

Commission on
Education and
Communication

Communicating Protected Areas

Editors: Denise Hamú, Elisabeth Auchincloss and Wendy Goldstein



Communicating Protected Areas

IUCN – The World Conservation Union

Founded in 1948, The World Conservation Union brings together States, government agencies and a diverse range of non-governmental organizations in a unique world partnership: over 1000 members in all, spread across 140 countries.

As a Union, IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

The World Conservation Union builds on the strength of its members, networks and partners to enhance their capacity and to support global alliances to safeguard natural resources at local, regional and global levels.

IUCN's Commission on Education and Communication – CEC

The Commission on Education and Communication, CEC, is one of the six Commissions from which IUCN draws expertise to fulfil its mission. CEC is a global network of experts in environmental communication and education, who work in government, international organizations, NGOs, mass media, business and academic institutions.

CEC brings to IUCN the know how on planning and implementing effective communication and education strategies, as well as managing knowledge and learning processes.

For more information visit: www.iucn.org/cec or email: cec@iucn.org

Communicating Protected Areas

Editors: Denise Hamú, Elisabeth Auchincloss and Wendy Goldstein

IUCN Commission on Education and Communication (CEC)
IUCN – The World Conservation Union, 2004

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organizations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN or other participating organizations.

Published by: IUCN, Gland, Switzerland and Cambridge, UK.
This publication represents the support of many individuals and their organisations. In addition to a workshop at the World Parks Congress 2003, Durban, preparatory workshops supported include a workshop in Argentina supported by the Spanish Ministry of Environment, and a workshop in Kuwait supported by the country's Environment Public Authority. World Parks Congress participants were supported by grants from GEF – UNEP and GTZ; the drama and video were supported by the Council of Agriculture, Forestry Department of Taiwan, Province of China; the World Bank – External Affairs – Development Communication, USAID and Conservation International supported the workshop; and thanks is given to the Turner Foundation for funding the printing of this publication.

IUCN

The World Conservation Union

Copyright: © 2004 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation: Hamú, D., Auchincloss, E., Goldstein, W. (eds.) *Communicating Protected Areas*, Commission on Education and Communication, IUCN, Gland, Switzerland and Cambridge, UK. xiv + 312 pp.

ISBN: 2-8317-0822-2

Cover photo: Open day celebrations at Djoudj National Park, Senegal. Photograph taken by Lucas Chambers, 2003. Rights held by IUCN's Wetlands and Water Resource Programme.

Printed by: Allied Printers, Thailand.

Available from: IUCN Publications Services Unit 219c Huntingdon Road,
Cambridge CB3 0DL, United Kingdom
Tel: +44 1223 277894, Fax: +44 1223 277175
E-mail: info@books.iucn.org
<http://www.iucn.org>
A catalogue of IUCN publications is also available.

The text of this book is printed on Greenread, 75gsm, recycled paper.

Contents

Foreword		ix
Preface		xi
Strategic communication to build support for protected areas: principles, lessons and recommendations		1
Chapter 1	Recommendations from the meeting of experts on the role and impact of education and communication for protected areas management in Latin America	3
Chapter 2	How to manage change? How to manage people? Skills and knowledge for effectiveness in communicating protected areas and biodiversity values <i>Frits Hesselink</i>	9
Chapter 3	Promoting sustainable development through strategic communication <i>Paolo Mefalopulos and Lucia Grenna</i>	24
Chapter 4	The GreenCOM Project: using Strategic Participatory Communications for protected areas <i>Roberta Hilbrunner</i>	32
Chapter 5	Understanding local reactions to protected areas <i>Marc Stern</i>	40
Chapter 6	Building support for and beyond protected areas in the Philippines: a Haribon's journey of transformations <i>Margarita Lavides, Anabelle Plantilla, Neil Aldrin Mallari, Blas Tabaranza jr., Belinda de la Paz and Cristo Marie Nozawa</i>	46
Governmental agencies using communication to build support for protected areas		59
Chapter 7	Engaging Canadians: building professional communications in Parks Canada <i>Dawn Bronson</i>	61
Chapter 8	Strategic communication planning for a national system of protected areas, Mexico <i>Rosa Maria Vidal, Lucia Grenna and Daniel Calabrese</i>	69
Chapter 9	Strategic communication and visual identity in the National Commission for Natural Protected Areas (CONANP), Mexico <i>Marco Sanchez Lira</i>	87
Chapter 10	Building support for protected areas: the case of the Butrint National Park, Albania <i>Alex Koutsouris, Emanuele Santi and Auron Tare</i>	92

Chapter 11	The Projeto Doces Matas and communication <i>Tomas Inhetvin, Marcos Antonio Reis Araújo, Lêda Luz and Infaide Patricia do Espírito Santo</i>	102
Chapter 12	Benefits beyond borders: the case of Madikwe Game Park <i>Solly Mosidi</i>	109
Chapter 13	The use of traditional knowledge in the South African National Parks' Imbewu Youth Programme: planting a seed of environmental awareness <i>Ishmael Makwaeba</i>	115
Chapter 14	Environmental education and awareness at the National Herbarium and Botanic Gardens of Zimbabwe <i>Soul Shava and Anthony Mapaura</i>	124
	NGOs using communication to build support for protected areas	129
Chapter 15	Bridges for conservation: experience with community participation in an awareness campaign around four protected areas in Lebanon <i>Andrea Schwethelm Munla</i>	131
Chapter 16	Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines <i>Merlijn van Weerd, Gwen van Boven, Jan van der Ploeg</i>	139
Chapter 17	Education and communication for conservation: co-management of the Sierra Gorda Biosphere Reserve, Mexico <i>Martha Isabel "Pati" Ruiz Corzo</i>	155
Chapter 18	Protected area communication, education and public awareness: the Every River Has Its People project, Botswana <i>Tracy Molefi</i>	163
Chapter 19	The process of local ownership of the Tingo Maria National Park, Huánaco, Perú <i>Patricia Fernandez Davila</i>	175
Chapter 20	Bringing positive changes in the protected areas of Nepal through communication and education <i>Chandra Gurung and Neelima Shrestha</i>	182
Chapter 21	Developing support for protected areas through a conservation and education centre: India case study <i>Prashant Mahajan</i>	192

Looking to the future: professionalizing protected area communication	205
Chapter 22	Beyond training: protected area organizations as learning organizations. Developing capacity to change towards management in partnership <i>Frits Hesselink, Eddie Idle and Gwen van Boven</i> 207
Chapter 23	Optimizing the use of research in order to consolidate communication planning for protected areas <i>Marco Encalada</i> 217
Chapter 24	Evaluating facilities and resources for environmental education and interpretation: criteria and indicators <i>Jaume Sureda Negra, Miquel Oliver Trobat and Margalida Castells Valdivieslo</i> 227
Chapter 25	Strategic intentions: using communication and education to support biodiversity conservation and protected areas <i>Haroldo Castro, Robin Abadia and Shannon Quesada</i> 239
Chapter 26	Promoting Protection Through Pride <i>Rafael Manzanero</i> 246
Chapter 27	Mass media and engaging journalists: supporting biodiversity conservation <i>Haroldo Castro and Jim Wyss</i> 255
Chapter 28	Shared principles: heritage interpretation promoting sustainable development <i>Deane Adams</i> 258
Chapter 29	Young conservationists and the future of protected areas worldwide <i>Lisbet Kugler</i> 265
Chapter 30	Recommendation 5.32 of the Vth IUCN World Parks Congress: strategic agenda for communication, education and public awareness for protected areas 273
Conclusion	275
Chapter 31	Concluding thoughts on communicating protected areas 277
Chapter 32	'A Thirsty Place': drama from the Vth IUCN World Parks Congress <i>Tamara Guhrs</i> 285
Biographical summaries	305

Foreword

"There are 30,000 or more protected areas around the world, covering in all about 10% of the land surface (roughly the size of India plus China). These places supply essential benefits far beyond the boundaries of the areas themselves. Protected areas bring water to cities, protect downstream communities from flood, shelter the homes and sustain the livelihoods of indigenous groups, safeguard biodiversity for humanity as a whole, and provide contact with nature for an ever-more urbanised society. Already they can claim to provide "benefits beyond boundaries". In the future, the value of these benefits is bound to grow, as climate change, population growth, and many other pressures on resources make the remaining natural and semi-natural parts of the world even more vital to the well-being of humanity and the survival of the natural world. So the responsibility of managing the world's protected areas estate is a heavy one and engages many hundreds of thousands of people".

Kenton Miller, Chair of the IUCN World Commission on Protected Areas¹.

Despite the heavy responsibility born by protected area management, "according to the best available data on the status and trends of protected areas... protected areas are not... sufficiently well managed to maximize their contribution to biodiversity conservation... and there is an urgent need to improve management nationally, regionally and globally" (CBD Programme of Work on Protected Areas: Annex I.2). Adopted at the 7th Conference of the Parties in Kuala Lumpur, February 2004, the Convention on Biological Diversity's Programme of Work² on Protected Areas therefore emphasizes strengthening protected area management.

As apparent in the words of Kenton Miller (above), in this ever-changing world the future is all about managing the change necessary to achieve protected area objectives. As trends point to social, participatory approaches to protected area management, communication is an essential social instrument to manage people. This publication is a contribution of the IUCN Commission on Communication and Education (CEC) to building protected area management communication capacity.

CEC supports IUCN in achieving its mission: to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. Fostering leadership in conservation and sustainable development, CEC innovates, guides and assists in the strategic use of knowledge, capacity development, learning, education and communication as means to plan and implement policy, programme and management objectives.

In conjunction with IUCN's World Commission on Protected Areas (WCPA), CEC assists countries to meet the goals of the Convention on Biological Diversity Programme of Work on Protected Areas. These goals include building the capacity of managers in planning, establishing and managing protected areas (Goal 3.2), and strengthening 'enabling activities' including communication, education and public awareness (Goal 3.5) - working in close collaboration with the CBD's Communication, Education and Public Awareness (CEPA) Initiative. Drawing on material from the Vth IUCN World Parks Congress (Durban 2003) and complimentary preparatory work of CEC, we hope you find the papers that follow a useful insight into the use and value of communication as a means of building support for protected areas.

Denise Hamú,
Chair of the Commission on Education and Communication

Notes

1. <http://www.iucn.org/wcpa/wcpa/wcpaindex.htm> (as of 10 October 2004).
2. <http://www.iucn.org/wcpa/cbd/cop7paprogrammeofwork.pdf> (as of 10 October 2004).

Preface

The papers within this publication are drawn from presentations at the Vth IUCN World Parks Congress in Durban, 2003 (the outcomes of which influenced the development of the Convention on Biological Diversity's Protected Areas Programme of Work) as well as complimentary preparatory work of the IUCN Commission on Education and Communication (CEC). The Commission fosters leadership in conservation and sustainable development by innovating, guiding and assisting in the strategic use of knowledge, capacity development, learning, education and communication as means to plan and implement policy, programme and management objectives.

The Vth IUCN World Parks Congress

In Durban, September 2003, the IUCN World Parks Congress was held for the 5th time. This ten-yearly event provides the major global forum for setting the agenda for protected areas, offering a unique opportunity to: take stock of protected areas; provide an honest appraisal of progress and setbacks; and chart the course for protected areas over the next decade and beyond. The challenge before the 2003 Congress was to show how protected areas are relevant to the broader economic, social and environmental agenda for humankind in the 21st Century. The overarching theme of the Congress – "Benefits Beyond Boundaries" – responded to this challenge, capturing the opportunities for protected areas in the next millennium.

The range of meanings or interpretations implicit within the "Benefits Beyond Boundaries" theme provided the flexibility to explore a wide variety of relevant sub-themes for the Congress. One of the seven workshop streams, "Building broader support for protected areas", aimed at strengthening existing support and mobilizing important new constituencies for protected areas. The stream concluded that significant social, economic and environmental changes are posing many challenges to protected areas, and identified the need for broader support from numerous interest groups to ensure protected areas' survival.

A sub-stream run by CEC, within the building support theme, addressed "Communication as a tool for building support for protected areas". This book primarily draws on the preparations for and presentations from this sub-stream. Recommendations on a strategic agenda for communication, education and public awareness (found in the concluding section of this volume) were approved by workshop stream participants, as part of agreement to further work on a 10-year global multi-stakeholder initiative to build broader support for protected areas, including action at global, regional, national and site levels.

In addition to managing the workshop's communication sub-stream, during the World Parks Congress CEC was active in demonstrating the use of communication within the whole event. These included: presenting to the plenary a drama called *A Thirsty Place* (see concluding chapter), which explores the feelings and reactions of local people to protected areas and their staff and how communication should be undertaken. A video was prepared by CEC members called "Voices Beyond Boundaries" and screened during the plenary, presenting the importance of strategic communication for protected areas. CEC was invited to develop a closing video on the Congress which captured the ideas, atmosphere and excitement of the event. As well CEC members offered to participants a short training course in communication. During the event a number of the international NGOs and IUCN and CEC met to discuss setting a common agenda to communicate on some priority issues, and recommended that such partnerships be established at all levels.

CEC Preparatory work

Highlights of IUCN's Commission on Education and Communication's (CEC) work on communication as a means of building support for protected areas, undertaken in preparation for the 2003 World Parks Congress (and from which a number of papers are drawn) include:

- in Central Europe, a five-year capacity building project: *Nature Management in Partnership* which involved pilot communication projects in five countries. This project involved government ministries, nature conservation agencies and protected area staff to develop skills to generate and maintain support for biodiversity, so that they can implement international agreements for biodiversity conservation (Convention on Biological Diversity, Ramsar, Natura 2000 etc.) and implement national priority plans. The project resulted in change in the way some of the organizations worked, as well as individuals, and resulted in many lessons about integrating communication, managing stakeholder relations, and about the professional development process itself (see papers by Hesselink and Hesselink, Idle and van Boven).
- in Latin America, a meeting of experts was held to clarify the role and impact of communication in and for protected area management (Buenos Aires, Argentina July 2003). Attended by governmental agency and NGO representatives from twelve countries, the workshop identified good cases for the Durban meeting, and a statement of recommendations to the World Parks Congress and COP7 of the Convention on Biological Diversity (see chapter two).
- in West and Central Asia and North Africa (WESCANA), CEC jointly organized a workshop with the IUCN World Commission on Protected Areas – WCPA, September 2002, prior to the IUCN WESCANA Regional Members Forum in Kuwait. The workshop – *Communication, Education and Public Awareness in Protected Areas* – stimulated exchange and reflection on experiences with communication and education as instruments to raise support for, and to contribute to, the management of protected areas. Experiences discussed included introducing people to protected areas in the region, working with communities and working in partnership. One of the papers from this session is included in this publication (see paper by Schwethelm Munla), and others in an IUCN report – *Communication, Education and Public Awareness in Protected Areas*.
- in Southern Africa, the 21st International Conference of the Environmental Education Association of Southern Africa (EEASA) in Namibia (June 2003) saw the sharing and critical reviewing of past and present EE activities in the Southern African Development Community (SADC) region. During this Conference, CEC sought contributions on protected areas, calling on its members to provide examples of communication and education as means to build support for protected areas (see papers by Molefi, Mosidi and Shava et al.).

This publication: *Communicating Protected Areas*

This publication is a CEC response to: (1) assist protected area staff in the need to gain support from numerous interest groups to ensure the survival of protected areas in the face of significant social, economic and environmental changes that are posing many challenges to protected areas, (2) support the communicators in protected area systems in their quest to show the added value of communication and professionalize their work, and (3) contribute to sharing knowledge for capacity building of protected area management in planning, establishing and managing protected areas as emphasized in the Convention on

Biological Diversity's Programme of Work on Protected Areas. The desire is to contribute to building protected area management capacity, increasing professionalism and mainstreaming communication as a management tool.

The publication documents contributions made during the WPC (and previously) influencing the elaboration of the Convention on Biological Diversity's Programme of Work on Protected Areas (above). These contributions were originally intended for a manual on protected area communication; however, for the time being this has been left on the 'backburner'. For the purposes of this publication, the editors have worked with authors to clarify their cases and help them share their lessons, presenting an overview of "where we are now" professionally in communicating and building support for protected areas. That said, we acknowledge that: (a) not all the cases and discussions undertaken at the WPC are presented here and (b) cases within the publication are not globally balanced (in part reflecting the availability of funds and people for participation at the WPC). Consequently we do not present this publication as comprehensive or exhaustive. Key points are, however, reflected, providing a flavour of the use of communication to build support for protected areas.

To some degree the organization of the book follows the areas of workshop discussion in Durban. The first part of the book – *Strategic communication to build support for protected areas: principles, lessons and recommendations* – presents the perspectives of experienced researchers, consultants, inter-governmental, governmental and non-governmental organizations. Whether operating at the local, national or international level, in these papers authors draw on a wealth of experience with strategic communication and protected area management. They describe lessons learned and outline subsequent principles and recommendations for the strategic use of communication to build support for protected areas.

In the second and third parts, case studies in *the use of communication to build support for protected areas by governmental agencies* (part two) and *non-governmental organizations* (part three) are presented. In attempting to organize these, it was apparent that there is often considerable overlap as, in many cases, governmental agencies and NGOs work together and use communication to engage and manage relations with one another. Nevertheless, we have clustered them according to the governmental or non-governmental perspective of the author(s).

The final section of the book – *Looking to the future: professionalizing protected area communication* – emphasizes the need to further professionalize communication and develop capacity. Included in this section are recommendations from the World Parks Congress as well as the script from a drama performed at the WPC for park managers and other Congress participants. Whilst not explicitly drawing conclusions, this drama presents a vivid summary of many of the issues discussed as well as a reminder of the Congress for all those present – a reminder which we hope will revive enthusiasm to carry forward agreements made to increase professionalism and mainstream communication in protected area management.

The Editors

Acknowledgements

This publication represents the support of many individuals, organisations and governments. We would like to take this opportunity to thank all those who participated in the communication workshop during the World Parks Congress for sharing their time and learning with us, and to their bosses for giving their time to contribute. We would also like to thank all those who supported participation at the Congress and note the generous

support of GEF-UNDP and GTZ, for funding many participants, as well as the World Bank External Affairs – Development Communication, USAID and Conservation International. Thanks to David Sheppard and Peter Shadie and their team for their organization of the Congress and their funding support; to Jeff McNeely and Frederick Schutyser for organizing and running the workshop stream on Building Broader Support for Protected Areas; the IUCN Education and Communication Programme team – Wendy Goldstein and Cecilia Nizzola-Tabja – and Ana Puyol for supporting the logistics and programme of the communication workshop, as well as CEC volunteers; Denise Hamú, Ana Puyol, Daniella Tilbury and Gwen van Boven for chairing and facilitating the workshop sessions. Thanks to the CEC regional members in Africa who contributed papers and in Latin America, who with the Spanish Ministry of Environment support prepared so well. Thanks to the Environment Public Authority, Kuwait, for supporting the preparatory workshop in Kuwait. We are indebted to the Council of Agriculture, Forestry Department of Taiwan, Province of China for supporting the WPC play and video; and GEF for the WPC closing video and play. Thanks to the actors, scriptwriter and Julian Sturgeon, *ResourcesAfrica* and Liz Rehoj for support to develop the play – A Thirsty Place; the CEC Steering Committee for advice on the workshop; Denise Jeanmonod for coordinating the printing of this publication in Bangkok; the Turner Foundation for contributing to financing the publication; and, crucially, the authors and sponsors of the papers for their goodwill and forbearance.

**Strategic communication to build support
for protected areas: principles, lessons and
recommendations**

Chapter 1

Recommendations on the role and impact of education and communication for protected areas management in Latin America

Introduction

Demonstrating the leadership and international position of The World Conservation Union (IUCN) in relation to policies and management of protected areas, IUCN sponsored the World Parks Congress, under the title "Benefits beyond Borders", September 8th – 17th 2003 in Durban, South Africa. The purpose of this event, held every ten years, was to demonstrate the importance and relevance of protected areas in relation to the economic, social and environmental agendas of the twenty-first century.

In preparation for the Congress, the IUCN Commission on Education and Communication organized a meeting of experts to clarify the role and impact of communication in and for protected area management in Latin America. This gathering was held from July 21 st – 23rd 2003 in Buenos Aires, Argentina. It was financed by Spain's Ministry of Environment, together with the Commission. Twenty-seven governmental agency and NGO representatives from twelve Latin American countries attended. This document presents the recommendations from this expert meeting.

Environmental communication and education: a statement from Latin America to the Parks Congress and the 7th Conference of the Parties on the Convention on Biological Diversity

"Informed participation, enduring conservation"

Protected natural areas in Latin America represent what is perhaps the most important treasure of global biodiversity, as this area has 40% of the world's species of plants and animals. Our countries have a strategic dependence on the conservation of these treasures since economic development in the region is very much related to the productivity of nature. Environmental resources, such as water, allow the generation of electricity, while ecotourism, cultural tourism, fisheries and forestry in many regions, and in many countries, represent primary sources of income. Millions of Latin Americans make direct and indirect use of the environmental resources of natural protected areas. For this reason human populations and nature are indissoluble in the region.

It is a fact, nonetheless, that national systems of protected areas face great pressure from unsustainable development plans, unplanned tourism, unsustainable infrastructure and (/or) the marginalization and poverty of local populations. These pressures relate to, and result from:

- low estimation and understanding of the value (economic, natural and social) of natural protected areas by national governments;
- development policies which run counter to the purpose of natural protected areas;
- unsustainable practices and increasing agricultural frontiers;
- insufficient numbers of environmentally-minded citizens to support them.

Consequently, short term and sector-oriented visions prevail in decision-making, at the level of institutions as well as communities.

Communicating Protected Areas

Faced with the need to involve a greater number of stakeholders in conservation and the sustainable use and management of natural protected areas in Latin America, the relevance of communication and education is clear. Used strategically and efficiently, communication supports the right to information and ensures that participation can be founded on the knowledge required to make decisions and take day-to-day actions. Thus communication is not simply a tool for disseminating information. Applied strategically it also facilitates a dialogue that generates new information and knowledge, helping to maintain the individual and collective motivation necessary to maintain agreed actions. As such, communication and education can be seen as an instrument for protected area management, clarifying socio-environmental realities and motivating people to take action.

In Latin America, communication in protected natural areas has generated a large volume of valuable experiences demonstrated at various stages of management, from conception through to the implementation of management programmes. Some of the fields of application are:

- conflict resolution;
- promotion of citizen participation;
- interpretation of nature;
- public policy design and management;
- protected areas management planning;
- conversion of production processes in protected areas;
- generation of skills for biodiversity management;
- financial management.

In all these fields, communication helps to consolidate values, as well as establish multicultural and multi-sectoral dialogue regarding natural areas.

In spite of its importance, we believe that:

- communication is not used to its full potential in the management of natural protected areas;
- within institutions, there is little political support for the value of communication in protected area management;
- communication is generally marginalized, and comes into play at the end of decision-making processes;
- there is no adequate assignment of economic and human resources to the objectives pursued by communication and education.

Communication and education knowledge and methodology is relatively new in the environmental field. Improvised uses of education and communication are common and have generated poor quality tools that have not achieved objectives. Managers of Natural Areas have sought short term results from communication and these have not been forthcoming. Furthermore, the management of natural protected areas is a field in which the thinking of natural sciences is predominant; and where communication and education are not considered valid. Therefore it has been difficult to professionally and systematically integrate them into conservation efforts and working groups.

Consequently, regarding communication and environmental education in natural protected areas, Latin America recommends:

- Education and communication must be integrated into planning processes for the management of areas from their conception and throughout the entire cycle of policies, programmes and projects.
- In the technical and decision-making structures of institutions, adequate room must be given for communication to function to its full potential at all levels.

- Sufficient economic resources and administrative support must be assigned to communication and education.
- Efforts must be made to continuously develop research initiatives and explore support for the management of education and communication strategies.

It is necessary to improve the quality of communication in terms of:

- *Strategic Positioning:* Communication must be established at the appropriate place within management decision making processes.
- *Training:* Specific training must be given to natural protected area communicators, enabling them to specialize and to improve synergies between managers and communicators. Communicators should be provided with a solid basic understanding of concepts in sustainable development, conservation and protected area management. All those involved in the management of protected areas should be provided with training in the basic aspects and principles regarding communication.
- *Strategic Planning:* It is necessary that communication responds to a strategic planning exercise in programmes and that the quantity and quality of planning be increased.
- *Research:* This is essential to improve the level of certainty regarding needs (perceptions, resistance, understanding, multicultural aspects), and the appropriate strategies to undertake action (media, languages).
- *Evaluation:* It is important to identify the impact of Education and Communication, to verify the real contribution made by interventions in these areas.
- *Ethics:* Ethical factors in the application of communication and education must be considered. The media and content must respond to conservation objectives of areas and not the interests of individuals.
- *Financing:* New methods of financing communication must be developed. A sufficient proportion of financial support must be assigned to specific project components to enable achievement of communication programmatic goals. The generation of creative financing mechanisms for communication must be stimulated, without, however, putting the credibility and purposes of natural area conservation at risk. The association of areas with commercial brands must be very carefully evaluated by area managers. Finally, it is important that the autonomy of environmental communication initiatives be assured.

We recommend the following actions be carried out in the short term in order to improve the integration of communication strategies into natural protected areas:

- Train personnel, at all levels of the protected area, in communication and education.
- Develop guidelines and instructions for training communicators.
- Ensure that the institutions responsible for management define a clear policy regarding the use of communications in the management of protected areas.
- Conduct international, subject-oriented meetings and workshops on environmental protected areas communication.
- Support international cooperation to promote concerted support for the initiative to increase intervention of communications in the management of protected areas.
- Establish a working group for research, evaluation, monitoring and documentation of experiences in the region.

Lessons and recommendations regarding communications goals for the management of protected areas

Communication must be considered a cross-cutting process intended to achieve the objectives of conservation and sustainable development of protected areas, and contributing to ensuring the participation of all related parties and social groups. In order to achieve this, communication must respect the rhythms, time frames, spaces and languages of the various stakeholders.

One of the most important functions of communications personnel is the creation or generation of interactive spaces in which to construct a mutual understanding on environmental issues. Recognizing and reinforcing this function will ensure that the objectives of conservation and sustainable development are achieved in protected areas.

Communication and education are processes which generate knowledge. They must be given their due strategic value, and it must be acknowledged that they are two-way processes, which are of fundamental importance in supporting the social processes which allow appropriate management of protected areas.

Lessons learned	Recommendations
There is scarce training and education for those serving as communicators.	<ul style="list-style-type: none">• Conduct training at various levels.• Train communications professionals in environment-related subjects.• Train technicians and other players involved in the development of communication skills.• Stakeholders with communications abilities must be identified and trained.
In many cases, cultural diversity is not taken into consideration.	<ul style="list-style-type: none">• A communicator must be an interpreter of cultural diversity, as well as a facilitator of intercultural dialogues.• The communicator may be someone from within the community or from outside.• In order for a strategy to be effective it must respect the time frames, spaces and languages of the various social players who are involved in the process.
There is not a sufficient tie between strategies and the specific needs of a protected area or a community.	<ul style="list-style-type: none">• A strategy must be planned which covers various levels and serves the target audiences.• Communications strategies must respond to the specific aspects of each protected area by using trained personnel.
Communicators are taken into consideration only to announce results.	<ul style="list-style-type: none">• The communicators must be seen as an integral part of the team in the development and management of projects and programmes, and as a fundamental part of the announcement of achievements. This function is of fundamental importance for the management of new funds.
Communication has not been an integral part of project design processes.	<ul style="list-style-type: none">• From the planning stage of any programme and/or project, communications must be present and must have the appropriate budget.• The communications strategy must be adaptable (flexible).

Recommendations on the role and impact of education and communication for protected areas management in Latin America

Lessons learned	Recommendations
Monitoring and evaluation systems are insufficient and rather ineffective.	<ul style="list-style-type: none"> • ' Communication teams must develop an evaluation system with indicators (qualitative as well as quantitative) which are suited to the education and communications processes.
Very rich experiences exist at the regional level, but they are not disseminated on a sufficiently widespread basis.	<ul style="list-style-type: none"> • Creation of a mechanism for documenting and sharing experiences. • Promote the exchange of experiences through international fora and workshops. • Strengthen existing networks of communicators, as a way of strengthening their role. Retain a "Coordinator – Promoter" for networks in order to keep networks continuously active – a function which may rotate among several members of the network.
Communication, in some cases, has been overemphasized as a general tool for resolving problems.	<ul style="list-style-type: none"> • Although communication is an important tool, it is not a panacea, nor can it resolve all conservation and development problems.

Recommendations for the Work Programme on communication, education and public awareness for the Convention on Biological Diversity

The following is a proposal of key activities in order to follow up on the Work Programme regarding communication, education and public awareness of the Biodiversity Convention.

1. Share the conclusions and recommendations of this workshop with the office of the Convention on Biological Diversity and with UNESCO, using them as a follow-up on the Work Programme for Latin America.
2. Produce a short video and a position paper regarding this meeting, in Spanish and in English, with conclusions and recommendations regarding the role and the impact of Communication on protected areas. Present this to delegations at the Seventh Conference of Parties to the Biodiversity Convention (COP-7) in order to support the implementation of the Work Programme. Also present it at GRULAC (Grupo Latinoamericano y del Caribe). Verify that the subject is on the agenda for the CBD Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA) meeting prior to COP-7, and exert influence in this area.
3. Identify and make initial contact with alternative communication networks that are working on democratizing information in order to integrate them into the follow up on these Work Programmes.
4. Publish the written case studies, reports, lessons and recommendations of this meeting, as well as the position vis-a-vis Durban. Distribute these to all who sent in case studies to this meeting, to members of the CEC, to the Commission on Protected Areas of the IUCN, as well as environmental and communications officials. It is suggested that PowerPoint presentations be added for this meeting.
5. Request the Biodiversity Convention Office link to the website of the IUCN-CEC in order to access the case studies regarding Communications and protected areas in Latin America.
6. Prepare a demand-driven programme of work on Communication skills and protected areas in order to implement the Work Programme.
7. Establish synergies between the Work Programme of COP-7 and the Decade of Education for Sustainable Development.

8. Ensure that, in Mesoamerica, the Biodiversity Convention Office Work Programme is applied in the context of the CCAD (Central American Commission on Environment and Development), taking into consideration the initiative of the Mesoamerican Biological Corridor.
9. This statement should stimulate the development of national initiatives that follow up on the Work Programme. The document, together with actions of the respective IUCN-member National Steering Committees, should be brought to the attention of governments so that they may develop and apply projects dealing with Environmental Communications.
10. Request that the Biodiversity Convention Office and UNESCO consider the names and expertise of the participants of this workshop when regional activities are developed in relation to the CBD work programme on Education and Communication.

Contributors

Denise Hamú, Miguel Pellerano, Gema Pulido Ramos, Haroldo F. Castro, Leandro Castaño, Oscar Brenes, Claudia Duarte de Rivera, Francisco de León Barrios, Jose Ignacio Mata, Rosa Maria Vidal, Marco Sanchez Lira, Andrea Brusco, Ana Maria Percossi, Alicia E. Toribio, Marta Andelman, Maricel Giaccardi, Mónica Catania, Roberto Molinari, Urbelinda Ferrufino, Carlos Cesar Durigan, Patricia do Espirito Santo, Ricardo Carvalho, Valeria Fuentealba, Marco Encalada, Ana Puyol, Sonnia Sanabria Patricia Fernández-Davila & Silvia Sanchez

Chapter 2

How to manage change? How to manage people? Skills and knowledge for effectiveness in communicating protected areas and biodiversity values

Frits Hesselink¹

Introduction

This paper draws on the experiences of the IUCN Commission on Education and Communication's communication capacity development project in Central Europe. With reference to Slovenian cases, lessons and principles of strategic communication are presented. Strategic communication is here defined as a series of planned and targeted communication interventions in the social environment. The interventions are often undertaken in combination with other legal or financial instruments. They are used to trigger changes necessary in the social system in order to bring about the conservation change mandated by nature management objectives.

Protected area management is change management

Protected areas and biodiversity are under increasing pressure because of the changes brought about by decisions in various sectors, such as public works, water, transport, agriculture and tourism. Protected area managers are therefore constantly confronted with often-challenging changes, for instance the construction of roads, dams, wind parks, railways and car parks, expanding urbanisation, and new leisure pursuits such as rafting and mountain biking. Changes can originate from the political or legal systems and cause changes in land ownership, such as the privatisation of forests in central Europe. Changes in the wider landscape around a protected area, such as dams or other infrastructure projects can also affect the species, habitats and ecological processes in the protected area. In European protected areas, changes in society and economy often influence land management. This change can in some cases become a threat to maintaining a certain species, for example as a result of a reduction in grazing. Protected area management thus has a great deal to do with change management.

Instruments to manage change: stick, carrot, drum

Protected area management and biodiversity conservation is about managing change, which means managing the process of changing attitudes and behaviour of people. Behaviour can be changed by changing the systems in which people live and function: legal, economic and social systems.

Governments have a range of instruments to influence the behaviour of citizens. Laws, regulations and their enforcement are powerful instruments, rather like a 'stick behind the door' when other instruments fail. Taxes, subsidies and other financial incentives are a second category of instruments, providing financial benefits to stimulate and reward a performance – like a carrot for a horse. Other instruments used are based on gaining more voluntary engagement of citizens, so that they behave in desired ways because of internal drives and motives, like a bear dancing to the rhythm of the drum. Communication, education and public awareness (when used alone) belong to this third category of instruments. In the Environmental Action Plans of the European Commission, these are called 'social instruments'. Communication is of course also an essential component of informing the population about legal and financial instruments.

In general, NGOs have only communication as an instrument. They often use public campaigning to influence the government to use its wider range of instruments. Similarly protected area institutions will use their internal communication lines with the government to try to bring about change in legal or economic frameworks in order to reach their objectives. But protected areas can also use strategic communication to directly influence the social environment of stakeholder groups to trigger changes in behaviour.

Change as individual, organizational and social learning

As each situation a protected area manager faces is new and different, there are no panaceas and no easy answers. Dealing successfully with change is mostly a matter of learning. Increasingly it is appreciated that learning needs to take place at many levels in society – throughout the system – at the level of individuals and organizations. Learning must also take place at a social level, as stakeholders participate in the processes that deal with new changes.

The conventional protected area management approach

The normal reflex of most protected area managers, when confronted with the need to change the behaviour of people, is to use existing legal instruments and enforcement procedures. If that does not work, managers often ask their superiors to push for new legislation or better enforcement by the responsible authorities (often outside their own organization). Only when there exists a broad basis of support in society does the mechanism of legislation and enforcement work.

In other cases conservation managers think immediately of financial incentives to bring about change: subsidies, tax incentives or discouragements. Alternatively they seek funds from their Ministry in order to steer behaviour with money. Often these efforts are without much effect, as government budgets are under pressure and conservation is usually not a priority. Moreover, financial compensation, subsidies or taxes do not always function as intended because of other factors such as: bureaucracy involved; the perception of not being treated equally with other groups; or making people's behaviour dependent on financial support instead of internal motivation.

A movie to 'change' private forest owners: strategic communication?

Challenged by certain private forest owners' disregard for biodiversity, a forest conservation manager requested help with 'strategic communication': *"Help us outline a television movie to convince private forest owners to care about biodiversity. We should show them some dramatic visuals of the consequences of clear cutting; some animation of various scenarios; some pictures of a beautiful forest managed 'close to nature'".*

It is very tempting to embark upon such a "communication" approach, however it is only strategic if we can give positive answers to questions such as: Would the movie reach all 200 000 or more private forest owners in the country concerned? Would they be motivated to watch the movie? If so – by what would they be motivated? Would it change them? If so, in what way would they be changed?

It is highly probable that a movie will not change the behaviour of private forest owners to more biodiversity friendly forest management. Communication should be seen in the wider perspective: supporting the objective of changing private forest owners' regard for biodiversity and, consequently, increasing biodiversity friendly forest management.

Communication is often end of pipe

In many cases the scientific background of most protected area managers leads them to invest in more study and research and/or to set up pilot projects. Communication and learning is, for most managers, a forgotten priority. Communication is thought of as leaflets, brochures, posters or videos to be used in schools or distributed in visitors' centres. The emphasis is on distributing scientific information. From a communication point of view one can characterise the normal, business-as-usual approach as one where the manager does not leave his or her desk, or does so only to study the ecosystems or species, and not to talk and listen to people. The normal reflex of protected area managers often results in unsolved problems, 'paper parks', negative publicity in the press and a bad image for conservation.

Strategic communication

Communication can be dealt with in a different way, when it is integrated in a total management approach. It is often a supportive instrument to realise public private partnerships and to deal with the changes needed for conservation and development. This is illustrated in the following case.

Visitors threatening '*Pulsatilla*' in Boc, Slovenia: applying strategic communication

The issue from the nature conservation perspective

Boč is a solitary mountain in south-eastern Slovenia. It is well known in Slovenia, especially through the organization of events to celebrate the 1st of May holiday. On two small meadows (a designated Natura 2000² site) grows the flower *Pulsatilla*, which is on the list of endangered species in Europe. Visitors, especially during the 1st of May celebrations, were increasingly threatening *Pulsatilla* by damaging the soil through trampling (when picnicking, parking and camping etc.). Additionally, this annual celebration also posed risks to flora and fauna generally. In turn, this impacted on the livelihood of the local community (stakeholders) which relies on a healthy landscape.

Previous approach: People should obey the law

The previous approach used by the Protected Landscape Area (PLA) management and other interest groups (the hunting society, mountaineering society, inn owners and municipality) was based on law enforcement, education and public awareness. However, these groups were not aware of the approaches of the other interest groups in the area. As a result, groups were often hearing and communicating different and sometimes conflicting messages. Every year the problem escalated and conflicts intensified – not only between visitors and interest groups but within the interest groups themselves – as all actors thought that they had the right solution and approach.

The issue from the "people management" perspective

The regional branch of the Institute for Nature Conservation – responsible for the protected area – recognized that they had to create a clear, shared vision of the problem, and that they should focus on the visitors' threat during the celebration of the 1st May event. This focus produced an understanding that common goals could only be successfully planned and executed if they were based on consensus with key stakeholders.

The new approach: relations management

The Institute decided to solve the problem with a new approach, guided by a 'people management' perspective. They agreed that the first step would be to bring stakeholders together and organize focus groups, before and after the annual event, to

explore motives for cooperation. Round tables would then be used to find management solutions and a management plan would be developed to involve all actors in jointly realizing and implementing these solutions. Public communication strategies would consist of timely, tailored and targeted information on event management. Mobility interventions would include ramps, parking and buses. The new approach would also include an evaluation of the strategy and its result.

Results

Through informal communication and building trust and working relationships, effective cooperation among different interest groups/stakeholders was achieved. This was largely the result of better internal communication. The 1st of May event attracted the same number of visitors and, unlike previous years, there was no disturbance of the *pulsatilla* meadows. Most importantly, however, was the change in visitors' behaviour: they camped only on designated spots and did not use their cars, travelling instead by bus or on foot; they used garbage boxes and took waste down to collection points in the valley. There was much evidence of increased visitor satisfaction.

Success factors:

- listening to interest groups as 'customers';
- internal communication among interest groups;
- team work, project management, and internal communication within the Institute;
- strategic communication targeted at visitors.

Room for improving success

After the event was executed successfully, the evaluation revealed that more should have been invested in positive feedback to visitors. The Institute also concluded that more professional event management was necessary. The Institute decided to outsource the event management for the next year as it was not its core business. It was decided that the municipality would take over this responsibility from that point forward. Doing this, the stakeholders owned the issue completely – its problems and solutions – enabling learning from mistakes and successes, and thus improved event management in the future. Finally, the evaluation made it clear that a more intensive and extensive communication campaign in the future would help to improve the success of this annual event.

Key communication interventions

The first step was identifying opinion leaders through informal meetings. The Institute then brought stakeholders together in formal and informal meetings. Using focus groups, the Institute and stakeholders explored joint solutions. Through effective internal communication and by informing visitors through the strategic use of free publicity, all actors supported a joint execution of the plan. The last step was made by way of evaluation and feedback.

The tipping point towards a change oriented approach

The moment that the new approach really started to take off – the "tipping point" – was when a public private partnership was formed between the Institute, the municipality, the inn keeper, the mountaineering society and other NGOs. Through this partnership, interest groups would together manage the 1st of May celebratory event. To get there the Institute first had to see the issue in a different paradigm. In the previous approach they were seeing it as visitors threatening biodiversity throughout the year. In the new approach they realized that if behaviour changed during the 1st of May event, 80% of the problem

would be solved. Then came the realization that this was less an issue of law enforcement than an issue of relation management. The strategic planning sessions, capacity building and coaching by external consultants played an important role in bringing about this paradigm shift, as did the focus groups. Once the public private partnership was established, the joint creativity of the partners resulted in a mobility plan and other successful event management measures.

The added value of strategic communication

Without a strategic communication approach, the situation in Boč would be still the same as, or worse than, in previous years. A range of internal communication interventions (strategic planning sessions, training workshops and materials, interaction with superiors and colleagues) created a change in attitude, knowledge and behaviour of the Institute staff. External communication interventions (focus groups, round tables, targeted and tailored information via free publicity, sign boards, etc.) created a change in attitude and behaviour of stakeholder groups (from appreciation that their opinion was asked, to willingness to cooperate, to joint planning of the event). These external interventions and resulting changes thus supported internal interventions and changes by providing practical evidence of the success of the new strategic communication approach.

Strategic communication: key principles

Strategic communication is an important management tool to realize positive changes and to achieve objectives. Key principles and guidelines for good practice in strategic communication include: engaging stakeholders and opinion leaders; developing partnerships; building capacity in organizational management and communication skills; focusing on positive word of mouth and reputation; and conducting thorough monitoring and evaluation. These principles are briefly touched on below.

Stakeholders, opinion leaders and partnerships

To find a leverage point for change it is essential to engage with stakeholders. However, it is impossible to engage with every individual member of a stakeholder group. Besides, not every stakeholder will provide reliable information or act as a change agent in the group. The most reliable information about who to involve comes from opinion leaders within stakeholder groups. Moreover these opinion leaders have an incredible network within their stakeholder group and are likely to communicate with and engage their constituency. Though they are often not the formal representatives of a group, they are the 'knowledge and power brokers' behind them and their opinions are valued by others. They are very well informed about what is going on and the interests of the stakeholder group, in addition to broad knowledge and interest that goes far beyond that of the average stakeholder.

To identify opinion leaders one has to observe interaction in formal and informal meetings of the stakeholder group. Once identified, opinion leaders can be brought together into multidisciplinary teams to explore the issue. This process is instrumental in building important public-private partnerships. Most of the external communication interventions used in this process are face-to-face, combining formal and informal means. Among these interventions, focus groups are particularly beneficial.

Focus groups

Focus groups are a means of interviewing a specific social/stakeholder group. They usually consist of six to ten people who are invited to spend a few hours with a skilled moderator – a communication expert who must be objective, knowledgeable on the issue to be discussed, and well versed in group dynamics and stakeholder (or consumer) behaviour. With ideas sparked from group interaction, these focus groups are an invaluable step in the process of gaining insight into opinions and exploring values and

motives. They are thus an excellent tool for exploring the leverage point for change; identifying win-win situations; and improving planning – providing qualitative data for communication and marketing strategies. However, a common precondition for the use of focus groups and other strategic communication interventions is an essential paradigm shift (change) in protected area management and accompanying capacity development (below). Once this paradigm shift has been brought about, focus groups are an invaluable means of developing trust and working relations.

Focusing on positive word of mouth and reputation

Part of strategic communication involves focusing on changes that will generate positive word of mouth among stakeholder groups. Success triggers more success: people want to be part of it. Success enhances the reputation of the staff involved, as well as the organization and nature conservation in general. The greater the change and its impact, the more it will enhance reputations. Making the change 'visible' through free publicity (press releases, etc.) and positive feedback to stakeholder groups will bolster the effect even more. A heightened reputation gives rise to the new challenge of living up to it and continuing participatory communication with stakeholders.

Monitoring and Evaluation

Monitoring and evaluation is an important success factor. In the case of Boč, it helped the regional branch of the Institute for Nature Conservation to realise that event management is not its core business and that next year the management of the event should be outsourced to the municipality. Once this was done, the stakeholders owned the issue completely – its problems *and* solutions – and improved the event management the following year as they learned from mistakes. Among other improvements, they used a few minibuses instead of one big bus to service the visitors better. The Institute is now involved as an advisor and monitors the effects of the event on conservation.

Preconditions for strategic communication

The key principles for strategic communication often imply a paradigm shift towards customer orientation. At the same time they often ask for further development of capacities in organizational management and communication skills.

Paradigm shift

Strategic communication implies that a protected area manager can see an issue in a wider context than just protected area conservation. This often necessitates a paradigm shift in perception. For example, the paradigm shift may be to change from ideas of enforcing conservation regulations to a more people-oriented perspective such as a relations management approach. Whatever the paradigm shift, for strategic communication it always means a shift towards a 'customer orientation'. In most cases internal communication (e.g. strategic planning sessions) is a first step in bringing about the paradigm shift, and the willingness of managers to change their perspective, attitudes, and behaviour is a crucial principle here. Furthermore, developing the capacity of protected area managers may be essential.

Capacity development

In some cases where conservation managers lack the necessary knowledge and skills for strategic communication, consultants can play a role in enhancing capacities through advice, training, and coaching. The reputation of consultants and their interaction often strengthens confidence among the decision makers in the organization about the need for a new paradigm and approach. The principle here is that informal internal communication is an important support to formal internal communication. The case in the box describes an experience of a communication expert coaching a paradigm change and helping to develop capacity in communication skills.

**Reviving a paper park through a new decree, the case of Peca Topla, Slovenia:
paradigm shifts**

The issue from the nature conservation perspective

Topla is a high valley at the foot of mount Peca in North Slovenia. Four decades ago the valley was designated – by decree – as a Landscape park. This was done without consulting the few families living in the valley. The inhabitants of the valley, the municipalities close by and other stakeholders did not want the park. They did not wish to cooperate and increasingly perceived the Regional Branch of the Nature Conservation Institute (the Institute) – responsible for the management of the protected area – as an enemy. The result was that the Institute had no regular contact with the inhabitants. Peca Topla was never more than a 'paper park'.

Previous approach: conservation through legislation

The Institute conducted some surveys and studies and organized a few formal meetings with local authorities. They also contacted the local tourist industry, as they were planning to issue a new decree, this time in dialogue with the stakeholders. The Institute worked under the assumption that they knew the ideas, attitudes and wishes of stakeholders.

The issue from the "people management" perspective

The moment the Institute realized that they were working on the basis of 'un-checked' assumptions, they were willing to give this more consideration. The starting point was to build a new strategy towards a new decree for the park based on consensus with stakeholders. They realized that this meant establishing connections with the stakeholders, and explore – through direct contacts – their attitudes, ideas and wishes. Based on this approach, they intended to start a joint planning process to formulate and execute a common strategy towards new legislation to turn the 'paper park' into a real park.

The new approach: customer orientation

The first step was to identify and bring opinion leaders together. This effort made it easier to establish relationships (through visits and informal meetings). Focus groups were organized to assess perceptions, fears, motives and other emotions, and to check assumptions and preconditions for joint action. The improved atmosphere resulted in more frequent joint planning meetings in the valley and joint execution of plans. This included some first technical interventions, based on wishes of the inhabitants: sign boards, a PR leaflet and postcards for tourists. The most appreciated improvement was the help of the Institute to get some funds from the Agro-environment Scheme for the farmers in the valley. The joint activities were evaluated and recommendations were formulated for next steps.

Results

The 'paper park' was not revived by another (unwanted) decree and the Institute understands now that the stakeholders neither want to revive the 'paper park' nor want a new decree. It also understands that revival of the park can only be realized through the people. There was an evident change in the attitude of the stakeholders: from fear and contempt to trust of individual representatives of the park (*"the park delivered on what they promised"*). The stakeholders also changed their behaviour. They started to cooperate in designing the content of the sign boards and the promotion materials for valley. For the short term they started to demand more (direct and indirect) support to help improve life in the valley (infrastructure, income generating opportunities). The new intention of the Institute is to next work out a joint management plan for Peca Topla within the existing legal framework.

Success factors:

- listening to customers;
- focus groups with external moderator;
- delivery on promises;
- team work;
- motivated local opinion leader;
- ability of Institute staff to change preconceived ideas, attitudes and behaviour.

Room for improving success

The Institute concluded that success could have been higher if they had used more intensive and extensive communication and had invested more time in analysing the results of the focus groups. With this information about customer experiences, they would have been able to give better feedback to the policy level and to discuss policy implications. They also realized that ideas for next steps should be discussed in more detail with the conservation policy level in the country.

Added value of communication

There was evidence of at least three elements of added value of communication. Firstly: the identification of opinion leaders by using informal visits. Secondly: the exploration, through focus groups, of the ideas and attitudes of stakeholders regarding feasibility of the interventions proposed by the Institute. Lastly: the strategy planning in dialogue and the execution of the joint plan through regular visits and kitchen meetings.

Key interventions	Change
Strategic planning sessions	Paradigm shift
Consultants	New skills of regional staffs
Focus groups	Identification of leverage point for positive change
Free publicity	Positive word of mouth about success

Lessons learned at the end of this phase of the project

A landscape park can not exist only on paper. It can only be a real 'living' park if the attitudes and behaviour of the local people make it so. The Institute can help change stakeholder attitudes to nature conservation using communication tools, but the communication process needs to start with listening, then analyzing, planning and then communicating in a two way fashion. In order to achieve this, internal change was first necessary as the park management and interest groups had to deconstruct assumptions and agree to work together. The park management had to undergo a paradigm shift from enforcement to a people-oriented perspective.

The process of paradigm change

Paradigm shifts do not take place overnight. The learning process needs time. In the box below some quotes illustrate the progressive steps in thinking towards a more customer oriented paradigm.

At the beginning of the project, the park manager explained: *"It is a paper park. The people were, and still are, against it. The decree was made without them. It contained too much bureaucracy and it did not provide any benefits for the people in and around the area. The area is very important for biodiversity; it needs protection "*.

He went on to say: *"It is clear we need a new decree which addresses these issues positively. The trouble is, all the time I hear that the people do not want a new decree. We know everything – what to do to conserve the biodiversity values and how to improve the life of the people – but they seem unwilling to even listen. Can you believe it?"*

Regarding the fact that the market has forced farmers to abandon the use of areas of the land for grazing – detrimental for the biodiversity in the Park – the manager stated: *"We want to preserve this landscape as it has been for generations. We need to reintroduce traditional farming combined with ecotourism so that it will be beneficial for the farmers... We have to reintroduce the traditional way of farming and convince them"*

Of the city people who either commute or have holiday houses in the area, he asserted: *"People do not properly value the land around their transformed farmhouses and thus they do not mow it, but we know some of the newcomers are even members of the Bird Society. We have to convince them of the traditional way of mowing and living in the area".*

When asked if he talked with people who live in the Park, the manager answered: *"I have no time but I know we have to communicate to change the situation, we already prepared many documents and brochures".*

Asked to reflect on how he viewed the villagers and the stakeholders in the communities close to the park, the manager's first reaction was: *"Well we have the decree, it is all in there",* then he 'corrected' himself: *"I think I would like to produce the basics and main policy lines of a new decree jointly with them."*

Encouraged to open up and accept the values, practices and motivations of the farmers and newcomers, and to have some talks as a manager with them, to listen to them, understand them better and show that the management is interested in human beings, the Park manager exclaimed: *"Wow, now you are asking a lot from us: as guardians of biodiversity it is not at all easy for us to accept and forget that they behave against the biodiversity values".*

The communication experts proposed: *"Why don't we explore what would motivate the people to keep the grassland as it used to be and then decide (together) whether we need a new decree or whether the old decree might do if we combine it with some measures which would play into their motivation ? "(and contribute to achieving the Park's objectives).*

As the Peca Topla communication capacity development project progressed the manager shifted from the omniscient and top-down – *"we know everything but they seem unwilling to listen "* – standpoint and moved towards integrating strategic communication and learning. He began to think differently: *"So you mean that we should not provide the villagers with information explaining how important the park is for biodiversity conservation and how useful the traditional farming methods were, but that we first should identify, in our communication, what blocks them from listening to us?"*

The learning process

During the project period the managers learned by doing. Some of the main lessons learned are illustrated below.

From the communication issue to the conservation issue

Each conservation issue has a specific communication issue, which has to be separated from the technical conservation issue (e.g. our park is losing endangered species because of xyz). The communication issue focuses on how the stakeholder groups relate to the biodiversity issue: what they know, how they feel, what they perceive, what motivates their actions etc. Quite often protected area managers communicate a lot about technical issues, without giving any clue as to what the audience can do or contribute. For example, how many posters about species or parks lack an address to write for more information or a bank account number for donations? Strategic communication means addressing the people-centred issues by formulating clear communication objectives towards influencing: attention; perception; interest; comprehension; emotional responses and beliefs; intentions; and action.

From statistics to human beings

When focusing on the conservation issue, protected area managers often think about people in terms of statistics; the number of people in the area; the number of farmers and hunters etc. While this is useful information for biodiversity conservation strategies, for effective strategic communication protected area management must see people as human beings with legitimate interests, frustrations, hopes and visions. If a protected area manager sees people as statistics s/he is inclined to communicate with them by way of brochures or posters. On the other hand, if people are viewed as humans the manager is more likely to phone and meet with them.

From convincing to motivating (push to pull)

There exist basically two groups of modalities of communication, based on different paradigms: trying to convince and trying to motivate people to support conservation or protected areas. Another way of saying this is trying to "push" people to have our conservation values (convince) or trying to "pull" people in our direction (motivate).

The first group basically aims to convince the target groups to become biodiversity experts and lovers, by sharing information about how important conservation is. This is based on the assumption that biodiversity experts and park managers know what is good for society and what is good for the individual. This modality of communication is mostly very instrumental and top down and uses posters, brochures, documentaries, educational packages for schools and educational experiences such as nature trails etc. The communication emphasis is on "talking", "sending" or "pushing" messages and is usually oriented to explaining nature's wonders.

The second group is a more pragmatic approach and recognizes that for any given topic (whether it concerns politics, art, sports, music or biodiversity) there are people trying to convince others of that topic's importance. It accepts that it is a fact of life that there are always more people not interested than there are interested in your issue. Bearing this in mind, the communication emphasis moves from investing in convincing people about the importance of conservation to one of motivating people to change. The communication emphasis is now on "listening" and "pulling" people towards the result sought. The communicator forgets about his or her values for biodiversity for a while and explores (pulls out and listens to) the vision, ideas, interests and motives of the target group. While listening, the manager is looking for emotions and motives which can be used as hooks to draw people to change what they do in a way that ultimately benefits the conservation and sustainable use of biodiversity.

The choice between the two communication approaches – push or pull – has much to do with the degree protected area management is able and/or willing to involve stakeholders. Various degrees of involvement exist, ranging from low to high: from stakeholders as clients to stakeholder as partners in dialogues, as producers of ideas, as co-producers of policy or management plans, as agenda-setters, as co-managers and as decision makers.

From closed and instructing to open and listening

An effective strategic communicator has to listen. Ultimately communication is about establishing a relationship, sharing common ideas and values, and acting accordingly. To do so, the starting point has to be the unconditional acceptance of the values and practices of the others (even if they are damaging biodiversity). Acceptance is the attitude which enables others to open up. Opening up provides the opportunity to listen. By listening one can come to understand the perceptions of the target group.

In many cases a range of emotions block a meaningful dialogue. People living in or around protected areas often carry with them years of frustration because of varied sources of irritation: hurt feelings, misunderstanding, bureaucratic procedures, etc. To establish a meaningful dialogue one first has to unblock those emotions. Give people room to express these frustrations. Only after people have let out these emotions are they able and willing to start to communicate about what is of interest to the protected area manager.

If one does not listen first to the frustrations and take these seriously (and try not to defend themselves immediately), no meaningful communication is possible. That is a fact of life. In personal, private contexts protected area managers would likely do so automatically, but from behind office desks this is easily forgotten.

From biodiversity to human costs versus benefits

Change in behaviour only comes about when the stakeholders perceive the change as being worthwhile. Stakeholders are often calculating citizens who carefully evaluate costs and benefits of any proposition that involves behaviour change. Too often, however, protected area managers focus communication only on the behavioural changes required to benefit biodiversity, without paying attention to (perceived) costs and benefits of behaviour change. When protected area managers communicate strategically they first speak to the people concerned, explore their perception of costs and benefits of behaviour change and then focus their communication on the costs and benefits, showing that benefits outweigh the perceived costs of behaviour change.

From biodiversity values to social values

Biodiversity values in protected areas are, by definition, values defined by biologists and other biodiversity experts. They are codified and in most cases the protected area itself and its management plan are the legal mechanism to protect these values. This does not mean that the biodiversity values are shared by the people living in and around the protected areas, let alone by the majority of society. They may perceive values (economic, religious etc.) in the protected area which are quite different from biodiversity values, and which determine how socially valid the biodiversity values are in the specific context. To make protected area management even more challenging, these perceived values are dynamic and changing as well as increasingly diverse with the social trends to ever-more individualization. This simply increases the case for strategic communication. The next phase in the Peca Topla case illustrates this.

Peca Topla a year later - next step in the paradigm shift: from decree to joint management plan

The issue from the nature conservation perspective

Peca Topla is a Protected Landscape Park (designated by a decree a few decades ago) in a small mountain valley. Within the valley there was limited infrastructure and the inhabitants were in need of new ways of generating additional income. The inhabitants of the valley, the municipalities close by and other stakeholders were – based on positive experiences in previous years (phase 1) – willing to cooperate with the Regional Branch of the Nature Conservation Institute, responsible for the management of the protected area. It was designated to partly become a Natura 2000 site.

Previous approach: first steps towards customer orientation

IUCN supported the project with the first steps towards a customer oriented approach. First clarity was created in a rather blurred vision of the problem by the Institute. Focus groups were used to identify emotions, ideas, needs, concerns and kitchen meetings to establish working relations. On the basis of the focus group a strategy was designed and stakeholders were mapped. The inhabitants indicated in the dialogue their priorities: their existence in agriculture was under threat, there was no asphalt road in the valley, there was no GSM aerial, there was no tourism. There were no sign boards and tourist promotion materials. The latter issues were jointly addressed. The activities were evaluated and decisions were made on next steps. Experiences and lessons learned were shared with colleagues of other regional branches of the Institute. Now the Institute assumes that they can take the next step and can negotiate a win-win situation towards a joint management plan.

The issue from the "people management" perspective

As in the first phase of this project, the Institute realized that their plans were based on assumptions and that these assumptions needed to be checked with the people concerned. They realized that the people were the most important success factor for the conservation of biodiversity in the park: they were the primary customers of the Institute. They realized that stakeholders are not statistics, but people of flesh and blood, with emotions, ideas and motives. They realized that they needed further exploration of those motives, ideas, fears and other emotions, before they could take next steps towards joint management planning.

The new approach: public participation

Focus groups were organized and brought to light the need to explore new income generating activities in the valley as part of the steps towards a joint management plan. Consensus was reached on joint planning and execution of next steps. An excursion was organized to successful income generation projects in other parks in Slovenia. To support new income generation projects, the Institute used its network. It used its knowledge of the local bureaucracy to convince the municipality to improve the roads into the valley. The Park used its contacts and relations with the Me'ica Lead and Zinc Mine – the driver of economic development in the region – to open an old mine as a tourist attraction in the valley. Communication interventions were planned in a timely, tailored and targeted fashion to generate free publicity on opening ceremony of the new tourist attraction.

The ambition of the Institute had been to negotiate a 'win win' situation: government support for infrastructure improvements; economic incentives for the valley; and support from the valley for a joint management plan of the park. They also had planned to explore the management competences, motives and need for training. The idea was to realize a joint management plan this through negotiation and round tables.

Results

In the project period a win-win situation was not realized and no joint management plan was formulated. The Institute continued to work on the issue and today – two years later – a draft management plan exists. At the moment, management of specific sites in the valley takes place under the regime of the Agro-environment scheme. The ambitions of the Institute for the project period were a 'a bridge too far'. The communication was effective and good, but the Institute was communicating the 'wrong' product at this stage. The reputation of the Institute improved tremendously, but not yet the reputation of nature conservation. The stakeholders changed attitude: they are proud of their valley and its nature values. Apart from cleaning a small wetland, they have not changed behaviour towards nature conservation. Important was the achievement of cooperation between all inhabitants of the valley in interventions that may improve their life. Yet stakeholders expressed the demand and need for continued strategic support to improve infrastructure and income generation.

Success factors:

- listening to customers;
- focus group identifying motives, ideas, perceptions and needs;
- existing interest in other income generating projects;
- meetings in the valley;
- informal communication;
- team work;
- free publicity of opening mine .

Room for improving success

Existing legislation and policies limit the possibilities of joint management. The approach chosen proved to be "a bridge too far": it is too early to negotiate win-win situations: they still have to be identified. More investment in teamwork and project management skills are needed. Reporting of 'market experiences' to 'bosses' - and their involvement - should be more routine. Also more feedback on successes needs to be given to the customers of the Institute.

Added value of communication

Key strategic communication interventions were: identification of opinion leaders (informal visits), exploration of stakeholders' ideas and attitudes regarding the feasibility of proposed interventions (focus groups) and joint planning and execution (visits). Internal communication of the lessons learned to other colleagues in the Institute, the Ministry and National Parks was important to illustrate that management plans depend more on people than on the nature conservationists, as well as what it takes to practice such an approach.

Lessons learned in this phase

A protected area management has to set realistic goals. Negotiating win-win situations requires changing attitudes of stakeholders towards nature conservation and this process may take a few years. A management plan depends on people. They are the key factor of the whole project and this should be taken much more seriously into consideration. The Peca Topla landscape park existed before only as a "paper park". Now, after various communication efforts, it has become a "living park" with local people at its heart. Much more time investment is still needed before joint management is truly achieved and local ownership of the situation established. In the meantime, the improved attitudes and behavior of the people living in Peca Topla and the improved working relationships with the Institute provide a solid basis for discussing and implementing a management plan for the Natura 2000 sites in this area. Today new initiatives are underway towards establishing

a regional park in Topla. This time the initiative comes not from the Institute, but from the mayors in the region, who have in mind the example of some successful parks in Austria. The experiences and lessons learned in Topla will definitely be of help.

Conclusions: integrating strategic communication and learning

Strategic communication begins when we stop focusing on explaining the importance of protected areas and biodiversity conservation (by providing scientific information) and trying to convince people to act accordingly. Instead protected area managers have to start seeing the issue as how to introduce an innovation among a large group of potential 'customers', in order to motivate them to a new behaviour. The communication approaches depend on who we first want to target, what behaviour change is aimed at and understanding how innovations are taken up in society.

People's behaviour is part of a social system. Individual change will be greatly helped if the social system changes. Strategic communication does not aim to change people individually. Its strategic purpose is to use communication interventions to trigger the changes necessary in the social system in order to bring about the changes mandated by protected area management.

Often it is necessary to involve the target audiences in the planning of the interventions as part of a joint learning process towards a public-private partnership as demonstrated in the cases of Boč and Peca Topla described above.

In this ever-changing world, managing change is undoubtedly at the core of protected area management. With continuous change comes the need for continuous learning at individual, organizational and social levels. Strategic communication is the means by which to manage change, however building the capacity of protected area management in this field is essential.

Suggested reading

IUCN Commission on Education and Communication: www.iucn.org/themes/cec/

Rientjes, Sandra (ed.). (2000). *Communicating Nature Conservation*. European Centre for Nature Conservation, Tilburg.

GreenCom, Academy for Educational Development. (2002). *Heating up Society to take Environmental Action, a guide to effective environmental communication and education*, Washington.

Robinson, Les and Andreas Glanznig. (2003). *Enabling Ecoaction, a handbook for anyone working with the public on conservation*, Humane Society, WWF Australia, IUCN, Sydney.

Notes

1. The idea to adapt two presentations into one chapter for this publication came from Ms Wendy Goldstein, Head of the IUCN Program on Education and Communication. The chapter is based on a key note speech for the Conference 'Biodiversity and Landscape: communicating and sharing values in a changing world', Villa Mondragone, Frascati, Italy 24 – 26 May 2001, organized jointly by the ECEE, the European Committee of the IUCN Commission on Education and Communication, the Lazio Regional Park Agency and the University of Rome "Tor Vergata". The other article is based on a key note presentation for an Expert Meeting of European CEC members on "*Managing Change – the role of CEPA, Communication, Education, Participation and Awareness*", organized by the Spanish Ministry of Environment and the IUCN Commission on Education and Communication, in Valsain Spain, 12- 16 June 2004. It is

published as Introduction in *Achieving Local, National and Multi-lateral Objectives: The role and value of CEPA (Communication, Education, Participation and Awareness) in Environmental Projects throughout Europe*.

The author wishes to thank Dr. Miro Kline (Kline & Partner, Ljubljana, Slovenia) for his work as consultant on the cases of Boč and Peca Topla and his contribution to the description of the cases. The author also wishes to thank Matja • Bedjani and Mojca Planjšek (managers of the Peca Topla project) and Matej Demšar, Simona Kaligari, Andreja Seneganik, (managers of the Boč project) for their openness, enthusiasm, good team work and input in the projects. Last but not least the author wishes to thank Ms Branka Hlad, Advisor to the Director of the Slovenian Environment Agency and from 1997 – 2003 country coordinator for the IUCN project, for checking the facts and providing many valuable suggestions for adaptation and editing.

The cases cited are part of the Slovenian country projects supported by the IUCN program 'Nature Management in Partnership for Central Europe' (1997 – 2003). The projects were executed under the guidance of the Environment Agency of Republic of Slovenia and since 2002 through the Institute of the Republic of Slovenia for Nature Conservation. The program was financially supported by the PIN-Matra Fund of the Ministry of Agriculture, Nature Management and Food Quality and the Ministry of Foreign Affairs of the Netherlands. Frits Hesselink was involved as international consultant.

2. "Natura 2000" is a European ecological network established under The European Union's Habitats Directive (1992) on the conservation of natural habitats and of wild fauna and flora. The network includes:

- "Special Areas of Conservation" designated by Member States in accordance with the provisions of the Habitats Directive,
- "Special Protection Areas" designated by Member States under the earlier conservation of Wild Birds Directive (1979).

Member States (including those applying for accession to the European Union i.e. the example involved in the above case) must identify and designate areas for protection and then take all the necessary measures to guarantee the conservation of the habitats and species, and to avoid their deterioration.

Chapter 3

Promoting sustainable development through strategic communication

Paolo Mefalopulos and Lucia Grenna

Introduction

This paper illustrates the significance of Strategic Communication for Sustainable Development and its significance in the World Bank development programs and projects. While providing some brief theoretical background, the paper highlights the methodological approach being adopted by the Unit of Communication for Sustainable Development in Operations (SDO) in its initiatives, focused mainly on environmental and rural development projects. We begin by providing a brief overview of the main communication paradigms in development. This helps to position and better understand better the role of communication as adopted by the World Bank's Unit of Operational Communication for Sustainable Development, which is the topic of the second part of the paper. Also discussed are challenges faced by communication in the World Bank – challenges which are common to many other organizations and professionals in this field.

Two main challenges for communication

Personal experience and related literature confirms that communication for development is widely praised. However, despite its formal recognition within international development institutions, governments and other organizations, communication for development is far from being fully understood and systematically applied (Anyaeqbunam, et al., 1998). There are a number of reasons for this; ranging from the perception of communication as important but secondary to other more technical disciplines, to the insufficient empirical evidence of the impact of communication, and consequently, the fact that many policy and decision-makers "remain unconvinced of the importance of communication in the development process, at least in so far as concrete action from them is concerned."¹

One of the main remaining challenges for development communication is illustrating the nature of this discipline, of crucial importance in virtually any development intervention, and how it differs from traditional notions of communication (i.e. sending messages, disseminating information or doing corporate communication). That is why the first questions to be addressed are "why communication?" and "what kind of communication?" Often presenters and speakers of "communication" use the term intending a specific kind of communication (e.g. corporate, mass media, etc.) and the listeners understand "communication" as something quite different (e.g. dialogue, advocacy, etc.). This is especially true in a discipline as relatively new as development communication, in which the term is conceived and adopted in numerous and sometimes inconsistent ways.

What kind of communication

It is important to first achieve common understanding of the term "communication". Communication can be conceived and defined in a number of different ways, but this does not mean that only one among these is correct and the others are wrong. The various definitions of "communication" reflect the diversity of communication objectives, approaches and functions.

Consider some of the broad communication approaches, each of which can operate within one or more of the three basic communication "modalities" or modes; i.e. mass, interpersonal and mediated (through radio, internet or other technologies) communication. The classification of communication approaches below reflects that adopted by the World Bank (and is similarly adopted many other institutions).

Corporate/institutional communication

With a number of uses, corporate or institutional communication can refer to the improvement of communication flow within an institution, to the strengthening of the capacity/skills of the employees, or to promoting the image or positioning of an institution or a sector (corporate communication) with specific audiences (e.g. general public, policy-makers, board of directors, etc.).

Advocacy

Advocacy implies using communication to foster an agenda or raising awareness on specific issues (e.g. AIDS, poverty alleviation, etc.). Communication approaches in this context are often closely related with journalism and they usually rely heavily on mass media.

'Development Communication'

This is also frequently referred to as 'Communication for Development'. While incorporating some of the approaches illustrated above, it goes beyond them by using communication to identify, investigate and analyze needs, risks and problems to be addressed. Development Communication can be defined as a "dialogue-based process entailing the strategic application of communication approaches, methods and/or technologies for social change".

This definition includes some crucial features of Development Communication. First, it is a process; second, it is an analytical activity based on dialogue (as will be explained later); and, third, it aims to achieve change. This implies that to be most effective it should be used from the beginning of the development intervention, i.e. identification and assessment of priorities and not just in the planning and implementation stages. If there is no communication assessment in the beginning, the process would be flawed and could hardly be regarded as Development Communication.

An overview of the main communication perspectives in the Development context

In order to better understand the different models and approaches related to Development Communication, let us briefly revisit the main theoretical communication frameworks in this field.

Modernization paradigm

There is a long tradition of communication used for development purposes. The modern concept of development can be said to have started in 1949 when President Truman stated that the role of rich countries was to address the "underdevelopment" of others (Sachs, 1992). The main objective has not changed much since: fight the poverty that has affected more than half of the world. This entails a worldwide program to support local economies, while at the same time promoting the spread of democratic values and institutions. Truman made it clear that achieving greater production, through the application of scientific methods and technological knowledge, would lead to peace and prosperity for the whole world. Following this line of thought, for many years development has been considered mainly, if not exclusively, in economic terms.

At that time the challenge was to make the poorer countries follow in the footsteps of the richer ones. The role of communication was to promote the spread of those values and attitudes conducive to the establishment of economic environments similar to those of the developed countries, while at the same time providing more technical support for the diffusion of innovations aimed at practical improvements. Communication was primarily conceived as the use of mass-media in a one-way, top-down process, following the traditional Sender-Message-Receiver model (Melkote, 1991).

Dependency theories

In the 1970s, the modernization paradigm was increasingly under fire because, among other things: it neglected the relevance of local social, political and cultural context; it expected development to occur along a consistent well-defined linear sequence; and it put the blame on developing countries for their conditions – ignoring the historical circumstances that led to their subordinate positions and kept them dependent on other richer ones (Servaes, 1991). This perspective is known as the "Dependency Theory" and here communication was seen mainly as a tool to educate the people and forge alliances among developing countries. As in the modernization paradigm, here too the main emphasis was on mass media which were expected to be placed under the supervision of the state, with the assumption that the state would represent the best interests of the citizens.

There have been other theoretical models related to this one, the most important being the "World-System Theory" developed by Wallerstein (1982), in which scholars recognized a more articulated reality than the simple linear relations of dependency between rich and poor countries. However, all of these theoretical perspectives soon came under fire. A major reason was that they tended to ignore the dynamics within developing countries (e.g. media under the control of the state did not guarantee a more horizontal and people-based flow of information).

Consequently a new perspective – based on people's participation – started to gain ground. Although this perspective is sometimes referred to as the participatory paradigm, in reality it has not yet become a paradigm. As the term implies, it envisions the active involvement of stakeholders in the development process, which is seen not only as a key value in the worldwide process of democratization, but it is also considered necessary to the validity and sustainability of development programs/projects.

Participatory paradigm

Most development agencies and international organizations are now convinced of the importance of actively involving and accounting for people's perceptions, opinions and beliefs in the decision-making process. It should be clear that participation is based on communication (i.e. dialogue defined as the use of two-way communication aiming to analyze and solve key issues. What is often less clear is that in order to design a valid and sustainable project, participation is needed, but not sufficient. A communication needs assessment carried out in 1994/95 in Southern Africa (Anyaeibunam et al., 1998) revealed that the wide adoption of participatory approaches, while being based on a horizontal model of communication, seldom resulted in a specific systematic communication strategy. What was needed was an approach that combined the people-based approach of participation with a systematic communication focus. In the related literature, this approach is labeled 'Participatory Communication'.

While terms such as 'participation' and 'empowerment' have gradually gained increased recognition in the world of development, communication based on a horizontal two-way flow of communication is still an elusive concept. This is partially due to the ambiguity of the term, as discussed above, but it is also due to the difficulty experienced by many communication practitioners in switching from the traditional (and more manageable) one-way communication model, "Sender Message Receiver", to a more appropriate and complex model of "Decision-maker A Dialogue Decision-maker 1," where

communication is no longer restricted to informing or persuading audiences, but is a process involving two or more parties within which situations are assessed; knowledge and experiences shared; problems analyzed; solutions identified; and finally strategies designed and agreed upon. The systematic and professional use of communication goes far beyond the common notion of being a communicator; it requires a sound knowledge of theoretical perspectives, models and methodologies, as well as familiarity with the implications of strategic application of the approaches.

The participation and empowerment of people cannot be achieved without a kind of communication, based on a horizontal model, open to any outcome, ensuring a two-way flow of information, knowledge and experiences. In other words, communication that empowers people (Freire, 1997) and that puts them in the driver's seat throughout the development process. This model, which is gaining more and more significance in the development world, is based on dialogue, in which listening is as important as talking. The aim is building trust and consensus in order to investigate perceptions, needs, risks, opportunities and problems, and only then work on the design of strategies leading to change. This does not mean that the more traditional kind of communication should disappear. On the contrary, mass media approaches are very effective in disseminating information, raising awareness and other similar activities. To summarize let us present a table with three basic communication features for each of the perspectives.

Modernization	Dependency	Participation
Core Value: media as diffuser of modern attitudes and innovations	Core Value: media as a means to achieve autonomy	Core Value: dialogue as the center of communication processes
Rationale: to disseminate information to large audiences	Rationale: to educate people and forge alliances among developing countries	Rationale: sharing perceptions, knowledge and experiences to achieve an action plan for change
Basic Model: one-way communication	Basic Model: one-way and two-way communication	Basic Model: two-way communication

Table 1: A communication comparison of three development paradigms.

Methodological and operational issues

The methodological approach adopted by the Development Communication Division is a combination of the knowledge and experiences of organizations in this field and the unique operational context of the World Bank. Based on previous discussion, the methodology in Communication for Sustainable Development should be linked with the current broader perspective on development. Accordingly, communication should not be considered exclusively as a process whereby information is transmitted, coded and decoded. Communication becomes, also, a problem-posing proposition (Bordenave, 1976), a research tool (Anyagbunam et al., 1998), a planning tool (Mefalopulos and Kamlongera, 2003) and a necessary process needed to involve stakeholders in the decision-making of development initiatives.

This should occur through dialogue, a needed component in the empowerment of the poor and marginalized (Freire, 1997). Also, communication cannot be concerned exclusively with behavior change in its narrowest conception. In this context, behavior change refers to a wider notion of social change, which includes behaviors, practices and/or the

restructuring of institutions. No matter what kind of change is sought, development communication should play a crucial role in achieving it.

Before detailing the methodology, we should briefly highlight the main types of interventions carried out by the Unit in support of field operations. The numerous different types of communication interventions in support to operations performed by the Development Communication Division can be grouped into (1) 'Participatory Communication', (2) public communication campaigns and (3) institutional strengthening. In many ways the boundaries between the three are not clear-cut (e.g. a communication campaign is usually more in line with a unidirectional mass-media approach, but the research for the appropriate message design can be carried out in a participatory mode).

1. 'Participatory Communication'

Participatory communication can be used in a variety of situations. It is most meaningful when used for assessing the situation and devising solutions through dialogue among representatives of all parties. This should lead to the appropriate and sustainable identification of the project/program objectives and to the design of the related communication strategy.

2. Public communication campaigns

Public communication campaigns are used when objectives have been determined and the main role for communication is to design effective messages persuading the audience to take action leading to change, usually in certain behaviors. The kinds of change sought here can typically be in the field of health, environment or wider economic reforms.

3. Institutional strengthening

Institutional strengthening is another line of intervention used by the Unit. The objectives here can be of three different kinds:

- i) those aimed at communicating the nature and purpose of the institution and/or program to the public and relevant institutions. This helps to position the concerned institution while promoting the activities carried out;
- ii) another kind of objective in this category concerns the internal flow of communication and how to improve the exchange of information within the institution. The same process can be applied to the exchange of information among institutions with a common interest;
- iii) finally, institutional strengthening is also concerned with capacity building – providing training on the processes and products of communication to personnel within the institution.

In order to understand how challenging communication for sustainable development can be, it is important to keep in mind (in addition to the difficulties associated with the construction of any new path) the weight that the traditional paradigm still carries in the theoretical and practical implications of everyday operations. In the past, the World Bank has often been critiqued for being too top-down in its approaches. Nevertheless, more recently the Bank has tried to adopt an approach that is more in line with the new participatory framework which has become the driving force of development. Jim Wolfensohn, the president of the World Bank, has been instrumental in formalizing the mandate for the inclusion of broad stakeholders' participation throughout the design and implementation of development projects and programs.

Key to our work is that communication is not just an instrument to send or disseminate information. It is first and foremost an analytical instrument, based on dialogue. No matter what kind of development intervention is expected, communication should always be present from the very beginning as it can bring a value-added insights that no other approach can. While overlapping with other disciplines (e.g. participatory appraisals,

social assessments, marketing research, etc.), development communication is the only discipline specifically using dialogue to share and investigate experiences, needs, problems and perceptions among stakeholders. Moreover, it is the only discipline coming up with specific entry points upon which to build the communication strategy. To make this clear let me briefly explain how communication for sustainable development can be divided in three stages:

The process of strategic communication

As stated, communication is a process along which a number of approaches, tools and products can be identified and implemented according to the circumstances. For clarity's sake, this process can be structured in three basic, broad phases.

1. Communication research problem analysis

In the first stage we need to identify all relevant inputs for our communication strategy. The function of communication is mainly analytical. Dialogue becomes a tool to identify relevant stakeholders, probe their perceptions, investigate their needs and problems, share knowledge and identify the causes of the situation that we intend to change. Communication here supports other analytical work by building trust, facilitating the exchange of information and reaching a common understanding of the situation. A number of empirical, quantitative and qualitative tools are applied in this phase (such as opinion polls, surveys, Participatory Communication Rural Appraisal and others). At this stage, the final output of communication is the definition/refinement of the communication objectives and not the objectives of programs and projects. This is no minor achievement and many development initiatives have had their roots in projects that did not deal with the top-priorities of the so-called beneficiaries and that were considered unclear and not feasible.

A baseline study is carried out and communication is used (usually in a participatory manner) to identify and set indicators and criteria for evaluation, to later be used to monitor the communication programme implementation and assess the impact of the communication strategy.

Depending on the circumstances, the following information should have been collected by the end of this phase:

- common understanding of the issue to be changed among all stakeholders;
- in-depth knowledge (i.e. cultural, social, economic background) of stakeholders groups and their position on the issue of relevance (in this case environmental);
- knowledge of the information and communication (internal and external) network of the stakeholders;
- definition of objectives clearly understood and agreed upon by all parties. The emphasis here is what we want to achieve.

2. Communication design and implementation problem solving

At this stage, communication applications have a function which is more in line with the usual conception of communication. Nevertheless it can be used in a number of different ways according to the needs. The following are some of the most frequently used communication approaches, which are by no means mutually exclusive: dialogue, social marketing, advocacy/lobbying, dissemination of information, institutional strengthening, capacity building (training/education) and community mobilization.

These approaches can be used individually or combined to achieve the intended goals. The point to emphasize here is that their selection and application will be decided in relation to the objectives set in the previous stage. If, for example, *the* objective is to

inform policy-makers about the findings of an environmental assessment conducted in a country, communication approaches should focus on disseminating the information (so long as we think that this would be enough to achieve our broader goal). Alternatively, we may need to adopt a more persuasive approach (such as advocacy) if we know the primary audience are law-makers requiring convincing rather than just informing. Once more, this is why the communication research work is so important. It is important to know what we want to achieve, but we also need to know a lot about our audience and other background information on the issue.

3. *Communication monitoring and evaluation* *solution assessment*

Having set the indicators and criteria for evaluation in the first phase of the communication process (Communication Research), these are used to monitor and assess the communication strategy in the third phase.

These three phases should facilitate comprehension of development communication at a macro level. In the first phase (i.e. problem-analysis) communication is an analytical tool, listening and dialogue are key instruments to investigate and assess the situation. In the second phase (i.e. problem-solving) communication is used to address and solve the situation, and ultimately bring change. In the third phase (i.e. solution assessment), overlapping with the other ones, communication is used to investigate and monitor progress, as well as assess change.

Conclusion

This paper is intended to give an overview of the development communication activities carried out by the Unit of Operational Communication for Sustainable Development in support of field operations. The challenges development communication has to face remain numerous. The main one consists of how to systematically mainstream communication in development interventions. This is strictly related to two challenges that development communication specialists have to face.

The first challenge is to position communication with managers and other decision-makers. Professional communicators should pay more attention to integrating and fine-tuning development communication intervention within management workplans and project-cycle activities from the beginning. Managers should be able to easily assess the costs and benefits of communication, and to do this they need to be able to see clearly when and how communication can be applied to the process. It is up to communicators to highlight these connections (i.e. entry points) and make sure that there are no inconsistencies between communication and the rest of the process.

The second challenge, while still focusing on promoting the value-added of this discipline, relates to development communication practices. Communicators need to be more systematic and assertive in providing empirical evidence on the impact of communication in development initiatives. This would entail a tighter quality control on the overall intervention. To achieve this, there should be clear criteria about the background required by development communication specialists. He/she should at least have a comprehensive knowledge of the theoretical and methodological systems in this discipline; have field experience; be knowledgeable about development programs and project cycles; be culturally sensitive, have a humble and open attitude towards people and change; and, most importantly, be willing and able to listen actively. Without these skills a communicator will be just another communicator and, as it is often cited, every person is a communicator, but we would like to add that not every person is a professional communicator!

Notes

1. This statement was written in the Communication for Development Roundtable Report, FAO. Rome, Italy, 1991 attended by leading specialists and institutions in this field.

References

- Anyaegbunam, C. Mefalopulos, P. and Moetsabi T. (1998). *Participatory Rural Communication Appraisal: Starting with the people*. FAO/SADC. Harare, Zimbabwe.
- Freire, P. (1997). *Pedagogy of the Oppressed* (Rev. Ed.). Continuum. New York, NY.
- Mefalopulos, P. and Kamlomgera, C. (2002). *Participatory Communication Strategy Design*. SADC/FAO Harare, Zimbabwe.
- Melkote, S. R. (1991). *Communication for Development in the Third World: Theory and Practice*. Sage Publications. New Delhi, India.
- Sachs, W. (Ed.). (1992). *The Development Dictionary*. Zed Books. London, UK.
- Sen, A. (1999) *Development as Freedom*. Alfred A. Knopf. New York, NY.
- Servaes, J. (1991). "Toward a New Perspective for Communication and Development" in F. L. Casmir (Ed.), *Communication in Development* (pp. 51-86). Ablex Publishing. Norwood, NJ.
- Wallerstein, I. (1990). "Culture as the Ideological Battleground of the Modern World-System" in M. Featherstone (Ed.), *Global Culture: Nationalism, Globalization and Modernity* (31-56). Sage Publications. London, UK
- Bordenave, J.L. (1976). "Communication of Agricultural Innovations in Latin America: the Need for New Models" in E. Rogers, *Communication and Development Critical Perspectives*. Sage Publications. London, UK.

Chapter 4

The GreenCOM project: using Strategic Participatory Communications for protected areas

Roberta W. Hilbruner

Introduction

Through project work in more than 30 countries during the past eleven years, USAID's GreenCOM project has applied communication techniques – including social marketing, civil society participation and mobilization, advocacy, organizational development, mass communications, and education – to empower people to develop sustainable solutions for environmental challenges. Many of these challenges have been related to biodiversity and protected area management.

Recent analysis of lessons learned through GreenCOM has identified a process that has proved to be immensely successful: Strategic Participatory Communications (SPC). GreenCOM has applied this process to a variety of environmental problems including ecotourism, sustainable agriculture, coastal and forest resource management, illegal logging, access to clean water, water conservation, solid waste management, energy efficiency, and clean production. This paper explains SPC and how it has been applied to support protected area management, providing three key suggestions for ways that protected area personnel may begin to apply SPC in their own work. Short case studies are presented to illustrate how GreenCOM used SPC to address protected area challenges in four developing countries: Egypt, Nicaragua, Panama, and Tanzania.

Strategic Participatory Communications (SPC) for protected areas

Drs. Sam Ham and Edwin Krumpe (1995) outline four major goals for protected areas:

- protecting natural resources;
- protecting visitors;
- enhancing visitor experiences;
- strengthening public relations i.e. building government and public support for protected areas and their conservation goals.

Each of these challenges involves people. SPC is a process that considers the *human dimension* in addition to technical solutions for environmental challenges. GreenCOM has found that applying SPC to protected area goals has a variety of important results. SPC increases people's understanding of issues, advocates for policy change, builds constituency for new policies (which also increases compliance with regulations), forges new partnerships and builds capacity for action, increases funding support, involves communities in resource conservation, and satisfies and protects visitors. In sum, SPC influences behaviour in ways that support sustainable protected area management.

Fundamentals of Strategic Participatory Communications (SPC)¹

It is important to emphasize that SPC is *a process* and not a quick fix for a problem or dispute. In essence, SPC is a way of bringing people together to:

- understand how their perspectives on a resource issue differ and appreciate the points on which they agree;
- make decisions and solve problems in ways that involve and benefit as many people or groups of people affected by the issue as possible;
- apply systems thinking concepts to generate a sustainable transformation of the way individuals, institutions, and societies view and manage resources.

To understand the process of SPC, it is helpful to consider the characteristics that make it unique.

SPC is strategic because it begins with research designed to frame a natural resource issue in its particular social, political, and economic contexts. The result is a bird's-eye view of all stakeholders, their different perspectives on an issue, and their relationships with one another.

SPC is participatory because it gives people from key sectors and social groups a chance to express their ideas and concerns and to take part in making decisions about natural resource management. This approach not only improves natural resource management but strengthens civil society as well.

SPC involves communications because initiating a society-wide dialogue about natural resources requires quality information disseminated to the right people through the right channels at the right time. This information also serves as an invitation to become involved in the dialogue and decision-making processes that lead to viable solutions.

SPC emphasizes the role of people in generating and adopting practices that contribute to a sustainable future.

What Strategic Participatory Communications (SPC) accomplishes²

SPC is a process that catalyzes complementary actions by multiple stakeholders toward a common purpose such as addressing protected area management issues. SPC can be equally effective in activities with little funding and in programs with relatively large budgets. Specifically, the SPC process will:

- facilitate the development of innovative partnerships and coalitions across sectors;
- strengthen effective citizen constituencies for decision making and action in relation to the sustainable use of their resources;
- increase private sector involvement to build economic bases for sustainable environmental resource use;
- generate demand for, approval of, and compliance with new policies, technologies, and services;
- accelerate and improve the flow of information among actors and stakeholders;
- catalyze solutions that create economic opportunities, social equity, and sustainable resource use;
- accelerate the adaptation and adoption of new technologies, alternative income generation activities, and natural resource management best practices;
- facilitate civil society participation in the development of new policies;
- accelerate decentralization and strengthen local governmental capacity to manage resources more effectively;

- strengthen the capacity of nongovernmental organizations (NGOs), governmental institutions, and the private sector in the application of a variety of social change methodologies;
- provide a process, methodologies, and tools to *go to scale* – that is, to catalyze change in sufficient numbers of individuals, groups, and communities to have a real and lasting impact on the issue or resolution of a problem.

SPC utilizes a systems thinking approach, in which widespread, lasting social change occurs as many discrete components work in tandem and reinforce one another.

Applying GreenCOM's Strategic Participatory Communications (SPC) approach

Protected area communication and outreach specialists can begin to lay the groundwork for using SPC in their work by keeping in mind three key lessons from GreenCOM's experience: plan strategically, expand stakeholder participation, and communicate appropriately.

Plan strategically

The importance of strategic planning cannot be overstated. For protected areas and other institutions seeking to apply SPC, this means first defining the issues. Although protected areas generally face the four challenges outlined at the beginning of this paper (protecting natural resources, protecting visitors, enhancing visitor experiences, and strengthening public relations), it is important to identify the *specific* concerns of a particular protected area. In addition to defining issues and concerns, protected area communication specialists need to understand who the relevant stakeholders are and how those stakeholders relate to and view these issues. This requires research.

Information about issues and stakeholders is the foundation for an overall communication strategy, which should be developed from the start and used as a general guide for all subsequent activities, materials, and strategies. Communication strategies should also be tied to the protected area's management plan to ensure that communications activities support management goals and objectives and are in turn supported by all staff members.

Expand stakeholder participation

Bring as many groups and sectors to the table as possible, but do so thoughtfully. Develop a mutual understanding of each group's perspective on an issue as well as its needs, wants, cultural preferences, traditions, and economic base. Use the "intelligence" gained to be creative in encouraging partnerships and coalitions among groups – including groups that would not naturally work together.

In addition, it is important to involve these stakeholders throughout the SPC process. They should help to identify issues, propose and negotiate solutions, and implement new activities. As a result of applying the SPC approach, each group should be equipped to take one step forward toward the goal.

Communicate appropriately

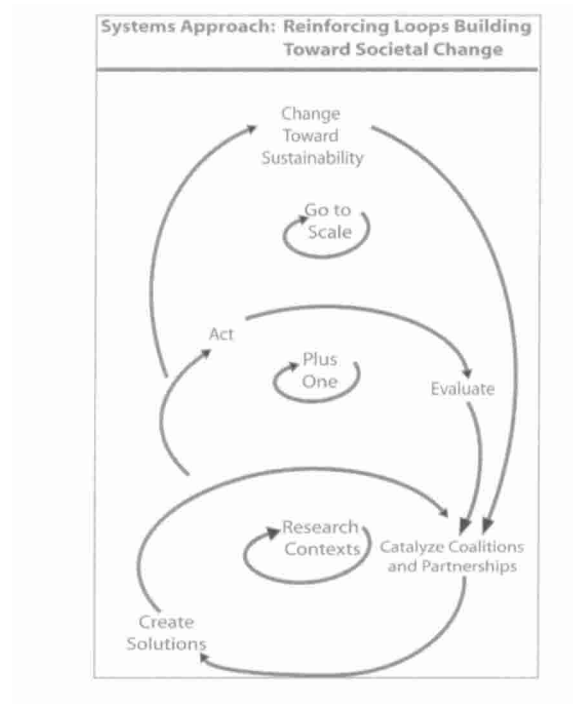
Choose communication tools and channels that are appropriate for different audiences. A one-size-fits-all approach rarely works, so it is necessary to reach each audience individually. If new messages or materials are necessary, design them for a specific audience and pre-test them with a representative sample of that audience.

A project can expand its impact by communicating simultaneously with a variety of different audiences through a number of different methodologies and communication channels. By engaging more than one audience, the society becomes saturated with the

message and stakeholders are in a better position to reach out to one another to form partnerships and coalitions that are dedicated to action.

Components of Strategic Participatory Communications' (SPC's) Systems Thinking Approach³

The SPC process includes the components described below. The accompanying graphic illustrates how these components interact as loops that perpetually feed into and reinforce one another, thereby providing many entry points for leveraging relationships and partnerships that lead to a fundamental transformation of the way natural resources are managed.



Research the context

Define and understand the issue. Identify gaps in knowledge and determine which kind of research is needed to gather the information that will fill those gaps. Define the goal. Identify the stakeholders who are related to the issue. Map the context – the social, environmental, governmental, and economic systems within which the issue is embedded. Identify leverage points to sustainable action. Analyze the position, beliefs, and values of the individuals and groups who are identified as leverage points. Summarize the results.

Catalyze partnerships and coalitions

Engage key stakeholders at multiple leverage points within the system to create partnerships and coalitions for common goals. Actively seek social, economic, governmental, and environmental representation within these partnerships and coalitions. Support them in "researching the context" for themselves, bringing them into the process as actors who analyze their situation and generate options for sustainable action.

Plus-One

Plus-One is a strategy for choosing appropriate next steps based on an assessment of the current knowledge, attitudes, and practices of target audiences. It is important to recommend actions that encourage movement along a continuum of change and that have a high probability of acceptance and adoption. Proposing actions that no one is likely to adopt serves no purpose.

Create solutions

With stakeholders and partners, generate policy, structural, and/or social options and negotiate and prioritize appropriate, sustainable solutions. Together, establish objectives and indicators of success and develop a strategic plan. Pre-test strategies, technologies, messages, and materials before they are implemented on a wider scale.

Act

Apply a combination of social change methodologies, tactics, and tools to achieve the indicators of success. Prompt both individual and collective practices that contribute to mutual, sustainable goals. Link actors, partners, and coalitions.

Evaluate

Monitor and evaluate the process, the degree of success in reaching common objectives, and the impact on social, economic, governmental, and environmental systems. Identify and build on success. Learn from mistakes. Identify new entry points in the system.

Going to scale

A real and lasting impact on the issue or resolution of the problem ultimately depends on catalyzing substantial numbers of individuals, families, groups, communities, and institutions to take action in support of sustainable solutions. Going to scale means producing sufficient social change to have a measurable long-term impact on the issue or problem.

GreenCOM and Strategic Participatory Communications (SPC) for protected areas

Excerpts from case studies on GreenCOM's use of SPC for protected areas in Egypt, Nicaragua, Panama, and Tanzania are provided here to demonstrate how the characteristics and components of SPC, described in the preceding pages, were implemented in local contexts.

Egypt

In the past ten years, Egypt's natural resources have come under increasing pressure from a number of sources, including a booming tourism sector. One of the areas most affected has been the Red Sea coastal zone. As the number of resort hotels increases, risks to the local environment such as urbanization, pollution, and damage to coral reef ecosystems are also multiplying. GreenCOM developed a comprehensive communications campaign to address these Red Sea concerns.

• Strategy

GreenCOM approached the issue of sustainable tourism by initiating a survey of tourists and tour operators – key audiences for any communication-related activities – in two major tourist destinations, Hurghada and Sharm El Sheikh. The survey was designed to gauge these groups' support for tourism-connected conservation initiatives. The results indicated that both tourists and tour operators strongly supported Red Sea conservation efforts, both in theory and in practice (i.e., they were willing to pay more for activities if they supported ecosystem conservation). From this research and target audience analysis, GreenCOM developed a strategic communications plan for the Red Sea region.

• Participation

In addition to tourists and tour operators, GreenCOM needed to capture the attention of other stakeholders – boat operators, educators, students, business owners, and

local government officials – and gain their support and involvement in ongoing conservation efforts. Project staff implemented several programs and events that gained the participation of multiple sectors. For instance, GreenCOM helped to form a professional boat operator association that would promote environmental best practices and encourage partnerships between operators and local conservation professionals. GreenCOM also provided support for the first Egyptian International Conference on Protected Areas and Sustainable Development, held in 2002 in Sharm El Sheikh. This seminal event gathered government officials, scientists, media representatives, and other stakeholders to address important issues related to sustainable development and protected areas.

- ***Communications***

An effective communications strategy for protected areas uses different channels to reach different audiences. GreenCOM, for example, drew children's attention to Red Sea conservation issues by using a popular cartoon character to frame those issues in an age-appropriate fashion. The project also worked closely with a corps of nature interpreters known as the Red Sea Rangers to build their capacity to communicate with a number of key audiences, including the boat operators mentioned above, local community members, and tourists. GreenCOM also used a more formal environmental education approach by developing educational materials on Red Sea ecosystems for use in schools, and designed a series of interpretive signs for several key locations along the Red Sea.

Nicaragua

In Nicaragua, GreenCOM found that Nicaraguans had little knowledge of or concern for protected areas. The project provided technical assistance to the Ministry of Environment and Natural Resources (MARENA) through a campaign calling attention to eight priority protected areas and the importance of conserving Nicaragua's outstanding wealth of biodiversity.

- ***Strategy***

Project staff conducted formative research with two key audiences at Volcán Masaya National Park: residents of the buffer zones surrounding the park and park visitors. This research focused on identifying behaviours that residents could engage in to support park conservation and determining the educational needs of park visitors. GreenCOM also recognized that protected area managers and extension workers in Nicaragua had little experience with using communication and interpretation tools, so part of the overall program included training for these individuals on how to create effective strategies and materials.

- ***Participation***

GreenCOM conducted a yearlong series of training workshops for representatives of selected parks and protected areas. Realizing that park officials were not the only ones responsible for implementing communication activities, other relevant stakeholders were also invited to be part of each park's delegation to the workshops. Those stakeholders included MARENA officials, representatives of local NGOs, local community leaders, schoolteachers, and tour operators. Park visitors also participated – albeit indirectly – in implementing the communications campaign, as GreenCOM monitored the new materials' impact on visitor satisfaction and knowledge for one year after the products were introduced.

- ***Communications***

GreenCOM collaborated with the groups mentioned above to develop interpretation materials for each of the eight protected areas. Products included brochures, posters,

and maps, all united by the common theme "*Nicaragua... Naturalmente*" ("Nicaragua... Naturally"). Although the primary use of the materials would be within the boundaries of the parks, it was also important to give them exposure on a wider scale. GreenCOM was able to do so by working with USAID and the Nicaraguan postal service to create a series of ten postage stamps with photos highlighting the beauty of the country's protected areas.

Panama

When management of the Panama Canal was transferred from the United States to Panama in 1999, the governments of both countries knew that the quality and quantity of freshwater in the canal watershed had to be protected for the country's economic, environmental, and social health.

- ***Strategy***

The case of Panama provides a perfect illustration of the importance of planning communications strategically. When the project began, GreenCOM found that the Panamanian public had little or no concern for the health of the Panama Canal Watershed (PCW) and by inference, no concern about national parks or protected areas within the watershed. Therefore, any communication interventions undertaken by GreenCOM could not be based on the assumption that citizens considered the PCW a valuable national asset. Instead, they would have to address this dearth of public concern before doing anything else.

- ***Participation***

GreenCOM consistently sought the involvement of a number of key stakeholder groups to build support for the watershed and protected areas within it and to create a sense of public ownership of the PCW. Project partners included grade schools, where GreenCOM initiated an innovative education-action program called Guardians of the Watershed, and government institutions and businesses, which were considered critical partners for building sustainable ecotourism in the watershed's protected areas, most notably the Soberania National Park.

- ***Communications***

A significant portion of GreenCOM's resources has been devoted to developing an ecotourism plan for Soberania National Park, which contains 20,000 hectares of protected forest. This plan is comprehensive and was developed with an eye toward making Soberania a model for other national parks to follow. It includes not only a strategy for developing ecotourism and income generation but also new and enriched activities for visitors, new interpretive paths and signage to highlight the park's myriad natural features, and a mass media campaign to promote Soberania as a destination for travellers from around the world.

Tanzania

- ***Strategy***

GreenCOM's initial mandate in Tanzania was to develop environmental education activities that would help communities located near Tarangire and Lake Manyara National Parks to understand the importance of using natural resources sustainably. Formative research indicated that there was a keen interest among community residents, especially schoolchildren, to play an active role in preserving the health of the parks. These findings formed the basis for a set of curricular materials and also encouraged GreenCOM to build stronger partnerships between schools and wildlife/conservation clubs such as Roots & Shoots (Jane Goodall Institute) and Malihai.

- **Participation**

In the quest to foster sustainable management of the Tarangire and Lake Manyara parks, it was important to give as many groups as possible a voice in the process. In addition to teachers and schoolchildren, GreenCOM worked closely with park interpretation and outreach personnel to help them develop communication plans and interpretive schemes that corresponded to their respective parks' needs. The project also expanded its Community Environmental Awards Scheme (CEAS) to communities located near the parks. This program encourages citizens to develop and implement sustainable resource management projects, which are then judged and the winners awarded prizes. CEAS is highly participatory, bringing together community members, local political leaders, and even national government officials.

- **Communications**

A variety of communication channels were employed in Tanzania. Curricular materials for schools were produced, including an environmental education teacher's guide and a book of illustrated stories called *Encounters with Wildlife*. An educational module dealing specifically with park-related issues will be published in the fall of 2003. Project staff members have also facilitated workshops for park personnel to give them hands-on practice in creating communication strategies and producing effective interpretive materials.

Conclusion

As a result of applying Strategic Participatory Communications in these four countries, protected area management and conservation have improved. Protected area personnel are communicating effectively with key stakeholders. People are aware of and value protected resources. Stakeholders are working together and are involved in conservation efforts. New policies, and even a new protected area, are supporting conservation goals and management efforts. Funding has increased. Visitors are better served, safer, and more satisfied. Visitor impact on natural resources has decreased. And in the ultimate test, resources are protected and conserved.

Strategic Participatory Communications is a powerful approach for bringing people together in support of protected areas.

Notes

1. This section adapted from GreenCOM (2003).
2. This section adapted from Booth (in process).
3. This section adapted from Booth (in process).

References

- Booth, E. M. (in process). *GreenCOM Strategic Participatory Communications methodology*. Academy for Educational Development [U.S. Agency for International Development Contract No. LAG-I-00-01-00005-00]. Washington, DC
- GreenCOM Project. (2003). *Fact sheet: Strategic Participatory Communications*. Academy for Educational Development [U.S. Agency for International Development Contract No. LAG-I-00-01-00005-00]. Washington, DC
- Ham, S. H. & Krumpal, E. E. (1995). *A belief-centred approach to site-based environmental interpretation for biodiversity in Central America*. Paper presented at the meeting of the GreenCOM Technical Advisory Group, Washington, DC.

Chapter 5

Understanding local reactions to protected areas

Marc J. Stern

Introduction

This brief note summarizes some of the preliminary findings of ongoing research¹ taking place in settlements surrounding three national parks: Great Smoky Mountains National Park (GSMNP) in Tennessee and North Carolina, United States, Virgin Islands National Park (VINP) on the island of St. John in the U.S. Virgin Islands and Podocarpus National Park (PNP) in the provinces of Loja and Zamora-Chinchipe, Ecuador. The goal of the study is to determine the relative importance of some specific aspects of park outreach strategies in influencing local reactions to protected areas by the people living within their immediate vicinities. Those aspects are:

- the provision of benefits to local populations;
- communication and outreach techniques;
- the garnering of trust (or distrust) amongst local residents for park managers;
- the nuances of local empowerment in park decision-making processes.

In order to study these aspects of park outreach, I have hypothesized that people base their decisions to act upon four types of evaluations they undertake regarding information they receive about parks (see Ajzen 1989, 2001; Ostrom 1990):

1. *Costs/benefits assessments.* Hypothesis: if individuals perceive that the benefits of the park's presence outweigh the costs, park neighbours should be more likely to support the park than they would be to oppose it.
2. *Perceptions about the attitudes of peers.* Hypothesis: people are more likely to act in accordance with what they believe their peers believe. In other words, when people perceive their peers to have more positive attitudes toward the park, they will exhibit more positive reactions to it. They may do this in order to either gain social currency or to avoid sanctions from their peers. Alternatively, people may develop their own internal belief system and values using their peers as reference groups for this development (see Merton 1968).
3. *Levels of trust in park managers to be fair and honest with local populations.* Hypothesis: higher levels of trust will correspond with more positive (or less negative) reactions to parks. Trust can be related to themes of predictability, reciprocity, and emotional connection.
4. *Local perceptions about the voice local people have in park-related decisions.* Hypothesis: if people believe they (and/or people like them) have some degree of influence over the decisions that affect their lives, they are more likely to be invested in positive ways in the process.

This research is designed to gauge the relative importance of each of these types of evaluations in affecting local reactions to the parks. Three types of reactions are considered in this paper as endpoints in the study:

- local attitudes toward the park;
- active intentional opposition to the park – ranging from intentional resource damage or illegal harvesting to active protests, lawsuits, or political lobbying against the park;

- active support for the park – measured as donating, volunteering, or defending the park in public.

Field methods in brief

Structured interviews and participant observation techniques were employed over three-month periods at both Virgin Islands National Park and Great Smoky Mountains National Park in 2003 and 2004, respectively. The statistical results presented below come from 240 interviews conducted at these parks (125 at GSMNP and 115 at VINP). Respondents were selected in two ways. First, a random sample was employed in the settlements within the immediate vicinities of each park. Then, cluster and targeted sampling methods were carried out to seek out individuals with potentially meaningful impacts upon the park. At VINP, relevant clusters included fishermen, residents with in holdings within the park, and concessionaires involved in recent conflicts with the park. At GSMNP, relevant clusters included hunters, descendents of families removed from the park, and recipients of specific forms of outreach. At both parks, individuals identified through interviews and other techniques as being park advocates or adversaries were also targeted, as were people identified as both formal and informal community leaders. The goal of the sampling was to maximize the diversity observed in local reactions to the park. At VINP, 55 randomly-selected respondents and 60 targeted respondents were interviewed. At GSMNP, I interviewed 62 randomly-selected respondents and 63 targeted respondents. Interviews averaged 61 minutes in length.

Over 150 additional interviews have been conducted at Podocarpus National Park during the spring and summer of 2004. At the time of this report, however, statistical analyses have yet to be carried out on this data. The analyses concerning PNP included in the discussion section of this summary result from field research conducted there in June and July of 2001 and from late April through mid-July of 2004.

Results²

Linear regression analyses revealed that each of the evaluations listed above has significant impacts upon local attitudes toward these national parks, with cost/benefits assessments bearing the most weight. Binary logistic regression analyses were employed to determine which of these types of evaluations might prove the best predictors of active local responses to each park, impacting upon their management effectiveness.

At both parks, one factor emerged as the most significant predictor of active negative reactions to the parks; that factor was trust. Trust was measured on a five-point scale to gauge the degree to which local residents trusted park managers to be fair and honest with the local population. Using trust alone, logistic regression analyses calculate with 82.1 % accuracy who within the sample is or is not actively opposing the park. The next best predictor out of the four evaluations listed above was cost/benefit assessments, predicting with 74.1 % accuracy.

Of the four evaluations listed above, perceptions about the attitudes of peers, perceived levels of local empowerment, and cost/benefits assessments combined to provide to best prediction of supporting actions. Using these variables alone, we can predict with just under 73% accuracy who in the sample is actively supporting the park. When all four evaluations are considered in concert with demographic factors, a more predictive model emerged that includes trust, perceptions about the attitudes of peers, educational achievement, and household income of the respondent. This model can predict the supporting actions of the local population with 75% accuracy. The interchangeability of

these variables suggests that they are, of course, inter-related to some degree. It also suggests that they are each important to developing local reactions to parks.

Discussion

As the global conservation community focuses much of its attention on attempting to provide alternative livelihoods to resource exploitation for residents living within the immediate vicinities of protected areas, careful attention must be paid to meaningful and appropriate engagement and communication with local populations. Preliminary results from this study suggest that trust for park managers is the most consistent factor associated with how local residents actually respond to national parks. Thus, the ways in which parks and partner organizations engage local communities can make or break any projects designed to work with them.

Some important lessons in this respect have emerged from the cases within this study. The most common explanations of distrust for park authorities that apply to all three parks in the study included a lack of meaningful personal connection to these entities, a lack of genuine local involvement in park-related decisions or initiatives, complaints of broken promises made by park authorities and their partner organizations, and perceived inconsistency in park-related communication and in enforcement practices.

At each of the parks in the study, individuals with more consistent informal or social interaction with park officials exhibited higher levels of trust for protected area authorities. This particular finding is especially salient at PNP, where various foundations are actively working within the park's buffer zone to develop projects to deflect resource pressures from the park. Typically, these organizations travel to remote settlements, conduct rapid participatory rural appraisals, then return to their offices to design potential projects and seek funding for them. Often, they are unable to return to the target villages for months; sometimes, lacking funding, they are unable to carry out any projects in these areas. This cycle of raising expectations and failing to meet them has generated passionate opposition to park-related entities in some areas. While no promises are ever directly made in initial visits to these villages, promises are clearly perceived. When projects are delayed or cannot be followed through, they put up serious roadblocks for future hopes of collaboration with residents in these areas. The most successful projects tend to be carried out by organizations whose employees actually reside within the areas they work.

Even where projects have been carried out with high levels of participation, many have failed to have lasting effects. Short and tenuous funding cycles have led many projects to begin without sufficient funds to see them through to a productive finish in which local residents could continue sustainable activities without the aid of extensionists. Funding mechanisms have also limited the flexibility of extensionists to adapt to real-life conditions at the sites of their interventions. Because of the short-term demands on measurable static indicators of success required by many donors, project personnel often feel compelled to proceed on pre-designed notions that may not quite address the direct causes of environmental degradation as they are uncovered through close observation over time. Without consistent presence in the villages in which extensionists are working in the region, trust between locals and project agents and understanding of local patterns, processes, and motivations are extremely difficult to develop. Extensionists need the freedom to learn and adapt to on-the-ground conditions.

Consistency also is important at the Great Smoky Mountain and Virgin Islands National Parks, in both formal and informal ways. At all three parks, trust levels were lower in people who viewed enforcement practices as sporadic or unpredictable – even in those committing violations. Consistency in communication also proved important at these parks. Complaints of sporadic, incomplete, or untimely communication were also linked to

distrust for park authorities. Many respondents explained that this inconsistency had led them to believe that the park was hiding something. In places where parks have significant impacts on local communities, information travels quickly, whether it is accurate or not. If people knew where to turn for clarification on a regular basis, they would be less likely to be caught off-guard or to misinterpret new park initiatives. Many residents suggested regular newspaper columns or gatherings in which the park would explain its current activities.

At both GSMNP and VINP, local residents who are commonly hired as maintenance workers or seasonal staff and occasionally into permanent positions at each park are critical to information flow to local populations. Interviews revealed that local residents commonly turn to these individuals for information regarding the national parks. Without consistent internal communication within park management organizations, these people, who could potentially be effective liaisons between parks and local communities, are often forced to plead ignorance about park policies. This has further led to beliefs amongst local residents that the park is trying to hide things from them, directly fueling passionate park opposition in some cases.

Internal communication shortcomings amongst staff have also powerfully impacted local views of the sincerity with which their public comments are considered. At VINP, while park managers told me that local comments influence policies on a regular basis, many local staff members I interviewed expressed to me that they did not believe that local comments were genuinely considered in major decisions made by the park managers. Interviews revealed that this stemmed in part from a lack of internal consultation with the local staff members themselves. If local staff members cannot be convinced that public involvement is genuine, the general public is far less likely to be convinced.

Empowerment issues were also strongly related to trust levels and response variables at each park. Both VINP and GSMNP are required by the National Environmental Policy Act of 1969 to conduct public assessments of major park initiatives by providing forums for public input. Each does so, however in very different ways. Although public meetings are held and public comments are heard at VINP, at most of the meetings I attended there was no one officially recording public comments. When park decisions are made, press releases typically mention that public comments have helped to influence the outcomes, but no information is provided about the nature of those comments or their impacts. While the people I interviewed generally respect that the park cannot accommodate all of their suggestions, they feel that they deserve clear explanations concerning how their comments have been considered. Most St. Johnians I spoke with do not believe their comments are heard at all. One explained, "We bitch about it, but they still do what they want to do. The people say to hell with their meetings."

This has led to low attendance at public meetings in recent years; thus, park officials must consider new ways of reaching out to local residents should they wish to re-establish open lines of communication. Interviews with residents suggested local desires for more informal and social interaction with park officials to bridge the gap between them. They also suggested that park authorities need to take the first step toward bringing people into their corner by either bending on any one of many issues that locals complain about regarding the park (e.g. fees for locals at local beaches within the park) or offering something tangible to the community (e.g. community service days, job training, etc.). In other words, people want to see that the park cares about them. Some initiatives administered by the Friends of Virgin Islands National Park, including scholarship and educational programs, aim to do just that. Common local perceptions of the Friends group, however, are as wealthy mainland outsiders who control park policy behind closed doors, working against the local community on many fronts. Although aimed toward providing college funds for local Virgin Islanders, the scholarship fund bears the name of a recent mainland superintendent who stirred quite a bit of controversy on the island. Thus, these

efforts have yet to have a positive impact on the park's relationships with native St. Johnians. This speaks to the importance of the degree to which partner groups actually reflect the sentiments of neighbouring communities, and also to the ways in which such programs are communicated.

At GSMNP, current public involvement processes are comparably very thorough. Public meetings typically include the presence of court reporters, comment forms, and drop boxes. Comments are processed by independent consultants, summarized, and made available to anyone who would like to see them. Still, there are feelings of futility amongst those who participate in these meetings. Although many are appreciative of the opportunity to voice their opinions, the fact that those running these processes are not those who will make the final decisions regarding their outcomes has created considerable mistrust and doubt. In fact, park managers are not even sure who will make the final decisions regarding four on-going public involvement processes. This lack of accountability and the distrust associated with it has instigated passionate protests against the park in some cases.

Cultural heritage preservation and interpretation is also closely related to levels of trust at GSMNP and VINP. At GSMNP, where the descendants of hundreds of families who were forcibly removed from the park still reside, the preservation of old home sites and cemeteries (as well as access to them) are important elements for creating common ground between park entities and these residents. Varying levels of effort in different areas around the park in protecting this heritage are linked to varying attitudes about how well people feel that the park seems to relate to local populations. At VINP, park decisions to focus most cultural interpretation upon a colonial period of occupation and slavery, largely ignoring the post-emancipation/pre-park establishment period of over 100 years when St. Johnians lived free as subsistence farmers, has also impacted local attitudes and reactions to the park. Many feel as if the park is specifically "anti-local" by disrespecting the more recent history of the island that is most relevant to its native population.' Park initiatives to reduce culturally important "non-native" species that pre-date the park's presence have exacerbated these feelings. Many St. John residents explain their opposing actions to the park by citing feelings of cultural disrespect that stem from these management philosophies.

Lessons

In summary, this research suggests the importance of a renewed focus on the processes through which communications with local publics take place and on the impacts of some specific types of decisions undertaken by park managers. Some lessons that have emerged from this research for parks and their partners to generate more cooperative relationships with their local neighbours include:

- maintaining consistent presence and participating socially in the communities surrounding protected areas;
- longer-term funding commitments and greater flexibility in indicators used for monitoring by donors and/or government entities;
- carrying out consistent enforcement practices;
- communicating regularly and clearly through culturally appropriate media;
- providing culturally appropriate venues for genuine local involvement in park planning;
- responding directly to public comments with clear and honest explanations of why they could or could not be accommodated before initiatives are carried forward;
- empowering the chief communicators in public outreach processes to be able make meaningful decisions and be accountable for them;

- improving internal communications between park staff, consulting local staff on management decisions that will affect the local public, and providing professional development opportunities for these individuals;
- incorporating and celebrating the present-day and recent local culture in park interpretation and exhibits;
- where possible, encouraging the creation of diverse partner groups that reflect the demographic make-up of local populations by including them directly.

For more detailed analyses regarding this research, please see Stern (*in press*) and Fortwangler and Stern (*in press*).

Notes

1. The author would like to acknowledge the Canon National Parks Science Scholarship, the Tropical Resources Institute, and the Doris Duke Conservation Fellowship for funding this research.
2. For additional detail on statistical tests, see Stern *in press*.
3. One exception to this is the Annaberg Folklife Festival that takes place once per year and includes Afro-Caribbean cultural events. All interviewees who expressed awareness of this festival viewed it in a positive light. However, most complained that acknowledging local culture in park interpretation once per year is not enough. While many park personnel have advocated for additional interpretation of more recent island history, extreme shortfalls in park budgets have forced difficult decisions in this arena.

References

- Ajzen, I. (2002) "Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior" in *Journal of Applied Social Psychology* 32(4): 665-683.
- Ajzen, I. (1988) *Attitudes, Personality, and Behaviour*. Stony Stratford, Open University Press, UK.
- Fortwangler, C. L. and M. J. Stern (*in press*). "Whose history? Why cultural and historical analyses matter to resource management" in *Policy Matters*.
- Merton, R. K. (1968). *Social Theory and Social Structure*. The Free Press, New York.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, Cambridge.
- Stern, M. J. (*in press*). "Payoffs vs. Process: Expanding the paradigm for park/people studies beyond economic rationality" in *Journal of Sustainable Forestry*.

Chapter 6

Building support for and beyond protected areas in the Philippines: a Haribon's journey of transformations

Margarita Lavides, Anabelle Plantilla, Neil Aldrin Mallari, Blas Tabaranza Jr., Belinda de la Paz and Cristi Marie Nozawa

Introduction

The Haribon Foundation for the Conservation of Natural Resources is a membership organization committed to nature conservation through community empowerment and scientific excellence. Haribon's work over the years is highlighted by successes in three areas: (1) building local government and community support, (2) building local and national alliances and (3) generating public support for the management of small protected areas.

This paper presents Haribon's communication and education strategies, along with corresponding immediate results, impacts and lessons derived. Haribon is now looking at the different perspectives on, and directions for, communications, public awareness and advocacy, in order to reach all non-negotiable targets and achieve the desired results towards greater awareness and more effective management of the country's priority areas for biodiversity.

The conservation situation

The Philippine Archipelago lies in the eastern Pacific Ocean, north of Indonesia, south of Taiwan and east of continental Southeast Asia. It includes over 7 000 islands spread over approximately 1 650 km of ocean from north to south and 1 000 km from east to west. The total land area of this spectacular collection of islands, reefs and shoals is less than 300 000 km², slightly less than that of the British Isles (Mallari et al, 2001).

The biodiversity of the Philippines is unique. The rich tropical forests, which once clothed the islands, have been isolated from mainland Asia for millions of years. A great diversity of animals and plants, found nowhere else on earth, have evolved there. An astonishing 44% of the (c.395) breeding bird species are endemic to the Philippines, as are 64% of the (c.175) mammals, 70% of (c.240) reptiles, 75% of (c.80) amphibians and 40% of the (c.8 000) flowering plants (Heaney and Regalado, 1998 in Mallari et al 2001).

McManus (2002) estimated the area of coral reef in the Philippines to be at 30 000 km². The portion of the world's oceans with the highest diversity of coral reef species encompasses the Philippines and extends due South, through eastern Indonesia, and eastwards, around Papua New Guinea, to the Coral Sea. Within this area, the numbers of species of fish, corals and many other groups of organisms, is at least three to five times higher than the number found in the Caribbean, Tahiti or Hawaii. The average reef in the Philippines would be expected to have more species than all but the most northerly reefs of the Great Barrier Reef (MacManus, 2002).

Almost every major international conservation organization now regards the Philippines as one of the highest priority countries in the world because of the extent of its biological diversity, the extraordinarily high levels of endemism, the high rate of deforestation and habitat destruction, and serious inadequacies in the existing environmental protection measures and protected areas network (Oliver and Heaney 1997 in Mallari 2001).

Historical background: protected areas under the National Integrated Protected Areas System framework versus Haribon's community-based protected areas

Since the enactment of the National Integrated Protected Areas System (NIPAS) Act in 1992, 18 priority sites have been proclaimed protected areas and more and more sites are being proclaimed under the National Integrated Protected Areas System framework. Nevertheless, even with the continuous process of proclamation, the number of sites of importance to biodiversity and sustainable fisheries is still too large to ensure protection in time. Further, in a paper presented in a Regional Protected Area Conference (2003) based on experiences in policy implementation, Tabaranza et al (In Press) stated that National Integrated Protected Areas System law was deemed flawed for the following reasons:

1. As a legal framework, it is largely nationally driven and "top-down". Local stakeholders have very limited involvement in site selection processes and decision making, and thus no sense of protected area ownership. Many stakeholders feel threatened by the implementation of National Integrated Protected Areas System law because they perceive this will curtail forest-related livelihood activities. In many sites, therefore, the National Integrated Protected Areas System and the Conservation Priority Protected Areas Program (CPPAP) have been met with lack of support from the local government units and local communities.
2. Many of the areas selected cover 30 000 hectares or more and cross municipal or provincial boundaries. While this may be beneficial to biodiversity, management proves problematic.
3. The process of formal designation is complex and tedious. To date, the legislative body of the government – the Philippine House of Congress – has only approved five National Integrated Protected Areas System sites. The rest of the sites have hardly progressed beyond local assessment and consultation.
4. Many members of the protected area management staff, as well as the Protected Areas Management Board under the National Integrated Protected Areas System framework, were fumbling because of lack of technical expertise, especially when the law was first implemented.

Fortunately, the Local Government Code in 1991 and the Philippine Fisheries Code of 1998 brought about the legal and jurisdictional shift of natural resource management – from national to local government – providing the legal framework from which community-based protected areas can be scaled up (multiplied and replicated) into many sites. Being an archipelagic country with fragmented habitats, community-based protected areas are more often than not situated near poor communities and are appropriately manageable by local communities and local government.

Since the 1980's, the Haribon Foundation has been adopting community-based coastal resource management, central to which is the establishment and management of community-based marine protected areas. These are scattered along the coasts of Zambales, Batangas, Bohol and Pangasinan. In 1999, drawing from community-based resource management inspiration and experience, Haribon facilitated the organization of

the National Alliance of community-based marine protected area managers in the Philippines (PAMANA Ka Sa Pilipinas).

The Haribon Foundation for the Conservation of Natural Resources

Since its inception in 1972, the Haribon Foundation for the Conservation of Natural Resources – a not-for-profit, non-governmental organization – has been in the forefront of environmental protection and sustainable resource management in the Philippines. It is a membership organization dedicated to nature conservation through community empowerment and scientific excellence, and is the oldest environmental organization in the Philippines. Haribon's niche – developed over 30 years of rigorous scientific and socio-economic research as well as community-based natural resource management work – is biodiversity conservation through protected area management.

At the site level, Haribon has facilitated the establishment and maintenance of about fifteen community-based marine protected areas. At the national level, Haribon has facilitated the organization of about 122 community-based marine protected areas across the country into a national alliance called PAMANA Ka Sa Pilipinas. This has made it the country's premier national fisher folk organization, advocating marine conservation and sustainability of near-shore fisheries. Likewise, Haribon joins non-government national alliances for fisheries reforms and marine conservation.

Looking at Haribon's protected area and biodiversity conservation work throughout the years, successes in three areas are apparent: (1) building local government and community support, (2) building local and national alliances, and (3) generating public support for protected areas and biodiversity conservation in general.

Building local government and community support for protected areas: lessons in the context of communication and education

Haribon's experience in the establishment and management of community-based marine protected areas reveals that diverse communication and education means can help build crucial support throughout protected area projects. In the establishment process, identifying the conservation issue and getting others to identify, accept and place the issue 'on the agenda' is a must. Communication means – such as assemblies, meetings and house to house visits – help to gain the acceptance of protected area projects by the community early on. Involving the community, eliciting reactions to proposals, and using these contributions to modify and refine implementation plans, establishes a sense of project ownership and wins approval.

Forming a "people's organization" facilitates identification of community issues and provides an organ through which the community contribute. With enough training (e.g. in basic ecology, leadership, organizational management), a core group of community-based campaigners from the people's organization work with project staff to champion the establishment and management of community-based protected areas. Reliable, credible and well-trained community-based campaigners are crucial in gaining community and local government support.

In addition to the primary targets for communication and education – including the coastal community (fisherfolk and their families) and the local government – other target audiences should be considered. Influential groups such as church leaders, local industries, professional organizations and schools (among others) may have considerable influence on the mindset of the primary targets and should be included in the communication strategy.

Awareness raising means – including production and distribution of popular materials (e.g. flyers, comics, community billboards (locally called 'peryodingding') etc) film screenings and other audio-visual presentations – are useful in deepening understanding of conservation issues and, with large audiences, have extensive positive impacts on protected area establishment and management.

Using the local dialect is important. As many materials as possible should be translated or developed directly in the local dialect, significantly increasing readership. Likewise, assemblies, trainings and other capacity building activities should be conducted in the local dialect to facilitate participation.

Cross visits to other successful community-based marine protected areas have strong impact (though involving fewer, select participants). These visits are seen as one of the most effective means of gaining support from both the local government units and the community. Immediate positive results such as planning sessions, seminars, the passing of resolutions and ordinances by the people's organizations and the local government units, have been successes following cross-visits.

Involving local community and government in planning is important in the process of securing sufficient approval and backing. Presenting the community with a resource assessment survey and using assemblies / meetings to take consensus decisions on the design of the protected area (location, size, zones, rules and regulations etc), collective community backing is strengthened and the likelihood of continued support maximized. 'Signature campaigns' led by the people's organization and project staff can support the proposed municipal ordinance of the protected area, lobbying local government units to commit to supporting the protected area project.

Capacity building through continuous training given to the people's organization and other members of the management body (e.g. resource management councils) is imperative, sustaining enthusiasm and support. Building capacity in communication and education facilitates dealing with the pressures of conflicting socio-economic, cultural and political forces surrounding the establishment and management of community-based protected areas.

Formally launching the established protected area raises the community's awareness as well as boosting the morale and sense of achievement of all those involved. Enforcement facilities (for example billboards and marker buoys) serve as powerful communication and education tools as well as impacting positively on compliance with protected area rules and regulations.

Ongoing dissemination of popular materials (e.g. flyers, comics, community billboards etc.), film screenings and other audio-visual presentations better understanding, maintain interest and continue to raise the profile of the protected area. Similarly, continuing organized cross-visits to other successful protected areas and networking are reinforcing measures.

Information pathways, whereby essential information is exchanged among stakeholders, should be understood and used by the project staff. Information pathways necessarily include the protected area staff and all the stakeholders – people's organizations, the community, the general public and local government units. Sufficient venues need to be created and appropriate communication and education tools put in place so that information pathways are substantial, accurate and free flowing.

Continued community involvement in the monitoring and surveying of the protected area consolidates community support through direct, empirical observation and participatory action. Training wardens to patrol the protected area (with, for example, patrol boat and

handheld radio) entrusts them with responsibility and accountability as they become the guardians of the area. Together with enforcement facilities, local community members actively enforcing protection of the area communicate strong messages of solidarity and contribute to further mobilizing support of the protected area.

By monitoring and evaluating the effectiveness of the communication and education means used, lessons can be learned through experience and methodologies can be refined.

Building local and national alliances for protected areas: lessons in the context of communication and education

Communication and education are also important in the formation of local and national alliances. Experience is drawn from Haribon's involvement in the formation of the National Alliance of marine protected area Managers in the Philippines (PAMANA Ka Sa Pilipinas).

Bringing together local people's organizations, government units and protected area managers in forums, provides time and space for the identification of issues and potential solutions as well as the drafting of a preliminary agreement to form a national alliance. Thus, such forums increase awareness of conservation issues and contribute to developing collective management of marine protected areas. Development of mechanisms to monitor and evaluate the effectiveness and success factors of protected areas may be undertaken at this stage.

Congresses (such as the 1st National Congress held in the process of formally organizing PAMANA Ka Sa Pilipinas) enable ratification of the constitution and laws, election of officers and official registration (to the Securities and Exchange Commission (SEC)).

Once officially formed, strengthening the alliance becomes the focus of communication and education activities. Recruitment of more marine protected area managers and local government units to the alliance is imperative. Workshops of marine protected area research and other project activities (such as participatory marine sanctuary monitoring and policy advocacy) stimulate interest from participants, furthering alliance capacity. Organizing cross-site visits enables the gathering of marine protected area profiles and introduces the alliance (PAMANA) to further community and local government units. Knowledge and marine protected area management data is built up, and marine protected areas secure media mileage in newspaper print as well as airtime for documentaries.

Networking is a key component in strengthening alliances. National leaders are encouraged to, and supported in, participating in national and international events, regional assemblies, conferences and networks. As well as this, there should be active participation in existing policy advocacy networks of NGOs, people's organizations, and academe focused on advocacy.

Tapping into, consolidating and establishing second level networks of local area NGOs and government units is also crucial to addressing the agenda and carrying out the activities of the protected area network. Without these second level networks, national campaigns are virtually impossible to pursue considering the limited number of people in the alliance secretariats. During the campaign period, these networks are able to build and finally establish a certain level of popularity and momentum in their respective sites, making possible the execution of campaign plans.

Conducting regular forums, conferences, workshops and training sessions at various levels (baywide, regional, national) helps build capacities of local protected area catalysts to respond to the needs of member marine protected areas, extracting and sharing best practices, and building relationships and linkages among them and with various resource

institutions. This provides a certain level of comfort and ease of communication among and between local community-based marine protected area catalysts and also the PAMANA secretariat and Haribon Foundation.

Simultaneously, maintaining a highly dedicated and competent core of staff, able to utilize the strengths and competencies of many other individuals and institutions in the service of protected area network objectives, is a key to success. Communication skills top the list of competencies required to be able to reach out to different stakeholders.

The communications team should aim to make campaigns comprehensive yet fun, creative and meaningful. Policy advocacy campaigns in support of protected areas need to avoid anger and should be dramatized with good feelings associated with conservation. Full use should be made of science and research as a tool for policy advocacy campaigns, yet at the same time they must be accessible to the general public, having gone through broad consultations. Essentially, the messages used in communication and education materials and activities should always be science-based and verified. Local dialect use is important.

Taking full advantage of available information technology is beneficial. Where realistic, the internet, media, projectors, computers, cellular phones and other communications facilities should be used to facilitate information exchange. This may include an electronic data-base of member marine protected areas, catalysts, and resource institutions. Publishing this information (in books, atlases, journals or newsletters) enables information exchange and compensates, to a degree, for the physical absence of network secretariat and national alliance leaders.

A project of the National Alliance of Marine Protected Areas in the Philippines (PAMANA): *BangkatBuhay (Boat and Life) project*

A project of the PAMANA alliance – the *Bangkat Buhay (Boat and Life)* celebration – was a month long celebration of national fish conservation week with six months of build-up activities.

The following activities were geared towards advocating policies in support of marine conservation and fishery management: a) a catalyst forum; b) campaign planning workshops; c) signature campaigns; d) public assemblies, conferences, training sessions, workshops and dialogues; e) a parade of decorated boats with people carrying banners with messages in support of conservation of protected areas; f) land parade with decorated vehicles; g) press conference; h) print media; i) radio plugs; j) TV documentary; k) production and dissemination of campaign brochures, leaflets and posters.

While utilizing parades, the campaign includes school bands and street dancing to generate interest and fun in the midst of issues about fish-kills and illegal fishing and advocating for community-based marine protected areas.

For the Boat and Life project 30-40 000 people were mobilized in support of marine conservation, fishery management and development, contributing greatly to awareness and strengthening local networks. Ten PAMANA chapters (baywide chapters, for example Lanuza Bay PAMANA chapter composed of about 7-10 community-based marine protected areas) were organized. PAMANA member sites doubled in number from 61 to 122, and Memorandum of Understanding, executive orders and public declarations were made in support of marine conservation, fishery management and development.

Generating public support for protected areas and biodiversity conservation in general: lessons and ways forward

The resource management efforts of local communities and local government must find support from the general public in urban areas where policies are created, influenced by the pressure of public opinion. The plight of protected areas and their local communities will not be addressed if the issues are not brought to the policy makers and the domain of public opinion. What is critical is not the geographical proximity to the decision-making centers but the public's opinion and level of consciousness vis-a-vis environmental issues. It is important that the public in urban centres are made aware of the problems faced in biodiversity conservation and that they understand that loss of biodiversity is irreversible and that it is critical to the nation's well being.

Bring the issue of biodiversity to the public and connect this to their everyday life: for example, link flooding with deforestation; link biodiversity loss to economic losses. Without this link people cannot and will not value biodiversity and its conservation. People, especially those from the urban centres, continually use resources from natural sources and yet do not realize that their very survival hinges on the protection of these.

Translate biodiversity concepts, issues and solutions into a language that the public can relate to. By doing this, a major behavioural change can be brought about. Thus, the test is to translate the very technical terms attributed to biodiversity to very popular terms. (Haribon utilized scientific market surveys to gain understanding of the average Filipino urbanite: to find out his level of awareness on biodiversity conservation and to find out what is the best way for him to appreciate and learn about it.)

Advocate the need for biodiversity conservation public awareness raising campaigns in audiences such as the government itself, the donors, the academe and the church. A significant percentage of the population does not know anything about protected areas because there is low prioritization of biodiversity conservation information dissemination. Biodiversity conservation is seen as the sole responsibility of the Department of Environment and Natural Resources (DENR) or the national government. But the government considers biodiversity as only a sub-sector of the environment sector. This situation reflects how much priority the general public or people in government give to biodiversity conservation.

Even within the Department of Environment and Natural Resources (DENR) there is the need to advocate for greater allocation of resources for biodiversity conservation. Funding agencies also have low awareness of the importance of biodiversity information dissemination. Many of the available funding opportunities are for governance, poverty alleviation and community development, but the link between community development and biodiversity conservation is not well understood and appreciated.

Because the importance of protected areas is almost totally unknown to the people, no one sector of the society can effectively promote its conservation. Haribon has started forming and strengthening partnerships with the government, civil society, corporate, and academe to promote protected areas. In this way, the different aspects of protected areas can be highlighted and costs can be spread among different parties. These sectors can freely move within their own milieu in terms (definitely, each sector will have its own limitations) of their public awareness programs.

Haribon has assisted the Department of Environment and Natural Resources (DENR) in formulating its information, communication and education Framework Plan to address biodiversity conservation. For the first time, all public affairs and information officers of the Department of Environment and Natural Resources (DENR) came together, planned and

crafted an information, communication and education plan which has been identified as one of the strategies in the National Biodiversity Strategic Action Plan (NBSAP). The intention is for Department of Environment and Natural Resources (DENR) to have a unified message on biodiversity conservation and to identify the roles of the other sectors of society (donor, NGOs, other government agencies) in bringing about more focused and targeted public awareness activities nationwide. However, this is just the first step. Department of Environment and Natural Resources (DENR) will have to master enough political will to implement this plan.

Engage the private sector in biodiversity conservation efforts, particularly in the arena of communication and education. Haribon is currently engaging the private sector. With big budgets for advertising and marketing, the private sector is the best vehicle to convey information to the public. TV, print, radio, and billboard advertisements have been very successful in ensuring that consumer products are bought and become household names. If this mechanism can be adopted for biodiversity conservation, its importance can be easily linked to everyday life and will be clearly understood by everyone. On the other hand, the academe can target the student population while local government units and civil society can focus on their own constituencies.

Convert the more aware segment of the public into members of environmental membership organizations. They can be powerful and effective communicators of biodiversity conservation messages. Because Haribon is a membership organization, it continues to tap the public as a funding source for its public awareness campaigns and activities. Through its awareness campaigns it hopes to "convert" the more aware segment of the population into members of its constituency for biodiversity conservation.

Market surveys, commissioned by Haribon in the last two years, indicate that there is a Filipino culture of giving and that the environment remains among the top five causes to which people give. However, as mentioned earlier, people will have to link biodiversity conservation to their lives in order for Haribon to maximize this potential. The issue should have a "face" which people can identify with. As it is, religious and child welfare causes have a huge share of the donation pie because the giving public can easily identify with these. Public support for biodiversity conservation is a critical element of building a sustaining mechanism for it, both at the site, national, regional and local levels.

Identify and train champions of biodiversity conservation through curricula and teaching modules in schools and universities. They can truly influence the young minds and multiply advocates of biodiversity conservation. Biodiversity conservation in general, and protected area management in particular, is not seen as a career by most. This is true even within academic institutions and is very evident in the lack of any undergraduate courses in most colleges and universities that encourage field studies or include field biology and management opportunities in their curriculum. The nearest undergraduate course is still forestry and marine biology. The latter is more field oriented but focused mainly on the sciences whilst the first is mainly an industry-based course. There are attempts to include wildlife biology in forestry but a decades-long focus on industry is difficult to change. Haribon's intention is to incorporate its teaching modules into the curricula of select universities. Haribon will encourage these universities to develop research programs and, eventually, degree courses to offer students.

Civil society has consistently been very active in the Philippines, contributing much in assisting government in the delivery of services. Recognizing their role in biodiversity conservation work in the country, there is also acknowledgment that their capabilities have to be strengthened to enable them to take on the greater challenges of their work.

The country's biological diversity is the nation's natural heritage. Therefore, conservation of biodiversity must be the responsibility of every Filipino. The involvement of ordinary

individuals and communities is critical in sustaining any national or local level concern for biodiversity conservation. All sectors play a role in biological diversity conservation and it is only through concerted efforts among these sectors that we can have a more informed populace and a reasonable and steady budget coming from the national government and other sources which may contribute to the implementation of more effective protected area protection measures.

Haribon's multi-media campaign for biodiversity, Manila

In April 2001, Haribon conducted a market survey asking urban Metro Manilans to identify priority environmental issues. It was not surprising to see air pollution and waste management as the top two issues identified. Biodiversity conservation received only 11%, even when respondents were prompted or received an explanation.

With these results in-hand, Haribon embarked on a trial multi-media campaign in 2002, in which public awareness activities were conceptualized and implemented. This was followed by a further market survey conducted in September 2002 to gauge the impacts of the awareness activities. This indicated that there are multiple sources of information for the environment and found that the more personal the experience (for example through hiking, mountain climbing, scuba diving, snorkelling etc) of environmental issues, the higher the respondents level of awareness and the higher importance they attach to biodiversity. Television is still the most important source of information for all issues and all age groups. Following television are newspaper and radio. Results of the recently conducted (September 2002) survey indicated an increase in total awareness for biodiversity conservation from 11 % in 2001 to 22% in 2002.

Television

An award-winning advertising agency was commissioned to create a 30-second television advertisement for Haribon which was aired for the entire month of April 2002 in selected television shows based on volume and quality of viewership. A well known opinion columnist volunteered his services as voice talent for the ad. Since March 2003, this ad has been showing for free in six theatres in Rockwell Power Plant Mall, an upscale mall in Metro Manila. The ad won the Gawad Araw Values award for best advertisement in 2002.

Haribon experiences in conservation were documented and are being aired by Isla, an advocacy channel shown on Philippine cable television, entitled "Biodiversity School on Air". Four episodes featuring Haribon's work on the Philippine Eagle and community-based resource management efforts in Bolinao, Pangasinan (a coastal community with locally-managed marine sanctuaries north of Manila), Mt. Isarog National Park (a national park known for its high species endemism found in south of Manila) and Sablayan, Occidental Mindoro (an island south of Manila having the patches of lowland rainforest) have been shot and are currently aired. Haribon has obtained free air time amounting to approximately PhP 4 000 000 (US\$77 000) from this cable channel.

Print and Publications

The same advertising agency also prepared three print advertisements which were placed in the two major national daily papers in April and May 2002. In addition, these adverts and other information about Haribon were placed in select magazines – known for their readership among the young professionals, young married couples and youth.

In 2001, Haribon published "Key Conservation Sites of the Philippines" – a directory of 117 important bird areas within the country. This was a product of five years of

primary and secondary data gathering, the latter done through a series of regional and national workshops to validate data. This book has been widely distributed to pertinent government agencies, particularly the Department of Environment and Natural Resources (Department of Environment and Natural Resources (DENR)), Houses of Senate and Congress, academe, private sector and the NGO community. All sites have been adopted by the Department of Environment and Natural Resources (DENR) as priority sites and the United Nations Development Programme (UNDP) Office in Manila has been using the publication as a guide when determining priority sites for funding. The book has been given the following awards: Golden Book Award (special citation); 2001 National Book Award for the Environment Category given by the Manila Critics Circle; and the 2002 Outstanding Book Award given by the National Academy of Science and Technology.

Haribon translates all its scientific research into material which can be understood by the general public. It publishes a quarterly magazine (in English), *Haring Ibon*, which is distributed to its membership and to different government agencies, local government units, the donor community, NGOs, academe and its community partners.

Educational Materials

Haribon has developed teaching modules on biodiversity conservation targeted toward tertiary level teachers. The curriculum was based on a nationwide training-needs assessment. A series of workshops and training sessions were held and an evaluation helped finalize the teaching modules. These are now available for distribution in CD form, making dissemination and duplication easier. An outcome of this is the inclusion of the modules in the *Integral Citizenship Curriculum* for National Service Training Program (NSTP) – a mandatory course for all freshman college students. This curriculum was developed by Haribon together with Maximo T. Kalaw Institute for Sustainable Development (MTKISD), the Earth Restoration Group, and other institutions in the field of biodiversity conservation, economics, social development, and military service. The Integral Citizenship Curriculum extends concepts of national security from military defence to ecological defence and human security. The curriculum is ready for implementation in the school year beginning in 2004.

Website

The website (www.haribon.org.ph) which has also accrued three major national awards, including the much-coveted Catholic Mass Media Award, was further improved. It now has an average of 200 000 hits/month or about 8 000 users a day (averaging 15 minutes per user) which translates to about 4 000 unique users/day of which approximately 20% are international users. The Haribon website, containing all information on the key conservation sites in the Philippines, was linked to the World Conservation Monitoring Centre's (WCMC) website, which had an average of one million hits per month in 2002. This link-up will facilitate WCMC's website users to take advantage of Haribon's information protected areas.

Public Exhibits

In July 2002, Haribon launched a mall exhibit – "Celebrate Biodiversity" – which brought the issue of biodiversity conservation directly to the general public and showcased the Philippines as one the world's wealthiest biodiversity. The exhibit, which contained modules on interactive computers, a rainforest photo collage, a water cycle diorama, video spot, membership stand, and a children's endangered wildlife colouring corner, was brought to three middle class to upscale malls in Metro Manila with each mall having the exhibit for a week. The exhibit attracted roughly 50 000 visitors. Haribon continues to receive various invitations to exhibits and for lectures on biodiversity conservation.

Haribon, in collaboration with the US Peace Corps and (SBMA), has recently inaugurated the GuBat Learning Centre in Cubi Point inside the Subic Bay Metropolitan Authority. At Subic Bay, a former US military naval base, more than 10 000 hectares of lowland rainforests of the Subic-Bataan National Park can be found. The Subic Bay Metropolitan Authority has provided a small building right across the bat roost of the Golden-crowned Flying Fox (*Acerodon jubatus*) as provided for in a Memorandum of Understanding signed in 2001. Twenty-two of the 70 species of bats in the Philippines are endemic, 14 of these are threatened. This learning centre houses some of Haribon's mall exhibit displays and materials and is a fitting opportunity to educate and promote biodiversity conservation in general and the plight of the bats in particular. The Centre is currently a work in progress and is seen as a satellite information hub for biodiversity conservation education considering approximately seven million local and foreign tourists visit Subic annually.

Perspectives and directions for communications, public awareness and advocacy

1. Reaction	d	Engagement
2. Exclusion	d	Inclusion
3. All out war	d	Critical collaboration
4. Personality focus	d	Platform focus
5. Issues	d	Programme
6. Focus on legislative action	d	Broad front attack
7. Mercenary of environmental issues	d	Single battle cry
8. Local	d	National
9. National	d	Global
10. Passed on info	d	In-house generated info
11. Opinion based	d	Science based

Conclusions

In building local government and community support for protected areas, as well as building local and national alliances, 70% of community-based protected area work (from establishment to enforcement, from capacity building to policy advocacy) consists of communication and education activities while the remaining 30% is technical, research and/or other functions. This provides the rationale to put premium on effective communication and education strategies.

High premium is also put on the communication skills of protected area champions – the project staff, community organizers, local government liaisons, biologists and the people's organization leaders – who are all in the frontline of support for protected areas and biodiversity conservation.

Media and communications are a means, not an end. It is important to consider who we need to influence, what the message is and what the best medium is.

Message content should be accessible, verifiable, timely, accurate, complete and relevant. The validity and relevance of the message must be ensured in order to be able to appropriately position the message, and the general strategy approach must be outlined, with an attractive theme identified.

Building support for and beyond protected areas in the Philippines: a Haribon's journey of transformations

During media production, materials should be produced as planned and on time. Various media should be mobilized and coordinated, actors trained accordingly and the impact of the strategy's implementation should be assessed.

Looking at media performance and field implementation, one should determine time tables for each media group, consider the most appropriate events, occasions, time and places, cross fertilize various media and communication channels, plan for multiplier effects, and "piggy-back" – getting a free-ride on existing communication channels, extension services or other institutional outlets.

References

- Mallari, N. A. D., Tabaranza Jr., B. R. and M.J. Crosby (2001) *Key conservation sites of the Philippines: a Haribon Foundation and Birdlife International directory of important bird areas*. In collaboration with the Department of Environment and Natural Resources and Bookmark, Inc. Makati City, Philippines.
- McManus, J.W. (2002) "The global importance of Philippine coral reefs" in Alino, P.M., Miclat, E.F.B., Nanola, C.L., Roa-Quiaoit, H.A. and R.T. Campos (eds). *Atlas of Philippine Coral Reefs*. Philippine Coral Reef Information (Philreefs). Goodwill Trading Co. Inc. (Goodwill Bookstore) Quezon City, Philippines.

**Governmental agencies using
communication to build support for
protected areas**

Chapter 7

Engaging Canadians: building professional communications in Parks Canada

Dawn Bronson

Introduction

Parks Canada is the government agency responsible for National Parks, National Historic Sites and National Marine Conservation Areas in Canada. It has been rebuilding its professional communications capacity since the late 1990's, a capacity that had been eroded by years of budgetary reductions and shifting priorities. A new professional and integrated communications capacity was needed, one that would respond to the changing external environment, one that would use new technologies and techniques effectively and one that would ultimately meet the long-term strategic needs of the Parks Canada Agency.

Parks Canada communications: 1960's to mid 1990's

For many years through the 1960's and 1970's, Parks Canada was credited with excellence in communications. In particular, the organization had a reputation for innovation and creativity in interpretation. It gained recognition nationally and internationally for personal programming and exhibits, audio-visual productions and print media.

The 1980's through to the mid 1990's were times of considerable change. Budget reductions were occurring throughout the public sector, including Parks Canada. Recruitment had stalled creating a workforce that was not re-inventing itself. To cope with budget reductions, a variety of experiments in organizational design and programming were occurring, taking the Parks Canada program in a number of different directions. The organization's national identity was eroding and accountability for communication was becoming increasingly unclear. At the same time many senior staff were retiring, taking with them invaluable corporate memory and well-honed professional and technical skills.

In external communications, we had become unprofessional. Our local communications activities often failed to situate messages within the larger Parks Canada context. We adopted a range of cost-cutting measure in interpretation – from letting the private sector do it, to contracting out, to using students, to eliminating it altogether in some places. We adopted aggressive approaches to revenue generation, and at times found ourselves in an adversarial position with the public and the tourism industry, both of whose support we needed. We found our ability to manage issues, particularly with the media, was slow and reactive. Small issues became big issues, hitting the national news overnight. And we found ourselves inflaming the issues by our failure to plan, see the bigger picture and be proactive. Considerable energy was devoted to "fighting the fires" of today, with little capacity to plan for tomorrow's issues.

Our external environment had seen profound changes during this same period. Immigration, multiculturalism, and urbanization were changing the face of Canada. Canadians seemed to be preoccupied with social and economic issues, such as the economy, health care and education. Nonetheless, research was indicating that parks were still important to Canadians. A national poll¹, first conducted in the mid 1990's, since replicated in 2000 and 2003 asked Canadians to list important symbols of their national

identity. National parks consistently ranked third, only after the flag and the national anthem.

Another factor changing how we managed parks was the growing imperative to address Aboriginal issues. Aboriginal communities across Canada were living on the margins of society, socially and economically. Governments recognized the need to engage Aboriginal People and strengthen their inclusion in society. For Parks Canada, this would mean an increasingly important role for Aboriginal People in all aspects of our program.

Finally, Parks Canada was not immune to the rapid technological changes occurring in the larger society. Our messages were competing for space and attention in an increasingly "noisy" communications environment. We needed to become much more sophisticated in both our understanding of our audience and the use of new technologies, including the internet.

Beginning the renewal of communications: the late 1990's

By the late 1990's the renewal of communications in Parks Canada had begun. In a report by the Parks Canada Agency on the *State of Protected Heritage Areas*, an entire chapter was devoted to the state of communications activities. There was a fundamental recognition that:

Parks Canada cannot protect or conserve all the areas identified as important representatives of Canada's history and natural environments on its own. For that reason, the agency has developed and implemented external communications and education activities that encourage Canadians to experience and understand the heritage of these places and to nurture a sense of shared responsibility for their protection among all Canadians.²

The concept of shared responsibility would set an important tone in a new national communications strategy. It would speak to engaging Canadians, to build a deep sense of identity with and personal responsibility for their heritage.

The report went further to present efforts to renew heritage presentation – public education through both interpretation and outreach which would result in building "a strong foundation for professional heritage presentation delivery." It discussed the importance of sustainable heritage tourism, which challenged "Parks Canada, in combination with the tourism industry, to develop an effective visitor use strategy". Finally, it spoke to strategic alliances and working with stakeholders, recognizing that these groups "help Parks Canada achieve its mandate by providing an outside perspective, performing important services and helping raise awareness..."

In the late 1990's a number of studies were undertaken and strategies developed. In 1997, Parks Canada's Management Strategy for Corporate Image and External Relations was drafted, providing direction to marketing and external relations practices. In 1998, An Action Plan for the Renewal of Heritage Presentation was prepared providing direction for interpretation and education activities. Heritage tourism planning was occurring at the local level, involving partners in a process that would start to define common future objectives. These, and other actions, became the building blocks of a national communications strategy, *Engaging Canadians*.

A national communications strategy – *Engaging Canadians*¹: 2001

Unlike previous renewal efforts, a key objective of *Engaging Canadians* was the coordination of what had been previously seen as distinct and different communications activities. For instance, it was clear that interpretive messages needed to be consistent with marketing activities, stakeholder communications needed to be consistent with media communications. We needed to be strategic, consistent and coordinated if we wished to be heard and understood.

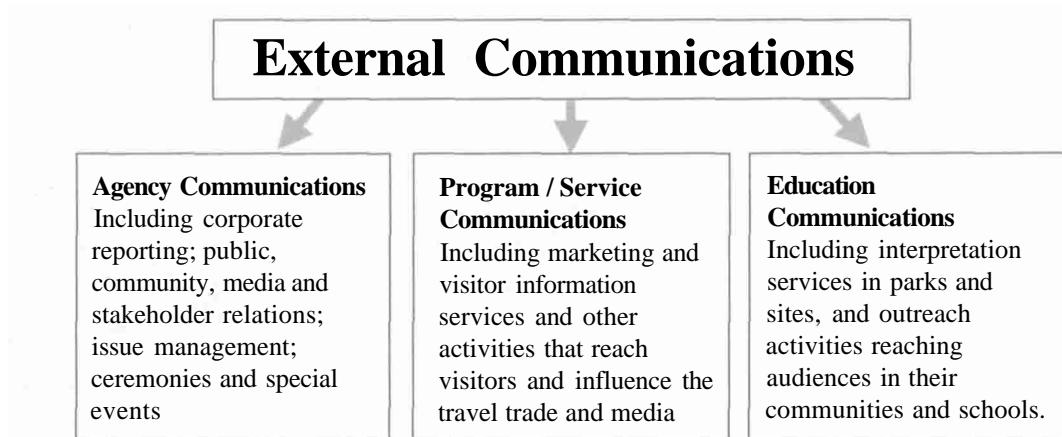


Figure 1: External communications activities at Parks Canada

Engaging Canadians presented an integrated strategy for Agency, Program/Service and Education Communications:

The more coherent and consistent external communications are, the more effective Parks Canada will be in meeting its mandate, fulfilling its mission and reaching its policy objectives.

*The more that external communications are strategic in terms of who is targeted, what is communicated and how, the more likely Parks Canada will achieve optimal outcomes in a timely manner with the resources at its disposal.*⁴

Engaging Canadians described a model for communications. It is a model for engagement that begins with awareness, moves to understanding and culminates with support. This model was called the "3I's" model: Inform, Influence and Involve.

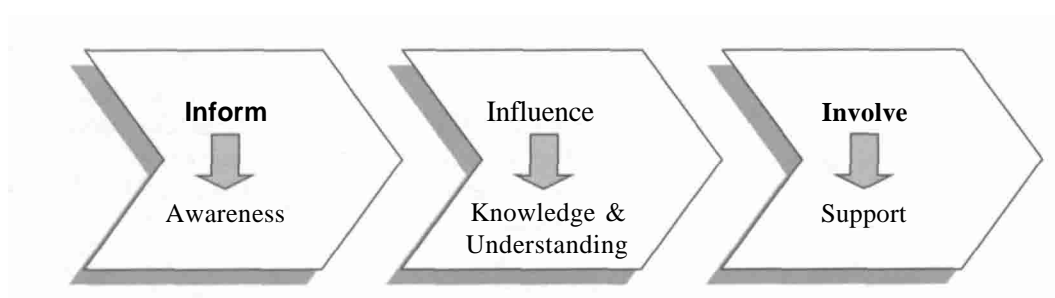


Figure 2: The "3rs" of Communications – A Continuum to Build Support⁵

Based on the "3I's" model, the *Engaging Canadians* national communications strategy presented three overarching goals for external communications:

- to raise awareness of Parks Canada's systems of national parks, national historic sites and national marine conservation areas by *informing* Canadians about parks;
- to foster understanding and enjoyment of individual heritage places, in ways that respect commemorative and ecological integrity, thereby *influencing* their attitudes about parks;
- to strengthen emotional connections to and the sense of ownership of heritage places as important, distinguishing symbols of Canada and of our shared citizenship, by creating more opportunities for direct *involvement* in parks, such as stakeholder forums, liaison committees, advisory boards and expanded volunteer programs.

Engaging Canadians in action – getting to work

A number of details in the *Engaging Canadians* strategy help to link the communications model with the strategic actions, helping to ensure consistent and coordinated actions. These include the *Parks Canada core positioning statement* (1997), the *Parks Canada Charter* (2001) and the *Parks Canada Message Toolkit* (2001), clarifying the responsibilities of the agency and helping employees throughout the organization to represent it in a consistent, integrated and holistic way.

Additionally, the strategy itself details a thought process that takes one from the basic communications model through to the various actions taken on the ground. This is the *Agency Communications Framework* and the thought process includes:

1. *Definition of target audience and defining the primary and secondary priority segments:* It should be noted that a number of target audiences have been defined for Parks Canada.
2. *Definition of desired outcomes of communications:* this is where the language from the "3I's" model appears. However, it is not the words inform, influence, involve (those are our inputs), but rather the outcomes of informing, influencing and involving – namely awareness, knowledge and understanding, supporting, and participating. The outcomes are attached to the various target audiences.
3. *Areas for improvement:* based upon a gap analysis – what is currently working well, where do we need to concentrate efforts to achieve results?
4. *Communications activities:* broken down by foundation elements (must do) and innovation elements (where new opportunities exist).
5. *Accountability:* where responsibility within the organization will rest to undertake the communications, recognizing geographic and organizational realities.

The *Engaging Canadians* strategy incorporates a multi-page table that presents this model for communications. Parks Canada was signalling a strong commitment to communications – a commitment that needed to be followed up with concrete actions. To that end, *Engaging Canadians* became a focus for the coordination of a range of strategic initiatives – some of these initiatives already underway, some of them new.

Table 1 provides a brief overview of some of the strategic external communications initiatives / actions and the results achieved in terms of professionalizing Parks Canada's communications capacity.

Action	Description	Result
Strategic Funding for Heritage Presentation	Park and site staff have been able to apply for funds to develop new and innovative programming initiatives in priority areas: aboriginal interpretation; outreach education; re-capitalization of interpretive media; innovative targeted on-site programming; species at risk education fund.	Since 2001, Parks Canada has invested over \$5.0 million in projects across the country. This investment has levered significant local investment – in some cases \$2 in local funds per \$1 in national funds. Over 200 individual projects/ programs were launched.
Corporate Identity Project	Program to ensure that Parks Canada identifies itself in a distinct, consistent way in all circumstances. Key initiatives to date include the redesign and replacement of all primary identification signs, the implementation of new uniforms and the development of consistent design standards for various other applications.	Investment of almost \$6 million over the past 3 years, resulting in a considerable progress in implementing a consistent and professional identity for the Parks Canada Agency.
Accord with the Tourism Industry Association of Canada (TIAC)	A collaborative accord, signed in January 2001 between TIAC and Parks Canada to work cooperatively to protect Canada's heritage places and foster sustainable tourism.	Establishment of a constructive tone for a positive and ongoing relationship with the tourism industry.
Partnerships in Broadcasting	Great Canadian Parks Series History Lands Series Histoire Max SeriesCG (Canadian Geographic) Kids seriesOther Joint Ventures in Broadcasting	Speciality and mainstream broadcasts, with individual programs usually focusing on individual parks/sites. For example, the original broadcast of Great Canadians Parks was estimated to reach 6.0 million viewers, a number now exceeded through re-runs.
Parks Canada National Curriculum Project	Creation of dedicated staff positions across the country to work with provincial and territorial ministries of education, curriculum developers, boards of education, teachers and others in the education community.	New national program just being set up in 2003. building on a variety of locally innovative initiatives. The intention of this initiative is to bring the stories of National Parks and National Historic Sites into the classrooms of Canadian students.
Parks Canada Internet and Toll-Free Information and Reservation Services	A series of initiatives designed to improve and integrate the delivery of information services on the Web, by telephone and in person, facilitating awareness, trip planning and reservations.	Parks Canada re-designed web site was launched in 2002. The web receives 170 million hits/year, and 4.5 million visit/year. The integration of web, phone, and reservation services in an ongoing project.
Heritage Presentation Awards of Excellence	Initiated in 2002, to recognize and reward innovation and excellence in innovation, personal programming, non-personal media, staff member of the year and lifetime achievement.	Over 41 nominations were received for 7 awards. Heritage presentation programs, products and people from across the country were recognized and awarded for excellence.

Table 1: Engaging Canadians in action

Engaging Canadians in western and northern Canada

Over the course of the last decade, Parks Canada adopted a flat and decentralized organization. Regional variation to the delivery of programs and services was and still is an acceptable approach to management. It allows field managers to be responsive to local and regional circumstances while working within a national framework.

In the fall of 2000, the Director General of Parks Canada's Western and Northern Region⁶ initiated a review of communications, with a particular focus on organizational and professional capacity. The intention was to identify and address weaknesses in the delivery of communications and to develop recommendations that would help to implement *Engaging Canadians*.

The situation analysis in Western and Northern Canada revealed that the cumulative impacts of budget reductions, downsizing and restructuring had been significant. Western and Northern Canada had responded with bold experiments in organizational design and delivery of operations. While some of these experiments were successful, the overall result was significantly diminished communications capacity and a consequent series of notable crises in issue management.

Examples of crises in issue management include what started out as an initiative in water conservation being reported in the national news as Parks Canada's attempt to force three-minute showers on guests of a five star international hotel in one of the Rocky Mountain National Parks. In another example, what started as an aquatic ecosystem restoration initiative turned into headlines about bombing a lake to kill all the (non-native and native) fish. Regardless of how noble the cause and appropriate the action, as these issues played out in the national media, Parks Canada found itself in a defensive, reactive position. The media had a field day at Parks Canada's expense. The Agency was portrayed in the media as autocratic and out-of-touch with Canadians. Alarm bells were ringing that Parks Canada was trying to push Canadians out of their parks.

When these volatile issues hit the national media, the lack of professional capacity became readily apparent, as did fundamental flaws in organizational structure. Few field units had invested in professional communications. Most had downplayed communications as a profession, creating organization models that dispersed communications capability amongst the various other functional groups, such as the Warden Service, Town Site Management or Front Country Management. The thinking of the day was that communications was everyone's responsibility. The results were:

- unclear accountability for overall communications;
- often no professional communications advice at the management table;
- no communications unit from which to build and implement comprehensive communications strategies;
- erosion of funding support for communications programs and products.

These fundamental organization issues would need to be addressed in order to begin implementing *Engaging Canadians*. Before the strategy could be successfully implemented to address critical communications issues, a professional capacity was required. A deliberate and careful structural response would need to be the first step.

Among Western and Northern Canada's responses, each of the field units were to create communications units, headed by a communications manager. Unlike organizational models of the past, these units would provide leadership and coordination of the full range of communications activities: agency communications, program/service communications and education communications.

Implementing this new organizational model posed some significant challenges, including:

- building buy-in amongst managers and staff for this organizational change that needed to be managed within existing budgets;
- overcoming the fatigue from successive re-organization exercises during the tumultuous years of downsizing and budget reductions;
- getting the right people in place – recruiting and/or training for the new skill sets of the future;
- building the culture among staff that recognizes and supports communications as one of the primary tools for achieving the mandate.

These organizations are now getting established with key positions being staffed with qualified professionals. However, setting up these organizations is just the beginning of the journey to building capacity and professionalism. Next steps in the process include the establishment and strengthening of internal and external networks to build synergy and cooperation; filling the skills gap through training and professional development; and ensuring the tools and processes are in place to enable communications professionals to succeed.

By way of comparison, in 2000 the east had a very different organizational model and very different capacity to deliver programmes and services. Consequently Eastern Canada's response to *Engaging Canadians* has not been the same as that of Western and Northern Canada. They were not facing the same capacity shortfall. Nor were they facing the serious media issues. However, they are still taking steps to implement the *Engaging Canadians* strategy. While there will continue to be regional variation in tactics, those variations will be within the broader framework set out in *Engaging Canadians*.

Parks Canada: the view from outside

To this point, this paper has been an insider's look at Parks Canada and our strategies to improve external communications. But what about the audiences, the clients, the stakeholders, the visitors? In short, what about the Canadians that we are trying to reach? What is our starting point as we move forward with *Engaging Canadians*?

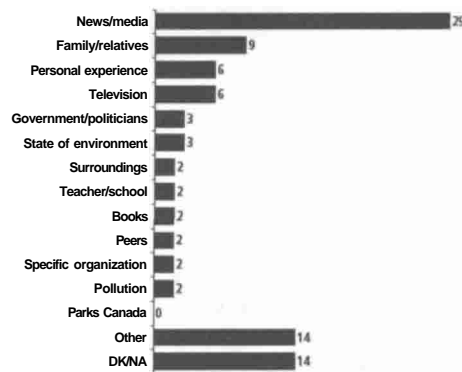
In 2001, a communications consultant⁷ presented Parks Canada with a perspective on strategic communications based upon managing conversations – in particular the everyday conversations Canadians had about their parks and about Parks Canada. The premise: we needed to understand Canadians and their conversations. We need to be aware of the influence of opinion leaders in the community on those conversations. We need to understand the impact of the media, with its tendency towards stories rooted in conflict. Finally, we need to recognize that the human reaction can often be one of emotion – emotions that can turn to anger and rage if situations get out of control.

We began to take a very broad reading of what Canadian's were thinking about us. In 2002, a major poll⁸ was undertaken to determine Canadians' perspectives of Parks Canada. Over 5 200 adult Canadians provided feedback regarding their values and beliefs concerning heritage protection, their use of national parks and national historic sites and how we communicate our messages. The poll illustrated that Canadians are concerned about nature and want to learn more. They are aware of the threats to the environment and they are paying attention.

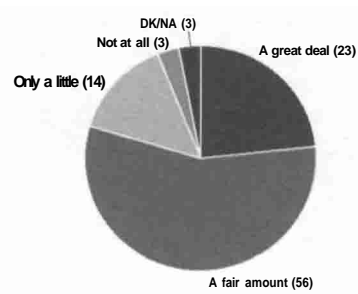
Parks Canada, however, needs to take notice of the ways Canadians become aware of issues that influence their attitudes. News media and television have great impact and we must work more effectively through those channels.

Greatest Influence on Attitudes Toward Environment

Canada; Unprompted



Level of Trust in Parks Canada as Steward of Canada's Natural and Cultural Heritage



When asked directly about Parks Canada, Canadians provided very encouraging responses. Parks Canada is seen as a trusted steward of heritage and a trusted source of information on the state of our National Parks. Interestingly, more than two-thirds of Canadians had heard, read about, seen or talked about National Parks in the past year. The level of awareness and trust that Canadians have for Parks Canada is a good starting point, as we move along the continuum from "inform" to "influence" and finally to "involve". But the trust of Canadians must continue be earned through actions we take every day. Failure to manage the conversation – like headlines to "blow up the fish" – can erode credibility and damage trust.

The future – communications and Parks Canada

This paper has chronicled the recent efforts of Parks Canada to build professionalism into its communications programs and activities. It has been a slow and deliberate process to bring about fundamental change that will stand the test of time.

While the building process is not yet complete, Parks Canada is starting to see the early results of *Engaging Canadians*. Those results include a stronger, more cohesive and professional national identity, improved relations with key stakeholder groups, better issue management, and recognition of the importance of education – building support from the next generation of Canadians.

Engaging Canadians is influencing the work of Parks Canada throughout the country. Locally at individual parks and sites, at the provincial and regional levels, as well as at the national level steps are being taken to implement this important strategy. Over time I am convinced that it will achieve its goals: to raise awareness, to foster understanding and enjoyment, and to strengthen the sense of ownership that Canadians have for our National Parks and National Historic Sites.

Notes

1. Environics Research Group, for the Association for Canadian Studies
2. State of Protected Heritage Areas, 1999 Report, Parks Canada Agency
3. Engaging Canadians, Parks Canada's Strategy for External Communications, Parks Canada Agency, September, 2001
4. *ibid*
5. *ibid*
6. Parks Canada's Western and Northern Canada Region includes the four western provinces of Manitoba, Saskatchewan, Alberta and British Columbia and the three territories of Nunavut, Northwest and Yukon.
7. Jon Lovick, Lovink Media, Calgary, Alberta, 2001.
8. Canadians' Perceptions of Parks Canada, Environics Research Group, 2002.

Chapter 8

Strategic Communication Planning for a National System of Protected Areas, Mexico

Rosa María Vidal and Lucia Grenna¹

Introduction

This paper presents the Mexican National Commission of Natural Protected Areas' (CONANP's) strategic approach to communication. Currently in the "positioning of concepts" delivery phase, it describes the planning process realized in collaboration with the Center of Environmental Communication of Pronatura Chiapas and the Environmental Communication Unit of the World Bank. Stakeholder classification, communication needs and multi-level objectives of the communication strategy are presented, in addition to the institutional challenges of integrating and maximizing the use of communication in protected area management.

The role of communication in protected area management

The role of communication in the environmental field and the importance of a strategic communication approach have been discussed in many fora². In Mexico, however, the use of strategic communication as a tool for the management of protected areas has been little explored. There are few examples where communication is planned to strategically support the biodiversity conservation goals of the Reserve or the institution³.

In the authors' experience, communication has had three major functions for environmental organizations: (1) institutional positioning; (2) campaign-based fundraising; (3) reacting to public opinion in a conflict situation. In the case of protected areas, communication has often been used mainly for promoting tourism and disseminating protected area laws. Given that the root causes of challenges facing protected area managers in Mexico (and elsewhere) are the values, behaviour, choices and decisions that governments and citizens take in relation to the use of natural resources, this limited use of communication is far from optimal.

The challenge for protected areas is to use strategic environmental communication building on experiences developed in other sectors. Key to this approach is recognizing the need to maintain dialogue among stakeholders; this has traditionally been applied in community education. By facilitating a platform for generating information, motivation and the creation of an enabling environment for decision making at individual, group and institutional levels, communication will move from a top-down, 'conductive' approach to a participatory and 'constructive' model.

The Mexican Environmental Communications Center (CCoA) at Pronatura is experimenting with the participatory model and adapting the principles to communications campaigns. In this model a series of action-reflection-action steps are used, based on the premise that learning and motivation result from living experiences and that by "doing things" self confidence is gained and knowledge is acquired.

To ensure the effective participation of all stakeholders in the management of protected areas, it is important to use a holistic communication approach that integrates methods.

Andelman (2002), for example, proposed a model comprised of a spectrum of strategies for increasing public participation in biodiversity conservation, ranging from information provision to consultation to joint planning and empowering decision making. In this model, communication is involved in all the stages. The methodologies for assuring the empowerment of individuals require training and skills development. (Environmental communication is thus complementary to environmental education and the education for sustainable development approach that has been employed in many protected areas).

The strategic planning of communication depends on a comprehensive understanding of the stakeholders' priorities and on their role and power to influence conservation and sustainable use of natural resources. Using creative communication approaches and effectively using resources to strategically reach specific stakeholders at specific moments, communication, whilst not controlling all the outcomes, becomes an invaluable tool. However, planning methods must be improved if the efficiency of environmental communication is to be increased.

Commonly communication is conducted for a specific protected area without consideration for the protected areas system as a whole. While this may yield results for individual protected areas, the communication must also be within a national vision for communication.

This paper presents the Strategic Communication Plan developed for the National Commission on Protected Areas in Mexico – CONANP – in collaboration with the Center of Environmental Communication of Pronatura Chiapas and the Environmental Communication Unit of the World Bank, as part of a GEF project appraisal in year 2001.

Background to protected areas in Mexico

Conservation of protected areas in Mexico dates back to the prehispanic period. The first national park was established by President Carranza in 1917, but it was not until the period 1934-1940 with the election of President Lazaro Cardenas that a great conservation and natural resources management effort was launched. Cardenas created institutions such as the Department of Forestry, Wildlife and Game, a National Program of Reforestation and 40 National Parks and Forestry Reserves. Protected areas were established on *ejido*⁴ lands – collectively managed social property resulting from the Mexican Revolution – or on private property, causing conflict as land owners were not consulted.

Unfortunately, industrialization and population growth during the following decades reduced the Mexican government's interest in conservation efforts. A number of scientists and naturalists pressed for action leading to growth of the conservation movement, albeit with little support.

It was not until 1972, with the UN Conference on Human Environment and the establishment of UNESCO's "Man and Biosphere" programme, that Mexico initiated its most recent phase in conservation. Reflecting on the impacts of the National Parks in Mexico and the difficulties of balancing development needs and the protection of biodiversity, a well known Mexican scientist proposed the "Mexican Model of Biosphere Reserves" in which social and economic needs were integrated with conservation goals. This new model called for full participation of people living in the protected areas as a necessary condition for their sustainable development. There are 34 Biosphere Reserves and 65 National Parks in Mexico as well as other areas for the protection of flora, fauna and monuments.

During the last twenty years, the administration of protected areas has been the responsibility of several institutions. As a consequence, recurrent changes in direction

and approach have limited growth and strength. In 1982 the first Ministry of the Environment was created and set up the National System of Protected Areas (SINAP). In June 2000, the National Commission of protected areas (CONANP) was established as a decentralized institution within the Ministry of the Environment.

The National Commission of Protected Areas, CONANP, is responsible for 148 federal protected areas, which comprise 8.7% of the national territory of which 95% of the land is *ejido* (collectively managed social property resulting from the Mexican Revolution) or private property. These numbers indicate the importance of a social approach to conservation in Mexico.

Despite a periodic increase in the number of decrees for new protected areas in Mexico, the National System of Protected Areas (SINAP) had difficulty conducting effective natural resources management. The System's weak position within the federal administration, as well as the lack of integration of its efforts into the national agenda, meant that limited sources were available for its operation. At the beginning of 1995, SINAP's fiscal budget at the national level was \$US 350 000.

In 1992, during the Earth Summit in Rio de Janeiro, the president of the World Wildlife Fund – Kathryn S. Fuller – proposed the need for a Mexican Fund for Nature. This initiative had the commitment of society leaders and national NGOs that, during the following years, promoted the establishment of such instruments. With contributions from the Mexican and US governments, the Mexican Fund for the Conservation of Nature (FMCN) was established. This Fund has been recognized for its transparency and efficient administration, becoming one of the major institutions with the capacity to receive and distribute international donations for conservation (FMCN, 2001)

During the same period the Mexican government requested a donation from the Global Environmental Facility (GEF) to strengthen the National System of Protected Areas (SINAP) by providing support for ten protected areas in Mexico. However, changes in the administration at protected areas in Mexico slowed the disbursement of funds. In 1996 the Mexican government decided to revise the program, creating, in its place, the Fund for Natural protected areas (FANP), which would seek private and public participation. The Fund for Natural protected areas was established in 1997 with 16.5 million dollars under the administration of the Mexican Fund for the Conservation of Nature (FMCN),⁵ and a second disbursement was approved in November, 2000, supporting in all 14 Reserves. In addition, the National Commission on Protected Areas (CONANP) become responsible for a specific sub-project to develop activities for strengthening civil participation, policy co-ordination, mainstreaming resources and communication. The strategy proposed here was used as basis for the definition of the activities included this project. The Environmental Communications Unit of the Department of External Affairs of the World Bank, supervised project preparation. The Center of Environmental Communication of Pronatura served as external consultants to facilitate the planning process.

The Communication Strategy

The creation of the National Commission of Protected Areas (CONANP) in Mexico and the opportunity to integrate strategic communications into the second Global Environmental Facility project of the National System of Protected Areas (SINAP) opened a window for exploring the strategic planning of communications at the level of a National System of Protected Areas.

Additional conditions facilitating the strategic communications process included:

- a clear vision from the President of CONANP on the strategic relevance of communications in reaching conservation goals;
- a wide range of existing outreach endeavours in various Mexican Biosphere Reserves;
- existence of communications professionals on several of the Reserves' teams;
- a Communication Director at the central CONANP office with experience in disseminating scientific information and with a commitment to the mission of CONANP;
- consensus regarding the need for communications at various institutional levels.

Communication strategy development

In the development of the communication strategy, balanced attention should be given to the following components:

- the conservation issues and environmental problems in the context of social dynamics, from where conservation goals are defined;
- perceptions, beliefs, behaviours and motivations identified by age and gender, from where communication goals are established;
- the institutional background and organisational capacity for the implementation of the strategy.

Activities used to develop the communication strategy included in-depth interviews with CONANP staff (Reserve directors, communications staff, field biologists) and several national and international conservation NGOs, as well as interviews with representatives of development sectors, field visits and community interviews. Additionally internal documents were reviewed, and two planning workshops were held with CONANP staff along with social and communication consultants. As a result of the interviews, the conservation challenges, stakeholders and their opinions were identified enabling a strategy to be developed (see Table 1).

Conservation challenges identified

In Mexico, most of the protected areas were established with small (if any) consultation or involvement of stakeholders and land owners. This provoked, in many regions, attitudes against protected areas as a means for conservation. It was not until the establishment of the General Law for Ecological Balance and Environmental Protection in 1992, updated in 1997, that consideration was given to public participation in the establishment of protected areas (article 47). This law also stated that the Federal Government is responsible to communicate and provide information to increase social participation.

In 2000 the Natural Protected Areas Regulation established some mechanisms for promoting social participation, such as the National Advisory Council of protected areas and specific advisory councils for each of the Reserves. The councils included academics, non-governmental organizations, private institutions, state and local governments, indigenous peoples, farmers, and others.

During the development of the communication strategy, the three major challenges faced by protected areas in Mexico were found to be:

1. poor or non-existent social involvement;
2. contradictory development policies that affect protected areas;
3. unsustainable land use practices.

	Diagnosis	Objectives	Activities and Expected Results	Products
Strategic Definition	<p>Identification of conservation challenges, stakeholders and objectives.</p> <p>Subsequent identification of communication needs.</p>	<p>Definition of stakeholder-specific communication objectives</p>	<p>Definition of desired communication results in terms of stakeholder perceptions, attitudes and behaviour</p>	<p>Rationale for the communication strategy</p> <p>Logical Framework</p> <ul style="list-style-type: none"> - Priorities - Financial needs - Timetable - Indicators
Identification of the motivations and communication channels	<p>Identification of stakeholder perceptions and motivations (from various sectors including local communities and governmental institutions) regarding protected areas conservation.</p>	<p>Consideration of stakeholder information in the development of the strategy and message elaboration</p>	<p>Definition of the core idea, campaign design selection and implementation</p>	<p>Plan for communication delivery (design, production, distribution)</p>
Institutional Framework	<p>Identification of communication channels and means used by the stakeholders.</p> <p>Identification of CONANP's institutional mission / vision, position of communication, capacity and division of work.</p>	<p>Multi-level (local, national, central) common needs and specificities.</p> <p>Distribution of communication administration</p>	<p>Institutional strengthening and internal coordination.</p> <p>Establishment of alliances on environmental communication at local and national levels.</p>	<p>Institutional Guidelines for Communication</p>

Table 1. Planning matrix for environmental strategic communication

1. Poor or non-existent social involvement

In some areas, populations living in or around the reserves are not aware of the existence of a protected area. Although this situation varies from one place to another, it is still considered one of the basic communication needs.

A survey conducted in the Mesoamerican Biological Corridor with 500 interviews in 4 towns in the Yucatan Peninsula, early 2002, revealed that 52% of the population had heard of protected areas and 40% could mention the name of an existing Biosphere Reserve in the region. This study was conducted in small, urban cities and towns, but did not include indigenous communities. On the other hand, in three semi-urban areas on the coast of Chiapas, around 70% of people interviewed in approximately 2000 surveys could not explain what a protected is despite the presence of two Biosphere Reserves in the region.

In the case of rural indigenous communities (such as the tzotziles and tzeltal communities living in El Ocote Biosphere Reserve) our research showed that the idea of protected areas is not clear, and they are generally perceived as being in the interest of the government, externally imposed and threatening to take their lands (although governmental decrees do not imply expropriation). Local populations do not perceive, in the same way as conservationists, the need for protection of the environment. Their references are limited to what they see, feel and experience locally, and they lack a wider perspective, which means that concepts of scarcity and biodiversity loss are not necessarily shared.

In other areas, conflicts between land owners and reserve managers, caused by the imposition of environmental regulations, have resulted in a negative image of the reserves and their value. Conservation is perceived as a barrier to development. This is common throughout socioeconomic strata as well as in various sectors (i.e. tourist service-providers, extractive industry companies, urban developers, subsistence farmers, etc.)⁶. In fact, this opinion was shared by all the stakeholders interviewed. Comments included:

- *"Change in the attitude of the public will come when the protected areas become an opportunity for development".*
- *"There is a need to promote the benefits of protected areas, and mitigate the image that reserves negatively affect local economic interests".*
- *"Protected areas have to be projected as strategic elements supporting the economical viability of the country".*

The challenge of promoting social participation depends on the specific conditions as it can be constrained by accessibility (roads), the cultural diversity of populations (which may include different ethnic languages), dispersion of communities, literacy levels and the existence of communications infrastructure.

Reserve managers have different ways of approaching social participation: in some cases participation is used as a reaction to levels of conflict, in others as a means to promote changes in land use, or to reduce environmental threats, such as forest fires. In most cases, participation is still a goal more than a reality. Social participation could begin with awareness, but often depends on the perceived benefits of conservation, which require that reserve managers articulate the benefits and understand peoples' interests.

2. Contradictory development policies that affect protected areas

In Mexico, development planning is based on the federal division of territory into states and municipalities. There is also sector planning based on sector criteria (health, agriculture, forestry, education, etc). Protected areas are not presented in any special way to other sector and development planners, therefore policies and programs often promote activities in conflict with the conservation objectives of the reserves. As a result, the introduction of subsidies for cattle ranching or subsistence crops the use of agrochemicals, coastal development, highway construction, forestry programs and the

creation of new *ejidos*, (among many others), are examples of contradictory activities promoted by the government.

In the past, the weak structure of the protected areas system and limited public support reduced the negotiation power of the reserve managers to deal with other sectors. Now there is the need for inter-institutional coordination and the orientation of financial resources from development sectors to promote a sustainable development approach in the buffer zones of Biosphere Reserves. This need has been recognized by the Mexican government and was included in mainstreaming component of the second grant from the Global Environmental Facility to the National System of Protected Areas (SINAP).

3. Unsustainable land use practices

The third challenge faced by protected areas is, in part, a result of the above policies, as well as having origins in the socioeconomic and cultural background of this region and its people. This challenge is unsustainable land use practices. An example is the slash-and-burn system of maize production which was considered an environmentally friendly approach during the Maya Period. Soil fertility and productivity is increased by burning slashed plant matter from clearing a forested area. Traditionally, after using the selected plot, the maize production was moved to a new area, leaving the previous one "at rest" for several years. Nowadays property fragmentation and demographic pressure have diminished the possibility of leaving resting areas, so one small plot is used year after year, without any soil conservation measures, thereby depleting the fertility and reducing its productivity. In addition, the green revolution introduced the extensive use of fertilizers and pesticides into the ecosystem and promoted monocultures. Today there are regions (such as protected areas) in which the slash-and-burn system is no longer sustainable. Other unsustainable land use practices are the extractive activities carried out for religious, medical or alimentary purposes. In the highlands of Chiapas, the harvest of *bromeliads* – a plant used in traditional ceremonies of the highland Maya – is in the hundreds of thousands, putting at risk two endangered species. These practices are based on deep cultural beliefs and have been transmitted by community elders to new generations.

In other areas, unsustainable uses are related to private sector and industries (such as mining, salt production, tourism, fisheries and oil exploitation). It is therefore necessary to incorporate the participation and involvement of private sector in order to reach conservation goals.

Stakeholder (audience) classification

Based on the three major challenges facing protected areas in Mexico and the consequent conservation objectives, stakeholders are classified according to their relative influence on protected areas. Their classification is also linked to specific institutions and sectors that may affect protected area conditions.

Stakeholders with *direct influence* on protected areas:

- local communities and land owners within protected areas that use natural resources;
- industries and/or the private sector impacting through the exploitation of natural resources and/or pollution;
- sector programmes impacting on natural resources and biodiversity.

Stakeholders with *indirect influence* on protected areas:

- visitors and tourism,
- urban citizens using environmental services (water, air, soil);
- national and international policies affecting rural areas and biodiversity.

Each protected area should prioritize audiences according to specific needs (increasing visitors, reducing conflicts, improving institutional coordination, etc) and reduce the temptation to be reactive and instead build a sustained communication process with audiences.

	Diagnosis	Objectives	Activities and Expected Results
Strategic definition:	3 main conservation challenges facing protected areas:	Stakeholder-specific communication objectives:	Stakeholder-specific desired results:
National System of Protected Areas in Mexico	<p>1. poor or non-existent social involvement of stakeholders;</p> <p>2. contradictory development policies;</p> <p>3. unsustainable land use practices and policies.</p> <p><i>Conservation objectives, communication needs and communication objectives are in relation to these challenges.</i></p>	<p><i>Local inhabitants and resource users</i> – increase social participation and sustainable practices in protected areas.</p> <p><i>Government</i> – include biodiversity and conservation in planning and policy design and implementation.</p> <p><i>Urban citizens</i> – increase visitors to, and support for, protected areas.</p>	<p><i>Local inhabitants and users</i> – reduced opposition. increased participation, more sustainable practice.</p> <p><i>Government</i> – greater allocation of budget for sustainable programs in protected areas, improved coordination and reduced competition.</p> <p><i>Urban citizens</i> – enhanced motivation to care about nature and greater support for protected areas.</p>

Table 2. Resumed Matrix of the Strategic Communication Planning for The National Commission of Protected Areas-Mexico.

The communication strategy developed focuses on establishing ongoing dialogue among community decision makers and policy makers, and on mobilizing the will and resources of other stakeholders. Understanding stakeholder perceptions and motivations is key to the success of this process, but there is commonly inadequate research into these. Pronatura Chiapas has researched the coastal and highlands areas of the state and similar studies have been conducted for other specific purposes and projects (Biological Mesoamerican Corridor). Further specific surveys are necessary, as is further research on the methodologies for gathering this information.

Understanding stakeholders is also crucial to the elaboration of messages and content design. Outlined below are examples for three audiences: policy makers, local inhabitants and urban citizens..

Considerations for message and content design

Messages for *policy makers* should:

- include issues related to the political and economical values of protected areas, not only in Mexico but internationally;
- demonstrate the benefits of institutional co-ordination and concrete examples of sustainable practices and their cost-effectiveness;
- relate to values and concepts such as efficiency, democracy, transparency, results, visibility and progress, at both the national and global levels;
- use technical content that is well distributed in the materials;
- include concise data and illustrative short examples;
- list experts and institutions for further reference;
- provide information on the status of the law and regulations related to the issue (in the case of Congressmen).

Messages targeting *local inhabitants* should:

- respond to the social and cultural backgrounds of the communities and local institutions;
- take into consideration issues such as languages and dialects, nature-related traditional beliefs, literacy levels and conceptual barriers;
- include a clear perspective on conservation in relation to development, Mexican biodiversity in relation to cultural diversity, and the reasons why a protected area is special in its territorial context;
- beware of the fact that, as a result of urbanization, the idea of something "natural or wild" is synonymous with being underdeveloped and local communities are pushing for development;
- include images of people (not only wildlife) in "action", showing the people as protagonists of conservation and providing clear geographical references, such as local hills, rivers and towns;
- seek the participation of local inhabitants in the production of communication materials and in the planning of activities;
- use local inhabitants in community radio networks, theatre, arts workshop, advocacy activities, community journalism and music production, providing human resources, insight and creativity to increase the impact of communication efforts.

Messages targeting *urban citizens* should:

- include cultural and natural values of protected areas;
- highlight the relationship between the rural and urban area;
- be consistent when positioning protected areas in terms of their natural and biological importance, their socio-economic role and their unique status and a source of Mexican pride.

	Diagnosis	Objectives	Activities and Expected Results
Identification of the motivations and communication channels: Mexico	Perceptions of stakeholders regarding protected areas and conservation: <i>Local communities</i> – "Protected areas are against our own development. They mean restrictions". <i>Government sectors</i> – "What is a protected area? I have my own development programs and I cannot make an exception"... First is development (infrastructure); <i>Urban people</i> – "Do we have protected areas? Are these places fun and safe?"	Consideration of stakeholder information in strategy development and message elaboration: Age, gender, cultural and socio-economic background, values, languages etc.	Definition of Core idea, selection of media and design of campaigns: A series of national campaigns with local adaptation. Implementation schedule with positioning, reflection and action phases. Special activities and products designed for local residents and decision makers

Table 3. Resumed Matrix of the Strategic Communication Planning

Institutional dimension of strategic communication planning: CONANP

While the analysis conducted in 2000 pointed out the need for CONANP's communication efforts to address the conservation challenges outlined above (i.e. using communication to increase social participation, resolve conflicts, address unsustainable land-use practices etc), the analysis conducted in 2000 also pointed out the need for communication efforts to meet institutional requirements.

In its strategic plan, CONANP expressed its mission as "conservation of natural patrimony through protected areas", stating in its vision: "in five years the National System of Protected Areas (SINAP) will be a conservation model and a reason for national pride" (CONANP, 2001). In the opinion of some stakeholders, the Commission identity should reflect the idea of a "national network", "the professionals of protected areas management."

CONANP is formed by three General Directorates:

1. Promotion and Institutional Development;
2. Natural Resources Management for Conservation, and
3. Conservation for Development.

The communications department is located under the Promotions and Institutional Development Directorate. However its work is relevant to the entire structure. Moreover, the President of the Commission and the Directors of each reserve require specific communications products to facilitate their negotiations capacity⁷. While communication is not a General Directorate, it is a major component in different activities: the social participation strategy, policy coordination strategy, activities to increase visitors and generate income, etc. The communication department needs to acquire a coordination function and to facilitate internal dialogue about the priorities, needs and materials support.

Communication is a tool to be used by the whole institution and is not the unique responsibility of a single department. The communications department should be positioned at the level of top management, in order to ensure it is considered in the institutional decision-making process and communicators are included in executive planning teams from the beginning of the process. The communications department has to co-ordinate the efforts, track the activities and ensure their coherence.

Some of the internal limitations for communications that were expressed by staff members include:

- the lack of recognition of the role of communications in conservation (even when the need is recognized, the role is not clear);
- the inclusion of communications at the end of a decision-making process (not as an actor, but as an executer of objectives defined by others who may or may not have experience in communications);
- the limited resources available for communication campaigns, and
- the difficulties of developing an integrated national image that is supported by all the protected area teams.

CONANP's example will be very useful for others interested in improving the effectiveness of communication and education efforts across an institution.

The communication strategy will need a monitoring plan to set baselines and indicators.

	Diagnosis	Objectives	Activities and Expected Results
Institutional Framework for Communication at CONANP	<p>CONANP mission/ vision, positioning of communication and division of work:</p> <p>CONANP vision: "In five years the National System of Protected Areas will be a conservation model and a reason for national pride".</p> <p>Positioning of communication in CONANP: A communication department.</p> <p>Low level of internal coordination with other areas with high responsibility in social involvement. conservation measures and coordination of policies.</p>	<p>Levels needed for an integrated communication administration:</p> <p>Local: On site with local stakeholders National: Institutional image, national campaigns.</p> <p>Central: Federal decision makers Internal: multi-level communication (vertical and horizontal)</p>	<p>Institutional strengthening:</p> <p>Communication as a cross-cutting issue.</p> <p>Building multidisciplinary teams with other relevant departments (during the whole project cycle).</p> <p>Training in strategic communication.</p> <p>Collaboration with NGOs, research institutions and production companies</p>

Table 4. Resumed Matrix of the Strategic Communication Planning

Institutional strengthening

The National Commission on Protected Areas in Mexico (CONANP) has identified communication as a central component of their activities. They have a communication unit and several staff members dedicated to education and communication activities in specific protected areas. The Commission has made great progress in standardizing the institutional image, and has produced communication materials, such as a series of posters for each protected area, an electronic bulletin, and a web site. There is also a national process for standardizing the Reserve signs and trails. All these efforts will benefit the concept of a national network of protected areas.

At the local level there are also ongoing communication efforts, some of them very interesting in terms of methodologies and results. The Commission has produced a "didactic version" of the management plans for some of the areas, which will help disseminate the purposes of the Reserves to local stakeholders.

During the following years, the Commission needs to integrate all these efforts in accordance with the strategy. In order to do this, there is a need for staff training, identification of pilot areas, organization of multidisciplinary teams, establishment of internal coordination bodies (with all the officials involved in social participation) and inter-governmental coordination bodies, as well as direct efforts to address the main conservation challenges.

Levels of communication strategy administration

In order to establish an operational framework, we identified four levels on which the strategic plan would have to be administrated; this is based on the current organisation of the institution.

1. Communication Programs and Campaigns of Reserves

Each protected area needs to develop a specific communication strategy, supported by research and regional analysis of specific stakeholders and needs, whilst also aligned to the national campaigns. At this level, indicators are very important to measure progress against expected results, including the attitudes and participation of stakeholders. Communication at this level can be more direct and relate to the cultural and social relevance of the sites.

2. National Guidelines for Communication

A national communication framework is needed, through which a national network of protected areas can be easily identified by citizens and governments. The central headquarters have defined a series of actions towards this, from the design of a staff uniform to the standardization of signs. Simultaneously the national guidelines for communication have to be sensitive to the specific conditions of protected areas, bearing in mind the fact that the most important stakeholders are the people living on the sites with a direct impact on natural resources.

3. Central offices communication program

At the central headquarters, specific stakeholders (such as policy makers and urban citizens in Mexico City) and international institutions are key targets for efforts to increase support for conservation in the country. Specific materials and activities have to be conducted in a planned fashion and indicators have to be developed to monitor the progress.

4. Internal Communication and Information Management Systems

Internal communication is also an important part of the CONANP communication strategy. Internal communication is important to strengthen the institutional identity and to share values, methods and procedures so to achieve consistency in media relations as well as with other sectors of the government and local inhabitants.

Tables 5 and 6 present CONANP's communication strategy objectives, stakeholders, motivations and desired outcomes at (table 5) the central / national level and (table 6) at the local level of a specific protected area.

Strategic Communication Planning for a National System of Protected Areas, Mexico

Objectives	Stakeholders	Motivation for action	Intermediate Outcomes	Long term Outcomes
<p>(1) To integrate a biodiversity component in development planning and other sector policies</p> <p>(2) Increase the status of protected areas within the federal and state administration</p>	<ul style="list-style-type: none"> Ministers, Vice-Ministers and Directors of Ministries (various sectors) State Governors Heads of Secretaries in Federal States Congressmen Directors and members of institutions in the National Council of protected areas Leaders of opinion Social groups Media, journalists 	<ul style="list-style-type: none"> National sovereignty considerations National heritage concept Demonstrated economical values of protected areas Political status (national / international) 	<ul style="list-style-type: none"> A shared vision of protected areas as a need and a tool for development Establishment and operation of an Inter-sectoral commission 	<ul style="list-style-type: none"> Increase of budget and support Orientation of programs in a sustainable manner Citizenship support
<p>(3) Increase public support for protected areas</p>	<ul style="list-style-type: none"> Business leaders Professional men and women Middle and upper class that travel NGOs involved in social causes (not only environmental) University and High-school students 	<ul style="list-style-type: none"> Enjoyment of a different lifestyle Perception of losing potential quality of life (because of loss of biodiversity and natural resources?) 	<ul style="list-style-type: none"> Identification of the need, value and existence of the National System of Protected Areas Increase number of visitors in Reserves 	<ul style="list-style-type: none"> Citizenship support Sustainability of areas
<p>(4) Institutional identity</p> <p>(Strategy to support the other objectives and goals)</p>	<ul style="list-style-type: none"> National and international Parks visitors Staff members of institutions related to the CONANP Communities living in and around the Reserves 	<ul style="list-style-type: none"> Trust Transparency Efficiency Creativity Professional 	<ul style="list-style-type: none"> Development of consistent image throughout the nation 	<ul style="list-style-type: none"> Positioning the institution and the System Create a collective image of the Reserves, consistent throughout the country

Table 5: Central / national level communication strategy objectives

Communicating Protected Areas

Objectives	Stakeholders	Motivation for action	Intermediate Outcomes	Long term Outcomes
(1) Increase the support and participation of local users and owners of natural resources in conservation efforts (participation in planning, changes in land use patterns, understanding of legal frameworks)	<ul style="list-style-type: none"> • Men and women • Land users or property owners, in the productive age (15-45) • Community leaders (elders, formal and non-formal authorities, religious and traditional leaders, social grassroots organizations, business leaders, etc) • School children • Teachers • Youth groups 	<ul style="list-style-type: none"> • Economic development is not against conservation • Perception of increased life quality by sustainable management • Conservation of traditional practices and values 	<ul style="list-style-type: none"> • Reduced opposition in and around protected areas • Communities interest in experimenting with alternatives for land use management 	<ul style="list-style-type: none"> • Sustainable management practices • Conservation and protection actions conducted by the communities • Stop deforestation
(2) Increase the support of institutional stakeholders	<ul style="list-style-type: none"> • Directors of NGOs • Decision makers in local government • Researchers • Social grassroots leaders 	<ul style="list-style-type: none"> • Shared responsibilities • Recognition • Democracy • Transparency 	<ul style="list-style-type: none"> • Established operational alliances with other stakeholders (NGOs, local government, research institutions) • Advisory Councils 	<ul style="list-style-type: none"> • A committed conservation movement • Institutional structures that give sustainability to the management
<p>(where the Reserve goal is oriented to this objective)</p> <p>(3) Increase the number of visitors and donations to the protected area as well as increasing good behaviour</p>	<ul style="list-style-type: none"> • Profile of visitors depending on site • Often a combination of national and foreign tourism • Local neighbouring communities and cities • Tourism providers, • Tourism • Governmental agencies • Transportation companies • Travel agencies and travel groups 	<ul style="list-style-type: none"> • Recreation 	<ul style="list-style-type: none"> • Financial sustainability of the Reserves • Improved level of understanding of natural values 	<ul style="list-style-type: none"> • Citizenship support • Responsible behaviour in relation to natural areas

Objectives	Stakeholders	Motivation for	Intermediate action	Long term Outcomes
<p>(Mainstreaming at local level)</p> <p>(4) Coordinate the interventions in the area by different development sectors</p> <p>(5) Include biodiversity and the protected area as a consideration for development planning</p> <p>(6) Increase the status of protected areas within the local policies and programs</p>	<ul style="list-style-type: none"> • Members of Advisory Councils for each protected area • Head, Directors and technicians of State secretaries with influence in the protected area • Municipal Presidents • Churches • Local radio and newspaper journalists • Business leaders • State Congressmen • Staff members of NGOs • Urban neighbouring population (University students, social groups, business leaders, media class) 	<ul style="list-style-type: none"> • Career development • Political Status • Power sharing • Recognition 	<ul style="list-style-type: none"> • Reduced opposition and competition • Attitudes for sharing information, changing procedures and reaching agreements • Development of joint programs 	<ul style="list-style-type: none"> • Increased number of resources and projects conducted in protected areas to support conservation • Actions form stakeholders for increased budget, integrated projects and coordination • Citizenship local support

Table 6: Local / protected area level communication strategy objectives

Communication Strategy Phases

While it is difficult to deliver the strategy sequentially, there are two major issues to consider:

- 1) a long term vision of the process of the strategy proposed here will take at least 5-6 years to be delivered in order to achieve the expected results;
- 2) delivery of a communication plan passes through three likely phases:
 - a) positioning of the concepts and ideas;
 - b) reflexive stage;
 - c) mobilization stage.

At present, in Mexico, the environmental (conservation) sector is in the first delivery phase – positioning the issues -as there is a very low level of awareness about the importance of biodiversity, its trends and its social relevance. With the resources at hand, each phase is likely to have a duration of 1-2 years.

For each delivery phase, a revision of intermediate outcomes is recommended, as well as adjusting the strategy and considering the most cost-effective relationship between the selected media and the potential results in terms of impact on audiences and conservation objectives. This is particularly important in cases of resource scarcity, as is the case in CONANP.

The communications strategy must be delivered in a series of focused campaigns at the national and local levels, as well as by introducing communications tools with an autonomous life (such as web pages, electronic bulletins, interpretative hiking trails in protected areas, etc).

Proposed Levels of Intervention and Communications Administration

In order to establish an operational framework, we identified three levels on which the strategic plan would have to be administered:

1. protected area to meet specific conservation needs;
2. national image and campaigns;
3. central offices.

As part of the administration a delivery mechanism must be designed to ensure that internal resources and allies are efficiently used so as to reach stakeholders and maximize the impact of the strategy.

Lessons Learned

This case shows the importance of communication planning at the national level and from which some specific lessons can be drawn:

1. Factors bearing on the effectiveness of communication efforts include a) individual motivation, b) social pressure c) an enabling environment (legal, technological, resources availability) and d) skills development.
2. Communication planning needs to be integrated into the conservation strategy of the protected areas system. The planning process itself should be participatory and take into account ideas from the top level of the central institution's administration, environmental sector policies and attitudes as well as those from other sectors affecting conservation goals, local staff members, and the perceptions of other local stakeholders.
3. Planning is related to the specific conditions of the institution. The institutional positioning of communication and the departmental assignment of communication activities must be identified. The way(s) in which the communication department is reflected in the structure of the organization, may show the level of importance and budget it receives.
4. Whilst strategic communication planning has the purpose of supporting the conservation objectives, it is still perceived as a tool for institutional promotion, and it still needs to illustrate the use of communication as a tool for conservation and to train human resources accordingly.
5. Most protected areas systems lack enough resources for communication efforts. A planned strategy will reduce costs, identify the impact needed and then determine the role of each member in achieving results.
6. At the local level, communication and education allies could be more substantial than those at the national level. Local radio stations, local journals and local systems of communication are more accessible and receptive of information about protected areas, and can be more easily involved in conservation activities. A national network of alliances needs to be built with NGOs, the private sector, grassroots organizations, media producers and others who could support the implementation of the communication strategy.

7. There is still discussion about communication approaches. A combination of social marketing with participatory methods could provide the basis for transformation of communication from the behaviour-change model to the decision-making (empowering) model. There is need for a review of the relationships established with stakeholders whereby the perception of stakeholders as "recipient audiences" is rejected, to rather involving them in dialogue and consensus building, without which conservation efforts will face a constant threat.

Notes

1. We acknowledge the support of Emanuele Santi, Paolo Mefalopulos, Daniele Calabrese and Fabio Santucci for the revision, suggestions and collaboration for the integration of this paper. The President of CONANP Ernesto Enkerlin President of CONANP and Marco Sanchez, Director of Communications, facilitated the information and institutional support for the development of the strategy.
2. For example the BEPA conference organized by CEC-UICN.
3. Some examples are projects conducted under the Rare Center, WWF, CI or Pronatura in specific protected areas which respond to specific planning processes.
4. Ejido is the name given to a special land tenure in Mexico, resulting from the Mexican Revolution. It states the social property of land. The ejido was established when a minimum of 25 families claim for land to be used as a production unit. In the cases where the land included a forested portion, this area had to be managed in a collective way. With land reforms in 1992, today the family plots within the ejidos can be sold
5. The GEF project is named Consolidation of the National System of protected areas in Mexico (SINAP)
6. Some specific cases are the Montes Azules Biosphere Reserve (Lacandon rainforest), the Marine National Parks in Cancún and Isla Mujeres, the Monarch Butterfly Biosphere Reserve, the Upper California Gulf Biosphere Reserve, the Calakmul Biosphere Reserve, in which a diverse range of interests of private, public and community sectors are affecting the conservation of the area.
7. For a detailed institutional communications analysis see the complete report.

References

- Andelman, M. (2002). *Diversidad Biológica y Participación Pública- Análisis de experiencias en Argentina*. UICN-CEC. Quito.
- Beltrán, L.R. (1993). "Communication for development in Latin America: a forty-year appraisal" in Nostbakken, D. & Morrow, C. (Eds.) *Cultural expression in the global village* (pp. 10-11). Southbound. Penang.
- CONABIO (1998). *La diversidad biológica de México: Estudio de Pais, 1998*. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Mexico.
- CCAD, (2002). *Estudio de Opinión Pública Mesoamérica. Serie Técnica 06*. Disco compacto. CCAD-PNUD/GEF, 2002. "Proyecto Para La Consolidación del Corredor Biológico Mesoamericano", Managua, Nicaragua.
- Congreso de la Union, (1997). *Ley General del Equilibrio Ecológico y la Protección al Ambiente*. Ediciones Delma. Mexico.
- Cohen & Luciani. (1999). *The UNICEF Model of Development Communication*. PowerPoint document. www.comminit.com.
- CONANP (2001). *Plan Estratégico 2000-2007*. Documento interno
- FMCN-SEMARNAP (1999). *Informes Anuales de Actividades SINAP-GEF*. Reportes Internos.
- FMCN-SEMARNAP (2000). *Informes Anuales de Actividades SINAP-GEF*. Reportes Internos.

- FMCN-CONANP (2001). *Informes Anuales de Actividades SINAP-GEF*. Reportes Internos.
- FMCN-CONANP (2002). *Informes Anuales de Actividades SINAP-GEF*. Reportes Internos
- FMCN (2001). *Informe Anual*.
- Glanz, K. & Rimer, B.K. (1995). *Theory at a glance*. National Institute of Health, Washington
- Simonian, L. (1995). *Defending the Land of the Jaguar. A history of conservation in Mexico*. University of Texas Press, Texas, USA.
- Trellez, E. & Quiroz, C. (1995). *Formación Ambiental Participativa. Una propuesta para America Latina*. CALEIDOS/OEA, Lima.
- Vidal, R.M., Ramírez, X, & Vidal, I. (2001). *Estrategia de Comunicación para el Sistema Nacional de Areas Naturales Protegidas. Centro de Comunicación Ambiental, Pronatura Chiapas, A.C.* Documento Resultado de Consultoría. Proyecto SINAP II., Mexico.

Chapter 9

Strategic communication and visual identity in the National Commission for Natural Protected Areas (CONANP), Mexico.

Marco Sanchez Lira

Introduction

During recent years the management of each natural protected area in Mexico used diverse communication actions and products according to its own needs, time, resources and ingenuity. Some were very successful, others were not so. At the same time, the administration and management of the natural protected areas fell under different government agencies with diverse hierarchies, resulting in isolated, fragmented communication efforts which lacked force and had limited impact. These efforts did not contribute to the formation of a uniform institutional (i.e. natural protected area) visual identity and disabled any capacity for dialogue with other sectors, the decisions of which have important effects on conservation.

This paper addresses the creation of a visual identity for the National Commission for Natural Protected Areas (CONANP) in Mexico.

The challenge

The central problem confronting the Directorate of Strategic Communication and Identity (DCEI) - recently created by the Mexican National Commission for Protected Areas (CONANP) - was that no plans had been made to construct a national level identity through communication. As a consequence, nationally few people knew about or valued the natural protected areas, nor recognized the institutions responsible for them.

When there is little knowledge of protected areas among the general public, communication efforts must be multiplied. A strong identity can enhance the effects of communication (e.g. a sign can be substituted for a person; a properly identified vehicle can represent authority and order in a community). Lacking a nation-wide identity, each protected area produced various materials to promote itself. With no specialist communication input, this resulted in a wide variety of materials, the majority of which were of poor design and printing quality, without well-planned print runs, without specific target audiences, and often with long, highly technical content. Moreover, often these materials were only distributed amongst specialists in the topic.

The first task of the Directorate of Strategic Communication and Identity was to develop the basis for a strategic communication plan and develop the Directorate institutionally under a World Bank GEF project. Pronatura Chiapas - an NGO - was contracted as a consultant to contribute to the strategy of the Directorate. Some of the results are now going into practice.

The strategy includes special messages for each target audience, using colloquial vocabulary and materials that are attractive and accessible. Important target groups include: functionaries at the three levels of government (federal, state and municipal); congresspersons; service providers working within the protected areas; tourism operators

and tourists; NGOs; potential donors; exhibition visitors; international organizations interacting with CONANP; CONANP's counterparts around the world; local communities; media; and youth in urban zones.

A second phase of the project, implemented in September 2003, (in pilot form in four natural protected areas) is the production of more specific materials for the benefit of local communities living in the protected areas.

Desired results

The desired results of the strategic communication plan included providing the Mexican people with access to information about protected areas in order to secure their commitment to conservation. This involved informing the various 'players' (i.e. those with a role in the protected areas) about the importance of conserving natural resources for the viability of Mexico. Using innovative communication efforts we hoped to establish close links with society (regarding the protected areas), enabling government and society to work together towards developing a culture of conservation.

Another desired result was increasing CONANP's visibility within the governmental sector so as to achieve administrative and logistical support for the development of the Department's work. Thus an aim of the communication plan was to obtain more substantial resources for communication efforts which would, for example, enable the use of mass media in the future (previously not possible).

Communication strategy research conclusions

To develop the strategy, research was undertaken. The research revealed the need to focus on three priority areas in order to achieve the desired results:

1. Identity - aiming to provide a recently created organization with an institutional identity / image and consistent graphics (uniforms, vehicles, serial products, signposting).
2. Diffusion - using publication lines and specific products for strategically selected target groups, and participating in specialized forums, fairs and exhibitions.
3. Newspapers - via public relations and attention to local, national and international communication media (- training people in the topic of natural protected areas, with emphasis in the Mexican states that form part of regional and international conservation initiatives).

Strategies used to address the communication problem

The Directorate of Strategic Communication and Identity formed an external interdisciplinary working group to develop a communication strategy and an Identity and Communication Manual. A new, national level identity for protected areas was presented, including uniforms, vehicles, buildings, and (above all) signposting within the protected areas. Using diverse products, strategically planned for specific target groups, it aimed to improve the positioning of protected areas. The Manual determined rules concerning the identity of natural protected areas, and communication and diffusion efforts. All the protected areas and suppliers working with the National Commission (CONANP) were obliged to adhere to the Manual's rules and procedures, under the guidance of the Directorate.



Figure 1: The logo used by CONANP and all the natural protected areas with national identity



Figure 2 : These brochures are an example of the way in which literature from distinct protected areas has been standardized

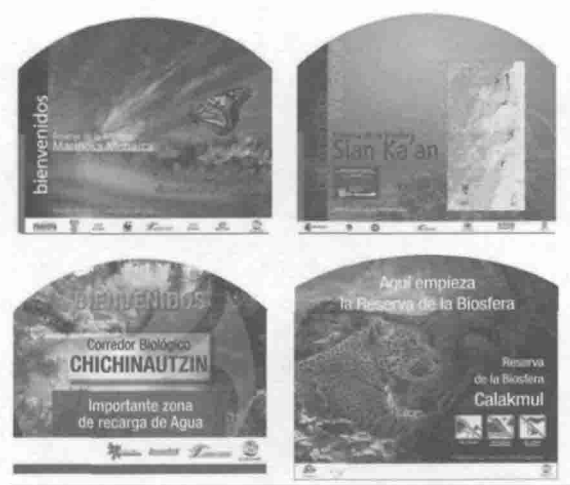


Figure 3 : Welcome signs from four national natural protected areas, showing greater uniformity which is crucial to the construction of CONANP's visual identity.

A series of other new products have been developed such as "*Mexico, Conservation Images*" (used to present CONANP), the Didactic Version of Management Programs, the electronic magazine *Entorno*, various postcard series

for children and adolescents, and Progress Reports for congressmen and decision makers.

Strategies to promote action and manage participation

The priority area to address was political and administrative good will, to emphasize the importance of communication and gain support for standardizing the institutional identity at a national level. To achieve this, help was received from the Secretary for the Environment and Natural Resources and from the President of CONANP.

The Directorate of Strategic Communication and Identity was promoted as providing a service area for all sections of the Commission and the communication strategy – an instrument through which everyone can win.

Naturally at first there was resistance to change and inertia. However, little by little this has been overcome by working together and showing results. One by one, the protected areas in the country have begun to join the communication project, making use of the tools, planning schemes and services for their own benefit and that of the institution nation-wide.

Results, evaluation and lessons learned

The cooperation of protected area management and central offices has helped to modify the way in which Mexico's protected areas are perceived at the national and international level. We have taken the initiative in being proactive in communication rather than being reactive and defensive. We have been able to gain credibility and improve perceptions regarding the environmental benefits of the protected areas. At the local level, environmental education programs carried out by each protected area support the messages of the benefits of protected areas. We have promoted a conservation and ecotourism culture, drawing attention to the topic of natural protected areas. The production of materials with a unified standard strengthens the image of the institution, and we have been able to demonstrate that if we want recognition for the institution, we can only achieve it with the cooperation of all who work for it. As a result, within two years in the environmental sector of Mexico, the Commission has become the best known institution in terms of image and our work has been recognized by non-governmental and international organizations, making possible our presence in the Fifth World Parks Congress, Durban 2003.

The project is still in progress. From the beginning we have maintained that it must be continually improved, and as a result, we are now carrying out an evaluation of the Identity and Communication Manual. Without a doubt, this will highlight areas which must be modified and improved, helping us to learn what has and has not worked, and why.

Recommendations – general principles for others

The success of the strategy developed by the Directorate on Strategic Communication and Identity has been such that it is being replicated by others within the Secretariat for the Environment and Natural Resources (Federal Attorneys for the Protection of the Environment, and other central offices of SEMARNAT), as well as other government agencies (such as the Secretariat for Tourism and the Fund for Promotion of Tourism). Businessmen have also requested that we cooperate with them to improve their

communication efforts, whereas previously we were the ones approaching them (with little success) for the development of this type of joint work.

The general replicable principle is that it is profitable and beneficial for the national institution (in our case CONANP) and the protected areas (together) to develop a national communication plan. Contrary to popular belief, this has raised the level of negotiation with possible financiers of private, governmental or NGO projects. Common branding throughout an institution makes it possible for protected areas to raise their profile. Despite the complexity of protected areas in Mexico (cultural, ethnic, political, and geographical), it is possible to integrate the areas into a consolidated, unified communication and identity project.

Key actions for protected areas communication over the next ten years

Every protected area conservation project should have at least 15% of its budget designated for communication, and this should be included from the beginning of the project, with the understanding that communication is not the solution to problems arising from specific occurrences but is an integral component of the whole process.

Each country should integrate its national communication projects for parks and reserves in such a way that all possible players are involved and presentations can be put forward in national blocks. Within each of these, the "model projects" should be emphasized.

There should be a greater exchange of information about international experiences. Familiarity with cases that have and have not been successful can be used to strengthen national strategies.

The number of international meetings should be increased and IUCN should be encouraged to provide training in a more continuous manner. This would strengthen the existing networks of communicators or environmental journalists from different countries and regions, improving the importance given to this topic in all possible international forums.

Chapter 10

Building support for protected areas: the case of the Butrint National Park

Alex Koutsouris, Emanuele Santi, and Auron Tare

Introduction

The Butrint National Park is a major natural and archaeological resource for Albania, as well as the major tourism asset for the whole southern region. Its establishment and preservation of the park is a good example of how conservation efforts can be enhanced by communications activities, ranging from international advocacy and lobbying to event management and work with communities. This paper describes the main communications actions which led to its establishment (1977-2000), its consolidation (2001-2003) and its current challenges, looking at the main lessons learned and at the most effective communication strategies and approaches, which can help ensure sustainable future development of the Butrint area.

The Butrint National Park (BNP)

Butrint National Park is a protected area of twenty-nine square kilometres, situated in the south of Albania near the Greek border, approximately nineteen kilometres from the city of Saranda and six kilometres from the town of Ksamil. It comprises a diverse landscape of lakes, lagoons, open plain, hills and mountains, and encompasses an archaeological site of exceptional value with ruins dating from the late Bronze Age (12th century BC), through the Greek, Roman, Byzantine, Venetian and Turkish periods, up to the 18th-19th centuries AD.

Today the Park represents a unique blend of cultural and natural landscapes illustrating the relationship between man and nature for over three millennia. Butrint has been attracting archaeologists for many decades and has been open to visitors as an archaeological park since the early 1970's. In 1992 it was designated a World Heritage Site, further expanded in 1999, and proclaimed a National Park by the Albanian government in March 2000.

The natural landscape of the Park area is extraordinarily intact. The Butrint wetland complex shelters 33 animal species of Global Conservation Concern with 14 globally endangered species. Almost 70% of Albania's amphibians and reptile species are found in this area, as well as the highest number of bird species ever recorded on an Albanian site, and considerable diversity of mammals and endemic and sub-endemic plants of National Conservation Concern. In 2003, the area from the Cuka Channel to the Greek border, encompassing Butrint National Park and the Stillo Peninsula (considered the 'greater / larger park area'), was designated a Wetland of International Importance under the Ramsar Convention.

Building support for the establishment of Butrint National Park (1997-2000)

Tracing the history of the development of Butrint National Park is no easy task, as the site has experienced long periods of attention as well as abandonment. However, 1997 can be defined as a key year for the Park's development and the beginning of a long and exciting period of support building efforts, leading to its ultimate establishment as a National Park. With 20-25 000 thousand visitors in 1996, Butrint was already showing potential as a destination for tourists staying in Corfu, but in 1997 civil unrest, social upheaval and lawlessness broke out in Albania following the collapse of the financial pyramid scheme scams that were widespread in the country. This had negative consequences not only on the then-fledgling tourist industry of Butrint, but also on the archaeological treasures it housed. The site, particularly its museum, was looted during civil unrest in early 1997. The unfortunate event received worldwide publicity, especially within archaeological and related scientific circles.

In October 1997, a joint UNESCO (United Nations Education, Scientific and Cultural Organization) - ICOMOS (International Council on Monuments and Sites) - Butrint Foundation assessment mission was undertaken at the Butrint site. The mission found that: the site museum had been looted and its content - an unspecified number of archaeological objects - disappeared; the ancient theatre and related buildings were flooded; the site was not properly secured with either fences or permanent surveillance; the management and planning arrangements for Butrint had been deficient for several years.

More specifically it was found that the Butrint site was in an extremely insecure and threatened position because of the following:

- no clear definition of responsibilities and collaboration arrangements among Government agencies and institutions were in place;
- no adequate human and financial resources had been made available for the site;
- no management plan existed;
- development, demographic and environmental pressures on the immediate surroundings of Butrint were increasing;
- no regional or local plans were in place or in preparation.

Subsequently, it was recommended that a programme of corrective action be developed, including immediate actions to improve the conditions and security of the site, as well as a series of actions for the middle and long term aimed at establishing adequate management arrangements, developing a management plan and incorporating Butrint in regional and local planning. In particular the UNESCO mission proposed that:

- the management authority for Butrint be given to one agency, with responsibility for providing co-ordination and co-operation among institutions, both at the national and the local/regional levels, and with an office as close as possible to the site, staffed with adequate human and financial resources;
- priority be given to the preparation of a management plan for Butrint, providing the framework for inter-institutional co-ordination and planning, to be incorporated in regional and local development schemes;
- a review of the boundaries of the World Heritage designated area be carried out and a surrounding buffer zone be clearly established.

For the achievement of such targets (and many others related to archaeological issues beyond the scope of this paper) it was proposed that the World Heritage Committee and UNESCO should establish a long-term collaboration with the Albanian Government on the implementation of a programme of corrective action, and that this should be closely co-ordinated with other international organizations and agencies, such as the World Bank and

the European Union. It was also recommended that a partnership be established with the Butrint Foundation - a UK-based charity researching and planning a variety of subjects related to Butrint.

The report, and especially the fact that Butrint was inscribed on the List of World Heritage Sites in Danger, was given wide publicity and exerted strong pressure on the Albanian government (UNESCO: WHC-97/CONF.208/INF.15;ATA97-12-05).

By this time, Butrint had already acquired fame as a symbol of Albanian heritage and unique archaeological site in scientific circles, among key decision-makers and society at large. Nevertheless, in order to generate support for the above targets and proposals - especially for the establishment of protected areas - strategic communication approaches had to be deployed. Efforts focused on strengthening support among high level policy-makers at the national level, as well as international organizations and foundations, with a simple message based on the tremendous value of the site for both Albanian and international cultural heritage. For the domestic audience, this message had to be closely tied to national pride.

Using communication to broaden the high-level involvement of key national and international actors, the main players supporting the establishment of the Butrint National Park were the Ministry of Culture and the Butrint Foundation, backed by the Albanian Prime Minister and UNESCO, along with the World Bank which became 'full-heartedly' involved around 1999.

A considerable challenge was isolating and overcoming resistance from the Institute of Archaeology, the Institute of Monuments, the Ministry of Tourism (due to their own view on the development of tourism in South Albania), as well as from national and international developers.

In addition to lobbying by top-echelons, efforts consisted of the organization and facilitation of key events and high-level meetings, such as:

- a workshop on the future of Butrint, held in Saranda with the Butrint Foundation, in cooperation with the Albanian Ministry of Culture and the local authorities. Here the Prime Minister and the Minister of Culture had the chance to discuss Butrint with the Butrint Foundation, a representative of the World Bank and representatives of the district council and the Saranda municipality;
- a meeting between the President of the Republic and the representatives of the Butrint Foundation and the UK ambassador to Albania;
- further discussions between the World Bank and the Minister of Culture, on an intervention proposal.

As a result of these efforts, by the end of 1998 intergovernmental conflicts had been overcome and the Albanian Ministry of Culture and the Butrint Foundation signed a five-year agreement on the protection of the archaeological park of Butrint. Responsibilities for the Park were given to the Ministry of Culture. The Butrint management office was established by a government decree at the beginning of 1999. This office was charged with the task of implementing a programme aimed at creating a new structure with trained people carrying out several functions (assisted by the International Ranger Federation), protecting the park from illegal interferences and damage, and applying outreach programs targeting both pupils in schools all over the country and the area's general population. The legal establishment of the Park arrived a year later, in 2000.

As a relatively independent stakeholder and the most visible communication medium, the press had an important, autonomous role in the establishment of the Butrint National Park. Generally speaking, journalists were pro-Park - mainly due to either their personal contacts with the Park Director (who actively pursued their support) and/or his invitations to visit

the site - and news concerning Butrint was in the media even in difficult times (such as the years 1997 - 1999), enhancing public awareness though not (noticeably) stimulating people's involvement. At this stage the local populations were not involved. The local authorities were aware of developments, however, during these early stages even they were little involved, mainly due to prevailing economic and political instabilities in the country which were draining attention and resources.

In sum, amidst difficult circumstances (collapse of the pyramids, the Kosovo crisis etc.) and in view of the great dangers facing the 'wider' area of archaeological importance in addition to the Butrint site itself, the establishment of the Butrint National Park was made possible through:

- lobbying top-echelons;
- pressure exerted by the UNESCO-ICOMOS report;
- the presence of an already sensitised scientific community and Albanian intellectuals;
- establishment of a management office;
- support of the press.

Therefore, the communication strategy (though not articulated as such) was confined to/ based on high level public relations, exerting strong pressure on the Albanian government.

Building support for the consolidation of the Butrint National Park (2001-2003)

The establishment of the Butrint National Park and Management Office secured the important archaeological site(s). Consolidation of the Park was next on the agenda, with the first actions of the Office concerned with the preservation and upgrading of the Park itself.

National and international level objectives were to enhance the fame of the Park and further attract the attention of the national and international audiences and, thus, of supporters, partners, donors and tourists. At the local level, the objectives were to protect the Park from the illegal and environmentally damaging practices, as well as to create a favourable attitude towards the Park on the part of the local communities.

During this period, three papers were researched and produced:

- a Development Study (by UEA, using an Institutional Development Facility grant from the World Bank to the Ministry of Culture and the Butrint National Park (Martin, 2002);
- a Masterplan for the Park (within the same framework) (Buchanan, 2001);
- a Development of Eco and Cultural Tourism Study (Ravindra, 2002).

The purpose of the Development Study was to provide a comprehensive and detailed assessment as well as development recommendations for the future infrastructure of the Park, aiming to promote high quality cultural and nature tourism, while maintaining local ownership of the management of the Park and preserving the site.

One of the initial aims of the Park management was to show the local population the management's determination to implement their mandate and enforce the law, demonstrating the political commitment of the government and the strong leadership of the Office. Actions concerned the prohibition of illegal actions within the Park area, such as habitat destruction, building/construction, dynamite fishing and export of endangered species, as well as unsustainable landscape management and agricultural practices (logging and hunting, post-harvest burning of the fields as well as of reeds etc.). Prohibiting such actions in the Park

signified/conveyed the strong will of the Park management and changed the 'free-rider' attitude and illegal behaviour of the local population.

In order to mitigate potential bad-will resulting from Park law enforcement, the Park Management simultaneously facilitated the construction of a number of public works and financed a few others in an attempt to demonstrate their concern for the local communities.

Accordingly, the Park also sought to provide the local population with employment opportunities. All members of staff (rangers, guides and workers, in all sixteen people) were from the local communities, and during the summer in 2003 an additional sixty people got a four-month contract with Butrint. The Park is, therefore, becoming (through the expansion and development of its activities) an all-important source of income for the local communities. Given the dependence of the area on small-scale, nearly-subsistence agriculture, and the high rates of under-employment, the provision of employment opportunities strengthens the positive attitudes of the local population towards Butrint.

Despite the above, one of the major constraints to all Office activities was the lack of staff. The Office was unable to build a sufficiently large and strong team, both due to the lack of funds and the fact that most experts were either working in Tirana or had migrated (mainly to Greece) to earn a living. This, in turn, did not allow for the attraction of more projects by the Office, and generally restricted its activities - including communication. Nevertheless, throughout this period significant communication activities were carried out, primarily concerned with building public relations.

An effort to improve relations with local communities was the organization of ad hoc meetings with the local population. Organized by the Park Director, the meetings addressed topics and plans relating to the Park, promoting environmentally friendly practices, and attempting to convince the local people that the Park does not threaten their livelihoods, insisting upon its positive future role.

Whilst continuing to lobby the government, events were organized by the Butrint National Park (partially funded by the Institutional Development Facility - World Bank), giving the Park a leading role in Albanian cultural activities and improving public relations. Such events included Magic Flute concerts focusing on maintaining local folk and music traditions (started in 2000), the 'Butrint 2000' International Theatre Festival (also started in 2000), a series of art exhibits and school programmes. In parallel, various activities at the local level (for example art competitions) were organized, in order to promote the Park among the local youth and increase awareness and appreciation of and for the site, in both cultural heritage and ecological terms. During these events worldwide personalities and national political figures visited the site upon invitation.

These cultural events and VIP visits promoted the Butrint National Park at national and international levels through press coverage. Interest was significantly boosted, and the fame of Butrint expanded in scientific, cultural and tourism terms, helped by the discovery of an ivory chess piece, excavated at the Byzantine palace, which is more than 500 years older than any previously discovered; the discovery of a 2 000-year-old statue believed to depict Athena/Minerva, along with a bronze finger; the return of three heads from Greece, stolen in 1977. Excavations and restoration work continues in the archaeological sites while new interest also arises.

During this period, the Butrint Office's communication strategy was based on the provision of information to the press - both Albanian and international - through: press releases on the events organised in the Park, with information and photos sent to a large number of journalists as well as key people in various decision-making positions and people who have shown considerable interest in Butrint; organised media tours for a number of invited journalists both from Albania and abroad (April-May). This activity has been developed over the last couple of years.

At the local level, both the press and radio held very favourable attitudes towards the Butrint National Park. The "Saranda FM 100" radio continues to be a supporter of the Park and the development of soft tourism in the Saranda district. Among others, the radio is currently holding a special programme called 'Projections' dealing with eco-tourism values and environmental conservation. Support of the local radio is of great importance given that radio is, after meetings with local people in the communities, the most influential communication channel in the area.

Mainly dealing with local issues, Butrint was/is among the main topics of the supportive local and regional press. They continue to play a crucial role in providing information on all the events taking place in the Park, presenting it as a cultural centre, archaeological site and the centre of the communities surrounding the Park. The press also deal with topics such as the relationship between the Park and the communities; tourism, agro-tourism and business development; the problems of tourism development (strategy) and so on. The local press, having more-or-less rejected the option of mass tourism, is in favour of the Butrint National Park, supporting efforts for the development of alternative tourism schemes that will benefit the local communities. Such support is invaluable since the audience includes the most well educated and influential people in the area and nation-wide.

Also encouraged by the Office was the development of documentaries, self-financed by the media and presented by RTL and ITN, as well as various Albanian TV stations. A film concerning the so-called 'Minerva' statue was presented during the concert of traditional instruments in Butrint (Shekulli, 27 February 2003). Additionally, in 2003 two CDs were produced, in co-operation with the Ministry of Culture, presenting the live recordings of the flute and the polyphonic concerts that took place in Butrint. Two Butrint site guides and an album were issued (in both Albanian and English). The Office also circulated reports and strategy documents among decision-making bodies and key-persons.

Despite outreach efforts, a percentage of the local population seems to lack sufficient information about the Park and its development role and plans. Moreover, not all the local authorities favour the existence of the Park (or specifically the Park Management Office) due to their own political interest related to tourism and/or construction development. It has to be mentioned that in Albania there is still corruption, land speculation and strong pressures are exerted on local authorities on the part of national and international developers, thus local authorities often, on the one hand, attempt to revise existing land use studies while, on the other, issue small-scale permissions for constructions.

In summary, during the consolidation period, the fame of the Butrint National Park was considerably boosted, resulting in increasing visitor numbers. The Management Office was instrumental in such developments, through press contacts (with the press continuing to play an autonomous role in supporting the Park), other contacts and the organisation of various events, especially cultural ones, including international level and VIP visits to the Park. Lobbying by the Butrint Foundation and the Park Office had a particular influence on the government, especially in terms of the attraction of donors and new projects. In parallel, scientific publications and reports (i.e. those of UNESCO and the Butrint Foundation) were still of major importance in mobilising international support for the Park. A new supporter on the international scene was the RAMSAR Convention Bureau.

On the down-side, whilst local communities were provided with information, invitation to dialogue and consultation remained very limited (below). Although local communities demonstrated increasingly positive attitudes, they were still not forthcoming in getting involved and taking advantage of developments. Moreover, despite the strong recommendation of the UNESCO-ICOMOS report, no concrete communications plan was elaborated. This was mainly due to priority concern for the protection and promotion of the Park, as well as the serious human resources deficit of the management office. Given this human resources situation, it was not possible to proceed with the building of local partnerships or to delegate power to local populations through the employment of

animators, the establishment of community networks/fora or the promotion of community co-operatives and of environment friendly enterprises. The challenge of the Butrint National Park to contribute to the sustainable development of stakeholder communities is still at stake.

Building sustainability: current challenges facing the Butrint National Park (2003 - Present)

For the moment, there do not seem to be any major threats to the Butrint National Park ("the Park is saved"). It is the most impressive attraction in a region rich in natural and archaeological assets and has recently attracted more than 45 000 visitors per year. Last summer's increasing numbers encouraged faith in the potential of the park to generate significant operational income through Park fees. However, the Park's fragility, weak institutional structure and management team are serious concerns, and Butrint still has a long way to go in terms of inducing economic development in the area. Greatest potential lies in using the Park as a catalyst for sustainable tourism and new income generation in the southern part of the country, linking to other sites in the development of regional cultural/archaeological and eco-tourism trails.

An important point to be made here is that, while tourism in the city of Saranda takes the characteristics of mass tourism, for the area under consideration, ecotourism has to be the leading notion for tourism development. Here we define ecotourism as tourism to natural areas with an educational component, conserving the environment and sustaining the well-being of local people (Ravindra, 2002). Community-based approaches (see below) well suit the larger Park area, yet a more 'radical' approach might be advocated, namely Pro-Poor Tourism (PPT), due to the current socio-economic situation in the area (domination of nearly-subsistence agriculture, high levels of underemployment and extended poverty). Pro-Poor Tourism overlaps with both ecotourism and Community-Based Tourism (CBT), but is not synonymous with either. Pro-Poor Tourism aims to deliver net benefits to the poor as a goal in itself, with environmental concerns being one part of the picture. Involving more than simply a community focus - it requires mechanisms to unlock opportunities for the poor at all levels and scales of operation.

Currently, a number of projects are proposed to run beside, and in line with, environmental targets and small-scale interventions addressing the improvement of the infrastructure of the Park site vis-a-vis increased tourist flows. These projects are expected to enhance Butrint National Park's role in local development. Within them, the role of strategic / development communication emerges as a priority.

Project 1: Conservation and low intensity traditional habitat management in the Butrint Wetland complex (Ramsar site)

This World Bank - Global Environmental Facility project specifically focuses on conservation and low-intensity traditional habitat management in the Butrint wetland complex (Ramsar site). The project aims to:

- enhance local economic development;
- introduce sustainable (non-destructive) resource use to the larger Park area;
- establish integrated landscape management approaches;
- encouraging compatible, low impact ecotourism;
- increase public awareness and participation in protected area management;
- disseminate knowledge on piloting innovative management approaches through the publishing of survey results, case studies, and different habitat management practices.

Project 2: Provision of assistance for the development of community-based tourism (CBT) in the larger Park area

A second project, funded by the World Bank and the Italian Development Cooperation, concerns the provision of assistance for the development of Community-Based Tourism (CBT) in the larger Butrint National Park area and the marketing of its features. The project will address, among other issues:

- institutional development of the Butrint National Park office;
- participatory analysis and planning with the people of the villages surrounding the Park, regarding the development of ecological and niche market tourism;
- building links and partnerships with relevant actors at both national and international levels;
- community organisation and training (i.e. formation of community associations that improve the coordination and likelihood of success);
- facilitation of local marketing for community based tourism activities and products. This marketing component is in place to address the issue of the limited impact of tourism in the area.

The project aims to:

- develop and implement a communications and international marketing strategy aimed at raising interest in Butrint National Park and its surroundings as archaeological and eco-tourism destinations;
- provide technical assistance and guidance to the Park Management on international tourism marketing;
- assist the Park, the local authorities and tourism business in the creation of a common platform for tourism marketing and strategy focused on ecological and archaeological tourism;
- utilise not only the archaeological and natural assets of the larger Park area, but the local tradition and culture as well.

Developing and implementing a strategic communication plan

The prerequisites for the design and implementation of a strategic communication plan are in place and this should be carried out in the years to come. Public awareness, capacity building and participation are key-elements of the forthcoming projects, along with capacity building and staffing of the Butrint Office, and network building. The above-mentioned projects, funded by the World Bank, provide Butrint with a unique opportunity to establish strong relationships with local stakeholders (local populations and local authorities) and play an important role in rural development. To some extent this compensates for the missing element in the Park's activities thus far which have not been based on a sound strategic communication plan. Building on the Office's experience in establishing high-level relationships, as well as its influence on the press, the new endeavours will address most stakeholders and invite new ones, as the Park works towards contributing to the sustainable development of the larger Butrint National Park area.

Lessons learned

Examination of the events in the archaeological site of Butrint and the larger Park area (1997 until the summer of 2003) resulted in the following conclusions and lessons learned concerning the employment of communication activities:

1. The communication approach, based on creating international and governmental pressure, was essential to build support to a sufficient level. Taking a top down

approach in the establishment of a natural or archaeological park, without proper involvement of local communities, can prove to be a major mistake; however, in times when sites are being destroyed, turmoil dominates in the country, when there is land speculation and corruption among local authorities and when local populations show an aggressive behaviour towards land and natural resources due to extreme poverty, it is difficult to conceive of a bottom-up approach. Nevertheless, a more balanced approach may be feasible, if sought after.

2. Local communities need to be encouraged to see parks as opportunities for social and economic development and not only as a series of prohibitions and limitations to pre-existing economic activities (free ranging, farming, hunting, fishing, wood collection, etc.). These opportunities need to be supported by measures to enhance economic benefit.
3. Improved communication with communities facilitates conservation and protection efforts. Positive gestures, including the improvement of infrastructure and especially the provision of employment opportunities, contribute to community and Park relations; Contributing to improving the standard of living of the local communities/stakeholders is crucial and an area which the Butrint National Park needs to address. The strategy for this should focus on the diversification of the rural economy, mainly through alternative tourism, and should include the participation of stakeholders in strategy design, implementation and evaluation. Within a communications strategy framework, the animation and empowerment of stakeholders is a necessity and a challenge.
4. A well organised relationship with the press has successfully contributed to the establishment of the Park and has consolidated Butrint as an emblem of Albanian culture and society, creating interest on the part of the international community.
5. Art is a conduit to transmit cultural values across the borders of Albania.
6. Efficient management and Park publicity (as a unique world heritage monument and an international cultural centre) increases the number of visitors and revenue, laying foundations for park sustainability. With increasing tourist figures, it is estimated that the Park will be able to cover almost all its operational costs.
7. Achieving higher visibility and recognition of the national and international significance of the Park at central and local levels has secured the integrity of the Park's natural and cultural assets.
8. Institutional coordination - supported by good communication - is important.
9. Increasing management capacity enables efforts to increase interest in the Park from the international donor community, and presents more opportunities for realizing the potential of Butrint's uniqueness.

Conclusion

Once established, the Butrint National Park Office had to deal concurrently with multiple issues including: the protection of the archaeology, ecology and biodiversity of the site; the control of land use; the management of increasing numbers of visitors; infrastructure development; income generation and fund raising for the necessary Park expenses; and fostering local understanding of the concept of protected areas to ensure the sustainable management of the Park.

The Institutional Development Facility programme had significant impact on both institutional development and public awareness in improving, protecting and preserving the natural aspect, character and ecology of the Butrint site. As a result, nowadays there is improved planning, coordination and management capacity of the local Butrint bureau as well as improved inter-institutional coordination at the national level on issues affecting the Butrint area. The Butrint National Park Board is a functional inter-institutional body that made possible the strengthening of its national and international role as a site of specific interest for a range of conservation efforts and cultural events. The Park Office has gained

support and recognition from local authorities and government institutions, and is very active in raising support from the international donor community.

Forthcoming projects, funded by the World Bank, will further strengthen the human resources of the Butrint Office, putting in place a concrete strategic communication plan that will support capacity building and establish participatory processes with stakeholders (especially local populations), to become actively involved (plan, implement and evaluate) in the sustainable development of the larger Park area.

Notes

1. The Development Study addresses: visitors; cultural and natural resources; existing infrastructure; development proposals; conservation of the built heritage; habitat restoration and management; institutional capacity and priorities for action. It identifies the following necessary communication activities:
 - the need to "establish community forums to discuss development proposals";
 - "a public information campaign (is) required to break the notion that Butrint stops at the modern gate, in order to prevent accidental destruction of remains through inappropriate fanning techniques and development proposals";
 - the local people's "skills associated with agriculture, fishing and tourism... need to be harnessed and developed by the Park to meet the requirements for sustainable landscape management and high-quality visitor services";
 - "Public awareness and environmental information campaigns are required to ensure that the local community understands and participates in the development of the Park".Accordingly the following objectives are outlined:
 - draw up management agreements with local land users and fishermen for the sustainable use of natural resources;
 - set up an environmental education programme for local communities, to help prevent illegal activities;
 - develop community-based projects that promote the values of the Park;
 - create a Park forum to exchange ideas with the local communities.
2. The Masterplan addresses issues of the physical environment of the Park infrastructure without any specific attention paid to issues of participation and communication. However, it does mention the need to "involve the community in planning and operation of the Park" and "ensure that they understand principles and goals of the Park management", stating "ensure local participation", place "emphasis on local consultation and participation" and suggests "extensive educational information" be provided.

References

- Buckanan, J. (2002). *A Masterplan for Butrint National Park*, Cambridge.
- The Butrint Foundation (2003). *Ten Years of Butrint Foundation: Report 2002*. London.
- Martin, S. (2002). *Butrint National Park Development Study*. Tirana.
- Ravindra, M. (2002). *Development of Eco- and Cultural Tourism: Recommendations for Action*. Halifax, Canada.
- UNESCO (1997). *Convention concerning the Protection of the World Cultural and Natural Heritage - World Heritage Committee (Twenty-first session)*. Paris
- UNESCO (1992). *Properties Inscribed on the World Heritage List*. Paris.

Chapter 11

The Projeto Doces Matas and Communication, Minas Gerais, Brazil

Tomas Inhetvin, Marcos Antonio Reis Araújo, Lêda Luz, Infaide Patricia do Espírito Santo

Introduction

In the State of Minas Gerais, south-eastern Brazil, landscape fragmentation and the unsustainable degradation of natural resources (principally in the Atlantic forest region) are major threats to biodiversity. The mere creation of protected areas is not enough to ensure the preservation of this natural heritage; protected areas have to be well managed too. This task includes, at the local level, the participation of the local communities in the buffer zones of protected areas. At the regional or national level, the establishment of a well managed system of protected areas is vital. At present, protected areas in Brazil are managed by the federal government, state governments, municipalities and the private sector. As yet, there is no networking between these entities to allow efficient management of the whole protected areas system. Today, the necessity of more interagency cooperation is a dominant topic within the ecosystem approach.

Created in 1995, the bilateral (Brazilian/German) Doces Matas Project – *Conservation and Management of Natural Resources of the Mata Atlântica in Minas Gerais* – has addressed these protected area management issues. After eight years of work in participatory protected area management, and in the third and last phase of consolidation, this paper presents an overview of the experiences, results and lessons learned in relation to communication as a strategic instrument in participatory processes.

The environmental context

The State of Minas Gerais is located in the southeast region of Brazil. It has an area of 588 384 km² and a population of about 17.8 million inhabitants. Nearly 82% of the population is concentrated in urban areas. The economy is the third strongest (GNP) in Brazil, only behind the states of São Paulo and Rio de Janeiro. It has a large variety of landscapes, soil types and climates, reflected in a rich diversity of flora and fauna in a mosaic of great complexity. The main are: Mata Atlântica (Atlantic Forest), Cerrado (Savanna) and Caatinga (Steppe Savanna). The Mata Atlântica and the Cerrado are classified among the planets' twenty-five biodiversity "hotspots" – the most diverse ecosystems suffering high levels of habitat loss.

The Doces Matas Project

The Project "Conservation and Management of Natural Resources of the Mata Atlântica in Minas Gerais" was created in 1995 to minimize this devastation of the Atlantic Forest in the State of Minas Gerais and to protect this important ecosystem.

The project is known as the Doces Matas Project due to its involvement with the protected areas of the remaining Atlantic Forest in the basin of the river Rio Doce. It is a bilateral

project of technical cooperation between Brazil and Germany, associated with the Pilot Program for the Protection of the Tropical Forests in Brazil (PPG7). It aims to ensure the conservation of the biodiversity and sustainable development, in a participatory way, in three protected areas and their buffer zones.

Partners

Partners in the Doces Matas Project include the management bodies of the three selected protected areas (remnants of the Atlantic Forest in Minas Gerais):

1. the Caparaó National Park, managed by the federal organization IBAMA – Brazilian Institute for Environment and Renewable Resources;
2. the Rio Doce State Park, managed by the State Forestry Institute – IEF – under state government;
3. the Private Natural Heritage Reserve (RPPN) Mata do Sossego, managed by the NGO, Fundação Biodiversitas (Biodiversity Foundation).

The selection of these three areas is explained by their relative proximity, which enabled a circuit of technical exchange to be formed between the professional staff and the activities in progress.

Technical cooperation is accomplished through the German Consortium: GFATerra Systems / IP Institut für Projektplanung consultants, contracted by the Deutsche Gesellschaft für Technische Zusammenarbeit – GTZ for the management of the third phase of the Doces Matas Project.

Caparaó National Park

This national park is located in the Caparaó Mountain Range, on the border between the States of Minas Gerais and Espírito Santo. It has an area of 31,800 hectares and is administrated by IBAMA. In the lower parts, the Atlantic Forest dominates the landscape, but it gives way to rocky field formations, as the altitude increases. The Pico da Bandeira (Flag Peak) is quite outstanding, at an altitude of 2,890 meters, making it the third highest point in Brazil. In its buffer zone the coffee monoculture dominates, with intense deforestation, soil erosion, river silting and the indiscriminate use of toxic agricultural chemicals. The Doces Matas Project activities prioritize the effort for a greater integration with the communities in the buffer zone.

Rio Doce State Park

Located in the micro region of the Vale do Aço (Steel Valley), the park has a total area of 36 000 hectares, making it the largest fragment of the Atlantic Forest in the State of Minas Gerais. It is administrated by the State Forestry Institute – IEF. Within its borders is located part of the greatest lakeside province of Minas Gerais, with approximately 40 lakes. It is very rich in fauna and flora, protecting various endangered species, such as the *mono-carvoeiro* (*Brachyteles hypoxanthus*), the *onça-pintada* (*Panthera Onca* – South America's largest feline) and the *jacarandá-da-Bahia* (*Dalbergia nigra*). The main economic activities in the buffer zone include extensive cattle ranching and reforestation, with eucalyptus for charcoal and cellulose production. The priority within the Doces Matas Project is the participative development of a Management Plan, focusing on more efficient management of the Park.

Private Natural Heritage Reserve Mata do Sossego

The reserve is located in the municipal area of Simonésia/MG. Despite having an area of only 180 hectares, taken together with its buffer zone, Private Natural Heritage Reserve Mata do Sossego (RPPN Mata do Sossego) forms the region's most extensive and best preserved remnant of the Atlantic Forest, with a total of 800 hectares of

unbroken native forestland. It is administrated by the NGO Fundação Biodiversitas. The RPPN Mata do Sossego and its buffer zone are the natural habitat of several species in danger of extinction. There are, among others, the *mono-carvoeiro* (*Brachyteles hypoxanthus*), the *onça-parda* (*Puma concolor*), the *guigó* (*Callicebus nigrifrons*). The area was created, primarily, for the protection of the *mono-carvoeiro*, the largest primate in the Americas. The activities selected as priorities involve environmental education and the experimentation and dissemination of sustainable agricultural practices in the buffer zone.

Communication and education background

Traditionally, the different environmental institutions in Brazil had relatively poor communication patterns and no integrated action plans. Furthermore, the management of protected areas was often executed by the park authorities with their "backs to the communities," ignoring the needs of the local population. The importance of the parks for the people in the buffer zones and the specific consequences of conservation for their socioeconomic and cultural existence were basically unknown. Target oriented communication and cooperation within the local communities, as well as within the environmental institutions, were insufficiently developed.

In the educational field, institutions and communities suffered from a lack of methodological skills to facilitate social and institutional processes of change and the appropriate technical knowledge necessary to develop subject-specific actions to achieve their needs.

Innovative approaches in protected areas management

In early 1995, the Doces Matas Project adopted innovative approaches for the conservation of the biodiversity in the Atlantic Forest, having predicted several of the current conservational tendencies, such as:

- change of the protected areas approach from "islands" to "networks", motivating connectivity between them and creating "Ecological Corridors";
- integration of conservation of biodiversity and sustainable local development;
- active involvement and participation of buffer zone communities in conservation and management of protected areas;
- institutional cooperation between federal and state government and non-governmental organizations in the environmental sector.

The inherent understanding of these approaches is that protected area management involves more than merely protecting flora and fauna. It has to do with changes and managing changes means managing people's behaviour. In this sense, communication became *the* strategic tool to work with people on different levels of the project, including them in decision making processes.

Communication as a strategic instrument for project management

The Doces Matas Project uses communication as a strategic instrument for participatory and cooperation processes. Communication tools are employed at two main levels:

- the institutional level;
- the level of protected area management and local / buffer zone communities.

Communication at the institutional level

To improve inter-institutional communication, motivating and increasing the exchange among the institutions involved (the federal organization IBAMA, the State Forestry Institute and the Biodiversity Foundation NGO), the Project established:

1. a Deliberation Board;
2. a Project Coordination Group;
3. five Technical Working Groups.

The Deliberation Board is composed of two members from the executive directorates of each of the Brazilian institutions involved and is presided over by the State Secretary for Environment and Sustainable Development. The Deliberation Board approves the annual planning and monitors the performance of the Project Coordination Group.

The Project Coordination Group advises the Deliberation Board and contributes to the elaboration, execution and monitoring of the annual working plan. It consists of a representative and assistant from each institution, the managers of each of the protected areas and the consultants of the German technical cooperation consortium GFA/IP.

The Project Coordination Group acts at the project management level, coordinating the Technical Working Groups. The Technical Working Groups work at the operative level, executing specific technical activities in the Protected Areas and buffer zones.

Technical Working Groups plan specific programs in each protected area and execute the proposed actions. They are interdisciplinary teams from the Brazilian institutions involved and other partner institutions. In the current phase of the Project there are five Working Groups in action:

- Participatory Appraisal of Protected Areas;
- Management plans;
- Environmental Interpretation;
- Ecotourism;
- Sustainable Environmental Practices.

Communication at the level of protected area management and local communities

The following actions of the Project's Coordination Group, Technical Working Groups and staff of the partner institution aimed to strengthen participatory processes at protected area management and local community levels (involving capacity development and awareness-building about ecological issues among the populations in the buffer zones of protected areas):

1. participatory appraisals of protected areas were proposed which involve the staff of the institutions and aim to identify threats and problems within the protected areas, as well as possible solutions;
2. a strategy for discussing protected area management plans with local communities was formulated;
3. participatory ecotourism plans in protected area buffer zones were elaborated;
4. environmental interpretation activities in protected areas were developed and disseminated;
5. basic guidelines for environmental education and buffer zone educational activities were outlined;
6. technical support for the dissemination and application of sustainable environmental (agricultural) practices was provided;
7. a participatory rural appraisal involving the local population and focusing on sustainable local development was implemented in the buffer zone of one of the parks;
8. capacity building was carried out as a transversal activity of the project.

1. Proposal of Participatory Appraisal of Protected Areas (DIPUC)

This participatory methodology for survey and analysis of the situation of protected areas, based on a process of shared apprenticeship. It was adapted from the tools of Participatory Rural Appraisal. The objectives are to make participation possible for the different stakeholders in protected areas; to collect and analyze information to subsidize the sectorial planning or the elaboration and actualization management plans; to prepare the staff for the participatory management of protected areas with the active involvement of the communities in the buffer zones.

2. Formulation of a strategy for discussing protected area management plans with the buffer zone communities

The participatory management of protected areas is still a challenge in Brazil. The Project supported the process of management plan elaboration, with the aim to reconcile the various interests of the population, institutions and buffer zone organizations with the conservation objectives inherent in their management category.

At the same time, the project backed the implementation of Advisory Boards, as established through the National System of Protected Areas (SNUC). In accord with environmental legislation (which requires social participation in protected area management) the joint development of the management plan represents the effort to seek consensus between technical needs and needs of the local communities.

3. Elaboration of participatory ecotourism in the buffer zones of protected areas

In the protected area of Minas Gerais, the absence of planning for tourist activities was identified and, accordingly, the urgent need to discuss strategies to organize these. The Technical Working Group on Ecotourism was created. The main objective is to contribute to the development of sustainable ecotourism in and around protected areas, with full participation of all actors involved. Involved are the following aims: to avoid or minimize negative impacts in the protected areas and their buffer zones; to preserve the local culture; to create possibilities of employment and income for the local population; to build awareness among the parties concerned; to plan and implement a proposal for the organization of ecotourism in a participatory way with the communities of the buffer zones of the protected areas.

4. Conceptual development and dissemination of Environmental Interpretation activities in protected areas

The objective is to organize and coordinate Environmental Interpretation activities (i.e. a set of specific communication and education techniques which permit the visitors of a protected area a wide reflection about the necessities of conservation of the given natural resources). A manual regarding environmental interpretation concepts and techniques has been published by the Technical Working Group on Environmental Interpretation.

5. Outlining basic guidelines of environmental education and development of educational activities in the buffer zones

In addition to technical training courses for its members, the following are environmental communication and education experiences of the Technical Working Group on Environmental Interpretation: 1) Distribution of environmental education calendars and the environmental folders/notebooks about the Atlantic Forest in schools in the buffer zones. The students received a questionnaire to answer some theme-related questions. The result of the survey was published in a booklet called "Our life has everything to do with the life of the forest." This booklet has been distributed to the schools and integrated in their curricula regarding the overall knowledge about the Atlantic Forest and coherent measures of environmental conservation; 2) Implementation of the "Library Box Project". A box with environmental topics publications stays for a period of 3 month in each school. The students are encouraged to read the publications and the content is incorporated into classroom plans by the teachers.

6. Provision of technical support for the dissemination and application of Sustainable Environmental (Agricultural) Practices

The actions that promote dialogue and communication between the park authorities and the local rural communities focus on the discussion and experimentation of agro ecological practices, especially in regions of coffee monocultures by smallholders. Different activities are planned and implemented with rural communities in partnership with social organizations, like labour unions, cooperatives, associations, and the church, as well as the governmental agricultural extension service agency and other environmental NGOs. Among the vast spectrum of activities, the following topics can be highlighted: the technical exchange between farmers as well as between farmers and professional staff, practices of soil and water conservation, green manuring, experimentation with agro forestry systems and the recovery of areas of permanent protection, specifically along river banks.

7. Implementation of Participatory Rural Appraisals in Park buffer zones

These were used in the buffer zone of the Private Natural Heritage Reserve Mata do Sossego to facilitate dialogue and comprehension between the main stakeholders in the region. Consequences of these appraisals have been the creation of several commissions by the local population to solve specific problems like health, education and poor soils. The initiatives regarding agro-ecological aspects have been supported by methodology of participatory monitoring to observe and discuss individual experiences collectively and to develop a proposal of environmental education with adults, allowing a reflection about the human impact on the local ecosystem. By 2003, more than 400 rural families had been involved. This communication tool has created conditions to integrate environmental issues in community and municipality agendas. After eight years of action, the protected area is integrated in the social and economic context of the municipality.

8. Capacity Building

This is a transversal activity of the project, focusing on the technical topics of participatory management of protected areas and methodologies allowing communication and participation between the different hierarchical administration levels of the protected areas as well as between them and the different sectors of society from the buffer zones. The technical topics of participatory management mentioned above concern participatory appraisals of protected areas and management plans (participatory planning, monitoring and evaluating techniques), environmental interpretation, ecotourism and sustainable environmental practices. They have been administered in a vast spectrum of training courses, workshops, seminars and meetings since the beginning of the Project.

Impacts of communication efforts on protected area management

The intervention of the Doces Matas Project has resulted in positive impact on the institutions, on the protected areas and on the surrounding communities. We would like to highlight here certain relevant successes achieved in recent years:

- changes in the philosophy of work, specifically in terms of participatory, interdisciplinary and integrated action on the part of the institutions;
- institutional opening for social participation in protected area management;
- institutional paradigm change regarding the search for partnerships and inter-institutional cooperation in protected area management;
- increasing local partnerships;
- environmental issues are on the agenda of local stakeholders;
- increased capacity and action of partners and professional staff in protected area management and sustainable development in the buffer zones, with special reference to participatory methods;
- changes in the perspectives of the communities in relation to the protected areas;

- dissemination of concepts and application of new planning practices in the institutions;
- integrated view of protected areas and their buffer zones by the institutions.

Lessons Learned

After eight years of work in participatory protected area management and in the third and last phase of consolidation and dissemination of experiences and results, the Doces Matas Project is able to highlight the following major lessons learned:

- Inter-institutional cooperation is sometimes hard and time-consuming, but, is, nevertheless, worthwhile and necessary.
- The political support of the main stakeholders and good governance structures are essential for success.
- Social and institutional processes of change demand time and patience from all participants.
- Communication between people is the key to achieve project management objectives.
- Participation leads to sustainability on project level as well as social organization and applied democracy in the political dimension.

Chapter 12

Benefits beyond parks borders: the case of Madikwe Game Park, South Africa

Solly Mosidi

*I participate; you participate
he participates; we participate
you participate ... They profit
(Arnstein, 1969)*

Introduction

The idea of community participation in Parks Management entails involving the people who will be affected by it in the planning and decision-making process so that they can benefit from the project¹. The local community's concerns over and influence on the project are important because "failure to emphasize participation dramatically increases the chance of rejection for proposed development efforts" (Drake 1991a:252). Furthermore, ecotourism practiced in conserved areas "cannot be sustained without acceptance and support of the rural communities which surround them" (Cowling & Oliver 1992:224).

Community participation in Parks has been implemented in many Latin American and African countries. Most of the rich natural vegetation that is found in these countries occurs in privately owned areas or areas which are communally owned by rural communities. While some benefit from game parks and reserves², the majority of the rural communities are located are not deriving any benefit (except perhaps earning a wage). Parks Boards are treating these communities as passive beneficiaries of project activities, meaning that the communities are not involved in the process of change or in their own societal development (Wells et al. 1992). Nevertheless, there are exceptional cases in which the local rural communities are empowered and have the capacity to influence the outcome of projects, in which the communities are equal stakeholders and have succeeded in achieving their objectives with regard to ecotourism³.

In South Africa, the idea of local rural community participation is relatively new. The country has a history of forced removals and proclamation of game parks in areas communally owned by rural communities. Most of the national parks, game reserves and nature reserves are fenced and border a settled rural African community (Coppin 1990; Poulthey & Ngubane 1990; Thompson 1990; Els 1994), yet rural communities are not involved in decision-making with regard to the parks. Moreover, as the parks themselves are "not created in social and economic vacuum or unpopulated areas... park creation frequently entails an abrupt change in local economies" (Place 1991:186), based on the exploitation of numerous natural resources⁴. Thus park development should be in such a way that "rural people are able to replace the direct exploitation of dwindling biological resources with adequate economic opportunities (such as) from tourism attracted by the continuing presence of these resources...Park-based conservation programs may then be successful" (Place 1995:171).

On the other hand, local rural community participation should not be seen as a panacea (remedy) for all the socio-economic costs of ecotourism projects (Drake 1991a; Drake 1991b). It too has its disadvantages, such as an increase in the number of managerial and administrative staff, and the fact that benefits do not always reach intended target groups. Furthermore value may be confused with facts, and participation may be time consuming, costly and stressful (Drake, 1991b).

Residents who benefit from tourism start supporting it, whereas those who do not benefit from it tend to regard its impacts in a negative light (Wells et al. 1992; King et al. 1993). It is apparent, as Keane (1992) argues, that different communities are at different stages of preparedness to engage in economic initiative. However, it is also apparent that the "principle guiding future action must be that the struggle against abuse of the environment and struggle against poverty and social injustice are inextricably linked" (Ramphela 1991:201). Thus it must be made clear that sustainability in game parks cannot be achieved without the participation of the surrounding communities.

Madikwe Game Park

Madikwe Game Park (henceforth referred to as "the Park") was the last and largest game park proclaimed by the former Bophuthatswana Government, on 12 March 1992. It is South Africa's fourth largest game reserve and it covers an area of 75 000 ha, of which 32 km borders on Botswana in the north. Unlike its predecessors, which were created mainly for purposes of conservation, the Park was proclaimed an ecotourism destination (Davies & Trieloff, 1992). It was intended to be a more efficient form of land utilization which was both ecologically sustainable and socially acceptable (Davies & Trieloff, 1992). This was to be achieved with the Bophuthatswana Parks Board managing conservation and private enterprises running lodges in line with the Parks Board's criteria and policies.

Consideration was to be given to job creation, to maximizing land yield, economic and social benefits to local and peripheral communities, and to attract private sector funding, management expertise and foreign currency through regional and international tourism (Davies & Trieloff, 1992). This was meant to improve the quality of life of rural communities and provide a stable local economy, thereby reducing the degenerative impact on the environment that often accompanies and results from poverty.

The Park was therefore to operate differently from other parks in that it would offer specialist services to the exclusive end of the market. The private sector was given the opportunity to be involved in the establishment of safari camps and lodges while the Parks Board would manage the land and game. The Park would be divided into two main areas: the area north of Molatedi Dam would be fenced and stocked with most of the historically indigenous wild animals including the "Big Five" (elephant, rhino, leopard, lion and buffalo). The dam area would be fenced separately and stocked with smaller non-threatening animals, which would allow tourists to move around freely, and also maximise use of the dam (Davies & Trieloff, 1992).

The role of education and communication

In order to develop the capacity of local communities to fully participate in activities in the Madikwe Game Park, personnel within the Department of Environmental Affairs and Tourism within the Govan Mbeki Municipality in South Africa undertook the task of communicating with and educating these stakeholders. Additionally, communication and education with/of the Parks Board and local entrepreneurs was necessary, enabling them to see the value of community participation. Education and communication were thus used as tools to minimize tension surrounding the establishment and management of the Park.

This paper addresses how, through education and communication, the communities of Molatedi and Supingstad Village on the east and west of the Park respectively, were drawn to develop projects which would benefit them. These projects were to be negotiated with both the Parks Board, entrepreneurs operating in the Park and the community that initially depended upon land within the park for grazing pastures and other resources. Several

structures and organizations within these communities were worked with as part of the education and communication efforts. In some instances, work went beyond the parameters normally conceived for an environmental educator.

The Parks Board and entrepreneurs

As is often the case, the Parks Board staff and entrepreneurs resisted the idea that the community would receive benefits from the Park beyond employment. They felt that provision of cheap employment was enough. Educating the Park and entrepreneur staff was very difficult. An obstacle was the fact that often high-level staff were unavailable and it was, instead, necessary to deal with Junior Officials reporting to them. Moreover, incorporating rural communities in decision making processes was often regarded as unnecessary. Dealing with such structures required patience. In some cases the only way to persuade people was through political structures, using the fact that the Parks Board have to report to the Department of Environmental Affairs and Tourism and reporting any lack of cooperation to the Ministry. This was only used as a last resort as it may be a lengthy process and is not good for stakeholder relations. Eventually, following regular Environmental Education presentations to the Minister and Members of the Executive Council ("MINMEC"), the National Parks Board embarked upon a social ecology approach to address the plight of people surrounding their parks. As a provincial park, the social ecology ideology is slowly taking off. Communication to and education of Park and entrepreneurial staff is still needed.

Local Chiefs, Tribal Council meetings and Community Development Organizations

The local Chief and his Tribal Council take all decisions that involve their community as they are the custodians of the land and control developments in their area. Being accepted by them, and encouraging them to consider conservation proposals, was essential to the success of the project.

Meeting with local Chiefs of the Molatedi and Supingstad communities was, therefore, crucial. Used strategically, such as scheduling meetings to precede any Tribal Council in which proposals feedback were on the agenda for discussion, these meetings could prove invaluable. Providing early information to the Chief equipped him with the necessary information to guide the proceedings as the chairperson of the Tribal Council.

The local Chiefs introduced the Head of the Department of Environmental Affairs and Tourism within the municipality to their Community Development Organizations (CDOs) as structures that should be worked with. These organizations were originally established by the Parks Board to organize labour by drawing up a list of unemployed people in the community (and their skills) to be used by entrepreneurs when they needed labourers. Although organized by the Parks Board, each Tribal Council elected men and women to constitute their Community Development Organization and the composition varied from village to village. They reported to the Tribal Council and whole community every quarter as need arise, as well as providing services to the Parks Board and entrepreneurs within the Park.

Through workshops and meetings, the function and capacities of the Community Development Organizations were increased to:

- determine the needs and the problems of the community;
- prioritize development needs;
- be involved in the execution of community projects;
- raise Funds;
- help with project administration;
- help with environmental education.

Although it was not easy to add these additional responsibilities to the Organizations, members later embraced them and saw this as part of community development. This was facilitated when the majority of members were trusted and respected professionals (nurses, teachers, extension officers etc.) working within these communities. (The structure operated much less well in other villages where members were unemployed and fought over who should be first on the employment list).

Expectation management was a great challenge in and around the protected area. The majority of people in these communities are unemployed and far from the nearest urban centres. The mere mention of employment opportunities raised expectations that all would be employed and/or receive free grants. It was, therefore, necessary to sensitively educate local communities about benefits beyond employment.

In order to play a guiding yet not controlling role, issues and suggestions were often proposed informally to individual members of the Community Development Organizations and they then later introduced them in CDO meetings. In these meetings, the proposals would be endorsed by the Department of Environmental Affairs and Tourism and further scenarios provided before they were left to take decisions. In this way effort was made to play as passive a role as possible, empowering locals to take the lead whilst the Department of Environmental Affairs and Tourism representative became part of the organizations and accompanied them to tribal council and village meetings, functioning as an advisor and sounding board for the local Chief.

Through the Community Development Organizations, presentations were made to Tribal Councils for approval and endorsement. (The use of videos of best practices from other Parks – showing where community participation succeeded – was a useful means of communicating and educating stakeholders, enabling them to see communities in similar conditions/contexts benefiting from neighbouring Parks). Several projects were suggested, planned and endorsed in this way – involving the entire community. Additionally, the CDOs approached possible sources of funding (for example a Platinum Mine was approached and helped to fund the renovation and building of classrooms) as well as the Parks Board for assistance.

Examples of the projects include:

- the establishment of a trust fund to control the benefits accrued from the Park's projects and ensure that they are wisely directed towards the needs and problems of local communities;
- the use of dual entrance fees for the Park to enable local communities to share in the pleasure of the Park at minimal costs whilst visitors pay higher prices;
- the use of tribal authority staff to handle hunting licenses and avoid the handling fees of the Parks Board;
- the development of a cultural village – a living museum of Tswana culture;
- the use of old mission school buildings as facilities for an environmental education school for training park wardens and providing ecologists with first-hand practical knowledge of the Park;
- the establishment of vegetable gardens to meet local needs and supply Park lodges;
- the sale of fuel wood from alien plants (sourced during bush clearing operations) to lodges and locals in nearby towns.

Exploring such projects with the community through the meetings and workshops with the local Chief, Tribal Council and Community Development Organizations helped managed peoples' expectations. Although not all the projects proposed became a reality, through education and communication, the communities of Molatedi and Supingstad embraced the Park in their vicinity as well as embracing the concept of conservation.

At the national level, other communication and education activities used to build support for the protected areas across South Africa included representation on the governmental committee designing a new curriculum for South Africa. This enabled the representative from the Department of Environmental Affairs and Tourism to play a major role in writing environmental education into the curriculum. Once in the curriculum, however, most teachers had difficulty integrating environmental education into their lessons. This was due to both lack of capacity and understanding regarding the terminology used in curriculum design. At the local level, therefore, together with the Madikwe Park Liaison Officer, local teachers were helped to integrate Environmental Education into their lessons and create Environmental/Conservation clubs respectively. Additionally, teachers were trained and their capacity built in the creation of eco-clubs which provided youth with activities that kept them busy and involved with issues and projects making their villages better places to live. Yearly, the Liaison Officer would provide transport for these clubs to attend national youth conservation congresses where they could share their projects and learn from others. Most members of these clubs followed conservation as career.

Crucial to success of these communication and education efforts around the Madikwe Game Park was the role of the representative from the Department of Environmental Affairs and Tourism. Rather than maintaining an external expert role, becoming integrated into the village and community and gaining acceptance was the key – becoming, in the local lingua franca, the "son of the soil". In this case, unlike the Community Liaison Officer from the Park Board who wore Park uniform, wearing local informal clothing contributed to this acceptance, as did staying within the village and not inside the Park and speaking the local language. Gaining acceptance in such ways is highly dependent upon the individual chosen to undertake such tasks and careful thought should thus be given in the selection of those involved in communication and education.

Conclusion

Without the provision of information and its dissemination among local communities, no meaningful participation will take place. Rather, communities will solely provide cheap labour to these protected areas, especially as they are situated far from urban areas and have no active labour unions. The case of Madikwe Game Park is not different. Although the communities have been educated and provided with sufficient information to be able to participate effectively and benefit from the Park, there is still resistance from Park management and entrepreneurs. They still see provision of employment as the sole necessary benefit to the communities.

As the custodians of biodiversity, park management should use their tender and procurement procedures to include clauses that will force or direct entrepreneurs doing business in the park to embrace the idea of community participation and benefits beyond the park. Without the communities benefiting from the Madikwe Game Park, the conservation and ecotourism that is practiced will be of no benefit to the disadvantaged rural communities. In the end the historical antagonism of South African black rural communities towards conservation will not be overcome.

Park management should work towards empowering local communities, educating these neighbours, sharing Park benefits and networking their expertise. local communities will then be in a position to work collaboratively with Park management and entrepreneurs in order to sustainably manage and control their resources in a peace.

Notes

1. For examples see the following case studies - Drake, 1991 a; Drake, 1991 b; Cowling & Oliver, 1992;
2. See cases in Lindberg & Hawkins, 1993.
3. Such projects include, among others, the Kafue Flats and Luangwa Integrated Rural Development Project in Zambia, the Nazinga Wildlife Utilization Project in Burkina Faso in Costa Rica and Culebra Wildlife and Mindo Ecotourism in Ecuador (Drake, 1991 a; Drake, 1991 b; Olido, 1991; Wells et al. 1992).
4. See examples in Gorio, 1978; Sayer, 1981; Place, 1991; Sherman & Dixon, 1991; Whelan, 1991; Anderson, 1992; Els, 1994.

References

- Arnstein, S.R. (1969). "A ladder of citizen participation" in the *Journal of American Planning Institute*. July: 216-224.
- Boo, E. (1990). *Ecotourism: The Potentials and Pitfalls*. World Wildlife Fund, Washington.
- Boo, E. (1991). "Making ecotourism sustainable: recommendations for planning, development, and management" in Whelan, T. *Nature Tourism: Managing for the Environment*, 187-199. Island Press, Washington.
- Brandon, K. (1993). "Basic steps towards encouraging local participation in nature tourism projects" in Lindeberg, K. & Hawkins, D.E. (Eds.), *Ecotourism: A Guide for Planners and Managers*, 143-151. The Ecotourism Society, Vermont.
- Cowling, R.M. & Olivier, N.J.J. (1992). "Indigenous plants" in Fuggle, R.F. & Rabbie, M.A. (Eds.), *Environmental Management in South Africa* 212-249. Juta, Cape Town.
- Davies, R.J. & Trieloff, C. (1992). *Madikwe Game Park Management Plan*. Parks Board, Mmabatho.
- Drake, S.P. (1991a). "Local participation in ecotourism projects" in Whelan, T. (Ed.), *Nature Tourism: Managing for the Environment*, 132-163. Washington: Island Press.
- Drake, S.P. (1991b). "Development of a local participation plan for ecotourism project" in Kusler, J.A. (Ed.), *Ecotourism and Resource Conservation. A Collection of papers*. Volume 1.
- Els, H. (1994). "Sosio-ekonomiese ontwikkelingsbenadering tot die volgehoue benutting van hernubare natuurlike hulpbronne in landelike gebiede" in *South African Journal of Ethnology*. 17 (1)3-17.
- Keane, M.J. (1992). "Rural tourism and rural development" in Briassoulis, H. & van der Straaten, J. (Eds.), *Tourism and Environment: Regional, Economic and Policy Issues*, 43-55. Kluwer Academic Publishers, Dordrecht.
- Mosidi, S.M. (1996). *local Rural Community Participation in Ecotourism: The case of Madikwe Game Park, North-west Province, South Africa*. Unpublished Master of Arts in Geography Dissertation. University of Pretoria. Pretoria.
- Wells, M. et al. (Brandon, K. & Hannah, L.) (1992). *People and Parks: Linking Protected Area Management with local Communities*. The World Bank, Washington D.C.

Chapter 13

The use of traditional knowledge in the South African National Parks Imbewu Youth Programme: planting a seed of environmental awareness

Ishmael M. Makwaeba

Introduction

South Africa National Parks (SANParks) has been undergoing a transformation towards a "socio-ecology" management approach, increasing participation in conservation. As part of this effort, the Imbewu Youth Programme focuses on traditional knowledge of retired indigenous park rangers – 'wise elders'. The African oral tradition is used by the elders to communicate with youth during a four-day wilderness experience in the National Parks, hoping to promote interest in the natural environment and subsequent participation in conservation efforts. This is further encouraged in a six to nine month, outcome-based follow-up programme – the Junior Honorary Ranger Orientation Course – developing capacity to identify and address environmental problems.

South African National Parks – SANParks

Mission: To acquire and manage a system of national parks which represent the indigenous wildlife, vegetation, landscapes and significant cultural assets of South Africa for the pride and benefit of the nation.

Vision: To be the pride and joy of all South Africans

Transformation statement: South African National Parks (SANParks) is striving to transfer power and control of resources from the minority that had been appointed and privileged by an undemocratic system, to the majority that participates in the new democratic process. It is also directing the benefits of its activities to providing for all South Africans, rather than the wealthier and more privileged sections of society.

A new look at conservation

In the past, conservation areas in South Africa were largely established through enforcement and compulsory exclusion. The history of our national parks was often characterized by conflict between the Parks and neighbouring communities, mainly due to disrespect for local, indigenous knowledge and traditional conservation practices. The preservationist view, that conservation can only succeed if people and Parks are kept separate and that communities 'contaminate' natural wilderness, resulted in a rift between those who lived around national parks and those who were responsible for running the Parks. This adversarial relationship was exacerbated by the fact that communities often paid heavily for conservation in terms of loss of land, loss of access to natural resources and, hence, reduced economic opportunities.

International trends and the broad transformation of South African society demand that we revisit the 'people *versus* Parks' or 'fences and fines' approach that has characterized conservation for the greater part of this century. Successful long-term management of South Africa's national parks depends on the co-operation and support of the local people. The time has come to look at how best the rift between Parks and people can be narrowed.

Local people must be involved in conservation once again. Parks cannot exist in isolation. If they are to be of relevance in a transformed South Africa, Parks will have to see themselves as part of the community in which they are situated and strive to be 'good citizens'. This means they will need to recognize their links with and dependence on local communities, include local people in their planning and management programmes and, where possible, contribute to or facilitate community development. There is a critical link between development and conservation, and national parks are well placed to encourage sustainable living in the surrounding communities.

We also have to realize that our cultural heritage is inextricably linked to the biodiversity of our country. V M Toledo, in 1988, wrote the following about conservation in Mexico, and it is equally true in respect of South Africa:

In a country that is characterized by the cultural diversity of its rural inhabitants, it is difficult to design a conservation policy without taking into account the cultural dimension; the profound relationship that has existed since time immemorial between nature and culture. Each species of plant, group of animals, type of soil and landscape nearly always has a corresponding linguistic expression, a category of knowledge, a practical use, a religious meaning, a role in ritual, an individual or collective vitality. To safeguard the natural heritage of the country without safeguarding the cultures which have given it feeling is to reduce nature to something beyond recognition; static, distant, nearly dead.

V. M. Toledo (1988).

Intangible Heritage: Traditional knowledge

In Africa, great emphasis and importance is placed on the intangible heritage — that which exists intellectually in a culture, such as songs, myths, beliefs, superstition, oral history and poetry, and various other forms of traditional knowledge systems manifesting in cultural practices. Nature figures profoundly in this intangible heritage, which often encompasses the associations or histories of animals, plants and landscapes in oral traditions, and the knowledge stored in this way manifests in practices such as medicinal uses of plants, taboos and rituals related to species etc.

When colonialists arrived in Africa, they arrived with the myth that the indigenous peoples of Africa were barbarians, irresponsibly destroying resources due to a lack of law and ethics. They were unable to appreciate the local, indigenous knowledge – stored in intangible African heritage – about natural resources and cultural practices ensuring their conservation. Conservation is now, necessarily, undergoing transformation in order to address this lack of appreciation and respect for indigenous, local people and their heritage.

Transformation: Conservation and "social ecology"

Part of SANParks' present transformational efforts (statement above) is the "social ecology" programme. This represents the fundamental shift from traditional conservation practices to a more holistic, integrated natural and cultural heritage management approach. It includes not only the management of biodiversity in conservation, but also the pursuit of "social ecology" – the long neglected but crucial people aspect in conservation. Social ecology brings vital people's participation into conservation. Without it, the mission of SANParks would simply be unachievable. If conservation is the business of SANParks, then its key ingredients must be natural resources and people. For practical considerations, the focus of the social ecology programme is on the historically disadvantaged communities living in the neighbourhood of national parks.

SANParks' Imbewu Youth Programme (IYP): Environmental Awareness

The Imbewu Youth Programme follows the "social ecology" approach to conservation, contributing to the new political, economic and social realities of South Africa. It addresses the need to recognise the value of local, indigenous and intangible heritage. Focusing on the historically disadvantaged youth of townships and rural communities labelled as the "lost generation", Imbewu aims to re-kindle self-identity within and amongst youth, acknowledging the cultural perspective in the broadening of environmental interpretation and education.

Aims and objectives:

- to contribute and support the development of a better understanding and appreciation of the conservation of biodiversity and its associated cultural assets among young people;
- to offer potential youth leaders a unique and personal experience of wilderness so that they may appreciate the importance of nature to humankind;
- to encourage and promote local indigenous ecological knowledge and interpretation of the environment.

Programme beneficiaries:

- secondary school going children and community youth;
- ages thirteen to twenty-one years;
- previously disadvantaged youth groups from townships and rural areas.

Programme Background

Imbewu (literally meaning seed) Youth Programme is a four-day entry point wilderness experience and environmental awareness programme that started in 1996. A joint venture between the South African National Parks (SANParks) and the Wilderness Foundation South Africa¹ (WF-SA), it enables South African youth to reclaim their birthright; a quality experience in South African National Parks.

One of the unique aspects of the Imbewu programme is that retired indigenous park rangers ('wise elders') are selected and trained as Imbewu teachers. Staff and local community members help in identifying these elders/retired game rangers as potential teachers. They are screened according to criteria including age (not younger than fifty-four), health, communication skills, knowledge, background and previous practice of cultural activities. The elders are trained in a number of fields to build their confidence in their new 'job'.

As former employees of the National Parks, each elder/retired park ranger has on average thirty years experience working in the parks, mainly on foot. Most of them cannot read or write but they have traditional knowledge which they can disseminate through the Imbewu educational programme. Their lifetime experiences are a great resource for learning, both for other elders, Imbewu programme facilitators and youth. They can share their knowledge in home languages using the African oral traditions in an afro-centric context. The emphasis is on learning instead of teaching, and participants are involved through relating questions and discussions to their experiences and knowledge base.

Imbewu counters the euro-centrally biased approach to interpreting and communicating conservation messages among indigenous Africans – an approach that lacks association with local heritage and therefore tends to be difficult for indigenous peoples to comprehend and apply. Moreover, it presents the opening of doors for ordinary local people to freely share their stories and their understanding of nature, their intangible heritage, with youth.

Programme content

For four days, groups of eight to sixteen young people are exposed to the wilderness within a National Park. This time is spent, accompanied by the retired park rangers and field rangers (for safety) in a bush camp. It is intended that this personal experience will build an emotional attachment to the environment and National Parks. On return to their communities and schools, the youth are expected to start conservation clubs, school or community based environmental projects.

Each year geographical areas of operation are identified from which prospective participants will be selected. Eight youth (sixteen in Imbewu-Kruger) are selected for the Imbewu Course by the management at selected schools. The age group ranges from thirteen to twenty-one year-olds but can be over with community-based youth groups. The majority are from secondary schools (Grades eight to twelve). Most of them have never before set foot in their parks! The course/trail takes four days and three nights. Courses run throughout the year except during school examinations and some holidays.

Rustic, low-impact bush camps have been established as sites/camps for the Imbewu course. Currently there are four fully operational bush camps in our parks (Kruger, Addo Elephant, Tsitsikama and Namaqua National Parks). No structures are erected other than ablutions facilities where the (potential) impact has been assessed. Participants sleep out in the bush, in the shelter of trees under an open sky. In cases where there are dangerous animals in the vicinity, an electric fence is put up for participants to reside within. During the day time the participants go on trails with the elders.

• *Environmental interpretation and African traditions*

The importance of the natural environment to African indigenous communities is apparent at all levels and is stored in and by the people. Respect for the environment, and the precarious balance between culture and nature, is manifest in cultural values, beliefs and taboos, and expressed in all manner of ways, from local language, taxonomy, proverbs, songs, folk lore and stories, to dances, myths, rituals, totems, agricultural practices, equipment and materials. However, with the changing times, the younger generations are often not inheriting this wealth of knowledge and the inherent concern for ecosystem management.

Whilst sitting around the campfires at night, as well as during the trails and visits to local cultural site (for example Masorini in Kruger), the retired game-ranger elders draw on traditional knowledge – intangible heritage – interpreting the natural environment for the youth. They share knowledge about the flora, fauna and topography of sites, historical links, conservation ethics and community wildlife laws with the youth.

Participants identify and learn about species, discovering, for example, the medicinal properties of plants. Examples include the weeping wattle tree used for cleansing bad spells in a village or yard; Aloe which can be used for blood cleansing and for the treatment of burns; and the use of Buffalo-thorn tree – *Ziziphus mucronata* – to heal abscesses having mixed the leaves in hot water.

Using the oral tradition of sharing knowledge, subjects discussed include taxonomy, proverbs and taboos related to nature and conservation. African folk stories are of great use having didactic ethical elements (parallel to Aesop's fables in Europe).

• *Local language: taxonomy*

Various places are named according to the totem animal of the clan, or because of animals or plants found in or dominating the area. For example, *Lesetlheng* is so-called because 'mosetlha' (Weeping wattle – *Peltophorum africanum*) are the dominant trees in the area, and the place name *Dithabaneng* translates as 'place of the hills'.

The use of traditional knowledge in the South African National Parks Imbewu Youth Programme: planting a seed of environmental awareness

In addition to places, examples of animal taxonomy related to local language are common. An example is the story of the Batswana people who, when migrating, encountered hundreds of herds of buffalo for the first time and asked themselves in shock: 'Ware *ke eng dilo tse?*' (What are these?). From this exclamation '*nare*' came to mean buffalo in Setswana (the language spoken by the Batswana people in Botswana).

• Local language: proverbs

Proverbs are another example of intangible heritage (said to express the gravity of meaning). Different indigenous communities have proverbs peculiar to their environmental setting, upholding their values, morals and overall way of life. These proverbs are mainly composed of natural things such as animals, plants, landscapes and extraterrestrial objects like clouds, sun, moon and lightning.

For example, African proverbs include "*Ose bone thola borethe, teng gay one go a baba*" which translates 'Do not adore the smoothness of the bitter-apple, it is acrid inside'. Through reference to experiences with apples, the proverb warns "Do not be deceived by a pleasing exterior, people can be deceitful". Another example is the proverb "*Lesilwana la go leswafatsa sediba, letla bonwa le nwa kae?*" which translates "Idiot who dirties the pool where will he drink?" The meaning of this proverb: "If you use something now do not waste it as you may need it tomorrow". Relating to daily life, this proverb communicates a strong and clear conservation message.

• Local beliefs

Unique natural features are often regarded as sacred. As such, it is a taboo to do certain things in such places. For instance there are/were customs and traditional practices surrounding water. Children were warned that urinating in a river would change them to the opposite sex! This myth was probably sufficiently frightening to prevent people urinating in streams. This would have limited a disease like bilharzias. The bilharzias parasite is passed on from human urine and faeces to small water snails and then through its life cycle back to people via the water.

Another belief influencing people collecting waters is that of Nguni water collectors. They say that where there are frogs one does not find sweet water. Frogs are eaten by hammerkops *Scopus umbretta* ("the lightning bird" or "bird of the witches"), and the prospect of collecting water by a 'witch bird' was a terrifying prospect.

Moreover, large bodies of perennial water are believed to have a big snake '*mmamogaswa*/'*kgwanyape*' deep inside (e.g. Zambezi River and Nyami nyami legend). Some *sangoma* (traditional healer) initiates have to go deep into such waters to be licked by "the snake". The "snake" should never be disturbed – suggesting a conservative treatment of the river. Once disturbed it flies from with a tornado-like gale force wheel wind disturbing anything in its way.

• Community law and traditional control over the destruction and consumption of wild animals

Community laws have traditionally controlled the use of common species for the benefit of the community as well as enabling population protection. For example, community law reserved the destruction and consumption of highly endangered and ecologically important species (such as vultures, ox-peckers, egrets, secretary birds, pythons, and monitor lizards) for traditional healing and today some communities do not eat these species. Similarly, the community chief would dictate (and thus control) the frequency with which a regiment of males from the community could carry out a traditional game hunt.

- **Taboos**

A number of interesting taboos reinforce traditional community laws. For example, swallows, frogs and millipedes are viewed as God's children of rain; therefore their appearance is regarded as a forecast of rain. Accordingly it is believed that the destruction of these animals would result in a severe drought. It follows that although the millipede provides a very effective medicinal powder for eye infection, this powder may only be obtained from millipedes dying from natural causes. If killed either deliberately or by accident, the culprit must exonerate himself by counting the millipede's legs. Considering the number of legs on a millipede and the complicated traditional counting method, this constituted an extremely arduous task, deterring people from killing them.

- **Indigenous African games**

Whilst on the Imbewu course, the young people also play indigenous African games such as morufa/ncuva, a board game, requiring a high degree of thinking and problem solving. The game used to be played by men in the late afternoon under the shade of a tree, using the pips of the *morula* fruit.

- **Solitaire**

Another experience is a 'solitaire'. The youth spread out in a safe place and observe, feel and smell the natural environment for up to thirty minutes. During the solitaire participants contemplate how they "communicated" with Mother Nature and later share their experience this through poems, drawings or written songs. Participants react positively to these activities, as the following example proves:

*"Nature is beautiful
Interesting things on earth
Trees are green and rivers are flowing to Mozambique
Birds singing songs with different languages
Skies are blue
Wind blowing, from north to south
Good smelling from tree flowers
All things bright and beautiful
The lord made them all"*

Douglas Hlatswayo

- **Workshop session**

Part of the camp programme is a workshop session which takes place on the afternoon of the second day. The aim is for participants to share information on what they are/are not doing within their various schools. They also discuss their impressions, the potential for sharing experiences and the need for youth involvement in environmental awareness. Participants are also guided on what they can do as ambassadors for conservation when they return home. This includes establishing conservation clubs and registering for the Junior Honorary Rangers Orientation Course that will give them additional guidance regarding positive involvement in conservation. Once they have established a club or become a Junior Honorary Ranger, participants are expected to take further conservation courses annually. This is in order to keep up their membership, expand their knowledge and increase their influence in learning institutions and ambassadorial tasks. Results are satisfactory since quite a few do go back and make a visible difference.

Junior Honorary Ranger Orientation Course – follow up

A four day Imbewu course/trail is not enough to empower participants (especially those without any prior involvement in conservation related matters) to develop action-competence that will lead them to be proactive in conservation projects. A follow-up is a

The use of traditional knowledge in the South African National Parks Imbewu Youth Programme: planting a seed of environmental awareness

must. As a result the Junior Honorary Rangers Orientation Course (JHROC) was adopted in 2001, created in response to the requests of participants who attended the Imbewu course and established clubs at their respective schools/communities. These participants now commonly apply to do this follow-up course, indicating the success of the Imbewu project.

The course is the joint effort of the SANParks Honorary Rangers, Imbewu management and the University of South Africa. The focus of the course is to empower youth through the acquisition of knowledge, skills and positive attitudes, so that they will be able to help SANParks and their communities at large. The Junior Honorary Rangers Orientation Course is a distance learning course. The course takes six to nine months. The training package for the Junior Honorary Rangers (JHR's) consists of:

- an interactive workbook;
- a one-day practical workshop;
- a portfolio;
- a practical group project based on another environmental course (e.g. cleaning campaign, donga reclamation, indigenous name of local tree and their uses, etc.).

The interactive workbook has to be completed by each applicant and must be submitted before the practical workshop as this will build on knowledge acquired through the completion of the workbook. The JHR facilitator in each region will present the practical workshop. The portfolio must be compiled throughout the year and must be submitted at the end of the year.

To qualify for appointment an applicant must successfully achieve the outcomes set for each of the above aspects of training. Once a qualified Junior Honorary Ranger, you have to secure this status by at least doing one other environmental related course (e.g. bird watching, tree identification etc.) and a project.

The interactive course workbook constitutes an orientation course, covering many aspects considered important for the Junior Honorary Ranger's, though not exploring these in depth. The underlying philosophy of the workbook is an outcome-based education which is learner-centred and the emphasis is not on what the facilitator wants to achieve, but rather on what the learner should know, understand, be able to do and to become. This means that:

- learners do not only have to gain knowledge, they must understand what they learn and must be able to develop appropriate skills, attitudes and values during the learning process;
- learners become active participants in the learning process and have to take responsibility for their own learning;
- learners are given the opportunity to work at their own pace and in different ways according to their individual abilities and levels of development.

The following research skills are included in the learning programme through the interactive workbook and associated small-group projects and/or portfolios:

- recognizing environmental problems;
- defining environmental problems;
- listening with understanding;
- collecting information;
- organizing information;
- analyzing information;
- generating alternative solutions;
- selecting a solution;
- developing a plan of action.

Evaluation

Strengths/successes of the Imbewu programme and JHROC

- using the social ecology approach and bringing people's participation into conservation;
- acknowledging South Africa's cultural diversity and ensuring an afro-centric, context-specific approach;
- broadening environmental interpretation and education;
- valuing, encouraging and promoting local indigenous and traditional empirical knowledge and language(s);
- improving understanding and appreciation of the conservation of biodiversity and its associated cultural assets;
- drawing on the great resources presented by the elders' lifetime experiences;
- identifying continuity between past practice and present conservation efforts;
- bridging the generations between elders and youth;
- reclaiming a birthright (quality experience in SANParks) and re-kindling self-identity within and amongst the "lost generation" of youth from townships and rural communities;
- taking a 'bottom-up'(school-based) approach with youth and helping them to come up with constructive proposals;
- developing positive perceptions among previously disadvantaged communities;
- stimulating ambassadorship at school, community and even national levels;
- emphasizing learner-centred (rather than teacher-centred), outcome-based education, empowering youth through knowledge, skills and positive attitude;
- using an experiential, participatory and interactive approach and facilitating sharing;
- enabling Imbewu programme facilitators (in addition to youth and other elders) to learn from the elders' knowledge and experience;
- following the Imbewu programme with the Junior Honorary Ranger Orientation Course;
- involving over 4500 youth leaders from six provinces in the programme (since 1996);
- establishing conservation clubs;
- spreading conservation messages to other schools through presentations and word of mouth;
- stimulating people to pursue training courses with other conservation institutions;
- celebrating environmental calendar days;
- motivating volunteer work (e.g. for local zoological gardens);
- having then potential to grow;
- attracting invitation to participate and present experiences elsewhere, such as during the Parks debate at the World Summit on Sustainable Development, Johannesburg 2002 and at the World Parks Congress in Durban 2003;
- achieving successes which provide good indicators of the programme's potential.

Weaknesses/threats/opportunities for improvement

- The success stories are isolated and just a drop in the ocean as most of the young participants disappear.
- Developing the elders' confidence in their role within the Imbewu programme is challenging as they do not necessarily see themselves as cornerstones of indigenous knowledge.
- When there is great linguistic diversity within an Imbewu group, language can present a challenge.
- The initial Imbewu experience is very short (four days) and there is no guarantee that it will be repeated.
- Pre and post-programme contact is required to enhance the experience.

The use of traditional knowledge in the South African National Parks Imbewu Youth Programme: planting a seed of environmental awareness

- The follow-up programme should be sequentially linked to the experience – at the moment it is not sufficiently integrated with the Imbewu wilderness experience (it does not continue interaction with the elders and the use of traditional knowledge).
- The directorate's priorities affect the operation of the programme due to resource allocation.
- The project is not cheap to run as very few participants can be taken each time.
- Funding dependency presents issues of sustainability.
- Organisational networking should be encouraged to share costs – however, collaboration/partnership (with the University of South African and the Wilderness Foundation SA) does not always work well and needs improvement.
- Thorough evaluation should be undertaken and necessary improvements made.

Conclusion

It is hoped that both SANParks and others can learn from the Imbewu programme experiences and work towards democratically empowering people to participate in the management of National Parks. Too often conservationists still underestimate the importance of a social ecology approach, or rather a 'peoples' approach to park management. Identifying and using the traditional knowledge of indigenous peoples has significant potential for bridging the gap between the practices of the past and the needs of today. Focusing on commonality and learning, individuals, communities and conservation management bodies can productively work together towards goals for the greater good.

Notes

1. Wilderness Foundation South Africa is an NGO. www.wild.org/southern_africa/wf.html

References

- Grenier, L. (1998). *Working with Indigenous Knowledge: A guide for Research*. IDRC. Canada
- Mutwa, C. (1997). *Isilwane – The Animal: Tales and Fables of Africa*. Struik. Cape Town
- Suping V.S. (Chief) and Collison R.F.H., (1992). *Occasional Paper No. 2. (1992). The Wildlife Conservation Tradition of the Botswana*. The Bophuthatswana National Parks and Wildlife Management Board.
- Toledo, V. M. (1988). "La diversidad biológica de México – criterios para proteger un patrimonio", in *Ciencia y Desarrollo* 81(15): 1730.
- Xaba, Z. (2003). *Amanzi Amnandi – Sweet Water: Wildlife and Environmental Society of Southern Africa Worksheet*. Rhode University.

Chapter 14

Environmental education and awareness at the National Botanic Garden of Zimbabwe

Soul Shava and Anthony Mapaura

Introduction

Botanical gardens play an important role in the conservation of plants. Unless the roles of gardens are clearly communicated to the public, however, they remain the preserve of the scientific community and areas of awe to the local communities. A key responsibility of botanical institutions is to demystify plants and their conservation and be an important medium for communicating the value of the diversity of plants and for cultivating a plant conservation ethic in our communities. This can be achieved through public education and awareness programmes, interpreting living plant collections for visitors. This paper presents the experiences of such a programme developed in the National Botanic Garden of Zimbabwe.¹

The National Botanic Garden of Zimbabwe and its role in plant conservation

The National Botanic Garden of Zimbabwe, established in 1963, is a 68 hectare protected plant conservation area located 4 km north of Harare city centre. The garden combines *in-situ* and *ex-situ* conservation efforts. 10 hectares of the Garden are devoted to *in-situ* conservation, conserving a section of the original natural Highveld Savanna vegetation of the area (otherwise known as 'Miombo Woodland') in its original position. This *in-situ* conservation is further augmented by the Institute's 48 hectare Mazowe Botanic Reserve 30 km north of Harare.

The greater part of the remaining area of the National Botanic Garden of Zimbabwe is devoted to *ex-situ* conservation – mainly to conserving collections of the main vegetation types of the country (from the Lowveld Savanna and Rainforests of the Eastern Highlands). These *ex-situ* indigenous plant collections are arranged and landscaped in the Garden so that they depict the main vegetation types of Zimbabwe as they occur naturally in the wild. In this way, over 80% of the indigenous woody plants of Zimbabwe are represented in the Garden. Additionally, there are other sections of the Garden that house plant collections from other countries and continents with climatic conditions similar to those in Zimbabwe.

Attracting a variety of animal wildlife, including a profusion of birdlife, small mammals, reptiles and insects, the garden also serves to conserve and make visible indigenous fauna.

The Environmental Education and Awareness Programme of the Garden

Since its establishment, the National Botanic Garden of Zimbabwe has received groups of visitors interested in learning about indigenous plants of Zimbabwe. A programme focusing on educational and awareness activities was developed, in order to:

- enhance the relevance of the Garden to the public;

- emphasize the role that plants play in nature;
- highlight the value of plants to humankind, with particular reference to the indigenous communities of Zimbabwe;
- promote the need to conserve indigenous plants and local vegetation types;
- further the public's appreciation of, and support for, the role the Botanic Garden plays in plant conservation.

Accordingly, an Education Officer was employed in 1994 and an Education and Interpretive Centre was built within the Garden in 1995.

Target groups

Following a survey revealing that the majority of visitors to the Garden were primary and secondary school groups, the education programme was developed to target them. Thus this programme has, as its basis, plant related topics from primary school (e.g. the Environmental Science syllabus) and secondary school curricula (e.g. Science, Geography, Biology, Agriculture syllabi).

The programme provides 'hands-on' education activities for learners in a more-or-less natural vegetation setting. These activities include discovery walks (mainly sensory investigation of the nature through looking, listening, touching, smelling and sometimes tasting), as well as activities for artistic expression (visitors drawing, painting, story building and poetry writing), discussions on indigenous plant knowledge and experiments with plant properties, adaptations and uses.

In addition to school groups the Garden also receives groups with specific knowledge interests on the Zimbabwean flora. These come from colleges, universities, community organizations, governmental and non-governmental organizations, research institutions, etc. Day programmes are organized to suit the groups' needs, for example focusing on ecology (vegetation types and plant adaptations) for a college ecology class; examining uses of indigenous plants with a community group; culinary herbs, edible wild plants and traditional food recipes with a women's cooking club, etc. The main aim is to address the group's specific requirements, whether through traditional guided Garden walks, talks, discussions, lectures or demonstrations. With all groups, the most successful activities are those that enable a dialogue and in which visitors are practically engaged.

Garden interpretation

In addition to arranged educational tours there are visitors who frequent the Garden to walk on their own as individuals, families or small picnic groups. Without adequate interpretation, the garden is meaningless to these visitors beyond its aesthetic value. In an effort to make the garden an interactive and conducive learning environment for these visitors, interpretive labels have been put up in most sections of the garden to enable self-guided tours. They provide information on the plants or plant groupings (i.e. their uses, distributions and other unique properties). In addition, a brochure has been prepared for visitor use on self-guided tours, presenting more detailed data and highlighting positions of key plant species in each section.

Educational displays

Education displays in the Education and Interpretative Centre are put up for use by diverse visiting groups and the general public. They include charts, posters, plant samples, notices and related educational information. The themes around which they are organized include plant uses (e.g. medicinal plants or food plants), plant dispersal, plant pollinations, plant origins and distribution, vegetation types and important plant groups. The displays are regularly changed to address varied themes of interest to the different visiting groups.

Collaborative and outreach activities

Over time we realized that institutions often have limited capacity in terms of funding, human resources, expertise and transport. However, by combining efforts with other related stakeholders we can minimize costs, share experiences and expertise and therefore attain goals more efficiently. The institute's education staff therefore undertakes many collaborative activities with other environmental organizations.

An example of collaborative work with another environmental organization is running education camps at RIFA Environment Centre (a wildlife camp within a game park area in Chirundu) in collaboration with the Zimbabwe Hunters Association. These camps are run for senior secondary education school groups and colleges. They involve wilderness excursions into the natural environs of the Zambezi Valley and studies on the vegetation, geology, wildlife, ecological associations, predator-prey relationships, as well as social impacts and economic implications of game parks and reserves. The wilderness environment seems quite enriching to students. In their feedback to us they inform us that it exposes them to aspects of the environment they are often not exposed to (especially the city dwellers). It also builds team spirit and care for one-another, sharing of chores (such as cooking and washing up) and undertaking a variety of group activities.

The institute also does outreach activities with schools interested in establishing woodlots or identifying trees on their premises. This supports events such as the National Tree Planting Day and enables students to acquire knowledge on plants within their daily learning contexts. During these outreach activities we identify plants, provide advice on plant propagation and give talks on the value of indigenous Zimbabwean plants.

Additionally, the education staff works collaboratively on the production of education materials such as the "Know your Indigenous Plants" series. Currently the publications under this series include: Tale of Indigenous Tree of Zimbabwe, Wild Leafy Vegetables of Zimbabwe, Wild Fruits of Zimbabwe and Poisonous Plants of Zimbabwe). These have been published in collaboration with Sharenet, South Africa, the Zimbabwe National Environment Trust (ZIMNET) and Environment and Development Activities – Zimbabwe (ENDA-Zimbabwe).

Challenges and lessons learned regarding environmental education and communication

Language

The use of scientific (botanical) terminology has been a major barrier in communicating the role of the Garden to the public, attracting attention and building support for the Garden's activities. Having realized the impact of this, we have embarked on a program to change our public image and our awareness and educational materials. Even our interpretative labels now include common names in English, Ndebele and Shona as well as indigenous uses wherever possible. This makes the Garden much more accessible to members of the public (especially those on self-guided tours) who now benefit from identifying plants and reading the related literature in vocabulary they understand.

Relevance: linking plants to people and encouraging a culture of conservation

In order for local people to relate to and support the Garden, it needs to be associated with their day-to-day lives. If the links of the Garden and its activities to the local communities are not highlighted, the people will remain detached from the institution. Therefore, extensive research on, and documentation of, the uses of plants by indigenous communities (indigenous knowledge) is being undertaken. Plant uses are now being incorporated into the Garden's plant labels and disseminated in our publications.

Most of the time, with developments (such as housing construction or agricultural expansion) natural vegetation is cleared and lost. By enabling people to realize the benefits

they can derive from indigenous plants we can stem the indiscriminate destruction of vegetation. Accordingly, the institute is encouraging landscaping with indigenous vegetation, propagating indigenous plants for the public in its nursery and providing advice on cultivating them. It is also producing publications on the uses of plants (providing fruits, medicines, etc.). In this way, it is hoped that the value of indigenous plants will be enhanced and that people will be more appreciative of their botanical surroundings.

Recommendations

Public awareness of the value of botanical conservatories, arboretums, parks, reserves and gardens needs to be raised in order to develop an appreciation for their role and to develop a plant conservation ethic amongst our communities.

Communication on plant conservation efforts should not focus only on the threatened plant species and plant biodiversity hotspots but should be extended to include threatened vegetation types, some of which are considered to be wide spread today but are being rapidly lost and need urgent protection.

The role of environmental education and interpretation (communication, education and public awareness) in protected area conservation should be highlighted and prioritized amongst protected area institutional staff and management. People are not concerned with the conservation of indigenous fauna and flora unless they realize their value. If this is not done, all our efforts will be undermined by the activities of surrounding communities. Case studies in which education, communication and public awareness have been successful in promoting conservation should be documented and widely disseminated.

It is necessary to communicate the link between protected conservation areas and local communities. Protected areas are not isolated islands. They occur within peopled areas and these people can positively or negatively impact on their activities. In most cases within southern Africa, parks and wildlife areas have been created at the expense of local communities who then had to be relocated. This has created an antagonism between local communities and protected area management. Usually the communities feel they have a right to access resources in such areas while protected area management feels obligated to protect these resources at all costs. This creates a deadlock that needs to be resolved. In order to successfully address this conflict of interest, there is need for compromise between the stakeholders. A share of the resources must be allocated to these communities and efforts for poverty reduction put in place.

Mass media is a strong communication tool in society. However, most environmental issues of concern, including the plight of protected areas, do not usually find themselves in popular media channels such as radio and TV. As a result, conservation issues remain to large extent the domain of conservation scientists. There is need to reach the public through popular media channels. To this end the mass media (both print and electronic) should be involved actively in Environmental Education and Interpretation. This entails providing reporters with up to date information on events in a language that is accessible to them and understood by the public. Conservationists therefore have the role of interpreting their research results in simple understandable language.

Notes

1. The National Herbarium and Botanic Garden of Zimbabwe is administrated by the Division of Agricultural Research and Extension in the Ministry of Lands, Agriculture and Rural Resettlement, in conjunction with the Botanic Garden Fund Committee – a board of trustees appointed by the Minister of Agriculture, www.nationalherbarium.org.zw/

**NGOs using communication to build
support for protected areas**

Chapter 15

Bridges for Conservation: Experience with community participation in an awareness campaign around four protected areas in Lebanon

Andrea Schwethelm-Munla

Introduction

This paper reviews the experience of the Lebanese Protected Areas Project's participatory 'awareness campaign', October 2000-November 2001. The campaign used a bottom-up approach, encouraging grass-root participation in the awareness building process. Rooted within the Lebanese context, lessons learned cannot be universally generalized. However, other protected areas with extremely limited resources for education and awareness may benefit from the experiences shared as the approach can source access to a pool of additional resources, various audiences and new partnerships for conservation.

Background on the Lebanese Protected Areas Project

When Lebanon established its first two nature reserves ten years ago, few Lebanese took note of this important event and reserves existed more or less on paper until the launching of the Protected Areas Project (PAP) in the Ministry of Environment (MoE) in 1996. This Project, funded by a U.S. \$2.5 million grant from the Global Environment Facility (GEF) and implemented with the administrative support of the United Nations Development Programme (UNDP), benefited three nature reserves: (1) Horsh Ehden Nature Reserve, (2) Al Shouf Cedar Nature Reserve and (3) Palm Island Nature Reserve.

Three local non-governmental organizations (NGOs), which had played a prominent role in pressing for the establishment of these protected areas, were given the responsibility of managing their daily affairs in collaboration with a locally hired, full-time management team. With the help of the technical and scientific expertise of IUCN – the World Conservation Union – the Protected Area Project achieved impressive results, building the capacity of the protected areas' NGOs, training Reserve staff, developing management plans, making inventories of flora and fauna, and developing awareness material.

While growing professionalism in management produced its first successes inside the Lebanese nature reserves, the surrounding population remained largely sidelined, uninvolved and often uninformed. The remarkable exception was the Al Shouf Cedar Reserve where the NGO in charge of managing the Reserve, backed by strong political support, successfully established close working relationships with municipalities located around the reserve and invested much effort in spreading awareness and providing local benefits through a rural development project.

With the help of several NGOs, educational material was produced on the reserves (including video films, a slide series, training booklets and posters) but clearly more was required to muster public support.

The Protected Areas Project's call for awareness campaign proposals

In April 2000, the Protected Areas Project called for proposals for an awareness campaign around the three reserves, as well as the more recently established (1998) Tyre Beach Nature Reserve. The campaign objectives, according to the Protected Areas Project terms of reference, were to raise awareness and build capacity for conservation among Lebanese in general and among the communities located around the reserves in particular. Specified target audiences included the media, schools, universities, landowners, farmers, municipalities, community-based organizations, protected area NGOs and the general public. The expected outputs were listed as lectures, seminars, field trips, outdoor activities, publicity campaigns, a brochure and awareness material.

In August 2000, the Protected Areas Project awarded the remaining budget of US \$45 000 (earmarked for awareness) to the Society for the Protection of Nature in Lebanon (SPNL). The project's duration was shortened from the originally planned 19 months to 13 months (from October 2000 to November 2001). The branch of the Society for the Protection of Nature in Lebanon specializing in environmental education and awareness – the Environment Information Center (EIC) – had developed the SPNL project proposal and was, therefore, to implement the campaign.

The value of "awareness campaigns"

Sustainable development requires the wise use of our natural resources to provide for our present needs without compromising the needs of future generations. This can only be brought about through a substantial change in behaviour. Generally, the proclaimed goal of "awareness campaigns" is to bring about this change. However, the term "aware" describes a state of being 'informed', 'acquainted', 'conscious' and at best 'knowing', thus describing a passive condition and not an action. In fact, studies have shown that while a high level of awareness and knowledge on environmental issues leads to a greater level of concern among people, this does not automatically bring about an actual change in practices.

Disseminating information and raising awareness are important, but only the beginning. If people lack either the practical skills or the opportunities for action, awareness becomes almost meaningless. If people do not acquire ownership of the framework in which to act, in all likelihood action will stop once the external catalysts disappear. This is especially true in the absence of other incentives, penalties or rewards.

Nevertheless, traditional one-way, top-down 'awareness campaigns' conceived far from the social, economic and cultural realities of the 'target audience(s)' (*note the war-like terminology*) and typically delivered through the media, lectures and the distribution of awareness material, have historically been the preferred option in Lebanon. This is not surprising since they provide the quick feeling that action has been taken without the agony of devising structural changes or going through the time consuming process of working in partnership with the community.

The importance of community participation in awareness campaigns

It is true that encouraging community empowerment is tedious and results are far from guaranteed; but enabling even small grass-root actions can exert a powerful effect on the attitudes, abilities and understanding of those who participate. In the end, this step by step process will bring us closer to real and sustained behaviour change than the most perfectly implemented awareness campaign.

Community participation in awareness efforts does not involve the public in management decisions. Its value lies in the fact that it promotes open communication and builds mutual support and trust between the community and park management, consequently leading to a better understanding of the issues from both sides. Working side by side for a common goal creates a spirit of partnership and a sense of community identity and ownership. Thus, it may be considered a stepping stone towards full participatory management.

The awareness campaign strategy of the Society for the Protection of Nature in Lebanon's Environment Information Centre

The awareness campaign strategy to focus on local participation was born out of the above considerations, coupled with simple necessity. The allocated project staff – consisting of the full-time project manager and a part-time administrative assistant – could under no conditions effectively generate awareness among the multiple 'target audiences' located all over the country on their own. Moreover, the small project budget was hardly sufficient to implement the multitude of activities. The only option was to identify a new pool of human resources capable of reaching the local audiences.

Thus, the idea developed to establish Local Awareness Committees (LACs) for each Reserve, composed of volunteers representing community organizations, municipalities and key stakeholders. The plan was to train and assist them, in close collaboration with the protected area NGOs and Reserve Management, to conduct a locally organized awareness event. The hope was to turn these Local Awareness Committees into permanent support structures for protected area management. Beyond the duration of the campaign, each organization could then spread awareness internally among its membership and join forces with other committees to hold a major annual community event.

By distributing tasks and responsibilities among many actors, the under-funded campaign could achieve more and reach a larger audience. Figure 1 shows the distribution of roles and responsibilities among key actors in the awareness campaigns.

Local Awareness Committee	Participation in training workshops, field trips, activities and meetings	Planning and implementation of Local Awareness Event	Carry out awareness activities within their organizations
Protected Area NGO	Participate in the strategic planning of events and activities	Networking and linking with local actors; coordinate activities of the LAC	Provide technical assistance, administrative support and facilities
Reserve Management Team	Act as local focal point and provide logistical support during events	Act as trainers in workshops	Give presentations to community audiences
Environmental Information Centre of the Society for the Protection of Nature in Lebanon	General organization and supervision of all activities; follow-up, monitoring and reporting	Organize national events and events for the media; organize and conduct workshops and field trips	Production of awareness and training material

Table 1: Roles and responsibilities of key actors in the awareness campaign

Working on the campaign with Local Awareness Committees

After training workshops were conducted for the Local Awareness Committees on the importance of biodiversity and protected areas, each committee proceeded to decide what awareness event it would like to organize for its protected area and to plan the implementation of the event.

The fact that the role of the Environment Information Centre changed at this point (from organizer and trainer to facilitator) proved to be problematic because some Local Awareness Committee members expected the Centre to be in charge of organizing, implementing and financing these events. The often-encountered attitude within the Committee was that a good local awareness event is costly and beyond the capacity of its members. A lot of effort was required to explain that organizing the local event constituted a training/ learning-by-doing opportunity for the Committee. Learning to draw from their own local resources would build their capacity to organize similar events in the future without the assistance of an external agency.

This led to the withdrawal of some disappointed Local Awareness Committee members and to the replacement of a large event with a much smaller one, more in line with the capacity of the Committee. Nevertheless, the eventual output was still considerable.

• *The local community events of the Local Awareness Committees*

The Local Area Committee of the Al Shouf Cedar Nature Reserve, in collaboration with the Reserve Management Team, organized two successful Open Door events. They invited local inhabitants to visit the Reserve and secured free transportation from the municipalities. Local Area Committee members acted as guides for over 400 people who took advantage of this occasion. Now the Reserve Management plans to repeat this event on a yearly basis.

The Local Area Committee and the Management Team of the Horsh Ehden Nature Reserve organized a three day festival. As in the Al Shouf Reserve, they prepared a series of trips for the local population, training young scouts as guides for the visiting groups and procuring free bus transportation from the municipality. Activities included night hikes to the Reserve with star gazing, an exhibit organized with the local women's organization, a workshop on organic food and agriculture, video projections and a concert in the packed main village square, as well as a media tour of the Reserve. Again the decision was taken to make this an annual event.

The Local Area Committee of Palm Island Nature Reserve had initially planned a large scale Turtle Festival which had to be cancelled due to a decrease in the size of the Committee and other organizational difficulties. Instead, Committee members organized a two day awareness event which included Puppet Theatre for children, an exhibit and a video presentation. The main event was a seminar organized in cooperation with the syndicate of fishermen who are key stakeholders in the Reserve. The seminar was well attended and could be the beginning of a fruitful dialogue between the fishermen and the Reserve Management.

In the Tyre Beach Nature Reserve working with the Local Area Committee was especially difficult because the Reserve still had no financial resources and no Management Team. However, the enthusiastic participation of the cultural club of a local football team in the Committee led to unusual results. After inviting the football team to a short presentation and tour of the Reserve, a brochure was prepared with pictures of the team, with their comments and some information about the protected area. After a press conference the media was invited to visit the protected area and to accompany the players to the public beach section of the Reserve where they distributed the brochures.

- *Workshop for the private sector, municipalities and the media*

In addition to the local community events, a workshop was organized to discuss ways in which the community could benefit from ecotourism. Ecotourism provides an opportunity for cooperation between different stakeholders and has the potential to contribute to the sustainability of the Nature Reserves. An international expert on eco-tourism was hired to take part in a workshop discussion on how each sector can contribute to ecotourism, along with representatives of the Ministry of Tourism, the Ministry of Environment, municipalities, the media, protected area management, hotels and, for the first time, representatives of ecotourism companies as well as mainstream tour operators.

Achievements of the awareness campaign

The campaign featured over eighty activities which cannot all be mentioned here in detail but which are represented in Table 2 (below). Despite many shortfalls, mainly due to too many activities within a short time and lack of funding, the experience was seen as an overall success by participants. Most Local Area Committee members felt they had personally benefited and at least one Local Area Committee remained active beyond the duration of the project.

Additional awareness material was produced, new audiences were reached and local capacity for spreading awareness was built. The new partnerships that were developed opened new opportunities for future cooperation. The lessons learned from this campaign -especially regarding mobilizing and involving many community members to build support for protected areas using limited financial and human resources – can be used to improve campaigns in the future.

4 Local Awareness Committees established	4 community events	1 internet page on protected areas and the campaign
4 workshops for Local Awareness Committees	1 protected area festival – Beirut	3 exhibits on nature reserves
2 exchange visits for Local Awareness Committee members	16 school presentations	1 educational booklet for children on forests and protected areas
4 workshops on environmental education	1 national school competition	1 brochure on protected areas in Lebanon
4 environmental education field trips	4 field surveys	1 brochure on Palm Islands Nature Reserve
1 workshop on ecotourism	2 field trips for media	1 brochure on Tyre Beach Nature Reserve
1 workshop for fishermen	1 press conference	1 audio-guide on Palm Islands Nature Reserve
3 workshops on organic farming	7 TV and radio interviews	1 poster on sea turtles
2 workshops for university students	1 documentary on the campaign	1 reference document on the campaign
1 evaluation workshop	8 video presentations for community organizations	total number of activities: 82

Problems faced during the awareness campaign

The core problems faced during the campaign were lack of funds and lack of time. The Terms of Reference for the Protected Areas Project channelled efforts into too many point activities, which left insufficient time for in-depth preparation, follow-up, or for the development of more sustainable programs and partnerships. No additional staff could be hired due to a lack of funds. Renegotiating the Terms of the project would have been advisable but seemed hardly possible in light of the expected expiration of the Protected Areas Project in November 2001.

Project implementation was also slowed down by the late signing of the official contract which was a prerequisite for key partners to join in the activities.

Due to the voluntary character of the protected areas NGOs and the lack of staff of the management team (or no management team as in Tyre Beach Nature Reserve), the Environmental Information Centre of the Society for the Protection of Nature in Lebanon had to assume much of the role of a local campaign coordinator and had to take over more responsibilities than expected in the planning and implementation.

In some instances, effective local cooperation was hindered because protected areas NGO members did not consider collaboration with local communities a priority and Local Awareness Committee members did not take their commitment seriously. The campaign also suffered from the lack of availability of previously produced awareness material (produced in very limited quantities) and the lack of sufficient reliable data on the biodiversity of the reserves.

Evaluation

A one-day workshop was organized at the end of the awareness campaign. This workshop involved stakeholders in the evaluation of the activities (workshops and local community events) and the overall organization of the campaigns. Following each evaluation, the participants developed a set of recommendations. Additionally, the work of the Local Awareness Committees and the educational field trips were separately evaluated.

Overall, the partners felt that the campaign was a totally new and innovative experiment which had good results, especially because it aimed to involve the community directly. They welcomed the establishment of new partnerships and the exchange of experience and were pleased with the participation of various community organizations. They pointed out that the implementation of such a large number of activities within a very short time was achieved only by exerting a lot of effort and that, despite the constraints, many of the activities were very effective.

Recommendations for improvement next time:

- Negotiate the terms of reference for the project so that efforts are not channelled into point activities instead of sustainable program development.
- Prepare a long-term strategy for awareness about protected areas and allocate a portion of the Ministry of Environment's financial support for protected area management to awareness.
- Set more realistic objectives to enable in-depth and adequate training to occur, defining clearly the role of partners.
- Make sure there is enough time to develop the work-plan and to prepare and plan activities in coordination with the partners.
- Clarify the respective roles, input and support to be provided by partners (especially NGOs that are staffed by volunteers).

- Increase involvement of the protected area NGO and the management team. This could be achieved by creating the position of an awareness specialist for each area.
- Plan communication both internally (e.g. to provide a clear communication protocol for focal points within an organisation) and externally in order to maximise the involvement of the community, media and other organisations.
- Provide more information for a better understanding of the local situation.
- Create a network of all protected areas to exchange information and improve work tools for awareness.
- Diversify the project team to include experts with various fields of expertise.
- Provide additional detailed information at the introductory workshop – "Developing partnerships for Awareness around Protected Areas" – for the Local Awareness Committees and attract more organizations from different sectors.
- Provide more time to help volunteers learn from hands on activities when training.
- Include more practical experience rather than theoretical lectures in workshops for farmers/fishermen.
- Provide information on the role of the protected area as it relates to them.
- Follow-up and expand workshops on partnerships for sustainable tourism.
- Make more efforts to gain the support of public figures so as to give greater visibility and weight to the campaign.
- Increase the amount of available material and information on the reserves.
- Compile a file (for easy replication) on the workshops for participants.

Lessons Learned

In general:

- the intervention of an outside party (EIC) and the support of national and international partners (Ministry of Environment, IUCN, GEF, UNDP) can act as a catalyst for initiating local awareness efforts.

Establishment of Local Awareness Committees:

- provides the protected area management (which has insufficient manpower) with a pool of trained human resources to conduct awareness activities;
- decreases the cost of organizing awareness events;
- greatly facilitates the dissemination of information about the importance of the protected area to new audiences;
- enhances communication, mutual respect and understanding between protected area management and a large cross section the community;
- promotes a feeling of community identity with the protected area.

Community members are more interested in participating in awareness efforts if:

- protected area management has shown serious concern for the needs of the local community and is engaged in a continuous dialogue with local stakeholders;
- they are considered and treated as full partners by the protected area management;
- the awareness efforts of community members are supported by the protected area management team;
- sufficient training and awareness material has been provided (i.e. if they believe in their capacity and if expectations regarding roles and responsibilities are well managed).

Future campaigns

To address the general lack of awareness on the need to conserve biodiversity, future projects in Lebanon need to address basic weaknesses in the existing system for delivering awareness programmes. In particular it is necessary to strengthen the communication and education components of protected areas management by establishing long-term educational programs and by setting up informative Nature Centers around the Reserves. Each Reserve should have a full-time awareness specialist, guides well-trained in interpretation techniques, and a comprehensive set of educational material on the area. Cooperation with research institutions needs to be strengthened to make scientific data available and accessible for a broad audience. Local Awareness Committees should become a permanent entity, linked to the protected area management through formal channels.

Conclusion

Local Awareness Committees are by no means the only avenue for raising awareness for nature reserves. They are, however, a good option as they foster civic responsibility and provide rare opportunities for adult citizens to learn and apply more sustainable practices and processes, such as consensus building and development of partnerships.

Such opportunities need, and can be created, through structural changes and a flexible framework which allocates time and resources that allow for the uncertainties of a people-driven process. The establishment of long-term educational programs addressing the community and educational institutions and the production of informative material should be an integral part of this approach. How this is done will, in the end, depend on the regional and national context. The experience of this awareness campaign in Lebanon has shown that if protected area management invests in, and gives value to, the development of partnerships and communication and education strategies, they will eventually reap the benefits of increased community support for conservation.

Chapter 16

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

Merlijn van Weerd, Gwen van Boven & Jan van der Ploeg

Introduction

Protected areas, especially in developing countries, can no longer exclusively be seen as areas of wilderness aiming to conserve nature in its most pristine state. For both ethical and pragmatic reasons, the exclusion of local communities from areas providing the natural resources on which they depend has been abandoned as a workable biodiversity conservation strategy. Adoption of the 'Ecosystem Approach' – in which people are considered part of nature – and the general feeling that local stakeholders should be involved in the management of protected areas (co-management), demands new methods and innovative strategies. To effectively involve local people, communities and leaders in protected area management, it is necessary for the protected area manager (be it a person, government agency or NGO) to possess a crucial skill: communication.

The acceptance and understanding of local stakeholders of (and their compliance with) protected area regulations will arguably be more efficient than the strict enforcement of these regulations. Nowadays, it is the word and not the sword that is supposed to do the job. This paradigm shift in protected area management will take time to crystallize and become truly established and successful. Learning from real cases, successes and failures will benefit other practitioners in the field.

The Philippines, one of the world's biodiversity hotspots and a country with a very progressive and recently established legal framework for biodiversity conservation, offers an exciting experimental arena from which to learn. Whilst research is ongoing, we present (in very simplified ways) two related case-studies from the Philippines in which communication was used to involve local stakeholders in protected area establishment and management: (1) the conservation of the Northern Sierra Madre Natural Park, and (2) the Philippine crocodile conservation project.

Biodiversity conservation in the Philippines

The Philippines lost most of its original forest cover during the 20th century. In 1900, 70 % of the original forest in the country was still in an undisturbed state. This had dwindled to 3% by 1992, with additionally an estimated 20% cover of residual semi-logged forest (Kummer 1992; Heaney & Regalado 1998). Logging and conversion of forest to agricultural areas are responsible for a continuing decline in forest area. The annual deforestation rate of 1.4% during the period 1990- 2000 is higher than any of the surrounding countries, including Indonesia (FAO 2003). Natural freshwater habitats have disappeared on an even larger scale. Philippine wetlands and their associated fauna and flora are threatened by reclamation, siltation, pollution, water level lowering, over-fishing, hunting and the introduction of alien species (DENR & UNEP 1997).

Philippine biodiversity is characterized by its very high number of endemic species: species that evolved on the Philippine islands and do not occur elsewhere in the world. On a global

conservation level, endemic species have received much attention because they, as a result of their restricted occurrence, run much higher risks of extinction than widespread species (e.g. Brooks *et al.* 2002, Myers *et al.* 2000). The Philippines, combining very high levels of endemism with extreme levels of primary vegetation loss, is considered one of the eight hottest hotspots in which conservation action is most urgently needed (Myers *et al.* 2000).

International attention, the availability of detailed biological data, and a better understanding of the socioeconomic driving forces and political changes, spurred an interest in biodiversity conservation in the Philippines. The World Bank, the European Union, donor countries and international non-governmental organizations have funded and implemented biodiversity conservation projects in the Philippines since the early 1990s. Former national civil concern groups, such as the Haribon Foundation, Conservation International Philippines and Kabang Kalikasan ng Pilipinas (WWF-Philippines), have become well established NGOs who now 'pull the conservation cart' in the country.

The toppling of the Marcos leadership in 1986 and the subsequent democratic reforms led to a re-organization of government institutions and legal frameworks, with decentralization a focus (Van den Top & Persoon 2000). The Local Government Code of 1991 grants authority on many local issues, including land use decisions, to municipalities. The National Integrated Protected Areas System (NIPAS) law of 1992 and the Wildlife Act of 2001 established a new national framework for biodiversity conservation. The new government has embarked on an ambitious road to establish ten new protected areas under the Conservation of Priority Protected Areas Project (CPPAP) and another seventeen under the National Integrated Protected Areas Project (NIPAP). Biodiversity conservation falls under the jurisdiction of the Department of Environment and Natural Resources (DENR).

The NIPAS law of 1992 provides guidelines for the establishment and management of protected areas. New protected areas can only be established after consultation and consent of local communities. People, who live or cultivate land within the protected area for a period of at least five years prior to establishment, retain their access and user rights. Every protected area has to be managed by a Protected Area Management Board (PAMB) with a representation of local communities and indigenous people. The Protected Area Management Board takes all decisions concerning the protected area, including the establishment of zones. Possible zoning includes: (1) "total protection zones" where human activities are restricted to scientific research and regulated tourism (2) "sustainable use zones" where the harvesting of natural resources is regulated, and (3) "multiple use zones" where rural development is encouraged. The Management Board decides on user fees, on zoning and on all development activities within the boundaries of the protected area. Involvement of local representatives in park management has undoubtedly led to the acceptance of newly established protected areas in the Philippines since 1992, for there has hardly been any opposition to these new parks.

Local Protected Area Management Board representatives are instrumental for effective park management. As we will see below, there is a danger that local development preferences counteract with supra-local biodiversity conservation targets. Therefore, communication, education, public awareness, training and capacity building are extremely important to guide the decentralization process towards local protected area management.

Two related cases

We present ongoing research from two related case-studies from the Philippines, in which communication was used to involve local stakeholders in protected area establishment and management. The first case study presented is biodiversity conservation in the Northern Sierra Madre Natural Park. A National Protected Area, it is under national law and the jurisdiction of the national agency for protected areas. The second case study presented is

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

from within the Northern Sierra Madre Natural Park and its buffer zone, specifically addressing conservation of the critically endangered Philippine Crocodile – *Crocodylus mindorensis*. This is a local initiative of the San Mariano municipality.

Case 1: Biodiversity conservation in the Northern Sierra Madre Natural Park – a national protected area

The Sierra Madre Mountain Range is situated along the eastern coast of Luzon (the largest island in the Philippines) from the North-eastern tip to the central Luzon plains. The northern portion of this mountain range, the Northern Sierra Madre, is remote, inaccessible and still largely covered by undisturbed mountain forest. It is the largest remnant stretch of undisturbed forest in the Philippines. Established in 1997, the Northern Sierra Madre Natural Park (NSMNP) is the largest of ten priority protected areas for biodiversity conservation in the Philippines.

Of the nine municipalities that are entirely or partly situated within the park, around 23 000 people live in the three municipalities that are entirely situated within the park. Of these, 2 000 people are *Agta*, the indigenous people of the area (DENR 2001). Another 271 000 people live in the municipalities that are partly situated inside the park. Of these, about 15 000 live within five km of the Natural Park's border. Most of the inhabitants settled in the area only recently, following the logging firms that were awarded timber concessions in the area during the 1960s. Established logging roads provided entry into the previously-remote mountain areas for land-seeking farmers, most of whom were dependant on slash-and-burn farming (Van den Top 2003).

Logging, albeit illegal outside specified Community-Based Forest Management Areas (CBFMA), is still an important income generating activity and is widely practiced inside the park (DENR 2001a). In addition, gathering and use of plant and wildlife species remains an important food and income generating activity for both indigenous people and recent migrants (*Ibid*). Eco-tourism is seen as a possible alternative future income generating activity, although the potential for successful establishment (there is hardly any tourism now) is very limited (van der Ploeg and Taggug 2003).

A Dutch funded integrated conservation and development project, the Northern Sierra Madre Natural Park-Conservation Project (NSMNP-CP), was implemented in the area from 1996 until 2002 by Plan International, and a second phase is now being implemented by WWF-Philippines. It is envisioned that a combination of alternative livelihood development and the establishment of co-management arrangements for sustainable use of natural resources will lead to the conservation of the Natural Park and its biodiversity, as well as increased prosperity for its human population. The project is also assisting the Department of Environment and Natural Resources in the set up of park management: installation of the Protected Area Management Board and preparation of a management plan. The first version of the management plan was published in 2000 (DENR 2000a) – largely written by experts from NGOs. Communication and increasing public awareness were important components of the first phase of the Northern Sierra Madre Natural Park-Conservation Project.

Communication and awareness in the Northern Sierra Madre Natural Park

Main issues

The main issues that were threatening the integrity of the Northern Sierra Madre Natural Park and its biodiversity were determined using a multi-stakeholder, interactive approach. Apart from the gathering of biological and socioeconomic data by scientists, interactive sessions were organized with local communities to map community resource use, discuss

conservation options and conduct problem-tree analyses. Realizing the risk of oversimplifying a very complex situation, Figure 1 presents a summary of these problem trees (NSMNP-CP 2002a).

Causes:

- population growth;
- unregulated immigration;
- low family income;
- limited livelihood sources;
- inappropriate farming systems;
- inadequate basic social and technical services;
- lack of and conflicting tenure instruments;
- limited market for farm products;
- **inadequate knowledge of technologies and lack of technical farming skills;**
- **low level of environmental awareness;**
- **inadequate knowledge of environmental issues and solutions;**
- **lack of appropriate approaches and strategies for environmental conservation and sustainable development on local levels;**
- **lack of public advocacy for environmental protection;**
- lack of political will and poor judicial system to enforce environmental laws.

g

Main issues:

- illegal logging;
- illegal and destructive fishing;
- uncontrolled wildlife poaching and selling;
- increased pressure on natural resources;
- swidden farming (areas cleared for temporary cultivation by cutting and burning the vegetation);
- grassland and forest fires;
- improper waste disposal;
- dependence on the use of pesticides, insecticides and inorganic (i.e. chemical) fertilizers;
- low literacy rates;
- limited health services;
- insufficient post-harvest facilities;
- minimal participation of local stakeholders in environmental conservation activities.

g

Resulting in:

- low farm productivity;
- low incomes;
- health problems, with untreated health cases and high child mortality;
- degradation of terrestrial and marine resources;
- loss of biodiversity.

Figure 1: Simplified presentation of the main issues threatening the Northern Sierra Madre Natural Park, its human population and its biodiversity. Issues that were identified as targets for the communication strategy are in **bold**. Edited from NSMNP-CP (2002a).

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

Communication goals

Based on the issues identified and their causes, a communication strategy was prepared with the following goals:

- Increase knowledge and awareness of local communities regarding biodiversity, forest conservation, sustainable development and protected area management.
- Inform local communities of the intentions and goals of the conservation project, trying to win their support and involve them in planning, decision making and monitoring processes.
- Prepare local representatives for their role in the Protected Area Management Board of the Northern Sierra Madre Natural Park.
- Stimulate a transition towards sustainable development and natural resource use (abandoning illegal activities such as logging, dynamite fishing, and slash-and-burn farming and instead using sustainable hunting, fishing, and extraction of non-timber forest products, intensive farming systems in multiple use zones and agroforestry).
- Specific training on farming techniques, post-harvest techniques, fisheries etc.

Target groups

- Of the nine municipalities situated entirely or partly within the Park, three in the park (covering 39 *barangays*¹, about 23 000 people), and two municipalities partly in park (12 *barangays*, about 8 000 people), were targeted – totalling about 31 000 people.
- Local leaders and members of People's Organizations (PO)².
- Protected Area Management Board members.

Communication strategy³

• Information dissemination

Transmission methods were used mainly to reach large audiences and to provide for a continuous availability of background information. Regular updates of project, park and community developments were given to keep the target audience informed. The target groups provided inputs to the information materials.

Quarterly newsletters, in local languages, were distributed to all households in the covered *barangays*. Twelve radio discussion programs of 20 minutes were aired on a very popular local radio station that could be received in the entire target area. Sixty-three short dramatized environmental plugs were broadcast on the same radio station. Local language and English posters and flyers were designed and distributed covering specific information on threatened species. A comic book with several environmental topics was drawn by a local artist and distributed among 7 000 households. A booklet was distributed among 6 000 households, with drawings and text on marine ecosystems, fisheries and do's and don'ts in the use of marine ecosystems. In co-operation with other stakeholders, a flipchart with information on biodiversity, conservation and the park was distributed among all the local leaders. A booklet about the park was distributed to all households. A teachers' training and education module on biodiversity was designed in co-operation with the Department of Environment and Natural Resources and the Ministry of Education. Most schools in the region now use this module. An information package on biodiversity, environmental issues and the park was given to all Protected Area Management Board members.

• Interactive

In 39 *barangays*, a non-formal participatory environmental education approach was used, which is known in the Philippines as *Dalaw Turo* (visit and teach). Local participants are presented with environmental problems using participatory theatre, exhibits, ecological tours and games. Some of the *Dalaw Turo* groups continued without further assistance and are still active; others broke up without continued support after 2002.

In each barangay several interactive sessions were held on various occasions. Each barangay was visited and informed about the project at the start. They were provided with information about the Park and consulted on the Park's draft management plan (the management plan serves as a guideline for protected area management and had to be endorsed by the local government units of the 9 municipalities of the Northern Sierra Madre Natural Park). Each was involved in several workshops to make an inventory of current land use, problems, natural resource and land use planning. These workshops resulted in Community Resource Management and Development Plans (CRMDP), which are intended to serve as frameworks for further sustainable development in each barangay. Community workers of the NSMNP-CDP visited each community at least once a month to discuss the progress of alternative livelihood development activities and other issues pertaining to the conservation of the Natural Park.

The Protected Area Management Board first met in 2000 and consisted of the mayors of the 9 municipalities, Agta representatives (local indigenous peoples), Peoples' Organization representatives, Barangay Captains, a youth leader, a women's group leader, the provincial planning officer, NGO representatives and Department of Environment and Natural Resource representatives. These Protected Area Management Board members received specific training on protected area management.

Results

The impact of the awareness raising campaigns was measured by interviewing a representative selection of community members prior to and after the campaigns. Questions were asked in two categories: knowledge and awareness. Answers were given points on a scoring scale from 0 to 3, with 0 being completely wrong and 3 fully correct. Answers were pooled and again scaled according to the percentage of points won. The scaling used was: low (0-37 % of total points), limited (38-52 %), average (53-68 %), high (69-84 %), and very high (85-100 %). The results of surveys in the three municipalities in the park, which were carried out "before" (1999/2000) and "after" (2000/2001) public awareness campaigns in the NSMNP, are shown in Figure 2 (van Boven 2001a; van Boven 2001b; van Boven 2001c).

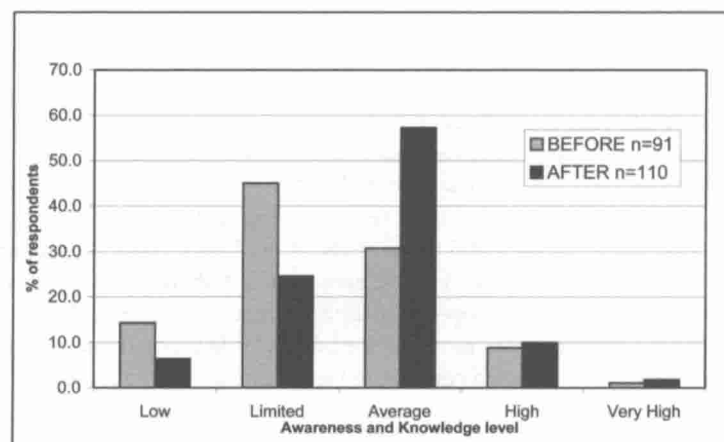


Figure 2: Proportional scores of respondents on awareness and knowledge questions regarding biodiversity and biodiversity conservation in the Northern Sierra Madre Natural Park before and after information campaigns.

We clearly see a shift in biodiversity and protected area knowledge and awareness when comparing results before and after the awareness campaigns. Before campaigns, the largest group of respondents showed a "limited" level of awareness and knowledge, with more than 50% in the "low" and "limited" groups. After campaigns, the largest group of respondents fell in the "average" category, with the majority of respondents in the average, high and very high groups.

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

Were the goals reached?

Awareness and knowledge were strongly enhanced in the Northern Sierra Madre Natural Park. Most inhabitants, if not all, were informed at least once about biodiversity conservation and the Natural Park. All inhabitants were given a chance to respond to developments within the natural park, such as the Community Resource Management and Development Plan and the management plan of the Park. Local community representatives form a majority in the Protected Area Management Board and take decisions about the Park's management (Leones & Jensen 2003).

Did the communication strategy also lead to more sustainable use of natural resources and is the integrity of the park and its biodiversity now safeguarded for the future? This is a difficult question to answer as good quantitative data is lacking. Satellite imagery would reveal changes in forest cover but was not available. Unfortunately, there is no systematic monitoring system of illegal activities, though various anecdotal reports show that illegal logging continues on a large scale in the Park. Guerrero (2001) mentions having observed groups of 300 loggers in the park. Van Alphen and Telan (2002) report 500 individuals cutting timber along Abuan River, the largest watershed in the Northern Sierra Madre Natural Park; a number of which were also observed the following year (pers. obs. Minter). In May 2003, various small groups of loggers were active in the total protection zone of the park including members of the Peoples' Organizations that received livelihood support, training and all information that has been disseminated on biodiversity conservation (pers. obs. van Weerd). In October 2002, several boats with illegally cut timber were observed at night on the Pacific coast of the Park (pers. obs. van Weerd). Van Gils, Tarun and Telan (2002) report that hunters move into the Park daily, and during extensive wildlife surveys in the park in 2000, 2001 and 2002 no undisturbed habitats were found except at elevations above 1000 meters (pers. obs. van Weerd). After a strong typhoon hit Northeast Luzon in August 2003, most community members at the natural park fringes declared they had no option but to go logging in the Park to obtain cash (pers. obs. van der Ploeg).

We conclude that although alternative livelihood development has raised the living standard of many inhabitants of the Northern Sierra Madre Natural Park, and awareness programs have certainly contributed to more knowledge about biodiversity and the need to conserve forests and natural resources, illegal activities continue in the park and threaten its future as a refuge for endangered wildlife (see also Beets *et al.* 2002; van der Ploeg *et al.* 2003).

The functioning of the Protected Area Management Board raises concerns as well. Having a Protected Area Management Board has certainly contributed to local acceptance of the Park, but the following example shows possible future difficulties with this participative management system. In 2001, the only logging company that still had a concession at the borders of the Park requested permission to construct and use a logging road through the park to a logging area outside of it. A legally required environmental impact assessment was conducted with the conclusion that the road would destroy primary ultra basic forest, a very rare forest habitat, and cross the 1 000 m. altitude line, which is not permitted under the NIPAS law (see above)(Co and Tarun 2001). The Protected Area Management Board convened and most municipal mayors and PO representatives voted in favour of constructing the road. It was only through intensive lobbying that the NGOs were able to convince the indigenous people representatives to vote against the construction of the road. During a second and a third meeting the issue was brought up again, now with the "developers" also lobbying the indigenous people representatives to vote in favour of constructing the road. However, they did not win a majority of votes, and failed to get Protected Area Management Board approval for the road construction. This has been heralded as a victory for conservation. The road, however, was constructed and is used without Protected Area Management Board approval (pers. obs. Minter and Tarun April 2003), raising questions about law enforcement in the Northern Sierra Madre Natural Park and the credibility of the Protected Area Management Board.

Case 2: Local protection of the Philippine Crocodile in the San Mariano municipality (within the Northern Sierra Madre)

The Philippine crocodile – *Crocodylus mindorensis* – is an endemic freshwater crocodilian now extremely limited in distribution and population size (Ross 1998). *Crocodylus mindorensis* is critically endangered (Crocodile Specialist Group 1996) and was placed at the top of the priority list of crocodiles needing conservation action by the IUCN Crocodile Specialist Group (Ross 1998). It has been nationally protected since 2001 under the Wildlife Act (DENR 2001b).

The main threats to the survival of the Philippine crocodile have been listed as habitat loss, pollution of rivers (mainly due to mining), and the killing of crocodiles for skins, meat and amulets as well as out of fear or ignorance (Banks 2000). Although the small Philippine crocodile does not pose a threat to people, the Estuarine crocodile *C. porosus*, which also occurs in the Philippines in coastal habitats is a potential man-eater. Most Filipinos do not know the difference between the two species and the public image of crocodiles in the Philippines is very negative. At best, people are indifferent about crocodiles but most regard them as vermin and the Filipino word for crocodile, *buwaya*, is generally used as a synonym for corrupt politicians and for greedy and selfish people in general (*Ibid*).

In 1999, the presence of *Crocodylus. mindorensis* was confirmed in the Northern Sierra Madre (van Weerd 2002b). A small and fragmented Philippine crocodile population still exists in the rivers and creeks of the municipality of San Mariano. The most important crocodile habitats, with permanent and reproducing populations, are located in the transition zone between the Natural Park and the densely populated Cagayan Valley, and do not, therefore, fall under the rules and regulations of the protected area. These former large Philippine crocodile populations were greatly reduced by commercial hunting during the 1960s by crocodile hunters from the southern island of Mindanao and new settlers (Oudejans 2001). Currently there is no market for crocodiles in the Philippines as both species are listed by CITES and there is no internal trade or demand for crocodile products.

The killing of crocodiles remains the major threat for the survival of the Philippine crocodile in Northeast Luzon. A conventional conservation program – based on minimizing people-crocodile interactions and totally protecting natural crocodile habitats or relocating people – is not an option in San Mariano. Therefore, a Philippine crocodile conservation strategy was designed that focused on co-habitation and maximizing local acceptance of crocodiles. The program started as a sub-project of the Northern Sierra Madre Natural Park-Conservation Project in 1999. After this component of the Project was phased out in 2002, the project was continued by the Crocodile Rehabilitation, Observance and Conservation Project (CROC⁴) with Grants from the British Petroleum Conservation Programme⁵ (BP Conservation Gold Award in 2002 and Top Follow-Up Award in 2003).

Communication and awareness in the Philippine Crocodile Conservation project in San Mariano

Whereas the Northern Sierra Madre Natural Park-Conservation Project uses an ecosystem approach, the much smaller Philippine Crocodile Conservation project focuses primarily on species preservation. The methods that were used to determine the main issues and causes were similar to those used in the Natural Park. Scientific information was first gathered on Philippine crocodile distribution, socioeconomic situations and anthropogenic threats to crocodiles. Nine community consultations were conducted to discuss conservation options and issues with the most relevant local communities (those living near identified crocodile habitats). In May 2002, a 5-day workshop was organized with the main stakeholders to carry out a problem tree analysis (NSMNP-CP 2002b). The results are given, in simplified form, in Figure 3.

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

Root causes:

- no alternative sources of livelihood;
- **negative perception of crocodiles;**
- **lack of knowledge of and interest in conservation.**

And additional causes:

- inappropriate resource management;
- lack of law enforcement and implementation of laws and regulations;
- **lack of co-ordination and networking between stakeholders;**
- **lack of an organized, skilled, dedicated crocodile conservation group;**
- absence of a crocodile conservation plan.

g

Main issues:

- killing of crocodiles;
- habitat destruction;
- unsustainable illegal fishing activities.

g

Resulting in the following ecological effects:

- siltation;
- water pollution;
- water-level decrease;
- ecological imbalance;
- less fish;
- loss of other biological resources.

And the following effects on crocodiles:

- food depletion crocodiles;
- decrease of crocodile population;
- crocodile population fragmented;
- no breeding areas crocodiles;
- inbreeding.

Figure 3: Simplified presentation of the main issues threatening the Philippine crocodile in San Mariano. Issues that must be tackled by a communication strategy are in **bold**. Edited from the report of the 5-day Philippine crocodile conservation workshop of May 2002 (NSMNP-CP 2002b).

Communication goals

- Increase knowledge and awareness of the Philippine crocodile, its endemic status and its conservation status.
- Make sure people differentiate between the Estuarine crocodile and the Philippine crocodile.
- Create a sense of pride that the Philippine crocodile survives in San Mariano, emphasizing that San Mariano is one of very few areas with a wild Philippine crocodile population ("putting San Mariano on the map").
- Involve local communities and the local government unit in planning, implementation and monitoring of the Philippine crocodile conservation activities.
- Put an end to killing of Philippine crocodiles and unsustainable fishing activities and bring about change towards protection of freshwater habitats and watersheds.

Target groups

- All communities, households and individuals near crocodile habitats (About 200 people as primary target, about 3 000 as secondary target audience).
- The general public in Isabela (to a lesser extent).
- The Local Government Unit of San Mariano.
- Local and regional government institutions.

Communication strategy

• *Information dissemination*

Two posters (1 000 copies and 2,500 copies) were distributed to all public places and households in target communities. These posters explain, in local languages, that the Philippine crocodile is threatened and endemic. They both carry the message that the Philippine crocodile is something "to be proud of, the motto of the awareness campaigns. Flyers (1 000 copies) were distributed to all households as well. Large billboards were placed along access ways and in *barangays* near Philippine crocodile habitats, with information about Philippine crocodile conservation in San Mariano. The Philippine crocodile was also regularly featured in the quarterly newsletter of the NSMNP-CP, during radio broadcasts, in a comic book distributed among 7 000 households and in performances of community theatre groups following the establishment of *Dalaw Turo* (visit and teach – above) in the area.

• *Interactive*

Nine community consultations were organized in communities near critical crocodile habitats. During these consultations an introduction was given to the Philippine crocodile and the conservation project. A discussion was organized with community members to find solutions to issues pertaining to crocodile survival, freshwater habitat conservation and sustainable land use around crocodile localities. The community's input and the results of the discussions were used to write a site-specific conservation action plan.

Once written, the site-specific conservation plan which was then presented to the community for validation, discussion and (hopefully) approval. Since everything depended on community involvement for this project, it was decided to hold democratic elections for the site-specific conservation action plans. In one locality – Disulap River – the community approved the plan by a majority vote. In another area – Dinang Creek – the community approved the project in principle, but asked for assistance in securing land titles.

The Local Government Unit of San Mariano was involved in and committed to the Philippine crocodile conservation project from the start. Several meetings were organized with *barangay* captains (local village leaders) and municipal officers.

Perhaps even more important were informal meetings with community members near crocodile habitats; all households in these communities were regularly visited by field workers, staying with these families and sharing food and stories with them. Some community members, especially those that hunted crocodiles before, were hired as guides during field surveys.

Results

Awareness surveys were conducted in 2000 – prior to communication efforts- and afterwards, in 2003. Figure 4 shows the results of these surveys.

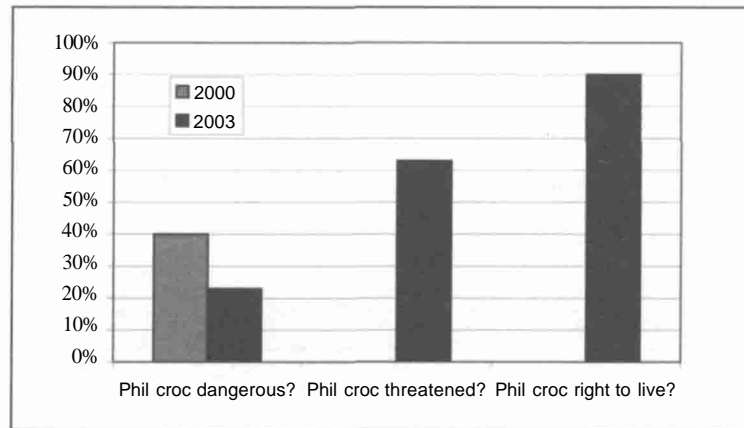


Figure 4: Proportion of respondents answering yes to questions pertaining to the status and image of the Philippine crocodile in San Mariano before (2000) and after (2003) communication campaigns.

It is clear that the communication program was successful. The proportion of respondents that considered the Philippine crocodile as dangerous declined from 40% to just over 20%. Nobody (0%) knew the Philippine crocodile was threatened prior to the campaigns; afterwards more than 60% knew. Whereas in 2000 nobody had positive thoughts about the intrinsic value of crocodiles, in 2003 90% of respondents thought the Philippine crocodile had a right to live.

The ultimate indicator for success of this Philippine Crocodile Conservation program is, of course, the number of crocodiles. Figure 5 shows that the number of non-hatchling crocodiles rose from 12 (start of the project) to 31 (2003). This is the result of successful breeding and growing up of hatchling crocodiles. Breeding occurred in three different localities in 2000 and 2002.

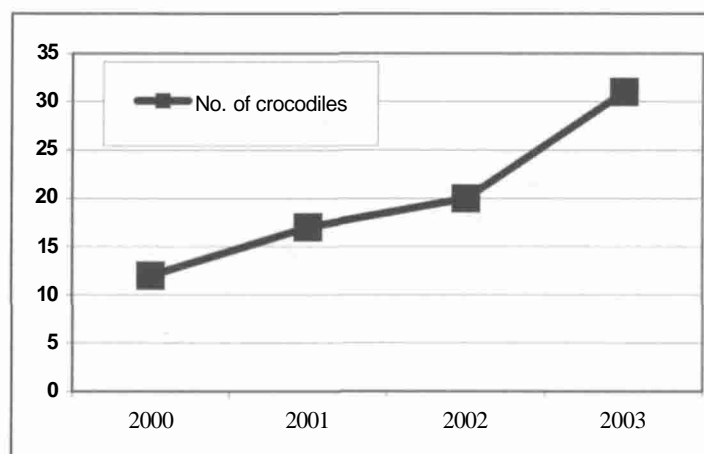


Figure 5: the number of observed non-hatchling crocodiles in San Mariano from 2000 to 2003.

The conservation program also led to local legislation. Ordinances and resolutions were passed and approved by the local government unit of the municipality of San Mariano: (1) prohibiting the collection and annihilation of the Philippine crocodile; (2) prohibiting the catching, hunting, collecting, or killing of the Philippine Crocodile for pets, sport, collection or personal consumption; (3) declaring the Philippine crocodile as the wildlife flagship species of the municipality; and (4) declaring the identified areas in San Isidro, Disulap and parts of *barangay* San Jose, municipality of San Mariano, as a Philippine crocodile sanctuary. It seems that this local legislation is effective; the killing of Philippine crocodiles in the municipality of San Mariano has largely stopped (see Figure 6).

Total	Year	Hatchlings	Juveniles	Adults
1996–1998	-	-	4	4
1998	13	0	0	13
1999 (start of project)	9	0	0	9
2000	3	0	0	3
2001	0	0	0	0
2002	0	0	1	1
2003	0	1	0	1

Figure 6: Reported recent catches and killings of crocodiles in the municipality of San Mariano.

Discussion and conclusions

The communication strategies for the Northern Sierra Madre Natural Park and the Philippine Crocodile Conservation project were sometimes overlapping and sometimes distinct. The target audience was also overlapping, but a specific program was conducted for the crocodile project.

The program for the Natural Park did result in increased awareness and knowledge, but not in a widespread change to sustainable resource use. Illegal logging and hunting continue and threaten the future of endemic species in the Park. Public participation in management of the park is required by law and has certainly led to acceptance of the Park's establishment by local communities. But it could also pose problems for the future, certainly from a conservation point of view.

Local participation in the crocodile conservation project was a pragmatic necessity but turned out to be a success: crocodiles are the "talk of the town", people have a sense of pride that the Philippine crocodile still occurs in their municipality, and local legislation seems to effectively protect the crocodiles in their natural habitat. The number of non-hatchling Philippine crocodiles is, with caution, rising which is the ultimate indicator of success for this project. Table 1 shows various parameters that differ between the two cases.

**Using communication to involve local communities and local governments in protected area management:
two related cases from northeast Luzon, Philippines**

	<i>Northern Sierra Madre Natural Park</i>	<i>Philippine crocodile conservation</i>
Scale	Large area, large project. Many stakeholders, many people, many organizational levels.	Small area, small project. Few stakeholders, few people, few organizational levels.
Incentives	Alternative livelihood development; community assistance; the future.	Pride (media coverage, San Mariano put on the map), limited community assistance.
Benefits	Without conservation: short term gains. With conservation: watershed, NTFPs, (tourism).	No short term gains; benefits on longer term not clear (increase fish stock, tourism). Immaterial benefits: pride.
Interaction	Limited personal relations between community workers and stakeholders. Interactions limited.	Strong personal relations between community workers and stakeholders. Frequent interactions.
Policies	Establishment of the protected area imposed.	Crocodile sanctuary established by local government with consent of local people.
Goals and focus	Integrated biodiversity conservation and rural development project. Ecosystem approach; maintaining ecological processes and structures.	Species preservation.
Resources	7000000 US\$	50000US\$
Centre of decision making	NGO program management office in Manila; policy formulation dictated by outsiders. Cosmetic co-management.	Community consultations; subsequent policies formulated by local government.

Table 1: Comparison of various discerning parameters concerning the Northern Sierra Madre Natural Park and the Philippine Crocodile Conservation project

Scale

Scale is important. More stakeholders require more effort and a diversification of information and communication campaigns. The larger the target group, the longer the timeframe needed to approach them all and convince them of the need to change. Scale also matters in project management. Small-scale projects run by local organizations are often more flexible, transparent, and output-oriented than the activities of larger environmental NGOs (*The Economist* 2003).

Incentives

Incentives do not always work but they certainly help to get support. In the Northern Sierra Madre Natural Park livelihood support has not helped in convincing receivers to stop with illegal activities they know are not good. In the crocodile conservation project, the lack of large incentives has not hindered successful adoption of crocodile conservation by the community. A sense of pride related to having the last Philippine crocodiles, spurred by media attention that puts this remote municipality on the map, seems to appeal to many people. The famous phrase: "if nature pays, nature stays" is contradicted here: "timber pays so does not stay". Because there is a large demand for hardwood, people are engaged in logging activities. Crocodiles, on the other hand, "don't pay and therefore stay".

Benefits

"Everybody is logging so why should I not" is what the inhabitants of the park and buffer-zones think. The long-term effects of watershed damage and the consequent erosion, microclimate change and possible disastrous effects of flash floods is not an issue now. Tourism, what tourism? The local crocodile stakeholder is concerned about freshwater habitats and the decline of fish stocks. Will crocodile conservation help in conservation of rivers and yield more fish? The Crocodile conservation project is trying to establish that link.

Personal relations and local involvement

There is quite a difference between dealing with 200 and dealing with 23 000 people. Personal relations and frequent interactions are important. Your friend will not kill that crocodile if he knows he has to explain himself to you on short notice.

Protected area establishment and policies

The declaration of a protected area is almost always a supra-local issue. A government decides to have a protected area; communities have to deal with the consequences. If a government has also decided that local communities have to agree with the protected area and participate in its management a possibly contradictory situation arises. The community has to participate in a process that is dictated top down. This easily leads to what Utting (2000) has labelled a form of 'cosmetic participation'. In the Northern Sierra Madre Natural Park-Conservation Project this is certainly the case (Beets et al. 2002). In the crocodile conservation project, the communities and the municipal government of San Mariano had the final word in declaring a protected area. If you want co-management and local participation in protected area management, let the lowest organizational level decide what is best. In the Natural Park, policies for the protected area were dictated top down and will not be followed by local stakeholders unless strictly (and painfully) enforced. In contrast, local communities and local government were responsible in formulating rules and regulations on crocodile conservation, increasing the probability that they will be respected.

A good communication strategy and program are pre-conditions for a successful conservation project, especially if local people are to be directly involved. Communication programs to involve local communities and local governments in protected area management can be successful, as the results of the Philippine Crocodile Conservation project show. In more complex situations, such as in the Northern Sierra Madre Natural Park, more time and a more comprehensive approach are needed to be really successful.

Notes

1. *Barangay*: the smallest political unit in the Philippines. A municipality consists of several *barangays*.
2. People's Organizations: co-operations of farmers within a *barangay*. The NSMNP-CP organised POs in all *barangays*. Most attention and training went to members of these POs.
3. The communication strategy was jointly designed, implemented and funded by the NSMNP-CP, the Technical Assistance to Biodiversity Conservation Project (funded by Worldbank and the Danish Government) and the DENR.
4. CROC – A research and conservation project carried out by the Cagayan Valley Programme on Environment and Development (the collaborative research programme of Leiden University and Isabela State University).
5. Providing support to student-led conservation programmes worldwide.

Using communication to involve local communities and local governments in protected area management: two related cases from northeast Luzon, Philippines

References

- Banks, C. (2000). *National recovery plan for the Philippine crocodile, Crocodylus mindorensis*. 2000 – 2006, Department of Environment and Natural Resources and the Royal Melbourne Zoological Gardens, Manila, the Philippines and Melbourne, Australia.
- Beets, W., M.S.J. Lucero & M.V. Dalmacio. (2002). *Final evaluation of the Northern Sierra Madre Natural Park Conservation Project*. Royal Netherlands Embassy, Manila, Philippines.
- Brooks, T.M., R.A. Mittermeier, C.G. Mittermeier, G.A.B. da Fonseca, A.B. Rylands, W.R. Konstant, P. Flick, J. Pilgrim, S. Oldfield, G. Magin, C. Hilton-Taylor. (2002). "Habitat loss and extinction in the hotspots of biodiversity" in *Conservation Biology* 16 (4): 909-923.
- Co, L. and B. Tarun. (2001). *Field validation report on the proposed 13.5 km logging access road of LUZMATIM through the southern portion of the NSMNP in Dinapigue, Isabela*. CI-Philippines and Plan International/NSMNP-CP, Cabagan, Philippines.
- Crocodile Specialist Group (1996). "*Crocodylus mindorensis*" in IUCN (2003) *2003 IUCN Red List of Threatened Species*. <www.redlist.org>. Downloaded on 01 December 2003.
- DENR. (2001a). *Environmental Management Plan for the Northern Sierra Madre Natural Park*. Department of Environment and Natural Resources, Manila, Philippines.
- DENR. (2001b). *Republic act 9147: an act providing for the conservation and protection of wildlife resources and their habitats, appropriating funds therefor and for other purposes*. Department of Environment and Natural Resources, Manila, Philippines.
- DENR and UNEP. (1997). *Philippine biodiversity, an assessment and action plan*. Department of Environment and Natural Resources and United Nations Environmental Program. Bookmark, Makati, the Philippines.
- The Economist*. (2003). "Who guards the guardians?" September 20-26, 2003.
- FAO. (2003). *State of the World's Forests 2003*. FAO, Rome, Italy.
- Guerrero, J. P. (2001). *Field report for Biodiversity Monitoring System, Sitio Katokolan, Ilagan, Isabela. September 25-26, 2001*. NSMNP-CP, Cabagan, Philippines.
- Heaney and Regalado, (1998). *Vanishing treasures of the Philippine rainforest*. Field museum, Chicago, USA.
- Kummer, D.M. (1992). *Deforestation in postwar Philippines*. Ateneo de Manila University Press, Quezon City.
- Leones, M.A.B. & A. Jensen. (2003). "Lessons learned in raising public awareness on biodiversity conservation in the Northern Sierra Madre Natural Park" in *The Sierra Madre Mountain Range; global relevance, local realities* edited by J. van der Ploeg, A.B. Masipique a & E.C. Bernardo. CVPED. Golden Press, Tuguegarao.
- Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A.B. Da Fonseca & J. Kent. (2000). "Biodiversity hotspots for conservation priorities" in *Nature* 403: 853 – 858.
- NSMNP-CP. (2002a). *Draft proposal for the second phase of the Northern Sierra Madre Natural Park – Conservation Project*. NSMNP-CP, Cabagan, Philippines.
- NSMNP-CP. (2002b). Lazaro, R.C. (comp.). *Philippine crocodile (Crocodylus mindorensis) conservation workshop, Environmental Information Center, Isabela State University at Cabagan, Isabela, 16-19 May 2002*. Plan Philippines NSMNP-CP, Cabagan, Philippines.
- Oudejans, P. (2001). *The Philippine crocodile (Crocodylus mindorensis): a study on factors determining distribution and population size in the Northern Sierra Madre, Northern Luzon, the Philippines*. CVPED and Leiden University MSc student report. Leiden, the Netherlands.

- Ross, J. P. (1998), *Crocodiles, status survey and conservation action plan. 2nd edition*, IUCN/SSC Crocodile Specialist Group, Gland, Switzerland and Cambridge, United Kingdom.
- Utting, P. (ed). (2002). *Forest policy and politics in the Philippines; the dynamics of participatory conservation*. UNRISD. Ateneo de Manila Univ. Press, Quezon City.
- Van Alphen, R. and S. Telan. (2002). *A study on distribution and population of Crocodylus mindorensis in Northeastern Luzon, the Philippines*. CROC survey report. Cabagan, Philippines.
- Van Boven, G. (2001a). *Awareness assessment survey in Maconacon, Isabela, September 2000*. Report for Plan International- NSMNP-CP. Cabagan, Philippines.
- Van Boven, G. (2001b). *Awareness assessment survey in Palanan, Isabela, January 2001*. Report for Plan International- NSMNP-CP. Cabagan, Philippines
- Van Boven, G. (2001c). *Awareness assessment survey in Divilacan, Isabela, February 2001*. Report for Plan International- NSMNP-CP. Cabagan, Philippines
- Van den Top, G.M & G.A. Persoon. (2000). "Dissolving Sate Responsibilities for Forests in Northeast Luzon" in MacDonald, C.J-H. & G.M. Pesigan eds. (2000). *Old Ties And New Solidarities; Studies on Philippine Communities*. Ateneo de Manila University Press. Quezon City.
- Van den Top, G. (1998). *The social dynamics of deforestation in the Sierra Madre, Philippines*. Doctoral thesis. Leiden University, the Netherlands.
- van der Ploeg, J. and Taggug, J. (2003). "Ecotourism as a potential strategy for the integration of conservation and development in the Northern Sierra Madre Natural Park?". Pp. 353-369 in Van der Ploeg, J. A.B. Masipique a & E.C. Bernardo (eds). 2003. *The Sierra Madre Mountain Range; global relevance, local realities*. CVPED. Golden Press, Tuguegarao.
- Van der Ploeg, J. A.B. Masipique a & E.C. Bernardo (eds). (2003). *The Sierra Madre Mountain Range; global relevance, local realities*. CVPED. Golden Press, Tuguegarao.
- Van Gils, H., B. Tarun & S. Telan. (2002). *Development of a protocol for the ecological study of the Philippine crocodile: preliminary results*. CROC. CVPED student report. Cabagan.
- Van Weerd, M. (2002a). *Summary report of the fauna study results in the Northern Sierra Madre Natural Park, 1999-2002*. Plan Philippines / Northern Sierra Madre Natural Park – Conservation Project. Cabagan, Philippines.
- Van Weerd, M. (2002b). "The status and conservation of the Philippine crocodile *Crocodylus mindorensis* in the Northern Sierra Madre, Luzon, the Philippines", Pp. 97-107 in *Crocodiles. Proceedings of the 16th working meeting of the Crocodile Specialist Group*. IUCN-the World Conservation Union, Gland, Switzerland and Cambridge, UK.

Chapter 17

Education and communication for conservation: co-management of the Sierra Gorda Biosphere Reserve, Mexico

Martha Isabel "Pati" Ruiz Corzo

Introduction

The Sierra Gorda Biosphere Reserve management recognizes that sustainability is dependent on sustainable society. It follows that conservation management must function as a social dynamic and that social strategies for conservation must be used (rather than strictly technical or legal strategies), engaging everyone from those at grassroots level to those in the state governor's office. This is a huge challenge in any Reserve highly populated by communities in extreme poverty. This paper summarizes the lessons learned from the seven year *Biodiversity Conservation in the Sierra Gorda Biosphere Reserve* project, co-managed by an institution within the Mexican Ministry of Environment and a locally founded initiative. Focusing on the environmental education and awareness raising campaign of the project, key communication strategies are described. Evaluation of the project led UNDP to describe the project as a pioneer for high impact programming strategy in Mexico and Latin America.

The Sierra Gorda Biosphere Reserve

The Sierra Gorda Biosphere Reserve (SGBR) is the second-most populated reserve in Mexico, with 691 communities and over 93 000 human inhabitants in extreme poverty. It extends over 384 000 hectares (of which 97% is private property) distributed throughout five municipalities in the northern third of Querétaro State, central Mexico, along the Eastern Sierra Madre. Over 70% of the Reserve is in a good state of conservation and stands as a green island in the overexploited lands of central Mexico. With its unique rich ecosystem diversity, Sierra Gorda is a sanctuary for flora and fauna of universal value and home to fourteen vegetation types, 1724 species of flora and 581 species of fauna.

The Biodiversity Conservation in the Sierra Gorda Biosphere Reserve project

With such a large population living in extreme poverty, conservation management is very complex and must come about through awareness and local community participation. Conservation must operate as a social dynamic, presenting alternative productive activities and practices that make conservation, restoration and sanitation possible.

At the Sierra Gorda Biosphere Reserve, there is a unique co-management model between the National Commission of Natural Protected Areas (CONANP) – a decentralized institution within the Ministry of the Environment – and the locally founded initiative – Grupo Ecológico Sierra Gorda (GESG) – which directly intervenes in the area's administration. The Grupo Ecológico Sierra Gorda began environmental education in the Reserve fifteen years ago and is the baseline activity upon which the seven year *Biodiversity Conservation in the Sierra Gorda Biosphere Reserve* project piggybacks.

Biodiversity Conservation in the Sierra Gorda Biosphere Reserve is a full-size Global Environmental Facility (GEF) project, in which there are three main actors:

1. the United Nations Development Programme (UNDP) is the administrative agency;
2. the National Commission of Natural Protected Areas (CONANP) is the executing agency of the federal government (in addition to the Biosphere's Federal Director – the author);
3. the Grupo Ecológico Sierra Gorda (GESG) is the operating agent on the ground. A locally founded initiative, it is the principal focal point for civil participation and action.

This paper focuses on one of the project's six outputs or goals; carrying out an environmental education and awareness-raising campaign.

The following are the general indicators:

- the design and approval of the regional campaign for raising awareness;
- levels of environmental awareness among governmental officials and the general public;
- the capabilities of project staff, community leaders and/or environmental agents to transfer environmental awareness to the local communities;
- the number of students to receive an environmental education program from the Grupo Ecológico Sierra Gorda in 110 communities within the Biosphere Reserve (it is hoped to educate 12 000 by the end of the first phase and 24 000 students by the end of the project);
- the organisation and results of forums, workshops, meetings, conferences and annual exchanges promoting the Reserve;
- the running of five workshops annually for other national NGOs in order to make replication possible in other Natural Protected Areas.

The Global Environmental Facility (GEF) leverage fund has been the key to assuring long term, holistic and sustainable processes, and to enabling twenty-one years of permanent attention to the communities in the Sierra Gorda bio-region.

A sustainable social approach to conservation

Biosphere Reserves must build their sustainability on the foundation of a sustainable society, developing new habits and productive skills with deference towards the Earth. Fostering hope requires the development of model social strategies for biodiversity conservation.

With sufficient financial resources, actions involved in the development of such model social strategies include various forms of communication and education – ranging from community activity, productive training and development, inter-institutional participation with the local, regional, and national government – in addition to the equitable management of natural resources, ecotourism and the adoption and application of the law. (Progress towards sustainability necessitates enforcing regulations until institutions regulate themselves and the public works spending abides by the official Management Program of the Sierra Gorda Biosphere Reserve).

Only by way of an educational process on every level – from the grassroots to the state governor's office – is it possible to consolidate a conservation process in densely populated Biosphere Reserves. The outreach work requires persistent presence, promotion, education and organization of community members. With persistence in these areas, it is possible to amplify the population's skills base, develop entrepreneurial

capacities and apply appropriate technical advice when required. A wave of conservation awareness and social participation may then be set in motion.

Education and communication outreach

Schools

The locally founded Grupo Ecológico Sierra Gorda initiated its activities in 1987. Reforestation and environmental education were the pioneer programs, establishing over 1000 hectares of native trees and reaching as many as 16 000 children every month in 168 schools (from pre-schools through to secondary schools) within the Reserve. These local schools serve as work stations through which relations are established with local authorities and parents, carrying out thousands of activities (in sanitation, skill training, restoration, management and conservation) and organized through community meetings and participatory workshops. The collaborative Biodiversity Conservation project took this structure as its base.

The Grupo Ecológico Sierra Gorda environmental education staff consists of a group of seventeen external promoters that introduce a dynamic community process, informing and organizing activities within the schoolroom as well as on the school grounds and in the community itself. Month after month, year after year, many environmental projects are facilitated, including children's forests, organic vegetable gardens, murals, clean-up campaigns, nature appreciation excursions, on-going recycling and sanitation. Twenty Earth Festivals are held at the end of every school year. All this is carried out by a young group of well-trained environmental education teacher-promoters who, over the years, have taken federal teaching slots in the Sierra Gorda and are in-turn replicating the program and disseminating a sustainable culture through their schools.



Figure 1. Earth Festival in Sierra Gorda Biosphere Reserve

Children's Forests: a degraded plot of land between one and three hectares is negotiated for donation by the community members, fenced off, and planted with native coniferous species by schoolchildren with their parents and teachers. The school makes a commitment to care for the growing forest.

Organic vegetable gardens: on the school grounds the teacher defines the plot available for a vegetable garden. The Grupo Ecológico Sierra Gorda promoter supervises the preparation of the soil, provides the seeds and visits monthly to follow-up the health and care of the garden. Once harvested, the vegetables are utilized in healthy nutrition and whole food cooking classes.

Clean-up campaigns: community-wide workdays are organized to pick up the trash discarded along the roads of the community, separating and sorting out the recyclable waste stored in the community recycling centre or taken to the regional recycling centre in Jalpan de Serra.



Figure 2: Community clear-up campaign in the Sierra Gorda Biosphere Reserve

Women

To penetrate households, another team of promoters work with the communities' women. The promoters spend two days every month staying in each of the twenty-seven communities and working with an organized group of women and community leaders during meetings, workshops, nutrition, cooking and gardening classes that include solar cooking, organic pesticides, traditional and herbal remedies, handcrafts and stretching exercises for the rural women.

These women are a source of energy with incredible spark, interest and persistence, working to develop healthy nutrition, backyard self-sufficiency, solid waste management, dry latrine adoption, wood-efficient stoves and community-based recycling centres. Over the last nine years, little by little people have begun to adopt lifestyle alternatives and the initiative has gained its own life by becoming a local custom.



Figure 3: Recycling centre in the Sierra Gorda Biosphere Reserve

General community

This social movement for conservation marks the coming together of civil responsibility and environmental awareness. There have been a series of seminars, diagnostic and planning workshops regarding adoption of the Biosphere Reserve's Management Program. These efforts have been reinforced by participatory evaluation and the formation of conservation networks such as voluntary civil brigades to control forest fires, local committees for community recycling centres, and networks of civilian surveillance against environmental crimes.

In addition, the project develops new skills of production using natural resources. Community level assistance requires years of training support in developing the product, administration and commercialisation as part of our services to the communities. Today there are community-based natural resource management projects that include micro-enterprises such as carpentry and ceramics workshops, dehydrated fruit and dried flowers, preserves and conservation tourism, forestry management and wildlife flora and fauna management, in addition to environmental services payments.

Multi-media communications

Communications is fundamental to reach the general population and reinforce the social process of instilling a sustainable culture. Grupo Ecológico Sierra Gorda maintains a branch office in the state capital, Queretaro City, attending to graphic design, public relations and media.

On a regional basis within the Reserve and in the buffer states multi-media promotion includes: environmental protection signs, murals, official orientation and interpretation signage, three weekly radio programs (regionally and in the state capital), special radio campaigns (especially during forest fire season), movie club events, constant presence in the local press, and printed information that promotes the purpose of the natural protected area and invites popular participation.

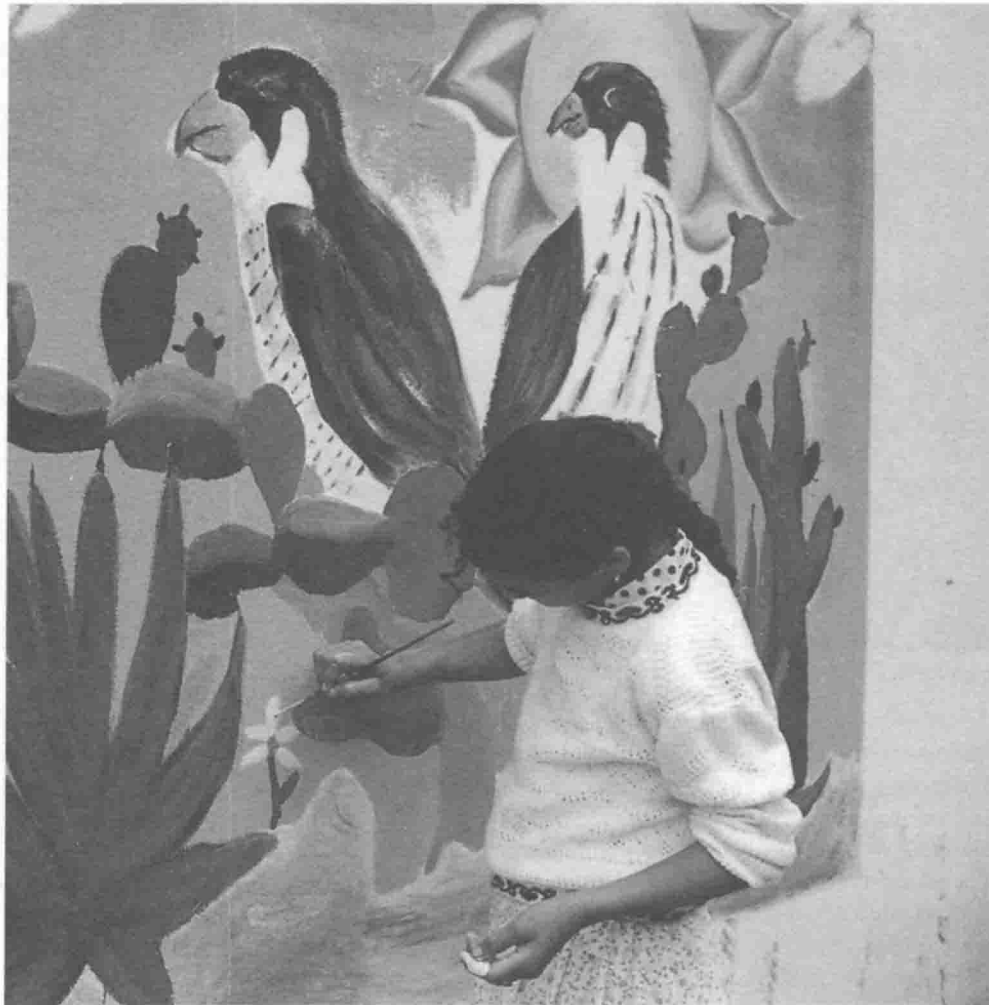


Figure 4: Mural painting in the Sierra Gorda Biosphere Reserve

These are supported by didactic materials and various tools developed for the kids in environmental education and their parents: manuals, scholarly series, videos, posters, table games and radio events that are actively managed by the communities and reach every level of society.

In Queretaro City the major newspapers and radios receive news bulletins regularly and publish several articles related to the Sierra Gorda Reserve every month, in addition to bi-monthly press conferences. Grupo Ecológico Sierra Gorda staff generates special interest articles for magazines and journals throughout the year and seeks television coverage whenever possible. Seeking to maintain a public presence is necessarily a constant activity, especially in order to administer such a complex area such as the Sierra Gorda and its numerous communities.

Advisory Council for the Biosphere Reserve

An Advisory Council for the Biosphere Reserve has been established since the Biosphere was decreed. It is a multi-sector body consisting of scientific and academic institutions, NGOs and three levels of government, in addition to different sectors of society (for example ranchers, producers and society members of common lands) and seeks to facilitate collaboration across the sectors in the best interest of the Reserve's communities and according to the published Management Plan. It does this using subcommittees dedicated to environmental education, productive diversification and ecotourism. The Advisory Council's Sub-committee for Environmental Education plans support and follow-up activities, involving committed teachers and educational authorities.

Monitoring and evaluation

Throughout 2002, our strategy and fifteen years of experience were rigorously evaluated by UNDP consultants. The project was described as a pioneer for high impact programming strategy in Mexico and Latin America. The results demonstrate ample social participation in concrete activities and growing enthusiasm. Since then we have been working on a series of impact and effect indicators, developing a model for participatory evaluation. Using this model as a tool, we intend to incorporate subjective information in addition to objective quantifiable information, such as the expansion of environmental awareness, changes in attitude and social participation. We have developed indicators and participatory evaluation tools which are accompanied by consulting and external evaluation.

Finding the effective formula to monitor and evaluate the development of a sustainable culture requires tools that pull up answers from the client's perspective: in the case of Sierra Gorda that means the communities, how involved are they, the local initiatives, habits, attitude change, the adoption of concepts and alternatives. The program is carefully monitored quantitatively by means of plans every trimester and daily reports that are certified by the educational authority of the state.

For the evaluation process different indicators are applied, such as: efficiency, effectiveness, progress and impact. These indicators are measured annually through sampling. External evaluations and auditors enrich the feedback mechanism and are required by various donating foundations.

The results of the evaluations that have been carried out have been integrated into the Geographical Information System (GIS) as an integral part of the project "Biodiversity Conservation in the Sierra Gorda Biosphere Reserve" which permits us to maintain continuous follow-up. Within the evaluation process we have held diagnostic workshops in the participating communities in order to obtain different comparative models that demonstrate growing environmental awareness on behalf of the community members.

The importance of producing such a model of monitoring and evaluation relates to the essential need for reliable testimonies demonstrating that a sustainable culture can serve as a force for civil participation in present-day society. Sustainable society will find its progress lies within sustainable resource use and conservation of biodiversity.

Results

Since 1987, the Sierra Gorda Biosphere Reserve has managed to trigger a wave of support and social participation in conservation, with more than 23 000 Serrano people involved in conservation activities. Most importantly, environmental awareness is permeating the local, regional, national government and orienting public spending towards sustainability.

Looking towards an enduring, long-term impact, programming and extension to the schools and community is beginning to undergo a fundamental change: the goal is to institutionalize the values and activities of environmental education to the federal school system both in the Sierra Gorda region and throughout the state.

Conclusions

In the rural mountains of central Mexico, among communities of the Sierra Gorda Biosphere Reserve in extreme poverty, environmental education and widespread communication have proven to be valuable catalysts for change. Growing acceptance and participation on

regional and state levels has led to the recognized success of the Sierra Gorda civil conservation strategy and demonstrates the strong foundation and roots for an enduring transformation of one of the last well-preserved mountain ranges that bridge North America to Mesoamerica.

Recommendations

Schools must be utilized as the entryway and the prime catalyst for social participation in a conservation movement. Environmental Education should be very pragmatic and serve as a way to derive activities that always benefit the common good. It should lead us to forming a society with heightened awareness and innovative productive skills and a new management of the natural resources. It requires developing a strategy that is varied and ample in reaching the diverse range of actors that represent the interests of the region.

Chapter 18

Protected area communication, education and public awareness: the case of the Every River Has Its People project, Botswana

Tracy Molefi

Introduction

The "Every River Has Its People" project of the Kalahari Conservation Society and partners, aims to promote the sustainable management of the natural resources of the Okavango River Basin (Angola, Namibia and Botswana), accruing benefits for the basin residents through facilitating the effective participation of basin stakeholders in natural resource (particularly water) decision-making processes and management. The community education campaign used by the project is a highly participatory approach. It draws on, and works together with, existing institutions and structures serving community development and welfare, and has set up new representative bodies to communicate local, regional, and trans-boundary issues. Presented below are the experiences and lessons to-date from the progressive and ambitious Every River project.

Environmental context

The Okavango River Basin extends into Angola, Namibia and Botswana. The river rises from the highlands of Angola as the Okavango (or Cubango) and Cuito Rivers, goes through Namibia (where it is locally referred to as the Kavango River) and flows for about 415 km towards the east along the Namibia-Angola border (Obeid and Mendelsohn, 2001). It enters Botswana at Mohebo, where it forms the panhandle, travelling a further 80km across the Kalahari Desert before it spreads out into a spectacular alluvial fan – creating a myriad of rivers, channels, lagoons, lakes, islands and marshes that make up the fascinating and magnificent inland Okavango Delta.

The Okavango Delta, panhandle and environs constitute a large geographical area of about 20 000 km². Within this geographical area there are approximately 100 000 people living in thirty-two sizeable communities. An estimated 40 000 of these people (40%) live in the immediate vicinity of the delta, and have a direct relationship with it deriving first hand benefits from its presence. In addition to the people, the Okavango River and delta supports a wide range of species of fauna and flora that make the Okavango Delta one of the major tourist attractions in Southern Africa (Rothert, 1997).

The trans-boundary Every River Has Its People project operates within the area of the Okavango River Basin, which, in Botswana, encompasses two protected areas: (1) the Okavango Delta and (2) the Moremi Game Reserve. The entire Okavango Delta is a designated wetland of international importance because of its uniqueness and diverse ecology. The area is hence guided by international conventions; the Ramsar Convention signed in 1997 and the Convention on Biological Diversity signed 1992. These international agreements require that a management plan be developed to protect the site. In proximity to the Okavango Delta (on the north-eastern side) lies the Moremi Game Reserve. This area was officially designated as a game reserve in 1965 and is managed by the Department of Wildlife and National Parks. It covers approximately 20% of the Okavango Delta (Campbell, 1997).

The Every River Has Its People project

Although this is a regional project implemented in Namibia and Botswana, this paper will be focusing mainly on the activities in Botswana with examples drawn from basinwide activities where necessary.

Communities living in and around the Okavango River and delta depend on its resources. In terms of sustenance, the river and delta provide water for domestic and agricultural use as well as supplying fish and edible plants. In terms of income, a significant proportion is derived from the river and delta via employment in tourism ventures. Any threat to the survival of the river and its resources is, therefore, a cause for major concern to the riparian (river) communities.

For this reason, in 1997 NGOs facilitated an outreach program through the Okavango Liaison Group (OLG)¹. This program set out to discuss issues affecting the Okavango River and delta with the riparian communities. This came in response to the Namibian government's proposal to build a pipeline to extract water from the Okavango River. The concern was that the government did not intend to carry out a proper impact assessment giving due regard to the river and delta in neighbouring Botswana. It was also realised that related discussions were among high government officials and excluding major stakeholders, especially the local communities.

The major outcome of the Okavango Liaison Group's outreach program was a collective request from more than 3 000 people living in twenty-five communities around the delta to participate in the up-and-coming processes associated with the Okavango. The outcome of the process was a request from communities to be involved in decision-making process regarding the Okavango River and Delta. The Every River Has Its People project (henceforth Every River) was therefore initiated by the Okavango Liaison Group, and the Kalahari Conservation Society became the leading organisation facilitating this process and addressing, among others, the following problems:

- insufficient human and institutional capacity to effectively participate in the management of the resources;
- minimal (and in some cases no) proper communication/consultation of local and regional stakeholders on major developments in the basin;
- the communities' and the government's minimal understanding and appreciation of the importance, value and needs of the countries regarding the river.

The goal of the project is to promote the sustainable management of natural resources in the Okavango River Basin for the benefit of basin residents and states, through promoting and facilitating the effective participation of basin stakeholders in natural resource decision-making and management, particularly related to water resources.

The communication, education and awareness component

In light of the above, Every River is carrying out a community education campaign on the Okavango River and Delta. The campaign will give stakeholders – particularly communities – an improved understanding of the dynamics of the river and its sustainable management. The communication and education aims to enable communities to play a meaningful role in delta management and decision-making processes, increasing understanding and communication between stakeholders (including governmental decision makers, local structures and the community).

Recognizing the need to ensure the active participation and considerable attendance of all sectors within the community, a major project component was identification and selection of the most optimal methodologies/means for community outreach. To facilitate reaching many stakeholders, the project opted to use existing institutions and structures serving

community welfare and development. These exist at two levels; the village level and the district level.

At the village level (in each of the targeted communities), the project used the universally acknowledged kgotla as the initial means of establishing rapport and the basis for continued work with the various other community structures. The kgotla is the village leadership institution, with the chief at its head. The community assemble at the kgotla to discuss, consult and seek consensus for decisions that affect them. Other existing structures used as channels for communication, dialogue and learning included:

- the Village Development Committee – made up of village representatives and the Chief - responsible for coordinating village development;
- the Village Extension Team – consisting of government officers undertaking extension work in village,;
- resource user associations including fishermen, basket weaver and farmers;
- schools and parent teacher associations – linking the village primary school and community and ensuring that the school provides the right environment for learning.

At the district level, institutions include:

- the District Council – composed of councillors responsible for initiating and overseeing implementation of projects;
- the District Development Committee – made up of government and state heads to address development issues;
- the District Extension Team – government officers undertaking extension work at the district level;
- tribal administration – composed of chiefs, sub-chiefs and headmen encouraging and supporting rural development initiatives;
- organisations of tour operators – carrying out tourism activities in the Delta;
- teachers – meeting periodically at the district level to undergo training.

The communication process

Working with the above village and district institutions and structures, the project approached communication and education in the manner depicted in Figure 1.

In the Every River communication process:

- step 1 consultation meetings;
- step 2 socio-ecological surveys;
- step 3 feedback meetings;
- step 4 capacity building and information dissemination.

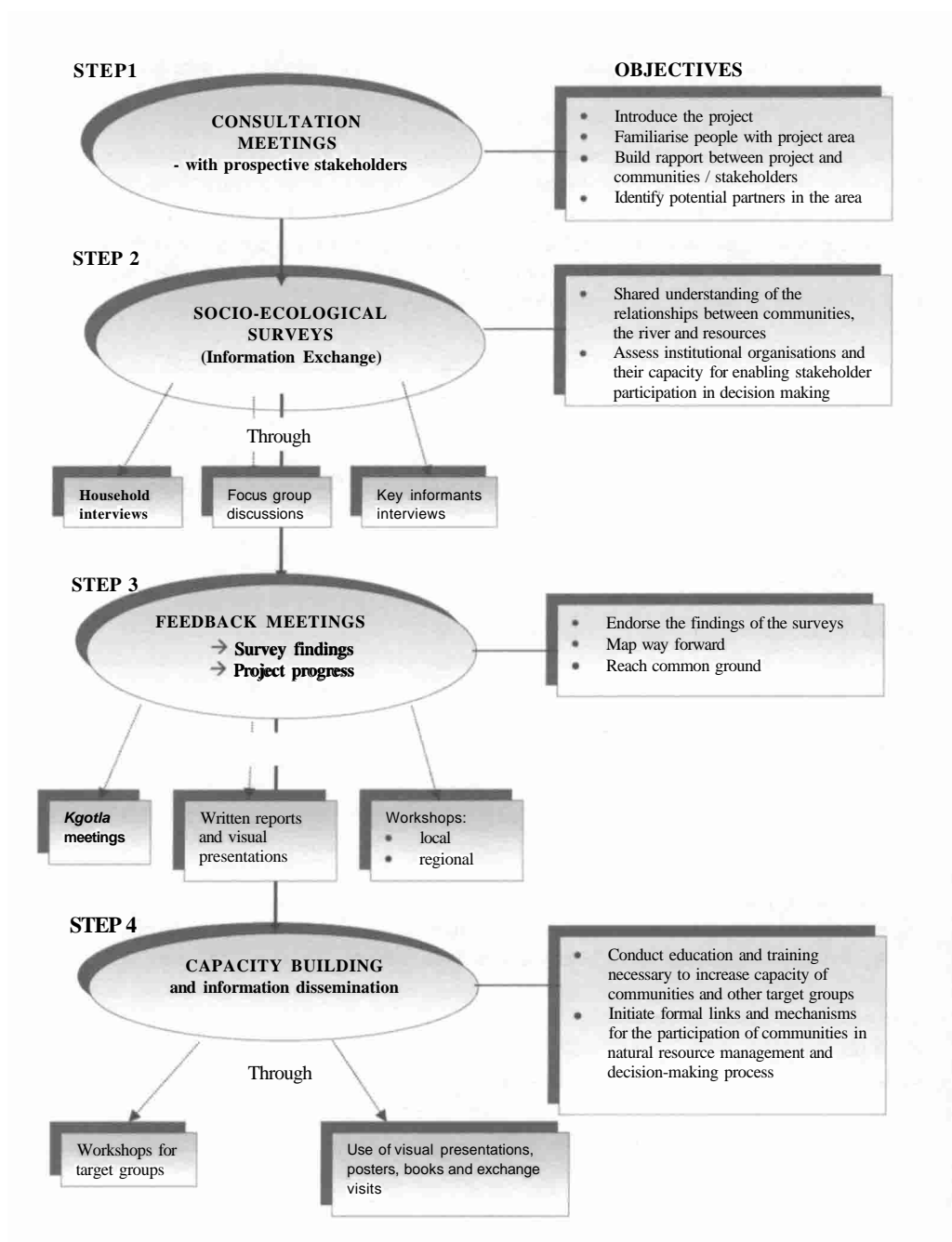


Figure one: The *Every River* communication process

When put into practice, the process is not linear. Various 'steps' may be conducted simultaneously with results feeding back and the strategy responding accordingly. Feedback mechanisms (for example) were not only used after the socio-ecology surveys to provide detailed survey information to the community (including posters summarizing findings in English and Setswana: Figure 2). Rather, they were adopted in a continuous feedback process throughout the project activities. Likewise, capacity building was necessary throughout the project, not just in the final step.

This communication process helped to build rapport and understanding through sharing ideas with the community on project activities. Project staff (made up of three Batswana) were able to familiarize themselves with project sites and anticipate possible difficulties. Communities endorsed the survey findings and reached a basin-wide common ground on issues.

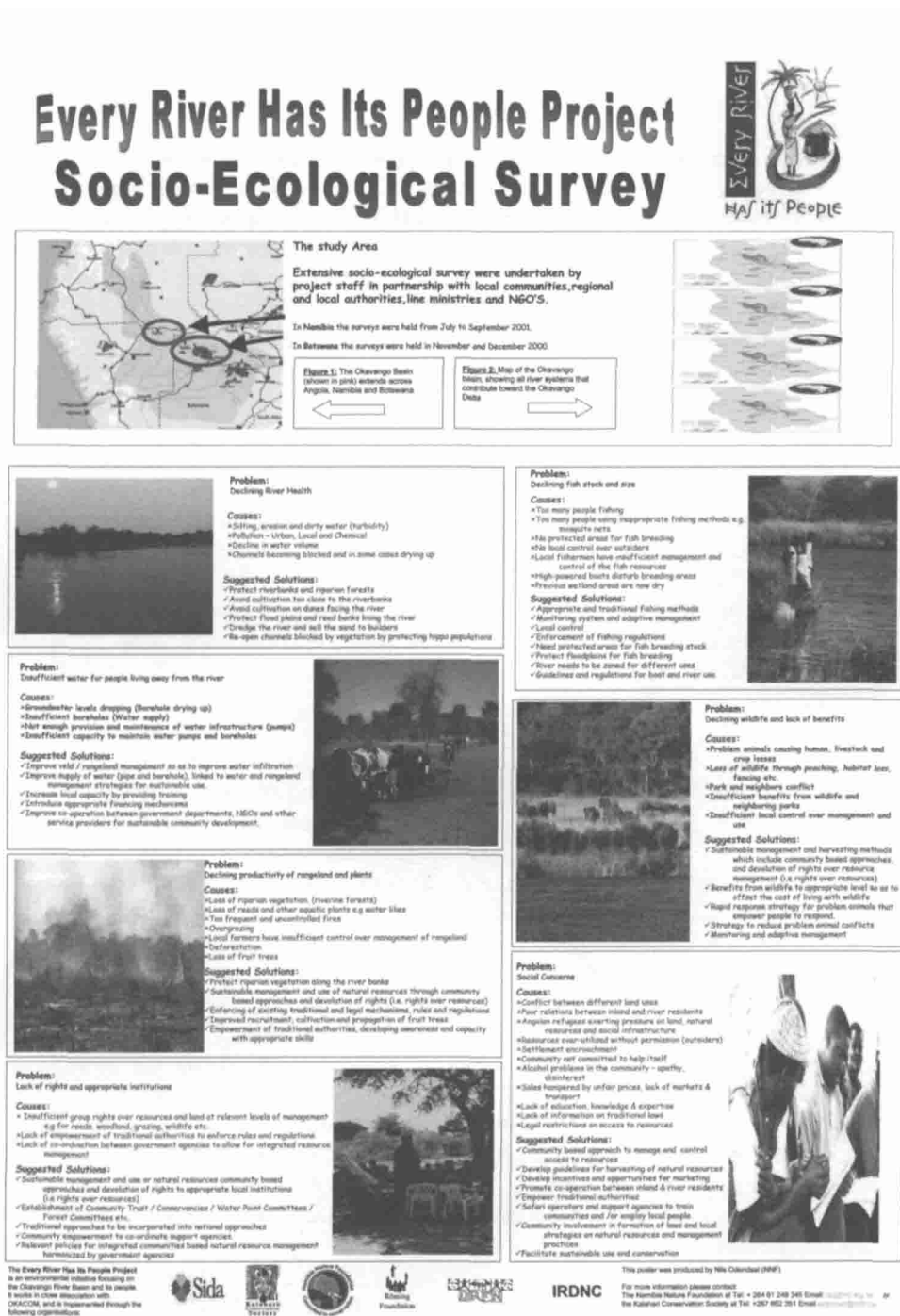


Figure 2: Poster of socio-ecological survey

• The government

At every step, the Every River project needed full support from existing governmental and non-governmental organizations.

The government was particularly helpful in providing guidance through the Reference Group – the advisory body established for the project. The Educational Material Review Team – consisting of government officers from education departments – also advised the project on the educational material produced for capacity building. Additionally, government officers participating in the projects' education and capacity building workshops used their own resources (such as cars, books, videos and posters) as they were not supported (in terms of finance and resources) by the project. The capacity

building workshops conducted in collaboration with government officers had an impact on the community.

The government structures were brought into the process through numerous presentations about Project to various departments of the governments including OKACOM (a Commission for the Okavango River Basin consisting of high ranking government official from Angola, Namibia and Botswana). The project also participated in activities organised by government departments such as tree planting, celebrating tourism day and management plans for the delta. Through the Reference Group and the Educational Material Development Team, Every River was able to penetrate the government structure since the majority of members of these committees are government officials.

The village and district level institutions forms part of the government structures as most of them consist of government officers. They are stationed in districts or villages to provide guidance and assistance to villages as per the requirements of their respective ministries and departments. They are a link between communities and the government.

Additionally, the (mainly government owned) media has been engaged to cover and report on project activities via national television and newspaper, thus communicating conservation to a wider audience.

• *Schools and teachers*

As introduced earlier, the project intended to use existing institutions and structures serving the welfare and development of communities. Naturally then, the initial plan was to target schools in 22 (of the 25) village communities in which socio-ecological surveys had been undertaken as part of the initial outreach programme of the Okavango Liaison Group. However, during communication (including consultation and feedback sessions) with diverse stakeholders, the project was requested to involve as many schools as it could afford. Many additional schools outside the initially-surveyed villages were then visited by the project. Already organised, it was easy to communicate and organise meetings with them. The schools were receptive of the project and made considerable input into the process as well. This varied from school to school depending on their respective needs and level of understanding of environmental education.

The initial plan was for the project staff to conduct classroom teaching. Due to time and resource constraints, this option was dropped and replaced with the training of teachers. The hope was that, once trained, teachers would pass the information on to the children. Their needs and expectations were identified and incorporated into the project activities. A working committee of teachers was formed.

After training the teachers, schools in Botswana participated in a competition whereby students submitted materials (such as pictures, poems and essays) focusing on their natural resources. The materials were then compiled into a booklet, which is now being used for communication and education. The booklet forms part of the resource materials used by the project for capacity building. The booklet has been distributed in schools and they use it as reading material about the Okavango River.

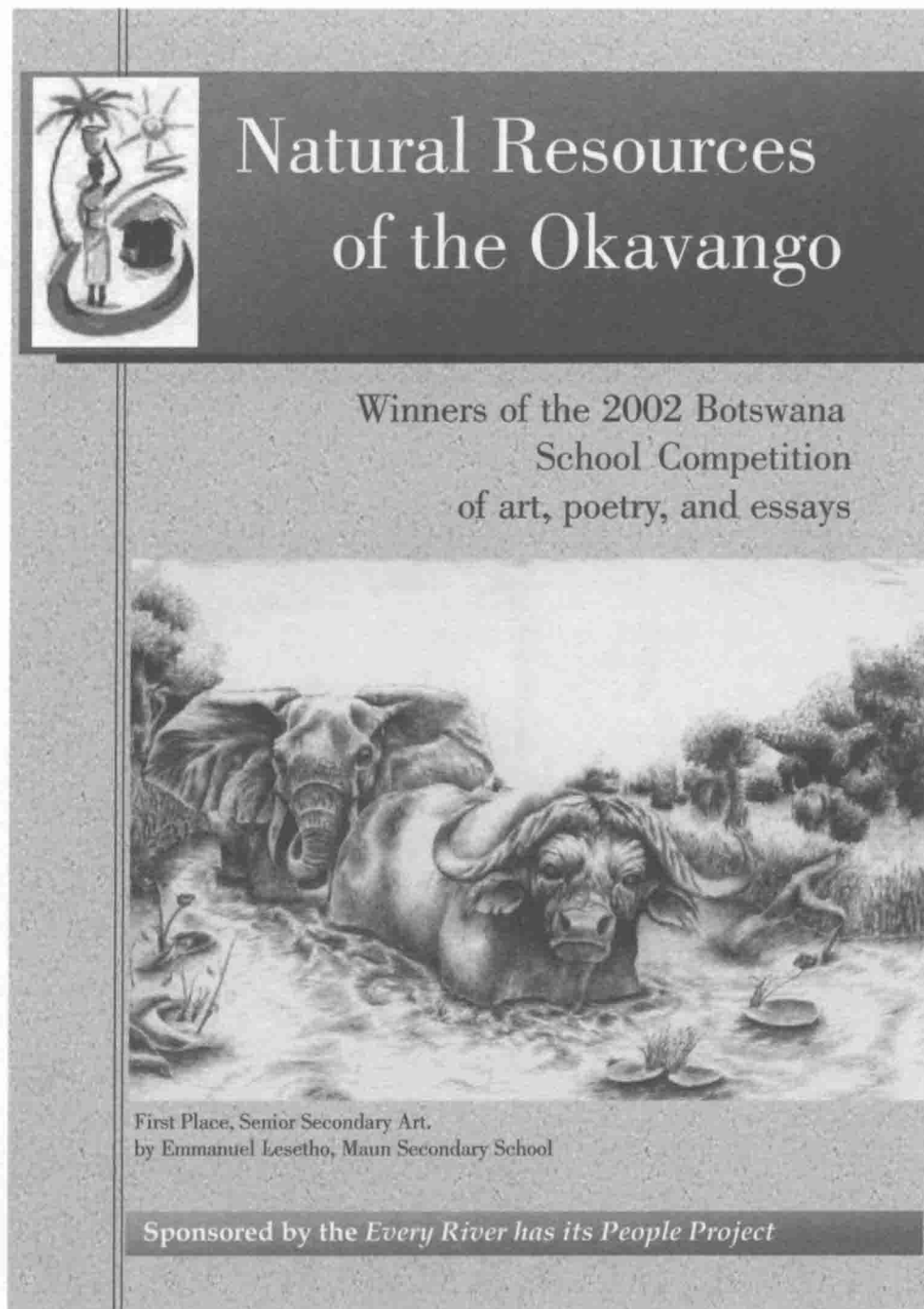


Figure 3. *Book produced by school children*

Okavango a true gift from God

Mighty Okavango,
A true gift from God.
Indeed you are,
Indeed of you we are.

Mighty Okavango,
In you, life dwells,
From you, water we get,
Reeds you provide for our shelter, so important,
Indeed you are a true gift from God.

Mighty Okavango,
See how great you are,
Indeed you are the source of our lives.

Written by Tshegetsang Mosiamiemang, Leapotswe Primary School.

(In Larson, E. (ed.) *Natural Resources of the Okavango: winners of the 2002 Botswana School Competition of art, poetry and essays*. Communications Unit of the Desert Research Foundation of Namibia, Windhoek).

As part of the evaluation of the capacity building workshops in schools, the schools were requested to submit proposals for school based conservation projects to the Every River project, and three schools are now implementing school based conservation projects supported by the project. The first prize school is engaged in setting up a School Environmental Education Area which entails erecting a fish pond, planting indigenous trees, keeping bees and setting up a display board with information about the Okavango River. The second school is doing a Biopark focusing mainly on the indigenous plants of the Okavango while the third school is also developing an Environmental Education Area. These school-based conservation projects are to be used for environmental education.



Figure 4. School children at Ikoga Primary working on their tree planting project.

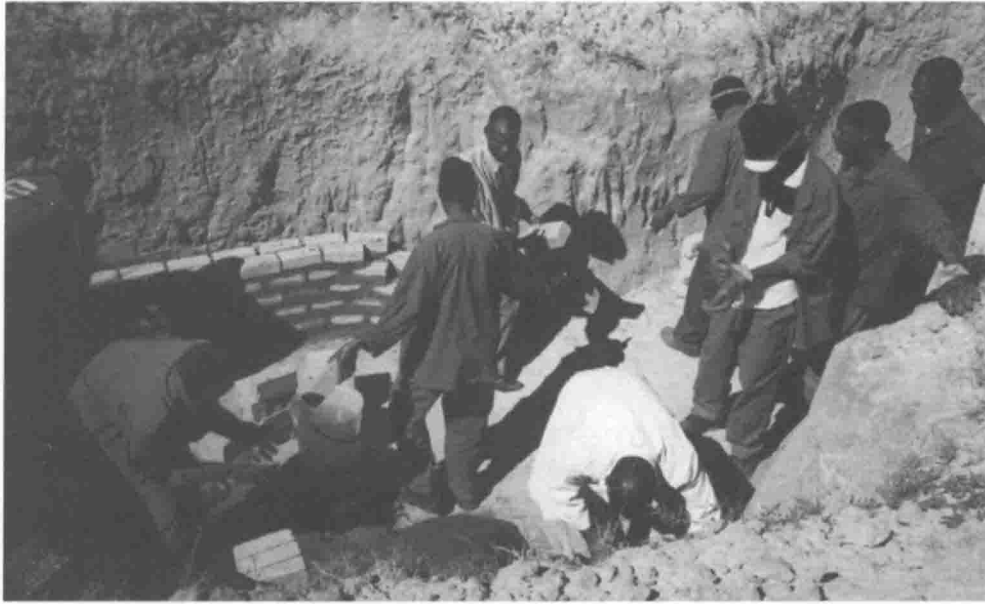


Figure 5. *Mohembo Primary School fish pond project under construction with the help of villagers.*

Parents teachers associations (PTAs) – committees of parents and teachers – are responsible for guiding and providing support to the development of the school. The PTA brings about an important linkage between the school and the village at large. That linkage is necessary if sustainable natural resource management is to be understood by all sectors of the community. A consultative meeting was organised by the project for PTA's of the three schools identified to implement school-based projects. It was to explain the project's expectation from the schools. The meeting also presented an opportunity for teachers to explain to parents how they intend to implement the projects and the support needed from parents.

- ***Basinwide Community Forum***

In addition to establishing a proper understanding of the relationship between communities, the river and its resources, the main accomplishment of the socio-ecology surveys was the establishment of a Basinwide Community Forum to represent the voice of the community in matters related to the Okavango River basin. This was instigated by the communities which, during the socio-ecological surveys, requested an institution consisting of community representatives from river villages in Angola, Namibia and Botswana, to represent their interest in matters relating to the Okavango River.

The Forum members were elected at a basinwide workshop held to mark the end of the surveys and validate the findings. Participants at this workshop were representatives from river villages in Botswana and Namibia. These were initially chosen through the Kgotla system (above) by their respective villages to represent them at this workshop. Most of these representatives are members of the various village level institutions hence had some kind of responsibility in their villages. To date, the Forum consists of representatives from Namibia and Botswana. The Angolans are to choose their representatives soon as they have just started implementing the project in their country.

The Basinwide Community Forum established a working communication relationship with OKACOM – the permanent Okavango River Basin Water Commission². OKACOM is an intergovernmental river basin institution formed by the three basin states to ensure that resources of the Okavango river watercourse system are managed in an appropriate and sustainable way. The Basinwide Community Forum had the opportunity to sit with OKACOM commissioners in a meeting to discuss issues relating to the Okavango river

basin. This was indeed an achievement. Never before had these high profile officers discussed issues with communities at this level. Community Forum members could/can now present their issues in meetings rather than having the project staff doing it on their behalf. They have already been invited to present at different forums.

Several information leaflets are being produced such as a brochure outlining who, what and where is OKACOM. These have been translated into the local languages; Setswana and Rukwangali. Other pamphlets in the pipe-line include information on the river and its resources.

Resource user groups (for example, basket weavers) are in the process of drawing up principles to help them develop conservation-related projects.

The evaluation and monitoring process

The project could not function without proper evaluation and monitoring strategies. Constant evaluation of each step was necessary to shape up the direction of the subsequent phases. The following were done to achieve this:

- All meetings were recorded and reported upon – whether a consultation, feedback or training workshop – and the records were used for post-survey evaluation with participants through informal interviews and questionnaires.
- Participant observation and listening was used in appropriate instances where understanding of issues discussed was measured by the level of participation during the workshop.
- Evaluation forms were completed by participants, usefully providing perspectives and feedback on aspects of the project (approach, rapport, subject materials, frequency and length of contact, effect of training), identifying strengths as well as areas requiring improvement.
- School children were asked to write stories, poems and drawings on issues of the Okavango, as well as proposals for school-based conservation projects, reflecting the project's impact. Monthly progress reports were provided.
- Resource persons (i.e. those facilitating the meetings, workshops etc) made written evaluations of the activities.

The communication campaigns objectives have been partly achieved. For example, stakeholders – particularly communities have an improved understanding of the dynamics of the river. Extensive stakeholder participation and "buy-in" toward a common development agenda at basinwide level, national level, district level and local/community level. A representative Community Basinwide Forum has been established to enable communities to play a meaningful role in delta management and decision-making processes. It also provides a linkage between stakeholders, hence increasing understanding and communication between stakeholders (including governmental decision makers, local structures and the community). Information material have been produced and effectively disseminated which helped in creating environmental awareness. A platform has been set for community-based natural resource management projects by identifying areas in the basin where they could be implemented as well as building capacity for communities to run the projects.

This work still has to be explored further, which is why the Every River has commenced Phase 2 of the project to strengthen what has been established and fully achieve the set objectives. Phase 2 will also provide an opportunity to adequately address problems initially identified by the project such as insufficient human and institutional capacity to effectively participate in the management of the resources; minimal (and in some cases no) proper communication/consultation of local and regional stakeholders on major developments in the basin; stakeholders minimal understanding and appreciation of the importance, value and needs of the countries regarding the river.

Lessons and future actions

Positive elements of the Every River project (successes)

- Pre-project consultation meetings and feedback sessions (were a huge success and created trust between the community and the project).
- Involving government officers in the capacity building programme – to explain to the communities issues concerning their respective departments – was a plus because project staff did not have to answer on behalf of others.
- Direct communication between communities, government officers and project staff strengthened working relations.
- Establishing and strengthening of the link/relationship between the government and NGOs in the region (such as KCS, TOCADI, and Conservation International) was evident through joining hands and resources to educate the communities.

Negative elements of the project (difficulties experienced)

- Communication to other critical areas/communities was difficult since the areas could only be reached by air or boats, which was very costly to the project and the communities. The areas do not even have telecommunication. Therefore their participation was heavily compromised by limited accessibility.
- Certain communities had very vast and significant political background and beliefs. In some villages meetings failed because people could not agree on anything only because they come from different political parties. This delayed progress.
- Language proved a challenge as some indigenous communities do not understand any of the official languages, requiring translators.
- In relation to the above constraints, organising meetings in some villages was a tedious process which delayed progress.
- The project budget for capacity building was minimal (financial limitation), restricting the frequency of training workshops and the number of groups addressed.
- Government and other NGO officers (human resources) were not always available to assist the project, hence the project staff was forced to undertake the presentations of others.

What we would do differently next time

- Assign more days to the training workshops and have more hands-on activities with the communities.
- Request more funds for capacity building and hands-on activities (such as exchange visits by communities to areas with successful natural resource management projects).
- Content of training workshops was overwhelming; too much at the same time. This should be spread over a series of workshops and meetings.
- Facilitate regular communications, networking and relevant discussions among pertinent stakeholders through timely open discussions among stakeholders on issues relating to the Okavango River.
- Focus more on economic empowerment and improve local livelihoods through enterprise options and diversification by supporting communities to establish trusts/conservancies and other community cooperatives or institutional structures most appropriate to local conditions.

What has to be done next?

- Maintain support and continue to build capacity at the local level and in the Basinwide Community Forum.

- Focus on the Basinwide Community Forum Members with training opportunities, identifying the role of individual members in their areas.
- Produce more educational materials for communication and capacity building.
- Provide more support to liaison and partnership between the Forum and OKACOM.
- Continue with implementing community-based natural resource management and school-based pilot initiatives, mapping the way for diversifying these activities.
- Inculcate principles of sustainable natural resource use amidst poverty-stricken, post-war Angola river communities not yet on board through building of capacity in Angola to implement the project.
- Facilitate regular communications, networking and relevant discussions among pertinent stakeholders.
- Create a collaborative strategy in the management of trans-boundary protected areas among the concerned states.
- Focus on integrated and sustainable livelihoods development and natural resources management.
- Create forums for linking indigenous knowledge with modern scientific knowledge to optimise synergies.
- Document and disseminate, by "lessons learned" toolkits and other means, the experiences from the project.
- Assist OKACOM to more easily coordinate these projects and other activities by means of a Basin/OKACOM website.

Notes

1. A pressure group created in 1996 by KCS, Conservation International (CI) and the Okavango Research Centre to counter the proposed Namibian pipeline. The OLG was a regional coalition of NGOs, academics and communities working for the sustainable management of the Okavango River Basin. Member organizations included KCS, CI, ORC, ECOSERVE Consultants, International Rivers Network, the Desert Research Foundation of Namibia, Earthlife Namibia, Somarelang Tikologo-Environment Watch Botswana, IUCN-Botswana and the Hotel and Tourism Association of Botswana and certain individuals involved in conservation and development.
2. OKACOM (The Permanent OKavango River Basin Water COMmission) which is an inter-governmental river basin institution formed by the three basin states to ensure that resources of the Okavango river watercourse system are managed in an appropriate and sustainable way.

References

- Applied Development Research Consultants (2001). *A Report of the Socio-ecological Survey of the Okavango basin, Every River Has Its People Project, Gaborone*
- Campbell, A. (1997). "The History of Wildlife in Botswana" pp.7-26 in *Conservation and Management of Wildlife In Botswana- Strategies for 21st Century*, Proceedings of Conference hosted by the Department of Wildlife and National Parks and Kalahari Conservation Society, Gaborone.
- El Obeid and I. Mendelsohn (2001). *A Preliminary Profile of the Kavango Region in Namibia*. A report prepared for Every River Had Its People Project, Namibia Nature Foundation, Windhoek.
- Jones, B.T. (2001). *Socio-Ecological Survey Report for the Okavango Basin, Every River Has Its People Project, Windhoek*.
- Rothert, S. (1997). "Which Way the Okavango" pp. 158-162) in *Conservation and Management of Wildlife in Botswana – Strategies for 21st Century*, Proceedings of Conference hosted by the Department of Wildlife and National Parks and Kalahari Conservation Society, Gaborone.

Chapter 19

The process of local ownership of the Tingo Maria National Park (Huánuco, Perú)

Patricia Fernández-Dávila

Introduction

In poor countries such as Peru, in which demands for access to natural resources are increasing at an accelerating rate, the role of communication in accomplishing the objectives of protected areas is increasingly important. In these situations park agencies have to rely on the joint efforts of society in general and the population directly connected with these areas, to assure their conservation.

The Peruvian state passed a Law for Natural Protected Areas in 1997, with the aim of promoting conservation of biological diversity and protected areas. Two years later the Master Plan was produced and later the Regulations for the Law (2001). These were all "impregnated" with a spirit of promoting civil participation, especially that of the local populations, in the management and development of the natural protected areas.

Conservation challenges of the Tingo Maria National Park (PNTM)

While land was set aside for conservation in the area from the 1940s, it was in 1965 that the Tingo Maria National Park was created, the second natural protected area to be established in the country. However, the law protecting this area did not establish the boundaries, indicating only the inclusion of two natural formations, the mountain chain known as La Bella Durmiente (The Sleeping Beauty) and the complex of caves known as Cueva de las Lechuzas.¹

The population of this zone, as is the case in many other areas of high altitude forest in Peru, is made up fundamentally of immigrant families who have moved into the mountains in search of a better standard of living. At present about 60 000 people live around the Park, of which the majority live in the town of Tingo Maria and in the district of Mariano Dámaso Beraún, where the protected area is located.

The lack of a true definition of the total extent of the protected area (estimated a few years ago as 18 000 hectares) gave rise to constant conflicts between the population and the Tingo Maria National Park authorities. The social tensions, principally a product of the continuous advances of agriculture into the Park and other inappropriate practices, made work difficult for personnel of the protected area and even (at times) put their lives at risk. The growing needs of the population surrounding the Park included a demand for title deeds for the lands upon which they were living. Such demands could not be met while the limits of the Park had not been defined.

The cultivation of the coca leaf, an important crop, has caused damage at different levels. On the one hand the chemical products which are used such as pesticides and herbicides affect the environment and the ecosystems, and on the other hand the soils are degraded as a result of the intensive use they have received over the years. Moreover, a peculiar, aggressive and invasive vegetation succession occurs in the areas abandoned by the coca growers. The local cultivation of coca is associated with a fungus which produces a

disease known locally as *seca seca*. According to local experience this fungus has become a problem for alternative crops and a threat to future agricultural investments.

Along with these issues there has been almost two decades of violence, due to the drug trade and terrorism in the area, resulting in a reduction in state help for the protected area, with serious budget limitations for Park management as a consequence. There has also been considerable loss of interest on the part of authorities managing the system of Natural Protected Areas of Peru, INRENA (National Institute of Natural Resources).

This meant that there was limited management capacity on the part of the National Park Administration to cope with the agricultural incursion, and coca cultivation. The limited budget for the appropriate management of the sites of interest, which were visited by hundreds of people, resulted in rubbish, noise, informal opening of new areas and paths, and a lack of adequate infrastructure. The Park Administration had a bad image with the local population and this led to resistance in the population and with some of the authorities, limiting possibilities to work on co-management of the area.

There was very little local knowledge about the existence of the Park before 1999, when work began to elaborate the first Master Plan. The local population only considered La Bella Durmiente as something that formed part of the landscape and, perhaps, as a symbolic monument for the town of Tingo Maria. They did not think of it as part of their natural heritage. Nor did they think of the Park's values associated with biological diversity or the environmental services provided by the Park. With this perspective, the area was vulnerable and the conservation of the Park was at risk.

Addressing the challenges – developing a Master Plan

To address the above challenges, in 2000, via the Project BIOFOR/USAID², the International Resources Group (IRG) and local friends decided to do something for the area, not only because of its natural value and the Park's environmental services, but also because it represented a mark in the history of national conservation - especially in the central forest region.

IRG/BIOFOR, the new head of the Tingo Maria National Park and the National Institute for Natural Resources (INRENA), called a meeting of the Municipality of the Mariano Dámaso Beraún (MMDB) district and the Universidad Nacional de la Selva (UNAS). They began a joint search for alliances with others interested in strengthening the management and conservation of the Park, and for those who could unite the efforts needed to produce the first Master Plan. This group took on the difficult job of calling in other local people and institutions. They knocked on many doors, and bit by bit the group increased. By then IRG/BIOFOR had installed its Committee of Technical Advisors (CAT) in Tingo Maria. This was made up of local people with a long history of work in conservation and management of natural resources and knowledge of the local realities. The Committee of Technical Advisors served as a base for the establishment of what, a little later, became the Inter-Institutional Support Committee. The members of this group committed their meagre economic, logistical and/or technical resources for the development of this process, and suggested there should be a broad involvement of the local population to share in decision making about the destiny of the Park.

Whilst designing the process of developing the Master Plan it became clear that, in order to produce a guideline document for the management of the protected area, it was fundamental to gain the participation of various groups involved and with an interest in the park. This was particularly important due to the fact that the guideline document would serve as the foundation for a longer term, joint management process for the Park.

The stakeholder groups involved in the Master Plan process included:

- local public sector authorities: local mayors, representatives from the different State sectors such as the Ministry of Agriculture, Ministry of the Interior through the Assistance Corps for Alternative Development (CADA), the Special Project of Alto Huallaga (PEAH), CONTRADROGAS (now known as the National Commission for Development and Life without Drugs – DEVIDA), and various others;
- private sector representatives: organizations involved with tourism in the area, local NGOs, social organizations, etc;
- representatives from the villages, hamlets and farmers from around the protected area.

The first step proposed was to reverse the situation of rejection and conflict with the population found in and around the Tingo Maria National Park. Thus began the process to define the exact limits and total area of the Park. Additionally, a limit of two years was established for the accomplishment of a number of desired results which would generate the necessary base for the Park's conservation. These included:

- definition of the total area of the Park and inscription in the Public Registers;
- formation of the Committee for Inter-Institutional Support for the Master Plan of the Park;
- incorporation of representatives from the population and authorities in the elaboration of the Master Plan;
- participation in the elaboration of the Master Plan strategically working towards adequate management of the Park over the following five years;
- formation of a Management Committee for the Park, made up of local representatives;
- approval of the Master Plan for the Park by the responsible authorities (INRENA).

The role of communication in the development of the Master Plan

When the decision was taken to prepare a Master Plan for the Tingo Maria National Park no consideration was given to the development of a communication strategy, perhaps owing to the fact that there was little knowledge about the value of communication as an instrument, as well as the lack of specialists to advise on this. However, communication evolved spontaneously as a reaction to necessity. Accordingly, communication was central in developing relations, addressing the need to join forces locally and involve the participation and commitment of social groups in working towards a goal in spite of limited resources.

From the moment that the announcement was made about the formation and participation of a strategic alliance which would result in the Committee for Inter-Institutional Support, through to the actual elaboration of the Master Plan, communication has helped develop the emblematic image of La Bella Durmiente as natural heritage important to the region. Communication actions concentrated on emphasizing the benefits that the protected area offers, principally as a water resource, and its potential for tourism and education. With these messages, the team attempted to obtain a favourable change of attitude towards the Protected Area and to establish the minimum conditions to achieve the slow integration of the population in co-management.

To achieve such a favourable change of attitude, it was also necessary to demonstrate that the Park Administration and the National Institute for Natural Resources (INRENA) were willing to actively address and counter some of the previous problems that they had instigated such as conflict deriving from distancing or rejecting the inhabitants of the surrounding zone. One of the first steps was the definition of the area of the Park and its boundaries. In collaboration with the local population, the park boundaries were defined and title deeds for farmer's property provided. At the same time, the municipality started to

carry out a pilot project with the local farmers for an agro-forestry system on degraded soils in areas adjacent to the National Park, and financed by IRG/BIOFOR – USAID. This project gave valuable evidence to communities about the economic and social viability of improving living conditions for this population and, at the same time, improving the soil. This reduced the incentive to continue encroaching on the borders of the Park. A series of participatory workshops were developed in distinct hamlets as well as in the town of Tingo Maria. These included, along with other aspects, the building up of a Vision of the Park, the boundaries and the definition of the Buffer Zones.

Another important event was the formation of the Management Committee for the Park, made up of representatives from the distinct sectors and, principally, facilitating the functioning of the protected area. In this way the population slowly became more involved in decision taking during the elaboration of the Master Plan.

Evaluation of the process of elaborating the Master Plan

The sum of these efforts, has led to the Park now having a Master Plan, elaborated with the help of stakeholder groups and officially approved by the National Institute for Natural Resources (INRENA) - the national authority in charge of the natural protected areas of Peru. In evaluating the process of developing the Plan, the following points are shared.

- Since the definition of the boundaries of the Park and its buffer zone, the relationship of the Park administration and the National Institute for Natural Resources (INRENA) with communities around the protected area has improved. Some farmers have stated "now we can obtain our land titles, since we now know the limits of our Park".
- In communicating the protected area, the emblematic image of the Bella Durmiente is of value to generate greater knowledge and a change of attitude in the population and the local authorities towards the Park. Messages emphasizing the environmental and conservation values of the protected area such as "La Bella is a regional heritage site and produces the water on which we all depend" work and should be continued.
- The make-up of the Committee for Inter-Institutional Support, (initiated by a small group of organization) and the cooperation amongst them to achieve a common objective, was vital to achieving the desired results.
- The foundations have been laid to continue generating local participation in the Park through disseminating the benefits of the Park and its potential to help in the development of the region. Moreover, the social players are beginning to understand their responsibilities in relation to the protected area.
- The process of elaborating the Master Plan is a useful model for other similar processes which will soon be put into effect in the area, owing to the fact that the population now has greater understanding and ability to help others.
- Better results could have been obtained if a communication strategy had been considered during the elaboration of the Master Plan. It is necessary to carry out further projects in communication with authorities, farmers and the population directly involved with the Park.

Lessons learned from the elaboration of the Master Plan

This process has definitely taught us a series of lessons that are worth applying in future so that errors are avoided, helping us to generate results in a more efficient and effective way in the future. Lessons include:

- Management of the protected area is not viable if the local population and local processes are not taken into consideration.

The process of local ownership of the Tingo Maria National Park (Huánuco, Perú)

- It is fundamental to acknowledge that the processes required for the efficient management of natural protected areas must have a committed effort which results in local ownership. The citizen must be, and feel to be, a central element.
- The various players must be involved through communication and understand the benefits and potential of the natural protected area, and informed of their responsibilities.
- Collective participation in the decisions taken towards the co-management of the protected areas must be strengthened.
- The important issue is not large quantities of money but the decision to search for common interests and work towards common objectives.
- The Natural Protected Areas administration is responsible for maintaining a favourable feeling towards the protected area, which requires permanent communication and perseverance with local players.
- Affection for the regional emblem (La Bella Durmiente) has served as a foundation for favourable changes in attitude towards the conservation of the Park.
- Proximity to the town of Tingo Maria has made the process easier because we are dealing with a natural protected area in a small and "manageable" environment.
- Greater and more systematic efforts must be made in communicating with the population about advances and progress in the Master Plan³, as well as about the environmental services and ecological values of the Park.
- Continue with the creation and strengthening of agreements to harmonize ideas about the co-management of the Park and seek further partners, and improve relationships with the Administration of the protected areas.

Development of the Communication Plan for the Tingo Maria National Park

The many experiences gained in the development of the Master Plan for the Tingo Maria National Park have provided input into the a Communication Plan. The Communication Plan had to deal with the fact that there a few resources and limited capacity for the level of challenges to management and the poverty of the population causes pressure on the natural resources.

In our preliminary investigations to define the communication we found that there is still a lack of confidence about the elaboration of the Master Plan, which generates opposition to the Park as an untouchable area. There is still some resistance towards accepting the administration of the Park as an entity. There is insufficient knowledge about advances in the Master Plan and whether or not the presence of the protected area will affect or benefit the local population. New local and regional political authorities are not familiar with the Master Plan elaboration process, or the benefits offered by the Park.

As a result the following target groups are important to consider in the communication plan:

- local public and private sector authorities, including the Regional Government of Huánuco; Mayors (Provincial and District); Public Sector Institutions; Basic (local) Social Organizations; Church; NGOs; Tourist Operators; Leaders of Local Opinion;
- teachers and students in education centres in the buffer zone and town of Tingo Maria;
- rural population in the Buffer Zone and town of Tingo Maria.

Communication must be oriented towards demonstrating specific points, giving adequate information, showing other similar examples and generating space for dialogue and

Communicating Protected Areas

participation. The outcome is to generate understanding which values environmental quality, promotes a demand for this and generates abilities to act towards avoiding or correcting environmental damage. The following objectives were set for the communication:

- strengthen confidence in the population and authorities;
- train the population to have greater understanding and sensitivity towards the willingness to take responsibility in sharing the management of the Protected Area;
- promote local participation in the co-management of the Park in a permanent manner;
- promote management of micro-water basins with the participation of diverse players, making clear the ownership of the land and placing value on the environmental services.

The results desired from the Communication Plan are to strengthen the incorporation and commitment of the region's social players in the co-management of the Park and to reduce, in a sustainable manner, pressure on the use of natural resources.

The key areas of messages were defined for each group and the main actions to disseminate them defined. These are summarized in the table.

Target group	Message areas	Actions
<i>General and local public and private sector authorities.</i> To orientate the local and regional authorities about their roles and responsibilities, as well as make them aware of the importance of co-management with the various social players.	What unites us to the Park? The benefits and potential of the Park for our life. Promote the co-management of the Park	Publication and distribution of the official version of the Master Plan for the Park, on a local, regional and national level. Popular version of the Tingo Maria National Park Master Plan such as an Information booklet for authorities.
<i>Teachers and students of Education Centres (Buffer Zone and town of Tingo Maria)</i> To increase awareness and offer support to teachers and students of the zone.	Know the limits and zoning of the Park. Knowledge and understanding of biodiversity and attractions of the Park.	Teaching guides and posters for teachers; incorporating maps and reference to the studies in which environmental topics can be focused. Colouring books. School painting competitions for students.
<i>Rural population in the Buffer Zone and town of Tingo Maria</i> To make the local population more aware of conservation, using the Park as an example	Definition of Park limits has allowed me to take title of my lands. Local population in the public agenda.	Radio spots for the rural population in the Buffer Zone and town of Tingo Maria.

The communication is not simply offering or gaining of ideas, concepts and declarations about environmental topics. It is a process which causes the population to behave responsibly as a consequence of understanding the specific problems of their own environment and the consequences of these on their own life and that of their community.

Conclusions

An analysis of our experiences in this process reveals the potential for repeating a participative process to develop a Master Plan and the importance of communication as the means to undertake a smooth process and to build support from many actors in other Protected Areas in Peru or internationally. Using practical and generally "controllable" ideas one can develop areas of agreement with the population which result in the local ownership of the Protected Area and development of mechanisms for co-management. The following recommendations emerge:

- Look for solutions to pending problems with the population, before embarking on products required for the management of the protected area (as was the case of the legal and physical definition of the Tingo Maria National Park).
- Combine efforts of local institutions and organizations towards a common goal.
- Willingness and compromise are required (rather than a lot of money) to achieve conservation objectives.
- "Sell" the direct benefits of the protected area to the local population and to the region.
- Emphasize the message that it is not only the protected area which "belongs to us all" but also the processes generated for its management and conservation.
- Other local governments in favour of conserving an area under their jurisdiction should use the Tingo Maria National Park example of an agreement with a municipality as a model.
- The process of engagement should be continued beyond the simple search for a product, in this case the Master Plan. With few resources, one can give added value to the Master Plan process by communicating the progress to the social players in the region.

Notes

1. Master Plan of the Tingo Maria National Park, INRENA, 2002
2. USAID's Global Bureau designed the BIOFOR Indefinite Quantity Contract, delivering short, middle and long term quick-response technical assistance to conserve biodiversity and to sustainably manage forests and other key renewable natural resources in USAID-assisted countries (<http://www.ard-biofor.com/what.html> as of 04 May 2004).

BIOFOR addresses ecosystem issues by providing technical assistance to government agencies that will help develop leadership capability, policy improvements and implementation, and sustainable management of Peru's biologically diverse areas, fragile ecosystems and tropical forests.

International Resources Group (IRG) is an international professional services firm headquartered in Washington, DC. IRG focuses on providing practical solutions to complex, mission-critical problems for public and private sector clients worldwide. <http://www.irgltd.com/irgltd/About/about.htm>

Top international development experts offer advisory and hands-on assistance to public and private institutions, helping them manage precious natural resources in ways that are environmentally sustainable, equitable, and financially viable. Our principal areas of expertise include community-based resource management (land, forests, fisheries, and water systems), applied environmental economics and policy, and environmentally sound urban and industrial development and capacity-building. <http://www.irgltd.com/irgltd/ENR/IRG%20Specialization%20Environment2.htm>

In the project's first year, IRG developed a management information system, established local technical advisory committees at six BIOFOR sites, and organized a coordination committee among donors. IRG has also developed economic valuation criteria and conducted socioeconomic studies for forest concessions, provided assistance for a protected area management strategy, compiled an inventory of NGOs with a presence at activity sites, and completed ecological economic zoning analysis for the entire department of Madre de Dios, the richest biodiversity zone in Peru. IRG also developed and implemented training in strategic planning and financial management for NGOs at activity sites and launched a grant program at sites surrounding six protected areas (<http://www.irgltd.com/irgltd/Projects/Latin%20America%20&%20Caribbean.htm> as of 04 May 2004).

Chapter 20

Bringing positive changes in the protected areas of Nepal through communication and education

Chandra P. Gurung and Neelima Shrestha

Introduction

So far over 18% of the total area of Nepal (147 181 km²) has been declared protected, with nine national parks, three wildlife reserves, three conservation areas and one hunting reserve established in the three different ecological zones: the Terai, the mid-hills and the high mountains. Initially protected areas were established in Nepal for the protection of wildlife, especially endangered wildlife. The objectives have, however, since been broadened to include the preservation of natural, historic, scenic and cultural values. Whilst the National Parks and Wildlife Conservation (NPWC) Act of 1973 provides the legal basis for the management of protected areas, a social (rather than regulatory) management approach is needed to address the challenges faced by the protected areas today. In such a social approach, communication and education are key tools and have thus been an integral part of WWF Nepal Programmes' activities.

Ecology of the Terai Arc Landscape

One of three ecological zones in Nepal, the Terai Arc Landscape is a vast conservation area, stretching from Nepal's Bagmati River in the east to India's Yamuna River in the west and linking 11 transboundary protected areas and forest corridors. This landscape is important from the national, regional and global perspective for its spectacular biological diversity, as well as being vital to the country for economic reasons because of its ecological resources.

The highly productive alluvial grasslands and sub-tropical forests of the Landscape support some of the highest Royal Bengal Tiger densities in the world, the second largest population of the Greater One-Horned Rhinoceros and the largest herd of Swamp Deer. It is also home to other endangered and protected species including Asian Elephant, Gangetic Dolphin, Gharial Crocodile, Hispid Hare, Greater Hornbill, Saras Crane and Bengal Florican. Thus, management of the Landscape can conserve the rich biological diversity of the Terai and provide the opportunities for long-term survival to large species.

People and the Terai Arc Landscape

With 6.7 million people living in the Terai Arc Landscape in Nepal, the majority of whom are poor and rely on subsistence agriculture, it is hardly surprising to discover that human action is at the root of much biodiversity loss and environmental degradation. Following analysis, seven direct causes were identified:

- forest conversion;
- uncontrolled grazing in forests;
- unsustainable timber harvesting;

- unsustainable fuel wood extraction;
- forest fires;
- watershed degradation;
- wildlife poaching and human-wildlife conflict.

Behind these direct causes, the analysis identified several major underlying causes:

- migration and population growth;
- low agricultural productivity;
- the struggle for land;
- lack of off-farm livelihood opportunities;
- inadequate access to, and management of, forest resources;
- cross border/ transboundary issues.

It was also identified that inequality and discrimination based on gender, ethnicity and caste greatly affect the causes mentioned above, together with the impact of insurgency and governance issues. Lack of awareness of biodiversity and wildlife conservation is also a factor.

Education and communication in the Terai Arc landscape

"If you want 1 year of prosperity grow grains. If you want 10 years of prosperity grow trees. If you want 100 years of prosperity grow people – educate them".

Chinese proverb.

Communication and conservation education has been an integral part of WWF Nepal Programme's activities since its inception in 1993. WWF Nepal Programme runs many conservation awareness programmes for different target groups helping them understand how conservation of the natural and cultural environment, including protection of biological diversity and restoration of forest corridors, benefits them in the long run. Using many tools to raise awareness, communication and education plays a significant role in bettering understanding, among the people living in the National Parks and the surrounding Buffer Zone, about the importance of conserving the natural and cultural environment.

In collaboration with partners – community based organizations, local non-governmental organizations, government officials, district development committees, village development committees and local leaders – WWF Nepal Programme organizes various awareness and capacity building programmes to increase the capacities of local people to conserve Nepal's biological diversity in a way that is ecologically viable, economically beneficial and socially equitable. This is essential to increase appreciation of the relationship with, and dependency on, the natural and cultural environment, and to bring changes in attitude and behaviour.

WWF Nepal Programme's education and communication for biodiversity conservation and sustainable development in the Terai Arc Landscape Nepal include the following approaches:

1. capacity building programmes;
2. celebrations;
3. school based environmental clubs – 'eco clubs';
4. environmental awareness and extension programmes;
5. girls students stipend;
6. non-formal education (for example cattle herders' education);
7. printed educational materials;

8. publications;
9. annual report;
10. media coverage;
11. radio programmes;
12. conservation videos/documentaries;

1. Capacity building programmes

Various capacity building programmes (such as training sessions, workshops, study tours, etc) are organized for local staff, teachers and local leaders, to develop their understanding, skills and capabilities in conservation and sustainable development.

Case Study I

The Sagarmatha National Park Buffer Zone was declared in January 2003.

The user groups and people residing around the national park had no knowledge about the potential advantages of Buffer Zone declaration. Local residents always felt that the park rules were unfavourable for them, prohibiting collection of firewood and other forest products.

Addressing this situation, the park and WWF Nepal Programme staff provided local people with orientation regarding the benefits of Buffer Zones, taking them on study tours in the Royal Chitwan and Royal Bardiya National Parks in the Terai Arc Landscape and their respective Buffer Zones. The participants observed and discovered various benefits and advantages of the Buffer Zone for the local residents. They learned about opportunities to promote tourism in the region and use revenues generated from the tourism industry for regional development.

Returning to their own region, residents in and around Sagarmatha National Park also received capacity building in the form of training sessions and workshops, convincing them that the Buffer Zone would be for the good of local residents. Hence, with help and support from the local residents, the Sagarmatha National Park Buffer Zone was declared in January 2003. The declaration would not have been possible without the help of the people residing in the national park and surrounding areas.

2. Celebrations

The Ministry of Population and Environment, of His Majesty's Government of Nepal, has encouraged organizations working in the field of environmental conservation to make the most of celebrations such as World Environment Day, Wildlife Week, World Forestry Day, World Wetlands Day etc, as important opportunities to communicate and raise community awareness about the significance of biodiversity conservation

Case Study II

Wildlife Week 2003 Celebration at the Royal Bardiya National Park, April 14 – 20, 2003.

Hence, these events are celebrated in the project areas of WWF Nepal Programme by students, teachers, local NGOs and community-based organizations, with community participation. These celebrations are an effective tool for disseminating information about the importance of biodiversity and its conservation. They not only help raise the awareness of those who participate in the celebration, but also other people who are not taking part in the event. The knowledge participants gain from their involvement in such events is shared among friends, neighbours and wider community members thus increasing conservation awareness among a larger population.

During the 2003 Wildlife Week, eco club members and teachers from, different districts of the Terai Arc Landscape, gathered at the Royal Bardiya National Park (RBNP). The visiting students got the opportunity to visit the RBNP and learn about the park's biodiversity and conservation endeavours. They also experienced the lifestyle of the people residing in the RBNP and Buffer Zone, staying in the local students' houses as paying guests.

Similarly, the teachers participated in a two-day workshop on eco club SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, conducted by the Terai Arc Landscape. They learned the meaning of, reasons for, and methods of SWOT analysis, building their capacity to evaluate and strengthen eco clubs. The teachers were also presented with the opportunity to interact with other teachers, sharing and learning from other's experiences, as well as seeing the park and its biodiversity.

Most of the teachers and students visiting the RBNP during the Wildlife Week had never been to a national park before. Hence, they expressed immense joy for the opportunity to visit the National Park, gain firsthand knowledge of the biodiversity and conservation endeavours and interact with other eco club members and teachers.

3. School based environmental clubs – eco clubs

In conjunction with conservation partners, WWF Nepal Programme has implemented school based environmental education programmes through the formation of eco clubs. Since 1994, 228 eco clubs have been formed under WWF Nepal Programme and its partners in sixteen different districts of Nepal – namely, Banke, Bardiya, Bhaktapur, Chitwan, Dang, Dolpa, Jhapa, Kailai, Kanchanpur, Kathmandu, Lalitpur, Morang, Palpa, Solukhumbu, Sunsari and Taplejung – with over 30 000 members.

The school-based eco clubs carry out various programmes to raise environmental and conservation awareness among the students, teachers and youth. Eco club activities encourage students to participate in conservation of the natural and cultural environment at local and national levels, and mobilize students, teachers and youth to raise conservation awareness in their communities.

Eco Club members carry out various curricular and extra curricular activities to enhance their knowledge on the environment and its conservation. These include study tours, planting projects, clean-up campaigns, awareness campaigns in the locality, recycling and re-use of waste materials, and various competitions such as essay, poetry and song writing and performance, quizzes and sports. These are very helpful in developing the students' knowledge and personality as a lot of preparation is required before writing an essay, poem or song. Students research information relevant to the subject and go out and observe the situation, trying to find as many facts and figures as possible. These activities give them an opportunity to learn by doing and increase their creativity, encouraging them to participate in other programmes. Using this creative and entertaining learning process, in which students research and apply their findings, proves more effective than other one-way approaches where students simply acquire knowledge.

Case Study III

One of the best examples of conservation work done by the school based eco clubs is that of the "Students' Environment Group" of Jagatamba Secondary School, Thakurdwara, Bardiya. The eco club was the Abraham Conservation Award winner in 1999. Among the eco club's many remarkable activities is the management of 8 hectares of government forest that was at one time illegally encroached upon by landless people. The club members played a crucial role in the reforestation of the encroached land and are at present carrying out agro-forestry work on the land. In addition, the members and the teachers of the eco club use mass communication media to spread conservation awareness within the community.

Of the 228 eco clubs formed under WWF Nepal Programme and its conservation partners, 160 are within the project areas of WWF Nepal Programme. Of these, 124 are in the Terai Arc Landscape with over 22 000 members, and thirty-six are in the mountain project areas with over 800 members. There are six eco club networks – made up of clubs in Bardiya, Bhaktapur, Dang, Kailai, Kanchanpur and Palpa – formed to strengthen the eco clubs and to facilitate sharing of ideas among the members. Each eco club has two teachers for guidance and support. These are the principal of the school (as patron of the eco club) and, usually, a teacher who teaches Health, Population and Environment. This subject is compulsory in His Majesty's Government of Nepal's (HMG/N) curriculum. With 228 eco clubs, WWF Nepal Programme and its conservation partners have 456 teachers as assets to support and ensure quality conservation education in both schools and communities.

By instilling the importance of conservation and sustainable development in the minds and actions of youth, we look forward to their support as they grow up and leave school-based eco clubs. It has already been observed that eco club members show increased responsibility towards the environment.

Student education radiates through communities. Conservation messages conveyed to a student are passed to people in his/her home (father and mother), then through them, the message is passed on to the wider community. Eco club activities are much appreciated in schools by the teachers, students and parents.

The eco club activities provide students and teachers with opportunities to better understand the environment in which they live. The activities help the students to practically understand the HMG/N curriculum Environment, Health and Population. With proper training, guidance and inspiration, the teachers and students can be mobilized more effectively to raise awareness on conservation and sustainable development in their communities. In this way they become the major supporters of conservation and sustainable development and raise awareness against poaching, illegal logging, illegal harvesting, collection of medicinal plants, unsustainable use of resources etc.

4. Environmental awareness and extension programmes

Various environmental awareness and extension programmes (including campaigns, community mobile education and extension programmes, audio/visual programmes, bill-boards with conservation messages and street theatre) are organized at local levels to create awareness on conservation issues among the local communities. These are more frequently organized for environmental celebration dates such as World Environment Day, World Forestry Day, World Wetland Day and Wildlife Week Biodiversity Day.

Nepal Television and Radio Nepal (the national stations) have the widest coverage in terms of the total population. However, not everyone in the remote areas of Nepal has access to radio or television, and quite a number of people cannot afford these. In such areas, other communication means are more effective, such as street theatre and mobile

exhibitions. Professional organizations and groups perform street theatre in these areas, writing their own scripts and performing according to client needs. In this way, street theatre carries conservation messages to those who are often less aware of the issues, and proves an effective means of communication and education.

Case Study IV

Extension programmes are very effective medium of communication in and around Nepal's National Parks. These Programmes not only raise awareness among the people but also bring out the participants' hidden talents. For example a group of people from the capital city, Kathmandu, went to the Royal Bardia National Park Buffer Zone and performed street theatre on the importance of biodiversity conservation. After seeing the performance, a person from the locality started doing the same and he now has a group of people doing conservation street theatre performances, earning a considerable amount of money and raising community awareness.

5. Girls' students stipend

The Girls' Students Stipend is for the long-term empowerment of women through education. The Girl Student Stipend is awarded to the needy girls in the project areas of WWF Nepal Programme. Educating girls is a long-term investment for biodiversity conservation. In the Terai Arc Landscape the student stipend is provided to the students who have been injured or whose family has suffered casualties from wildlife. This stipend is generally provided for a year or two until a more serious case arise. The stipend is also provided long-term to the girls/boys whose parents have been killed by wildlife. This kind of stipend is provided to compensate the damages caused by wildlife. These stipends have to some extent minimized the conflict between park and people. In this regard, an endowment fund has been created in the Terai Arc Landscape for the sustainability of the programme. In total 106 students have been receiving students' stipends in the project areas of WWF Nepal Programme.

6. Non-formal education: (a) for women

Non-Formal Education is implemented in the project areas of WWF Nepal Programme, in order to improve literacy rates and to create conservation awareness. This is especially among women who are the integral part of the household. However, a few men also participate in the program. In rural areas it is women who collect fodder for their cattle and firewood from the prohibited forest. Women are the heart of the house so it is essential to educate them in the wise and sustainable use of resources. The non-formal education classes are organized for times when women are not so busy with household work. Women attending non-formal education classes say that education makes them much more alert and that they cannot be cheated easily. They learn to read, write, do basic calculations and learn about the sustainable use of natural resources.

Non-formal education: (b) for 'Gothala' (Cattle herders)

Gothala or cattle herders' education is another form of non-formal education, aimed at teaching cattle herders about the importance of conservation and sustainable use of resources, and motivating them to enrol in school so as to increase the literacy rate in the community. Cattle herders spend most of their time in the forest, habitually destroying plants, cutting off branches off trees, collecting the eggs of birds and eating them and killing birds for meat. These environmentally unfriendly practices generally result from lack of conservation awareness.

The gothala/cattle herders' non-formal education programme was launched to address these habits. Cattle herders are taught basic literacy and environmentally friendly

practices, encouraging them to engage in productive work during their spare time. The cattle herders' education is usually carried out in the cattle-grazing fields, facilitating access to, and the application of, whatever is being taught.

To build trust and gain the attention of the cattle herders, WWF Nepal staff, with help from local people, distributed and taught various games such as snakes and ladders and football.

Case Study V

At the Royal Bardiya National Park, it came to attention that the cattle herders and the local people kill birds to entertain themselves, as there was no other means of entertainment in the villages. Hence, WWF ran a programme where a football was given to the group of cattle herders in exchange for every fifteen to twenty catapults (guleli). With the launch of this programme, the cattle herders were presented with an alternative source of entertainment and would play football rather than kill birds in their spare time.

After receiving the cattle herders' education, fifty cattle herders enrolled themselves in Jagatamba Secondary School, Thakurdwara, Bardiya for formal education. This was generally the result of finding out the advantages of being able to read and write.

It is generally lack of awareness among the local people and lack of alternative means that result in the practice of environmentally unfriendly activities. Though it may take some time, communication and awareness can bring dramatic changes in the behaviour and attitudes of people in the vicinity of protected areas.

7. *Printed educational materials*

As few people in the project areas can read and write English, educational materials are also developed in Nepali. They are usually developed focusing on forest and species conservation. Different types of materials are developed for different target groups – such as community members, school students and teachers – including books, posters, flyers, bookmarks, postcards and stickers.

During the conservation education classes, it is much easier to help the target audience understand the conservation issues with the help of visual aids. Following the classes, educational reference materials are distributed, helping the target audience to recall and retain the conservation issues.

Case Study VI

Red Panda saved by eco club Member: the impact of an educational poster

A young boy studying in grade V at Shree Jana Sewa Lower Secondary School, Sano Gumela in the Sagarmatha Community Agro-Forestry Project (SCAFP) found a few porters trying to hit and kill an animal that was wandering on a trail near the Toktok village at Chaurikharka VDC, Solukhumbu. The boy believed the animal to be a Red Panda, however, not being quite sure, he went and explained what he had seen to his brother – Sanjiv Rai an eco club member – who ran to the site. Referring to the educational poster developed and distributed by WWF Nepal Programme, he verified that the animal was a Red Panda – a rare species. He saved the Red Panda from the porters and reported the incident to SCAFP officials. The Park Ranger of Sagarmatha

National Park, present in the SCAFP office, went to the location and freed the panda in the forest.

When asked later, the young boy said that he had seen and read about the animal in the Nepali poster "Rare/Endangered Animals Species found in Mountain Region of Nepal" provided by SCAFP, enabling him to identify the animal. Since his brother is actively involved in the conservation activities through the eco club formed by SCAFP, he exactly knew what to do and where to turn to.

This incident has shown:

- the educational posters – produced in order to raise awareness on endangered and rare species among the students and teachers and the community members – had some success;
- Eco Club members, with proper guidance, can really play an active role in conserving endangered and rare species.

8. Publications

Quarterly newsletters are published in each of the project areas, detailing the important activities being carried out in the communities. The quarterly newsletter contributes to recording and updating the general people about the project area's activities.

9. Annual report

An annual report is published from the head office. This is a brief collection of the year's work and achievements of the WWF Nepal Programme family. The report gives others the opportunity to learn about WWF Nepal Programme's progress and successes in conservation. They are circulated throughout the WWF Network, other conservation organizations, partner organizations (both governmental and non-governmental) and many other institutions and individuals who are keen to know about WWF Nepal Programme and its conservation activities.

10. Media coverage

Media coverage is also a crucial way to make conservation efforts known to the rest of the country and world, so WWF Nepal Programme organizes media trips for environmental journalists. These media trips help journalists appreciate, and thereby portray, the real situation 'in the field'. Coverage in media motivates the people involved in conservation by recognizing their efforts and also reaches out to the general public who are keen to know more about conservation.

11. Radio programmes

Radio programmes are carried out in collaboration with various local FM stations in the project areas of WWF Nepal Programme. At present, the radio programme "Bhuparidhi" (meaning landscape in Nepali) is broadcast in the Terai Arc Landscape area to raise awareness on various conservation issues in the area among residents. The radio programme covers all the districts of the Terai Arc Landscape as well as some districts outside. Aired from Radio Nepal Regional Broadcasting Sub Station Surkhet and Kalika FM, "Bhuparidhi" has become one of the best examples of disseminating information through radio to larger audiences than can possibly be reached by field staff in a short period of time. The programme coordinator received lots of queries and feedback letters from the audience, and a listeners' club has been formed which has established good communication channels. In Nepal radio is the most effective media of communication as it has wide coverage; most people can afford it and it reaches illiterate people in a way that most printed media cannot.

12. Conservation videos/documentaries

Videos and documentaries on the conservation of forests, wildlife species, plant species and the sustainable use of resources are also made and collected from relevant organizations. These videos and documentaries are shown to the protected area community members in order to raise conservation awareness. Project documentaries are also made and broadcasted through the national television and other channels. By doing so, information about project activities and regional issues are disseminated to a larger audience. People residing in the project areas and involved in conservation activities, feel proud and motivated when such information is aired through reputed television channels.

Evaluation

WWF Nepal Programme is in the process of evaluating the ongoing communication and education work. Though the feedback from the communities and schools is inspiring (as the case studies and examples show) results from the formal evaluation are in the process of being documented.

Lessons learned

- Communication and education materials should be in the local dialect.
- Messages should be as simple and as understandable as possible.
- Conservationists working in remotely located protected areas should influence the village head or leaders and, through her/him, involve community members in conservation initiatives. Often local people listen to the village leaders and not outsiders.
- When talking about conservation, local people dependant on the natural resources look for direct benefit for their community.
- Conservationists should be able to suggest alternative practices.
- Communicators and educators should be culturally sensitive.
- Local protected area residents are the main stakeholders; hence their participation is essential to achieve success in conservation.

Future plans

1. Alliance with partners: There are a number of organizations – governmental and non-governmental – striving to achieve educational goals and develop the skills and attitudes necessary to understand and appreciate the relationship between humans and the environment. Managing the interrelation among human cultures and biophysical surroundings, entails practice in decision making and formulating codes of behaviour regarding issues concerning environmental quality. Therefore, these organizations should come together and work collectively to achieve the goals of conservation and sustainable development more effectively and efficiently. WWF Nepal Programme will play a vital role developing partnership with both government and non-government at local as well as national level.
2. Mainstreaming conservation education in HMG/N curriculum: The HMG/N's curriculum on Environment, Health and Population will be revised to incorporate conservation and sustainable development issues, integrating good practices in the education system. Expert guidance, help and assistance will be sought in this regard.
3. Capacity building training sessions/programmes: Teachers will be trained to develop their knowledge and skills to teach conservation education to their pupils.

4. Developing educational materials: More educational materials will be developed, on conservation and sustainable development, to support the curriculum. Educational materials will also be developed for local people and tourists in protected areas in various languages.
5. Strengthening and institutionalizing eco clubs: To empower and ensure the sustainability of eco clubs and their activities, the existing educators and members will be trained and an endowment fund will be established. Partnerships will also be made with organizations involved in forming school based environmental clubs.
6. Expansion of eco clubs: More eco clubs will be formed, in partnership with both governmental and non-governmental organizations.
7. Mobilizing local youth: Local youth would be mobilized to carryout activities in the local areas to raise awareness and to motivate people to conserve the biological diversity.
8. Developing strong supervision and monitoring mechanisms: Strong supervision and monitoring mechanisms will be developed to further strengthen (through evaluation and revision) the educational projects of WWF Nepal Programme and partners.

Conclusion

The main objective of communication and conservation education is to bring changes in the attitude and behaviour of youth, local people, and local leaders through various awareness programmes, so that they become catalysts in efforts to raise voices supporting conservation. Conservation and sustainable use of resources begins at home. Thus, knowing about sustainable use of resources is as important for everyone as knowing the importance to eat and to keep oneself clean. It is through various educational programmes that WWF Nepal Programme and its partners have been able to minimize the conflict between the park and people by creating better understanding among the local people about the need to conserve the biological diversity.

Chapter 21

Developing support for protected areas through a conservation education project and centre – India case study

Prashant Mahajan

Introduction

India is known as one of the world's twelve mega biodiversity hotspots. However, population explosion and over-exploitation of natural resources are putting tremendous pressure on the natural ecosystem and there has been great loss of wildlife. The most significant reasons for this are habitat loss and habitat fragmentation due to increasing human pressure on natural resources.

Historical experience and research undertaken by naturalists and social scientists has revealed that unless there is a radical change in human behaviour, there is a real danger that this planet, together with all the creatures that inhabit it, may be completely destroyed.

Participation in the conservation of natural resources means adopting eco-friendly practices, either by active involvement in processes to better the environment or, at least, avoidance of exploitative practices. Efforts to bring radical change in human behaviour that is detrimental to the conservation of natural resources must change the knowledge and attitudes of people; then changing practices is possible. This approach is crucial and should be applied to all problems related to the conservation of natural resources.

Background of the Conservation Education Project (CEP)

Over three years, 1993-6, the Bombay Natural History Society (BNHS) worked with local people living in and around protected areas, implementing a project funded by the Overseas Development Administration of the United Kingdom. The project was called the Conservation Education Programme (CEP) and was carried out in the following protected areas: (1) Keoladeo National Park, Bharatpur (Rajasthan state), (2) Mudumalai wildlife sanctuary, Tamilnadu and (3) Sanjay Gandhi National Park, Borivli, Mumbai. In collaboration with other target groups, including the Forest Department, non-governmental organizations (NGOs) and other social groups, the Conservation Education Project (CEP) aimed to increase the participation of local people in conservation efforts. A variety of education techniques were used, ranging from participatory rural appraisals (PRAs) and group discussions, to slide shows, film screenings, street plays, poster exhibitions, demonstrations of eco-friendly practices and rallies.

From 1993 to 1996, the project was implemented in four phases:

1. baseline study (six months);
2. experimental phase (seven months);
3. consolidation or field education programme phase (twenty months);
4. evaluation of the project (three months).

Project phase 1: baseline study (including awareness-attitude survey)

In order to understand people's dependence on protected area natural resources, as well as their cultural and socio-economic structure, an in-depth baseline survey was conducted. The information collected through this survey was used in two ways: firstly providing material for the project's educational programmes (for example information on the amount of fuel-wood and grass extracted from the forest was drawn from group discussion). Secondly, the baseline survey results were compared with the evaluation survey findings during project evaluation at the end of the three years.

For the baseline survey, an interview schedule technique was used. This was designed, by the project team, to collect information at the household level. It was pre-tested to determine the interview time and method of household selection. The pre-testing and subsequent modification of the interview schedule was followed by interviews with 500 randomly-selected households. The interview consisted of open-ended and limited response questions.

A questionnaire was prepared to collect information from other target groups such as Forest Department staff, district administration staff, park visitors, NGOs, teachers, local industries and rickshaw pullers. Each item in the interview schedule was coded and entered in Dbase III and Lotus software for information analysis.

Analysis of the baseline survey findings revealed information relevant to the development of a conservation education project – for examples information on natural resource use and existing communication and education channels and facilities. It was found, for example, that firewood collected from the park by locally resident villagers is mostly used for cooking, though in some villages cow dung is substituted for wood. This dung comes from cattle. Households in the surrounding villages have, on average, fifteen cattle and although grazing inside the forest is prohibited, villagers let cattle graze in there and harvest grass from the forest without permits. The analysis also revealed that tourism in the project areas can be divided into sight seeing and wildlife observation. International tourists were better informed about the forest area than the national tourists. Most tourists expected to find education facilities (such as an interpretation centre, carry-home material and self-guided nature trails) in project areas. In terms of media – modern media, such as TV and radio, are major favourites among the people. Traditional media are liked but not amply available and the current trend of entertainment through electronic media prevails.

Part of the baseline survey was an awareness-attitude survey as one of the objectives of the project was to bring about an attitudinal change in the people. In order to study the existing awareness levels and attitudes towards forest conservation issues and the Forest Department, an awareness-attitude survey was conducted before commencing any intervention. A spectrum of positive and negative statements pertaining to conservation issues in the project areas were arranged randomly and responses collected and rated on a five-point scale indicating the degree of agreement.

People with very favourable attitudes would agree with positive statements and strongly disagree with the unfavourable statements and vice-a-versa. A total of 120 men and women, falling within age groups less than 20, 21-50 and above 50 years, were randomly chosen as respondents within each project area.

Response analysis revealed the awareness levels and attitudes of the people towards conservation issues, throwing light on the misconceived notions about the target groups' awareness levels. For example, surprising results included the discovery that most of the older villagers, though illiterate, were able to connect certain issues such as grass collection and disturbance to birds and breeding areas. Certain villagers were aware of the

ecological importance of the forest ecosystem, and some of the older villagers had knowledge of medicinal plants. However, the majority of the younger men and women did not have a clear concept of ecological niches or relationships.

Other key facts revealed were that 51 % of the respondents had realized that they were living close to a forest of national and international importance; 78% of the respondents believed that grazing inside the park was not detrimental to the ecosystem and that it should be permitted through out the year; 66% of the respondents believed that the Forest Department was not doing its best for local people. They also strongly believed that it was the Forest Department's lack of will to improve the situation that led to physical violence between the department and local people in 1986. However, the attitude towards management was not altogether negative.

Project phase 2: experimental phase

The experimental phase was designed mainly to identify effective approaches and media that could be used to change knowledge levels, attitudes and practices, and also to set a strategy for the next phase – the development of educational resources and field education programmes.

A 'control area' was chosen, in which none of the educational activities were conducted but dependency on forest resources was identical. An awareness-attitude survey was also conducted with sixty respondents in the control area in order to enable comparative assessment of the changes within and outside the project area. It was observed that the initial awareness and attitude levels in the control area were sufficiently like those in the project area.

During the experimental phase, various trial awareness programmes were conducted in a few villages, using both traditional and modern communication media such as group meetings, film screenings, slide shows, poster exhibitions, demonstrations, village folk theatre, nature trails and eco-rallies. Themes included biodiversity, the ecological and economical significance of forests, and the negative impact of current practices (firewood collection, grazing, pesticide hazards etc) on forests. These formed the basis of education programmes during experimental phase. Efforts were made to investigate why particular media were or were not popular in particular areas.

A total of twenty-nine education programmes were conducted during the experimental phase (seven months). The audiences were often a mixed group of men, women and children. It was observed that women formed 40% of the target audiences – important as it is women who are directly adversely affected by degradation of habitat around their place of dwelling. The presence of a female member on the project team had a significant positive effect on women's participation. Children attending schools formed an important target group; hence 56% of the programmes were conducted in schools.

Before implementing any educational programme, the desired learning outcomes were determined and a feedback system was designed to evaluate the impact of the programmes, using informal discussions following the programmes and questionnaires. In the questionnaire, ranking was used based on the quality of learning outcomes organized thematically. Themes included: biodiversity and alternative resources – about which there was very positive understanding; the ecological and economical significance of forests – about which there was good understanding; and the negative impacts of current practices on forests (specifically pesticide use) – about which understanding was relatively slight.

Feedback was also collated on the media used in the education programmes (electronic media such as film and slide shows; poster exhibitions; demonstrations; and other groups

meetings and participatory rural appraisals). An inferential comparison of the feedback shows that electronic media (slides and film) were more appealing than group meetings or demonstrations. However, whilst more appealing, the effectiveness of electronic media (film and slides) was less than that of group meetings, demonstration, participatory rural appraisals and poster exhibitions. This means electronic media was helpful in reaching out to large number of people but with less effect.

The experimental phase revealed that a single medium may not produce the desired learning outcomes of an education programme, whatever the target group. A multi-media approach is the most rewarding strategy for effective communication (Communicating Conservation, 1994)

Project phase 3: consolidation phase (field education programmes)

Based on the experiences of the experimental phase, an education plan was prepared to address the major conservation issues. The programmes were centred on the themes: biodiversity and the ecological and economic significance of forests; the negative impacts of current practices (for example fuel wood collection and overgrazing) and the exhaustibility of natural resources. Issue-specific education plans, activity frameworks (example in Table 1) and education material was developed (slide sets, posters, flash cards, street plays and demonstrations, etc).

Theme	Target group	Objective	Education methods	Indicators of achievements	Methods of assessment
Biodiversity and the ecological and economic significance of forests	People living around forests	To create sense of respect for forests	Slide talk & film show on 'know your forest' Articles in local newspapers & magazines Programmes on radio & TV	People becoming aware of importance of forests People recognizing their regional and national roles	Oral & written feedback Increasing visits of local people to forest areas
The negative impacts of current practices and the exhaustibility of natural resources	People living around forests	To develop the support of local people for forest conservation by bringing about a reduction in biotic pressure	Participatory rural appraisals to assess resource availability - (forest mapping) Issue specific slide shows on collection of fuel wood and the carrying capacity of forest resources(demand & supply) Street plays on pressures on the forests	People recognizing their role in pressurizing forests Increased participation in awareness programmes People demanding alternative resources	Feedback during post programme discussions People adopting eco-friendly practices Active participation ineco-development activities of the Forest Department

Table 1: Consolidation phase education programmes: activity framework

An example of the approach used to tackle the issue of firewood collection from forests:

quantifying the firewood consumption of target villages and assessing the change in availability of firewood over period of time using participatory rural appraisals;

g
developing education materials, such as poster and slide sets on the patterns of firewood consumption, quantities consumed and the exhaustibility of forest resources;

g
conducting education programmes with the help of issue-specific education material and post-programme discussion on various alternatives to current practices;

g
holding demonstrations and discussions on various alternative practices such as energy efficient cooking methods, fuel-efficient mud stoves, solar cookers and biogas;

g
collecting names of interested people willing to adopt alternative practices and study reasons why some are and others are not willing to do so;

g
providing alternative fuel source and solve problems of unwilling people;

g
carrying out follow-up visits to assess the performance of alternatives the people's perceptions;

g
resulting in less pressure on forest resources and improvement in habitat.

(A similar education intervention plan had been adopted for other issues pertaining to biotic pressure on forest area).

One of the main objectives of the Conservation Education Project was to develop a network of NGOs for forest conservation. Several voluntary organizations were involved in conservation education programmes for villagers, students and the Forest Department. Periodic meetings were held with the NGOs, in which common strategies and actions for the conservation of local resources were decided.

The project's role in liaising between local people and the Forest Department was consolidated to bridge the gap between them. Dialogues between the Forest Department and locals were initiated through village meetings and participatory rural appraisal exercises. As a part of this interaction, various schemes within the government's eco-development project were linked with the Conservation Education Project's activities. The multi-organizational involvement in project activities was observed to be very effective in ensuring people's participation.

During the implementation of the consolidation phase education activities, a Conservation Education Centre was established on 33 acres of forestland on the outskirts of the Sanjay Gandhi National Park near Mumbai – the only National Park in Asia within city limits. The Government of Maharashtra has given the land on lease. This is a unique example of how state government and NGO can jointly share a land for conservation of biodiversity.

The Conservation Education Centre

In order to involve locally resident people in the conservation and sustainable use of natural resources, the Conservation Education Centre was set up and has initiated conservation education programmes in various protected areas, disseminating effective methods it developed during the Conservation Education Project.

The Centre's mission is Nature Conservation through Education and the aims are:

- to develop innovative techniques and aids for nature conservation education;
- to provide consultancy and training services in conservation education techniques;
- to provide a platform for advocacy and liaison with decision makers;
- to build support for biodiversity conservation in and around protected areas;
- to demonstrate and promote environment-friendly practices;
- to become the national centre of excellence for nature conservation.

• *The Centre's facilities and resources*

The Conservation Education Centre has an area of 825 square metres and uses the remaining 33 acres of land – deciduous forest – for nature study through nature trails and ecological research. The Centre consists of three public areas: the Display Hall, Discovery Room and Auditorium, with a separate administrative wing. It also has a small shop selling education-related gift articles (such as pencils, puppets, stickers, labels, puzzles, nature games, posters and wall-magazines) established to help financially support the Centre. Financial resources are also generated through project grants, programme fees and donations. In addition to the fixed facilities of the Centre, there are three thirteen-seat capacity mobile units, which are very important for outreach to schools and villages.

The Centre is well equipped with communication equipment, such as a video, slide and overhead projectors, a good collection of educational films and slide sets on biodiversity and environmental issues on both rural and urban environments, a public address system, a variety of interactive education materials (flash cards, story boards, game cards etc.), as well as themed displays and exhibits. The activities planned in the Display Hall and Discovery Room enable visitors gather information about the environment independently.

• *Target groups*

In order to develop and sustain the broad-based support of people from different sections of society for nature conservation, the Centre has been interacting with a variety of target groups including students, teachers, teacher trainers, government officers, defence officers, police and customs officers, NGO workers, journalists, decision-makers and corporate groups, and a variety of interactive, innovative and informative education programmes have been developed for these diverse sections of society in both urban and rural areas.

The Centre also runs various natural history courses (from general biodiversity conservation to specialized ornithology and entomology) for anyone interested in nature conservation, developing knowledge and skills, and encouraging course participants to later work as volunteers in conservation programmes of the British Natural History Society and other organizations.

• *Students*

With approximately 15 000 students visiting the Conservation Education Centre annually, students are one of the main target groups. The main objective is to provide every student with opportunities to acquire the knowledge, values, attitude, skills and commitment needed to protect and improve the environment.

Special programmes have been developed for underprivileged students – those who are physically and mentally challenged, street children, and slum children – as well as for economically challenged schools. For the latter, for example, the Centre has been developing and disseminating "Dhanesh" (Hornbill) – a wall magazine which is very popular among students and teachers.

- **Teachers**

Clearly the role of teachers in creating awareness and positive attitude towards the environment is crucial. Trained and motivated teachers can effectively develop positive environmental attitudes and skills in pupils. The centre, therefore, has developed programmes targeting teachers also.

Interacting with primary school, secondary school and college teachers through a series of workshops, the Centre develops their capacities in Environment Education (EE). The workshops help teachers understand the meaning of environmental education and how it can be made an effective and enjoyable experience in the classroom. They are equipped with further knowledge related to biodiversity and the environment, as well as non-formal education methods. These workshops not only motivate teachers to implement conservation education in schools; they also enable teachers to develop plans for this. In addition, they are provided with a "Green Teacher's Kit" containing information on India's environment, conservation issues and resources for conservation education.

Another project initiated by the British Natural History Society, in technical collaboration with the United Kingdom's largest conservation organization, the Royal Society for the Protection of Birds (RSPB), is entitled 'Education for sustainable living' in the Maharashtra state, aiming to develop effective methods and educational resources. The project intends to develop high quality, colour, locally-written teachers' guides and posters, based on sustainable development issues. These will be developed by a group of teachers from urban and rural areas, with the process facilitated by the Conservation Education Centre's education team. These materials will be distributed to 20 000 teachers and Eco-Club leaders in Maharashtra's secondary schools, educating them in sustainable development and helping interaction with up to 100 000 children a year for at least four years.

- **Local non-governmental organizations and government departments**

Other benefits of the 'Education for sustainable living' project include supporting local NGOs to become more effective in implementing sustainable development and education projects and local communities to become more proactive, participating in projects that improve environmental services and reduce negative human impact on the environment. Based on the Maharashtra project experience, BNHS and RSPB will later replicate the 'Education for sustainable living' project in other states of India.

The Conservation Education Centre also targets, through interaction, various departments of the Government, particularly the Forest Department, police department and defence agencies, as well as development NGOs, promoting the philosophy of sustainable development. A series of workshops and seminars, conducted on subjects (including development and environment, sustainable development, wildlife trade and networking for wildlife conservation) have been instrumental with these groups. Consultancy services print and electronic media on conservation education and sustainable management of resources have also been provided.

More specifically, the Centre has been helping the Forest Department set up nature education centres in wildlife sanctuaries and national parks in various parts of India. One such centre is under development in Asola Bhatti wildlife sanctuary, New Delhi.

- **Corporate groups**

Often overlooked, corporate groups make up one of the most powerful and influential sectors and can play a major role in environmental protection. Such groups have been approached by the Centre to demonstrate and promote environment-friendly practices and technologies.

Project phase 4: evaluation of the consolidation phase education programmes

In order to evaluate the efficiency of the consolidation phase education programmes, an evaluation survey was conducted in both the project and control areas. The baseline and awareness-attitude surveys, carried out in the first phase of the project, gathered socio-economic information of the target population in the project areas, as well as information on their awareness levels and attitudes regarding forest conservation. Similar information was collected from the control areas. While conducting the evaluation survey, there was no need to collect further socio-economic information so focus was on the awareness-attitude levels of the respondents interviewed previously in the project and control areas. The same range of positive and negative statements pertaining to project area issues were used for the evaluation survey. A comparative analysis between baseline data and evaluation data was carried out revealing facts about the change in the attitude of people resulting from educational activities.

An independent observer with an appropriate social science background and acquainted with the project area was identified. He was made familiar with the objectives of the project and fieldwork through visits and published reports. The objective of having an independent observer was to ensure objectivity of the survey and to receive independent comments on the achievements and shortcomings of the field education programmes.

In sum, the educational activities not only helped increase the awareness about biodiversity conservation and its role in the region; they also generated more positive attitudes to conservation. Of more importance, the conservation of biodiversity is increasingly assured through these educational programmes.

Percentage increase in awareness levels		
Theme	Project Area	Control Area
Accumulation of pesticides in birds visiting agricultural fields and the detrimental effects of this	71%	0%
Forest department rules and performance of duties	57%	15%
<i>Individual responsibility regarding the forest park</i>	21%	28%
Disturbance of birds due to grass harvesting during the migratory period	19%	8%
<i>Tourism potential of the forest park and related economic benefits</i>	0%	5%
<i>Uniqueness of the forest ecosystem and relationship with presence of migratory birds in area</i>	0%	507%

Table 2. Evaluation phase: increases in awareness levels. Fields in italics indicate a greater increase in the control area than in the project area.

Results from comparative analysis of awareness in the project and control areas were surprising. Whilst on some themes, the awareness of those in the project area increased considerably more than the awareness of those in the control area (as would be hoped and expected), the converse was true for other themes (note the italics in the table above). This is likely due to the work of local NGOs (such as bird watching groups) within the control area villages implementing sustainable development and education projects, as well as the diffusion of information through word of mouth: After all, the Communication and Education Project of BNHS was not undertaken within a vacuum.

After two and a half years spent interacting with the villagers during the Conservation Education Project, significant change was observed in the attitudes of those in the project area when compared with the control area. Villagers' perception of the park as a natural resource had been so high at the start of the project that now increases in positive attitude can be seen only in terms of whether wildlife or man should have more rights to park resources. In addition to increased awareness of the importance of the wildlife found in the park, people's attitudes are now such that they are agreeing that animals should not be shot dead, even if they raid crops in agricultural fields. Such tolerance is seen as a positive change in attitude and, consequently, in practice.

Achievements of the of the Conservation Education Project

The field education programmes of the Conservation Education Project have been successful in bringing about attitudinal change in the local people who use forest resources to meet their daily needs. The processes and results are well-documented and available in three reports of the project:

1. Baseline Survey Report;
2. Communicating Conservation – report on experimental phase;
3. Communication and change – report on evaluation survey.

Environmental awareness, at the individual level, increased among people living in and around the forest. This is revealed by analysis of the pre and post intervention surveys. The planned Conservation Education Programme has played an important role in bringing about this change.

The feedback system enabled identification of the fact that conservation messages travelled from participants to non-participants, from children to parents, from one village to another. Many people adopted environmentally friendly practices (such as the use of fuel-efficient mud stoves and the minimum use of pesticides – using organic pesticides where possible). Formation of 'Eco-clubs', a 'Bird Watchers Group' and 'Village Action Committees' in the project area have helped develop support for, and maintain interest in, the conservation of natural resources. Furthermore, the attitude of the Forest Department towards people's participation in forest conservation has changed due to the project's function of liaising between communities and the Forest Department.

Conaclusion

During two and half years work, we have come to realize more about how biological diversity directly supports economic growth for thousands of people living in and around parks. Conserving these areas is often viewed as paying a huge cost in economic terms, so we need to find ways that are financially feasible for all stakeholders and sustainable over time for those living in and around the parks.

When protected areas were declared, people most affected were user groups as access to the resources on which they depended was restricted. This gave rise to often-highly exploitative clandestine encroachment on these resources, resulting in the exhaustion of vegetative cover and threats to critical wildlife habitats around the buffer zone. Humans and wildlife finding a sustainable balance is necessary for the conservation of biological diversity.

Carrying out baseline and attitude-awareness surveys before the intervention enabled comparison with the evaluation survey at the end of the project. This comparison identified areas in which attitudinal change was brought about by means of effective

communication, i.e. effective processes in which participants create and share information with one another to reach mutual understanding. It also revealed that the influence of a communication channel depends very much on the specific conditions at hand and that for some types of messages people find mass media more agreeable and credible than interpersonal communication.

During the consolidation/education programme phase of the project, those surveyed progressed from acquisition of knowledge about environmental conservation to 'how-to' knowledge (how to apply it). It is important to note that the survey measured awareness/knowledge of themes (such as innovative/alternative resource use). If people are not informed properly about how to use this knowledge (for example how to adopt the innovation), if they lack the necessary resources to act on this knowledge, and/or if it is not culturally acceptable, mere knowledge means very little. The Conservation Education Project work therefore worked to move a step further, stimulating individuals to form an opinion or attitude about the information they receive, such as an innovative alternative practice. Following this comes the decision-making stage. There are two options: adopt or reject the required change in practice. Even if the knowledge building and attitude changing stages have convinced an individual to change practices, factors such as scarcity of resources or negative attitudes of others in the environment may prevent changes in practice becoming a reality. Thus, it is necessary to keep in mind the whole process. In the third stage, the implementation stage, the individuals start using the knowledge to change practices.

While designing and executing the field educational programme, there was progress through these various stages: awareness, 'how-to knowledge', attitude development, decision making and practice changing. Changes in the attitudes of those in the project area may be attributed to the planned communication effort.

Villagers are aware of their dependency on the park for many necessary resources including cattle fodder, fuel wood for cooking and water for irrigating fields. They have now come to correlate human action and environmental impact – for example linking pesticide use and ill effects on the wildlife in the park, relating collection of dead wood and dung to disturbance of the nutrient cycle etc. Understanding these correlations they can identify 'how to' change actions such as collecting small twigs instead of huge logs.

The educational efforts of the Conservation Education Project have brought the villagers to the point at which they are willing to use alternative resources and methodologies. These include using biogas plants and slurry as organic manure restricting the use of pesticides; using the right dosage of pesticides if at all; and installing efficient cooking stoves which save not only fuel but also fuel-gathering energy, while providing a non-polluting cooking atmosphere). Our communication and educational efforts have led to community organization and practical actions.

Future and recommended actions

1. The Forest Department, mainly the park managers, need to understand that the people living around protected areas are their best allies and that a partnership must be forged to share the responsibilities and resources and work towards saving the ecosystem.
2. Park managers need to change their role from policing authorities to resource management facilitators.
3. Middle and lower level staff of the Forest Department need re-orientation through in-service programmes and other management skills training.
4. The Forest Department needs to work closely with villagers, village groups, NGOs, and other government agencies.

5. Local organisations – the village mandals, youth groups, women's groups, and eco-clubs – should be taken into confidence by the Forest Department. They can harness the village force and mediate between villagers, the Forest Department and other agencies. These groups can also help in field research and in making knowledge available to local people so that their comprehensive understanding of the system helps forge new relationships.
6. Local people need to act now, having obtained the necessary knowledge from the Conservation Education Project and other sources. They must get involved in forming cohesive village groups, local committees, youth groups and eco clubs, to further the development processes towards constructive village committees.
7. Local need-based solutions should be sought by local organizations, as a preferable alternative to existing government schemes being pushed down their throats.
8. Emphasis should be on promoting tangible, as well as intangible, benefits of protected areas to local populations and to the whole nation.
9. The parks attract large numbers of international tourists. Opportunities for ecotourism are considerable and local employment opportunities should be explored and integrated into the overall objectives and welfare schemes of the park. (For example, locals could be trained as drivers, guides, or in the service sectors attached to the tourist accommodation. Cottage industries for local crafts could be set up).
10. Mutual confidence and a formal channel of communication should be built among people, social organizations, NGOs and different government departments. They should work for a common goal: people-park co-existence. All decisions affecting the lives of others should be deliberated upon and an informed decision arrived at. Thus, people's participation at various levels needs to be strengthened. The Forest Department, with its mandate to conserve the area, should take initiative in this respect and be followed by others.
11. All people's groups, social organizations and development NGOs should work for a common goal: people-park coexistence. Any intervention in, or near, the protected area should be analyzed by all concerned parties, keeping this common goal in mind.
12. The Forest Department should become a positive example for others, eliminating corruption at all levels, improving skills in communication and providing training on the social approach to protected area management.
13. Women's groups and eco mandals prefer to undertake activities such as nursery raising and energy woodlots. The Forest Department staff, especially the Social Forestry branch, should provide the appropriate training to these groups.
14. The Forestry Department, in consultation with locals, should coordinate community tree planting and afforestation. Efforts could be divided into (i) fruit species in private land holding and (ii) multiple use tree species in common land. Species of trees could be prioritized according to their usefulness. Tree plantation could be taken up with individual villagers as well as groups. The Social Forestry Department should be involved to impart the necessary training.
15. Local NGOs, the Forest Department and concerned communities should evolve a comprehensive management plan to tackle issues of unauthorized livestock grazing, grass cutting and lopping of trees within the park. Issues such as herd size, composition of cattle, veterinary health care and alternative fodder availability should also be looked into.
16. The Forest Department should consider the development of park buffer zones, through existing government programmes to restore degraded land. It should also try to develop local irrigation facilities, improve livestock quality, and take up plantation of multipurpose tree species. These efforts will succeed if local people are taken into confidence.

17. The introduction of smokeless chullahs to local people needs to be supported with the appropriate chullah design, and it is necessary to train masons through government programmes.
18. Conservation education programmes should be planned carefully so as to include initial development intervention. This will reduce programme dependency on other agencies and their programmes.
19. The approach and methods evolved during the project, and the present activities of the Conservation Education Centre should be replicated in other protected areas to develop broad-based support of people for conservation of biodiversity. Based on the experiences of the Centre, the Bombay Natural History Society is in the process of disseminating the effective methodologies in conservation education to decision-makers in India and organizations beyond.

**Looking to the future: professionalizing
protected area communication**

Chapter 22

Beyond training: protected area organizations as learning organizations. Developing capacity to change towards management in partnership

Effective Communication for Nature Conservation

**A PIN Matra project¹ in Poland, Hungary, Czech Republic, Slovak Republic and Slovenia
(1997–2003)**

Frits Hesselink, Eddie Idle, Gwen van Boven²

Introduction

To introduce new concepts, new ideas and new practices, much more is needed than a training workshop in which knowledge is transferred in a one-way process. Training may provide people with new knowledge, but if the organization and the system in which he or she is working are not changing accordingly, it can be very difficult to apply the new knowledge. Many who have attended training workshops and courses will be familiar with the "re-entry syndrome" i.e. the shock of finding that applying the new ideas and information they have just acquired are greeted with opposition and scepticism. In addition to helping individuals, capacity development implies the need to help organizations to become learning organizations.

In the project the IUCN Commission on Education and Communication (CEC) carried out in Central Europe from 1997 – 2003, CEC tackled the problem of capacity development in protected area organizations with a strategy which recognised the need for long-term help (at least 5 years) and the difficulties in managing change of the magnitude needed. CEC's starting point was to develop capacity in the strategic use of communication in support of biodiversity conservation. In practical terms the approach was via a series of interventions: needs assessments, stakeholder interviews, workshops, training courses, development of local language fact sheets, checklists and articles, coaching through learning by doing in routine and pilot activities, informal and formal high level meetings, national and international peer review and evaluations.

Quite often the issues which had to be addressed appeared at first sight to be far from the topic of capacity building in strategic communication. The learning process applied as much to CEC as to the countries and organizations involved in the project. A process in various stages was planned in advance, but readjusted during the project as the needs of the various countries became apparent. The most important lesson learned was that capacity development in strategic communication – and most probably in many other fields – needs to address capacity development of organizational management at the same time: it cannot solely focus on the operational (communication) level.

The CEC challenge

CEC – the Commission on Education and Communication – is composed of more than 700 experts in government, academia and in the field in over 90 countries, helping communities and organizations to find their own solutions for the many barriers towards

most appropriate forms of participation in environmental management and sustainable development.

The Commission is the IUCN knowledge network that deals with how to make biodiversity conservation relevant to non-conservationists and addresses individual and organizational learning.

CEC advocates participatory approaches in environmental management and sustainable development and helps to develop the capacity needed to realize this.



Figure 1. Illustration by Peter van der Vet

In many cases nature conservationists in IUCN and elsewhere realize that they are 'talking to themselves'. They have difficulties in reaching out to other audiences outside the conservation community. CEC develops the capacity of conservation experts in the Union to communicate effectively with other audiences. As trends point in the direction of a landscape approach for protected areas, with co-management and public participation, communication as a management tool becomes more and more important. Many managers still think that communication is just about press releases, brochures, websites and publications. The changes they need to make to deal with the trends are far more fundamental than appointing someone with a responsibility for dealing with the press and media. It calls for a more strategic approach to communication³, where audience, objectives and messages are ascertained before media (and not the other way around, as often is the case). In the landscape approach, people are at the heart of the mission of a protected area: they live there or live close by, they are tax payers, they are visitors, they are supporters, their business benefits from ecosystem resources and services, they are the cause of major degradation and depletion of natural resources, they consume to the extent that they threaten biodiversity and opportunities for future generations. In the landscape approach there are no solutions without people. Managing protected areas, therefore, is managing people. Managing people means strategic communication.

Strategic communication contributes to the management objectives and mission of the protected area. It is targeted and designed to deliver a specific outcome: increase in awareness, new constituencies and partnerships, participation of key stakeholders, policy

support, development of local capacity for co-management, investment in social change. A successful protected area manager uses communication for his management objectives in all phases of the protected area management plan (identification, design, implementation, management & control). Communication is a discipline in itself. CEC is IUCN's knowledge network that can assist protected area managers in using this tool strategically and effectively.

Capacity development program for Central Europe

Capacity building in strategic communication is central to the mission of CEC. From 1997 to the end of 2003 the Commission was involved in a capacity development program for five countries in transition to help nature managers prepare for accession to the European Union and change their practices from a focus on 'policing' to a focus on 'management in partnership'. In the framework of the Pan European Biological Diversity and Landscape Strategy, IUCN and the other co-leaders⁴ for Action Theme III (communication, education, public participation and awareness) held round tables with interested countries in Central Europe to define a capacity development program to be carried out by IUCN and CEC⁵. IUCN undertook a needs assessment and gained agreement with five countries⁶ to engage in the program.

The first workshop was held in Banska Bystrica, Slovakia, by the European Centre for Nature Conservation (ECNC) and CEC, for decision makers from ministries and agencies in the five countries. The purpose was to confront them with the need for change in their view of communication, to show the benefits of a different approach and to plan the next steps.

Following the first workshop, all countries sent four participants to a further CEC-organized ten day regional training workshop in Debe, Poland, focusing on the use of communication to help solve actual biodiversity problems. During this workshop, the participants began to develop five country programs, tailored to their specific needs, circumstances and problems, as identified by participants. Identifying the real problem⁷ was the first difficulty. We learned to say, "The problem is, what is the problem?"

Once the problem had been defined and agreed, the wider implications of how to use communication within nature conservation organisations became clearer. To use communication strategically requires not only competent people, but also organisations which provide an atmosphere in which they can exercise their knowledge, skills and competencies. In short, the development of capacity in the strategic use of communication means the development of a capacity to change and to manage the change process effectively.

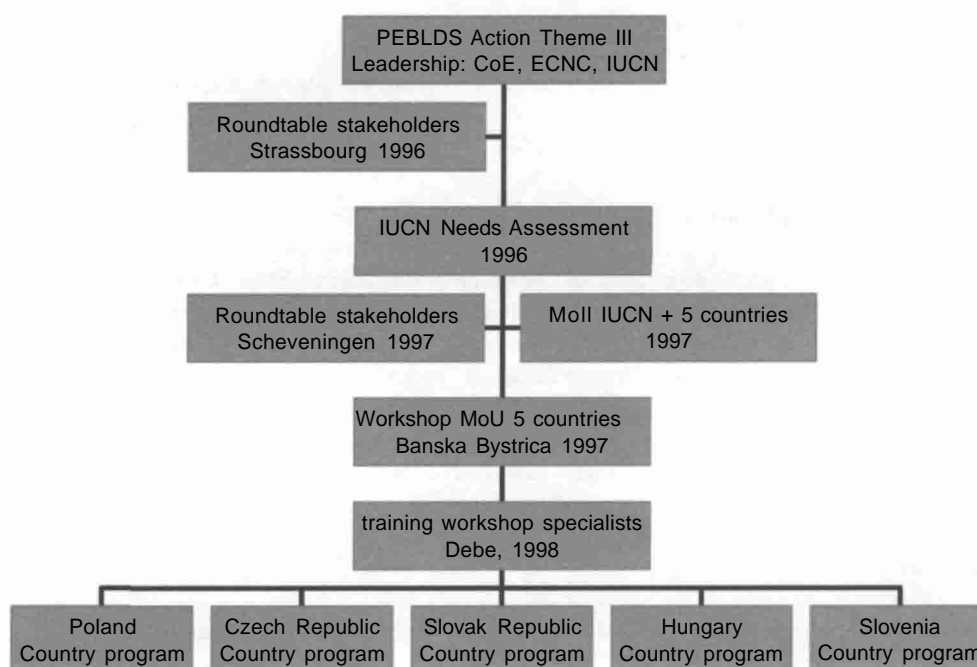


Figure 2. Events in the formation of IUCN capacity development programmes in 5 Central European countries.

Needs & system approach

The needs analysis had brought to light the following questions: "How do we develop our capacities to deal with different perceptions? How do we deal with our bad image and reputation? How do we ensure the participation of stakeholders? How do we motivate local communities to cooperate? How do we involve municipalities?" Quite explicit was the demand, "we need training; tell and show us what do and we will do it"

Of course training alone is not enough. If some people from an organization are trained, that does not mean they can use the new knowledge and skills when they return to the office. They operate within a system which has many elements e.g. an organizational culture and structure; a boss who may have other ideas and priorities; existing laws and regulations which need to be implemented; and deadlines to be met.

To make an impact with our capacity development program we looked at the system of management in each of the 5 countries and analyzed past and future trends. We asked ourselves, "How can we bring about changes in the wider system to sustain the positive effect of our actions?" And "In what ways could our efforts cause reaction in the wider system and weaken our results?"

Capacity development strategy

We came up with a strategy in 3 stages; later we made it 4. First we wanted to set up a network of key change agents in the 5 countries. In the second phase we wanted to realize in each country a critical mass of early adaptors around the change agents. In the third phase we wanted the participants to discover various individual and institutional barriers and in the fourth phase we wanted them to successfully overcome some of these barriers. And in all phases we tried connecting the learning as much as possible with the challenges of the Pan European Biological and Landscape Diversity Strategy and Natura 2000⁸ (N2K) for the countries.

**Beyond training: protected area organizations as learning organizations.
Developing capacity to change towards management in partnership**

Desired results	Interventions
<ul style="list-style-type: none"> • Change agents and network • Critical mass of early adaptors and tools • Applying knowledge & overcoming barriers • Breaking through individual and institutional barriers 	<ul style="list-style-type: none"> • International training and coaching activities • Local language tools and country training workshops • Pilot projects: learning by doing; coaching and advice; involving protected area management and agency • Pilot projects in Natura 2000: learning by doing; coaching and advice; protected area management and ministry

Practical experience

Working with people in ministries, agencies, protected area organizations and NGOs, we noticed that people in nature conservation work more-or-less in isolation. Their focus is on technical approaches and issues like, for example, the impression that more information is needed about the status and distribution of an uncommon species, habitat or ecosystem before any decision can be made. This tended to mean that the concept of participation of those outside the peer-group existed only on paper.

There seemed to be a widespread fear of communicating to non-experts and, most importantly, there was an almost total absence of basic organizational management skills. The real problems faced by management were not so much technical conservation issues (important though they may be) as problems in the organizations' capacity/ability to respond to the demands and protests of the people affected by, or involved and interested in, protected areas. The extensive technical background and know-how on nature conservation management contrasted sharply with the lack of professionalism in managing nature conservation organizations. This strengthened the link between the need for capacity development in the use of strategic communication and development in professionalizing the management of organizations.

Narrow vision on management

In the private sector, we find general managers who are familiar with all aspects of the organization's primary processes – those dealing with core business (e.g. production, purchasing, sales etc.) – and secondary processes – those supporting the business (e.g. human resources management, advertising, research and development, finance, administration etc.⁹). In their search for "success" they pay as much attention to what is happening externally in the world outside their immediate activities as to the internal processes of their business. At the same time, responsibility for each process is delegated to a middle manager.

The definition of the (primary and secondary) processes is an important step. If people are important, and usually they are, it is common to find someone in charge of consumer or customer care. Similarly someone takes responsibility for the quality of service or standards of production. In most large not-for-profit organizations (such as museums, opera houses, hospitals, etc.), the pattern or structural principles are often the same.

In contrast, in protected areas we often find general managers who are focused basically on the protected area itself (one of the primary processes) and very little on other primary and secondary processes. However, the trends and pressures from governments and public-opinion are towards a landscape approach, public participation and social and political relevance. This means that protected area managers need a greater external focus and much more creativity, flexibility and pragmatism in their organizational management. They can learn a lot from their colleagues in both the profit and not-for-profit sectors! In this kind of atmosphere or culture, strategic communication becomes an effective tool.

Trends call for a different management paradigm

The trend towards a broader-based landscape approach in conserving biodiversity means a shift from managing protected areas to managing change. Managing change means managing people, both externally and internally. It also means, perhaps first of all, changing our own attitudes and practices. Capacity development should then begin to help the development of a "learning organization."

Trends	
From	To
<ul style="list-style-type: none"> • Site/species based • Expert-led • Science dominated • Lengthy technical discussions 	<ul style="list-style-type: none"> • Wider landscape-based • Participative partnerships • Shared roles • Concentration of people processes.

Learning organization

In a learning organization networks and markets are more important than hierarchy. Individual contributions are more important than positions or titles. Employees are used to dealing with change and to taking their own responsibility. They are not waiting for others to tell them their job. Instruction is less important than discovering new opportunities; learning to do a better job. Of course this does not mean that important procedural matters are dealt with in a haphazard way.

Sometimes it is necessary to do things in a standard form, such as private companies issuing bills for services or nature conservation organizations granting permission for others to visit or collect in protected areas. Moreover, organizations often have legal, political and socio-economic constraints limit the speed with which they can make the changes to a learning organization.

Even where standard procedures are necessary, a "learning organization" will be searching for better ways of doing what is necessary. Managers have a crucial role to play in the development of these organizational characteristics. They need to be fully "on-board" in promoting the change from what the organization was, to what it wants to be.

Towards a learning organization¹⁰	
From	To
<ul style="list-style-type: none"> • Hierarchy • Collectivity • Vertical differences • Stability • Structure • Position, title • Final responsibility • Horizontal differentiation • Explaining • Waiting 	<ul style="list-style-type: none"> • Markets, networks • Individualism • Mutual equality • Change • Flexibility • Individual contribution • Self responsibility • Horizontal cooperation • Discovering • Progressing on own initiative

For capacity building this means: avoiding creating dependency on the 'trainers'; starting from needs; identifying and investing in key agents for change; looking for underlying causes that are an obstacle for new behaviour; identifying opportunities for success; focusing on improving reputation; and celebrating success.

**Beyond training: protected area organizations as learning organizations.
Developing capacity to change towards management in partnership**

Capacity development of human resources means working with people who often have various excuses or personal barriers in their growth towards new capacities. Often it is better to address the underlying causes of these barriers and let them discover that they can solve their own problems, such as progressing from "my boss suddenly gives me other tasks, so that now I have no time anymore for my project" to "why don't I think of an important role for my boss in my project".

Personal barriers or excuses	Potential underlying causes
<ul style="list-style-type: none"> • I have no time and no resources! • I have never done it! • How to break the ice with a farmer? • My colleagues do not keep agreed deadlines! • My boss suddenly gives me other tasks! 	<ul style="list-style-type: none"> • Planning and time management • Fear • Lack of self confidence • Lack of internal communication • No role for boss in project

Addressing underlying causes for personal barriers calls for more than training. It calls for coaching and advice. A helpdesk is a help! It should be available by personal interaction, phone or email and be present at vital stages to assist with preparation and provide feedback on performance. This was an important part of the capacity development in our program. We were a help desk for key actors in management and staff.

Characteristics	Training	Coaching
Needs Form Participants Duration Approach Content Didactics	<ul style="list-style-type: none"> • Theory • Programmed workshop • Group • One or more days • Steering on input • Knowledge, skills • Teaching good practice 	<ul style="list-style-type: none"> • Learning by doing • Short informal sessions • Individuals or small teams • One or more hours over period • Steering on output • Feedback on performance • Learning from mistakes

How do you know you are making an impact in the organization or system?

Our capacity development interventions during the program changed from focus on input to focus on output and outcome. The role of the international consultants gradually shifted from trainer to coach and from coach to advisor and helpdesk, especially in cases where local consultants were hired by the recipient countries to support the capacity development in their own language and social and cultural context.

Signals of step-by-step progress are more or less in the following order":

- start discussing what the 'real' problem is, and what the 'real' impact is;
- improve planning & time management;
- stop doing things the old way;
- start to copy behaviour that leads to results;
- discuss what is more effective;
- do things differently;
- improve internal communication;
- increase team work and project management;
- management takes the consequences of improved reputation seriously.

First signs of change were in the effectiveness of the key change agents. They started to think in terms of results and they considerably improved their time and project management. They started to work in teams instead of working in isolation. They learned how important it was to involve their bosses right from the start, to ask them questions

and to get a clear reconfirmation of tasks and approaches. In other words they learned 'how to manage their boss'. As the consultants worked in a way which made it increasingly difficult 'to lean on them', the key change agents started gradually to take initiatives and self-responsibility.

The start of an on-going professional discussion in their organizations about the real impact the organization could make was the first sign of organizational change. Hiring local communication and marketing consultants used to be exceptional in most countries and in others had never been done before. As a result of the program, most countries felt the need for this expertise and now the practice seems to be established. Internal communication is another important field where progress can be measured.

The most important sign of change was the behaviour of top management. In almost all countries the political head of the nature conservation sector was prepared to support the project, e.g. they were accessible and gave moral support. The ministers cooperated in the production of a brochure¹² on the role of communication in protected areas, featuring with their photo and a testimonial.

More importantly though – especially for the sustainability of the interventions – is the buy-in of the non-political head. For example, as a result of the project in Slovenia, the Director of the Environment Agency introduced the possibility of staff participating in existing local training programs for (organizational) management. The Director also introduced various elements of team building and internal communication. Over the years she provided increasing extra financial and moral support for the pilot projects and assumed various roles as ambassador for the strategic communication approach. Finally she and the Director of Communication of the Ministry made optimal use of the opportunity to receive international advice for various other strategic communication and management issues related to the National Biodiversity Strategy and Natura 2000.

In the protected area organizations, successful communication meant, in most cases, a considerable and measurable improvement of the reputation of the protected area among its major stakeholders. This in itself proved to be an incentive for managers to keep investing in external relations and strategic communication.

Main lessons learned

Lessons learned during these years working in ministries, agencies and protected areas were:

- Capacity needs were more 'organizational management oriented' than 'technical conservation'.
- The desired end result from any capacity program should be a learning organization.
- Training is necessary; coaching more effective; local professional advice the best.
- Understanding and support from the most senior levels in the organizations is a pre-condition.

The most important lesson learned was that capacity development in strategic communication – and most probably in many other fields – needs to address capacity development of organizational management at the same time: it cannot solely focus on the operational (communication) level.

Recommendations for a capacity development program for protected area managers

1. Capacity development programmes should aim for an outcome of a 'learning organization' so as to ensure the sustainability of the capacity development interventions.
2. Any capacity development program should contain a major component on improving organisational management skills, throughout all primary and secondary processes (including strategic communication).
3. Organizational capacity development programmes must recognise the extended period over which they operate and the extent of the changes they imply (i.e. annual "hit-and-run" projects are unlikely to have much impact beyond individuals).
4. Capacity development programmes should be seen as a normal "business-as-usual" and part of the ongoing/unceasing progress of organizations and individuals.

Notes

1. Over the 7 years the project was supported financially by the PIN-Matra Fund of the Ministry of Agriculture, Nature and Food Quality (www.agro.nl) and the Ministry of Foreign Affairs, the Netherlands (www.minbuza.nl). Financial and in kind contributions were also received from the Ministries of Environment and governmental agencies of the Czech Republic, Hungary, Poland, Slovak Republic and Republic of Slovenia.
2. Frits Hesselink, former Chair of the Commission on Education and Communication (1994 – 2000), is a private consultant and was involved in the design and implementation of all phases of the project (www.hect.nl). This article is based upon his presentation in the Workshop stream on Capacity Development in Durban. Eddie Idle, a former director of English Nature and a former President of Eurosite, is a private consultant and was involved in the project from the first workshop (Edward.idle@virgin.net) and provided valuable input in this article. So did Gwen van Boven who works for SPAN Consultants – the Dutch implementing agency - and participated in the third and last phase of the project (www.span.nl).
3. See also Hilbruner, R and Inanez, A., 2003, *Introduction to Strategic Communication*, GreenCom, Academy for Educational Development; Robinson, L. and Glanznig A., 2003, *Enabling Ecoaction, a handbook for anyone working with the public on conservation*, Humane Society International, WWF Australia, IUCN; Katus, J. and Volmer, W.F., editors, 2000, *Government Communication in the Netherlands, Backgrounds, Principles and Functions*, SDU, The Hague; Rientjes, S., editor, 2000, *Communicating Nature Conservation, a manual on using communication in support of nature conservation policy and action*, ECNC, Vermijs BV Breda
4. The Council of Europe, The European Centre for Nature Conservation and IUCN.
5. A two-pronged approach was used, one led by CEC and the other by the European Centre for Nature Conservation (ECNC).
6. Poland, Czech Republic, Slovak Republic, Hungary, Republic of Slovenia.
7. Quite often conservation managers tend to define problems on a rather abstract level. This makes it difficult to formulate a practical and result oriented strategy to solve the problem together with those who are part of the problem. The learning was to formulate 'small and more concrete problems' which - once solved - would contribute to the larger problem, e.g. 'the biodiversity threat caused by visitors' problem, became 'how can we help the organizers and local authorities to manage the yearly 1 May event in the protected area in a responsible way'.
8. "Natura 2000" is a European ecological network established under The European Union's Habitats Directive (1992) on the conservation of natural habitats and of wild fauna and flora. The network includes:
 - "Special Areas of Conservation" designated by Member States in accordance with the provisions of the Habitats Directive,
 - "Special Protection Areas" designated by Member States under the earlier conservation of Wild Birds Directive (1979).

Together these areas make up the "Natura 2000" European-wide network. Annexes to the Directives list the habitats and species whose conservation requires the designation of sites. Some of them are defined as "priority" habitats or species (in danger of disappearing). Annex IV lists animal and plant species in need of particularly strict protection.

Member States (including those applying for accession to the European Union i.e. the 5 involved in the present project) must identify and designate areas for protection and then take all the necessary measures to guarantee the conservation of the habitats and species, and to avoid their deterioration.

In fulfilling the requirements of the Directive, Member States are invited to "raise the level of public awareness ...by promoting access to information and participation in decision-making processes."

9. Primary processes deal with core business, e.g. the production of cars, the purchases of the raw materials and the sales. The secondary processes support the business: human resources management contributes to a devoted and well trained staff, marketing makes sure customers are satisfied and sales increase etc.
10. Based on Swieringa, J. and Wierdsma, A.F.M. 1990, *Op weg naar een lerende organisatie.*, Wolters Noordhoff Management; See for these trends in management also: Peters, T. 1992 *Liberation management*. Exel/Alfred A. Knopf, Inc.; Davenport, Th.H. and Prusak, L. 1998. *Working knowledge, how organizations manage what they know*. Harvard Business School Press; Black, J.S. and Gregersen, H.B. 2002. *Leading strategic change. Breaking through the brain barrier*. Pearson Education LTD.
11. For a comprehensive study on effective change see: Smith, R. 1997. *The 7 levels of change, different thinking for different results*. Tapestry Press, Irving Texas.
12. van Boven, G. & Hesselink, F., 2003, *Conservation Results by Managing Change, the Role of Communication, Education and Public Awareness, Experiences from Central Europe*, IUCN Switzerland.

References

- Hilbruner, R and Inanez, A. (2003). *Introduction to Strategic Communication*. GreenCom, Academy for Educational Development.
- Robinson, L. and Glanznig A. (2003). *Enabling Ecoaction, a handbook for anyone working with the public on conservation*. Humane Society International, WWF Australia, IUCN.
- Katus, J. and Volmer, W.F. (Eds.) (2000). *Government Communication in the Netherlands, Backgrounds, Principles and Functions*. SDU, The Hague.
- Rientjes, S.(Ed.) (2000). *Communicating Nature Conservation, a manual on using communication in support of nature conservation policy and action*. ECNC, Vermijs BV Breda
- Swieringa, J. and Wierdsma, A.F.M. (1990). *Op weg naar een lerende organisatie*. Wolters Noordhoff Management.
- Peters, T. (1992). *Liberation management*. Exel/Alfred A. Knopf, Inc.
- Davenport, T. H. and Prusak, L. (1998). *Working knowledge, how organizations manage what they know*. Harvard Business School Press.
- Black, J.S. and Gregersen, H.B. (2002). *Leading strategic change. Breaking through the brain barrier*. Pearson Education LTD.
- Smith, R. (1997). *The 7 levels of change, different thinking for different results*. Tapestry Press, Irving Texas.
- van Boven, G. & Hesselink, F. (2003). *Conservation Results by Managing Change, the Role of Communication, Education and Public Awareness, Experiences from Central Europe*. IUCN, Switzerland.

Chapter 23

Optimizing the use of research in order to consolidate communication planning for protected areas

Marco A. Encalada

Introduction

This paper presents experiences from the communication programme of group OIKOS – an Ecuadorian non-governmental organization promoting the sustainable use of natural resources. The programme focuses on the crucial role of communication research in the development of communication strategies to promote conservation.

The Communication Context

Whilst importance is, theoretically, given to communication in the management of protected areas in developing countries, in practice its planning tends to be limited and inadequate. Well known reasons for inadequate planning include lack of interest to use this instrument (communication) strategically in the majority of conservation programs and the scarcity of scientific exploration into methods for adapting planning to the great diversity of communication needs. Moreover, an important factor, as yet hardly recognized by the majority of critics, is the poor value given to communication research among those who practice environmental communication.

In 2003, the IUCN Commission of Education and Communication (CEC) selected over twenty communication programmes supporting protected area conservation in South America¹. A brief review of research procedures used in the planning of these communication programmes revealed that hardly any research supports the diagnosis and/or the development of communication strategies. In general, programmes sampled demonstrated that perceptions and social behaviours related to conservation issues and facts are not properly characterized, nor are existing communication systems clearly identified and taken into account. Likewise the social factors that directly or indirectly influence the adoption of practices related to conservation are not deeply studied. Additionally, there is only poor evaluation and little use of information available in academic and technical markets regarding analysis of the strengths and weaknesses of available communication media and techniques.

The main consequence of the lack of quality research is that, in the field, communication practice tends to be minimally effective. In turn this affects the prestige of the discipline in the context of conservation activities and creates conditions that further limit communication's contribution to protected areas. For instance, the lack of communication research limits access by communication professionals and management programs to evidence about the effectiveness of communication approaches and procedures. This also prevents communication programs being fed new theoretical and applied methods that periodically come about as a result of research.

More critical is the fact that due to the lack of research, or because of poor research, communicators and ecologists tend to deprive themselves of the opportunity to periodically examine the epistemological, theoretical and methodological relationships that exist between social communication and conservation of nature. Some practitioners are afraid that, if this persists, a gradual impoverishment of the practice of communication for

conservation will be induced. Strategic effort is needed to increase understanding about how social interventions should be managed – using well researched communication as a management instrument – in order to achieve conservation objectives.

Latin American efforts to optimize the use of communication research

In view of this situation, over the last ten years several environmental organizations in Latin America have made efforts to optimize the use of communication research to consolidate the planning and practice of communication and education in support of protected area conservation.

Components of communication planning requiring communication research include:

- appropriate audience segmentation and definition;
- factors (theoretical and methodological) that influence the sensitivity and motivation of audiences regarding conservation,
- comprehensive characterization of mass and community media systems;
- the influence of communication systems in the construction of people's perceptions and attitudes towards the practice of conservation;
- the extent to which the global communication systems are affecting local conservation behaviour.

Efforts have, therefore, been geared towards raising and renewing interest in methods for researching these components. This research enables a better empirical understanding of communication, making the case for the value of communication in the conservation field whilst also showing that communication must become a more efficient and cost-effective discipline, better integrated into the structure of conservation strategies.

The Ecuadorian non-governmental organization – Corporation OIKOS – has been engaged, for many years, in communication activities supporting the management of protected areas. OIKOS' main policy is to use communication research to support communication planning by helping identify conservation problems, communication needs and design requirements. Strategic communication systems can then be planned and implemented to support protected area conservation.

This paper describes some components of OIKOS' communication research experience used in the process of communication planning. It focuses on OIKOS' "Comunicar" communication program which promotes protected area and watershed conservation in the Andes of Ecuador.

The scope of the OIKOS communication program – "Comunicar"

With a strong emphasis on planning supported by formative research, Comunicar's main objective is to promote conservation of six important protected areas in the Ecuadorian Andes and the protection of related watersheds therein. These areas represent around 50% of all protected areas in Ecuador.

Program components include:

- stimulating sensitivity in populations settled in and around the protected areas (classified as "*substantive audiences*" – below) and motivating them to adopt conservation practices and protect their water resources;

- motivating well known leaders in various fields such as politics, economy, science, etc (classified as "*factorial audiences*" – below) in order to win their support for actions important to conservation;
- establishing mechanisms for dialogue between water users and communities that live in watersheds so as to guarantee watershed protection and the rational use of water over time.

In the processes of planning and implementing actions on these program components, communication research has been of paramount importance in assuring efficiency in the use of the communication resources. It has also been fundamental to increasing effectiveness and precision in the decision making processes. In the following pages some approaches and research methods are described. These have been applied in the program's communication diagnosis process and in the design of the communication systems.

Classifying audiences based on the social causes of conservation problems

Over the past 10 years OIKOS has adopted its own approach to classifying audiences towards whom communication efforts must be targeted. The approach stands on the assumption that every conservation problem has specific direct and indirect communication causes, social factors and structural constraints, all of which can be influenced by communication. The approach, therefore, highlights the importance of addressing the social causes of conservation problems.

In this process, "communication problem trees" are often used by OIKOS. These chart the various social causes and communication needs of conservation problems (See Figure 1 for an example based on watersheds).

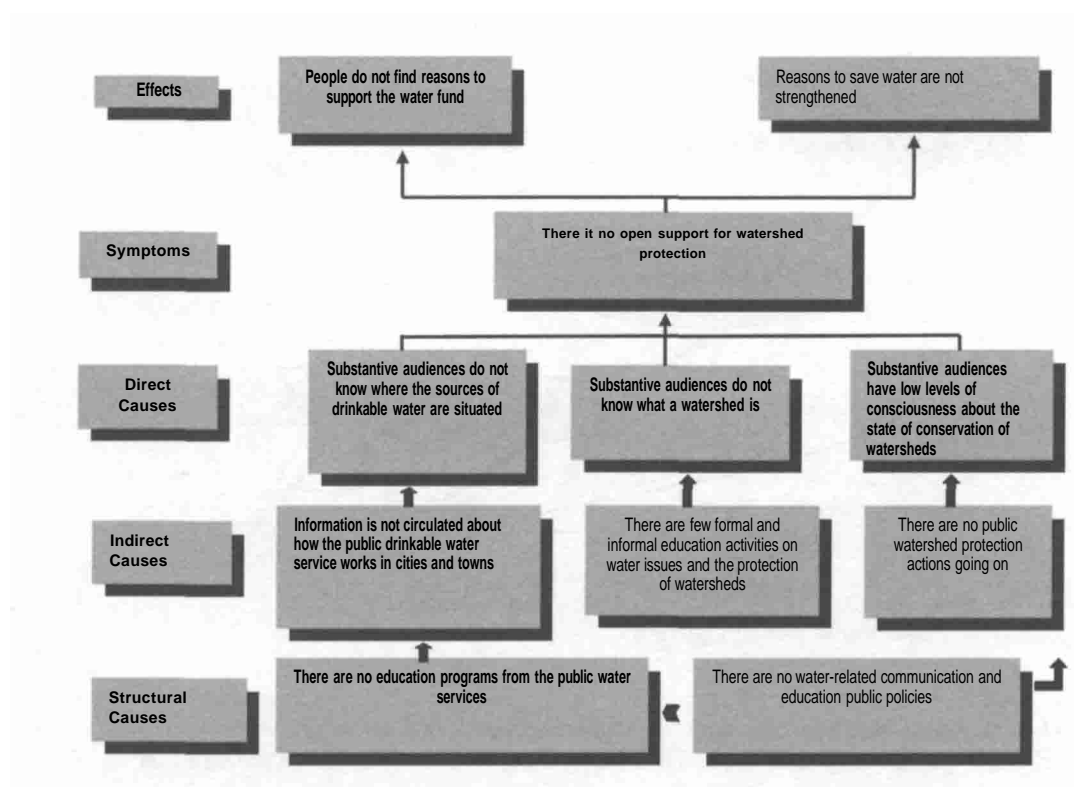


Figure 1. Communication problems tree on watersheds

According to their relationship with (i.e. proximity to and influence on) the causes of the conservation problem, audiences are identified and classified into four types: (1) *substantive audiences*, (2) *supportive audiences*, (3) *factorial audiences*, and (4) *general audiences*. OIK.OS' Comunicar communication strategy is then designed accordingly and this approach has proven very useful – especially when defining precision strategies and tactics.

In brief, *substantive audiences* are related to the direct causes of the conservation problem, whilst *supportive audiences* are associated with indirect causes². Beyond these audiences are groups who make up *factorial audiences* – related to social problems influencing the core problem – and *general audiences* made up of public opinion institutions and/or pressure groups which influence decisions of all sorts (of which decisions on conservation issues are just one branch).

1. Substantive audiences

If the essential conservation problem to address with communication is associated with the deterioration of natural resources, one will always be able to identify "agents" – the actions of who are directly related to the cause of the problem. These people make up the *substantive audiences*. They may live within or around the protected area and/or the watersheds and consumers of the natural resources. Additionally they may be visitors, scientists and workers undertaking activities in the sites. It is supposed that if these people do not change their knowledge, attitudes, behaviours, and practices affecting the protected areas, the conservation problem will not be solved. Therefore this audience needs to be at the forefront of all communication strategies. To achieve the desired conservation outcome, the most important communication efforts required target these *substantive audiences* (see Figure 2. Mutual Influence of Audiences).

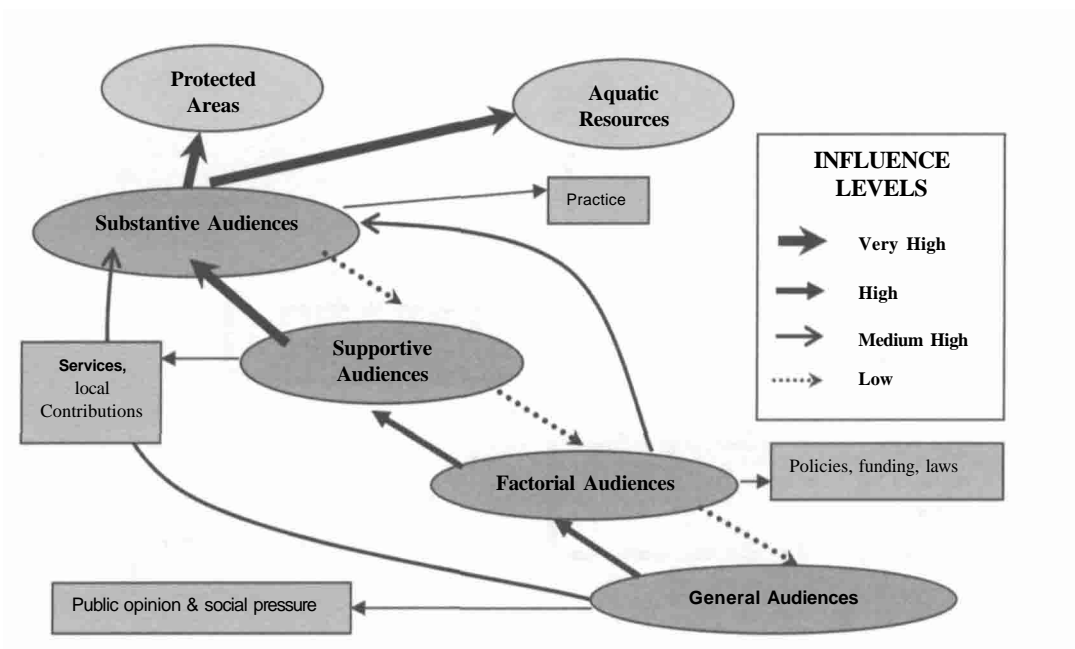


Figure 2. Mutual influence of audiences

2. Supportive audiences

The *supportive audiences* are constantly in contact with the *substantive audiences*, influencing them in various ways. Their incorporation in communication programs on conservation matters is essential. They need to be sensitized, motivated and trained to think, feel, and behave appropriately. In turn, they must communicate well and

successfully with substantive audiences in order to get their conscious and unconscious cooperation for conservation.

Some of the conspicuous members of this audience are teams from institutions working in the field to conserve resources and persuade local people of their importance, extension agents, cleaner-production advisors, and associations of state organizations and civil companies developing training systems for *substantive audiences*. All those who define and apply policies that directly influence the knowledge, attitudes and practices of the *substantive audiences* are also considered supportive audiences.

3. Factorial audiences

Factorial audiences have the power to govern decision making processes, including those affecting protected area management. These audiences are also responsible for creating the conditions necessary to enable *supportive* and *substantive audiences* to act in accordance with conservation requirements. Such important conditions tend to be those associated with economic, legal, political, technical, and managerial matters. This often involves the *factorial audiences* establishing policies, norms and programmes, as well as taking major formal operational decisions. Inevitably communication with these audiences plays an important role in attaining the requisite conditions for favourable conservation actions by other audiences.

Examples of *factorial audiences* include high-level officials of the Ministry of the Environment, Officials of the municipalities in the protected regions, high-level officials from governmental institutions with no legal authority over protected areas but indirectly linked to them (including the Ministry of Tourism, Agriculture, Foreign Trade, etc.), the National Congress, National Board of Justice and both national and international financing agencies.

4. General audiences

Finally, *general audiences* are the people who participate in processes that develop public opinion and social pressure around various issues – including conservation – that might be of interest to either specific groups or large numbers of individuals. They can influence the other audiences by setting the public agenda in support of conservation activities, or by publicly giving credit to the importance of performing favourable conservation actions in places that influence the preservation of watersheds and protected areas. As this audience can be influenced by communication, it must form part of any and all conservation communication programs.

Diagnosing communication needs

In the process of developing the communication diagnosis, the OIKOS "Comunicar" program involves research and assessment at two levels:

1. the general communication needs – considering the nature and status of present conservation efforts (working in collaboration with others involved in conservation on a broad scale);
2. the specific communication needs – exploring the perceptions of target audiences (working more autonomously and with a localized focus).

The results of assessments from both levels are taken into account during the processes of defining communication objectives, setting goals, building strategies and communication systems, as well as elaborating messages.

1. General communication needs in relation to necessary social responses to conservation

OIKOS analyzes the social responses (behaviours) required from the various social actors (audiences) in order to achieve the program's conservation goals. Required social responses include the development and/or adoption of new environmentally appropriate production practices in protected areas and watersheds; the performance of specific activities aimed at the ecological restoration in the ecosystems damaged by anthropogenic activity; changes in certain domestic practices that are damaging to protected areas; the legalization of land tenure in buffer zones; and the mitigation of activities that pollute the air, water and soils of these areas. Having identified the required social responses, the underlying communication implications are analyzed.

Since most of these social responses require the actors / audiences to adopt alternative practices or "innovations", OIKOS has used modern adaptations of the classical model of "Diffusion of Innovations"³ in order to identify the communication needs. This model sets the methodological and operational framework for communication to:

1. create consciousness about the existence of the innovation;
2. increase interest in the innovation;
3. generate knowledge about the innovation;
4. motivate trialling of the innovation;
5. help appropriately evaluate trials;
6. encourage decisions in favour of solid adoption of the innovation;
7. support the innovation with new and timely information for re-evaluation in order to consolidate it over time.

For each specific innovation (required social response), OIKOS researches: 1) the various steps involved in its adoption, along with 2) the basic actions that the corresponding audiences can be expected to perform, and 3) the various options for communication interventions necessary to stimulate the actions.

The results from this research method provide recommendations on the amount and type of communication needed for supporting the performance of actions necessary at each step in the process of innovation adoption. Additionally, the results enable OIKOS to determine the conditions under which there are actual opportunities for the adoption of innovations, as well as estimating their economic, financial, and social viability. With this information, communication systems and messages can be strategically designed.

The above analysis also identifies the social factors that must be influenced with communication in order to ease the adoption of innovations. This enables the definition of a preliminary working hypothesis for the global communications strategy. Among these social factors are political, economic, financial, scientific, technological, administrative, and educational factors, and the "*factorial audiences*" (below).

Likewise, this analysis facilitates an improved characterization of the various target audiences (audiences that should be worked with) and the social influence existing among them. These are important elements to take into account when designing communication strategies.

2. Specific communication needs of target audiences

To identify each audience's specific communication needs, OIKOS applies the diagnosis to focus on the state of people's perceptions, knowledge, attitudes, behaviours and practices about and towards conservation. The main research methods used are formal and informal surveys, focus group sessions and in-depth individual interviews.

The main elements considered relevant are audience perceptions and attitudes (often multi-level: personal, family, business, institutional and community levels) regarding:

- influence on the protected area (i.e. on the state of conservation, use of natural resources, production practices etc.);
- conservation needs of the protected area;
- potential to contribute to conservation;
- change and the adoption of innovative practices necessary to achieve conservation goals (economic, social and cultural capacities necessary; effort versus potential reward);
- potential to benefit from conservation of the protected area (tangibly and intangibly – materially, ethically, ideologically, intellectually, socially and emotionally);

In addition, analysis of the audience's communication structures and skills (their "communicability") is needed, including:

- extent of exposure to external information (whether from people, mass media, electronic information systems, etc.);
- capacity to assimilate and process information, defend rights, express views and innovate;
- social communication systems within the community (cultural groups within the community and communication media/infrastructure);
- informal networks of social influence (such as religious organizations, political groups, educational institutions, financial bodies, and related personalities).

The main research methods used for this target audience analysis are formal and informal surveys, focus group sessions and in-depth individual interviews.

*Perceptions and attitudes regarding potential to benefit from conservation:
Valuation of perceived effort versus reward.*

Audience perceptions and attitudes regarding their potential to benefit from conservation – especially the effort required by social responses (such as innovation adoption) versus the reward (point 4 above) – have been of particular interest to OIKOS. Research has thus addressed the extent to which such perceptions can affect motivation, confidence and adoption (or rejection) of favourable conservation practices. The proposed social responses (innovations etc) may then be adapted so that they are more favourable perceived and, hopefully, adopted.

In practice, OIKOS' procedure consists of rating perceived effort and reward (from 0 to 3). Aspects of intellectual, economical, emotional, ethical, physical and temporal effort and reward are surveyed. The average effort and average reward ratings will indicate the audience's perception of the proposed social response / conservation innovation.

OIKOS has found the best way to establish the rating indices – for example aspects of intellectual, economical and emotional effort and reward – is by means of focus groups with similar experiences and responsibilities in implementing conservation practices.

Legalizing land tenure in buffer zones: effort versus reward

OIKOS surveyed perceived efforts and rewards regarding the need to legalize Ecuadorian land tenure in protected area buffer zones for the sake of protected area and micro watershed conservation. The various audiences – substantive, supportive, factorials and general – were surveyed and the table show the average ratings for each.

Communicating Protected Areas

Audience	Average perceived effort	Average perceived reward
Substantive	1.5 = low	2.2 = high
Supportive	2.3 = high	1.4 = low
Factorials	2.3 = high	2.6 = high
General	1.8 = medium	2.4 = high

It was found that substantive and general audiences perceived the reward greater than the effort, while factorial audiences perceived effort and reward to be relatively neutral, and the supportive audience perceived a greater effort than reward. The results helped determine the types of communication actions that needed in order to improve the perception of general rewards and to minimize the notion of the efforts.

The table shows a breakdown of the indices used to evaluate the substantive audience's perception of effort versus reward (rated out of 3).

Efforts	Results	Rewards	Results
Intellectual: <ul style="list-style-type: none"> Understand the whole process Understand the technical process of the property's measurement 	2 3	Intellectual: <ul style="list-style-type: none"> Learn about future land transactions 	2
Economical: <ul style="list-style-type: none"> None 	0	Economical: <ul style="list-style-type: none"> Revaluation of lands Productive improvement Technical assistance Credit Access 	3 3 3 3
Emotional: <ul style="list-style-type: none"> Show confidential information Generate confidence towards strangers 	2 2	Emotional: <ul style="list-style-type: none"> Possession's security Personal – physical security Personal prestige Future transaction security Mental and emotional peace 	3 3 1 1 3
Ethical: <ul style="list-style-type: none"> Tell the truth about land possession. 	1	Ethical: <ul style="list-style-type: none"> Consolidation of an ethical position Political confidence 	1 1
Physical personal: <ul style="list-style-type: none"> Go with the program's team to measure the landed property 	1	Physical personal: <ul style="list-style-type: none"> Save physical efforts 	3
Time: <ul style="list-style-type: none"> Dedicate time to the landed property's measurement 	1	Time: <ul style="list-style-type: none"> Avoid trips outside the location 	3
Average	1.5	Average	2.2

Needs categorization

Analysis of both general and specific communication needs identified by OIKOS' communication programme – Comunicar – has revealed that the most important communication needs are associated with:

- Consumption and generation of factual information on various issues, particularly relationships between conservation and people's quality of life, interpretation of the problem's roots and the magnitude of its effects.
- Consumption and generation of conceptual basic knowledge about conservation and protection of water resources and its relationship with the factual information.
- Apprehension and generation of knowledge about practical processes that can be immediately performed in order to obtain results that support their most distinguished perceptive preferences.
- Creation of opportunities for dialogues at different levels for social reflection, decision making, agreements and consensus.
- Creation of opportunities for demonstration practices that reveal the viability and tangibility of applying cleaner production measures and options.
- Generation of opportunities to try out and evaluate cleaner production practices.

Some of the main conclusions of the communication diagnosis relate to the provisions that must be made within a communication plan in order to obtain the desired changes for the sake of protected area conservation. They also help identify short, medium and long term scenarios towards which work must be directed so as to get sufficient support for the sustainable conservation of protected areas.

Research as a contribution to the design of communication systems

The communication research for "Comunicar" has allowed OIKOS to make a conscious selection of "major" and "minor" communication systems that may be useful to meet the communication needs determined for each audience.

The term "major communication system" is applied to strategies of macro-processes that, by and large, make combinations of big media and large social communication processes to pursue certain results with a vision on the short and medium term. These usually respond to the "strategic objectives" of the overall plan and cover either a large segment of the audience, or several similar ones.

The communication research helps identify the major communication systems / social change models that best fit the conservation needs, or at least suggest how to adapt new approaches to meet these needs.

Notable communication and/or social change models.

The diffusion of innovations model. It is a classical one originated in the socio-anthropological tradition, which contributes with theoretical, methodological and operational elements, extremely important for the definition of social intervention programs and plans, especially of communication, for the promotion of new ideas useful and adaptable for the protected areas.

The "participatory communication" approaches originated in the practice of the Sociology of Change in Latin America. They pay a lot of emphasis on the importance of recognizing the right of people to participate in two-way communication processes among senders and receivers of the communication systems, as a way to optimize self

consciousness, mutual persuasion, and the adaptation of innovations to the tastes, needs, and perceptions of audiences.

The social marketing approach, which is very useful to raise interest and attention of the various audiences towards the issues and activities of conservation.

The instructional models of communication aimed at easing the development of information management and innovations learning processes.

The "minor communication systems" are chosen to sustain the strategies so as to achieve concrete results from specific segments of audiences. Obviously they are associated to the major communication systems, although the configuration is made on the basis of specific objectives, in reference to which small media, interpersonal or group communication events and message-production are carefully programmed and set. This is the way by which specific "tactics" of communication are established for implementation, such as: sensitization, motivation, consciousness and skills learning, where the same media or event can be useful for one or several tactics.

OIKOS has, in its menu, a wide range of communication media, processes and instruments that can be useful to attempt meeting the various needs according with the circumstances and the availability of resources. These may be interpersonal and group processes (mediated or not) and institutional, community, small, massive and electronic media.

Conclusion

It is hoped that the OIKOS experiences reported here can contribute to improving the standards of communication planning and research. With more rigor and effective diagnosis, conservationists and communicators will have more success in achieving their goals, which often include the adoption of new practices or innovations. By appreciating how people view the efforts in relation to the rewards related to such changes, more appropriate communication can be developed.

Notes

1. CEC (2003). Document of studies of communication about of protected areas. Meeting of experts regarding the role and impact of communication and education of how to handle protected areas in Latin America. Preparation meeting for the World Congress of Parks. Held in Buenos Aires in July, 2003.
2. In the Communication Problems Tree on Watersheds (Chart number 1), for example, the conservation problem is that there is no open support for the protection of watersheds. A direct cause is that the substantive audiences do not know what a watershed is or where these sources of drinkable water are situated. An indirect cause is that supportive audiences do not circulate information about the importance of watersheds or about how the public drinkable water service functions.
3. This model has been of great influence since the middle of past century by its considerably support to the modernization theories.

Chapter 24

Evaluating facilities and resources for environmental education and interpretation: criteria and indicators

Jaume Sureda Negre, Miquel F. Oliver Trobat and Margalida Castells Valdivielso

Introduction

Based on the extensive changes undergone in the theory and practice of management of protected areas during the 1990's, the concept of *communication* – including education, interpretation and information – has come to be considered one of the principal management instruments in these areas. This development, however, has not led to the increase of communication activities that would be logically expected.

Interest in evaluating the management of protected areas has increased with the realization that evaluation is a fundamental step towards the improvement of management¹. However, in these models of evaluation, the analysis of the efficiency and efficacy of communicative activities is generally dealt with only marginally and use is not made of contrasting or consolidating tools that would facilitate the process. Nevertheless, in the last few years some interesting research has been done on the evaluation of communication in protected areas².

Despite these advances, the evaluation of communication in protected areas needs to be more thoroughly researched, especially focusing on theoretical developments and case studies that would validate the tools developed thus far, as well as the principles on which they are based (Cifuentes, M., Izurieta, A. (1999)). As others have pointed out "the evaluation of management programmes is in its infancy" (Hockings 1998), and in the case of the evaluation of communication, we are at an even earlier stage.

This paper presents experiences and lessons from the evaluation of protected area facilities and resources for environmental education and interpretation. The evaluation was undertaken by petition of the regional government of the Balearic Islands (Spain), under the regional administration – the Council for the Environment of the Balearic Islands. The results were for use in planning programmes for environmental education and interpretation. Therefore, it was of special concern to find out, on the one hand, up to what point the current activities satisfy the existing needs and, on the other hand, up to what point the means and methods used in these activities are consistent with pre-established objectives. Focus was not upon evaluating impact and efficiency.

Communication, education, interpretation and information: the problem of terminology

In the management of protected areas, neither in theory nor in practice are the concepts of *education* and *communication* univocal. Moreover, various diverse concepts – education, interpretation, information, and communication – are often used to make reference to the same field of activities. To avoid confusion it is necessary to clearly define each of the terms used. Thus, *environmental communication* is the most general heading, and includes the other terms, as in: "the planned and strategic use of the *communicative* processes and resources in order to promote effective policies, public participation and the

launching of projects oriented towards environmental sustainability" (OECD 1999, pp 6). *Environmental education* then refers to the activities planned for school groups (formal education), or for other structured groups that visit the area for training purposes. The term *education* also applies to activities programmed by the administration of the protected area, but oriented towards structured groups outside the physical boundaries of the area.

The term *interpretation* refers to communicative activities carried out on site, and oriented towards occasional visitors whose reason for visiting the area is essentially recreational. These activities are designed to explain the importance of the natural, cultural and historical legacy of the area.

Finally, *information* refers to those activities designed to inform the public by distributing, to the general community or to any special interest group, information about any one of the aspects of the protected area.

Evaluating communication, education, interpretation and information facilities and resources in protected areas of the Balearic Islands

Analysis of the state of affairs reveals the need to develop resources that facilitate the evaluation of communicative actions in protected areas. The evaluation project elaborated in the Balearic Islands can contribute information relevant to other situations. As mentioned above, the project was petitioned by the regional authorities responsible for the management of protected areas – as part of a contract of collaboration between the Council for the Environment of the Government of the Balearic Islands and the University of the Balearic Islands (Sureda, Oliver and Castells, 2002) – and was carried out according to the stages indicated in Figure 1.

Stage	Sources of information
1 Classification of the facilities to be evaluated	Based on the analysis of facilities
2 Definition of the evaluation's objectives	Based on interviews with politicians technicians in charge of the project
3 Selection of the criteria and indicators for the evaluation	Based on available literature on this subject
4 Data collection Data analysis	Based on interviews, observations of the facilities, analysis of existing documents, etc Based on the established indicators
5 Preliminary analysis Identification of strengths, weaknesses, opportunities and threats (SWOT) for each protected area Analysis and assessment of the preliminary diagnosis with the managers of each protected area	Based on interviews
6 Final analysis Recommendations Proposals oriented toward the improvement of the facilities and resources	Based on the comparison of the first diagnostic with the opinions/assessment of the managers of the protected area Based on discussion groups

Figure 1. Stages in the evaluation process

Stage 1: Classification of the protected area facilities to be evaluated

During a preliminary analysis of the protected area facilities for environmental education and interpretation managed by the Council for the Environment in the Balearic Islands, it became apparent that the facilities are located in widely varying settings. Since the educational and/or interpretative activities can differ significantly depending on the setting in which they occur, the facilities were classified into two groups:

- facilities in protected natural areas
 - under management
 - not under management
- facilities in other settings
 - organized around a particular theme (e.g. classroom by the sea)
 - general nature (e.g. mobile classroom for environmental education)

Once these categories were designated, they were studied both individually and with reference to the structure as a whole (i.e. with reference to the policies on environmental education of the Council for the Environment).

Stage 2: Definition of the evaluation's objectives

As mentioned, the initial aim of the project was to evaluate the facilities in order to establish a basis for planning further interpretative programmes. However, during the course of interviews with pertinent politicians and technicians, undertaken with the aim of determining the interests of the Council for the Environment, it became evident that it was necessary to evaluate the adequacy and coherence of the educational and interpretative activities carried out in the aforementioned facilities. That is, it was important to find out, on the one hand, up to what point the activities were coherent, and on the other hand, up to what point the elements, means and activities formed a coherent system with the objectives to be met.

Accordingly, it was decided to base the evaluation neither on the analysis of the impact (results of the programme) of the educational, interpretative and communicative activities that were being carried out, nor on their efficiency (up to what point they meet the objectives). Rather, a type of evaluation was chosen that takes on some of the principal characteristics of a participatory evaluation: (a) placing high value on the viewpoints of the various agents, (b) considers the evaluation as a learning process for all of the participants, and (c) takes into account the negotiation amongst the participants when determining the results (USAID, 1996).

During the interviews more information was obtained on the following:

- situations which brought about the need for the evaluations;
- elements on which evaluations should be based;
- objectives to be met through the evaluations;
- type of decisions which the results of the evaluation might influence;
- people that might need the information obtained through the evaluations;
- sources of information that could be used;
- people that should be involved in the process of the evaluation;
- problems detected by the politicians/technicians.

Stage 3: Selection of criteria and indicators for the evaluation

In order to accurately evaluate the adequacy and coherence of the educational and interpretative activities carried out in the protected area facilities, it was deemed necessary to determine what key information to collect and the relative importance of the data that was collected. Through analysis of available literature on evaluation of protected area facilities and activities and especially on general standards for public use of natural areas, we defined what we call the optimal setting for communication in these areas. We defined

which aspects – or *criteria* – were to be evaluated. For each criterion, the most adequate indicators were defined, based on assessments carried out recently in other places in the world.

In order to determine the optimal setting for communication we analyzed two types of documents:

- documents that describe opinions about what a good communication strategy should be;³
- documents that offer an overview of the current situation (i.e. documents that describe the communicative activities that already exist in these areas)⁴.

In addition, we made use of other documents that focused on specific aspects – facilities, itineraries, etc. – of protected areas.

From our research into the optimal setting we concluded that environmental communication – which includes education, interpretation and information – serves three basic functions:

1. increases the knowledge and understanding of the value of protected areas that justify their existence;
2. increases satisfaction of the visit by minimizing or preventing the impact of visitors in the area;
3. increases the support and encourages the participation of the community living near the protected area.

Criteria and Indicators

Based on our understanding of the optimal setting, we then established the *criteria* (aspects to be evaluated) that could be developed to achieve the objectives for communication in protected areas.

From the criteria, we went on to identify the most adequate indicators for evaluating the criteria and their contribution to achieving the protected area communication objectives. These indicators guided the following evaluation⁵.

The following is a list of the *criteria* and indicators used for this evaluation.

Basic criteria and indicators related to general aspects and organization of educational and interpretative activities:

- Planning of educational, interpretative and communicative activities: coherency in management (between plans and activities); the existence of activity plans for public use.
- Economic resources allocated to the management of the protected area and activities for the public: resources specifically allocated for informative, educational and interpretative activities; plans for viability studies and maintenance.
- Human resources allocated to tasks of interpretation, education and communication: professionals dedicated to these tasks; initial and in-service/ on-going professional training; professional satisfaction; involvement of education and interpretation professionals in management; participation of local groups in management activities.
- Activities related to the promotion of the protected area: a corporate image; the use of a website, itinerant exhibitions, audio-visual resources, bulletins, books and articles; positive appearances in the media; material in information centres (tourism, youth etc.); active links with other associations.
- Existence of facilities: facilities for reception and information, for lodging, for recreational, educational and scientific use.

Criteria and indicators related to interpretation centres for visitors and their itineraries:

- Visitor centres: accessibility of location; handicapped visitor-friendly; linguistic diversity accommodation; suitability of opening hours; relevance of architectural characteristics (accordance with local environmental issues in terms of materials, energy consumption etc.); sustainability; capacity; visitor numbers; variety and versatility of space; public services (restrooms, shop, cafeteria); allocation of skilled human resources for management and interpretative tasks; resources for monitoring and control of visitors; protocol for information and interpretation (house-style etc.); interpretative messages and information content including welcoming message, code of conduct, orientation signs, direction for further information; breadth, depth, relevance, accuracy and suitability of information to various audiences; frequency of updates; monitoring and evaluation of visitor experience.
- Itineraries: quantity, diversity and suitability to the needs of various audiences; accommodating for linguistic diversity; adaptability to handicapped needs; appropriate resources; coherence and relevance of content; monitoring and evaluation mechanisms; follow-up activities; motivation to return; frequency of updates.

Criteria and indicators related to the target groups:

- Visitor satisfaction (various audiences): monitoring and evaluation of visitor experience; visitor numbers, visitor types and visitor frequency (i.e. one-off, repeat, regular); capacity studies; degree of satisfaction, complaints and suggestions.
- Attention to the local population: activities designed specifically for the local population; knowledge and acceptance of the protected area; involvement in management, projects and activities; active participation of local associations; monitoring and evaluation.
- Activities oriented toward school groups: programmes designed specifically for school groups; appropriate facilities and resources (economic, human, equipment, venues etc.); activities coordinating educational programmes with protected area management; variety of education levels involved; participation of professionals in educational functions; professional training; teacher involvement; teacher-training; didactic resources for teachers and students; preparatory and follow-up activities; regular updating of material; evaluation; relevance of activities' objectives and content; evaluation of programme and activities.

If the analysis is to be participatory, this proposed schema could be used as a working document that aids those involved in the evaluation to determine the indicators to be considered. If the evaluation is to be more traditional, quantitative assessment of the indicators is necessary.

Stage 4: Collection and analysis of data

During this stage, all of the facilities to be evaluated were visited by the authors of this investigation, in order to update the information that was already available and to compile data that was necessary for the evaluation. Then, the data was analyzed using the aforementioned indicators.

Stage 5: Preliminary diagnostic

Based on the data obtained and analyzed in the previous stage, a preliminary evaluation was made of the present situation in these natural areas, thus determining the strong points (strengths and opportunities) and weak points (weaknesses and threats). In order to obtain an accurate and effective evaluation that closely reflected the real situation, the preliminary diagnostic was presented to those responsible for the management of these natural areas, to compare and contrast with them the various aspects that could require slight changes or that were considered incomplete.

Stage 6: Final diagnostic and recommendations

As a result of this second round of interviews the preliminary diagnosis was completed, incorporating the comments made during the interviews. Once the final diagnosis for each of the facilities was completed, we compiled a list of general recommendations, valid for all of the different facilities, which included proposals to improve activities and to define objectives for education, interpretation and communication in protected natural areas.

General recommendations for facilities in protected natural areas

One of the outcomes of any evaluation, such as the process of evaluating the effectiveness of management of protected areas, should be a set of recommendations for improving the management (IUCN/WWF, 1999:5). Based on this principle, our evaluation included key recommendations on the facilities in protected natural areas and recommendations that refer to both facilities organized around a central theme and those of a general nature.

The following is a presentation of the recommendations related to the facilities in protected natural areas.⁶

Planning education, interpretation and communication within and across protected areas

- Management should collaborate with communication and education professionals to integrate education, interpretation and information dissemination in the management strategy of protected natural areas.
- Design, carry out and evaluate an annual education, interpretation and communication programme for each protected area. Each programme should consist of specific projects.
- Make sure the budgetary allocations are sufficient to implement the programmes.
- Create a system for coordinating all of the programmes of education, interpretation and communication in the protected areas that are managed by the Council for the Environment of the Balearic Islands, and homogenize criteria and activities.

Monitoring and Evaluation

- Make evaluation a fundamental aspect of management and include it in the protected area management planning process. (It must not be thought of as an added on element with negative connotations).
- In the planning stage, establish objectives that are specific, practical, oriented towards activities that can be carried out within a given period of time and may be easily evaluated.
- Determine measures to ensure that the planned and budgeted tasks are carried out.
- Establish a system of indicators used to evaluate the protected area education, interpretation and communication programmes on an annual basis. This system should be elaborated with the active participation of those responsible for the public use of the protected area facilities, and should form part of a systematic evaluation of the management of the protected area.

Human Resources – protected area professionals

- In planning and managing the education, interpretation and communication programmes, projects and activities, apply principles of participation and efficacy.
- Clarify the organization of labour and the delegation of tasks. (Problems in management result from vague job descriptions and jobs not specifically assigned to anyone).
- Make sure the human resources allocations are sufficient to implement the programmes. Do not assume responsibilities for which there are no resources.

- Ensure that those responsible for education, interpretation and communication have initial training coherent with the tasks required of them.
- Develop a permanent training programme for those responsible for education, interpretation and communication.
- Establish systems of incentives for jobs done well.

Collaboration

- Collaborate with diverse entities – groups, associations and institutions – in the organization of activities related to protected areas.
- Establish effective links between the parks and collaborating associations, creating systems that improve the communication and coordination between them.

Park identity policy – communication and promotion

- Determine the *identity* of each park (i.e. the public / corporate image that should be transmitted).
- Present individual protected areas as elements of a single protected area system: each should focus on a single theme and entice visitors, as well as encouraging them to visit other parks.
- Establish a communication policy for the protected area to follow when in contact with the media. Protected area news appearing in the local media often transmits a negative message that is later difficult to surmount. Designate a particular person for this job at each park, as well as to setting up measures for coordination amongst all the parks. It is recommended that formative and informative activities be developed for the media.
- Create a manual of signs (to guide and inform the public) to be used in all regional protected areas, developing uniformity and facilitating recognition.
- Establish a protocol for dealing with visitors.

Messages

- The orientation of programmes should not be limited to school groups. The erroneous concept that education refers only to school groups should be avoided and should not be allowed to condition all of the educational, interpretative and informative activities that are carried out in protected areas.
- Use of the protected area for the general purpose of providing information about the environment should be avoided. Instead, we recommend education on environmental protection, focusing on the management of the protected area, its objectives, programmes and activities.
- The subject of protected area management, protected area research and conservation work, and the history of the protected area, should all be fundamental elements communicated in the education, interpretation and communication programmes (especially those aimed at school groups).
- Give priority to contents that highlight the interaction between man and the environment. As other authors have pointed out: "We must give preference to a humanistic and dynamic image over one that is strictly naturalistic and static" (Bombil998).
- The contents of presentations, exhibitions, audio-visual displays and activities should be thematic. There must not be references to too many different things.
- Take advantage of special days of commemoration, Earth Day for example, to transmit messages to the public.

Itineraries and visitor centres

- Establish a protocol for those who deal with the public at visitor centres.
- Provide clear signposting and messaging.
- Focus on exhibits that are highly visual, interactive, organized around a central theme, and deal with protected area management.
- Be sure to regularly update guidebooks and itineraries.
- Accommodate for linguistic diversity.
- Maintain a policy on languages that is clear and tends toward greater efficiency (i.e. takes in to consideration the native language, yet is easily adaptable to diverse languages of visitors).
- Give priority to the quality of the visit rather than to the quantity of visits. Without a doubt, it is impossible to offer a comprehensive high quality educational programme within the limited time available for visits.
- Indicators should include visitor analysis, with a method standardized for all of the protected areas. This should cover aspects such as the visitor's place of origin, reason for the visit, degree of satisfaction, complaints, suggestions, etc. Create itinerant exhibitions in order to set in motion activities related to protected areas elsewhere.
- Create a website for the protected natural areas (bearing in mind that the Internet is a means of communication with immense possibilities, and that the number of users is increasing steadily).
- Create a document centre in each facility, housing a collection of all of the existing protected area documents. These documents – or at least a reference to them – should be at the disposition of the public.
- Increase the variety and quality of educational and informational material.

Local population

- As a priority, orientate educational, informative and interpretative programmes towards the local population (i.e. all of the islands' citizens and not just those who live in the municipalities nearest to the protected area).
- Design an annual programme of diverse activities – exhibitions, guided itineraries, talks, courses, articles in the local press, etc. – aimed at the local population, prioritizing the nearby municipalities.

School programmes

- Though educational activities should be diverse and not exclusively orientated towards school groups (as is, more-or-less, often the case), school programmes are important and should be thoughtfully addressed.
- The use of parks and related facilities by school groups for recreation should be avoided – or at least minimized.
- School programmes should be centred on the management of protected areas. There are two didactic uses of the parks: 1) as a didactic resource, and 2) as a resource for considering the management of protected areas. We recommend that the limited resources be used for examining protected area management.
- Carry out activities both before and after the visit, and make direct observation of the visit part of a comprehensive programme. This increases the time dedicated to the protected area theme, focuses the students' attention and maximizes the learning opportunity. It also helps monitor knowledge acquired, attitudes, etc. Although requiring a greater time investment, these factors are more important than the number of school groups that have passed through a given protected area.

Teachers

- Get the teachers involved in the educational activities that are carried out at protected areas.
- Prepare training programmes specifically for teachers.
- Elaborate educational material to make teachers' jobs easier (audiovisuals, programmes, etc.).
- Encourage teachers to visit protected areas, as well as welcoming protected area monitors into the schools.

Recommendations for the increasing evaluation capacity in protected area management

It is proposed that as a priority (in the Balearic Islands and elsewhere generally) the evaluation process be used as the basis for a training programme for those responsible for protected area environmental education, interpretation and information activities. This could be a participatory training strategy in which the indicators used and their results could be critically analyzed and could become the basis for establishing new management objectives. In this way, by contributing to ongoing training and improving activities, evaluation can contribute to achieving protected area management objectives through maximizing the efficient and efficacious use of communication.

Conclusion

It is not sufficient to simply pay lip-service to communication as one of the principal instruments of protected area management, yet often this is the case and communication activities are limited. In order to address this issue and maximize the use of communication as an instrument in protected area management, it is necessary to provide ongoing evidence of the efficiency and efficacy of communication activities. Evaluation of protected area management generally and communication specifically is a fundamental step towards this. Tools are needed to facilitate this evaluation process and more thorough research in this area is compulsory, validating the tools developed thus far and the principles upon which they are based.

It is hoped that results from the Balearic Islands project contribute to the development of resources for the evaluation of communication as an instrument for protected area management and that the recommendations derived from the evaluation process are used to improve the use of communication in protected area management. Indeed, the evaluation only has value if those in management responsible for decision-making commit to acting according to resulting recommendations.

Notes

1. In the development of these ideas, the investigations funded by the World Commission on Protected Areas of the IUCN, especially through the Task Force on Tourism and Protected Areas and the Task Force on Management Effectiveness have been essential. The studies by M. Hockings (1997), M. Hockings, M., S. Stolton, N. Dudley and A. Phillips (2000), K. E. Hornback, P.F.J. Eagles (1999), as well as contributions from the International Workshop on Management Effectiveness of Protected Areas (1999) are milestones on the road to developing interest in evaluating the management of protected areas. Other important contributions have been made by Courrau, J. (1999), Mallarack (2000), M. Cifuentes and A. Izurieta (1999) and the Institució Catalana d'Història Natural (2001).

2. Of special note are the work done in different forums such as those organized by the Commission on Education and Communication of the IUCN (The World Conservation Union, IUCN 1999, 2000), the conference Beyond the Trees (World Wildlife Fund WWF, 2000) celebrated in 2000, and the congresses of Europarc Spain in 1996 and 1999 dedicated to environmental education and evaluation, respectively (Europarc España, 1998) (Gomez-Limon, J., Múgica, M., 2000). Other noteworthy contributions have been made by Evaluating Environmental Education (Stokking, K., van Aert, L., Meijberg, W., Kaskens, A., 1999), and Best Practice in Park Interpretation and Education (Australian and New Zealand Environment and Conservation Council 1999).
3. Of the numerous studies analyzed in the former group we could mention Filho (1998), Rivera Silva (1999), Cifuentes (1999), Courrau (1999), Miguel Martin (2000), Gómez-Limón (2000), Hockings (1997, 1998, 2000). Hockings, Stolton, Dudley y Phillips (2000), Hornback (1999), The World Conservation Union (1999, 2000), Hornback, K.E.; Eegles, P. F.J. (1999), Europarc España 2002, Galician Strategy for Environmental Education (Xunta de Galicia, 2000), the results of the I Congress of Environmental Education in Protected Areas (Europarc España, 1998) and Learning in Protected Areas (The World Conservation Union 1999).
4. Of the latter group we found the work done by the Australian and New Zealand Environment and Conservation Council (1999, 2000) especially useful. These studies present, among other things, the results of a 1998 survey of more than 25 organizations, whose objective was to describe and analyze the educational and interpretational practices in protected areas in Australia.
5. The indicators that we propose are based on the analysis of available literature and on the consideration of the optimal setting for communication in protected areas. It is important to note that some authors consider that the term indicators should be used only in the cases where they provide quantitative information, and propose the use of the term descriptors to refer to qualitative information. In this article we do not make this distinction, as both quantitative and qualitative information can be found in our schema. This option, then, depends on the use that is made of our proposal, and the methodological options of the user.
6. In the two facilities in settings outside of protected areas, the particular characteristics of each one does not allow for general recommendations, but rather, the recommendations are specific to the management of that facility.

References

- Australian and New Zealand Environment and Conservation Council (ANZECC) (1999). *Best Practice in Park Interpretation and Education*. A Report to the ANZECC Working Group on National Park and Protected Area Management. Department of Natural Resources and Environment, Victoria: ANZECC Working Group on National Parks and Protected Area Management. Retrieved April 14, 2003, from <http://www.ea.gov.au/parks/best-practice/reports/interpretation/pubs/interp-and-edu.pdf>
- Australian and New Zealand Environment and Conservation Council (ANZECC) (2000). *Best Practice in Protected Area Management Planning*. A Report to the ANZECC Working Group on National Park and Protected Area Management. Parks and Wildlife Service Tasmania. Retrieved April 14, 2003, from <http://www.ea.gov.au/parks/best-practice/reports/management-planning/pubs/protected-area-management.pdf>
- Bombi, A. (1998). "Notas para el establecimiento de políticas educativas en parques naturales" en AA VV (1998). *I Congreso de educación ambiental en espacios protegidos. Reseva de la Biosfera de Urdaibai. 26-29 de Junio de 1996*. Servicio Central de Publicaciones del Gobierno Vasco. pp. 73-75. Vitoria.
- Cifuentes, M.; Izurieta, A (1999). *Evaluation of Protected Area Management Effectiveness: Analysis of Procedures and Outline for a Manual- Evaluación de la efectividad de manejo de areas protegidas: análisis de procedimientos y proyección de un manual*. Retrieved April 14, 2003, from:
http://www.nrsm.uq.edu.au/wcpa/metf/docs/PARKSfin_esp.pdf
http://www.nrsm.uq.edu.au/wcpa/metf/docs/Art_Eng.pdf
<http://www.nrsm.uq.edu.au/wcpa/metf/pages/pmdocs.htm>

- Courrau, J. (1999). *Strategy for Monitoring the Management of Protected Areas in Central America*. Document developed during a workshop organized in Tegucigalpa by PROARCA/CAPAS. Retrieved April 14, 2003, from:
http://www.nrsm.uq.edu.au/wcpa/metf/docs/MONITORING_english.pdf
<http://wcpa.iucn.org/taskforce/effect/pdfs/camerica-eng.pdf>
- Europarc España (2002). *Plan de Acción para los espacios naturales protegidos del Estado español*. Fundación Fernando Gonzalez Bernáldez. Madrid. Retrieved April 14, 2003, from
<http://www.europarc-es.org/pdf/planaccion.pdf>
- Europa España (1998). *Esparc 96. I Congreso de Educación ambiental en Espacios Naturales Protegidos*. Gobierno Vasco, Vitoria.
- Filho, W. L. et al. (Edit.) (1998). *Environmental education in protected areas. International perspectives and experiences*. Parthenon Publishing.
- Gómez-Limón, J.; Ramirez, L. (Ed.) (1998). *Seminario sobre educación ambiental en espacios naturales protegidos*. Centro de Investigaciones Ambientales de la Comunidad de Madrid "Fernando Gonzalez Bernáldez", Madrid.
- Gómez-Limón, J.; Múgica, M. (Ed.). (2000). *Evaluación de la gestión en Espacios Naturales Protegidos. Esparc '99. Actas del 5º Congreso EUROPARC-España*. Europarc España, Madrid.
- Hockings, M. (1997). *Evaluating Management Effectiveness. A Framework for Evaluating Management of Protected Areas (Draft for Discussion)*. IUCN World Commission on Protected Areas. Retrieved April 14, 2003 from
<http://www.nrsm.uq.edu.au/wcpa/anz/docs/Framework.pdf>
- Hockings, M. (1998). "Evaluating Management of Protected Areas: Integrating Planning and Evaluation" in *Environmental Management* 22(3): 337-346.
- Hockings, M. (2000). *Evaluating Protected Area Management. A review of systems for assessing management effectiveness of protected areas*. School of Natural and Rural Systems Management. Queensland. Retrieved April 14 2003, from
http://iucn.org/themes/forests/protectedareas/ME_Methodologies_Review.pdf
http://www.iucn.org/themes/forests/protectedareas/ME_Methodologies_Review.pdf
- Hockings, M., Stolton, S., Dudley, N., Phillips, A. (Ed) (2000). *Evaluating Effectiveness – A Framework for Assessing the Management of Protected Areas*. Gland, IUCN. Retrieved April 14, 2003 from
<http://www.nrsm.uq.edu.au/wcpa/anz/docs/BP6EvaEffectFinalComplete.pdf>
<http://wcpa.iucn.org/pubs/pdfs/EvaluatingJEffect.pdf>
- Hornback, K.E.; Eagles, P.F.J. (1999). *Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas*. Gland: IUCN. Retrieved April 14, 2003, from
<http://www.ahs.uwaterloo.ca/~eagles/parks.pdf>
- Institució Catalana d'Història Natural (2001). *Avaluació del sistema d'espais naturals protegits de Catalunya: la definició dels indicadors*. Retrieved April 14, 2003, from
<http://www.iec.es/institucio/societats/ICHistoriaNatural/Avaluacioespais.htm>
http://www.iec.es/institucio/societats/ICHistoriaNatural/Avaluació_d'espais.htm
- IUCN (1999). *Learning in Protected Areas – How to Assess Quality. Report of a European Conference Austria and Hungary, September 1998*. Gland: IUCN. Retrieved April 14, from
<http://www.iucn.org/cec/documents/Austria98.pdf>
<http://info.iucn.org/iucncec/documents/Austria98.pdf>
- IUCN/WWF (1999). *Management Effectiveness of Protected Areas. Summary of an international workshop*. Costa Rica. (<http://www.nrsm.uq.edu.au/wcpa/metf/pages/pmdocs.htm>)
- Mallarach, J.M. (1999). "Evaluación de la gestión de los espacios naturales protegidos: criterios, métodos y retos" in EUROPARC. *Evaluación de la gestión de los espacios naturales protegidos*. Actas del 5º Congreso Europarc España. Fundación Fernando Gonzalez Bernáldez. Madrid.

- Miguel Martín, P. (2000). *Los centros de visitantes: análisis de las funciones de recepción e información*. Barcelona y Palma: Universitat Oberta de Catalunya, Universitat de les Illes Balears.
- Rivera Silva, M^a (1999). "Interpretation versus education. Reflexións sobre o uso educativo dos Espacios Naturais Protexidos" in *Education Ambiental nos Espacios Naturais Galegos_A* Coruña: Universidade Da Coruña. Departamento de Pedagogía e Didáctica da Ciencias Experimentais
- Stokking, K.; van Aert, L.; Meijber, G, W.; Kaskens, A. (1999). *Evaluating Environmental Education*. Gland: IUCN. Retrieved April 14, from <http://www.iucn.org/cec/documents/ACF8044.pdf>
- Sureda, J.; Oliver, M.F., Castells, M. (2002). *Avaluació dels equipaments d'educació i d'interpretació ambiental de les Illes Balears*. Palma: Conselleria de Medi Ambient. Govern de les Illes Balears- Edicions Ferran Sintès. From <http://www.mediamweb.com/explica/EQUIPAMENTS.pdf>
- The World Conservation Union IUCN (2000). *Learning to Sustain. Promoting Understanding in Protected Areas*. Gland: IUCN Retrieved April 14, from http://www.iucn.org/cec/documents/Learn_to_sustain99.pdf
- The World Conservation Union. IUCN (1994). *Guidelines for Protected Area Management Categories*. Gland: IUCN. Extract of the publication available online.
- World Wildlife Fund WWF (2000). *Beyond the Trees Conference*. The conference presented almost 40 papers from specialists around the world. These papers are a comprehensive collection of information on global initiatives aimed at increasing management effectiveness of protected areas. Retrieved April 14, 2003, from: <http://www.panda.org/forests4life/spotlights/trees/index.htm>
- Xunta de Galicia (2000). *Estratexia gallega de educación ambiental*. <http://www.xunta.es/conselle/cma/CMA04d/CMA04df/p04df01c.pdf>

Chapter 25

Strategic intentions: using communications and education to support biodiversity conservation and protected areas

Haroldo Castro, Robin Abadia and Shannon Quesada

Introduction: Conservation International context

The success of protected areas is often determined by its stakeholders and will be based on their understanding of and support for the protected area. Ultimately, it is the individual and collective behaviour of these stakeholders that will make the difference. The realization that human behaviour is a fundamental component in saving our planet's biodiversity helped lead to the creation of Conservation International's (CI's) International Communications (InterCom) department more than ten years ago.

Conservation International has long been committed to using communications and education in its portfolio of activities. In fact, such activities support the organization's basic mission statement:

Earth's natural heritage must be maintained if future generations are to thrive spiritually, culturally, and economically. Our mission is to conserve the Earth's living natural heritage, our global biodiversity, and to demonstrate that human societies are able to live harmoniously with nature.

Additionally, Conservation International has determined that in the struggle to protect biodiversity for future generations we must ultimately do three things:

- prevent the extinction of endangered species of plants and animals;
- create and sustain protected areas;
- link remaining habitats through conservation corridors.

Our work with key stakeholders such as decision-makers, communities living in or near protected areas and general public consumers, contributes to the success of these outcomes. We prioritize where we do our work based upon three main geographic criteria:

1. Biodiversity hotspots

A preponderance of species diversity is found exclusively within the Biodiversity Hotspots, which combined cover a very small percentage of the Earth's land surface, approximately 1.4%. Each Biodiversity Hotspot has already lost the majority of its original species habitat (70% or more), and the remainder faces imminent threat of further destruction.

2. Wilderness areas

Earth's largest remaining tracts of pristine tropical forest are clustered in three areas – Amazonia, Africa's Congo Basin and the island of New Guinea. Unlike Hotspots, these major tropical wilderness areas are more than 70% intact and have low population pressure. Critically important for climate regulation and watershed protection, they are among the last places where indigenous people can maintain traditional lifestyles. Thirty-four other wilderness areas still exist, including desert and arctic ecosystems.

3. *Key marine ecosystems*

These ecosystems are the world's most biologically rich and productive ocean environments. They face severe threats from unsustainable coastal development, over fishing and pollution. Conservation International has researched major marine ecosystems and established top priorities for conservation activities, including Asia's famous Coral Triangle.

Communications and education for protected areas

The goal of Conservation International's conservation awareness efforts is to inform and inspire key audiences ultimately to change their behaviour in favour of biodiversity conservation. This behavioural change can take many forms and is specific to the targeted public involved. In many cases, however, awareness alone cannot change behaviours. Instead, a portfolio of other conservation tools must come into play - such as economic incentives or effective policy changes - for the final behaviour change to be realized. Without conservation awareness playing a part in this portfolio, however, the stakeholders involved may lack the motivation or information necessary to make sound decisions and put conservation into practice.

Conservation International defines conservation awareness as incorporating two distinct but complementary approaches: communications and environmental education (EE). Both are important methodologies that have clear advantages for Conservation International's projects. Communications often seeks to reach a large number of people, quickly, on a broad regional scale via television, radio, print publications, and campaigns. Through research into identifying sources of information for key audiences and the use of carefully crafted messages, mass communication can be far-reaching, fast acting, and locally targeted. It is an especially efficient way to reach large numbers of people when an issue is urgent.

Environmental education supplements this process by going beyond awareness, knowledge and concern for the environment and environmental issues, to also develop skills for target groups to participate in problem-solving, decision-making and conservation action. Although environmental education yields results both now and in the future, investment in it reflects a long-term goal of developing an educated citizenry with the capacity to think critically about issues facing biodiversity. Environmental education can either be broad-scale (as in formal education reform to integrate biodiversity conservation into the curriculum) or locally targeted (as in training rural educators to teach students and community members about biodiversity).

For protected areas, conservation awareness activities have the potential to:

- support the establishment (and proper management) of new protected areas by educating decision-makers and the public about the benefits of such areas to their country;
- encourage expansion of existing protected areas by communicating the benefits and highlighting successful examples of expansions in other regions;
- publicize any decisions to establish or expand protected areas among the international community and the political constituency of the region, rewarding the decision-makers involved for their positive behaviour;
- lobby for public and political support of protected areas that may be under threat from development projects;
- garner support among local communities that reside in or near protected areas, promoting transparency of information and enhanced trust in Conservation International and its partners;

- increase the understanding of ecological principles and their relationship to protected areas;
- reduce threat behaviours (such as illegal logging and forest conversion) in and around protected areas and instead promote sustainable practices;
- build national and local constituencies who are supportive of the protected area's long-term existence;
- facilitate participation of stakeholders and local communities to ensure greater buy in of key audiences.

Methodology #1: Creating communications strategies using the 4-P Workshop

Every country, region, corridor, protected area, and even site has a unique cultural background as well as economic, political, and environmental contexts. Effectively communicating a conservation message within these contexts means one should not simply repeat a successful formula for an awareness campaign or project.

To acknowledge and incorporate the differences between sites, Conservation International designed the 4-P Creative Workshop, a participatory exercise with about 30 to 40 people, which goes beyond mere formulas in order to create "custom-fit" communications strategies for specific regions, ecosystems or conservation outcomes. The workshop was inspired by different methodologies, including innovative advertising and social-marketing techniques, as well as the experience gleaned during other Conservation International gatherings. The first 4-P Workshop was organized in 1997 in Mexico.

The name "4-P" is derived from the four main sessions of the workshop, each of which begins with the letter "P": Problems, Publics, Products, and Plan. These four sessions make up the framework of the workshop. The goals are to:

- assess the Problems to be addressed in a particular geographical area;
- define the Publics that the message will target;
- identify the appropriate Products to reach these publics;
- design an action Plan, including a clear timetable for a two-year period.

Workshop participants include communicators and educators from partner organizations, members of the national and local media, marketing specialists, government officials, protected area staff such as directors or park guards, and other appropriate representatives of selected stakeholders who are directly related to the theme of the workshop.

Conservation International staff then refines the plan into a communications strategy during an internal session after the workshop, incorporating any funding, staffing, and scheduling realities. A final report is then made available to all those who participated so they can see their contributions.

If a full 4-P workshop cannot be organized due to funding or deadlines, Conservation International staff can hold a one-day "4-P Exercise." This internal planning session still covers the fundamental aspects of the full workshop, but without having the benefit of a variety of external perspectives or without the resulting "buy-in" and support once the plan is developed.

The morning session is reserved for brainstorming and reaching consensus on the priority Problems and target Publics, and the afternoon session covers the Products and the final Plan.

Methodology #2: Connecting practitioners through a network of communicators and educators

In 2001, a group of Conservation International staff decided to organize themselves into a Network of Communicators and Educators. This formalized Network allowed them to stay connected to one another and share information during the times when they are not physically together for a workshop or meeting. The objectives of the Network are to:

- connect professionals with similar technical backgrounds and responsibilities;
- share "lessons learned" across regions, such as sharing techniques for campaigns on similar themes, working with communities, or media relations;
- foster training and capacity-building opportunities, via exchange experiences or special courses;
- organize an annual gathering, called the Annual Retreat;
- create resource materials for use across the institution, such as Conservation International's "Handbook for Communicators and Educators", "Exploring Biodiversity", an educator's guide, and various templates for creating communications tools.

Since then, the Network has grown to about 30 individuals. The main event for the Network is an Annual Retreat, which is a gathering that allows for sharing of experiences, learning new skills, and hands-on training. The week-long event fosters the sharing of ideas and experiences among professionals working in similar roles and projects around the globe. They also have the opportunity to learn about new tools and available methodologies.

All communicators and educators try to attend on a yearly basis, as this is one of the few opportunities for professionals in this arena to gain new skills and build their capacity within Conservation International.

Methodology #3: Using campaigns to gather momentum

Conservation International may create effective and appropriate products, however, unless those materials are disseminated in a strategic timeframe to the proper people, the effort may not have the desired impact. People in any country, but primarily in urban centres, are continually bombarded with information and messages from television, radio, newspaper, street signs, and even word-of-mouth. For conservation messages to be heard amongst this "noise", a campaign must gather momentum and have well-timed "peaks and valleys". In the case of smaller communities, organizing events is a great way to reach large percentages of the population and ensure good participation among target publics.

There are several advantages to organizing communications outreach in the form of a campaign. This includes campaigns that:

- create media opportunities - allowing journalists to find more fodder for stories and features;
- address specific challenges or threats - especially those that are timely and need immediate attention;
- target multiple audiences - often reaching a broad scale and helping to "condition" audiences to receive more specific, tailored messages later;
- integrate many communication tools - creating opportunities for their distribution;
- organize efforts within a time frame - creating deadlines and life cycles that help concentrate efforts;
- rally partners and donors around a specific theme or need - collectively focusing energies and funds of many groups in one direction and achieving greater impact than would be possible alone.

When a new campaign is created or an important product is ready for release, there is an opportunity to host a launching event. Books, videos, new protected areas, or the release of "hot" scientific news, are all good excuses to bring media, decision-makers and partner NGOs together. When launching a campaign, events for the general public and children can take advantage of key dates, such as World Environment Day or the anniversaries of national parks. For example, the day before an evening reception, festivals for children can be organized to draw the attention of adults, teachers, decision-makers, and the press.

The launching of documentaries may also play an important role as centrepiece of those campaigns. A high-quality and professionally produced video can gather hundreds of key stakeholders together - including decision-makers and the media. These events create a unique opportunity to deliver the conservation message to priority publics. Moreover, if a partnership can be created with a local television station, the documentary may be broadcast to a larger public, reaching, in large countries, a few million people.

Education activities such as workshops, forums and seminars, can also be key elements of a campaign, as they reach certain audiences with specific information, and offer an opportunity for dialogue. By weaving these gatherings into the campaign timeline, communicators can take advantage of the opportunity to send a press release about the workshop, organize an evening reception with decision-makers, or produce and disseminate a report.

Case study 1: Celebrating Madidi National Park in Bolivia

Conservation International's awareness campaign for Madidi National Park in Bolivia sought to publicize a proposed dam project that would destroy a major portion of the protected area. Additionally, illegal logging was threatening the park, and decision-makers in the capital had very little knowledge of the park, and therefore were not taking actions to support its protection.

The strategy, designed during a 4-P workshop for the park, focused on the celebration of the fifth anniversary of the park at both the national and local levels. The "Madidi Week" - September 17 to 24, 2000 - drew attention to the uniqueness of this ecosystem, as well as the ecotourism work being done in an eco-lodge named Chalal?n, in collaboration with a local community. A local celebration gathered local communities near the national park for a week of festivities. The communities were given an official day off from work and school to attend the events, which included lectures, discussions, exhibits, a children's parade, drawing contests, puppet shows, video shows, skits and songs, and even a football match.

At the national level, Conservation International engaged journalists and held an event in La Paz in partnership with the National Conservatory of Music, with 400 people in attendance. Several communications tools were designed to support these initiatives, such as the logo for Madidi (which is now being used as the official logo for the National Park), posters, folders with media information, a short documentary on Chalal?n, a series of five TV public service announcements, a series of four radio spots, and a collection of materials for children (buttons, frisbees, stickers, pencils, and crayons).

Conservation International staff visited all major newsrooms of newspapers, television stations, and radio networks. In two days, the team made some 20 visits to media organizations, convincing directors to air the Madidi television and radio spots, distributing press kits to different outlets, and giving numerous interviews. As a result of this effort, seven newspapers published a dozen articles, more than 20 television

news stories were aired, and Conservation International's TV spots were broadcast at least 300 times by eight networks throughout Bolivia.

An important element of the campaign was the three-second appearance of the actor Harrison Ford - Conservation International's Board member - in one of the television spots, sending a simple but powerful birthday message to Madidi. Editors and television managers were amazed to learn that such an important celebrity not only knew about Madidi (most of them did not) but also cared about it. Because of his participation in this spot, Conservation International was able to gain more space in the Bolivian media and better catch people's attention.

Several positive results followed the campaign. The Park Director has since said that the campaign improved the parks visibility at the national level among policymakers as well as help communities feel connected with the park and its staff. Several follow-on environmental education activities were launched as a result of the momentum, including a mobile exhibit. The Italian Ambassador to Bolivia was so impressed he donated a large sum to the project. Finally, the dam project has still not been approved.

Case study 2: Educating local audiences about a new protected area in Guyana

While campaigns raise awareness about the importance of protected areas, education programs are also essential tools to reach local communities, allowing exchange of knowledge, and facilitating local participation in protected area design, planning and management.

For example, in Guyana, South America, a Conservation International education program is supporting the establishment of a new protected area in the Kanuku Mountains, an area of extraordinary biodiversity and intact forests. Despite its vast forests, Guyana is the only country in the western hemisphere without a system of protected areas. As in Bolivia, a national campaign targets decision makers and the general public. But in order to create the new area that will be the backbone of the protected area system, the process needed to include 18 indigenous communities in the region. The Government of Guyana asked Conservation International to lead a community consultation process in the Kanuku Mountains to integrate indigenous knowledge into the proposed management plan for the area.

An education program helped communities learn about new concepts and share their ideas, preparing them to provide input into the protected area design process. Like a campaign that links communication tools in a strategy, an education program makes sure that efforts go beyond a one-publication or one-event approach. The program, run by two former teachers from the region, has included educational materials, workshops and training for teachers, indigenous language interpreters and community leader. Teachers have played an important role, since they have the education and expertise to interpret new concepts for both youth and other community members. Trained teachers have been involved in leading summer camps for children, facilitating education activities at community meetings, and designing school conservation projects and awareness campaigns.

Education has helped clarify the myth that protected areas are all of one type and that they exclude people. For example, using IUCN case studies, workshop participants were able to understand categories of protected areas, concepts of zoning and the vital role that community participation plays in the success of protected areas.

Especially when addressing the complex and sensitive issues surrounding communities and protected areas, education programs can provide extensive and on-going opportunities for dialogue through a people to people approach. In the Kanukus, the education program has been key to facilitating community understanding of, support for and participation in the proposed area.

Lessons learned

Learning from our past experiences it vital to ensure our efforts remain effective into the future. Therefore, we recommend that institutions involved in communications and education for protected areas:

- Design concrete, yet flexible strategies that are created in a participatory manner.
- Ensure the presence of trained and experienced staff people who are connected across regions and offices.
- Use campaigns as centrepieces for communications outreach when appropriate.
- Design tools and activities that are tailored to local audiences.
- Produce high-quality products when reaching the general public or specific urban audiences.
- Form partnerships that allow for greater outreach and buy-in than if done alone.
- Evaluate the success of initiatives that translate to real, on-the-ground conservation outcomes - such as halting threat behaviors or influencing decision-makers.
- Secure on-going funding to sustain efforts beyond the life of the project.

Chapter 26

Promoting Protection through Pride

Rafael Manzanero

Introduction

RARE is a small conservation NGO based in Arlington, Virginia, that recognizes the need for new approaches to change people's attitudes and behaviour. Conservation is not only about endangered species or their threatened habitats. Conservation is about people. Whether it is rain forest destruction due to wild fires in Mexico, garbage pollution in the Caribbean or illegal wildlife trade in Honduras, it is people who are responsible for these detrimental activities and it is only through changing their behaviour that these trends can be altered. Public education and community outreach are pivotal in providing information upon which sound decisions can be made, as well as for communicating the choices and alternatives available.

Environmental education has the power to promote awareness about the natural environment, but this is not enough and education must also promote better understanding, build appreciation and, essentially, prompt people to action. Given the deep-rooted socio-cultural practices and trends related to environmental issues, this is no easy task.

Too often environmental education is dry, impersonal and has little effect. In many cases environmentalists find themselves preaching to the converted. In many others their messages are overly technical and daunting. People are repeatedly left with a sense of helplessness, believing that the situation is so serious that any action on their behalf will probably be futile. In addition, it has been common for environmentalists to point the finger at natural resource users (farmers, fishermen etc.) as the guilty party in the demise of the environment. Such approaches lack genuine understanding and appreciation of the social dimension of conservation.

For conservation to be really successful the public must connect with the cause and genuinely want to rally around it; they must feel an emotive bond to it. Too often, outreach and education programs target the mind. RARE has shown that targeting the heart may reap better results and, for more than two decades, has used island, national and/or regional pride as an emotive key in its program - *Promoting Protection Through Pride*.

Supporting RARE's mission "*to protect wild lands of globally significant biodiversity by enabling local people to benefit from their preservation*", the *Pride* program equips grassroots conservationists with the training and assistance needed to dramatically increase lasting public support for conservation and to generate immediate results for threatened species and ecosystems. Underpinned by pride and the use of social marketing techniques for community based education, the program works to bridge the gap between the scientific realm and the daily lives of local people.

Promoting Protection through Pride

Environmental education is generally an important program component for most conservation agencies; however, it takes on many different forms and methods. Developed in the small island of Saint Lucia some twenty years ago and since implemented in approximately fifty countries across the globe, RARE's *Pride* program brings together

diverse outreach and social marketing tools and sets in motion a continuous, well thought out, day-to-day environmental education program that is locally implemented and effective.

• ***Diploma in conservation education***

RARE's approach provides environmental educators-to-be with solid academic preparation in a Conservation Education Diploma Course at either the University of Kent, UK (in English), or the University of Guadalajara, Mexico (in Spanish). The initial course is for a period of ten weeks and provides training for environmental education candidates from conservation organizations. Those accepted onto RARE's diploma course must demonstrate a thorough commitment to staying in their communities and working towards regional conservation goals.

The selection process is rigorous. Both the organizations wishing to join the *Pride* program and their diploma course candidates are assessed. Ideally the candidates / students should come from conservation organizations: working on the protection of highly threatened sites of significant biodiversity; with a direct need for the *Pride* method; able to provide moral and financial support to the student; and with a deep commitment to success.

The following criteria are used by RARE as the foundation for objectively selecting the student educator (based upon which points are allocated to guide the selection process):

- *Conservation experience*: ideally three to five years experience working or volunteering.
- *Job security*: the more stable the person in a permanent position, the more likely and able they are to establish a sustainable environmental education programme.
- *Commitment*: based upon the time spent in voluntary service, the groups with which they are pro-actively involved in community affairs, the amount of support they have generated for their institutions and their values.
- *Community experience*: a working knowledge of community dynamics and ability to deal with organized community groups and communicate with local people in a respectful and thoughtful manner.
- *Origin*: with preference for locals from the community/region with better understanding of the conditions and greater ease relating with the target population to obtain support.
- *Academic level*: not necessarily a first degree but a Junior college certificate and the development of materials necessary for the education campaign) and the ability to drive a car and/or boat (as required).
- *Other skills*: such as a good working knowledge of computers (helping with reports and the development of materials necessary for the education campaign) and the ability to drive a car and/or boat (as required).
- *Enthusiasm*: ability to learn, level of open-mindedness to new ideas and the amount of energy demonstrated to undertake an environmental education campaign.

Most of the above criteria are assessed based upon the application form submitted by the applicant and respective conservation organization, reviewed by staff members and then referred to local specialists.

Candidates selected for the ten week Conservation Education Diploma Course then embark on exploring the foundations of social marketing and learning, biodiversity conservation, and the *Pride* method. They are encouraged to do well academically at the learning institution. Once they return home at the end of the course, they continue to be supported by RARE staff in order to ensure a sound conservation impact once they put into practice what they have learned.

- ***From diploma to action***

1. Full site research is undertaken by the educator in order to understand the situation.
2. A stakeholder workshop is held, inviting key institutions and leaders to help develop a conceptual model (according to the method developed by Foundations of Success, drawing on the experience of the authors of Measures of Success and using the Technology of Participation (ToP) method). The conceptual model depicts clearly the primary and secondary threats affecting the target condition.
3. Once direct and indirect threats have been exhaustively analyzed, it is time to articulate where education can impact to reduce or halt the environmental threat.
4. The educator carries out a survey of 1 % of the target area inhabitants. The primary objective is to understand the attitudes, knowledge and behaviour of the local residents.

Another stakeholder meeting is called, at which the assimilated data and conceptual model are presented and verified. The role of the educator is then to define SMART (specific, measurable, attainable, relevant, and time bound) objectives and describe specific deliverables. Focusing on these, the educators work towards tangible results, using a variety of activities to send the same message through different avenues and create an effective marketing tool.

5. To know and understand whether or not the program goals are being attained, RARE urges each student to develop their own Monitoring plan. This monitoring plan then serves as the backbone for verification of results in accordance to the calendar of tasks. Monitoring thus occurs throughout the campaign period. However, final results of the impact can often only be ascertained in the last phase of the campaign.
6. Each month the educator has a variety of tasks geared towards specific deliverables and objectives and reports to RARE on the tasks attained. Those not met must be pursued in the following month.
7. In addition to comparing the reports of the educators and providing feedback, to further verify the results attained in the field, RARE or University representatives pay at least two site visits for no more than a week each, while communication with the student via e-mail is constant.
8. After the first year of the campaign, educators and lead agencies are encouraged to keep the program ongoing and one of the ways to do this is by asking the educators to develop an environmental education strategy for their organization. For this, they return to the University for two weeks.

- ***Pride, social marketing and flagship species***

Pride can manifest itself at the individual, family, community or national level. It is an emotion unconstrained by social class or wealth. People do not have an innate pride for their local football team or a natural love for their flag and country; these are taught and reinforced over time.

All around us the phenomena of marketing and advertising work wonders. Advertisements don't just change knowledge; they change attitudes and behaviour too. As consumers, it is not rare for us to fall into the temptation of purchasing a new, and often useless, product as a result of effective advertising. Behaviour is influenced by peer pressure.

Mass advertising may give the impression that an activity (such as smoking) is rather "cool", "classy" and a popular thing to do. Mass advertising may also make a product appear popular, even when it is not. For instance, if one sees a new brand being advertised everywhere and then sees a few people wearing it, one is left with the impression that you must be the only one not doing so.

If a person listens to a sermon in church expressing the importance of protecting a manatee, then drives down the road and sees a large billboard asking people to respect manatees, arrives home and reads an article referring to the same species, and then his child arrives

from school and cheerfully tells him of a large manatee that visited them earlier that day - he is left with the sense that there must be something important going on here.

The *Pride* program also stresses marketing. As in business, the idea here is to successfully sell a concept. To do this a variety of activities and a flagship species are used. The local species should be charismatic, convey pride and be connected to the threat being addressed.

Designed to reach every segment of the target population, the educator applies numerous tasks as follows:

- *School song:* the Campaign Educator will solicit local assistance in producing a school song about the target species in order to make the school visitation component of the campaign livelier, and to reinforce lessons learned.
- *Other songs:* The educator will work with local musicians to produce one or more popular songs for airing on the radio. This strives to reach out to young people who have already left school.
- *Posters:* Colourful posters will be widely distributed in the communities throughout the target region at prominent sites such as supermarkets, schools, health centres and government buildings. The posters will show pictures of the target species and convey a message of its plight.
- *Puppet show:* Puppets are a manner of encouraging younger children to participate in the campaign and are fun to make and produce. The educator will work with local teachers to develop puppet shows of their own with the hope that such shows will be used widely in the school system.
- *School visits:* The Campaign Educator, accompanied with the flagship mascot, will visit schools within the target region to speak to as many children as possible. These talks will serve to introduce local kids to the species and its plight.
- *Bumper stickers:* Bumper stickers serve as a visible means of promoting the conservation message and a way of attracting local corporate support through tangible evidence of community participation.
- *Art/essay competition:* Competitions serve to reinforce and build upon the activities of a school visit. The sponsorship of prizes serves to further involve businesses in the conservation campaign.
- *Community outreach:* This task includes a mix of talks and lectures to community groups, the issue of press releases and the preparation of articles and/or interviews for the radio and TV. The task's objective is to carry the conservation message to a wider community.
- *Environmental news sheet/comic:* A monthly or quarterly Newssheet will be produced to furnish children with follow up activities. This task also provides scope for corporate sponsorship and may be used to continue outreach activities beyond the formal close of the project.
- *Sermon:* The church plays an important role in communities and the Campaign Educator will be encouraged to solicit the assistance of religious leaders by requesting their presentation of environmental sermons to their congregations.
- *Billboards & signs:* Billboards are a colourful eye-catching way of attracting attention. Placed at prominent road or water junctions they can be seen by a wide cross section of the local community and can afford an additional opportunity for corporate sponsorship. Signs designating protected area boundaries will also be developed by the program.
- *Legislation leaflet:* It is important for law enforcement officials to be aware of existing environmental legislation. Consequently, the Campaign Educator will produce a booklet/leaflet summarizing conservation laws that protects the species, and distribute the booklet/leaflet to law enforcement officers throughout the target region.

- *Fishermen's visitation:* The educator will work closely with fishermen's groups and will use this time to emphasize the benefits of wise use of the resources and the mutual need for sustainable development.
- *A-Z booklet:* The production of a booklet on the reserves wildlife provides school children with supplementary materials and resources to reinforce their interest in conservation.

The educational program becomes a full fun-packed endeavour, targeting schoolchildren, youth and adults. Yet at every segment of the population the message is only one and this is kept well focused. At the school level the young children sing, clap, dance and shout along with the costumed character while the educator explains the conservation message and provides all the children who bravely respond to questions various gifts including posters, badges and fact sheets. The children dance to the tune of a song composed specifically for the campaign and which relates to species and the environmental problem being addressed. Finally as the children are about to leave the classroom, the educator leaves an address so that children can write to their "favourite" species.

In Chiapas, Mexico, during the one year campaign conducted from 2000-2001, the educator received 780 letters from children who live in the highlands of El Triunfo Biosphere Reserve. All of the letters were warmly inviting their flagship species, the Quetzal (*Pharomacrus moccino*) to return to their home town and villages.

For the youth there are also fun activities such as puppet theatre and popular song. The popular song is developed around the main theme of the campaign and follows the popular rhythm or tune of the region, be it merengue, mariachis or calypso. To this day, more than thirty popular songs have been produced by educators using the skills and support of local artists.

Educators are also encouraged to explore other ways for reaching out to their public, and new, innovative ideas have been forthcoming.

In the Sierra de Manantlan Biosphere Reserve, the educator devised a billboard where local villagers could be informed about the level of the fire hazard for the season. The billboard described the levels as high, moderate and low, but interestingly the flagship species, namely the Mexican trogon, was painted on the same billboard and signalled the level of the fire hazard by means of its wings which were moved either up or down depending on the threat level.

In Chiapas, the educator devised an environmental puzzle as well as an environmental lottery which conveyed various environmental messages by means of illustrations whilst farmers played it. The lucky winners would also be given prizes such as t-shirts, posters and water bottles.

Over the last twenty years RARE has helped provide technical assistance to replicate the method in some fifty countries across the globe. During this time, we have recognized and learned from our local counterparts and agencies.

Lessons

Lesson 1: Local participation is crucial

The *Pride* program stresses the need (i.e. the need of a site for the environmental education programme) and local participation in order to ensure that efforts are used wisely and where

most beneficial. Local participation is critical, and begins at the initial phase (site research, stakeholder workshop and survey).

Once the program is underway, the educator is encouraged to involve as many leaders and key individuals as possible in the various tasks. The more people become involved, the more they will have a sense of 'ownership' for the program. We have observed that the more ownership is felt for the program, the greater chance it will have for being sustained overtime.

From children rallying behind the costume bird, sending letters to the water company paying for a calendar- people are integral to the program's success. From the local artist, who composes the popular song, to the priest reading a sermon for the protection of the species, and the housewife producing species-related crafts for sale - all become positive constituents. The concept is to generate as much enthusiasm as possible within the target audience.

In Chiapas, Mexico, and in Palau, Oceania, the children and adults went out of their homes to vote for their flagship species. The Executive Director of the Bahamas National Trust, Susan Larson noted that "there was unprecedented support for the community education campaign program and widespread community involvement in all of the activities tackled. The methods and orderly scheduling of activities, as outlined in the campaign manual, built momentum and capitalized on it as no other public program had done in the Bahamas before." This has been true of other campaign programs because of the integration of diverse individuals from all walks of life.

Lesson 2: Develop clear and measurable objectives.

As environmentalists, we are tempted to try and conquer several environmental problems and obviously want to direct an education program that can target many issues in a single blow, but this is neither warranted nor recommended. Environmental education has its limits and we need to be measured in our objectives and focused on what we want to accomplish.

Lesson 3: Selection of educator is critical to success

More than anyone else the educator and the local lead agency need to believe and be committed to the program. A critical step for the local lead agency, and a pre-requisite for running a successful *Pride* campaign, is identifying a capable counterpart to carry out the various tasks. With this in mind, the following criteria have been used as the foundation for objectively selecting the student educator. Based on these criteria, points are allocated which help guide the selection process.

Lesson 4: Wellfocused programs can achieve tangible results

Educators are taught to focus their efforts on specific deliverables. For over twenty years RARE has prompted educators to work towards tangible results. Once a goal is set, the variety of activities compliment each other by sending the same message but through different avenues. This combination of activities becomes an effective marketing tool.

Example 1: In the Sierra de Manantlan, Mexico, the goal was to reduce the surface area destroyed by forest fires caused by inappropriate agricultural practices among ten communities located inside the reserve (17 000 inhabitants). The Sierra de Manantlan Biosphere Reserve, consisting of 140 000 hectares, is located in Southern Jalisco and the neighbouring state of Colima. By the end of the program survey results showed that there was a 41 % increase in the number of people that knew the trogon with 51 % adding that they could identify the bird as a result of the campaign. An increase of 19% said that the forest was an important benefit obtained from the reserve by providing several environmental services. While an additional 10% increase occurred of those who felt proud of their reserve. But more important, the Secretariat of the Environment

and Natural Resources noted in their final report of 2001 that 22% of the burnt surface area was reduced compared to that of last year. Also it is important to note that five target communities in the campaign did not have any incidents of forest fires this year.

Example 2: In the Ria Lagartos and Ria Celestun Biosphere Reserve of Mexico, the campaign had the primary objective of promoting awareness and understanding of the threats of improper garbage disposal as well as the values derived by properly disposing of this among 75% of the inhabitants. By the end of the program, survey results indicated that 45% more people in Ria Celestun felt that by properly disposing of garbage was good for the natural environment. Of those interviewed in Ria Lagartos there was an increase of 43% who noted the same. Of those interviewed there was a marked increase of knowledge and understanding of diarrhoea, cholera, and dengue as a serious threat to health. In the case of dengue fever, 13% more of those interviewed in the post survey at Celestun and 15% in Ria Lagartos noted that this was a serious concern. More importantly, the environmental educator Mauricio Quijano notes that due to the conservation awareness program, people are more willing to participate in clean up campaigns. Mauricio reports that during a clean up campaign of 12 days in seven communities, children were able to collect 36 840 plastic bottles. For this activity, 3 050 children participated. His follow-up program consists of collecting 1 300 000 plastic bottles over the course of 120 days.

Other past "Conservation Education Campaigns" have facilitated many tangible achievements.

Reserve establishment: In The Bahamas (Abaco), The Cayman Islands (Cayman Brac), Grenada, Saint Vincent and Dominica. For example, RARE Centre assisted the Bahamas National Trust in conducting a *Promoting Protection through Pride* campaign on New Providence, Grand Bahama, Great Inagua and Abaco in 1992. This campaign resulted in the establishment of a 20 300 acre National Park on Abaco, thereby helping to conserve a vital area of feeding and nesting habitat for the Bahama Parrot.

Enactment of wildlife legislation: Wildlife legislation has been written or revised in Saint Vincent, Montserrat, Saint Lucia, Rota [CNMI], Kosrae, Yap [FSM] and Costa Rica. CITES regulations have been signed by Saint Vincent. In April 1996, Montserrat's Honourable Minister of Agriculture, Trade and the Environment, Mr. Charles Kirnon, wrote:

"Thanks for your [RARE Centre's] assistance during the drafting of the Forestry, Wildlife, National Parks & Protected Areas Bill. Many of your recommendations were used to produce a comprehensive and forward-looking piece of legislation... the legislation was enacted on February 13th 1996".

Wildlife populations are re-bounding: The population of the endemic Saint Lucia Parrot, [which was the focus of the first CEC campaign] has increased from about 100 - 500 birds over the past two decades. Writing on the efforts of Saint Lucia and RARE Centre's approach to conservation education, the IUCN Red Data Book notes:

"The recent history of conservation in Saint Lucia has become a model for other Caribbean countries and reveals an achievement unparalleled elsewhere in the world."

Lesson 5: Local sponsorship leads to sustainability

Environmental groups need to seek new methods and ways to generate funds locally for their conservation programs. The community education campaign program, because of its heavy emphasis on marketing, can generate much support from the companies and industries. Billboards, posters, puppet theatres and other material can be sponsored by local companies. Why would they want to join? - Because it can mean a lot of positive publicity for the company.

In Chiapas, during the Quetzal bird campaign a water bottling company Electron offered to publish 25 000 calendars at a cost of nearly US\$4 000. In Belize during the 1993 bill bird campaign the Rotary Club donated a large school bus to the Forest Department, while in Yucatan, the Coca Cola company funded the production of various materials.

In most campaigns, the educators have also been successful in obtaining sponsorship for the production of bumper stickers and colouring books, as well as in the provision of awards to art and essay competition winners.

Educators tend to express their admiration and astonishment at the level of support their efforts can attain. They are encouraged to make presentations to businesses and, because the program is appealing, an educator can usually come up with a concrete ally by the end. These allies are important to nurture since they can become a frequent sponsor and over time this helps to sustain the efforts of environmental education in the region. Generating local sponsorship and support also lessens dependency on external assistance and funding.

Lesson 6: Monitoring and evaluation keeps educators on their toes

Each student needs a monitoring plan to assess whether or not the program goals are being achieved by set dates. Monitoring must occur throughout the campaign period. An example of a monitoring plan from the Togean Islands follows.

Sub-Objective (01): By the end of the program, 25% [up from 19%] of the area's school children understand the importance of conserving the forest and the relationship with the marine environment, to ensure the health of the coral reef in the area, and can state two reasons for doing so.

What (indicators)	How (method and tasks)	By when	Who	Where
Percentage of school children who demonstrate knowledge of the importance of forest conservation and its relationship with marine condition	Survey: Develop and pre-test questionnaire	Month 7	Counterpart	Office
	Administer questionnaire to 25% of population aged 8-15	Month 10	Counterpart	Throughout target area
	Compare with initial survey	Month 11	Counterpart	Office

Table 1: Strategy for monitoring changes in children's knowledge.

Lesson 7: Follow-up strengthens the impact

Over the years, RARE has noted that several countries continue using the *Pride* method to build and strengthen support from their local constituencies for the protection of wild lands, endangered species or even to address other environmental hazards such as solid waste or forest fires.

In Belize, even after the 1993 campaign, the Belize Zoo and Tropical Education Centre, Belize Audubon Society, and the Forest Department have continued to use mascots to disseminate various conservation messages ranging from the yellow headed parrot and red-eyed tree frog to manatees. At El Triunfo Biosphere Reserve, amazingly even after three years the same Quetzal bird is being used to carry several messages ranging from forest fires and water conservation to gender issues.

As a result of these follow up initiatives it has been proven that indeed running CEC programs consecutively does strengthen the knowledge base among the target audience and promotes greater participation from the local stakeholders on matters **that** require conservation actions.

Conclusions

All of us have seen posters, badges and other educational materials created for educational purposes but the *Pride* campaign depicted here is different because it has specific objectives, it is organized month by month, it has local buy in, it selects best partners, it has a strong training component and emphasizes follow up. The RARE approach to achieving conservation aims by connecting to the emotions and developing capacity of educators with a proven method, has resulted in many success stories in different parts of the world.

Notes

1. Foundations of Success (FOS) is a network of individuals and institutions who seek to improve the practice of conservation. FOS is committed to working with practitioners to learn how to do conservation better. Key concepts and activities that FOS is involved with include adaptive management, the development of learning portfolios, and monitoring and evaluation. (www.fosonline.org as of May 20th 2004)

Chapter 27

Mass media and engaging journalists: supporting biodiversity conservation

Haroldo Castro and Jim Wyss

Introduction: the power of the media

Harnessing the power of the mass media is one of the most important and critical challenges for any environmental organization that wants to effectively change the habits and behaviour of a crowd, a nation, or even the world. Effective interaction with the mass media can have the following results:

- *Build constituencies:* By working with the media and effectively getting the conservation message out into the public arena, organizations can attract allies, convert foes and win the minds and hearts of those in power.
- *Multiply the message:* There is no single, more effective way of taking the conservation message to the masses than through the media. Moreover, by targeting different strata and hierarchy of media, environmental organizations can reach the audience that is most important to them at that moment- from rural farmers to government decision makers.
- *Catalyze action:* The mass media – through its power to educate, encourage and even intimidate – can induce action. A well-constructed communication strategy that catapults off the strengths of the mass media can create action and movement that result in profound changes on the ground.

Working with journalists

Although the ultimate goal of an environmental organization may be to interact with the media as a whole, that work truly begins on an individual level. While it may be self-evident, organizations must work with individual journalists and get to know those journalists as people if they ever hope to have an effective press outreach. This paper focuses on means by which to engage journalists in the work of environmental organizations.

Conservation International has developed four areas of interaction with journalists:

1. ongoing media outreach;
2. field visits;
3. journalism training;
4. awards and competitions.

1. Ongoing media outreach

One of the most important interactions a conservation organization and the media can have is the open and free exchange of information. Ongoing coverage and the daily exchange of information are the bread-and-butter of media outlets and a key part of having an effective communications team. Ongoing media outreach means interacting with journalists on a regular basis, not just when there is a pressing story your organization needs in the next morning's papers, but also responding to their requests.

2. *Field visits*

Field visits are another key element to producing solid media coverage of the environment. It is hard work for journalists to cover the great outdoors from the confines of the cubicle in their metropolitan newsroom. That is why it is so important for journalists to visit sites where conservation is taking place, so they can talk to the experts in the field and the communities that are being affected. Unfortunately, media outlets in many countries simply do not have the resources to send their journalists to the field. That is why it is important for organizations to consider supporting journalist field visits.

3. *Journalism training*

Another key pillar of solid environmental journalism is education and training. At Conservation International, the International Media Program hosts training seminars and workshops for journalists in partnership with the International Center for Journalists (ICFJ).

In 2002, Conservation International held workshops at Chalalán Lodge, Madidi, in Bolivia and Posada Amazonas, Tambopata, in Peru. In both cases, some 20 journalists from the region gathered to talk about their work, exchange ideas, develop event-based articles and learn from ICFJ and Conservation International experts.

During these workshops, print journalists worked on articles through peer critique, and television and radio journalists refined interviewing and production techniques. While the journalists built skills they were interested in, like investigative techniques and ethics, Conservation International got to share some of our most important issues with them and give enough background information on biodiversity issues that they could more effectively report on the subject.

These events are excellent venues for an organization to share pre-packaged exclusives with regional media. During the seminar in Tambopata, for example, Conservation International negotiated at least four exclusive stories that resulted in full-page spreads. Opportunities to work with local universities and journalism organizations to develop training programs should also be considered.

4. *Awards and competitions*

Another good way of encouraging increased coverage of issues that are important to conservation organizations is by sponsoring an award. At Conservation International we work with the ICFJ and the International Federation of Environmental Journalist (IFEJ) to host the Biodiversity Reporting Award (BDRA).

Launched in 1999, the BDRA is an environmental journalism contest that was held in six countries in 2003: Bolivia, Brazil, Colombia, Ghana, Guyana and Peru. The purpose of the Award is to recognize and reward outstanding international environmental reporting, and increase and improve environmental coverage.

One of the primary philosophies of the Award is that journalists should be rewarded with opportunities for capacity building and professional development. For this reason, the top prize every year is an all-expenses-paid trip to participate in an international environmental journalism gathering. In 2003 the six winners attended the annual conference of the Society of Environmental Journalists (SEJ) held in New Orleans, Louisiana. Peruvian winner Jorge Riveros was part of a panel on the illegal mahogany trade and the event gave all the participants a chance to share their experiences and forge excellent contacts with their colleagues. The winners of the 2004 contest will be attending the International Federation of Environmental Journalist's annual meeting in Mumbai, India.

The Award has proven successful in helping Conservation International build long-term allies with the press. Biodiversity Reporting Award winners have gone on to start environmental journalism associations, moved up the ranks to become editors and have

even started their own media outlets. Previous Award contestants are some of Conservation International's most valuable resources.

The Award has also helped build strong ties with organizations. In Brazil, the Award is co-hosted in partnership with the Alliance for Conservation of the Atlantic Forest, a partnership between Conservation International-Brazil and Brazilian NGO Fundação SOS Mata Atlântica. In Colombia, Conservation International works with the National Association of Environmental Journalist of Colombia (ANPA), which has been co-sponsoring the award since 2000, and, in Bolivia, Conservation International is working with the National Association of Journalists.

Over the years the Award has grown tremendously. When it was first launched in 1999 in Guatemala and Guyana, the contest attracted 19 journalists from six media outlets that submitted 42 articles. During the last cycle of the Award, those numbers had swelled to 241 articles from 125 journalists representing 86 media outlets. From 1999 to 2003 the Award has amassed more than 769 entries. During 2004 the Award is expected to expand even further, as it is held in Brazil, Bolivia, Colombia, Guyana, Peru and – for the first time – in Madagascar.

Chapter 28

Shared principles: heritage interpreters promoting sustainable development

Deanne Adams

Introduction

This paper presents principles and guidance for sustainable development heritage interpretation in protected areas. For the past decade rangers from around the world have been working together on shared issues, through the International Ranger Federation. The Federation has had four World Congresses, with the most recent held March 2003 in Australia, making resolutions and recommendations for action. At the last Congress one of the resolutions focused on our role as heritage interpreters, and specifically on the principles and our role in promoting sustainable development.

The Danish Nature Interpretation Service took leadership in shaping the early discussions of these principles, originally for a proposed international conference on sustainable development and heritage interpretation, by the Danish Nature Interpretation Service, in co-operation with the International Ranger Federation, IUCN and Heritage Interpretation International. The principles were then discussed, adapted and accepted at the International Ranger Federation's 4th World Congress in Australia, March 2003.

Definitions

The issue of sustainable development is gaining increased visibility though the definition is a source of discussion. Two definitions in common use are:

- Sustainable development or sustainability is "improving the quality of life while living within the carrying capacity of supporting ecosystems" (*World Conservation Strategy*, IUCN, 1980).
- Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (*Our Common Future*, Oxford University Press, 1987).

As the profession of heritage interpretation in protected areas grows throughout the world, the principles of the profession continue to evolve. "Heritage" refers to both natural and cultural resources that are protected.

Recent definitions from professional organisations in the USA and in Australia of interpretation are:

- "Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource" (National Association for Interpretation USA).
- "Interpretation is a means of communicating ideas and feelings which help people understand more about themselves and their environment" (Interpretation Australia).

Importance of interpretation for sustainable development

Many people working in conservation and preservation see implementing sustainable development practices as key to meeting the needs of humans in this generation while also protecting limited resources for the future. The rangers of the International Ranger Federation believe that heritage interpreters who are working in protected areas have a special responsibility to provide their audiences with opportunities to learn and to implement sustainable development practices. Interpreters are often a main contact point for many visitors to natural and cultural protected areas, either through personal contact or through interpretive publications, exhibits or films. Therefore they influence the reputation of the area and the organisation, the credibility of its work and its ability to build support for its work in the community. Interpreters can play a critical role in increasing sustainable development practices.

By being sensitive to the visitors and their interests, an interpreter can create powerful and memorable experiences drawing from the direct experiences in the protected area. Professional interpreters provide an experience that provokes critical reflection on sustainable development and multiple perspectives to issues. In addition working with communities around the protected area to develop sustainability practices can greatly contribute to the goals of protected areas.

Principles of sustainable development interpretation

The following shared principles can provide heritage interpreters with standards for dealing with sustainable development issues. They may be of value in gaining organizational support and could be used as a means for accreditation.

Practicing the fundamentals of high quality interpretation, a professional interpreter should:

- Develop an in-depth knowledge of the natural or cultural protected area that is being interpreted and apply that knowledge to build a range of relevant messages/compelling stories.
- Develop an in-depth knowledge of the audience. Recognise the perceptions, experience and knowledge of the audience members and develop the interpretive project with respect for a diversity of audiences, including those with cultural, age and gender differences.
- Apply effective communication techniques: develop clear objectives; organise each program or product around a central relevant idea or ideas; plan for all aspects of the project and evaluate the success of the interpretive work.
- Provide the audience members with multiple opportunities to find their own connections between the interpretive messages/interpretive experiences and their daily lives and motivations, thus providing the stimulation to reflect on their lifestyle.
- Recognise that it is inspiration, passion and emotion that often drive action.
- Use specific local sites, apply practical hands-on and active methods and involve multiple senses.

Encouraging and modelling sustainable development practices, a professional interpreter should:

- Incorporate sustainability principles throughout interpretive programs/projects and develop, with audience members, ideas for actions that are practical and realistic locally while considering broader or global impacts.

- Plan all aspects of interpretative events in a way that demonstrates sustainable development principles.
- Use materials from suppliers who exhibit responsible actions that support sustainable development.
- Strengthen the capacity of people to be involved in the decision making process about lifestyle and development.
- Demonstrate an honest, ethical and clear approach to sustainability.

Practical examples

Let us take these eleven principles and examine how they would work in developing and presenting an interpretive program in a protected area site. Using a hypothetical interpretive ranger drawn from experiences auditing and coaching interpreters from parks across the United States, this ranger is based in a park with mixed forest, exposed geologic features, and urban neighbours on the borders of the park. Let's imagine her name is Lee and she works in Good Forest National Park.

Lee has been a ranger at Good Forest for several years and has a broad understanding of the ecosystem of the park, the geology and the cultural stories of the people who historically lived in and around the park. Lee has been giving interpretive programs to general park audiences but has now been assigned to develop a program for 5th grade school students who will be using the park as a classroom, learning in the park, with their teachers and Lee as guides.

The first six principles apply to the fundamentals of high quality interpretation. How will Lee prepare for and apply these six principles?

Principle 1: Develop an in-depth knowledge of the natural or cultural protected area that is being interpreted and apply that knowledge to build a range of relevant messages/compelling stories.

During her time as a ranger Lee has developed a strong knowledge base about the park, through her research in the park library and through loans of university materials. She has taken advantage of lectures by visiting researchers and has volunteered with the bird monitoring team on some of her days off, to learn more about the birds who live in the park and those that migrate through. For the assigned classroom program, however, the school and park have already agreed that some aspect of geology will best meet the educational goals of the students. Lee must develop an in-depth knowledge of the park's geology. Lee spends a day in the park library, gathering reference materials such as books, photo records, and research journals. Then she schedules a visit the park's resource management staff, those rangers who are monitoring and managing the natural and cultural resources of the park. She asks for an overall update on new research in the park, then she spends a couple of hours with the park geologist, learning some of the interesting places that show how the park has been formed over the past million (or two) years. The interview with the park geologist enables Lee to focus on a few key geological stories for Good Forest National Park. Now she can return to the library and hone her research reading, based on the suggestions from the geologist. It may take her several more weeks of reading, fitted in between her time at the visitor centre desk and talking to visitors along the trails, before she is feeling confident about her knowledge of the park's geology. For now, her in-depth knowledge of geology in this one park has increased significantly and she is ready to build a range of relevant messages and compelling stories.

Principle 2: *Develop an in-depth knowledge of the audience. Recognise the perceptions, experience and knowledge of the audience members and develop the interpretive project with respect for a diversity of audiences, including those with cultural, age and gender differences.*

Lee not only needs to know the place that she is interpreting, but she also needs to have a good *knowledge of the people* who will be visiting. How can she gain this knowledge?

When she was developing interpretive programs for the general public she would take time to talk to visitors on the trails and outside the park hotel. She would answer their questions, but then ask some of her own, such as: "Why did you come here? What have you found the most interesting during your visit? What do you wish you had more time to learn about?" By asking a variety of visitors about their interests, she began to gain an idea of the motivations of visitors coming into the park and could tailor her programs to meet those interests. Before each program she would spend time again with those waiting and ask them what they knew about the topic she was going to discuss. She used that information to adjust her program to each audience so she could better meet (and exceed!) their expectations.

For this particular assignment, Lee knows she will be addressing a specialized audience - a classroom of 5th grade students who are studying geology with their teacher and will be spending a day in the park. In fact, the program she is developing will be used with dozens of 5th grade students from several schools around the park. Lee invests a half a day in visiting one of the classrooms, so that she can ask the students questions that will help her understand their interests. She joins a class, though before the visit, Lee studies the academic requirements for students at that level. She talks to several 5th grade teachers who will be bringing their students to the park, asking about specific information that the students are learning in the classroom, or any special requirements that students in that class have. When working with classes where the same teacher works with the same students for nearly a year, the park interpreter has a great advantage *in gaining in-depth knowledge of the audience*. Of course developing in-depth knowledge of the general park visitor will require a different set of techniques.

During the classroom time Lee talks to students informally and observes them with their lessons. She learns that students are starting to learn about erosion, weathering, and relationships between forests and clean water. As she listens to student questions, she thinks about some of the places in Good Forest National Park that might help the students understand these new concepts. She is starting to develop program ideas, based on student interests and needs.

Principle 3: *Apply effective communication techniques: develop clear objectives, organise each program or product around a central relevant idea or ideas, plan for all aspects of the project and evaluate the success of the interpretive work.*

Now is the time to find a special story under this broad topic of "geology". Lee knows that the 5th grade students must learn about how weather contributes to geological formations and how scientists do their work. In her classroom visit she learned more about what might interest the students. The park has some ideal places for showing the effects of weather. After talking to co-workers and exploring several ideas, she settles on a *central relevant idea*: "The small daily work of weather makes big changes over time and we can see evidence of those changes in this park. Scientists study in Good Forest National Park to find that same evidence of geological changes and to understand these changes."

Principle 4: *Provide the audience members with multiple opportunities to find their own connections between the interpretive messages/interpretive experiences and their daily lives and motivations, thus providing the stimulation to reflect on their lifestyle.*

Every student will be bringing to this park their own experiences and their own meanings about Good Forest National Park. Lee's challenge is to develop a program that will allow each student the chance to *make their own connection* to the meaning of the park and will allow them to find their inspiration and passion for this place. The students are asked to examine a small area and record their observations on a datasheet provided by the park. Lee asks the students what they learned from their observations and using their responses Lee points to evidence of the impact of water on the landscape. Students compare their observations in areas of bare soil with those who observed areas with shrubby vegetation. Those comparisons lead to discussions of the role of a forest in protecting water and soil and how the water from this mountainous park flows to the valley where the students live and brings them their drinking water.

Principle 5: *Recognise that it is inspiration, passion and emotion that often drive action.*

The interpreter's role is to be a catalyst in the interactions between the students and the park, to find ways to inspire from nature rather than lecturing them on the "right" answers. Lee will use several techniques such as storytelling, use of inspiring quotes, and asking questions, to help the students take the next step towards their own actions in support of protected areas. Lee tells the story of the elderly woman who grew up on the borders of the park, saw her hunting eliminated when the park was established, but who found value in having the park as a neighbour and is now a regular volunteer. Some students may hear the story and think of their own grandmother and wonder if she would do the same. Others may think of the elimination of hunting and wish they still could hunt in the park and wonder how this woman came to accept that change. With the story, Lee has provided all those students with a new way to think about the park and their personal actions.

Principle 6: *Use specific local sites, apply practical hands-on and active methods and involve multiple senses.*

Active methods and use of multiple senses are long-respected techniques used in successful interpretive programs. The students use their eyes to look at vegetation in a new way through the help of the magnifying glasses; they will delight in listening to deer or birds foraging amongst the vegetation; and will compare the feel of a smooth river rock to that of a rough rock that has been protected from weathering.

The last five principles apply to the specifics of modelling sustainable development practices:

Principle 7: *Incorporate sustainability principles throughout interpretive programs projects and develop, with audience members, ideas for actions that are practical and realistic locally while considering broader or global impacts.*

In the information sent to teachers in advance, Lee asked the teacher to encourage the students to bring a refillable water bottle. At the end of the day, after the students had refilled their water bottles several times, Lee brings out a bag full of empty plastic water bottles, representing the number of bottles the students had saved in just one day. It gives a strong visual message and the students immediately begin talking about other items they could reuse.

Principle 8: *Plan all aspects of interpretative events in a way that demonstrates sustainable development principles.*

New ways to live our daily lives can be shown with simple examples. The lunch break is treated as another learning experience, where the park provides reusable mugs for hot drinks and students' clean the mugs and talk about the differences between that action and throwing away plastic or paper cups.

Principle 9: *Use materials from suppliers who exhibit responsible actions that support sustainable development.*

The teacher worked with a company that produces journals that are made of 100% post-consumer recycled paper and secured a discount for the students. The teacher uses this information to discuss with the students the merits and impacts of recycling and of buying recycled products.

Principle 10: *Strengthen the capacity of people to be involved in the decision making process about lifestyle and development.*

These 5th grade students will one day be voters and decision makers. At the end of the day the group sits together at a quiet point that looks down on the valley where they live. Lee asks the students to think about what they've learned and felt. They reflect on how the role of the park as a source of water for the valley. She asks them to think about the changes happening in the valley, the new homes and businesses that each knows about. Students discuss how those might work with the nearby the park. Students use their journals to reflect on the value of having a park near homes, and on future decisions about needed housing and job sites and the impact that this could have on the park and the water. They discuss what sort of things might be considered important in planning the future development of the valley.

Principle 11: *Demonstrate an honest, ethical and clear approach to sustainability.*

Good interpreters, like good teachers, know that an audience will absorb only a couple of key concepts during any presentation. Lee has been clear in the approaches students can take to be sustainable - recycling and buying recycled products, understanding the role of water in their lives, and developing ideas for sustainable development. During the program Lee answers hard or complex questions by stating when she does not have all the answers and that sometimes communities must make difficult choices between providing housing and looking at the long-term health of a community by preserving their water source. She is honest and ethical in her responses.

After a day with Ranger Lee, these students have been exposed to variety of experiences and are asked what they will apply of their new knowledge to their own lives.

Suggested resources

Beck, L., Cable, T. (1998) *Interpretation for the 21st Century: Fifteen Guiding Principles for Interpreting Nature and Culture*, Sagamore Publishing, Champaign, Illinois, USA.

Brochu, L., Merriman, T. (2002) *Personal Interpretation: Connecting Your Audience to Heritage Resources*. National Association for Interpretation InterpPress. Fort Collins, Colorado, USA.

Ham, S. (1992) *Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets*. North American Press. Golden, Colorado, USA.

Interpretation Australia web site: <http://www.interpretationaustralia.asn.au>

Communicating Protected Areas

- Knudson, D. M., Cable, T., Beck, L. (1995) *Interpretation of Cultural and Natural Resources*. Venture Publishing, Inc. State College, Pennsylvania, USA.
- Larsen, D. (2003) *Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects, and Other Resources*. Eastern National. Fort Washington, Pennsylvania, USA.
- Lewis, W. J. (1980). *Interpreting for Park Visitors*. Eastern National. Fort Washington, Pennsylvania, USA.
- National Association for Interpretation [USA] web site: <http://www.interpnet.org>
U.S. National Park Service (1996/2003) Interpretive Development Program Curriculum
www.nps.gov/idp/interp
- Tilden, F. (1957) *Interpreting Our Heritage*. Chapel Hill. University of North Carolina Press, USA.

Chapter 29

Young conservationists and the future of protected areas worldwide

Lisbet Kugler (Ed.)¹

Introduction

This paper reports on a survey of young conservationists (20 to 35 year olds) undertaken by graduate students in a protected areas course at the Yale School of Forestry and Environmental Studies. Young conservationists will become the leaders in protected areas management around the globe and there is currently an urgent need to create better opportunities, frameworks, and resources for these young professionals if conservation is to succeed in the future. The purpose of the survey was, therefore, to understand the concerns and ideas of this contingent regarding the future of protected areas around the world.

The written survey was developed in the official Congress languages of English, French, and Spanish. Organized into six questions, the survey solicited concerns and ideas of young professionals on: 1) justifications for protected areas; 2) challenges to protected areas management; 3) innovative solutions to address those challenges; 4) the role of young professionals in the management of protected areas; 5) youth involvement; and 6) successful projects involving youth and young professionals in protected areas.

Survey responses came from 138 people in 52 countries (across 6 geographic regions). Naturally, not all young professionals have uniform beliefs about protected areas and their management and protected area visions, challenges, and solutions are often quite context-specific, with healthy debate about directions and options. Nevertheless, insightful ideas for improving protected areas management on many fronts were articulated. Following thorough analysis, the responses were crafted into emerging principles for protected areas management and recommendations for action in distinct areas. The implementation of these emerging principles relies in one way or another on some form of communication, and therefore, all are presented in this document.

Emerging principles for protected areas management

Analysis of the survey results led to the identification of emerging principles for protected area management and a broad range of communication ideas pertaining to education, outreach, participation and community involvement (among other subject areas), were revealed. Whilst some of these emerging principles directly address communication as a means of building support for protected areas, all are worth consideration when strategically planning and using communication (in the broader sense) as an instrument for protected area management.

The emerging five overarching principles for managing protected areas are:

- a. improve protected area management capacity;
- b. build broader strategic outreach for protected areas;
- c. recognize and accommodate diverse protected areas values;
- d. collaborate with stakeholders and integrate partners;

- e. integrate protected area management into policies and practices at broader spatial and temporal scales;

a. Improve protected areas management capacity

Respondents agreed that protected area institutions must have the necessary information, tools, personnel, funding, and organizational ability to manage parks in an adaptive, transparent, and capable manner. While new technologies such as Geographic Information Systems (GIS), remote sensing, and the internet have the potential to become important planning tools, budget shortfalls frequently limit an institution's ability to meet even its most rudimentary management needs. Revenue generating activities thus are a priority component of increasing the capacity of park management institutions. The structure of park management institutions themselves may provide barriers to success, and more opportunities for career advancement for park personnel should be developed to improve long-term employment conditions.

Institutions need to better increase their ability to "learn" from research, participatory planning, and their own staff. Mechanisms to increase the flow of information among participants, including researchers, park staff, and local community members, need to be improved.

b. Build broader strategic outreach for protected areas

Young professionals felt that environmental education and marketing strategies in support of protected areas have the potential to create common ground between parks and constituents. With careful planning and innovative messaging, the quality of such forms of communication can be improved. Our analysis of survey responses revealed the importance of consistency of message content, cultural appropriateness, building upon participants' existing knowledge, and using appropriate social institutions, media, and opinion leaders for the diffusion of conservation messages. Survey respondents identified a wide range of outreach targets for such messages, ranging from local communities to private industries to governments. These communication efforts must go beyond crafting and disseminating conservation messages, and instead promote open dialogue among constituents. These efforts must also recognize that economic incentives and environmental education alone are not adequate to remove powerful barriers to participation in conservation activities. Issues such as historic resource use rights, land tenure struggles, and industrial resource extraction must also be addressed.

c. Recognize and accommodate diverse protected area values

Young professionals worldwide share a broad concern for values of protected areas that go beyond biodiversity protection to incorporate ecosystem health, cultural diversity, human rights and health, spirituality, and the pursuit of scientific inquiry.

These values may serve as the basis for an evolving vision for how protected areas are created, managed, and marketed in the future, and relevant policies and economic market mechanisms should be changed to reflect these concerns. While there was no consensus on the relative importance of each of these values to biodiversity protection, their inclusion suggests that planners and practitioners should consider conservation goals in light of the complex ecological and social systems in which protected areas must operate. Increased attention to these ideas should not only work to build broader constituencies for protected areas amongst diverse stakeholders, it should also help improve the environmental and social quality of protected area lands and the populated landscapes in which parks exist.

d. Collaborate with stakeholders and integrate partners

Young professionals advocated the need for integrating multiple partners, to develop more innovative and sustainable approaches to protected areas management. To this end, appropriate partners for protected area managers could include universities and researchers, NGOs, local communities, private industry, and various sectors of local and national

governments. Rather than advocating for purely bottom-up or top-down conservation strategies, young professionals call for a more integrated, or lateral, approach that shares decision-making responsibilities across various types of stakeholders. Formulating more equitable linkages between the urban and rural, between the local and regional, and between the traditionally powerful and powerless may be essential to accomplish this task. Our analysis of the survey responses suggests that local communities living within and around protected areas may be the single most important stakeholders for collaboration with conservation practitioners, not necessarily because of the threats they might pose to neighbouring resources, but more importantly for the unique assets and knowledge they possess in relation to those resources.

e. Integrate protected area management into policies and practices at broader spatial and temporal scales

Respondents recognized the complexities of preserving natural integrity in human dominated ecosystems, and suggested that conservation planners and practitioners should look beyond traditional boundaries that have historically delineated appropriate allies, manageable geographic areas, and convenient time scales. Indeed, protected areas managers cannot afford to ignore political, economic, resource use, and social policies and practices at local, regional, national and international scales. To this end, young professionals suggested that project commitments that extend beyond the typical short-term planning cycles for protected areas may be necessary to promote the invaluable development of trust and understanding between newly acquainted stakeholders. Enhanced global communication and cooperation could provide exciting opportunities for integrating protected areas management into policies and practices at broader spatial and temporal scales.

Recommended areas for action

Regarding improving protected areas management practices and programs, a broad range of ideas pertaining to education, integrated planning, outreach, local community strategies, participation, and scientific research were articulated. A list of strategies and programs has been crafted - presented in the form of brief and broad programmatic ideas rather than detailed implementation plans - to inspire and catalyze further discussion. These have been organized into ten areas for action which, again, are of great relevance to the strategic use of communication for improving protected area management.

The ten recommended areas for action are:

1. capacity building for protected area employees;
2. outreach strategies;
3. education campaigns;
4. integrated regional and multi-sector planning approaches;
5. involving local communities;
6. park use and responsibilities;
7. participation through partnerships;
8. financial strategies;
9. scientific research and access to knowledge;
10. use of information technology.

1. Capacity building for protected area employees

So that protected area personnel can perform their duties well, it is important to create a work environment in which they have the security, training, and authority to successfully address the complex social and ecological realities of protected areas management.

Job stability and employee promotion should depend on employee efforts toward achieving conservation goals, rather than political whim.

- Provide conflict management and other appropriate training for protected area managers to best work with the multiple stakeholders involved.
- Establish mentoring programs for seasoned employees to help train and encourage new ones.
- Promote contracts for protected area employees that allow for more secure and clearly defined jobs beyond project cycles or short-term contracts.
- Promote exchange programs among protected area employees, at national and international levels.
- Utilize different types of media for training courses, such as correspondence or online resources, and facilitate employees' ability to participate especially if they are field-based.

2. Outreach strategies

Without popular support at multiple scales, the sustainability of protected area networks is jeopardized. Carefully formulated communication strategies are essential to garnering such support.

- Create common ground with local publics and evoke feelings of pride by celebrating national and community cultural heritage, both past and present, as part of protected areas.
- Identify local opinion leaders as targets for outreach to enhance the rapid dissemination of positive park-related conservation messages.
- Create partnerships with culturally important institutions, such as churches, recreation centres, or schools, to help disseminate messages about parks.
- Create and give value to culturally appropriate and socially recognized symbols for protected areas. Such symbols could potentially be used in social marketing strategies (for example in the form of logos, stamps, trading cards, pins).
- Incorporate conservation themes into popular media, including television or radio programs, sporting events, and celebrity promotions.
- Build upon existing cultural values relating to the conservation of nature through education and marketing campaigns as well as park events.

3. Education campaigns

Educational campaigns should be conducted to increase public environmental knowledge to enhance people's values of protected areas and to promote participation in their management. These campaigns should also be implemented in a culturally sensitive manner, building upon existing environmental knowledge, and should target multiple stakeholders, including the general public, decision-makers, and local communities. Experienced protected areas managers, researchers, and community teachers should be engaged as teachers for such initiatives.

- Create programs to provide youth, seniors, and other constituents with opportunities to work and learn in protected area settings, and to contribute to daily park management activities.
- Work in collaboration with school systems and other educational institutions (zoos, botanical gardens, museums) and other existing social groups (church groups, sports clubs) to promote research initiatives in protected areas and to build broader support for protected areas management.
- Promote programs in which youth are likely to involve themselves in conservation initiatives, such as "adopt-a-park" or selling stamps for conservation.
- Educate public about the importance of ecosystem function and services; the cultural, spiritual, and aesthetic values that ecosystems instil in people; and the role of protected areas in maintaining them.

4. *Integrated regional and multi-sector planning approaches*

Successful and sustainable protected areas management needs to consider land uses, local community resource use needs, property rights, institutions, and constituents operating outside their boundaries. Integrated regional planning, involving other governmental sectors as well as private sector constituents, can minimize negative ecological effects that external land uses can impose on parklands, and should be one of multiple strategies used to promote a country's conservation and welfare.

- Create partnerships between public and private landowners to manage resources in a way that minimizes negative ecological impacts to parklands.
- Dialogue with decision-makers from different planning sectors who manage lands around protected areas.
- Work to increase the national-level authority of protected area institutions and their ability to influence policy-making.
- Incorporate land use mapping and documenting beyond park boundaries into park planning.
- Work to establish new types of protected areas appropriate to the regional context, including private parks, urban parks, community reserves, and trans-boundary parks.
- Insure that fair trade practices are employed when products from protected areas and the local communities surrounding them are marketed.

5. *Involving local communities*

Acknowledging property rights and spiritual values, and seeking to minimize high social costs imposed on already struggling local residents in and around parks (such as economic hardship due to limited access to resources), community-based conservation has become a widespread approach to providing actual ecological and social benefits from parks to local communities. This approach recognizes social divisions, economic inequities, and power relations within communities, and encourages community participation in park management. It recognizes local communities as opportunities rather than liabilities to more effective park management.

- Reorient the conceptual framework used to analyze park-community relations so that it better recognizes the convoluted social and ecological dynamics involved.
- Work with communities to determine their role in park management and to develop economic and other alternatives to minimize negative impacts and create positive impacts of protected areas on local well-being.
- Employ strategies to insure meaningful participation of the multiple social groups that comprise communities surrounding protected areas.
- Create partnerships with local communities to monitor and enforce access to protected areas and extraction of natural resources.
- Include local community members in training exercises for park staff.
- Establish ecological clubs and youth ranger groups for local youth.
- Create protected areas in new categories (for example, community reserves) that recognize alternative property rights and land tenure to promote community involvement.

6. *Park use rights and responsibilities*

People should feel welcome to visit and use protected areas, but must recognize and accept their responsibility to act in accordance with established conservation measures designed to insure adequate protection of parks.

- Reduce park access fees for home country citizens as a means of increasing their visitation and awareness, and create mechanisms to reduce access fees for people who cannot otherwise afford to come.
- Promote programs for stewardship opportunities to increase positive uses of parks.

- Create a "park passport" system, the purchase of which provides reduced user fees, travel brochures, and other benefits. This can be implemented at the national or international level to increase motivation to visit parks.
- Control visitation to high use protected areas by restricting motor vehicle use, establishing maximum visitation rates, and limiting use of sensitive areas, but not by constructing economic barriers that yield inequitable access.
- As appropriate, hold cultural festivals, sporting events, and other community activities within or near parks, to motivate different user groups to venture into parks.
- Allow for economic and livelihood alternatives based upon immediate local needs and demands but regulated to mitigate long-term environmental impacts. This will require honest and open negotiations and partnerships.

7. *Participation through partnerships*

Partnerships with local communities, urban constituents, youth, and public and private institutions can result in more active management collaborations, increased volunteer opportunities, additional revenue through visitation and sponsorship, and multiple levels of involvement in decision-making and planning. Existing partnerships should be strengthened to encourage active participation. New partnerships or alliances with non-traditional affinity groups and youth groups can also help broaden support for protected areas.

- Create a young professional chapter of the World Commission on Protected Areas to increase opportunities for younger protected area managers to engage in discussion, strategic planning, decision-making, and programming.
- Encourage the participation of youth and young professionals, and other constituent groups at protected area conferences and forums, and provide opportunities to present their ideas at strategic meetings and policy sessions.
- Launch a "partners in parks initiative" that will incorporate and make use of new and existing partnerships as a means of promoting collaboration, education, and communication.
- Create a worldwide volunteer network to promote volunteer opportunities to work in protected areas. Opportunities to visit protected areas and to volunteer in a range of activities such as reforestation, monitoring and protection, and guardianship efforts should be promoted.

8. *Financial strategies*

Funding for protected areas management is dependent on public funds, donor agencies and philanthropists, but remains inadequate. New approaches to funding protected areas must be identified to create long-term income generating sources, reduce short-term funding cycles, and utilize mechanisms to attract private capital.

- Share financial responsibility for minimizing the impacts of tourism among travel agencies, governments, and tourists themselves to encourage more environmentally sound recreation.
- Continue using conservation easements to protect land from development, including land concessions and land trusts.
- Provide more incentives for nations to protect more land area (for example, in exchange for carbon credits) and improve existing park management by continuing debt-for nature swaps to aid debt-ridden countries with conservation gems.
- Utilize and advertise corporate sponsorships and partnerships for protected areas, such as financial compensation from advertisements that use protected areas to promote and sell an aspect of their product.
- Redirect revenues collected from concessions and tourist fees to a fund dedicated specifically to national protected areas (rather than a general government fund).

- Increase direct income and self-financing initiatives from protected areas, such as ownership of income-generating infrastructure within and beyond park boundaries.
- Create a national or international tax for ecosystem services provided by protected areas and other lands, similar to public utility companies, and utilize funds to finance protected areas.

9. Scientific research and access to knowledge

Inequitable power relationships around protected areas can be due to the possession of knowledge that provides park managers with invaluable social and ecological information. In order to promote well-informed management decisions that respect the rights of all stakeholders involved, efforts should be made to insure the unbiased creation and free distribution of scientific knowledge. Stronger linkages between scientific research and the application of its results should be encouraged.

- Create a clearinghouse on the internet or through other locally appropriate media of scientific information collected in and around protected areas that would be available to protected area managers and the general public.
- Create both local and international networks of scientists, students, local residents, park managers, and other decision-makers to generate and share relevant scientific research within and around protected areas.
- Insure that information collected within or about protected areas is repatriated to host countries and appropriate management agencies.
- Create mechanisms for efficient data management within protected areas institutions, which could allow for smoother incorporation of scientifically generated knowledge into the planning process.
- Emphasize the value of social science research in informing management decisions.
- Develop indicators for long-term monitoring which better reflect the complex ecological and social dynamics within given contexts including dynamic indicators of process as well as more traditional measurements.

10. Use of information technology

Information technology can facilitate advances in almost all aspects of protected areas management from education to policy planning to financial operations. The internet has become an indispensable tool for research, communication and training purposes. Software applications are increasingly inexpensive, reliable and available, and should be made more so.

- Utilize GIS, remote sensing image analysis, aerial photographs, management system applications, online distance learning opportunities, and other technologies in national to local level park planning and management, monitoring and evaluation.
- Encourage influential information technology companies to provide grants and through public-private partnership initiatives, to make computers, programs and training courses available at reduced or no cost to protected areas officials in countries with need.
- Create an internet-based information clearinghouse on protected areas worldwide as well as park-based informational websites, to disseminate information on managerial successes and failures in varying contexts.
- Provide reliable access to the internet for protected area staff.

Conclusion

In this document, a list of strategies and programs to improve the management of protected areas have been presented, crafted from the concerns and ideas voiced by young professionals regarding the future of protected areas around the world.

It is hoped that this document will serve as a fruitful starting point for:

- an intergenerational dialogue among youth, young professionals and practitioners about how to improve protected areas management worldwide, now and in the future;
- the discussion of young conservationists' visions for and roles in protected areas management.

It is also hoped that some of these strategies and programs will be considered and incorporated in the design of communication strategies for managing individual protected areas.

Notes

1. This paper is based on a report entitled "Young Conservationists and the Future of Protected Areas Worldwide: A Call to Discussion at the Fifth World Parks Congress, Durban, South Africa, September 2003." The report was the outcome of a graduate course offered at the Yale School of Forestry & Environmental Studies, in Spring 2003. Members of the course who contributed to writing the report are Charles Brunton, Jeffrey Firman, Kelly Levin, Susan Matambo, Keely Maxwell, Timothy Northrop, Carla Short and Marc Stern. Full the full report please see: http://www.iucn.org/themes/wcpa/wpc2003/pdfs/wpc/yale_youthwpc.pdf (September 25th 2004).
2. Youth is defined in this case as people less than 20 years of age, and young professionals as people between the ages of 20 and 35 who work in conservation in the state, private, or non-governmental sectors.

Chapter 30

Recommendation 5.32 of the Vth IUCN World Parks Congress: strategic agenda for communication, education and public awareness for protected areas

Protected area agencies are facing external pressures from many other sectors as nations develop their infrastructure, agriculture, urbanization, and industrialization processes. Integrating protected areas planning and biodiversity conservation issues into the agenda of other sectors is still a major weakness in most nations.

Communicating the benefits of protected areas and their relation to the development agenda has become essential for overcoming this weakness. Used in a strategic way, communication provides a tool for managers to increase their effectiveness, and improve visibility and reputation of protected areas. Communication should be used to share the perceptions and knowledge about conservation and protected areas among stakeholders.

Communication enhances a sense of ownership and commitment, thus adopting the most appropriate policies, instruments, means of management and conflict resolution strategies.

Communication (standing for communication, education, public awareness and interpretation) strategies need to be further developed by governments, institutions, and communities to gain wider support for protected areas.

Therefore, PARTICIPANTS in the Stream on Building Broader Support for Protected Areas at the Vth World Congress in Durban, South Africa (8-17 September, 2003):

1. RECOMMEND that governments, conservation agencies, inter-governmental organizations, NGOs, local communities, civil society, protected area managers, educational institutions and other interested parties work towards a common agenda for communication for protected areas at local, national, regional and global levels, capitalising on the instruments and institutional experience and capacity, to increase and build on the impact of the Durban Accord and Action Plan;
2. FURTHER RECOMMEND that governments, conservation agencies, inter-governmental organizations, NGOs, local communities, civil society, protected area managers, educational institutions and other interested parties:
 - a. INCORPORATE communication into the establishment of new protected areas and the management process of all PA from the beginning, especially in aspects related to policies and program implementation as a cross-cutting, multidisciplinary component;
 - b. INTEGRATE a multi-level (local, regional, national) communication strategy into all protected area management plans and practices;
 - c. ENSURE adequate funding for communication to be included in protected area budgets as well as agencies responsible for protected areas;
 - d. DEVELOP institutional capacity and professional skills for effective internal and external use of strategic communication by communication professionals, technical staff and stakeholders;

Communicating Protected Areas

- e. SUPPORT protected area agencies to become learning organizations that have the management capacity to deal with external developments in a resilient and flexible manner;
- f. INCLUDE professional communicators as part of the management team and key actors from the beginning of policy, management planning, and programme and project development;
- g. STRENGTHEN communication networks for knowledge exchange and professional development;
- h. IMPROVE relations with other sectors, at national, regional and local levels to create both informal and formal channels for bringing protected area issues into the operations and thinking of those sectors;
- i. DEVELOP a participatory approach to the public, communities that live in and around protected areas, visitors, and other stakeholders, empowering them to collaborate in PA management;
- j. SUPPORT communication and media professionals and practitioners to better understand PA and their benefits by promoting field visits, training seminars and other learning mechanisms;
- k. RECOGNIZE that communication must be research-based, monitored for effectiveness, evaluated for impact and linked to PA objectives; and
- L. USE communication tools to build the capacity of local communities to promote sustainable use of biodiversity in the context of PA.

Stream: Building Broader Support for Protected Areas

Stream Lead: Jeff McNeely

Reference

IUCN. (2003). *Recommendations of the Vth IUCN World Parks Congress*. Extracted on the 25th September 2004 from:
<http://www.iucn.org/themes/wcpa/wpc2003/pdfs/outputs/wpc/recommendations.pdf>

Conclusion

Chapter 31

Concluding thoughts on communicating protected areas

Introduction

This publication draws together examples of 'where we are now' professionally in communicating and building support for protected areas. These examples show how communication is used by international, governmental and non-governmental organizations at national and protected area levels, presenting diverse ways and means of communicating, the role of communication and lessons learned in its use. This conclusion does not attempt to comparatively evaluate the use of communication as the cases provide insufficient evidence for that. We do, however, attempt to draw out the trends and differences in approaches, as well as highlight some recurring messages.

Looking at the cases, it is apparent that the concept of 'communication' is multifaceted. Communication¹ may refer to a host of social instruments (such as instruction, education, interpretation, information dissemination, advertising, public relations, stakeholder management, etc.) and the term "communication" may be used interchangeably with other terms to make reference to the same, or at least overlapping, fields of activities (Sureda).

When using the term "communication", a specific kind (or aspect) of communication may be intended and another understood (Mefalopulos). Some refer to the one-way flow of information as communication – through products such as radio, TV programs, brochures and posters. Others refer to a two-way dialogue with stakeholders in which there is a genuine 'hearing of views' during a policy forming or protected area management process. The situation is further complicated by the fact that "communication" or "communications" are used variously. Within the chapters, "communication" or "communications" reflect the use of the authors. The IUCN Commission on Education and Communication (CEC) uses "communication" in the sense of communication management, in which the above-mentioned host of social instruments play diverse roles in the various phases of the policy cycle² or protected area management process.

So, what we are talking about can be confusing and this affects how clearly we communicate the added value of these instruments to protected area managers. Given that protected area managers use many approaches and processes that communicators think of as their "tools of trade", yet managers see as part of their normal management interaction, it is imperative to clarify what we are talking about. Whilst many "managers still think that communication is just about press releases, brochures, websites and publications" (Hesselink), seeing the role of communicators as rather end of pipe in a policy or management process, others are turning to more participatory approaches and are recognizing the need for '*strategic*' communication (as distinct from broader awareness and educational approaches) to achieve their objectives. If we do not successfully clarify what we are talking about, current disparities in the understanding and application of communication will continue.

In this conclusion we wish to promote the arguments for the use and value of strategic communication in protected area management, in the hope that these arguments can be used to further the integration of this important instrument in the work of protected area agencies. Additionally, we present some thoughts on professionalizing communication – directed at the communicators in protected areas – while being conscious that protected area managers may be less interested in these internal though important deliberations. Both are needed because although the importance of communication and its potential to contribute to protected area management is apparent, what is made of this potential

remains a considerable challenge. Whilst it is widely acknowledged that professional capacity in this field needs to be built and that strategic communication needs to be mainstreamed in protected area management, this is still far from common practice.

Arguments for the value and role of communication

The need for communication

Protected area agencies and protected areas face diverse challenges and threats from external agents. Socio-economic issues are often at the heart of the challenges faced by protected area management. Examples of such socio-economic issues cited in the cases include violence, resulting in a reduction of the state apparatus (Vidal); civil unrest, social upheaval, corruption and lawlessness affecting the tourist industry (Santi); immigration, multiculturalism, urbanization and a public pre-occupation with other social and economic issues such as health care and education (Bronson).

Related to socio-economic issues (and often more overtly impacting on protected areas) are activities in conflict with protected area objectives. Logging and conversion of forest to agricultural areas (Van Weerd), construction and development related to tourism (Santi) and other national or local development plans are common conflicting activities, driven by government bodies making development decisions without thinking about protected areas, biodiversity conservation and related benefits. Moreover, customary and/or traditional indigenous practices, such as the slash-and-burn system of maize production in Mexico, foster unsustainable land-use practices based on deep cultural beliefs (Vidal).

Protected area agencies therefore have to manage the impacts of many external pressures and activities that are in conflict with their management objectives. To modify these impacts, change is required at individual, social and organizational levels in attitudes and behaviour. Successfully managing protected areas is therefore managing the required change, invariably entailing managing people (with an emphasis on participation rather than manipulation).

Whilst some actions conflicting with conservation objectives of protected areas represent explicit opposition, others do not represent intentional conflict. They may be due to a lack of awareness and/or understanding of protected areas – their existence, boundaries and conservation objectives. They may also be due to the absence of sufficient motivation, or realistic capacity, to act differently to support protected areas and conservation objectives.

Invariably conflict arises from the management failure to adequately communicate with those who have a stake in the protected area – the stakeholders – and to involve these stakeholders in protected area policy and management. When it comes to managing a change from conflicting to a supportive behaviour, communication is an essential instrument for protected area management. As pointed out in the conclusions from Latin America, it is preferable to be pro-active to avoid conflict, rather than reactive. Many authors point to the importance of developing positive relationships by fostering trust and understanding through clear and sustained communication. Molefi and Fernandez Davila point to the changes that result when people are listened to and their views are taken into account in decision making processes.

In accordance with trends, the theme of the Parks Congress – "benefits beyond boundaries" -pointed towards broader-based landscape approaches to protected area management in which people and their livelihoods are important. In these approaches, dealing with people is at the heart of a protected area's mission. Yet, while participation and stakeholder involvement are widely recognized as important, it is clear that it remains a challenge for protected area managers to apply and use these approaches effectively. Indeed, the Convention on Biological Diversity's Programme of Work on Protected Areas insists that "protected areas are not sufficiently well managed to maximize their

contribution to biodiversity conservation... and there is an urgent need to improve management nationally, regionally and globally".

The role of communication

Communication has a *corporate role* important for the positioning of protected area interests amongst other social interests in society (Vidal, Sanchez Lira, Santi, Cavalcanti) and to achieve financial and political support for the protected area and the system. Communication supports the branding and identity of protected areas (Castro and Sanchez Lira) – important for creating national pride (Manzanero) and clarity of purpose – as well as developing a corporate culture and behaviour amongst the staff (Bronson).

Communication also has a role in providing quality *service to the protected area visitor*. Whilst this publication has not focused on this area, Adams reports on the interests of interpreters to develop a code of good practice for their work and papers by Sureda, Makwaeba, and Shava (amongst others) address the issues of interpretation and communication with visitors.

A further role of communication is an *instrumental role supporting the use of legal and financial instruments* to impose or coerce behavioural change in relation to a protected area. This is an often-resorted-to approach and one in which communication plays an instrumental role, explaining legal and financial measures and why they have been imposed. Even when communication is used in this role, conflict often ensues since real problems in stakeholder relations cannot be solved using such a one-way approach (Hesselink).

Communication also has an *explanatory role* aside from supporting the use of financial and legal instruments. Indeed, historically an emphasis of protected area communication was upon 'others' learning about protected areas and learning from protected area management. Protected areas focused on explaining the importance of the areas and of biodiversity conservation, as well as the economic values and benefits. When used in this way, communication is a one-way transmission of information, intending to 'push' or 'convince' people to act favourably towards protected areas. Used like this, communication be ineffective as the message is not necessarily heard; if heard, it may not be understood; and even if understood, it may not lead to changed action.

Increasingly the important *role of strategic communication as a management tool* is being recognised. In this role, communication is strategically used by protected area management to achieve the objectives and mission of a protected area. Using a two-way 'push-pull', dialogue-based approach which is oriented to motivating people to change (Lavides, Cavalcanti, Hesselink), communication is used to manage change and build support for protected areas in the face of dynamic factors impacting and exerting pressure on areas and/or systems. It is "a process that considers (and emphasizes) the human dimension in addition to technical solutions for environmental challenges" (Hilbrunner) "... maintain(ing) a dialogue among the stakeholders to facilitate a platform of information, motivation and an enabling environment for decision making at the individual and social levels" (Vidal).

As a protected area management tool, a *role of communication is to facilitate learning both internally and externally*. Knowing who to involve, how and when requires strategic thinking, listening and a willingness to learn. For protected area management, the importance of stepping out from behind desks and engaging in the communities of stakeholder groups – speaking with people, forming relationships with influential individuals and bodies, and learning about interests and motivations – cannot be overstated. Trust is built in this way and less conflict occurs as people are better informed, engaged and involved (Lavides, Stern). Using more participatory communication approaches means that managers have to be prepared to learn and to change what they do, including how they go about their business.

The significance of learning within strategic communication is highlighted by cases revealing that, whilst the global conservation community focuses much of its attention on attempting to provide economic benefits and livelihood alternatives to residents exploiting natural resources in and around parks, "trust for park managers is the most consistent factor associated with how local residents actually respond to national parks" (Stern). Learning that costs and benefits are only one part of the process through which individuals formulate reactions to protected areas, and that change in behaviour may be better motivated by improving trust than by presenting economic incentives, is a crucial lesson.

When "the ways in which parks and partner organizations engage local communities can make or break any projects designed to work with them", the importance of protected area management learning about and from stakeholders cannot be overstated (Stern). This often requires a paradigm shift in the way managers approach issues (Hesselink).

Communication and stakeholder participation are pre-conditions for effective and sustainable protected area management. However, whether their role and full potential is realized depends on how they are used. Given the limited resources available it is important to think before acting about where to target efforts and to work with influential individuals and bodies. Using a "system thinking" approach – designed to deliver specific outcomes – it is possible "to generate a sustainable transformation of the way individuals, institutions and societies view and manage resources, thus influencing behaviour in ways that support sustainable protected area management" (Hilbrunner).

Communication capacity to support protected areas

In order to build support for protected areas, it is necessary to have the capacity – in terms of skills and resources – to support protected areas. Managers and organisations need to be able to build the capacity of stakeholders (such as in alternative, sustainable livelihood options for residents in or near protected areas). Additionally many managers in nature conservation come from a technical background and lack expertise in communication and stakeholder management. Therefore, it is often also necessary to develop the capacity of key personnel within protected area organisations to use strategic communication to manage change and build support for protected areas. In addition, it must be ensured that the necessary skills and resources are in place, providing an enabling environment for mainstreaming strategic communication in protected area management. Without more emphasis on communicating and building communication capacity there can be limited expectations for protected areas in dynamic times.

Fortunately the value of strategic communication, and the need for capacity development in this field, is being recognized by national and international bodies including governments, institutions and conventions. Nevertheless, increased investment in strategic communication is only likely if we continue to prove its value and make the case for it with increasing strength.

Bronson, Castro and Hesselink point out the value of capacity development for communication in protected areas, with opportunities for interaction and sharing knowledge amongst the teams involved. An approach that fosters learning by doing, reflection and mentoring is the most likely to assure that skills are integrated into working practice. As well it is important to associate individual skill development with interventions at the management level, so that new ways of working are accommodated and supported and communicators are engaged in the planning processes.

Professionalizing communication: strategic communication in theory and in practice

In this section we look at the conclusions which arise regarding more professional planning of communication and issues in professionalizing the work.

Diverse interpretations and applications

Communication is gaining recognition and application, yet there are still many interpretations of what is entailed, and indeed of what "strategic communication" is. In the papers presented (perhaps due to the way in which they have been reported), there appear some seemingly-fundamental differences; in some communication approaches there is a more top-down process focused on convincing, whilst the approaches presented in others are more horizontal and involving. Consequently, it would be of value to the profession to compare similarities and differences in approach, identifying what engenders a "tipping point" to change as well as clarifying the principles of strategic communication – not so much to highlight deficiencies in existing strategies as to promote more comprehensive and genuinely strategic practice in the future.

Integration into management planning

For communication to be truly strategic, and thus effective, "it should be used from the beginning of the development intervention" (Mefalopulos), in all phases of the management plan and "throughout the entire cycle of policies, programs and projects" (see conclusions from the Latin American meeting).

As a strategic instrument of protected area management, communication functions as an indispensable analytical research tool for identifying, investigating and analyzing needs, risks and problems that need to be addressed (Mefalopulos). Yet, "problems of inadequate planning of communication and education strategies are recurrent... The greatest factor seems to be inadequate communication research" (Encalada). Given the fact that each conservation issue has a specific communication issue which has to be separated from the technical conservation issue, communication research is crucial.

Communication research

Various authors acknowledge the importance of communication research. It is key to the processes of: addressing the problems and the need for environmental strategic communication in protected area management (Vidal); defining target audiences/stakeholder groups (Bronson / Castro); examining the socio-economic, political structure and cultural aspects of the area and people (Hilbrunner); assessing people's dependence on, and relationship with, the area and its natural resources (Molefi); evaluating awareness levels and attitudes of people towards environmental issues (Mahajan); analyzing what is currently working well and where efforts need to be concentrated to achieve results (Bronson); and identifying potential partners in the area (Molefi). It is unclear from most of the articles what is meant by research and how extensive it needs to be. It seems imperative that, at a minimum, there is at least a process of listening, using focus groups and consultations.

Marco Encalada focuses on the issue of communication research, arguing that with greater research into the people towards whom protected area communication is to be directed, there is much greater likelihood of successful communication as strategies can be specifically tailored.

Encalada presents a model of communication research focusing on the basic conceptual knowledge and perceptions of audiences regarding: their influence on the protected area; potential to contribute to conservation of the protected area; potential to benefit from conservation of the protected area; the conservation needs of the protected area; and the adoption of practices contributing to conservation of the protected area. In addition to

these, he highlights the need for analysis of the audience's communication structures and skills, including: exposure to external information (whether from other people, mass media or electronic information systems); ability to process external information; ability to express their views; ability to defend their rights; communication systems within the community (cultural expressions and communication media); opportunities for dialogue and practical demonstrations at all levels; and informal networks of social influence.

A number of internal factors impacting on protected area management were cited within the papers, including fundamental managerial and organizational issues, an enabling environment, resource availability, skills capacity, and the positioning of communication in the organization. Therefore, before a communication strategy can be realistically developed, the institutional structure, position of the communications department/personnel, responsibilities, internal barriers & resources (Vidal), and the organization's capacity for enabling decision making (Molefi) must be researched. These will then determine the definition of objectives, design of communication actions, carrying out of actions and monitoring and evaluation processes.

Research methodology

With people at the heart of strategic communication, research methodology goes far beyond studying available literature. Dialogue and listening are key instruments (Mefalopulos), with all efforts made to maximize stakeholder participation. Participatory appraisal of protected areas – a participatory methodology for survey and analysis of the situation of protected areas based on a process of shared apprenticeship (Inhetvin) – is a positive approach, as are other socio-ecological, baseline and awareness-attitude surveys (Mahajan), and consultation or feedback meetings (Molefi).

Such participatory practices should be maintained in subsequent stages when defining communication objectives, planning and implementing communication plans, and evaluating the communication strategy. Constant step-by-step evaluation and revision of intermediate outcomes are needed in order to make any necessary strategic adjustments (Molefi, Vidal).

From communication research to planning

"In strategic communication... audience, objectives and messages come before media (and not the other way around as is often the case)" (Hesselink), therefore, once research is complete, the objectives (or "desired outcomes of communication" (Bronson)) can be defined. There will always be internal as well as external communication required. If research reveals internal challenges to protected area management, objectives will also target problems of institutional/organizational communication, with groups and/or individuals within institutions also becoming audiences. The objectives should be defined through participatory communication with the stakeholders, be specific to an audience/stakeholder group and appropriate (Hilbrunner). As Vidal affirms, "it is important to reduce the temptation to be reactive instead of building sustained communication processes with audiences". Indicators and criteria for evaluation should be defined at this stage (Mefalopulos).

From communication objectives to means and actions

Once the audience-specific objectives are defined, objective-specific and appropriate communication actions are designed, with expected results, indicators and criteria for evaluation confirmed (Vidal). Again this should be a participatory process (Hilbrunner). Accountability should also be determined, specifying where responsibility for the communications actions will rest – recognizing geographic and organizational realities (Bronson).

When it comes to the delivery, or 'carrying out', of the communication actions, Vidal talks of three broad phases (though difficult to align sequentially): firstly the positioning of

concepts and ideas, secondly a reflexive phase, and thirdly the mobilization stage (Vidal). The communication actions may be pre-tested in an experimental phase designed to identify effective approaches and improve the strategy before larger scale application (Hilbrunner, Mahajan).

Communication means and actions

Strategic communication breaks away from a common tendency to first focus on communication means such as press releases, brochures, videos, websites and publications. These media may be used if strategically appropriate to the audience and objectives targeted, focusing on motivating stakeholders rather than convincing them based on assumptions (Hesselink). Emphasizing stakeholder involvement and the two-way, dialogue based, 'motivating' approach, one-way media (often targeted at the general public and affecting minimal change) are secondary to interactive and face-to-face communication, such as focus groups, roundtables and workshops.

Monitoring and Evaluation

As indicated above, monitoring and evaluation are not left as after-thoughts in strategic communication. With indicators and criteria for evaluation and monitoring defined early on in the process (with the definition of objectives and the design of communication actions), these should be ongoing processes facilitating informed and strategic response.

Investigating analysis of the efficiency and efficacy of communicative activities in protected area management, Jaume Sureda reveals "the need to develop resources that facilitate the evaluation of communicative actions in protected areas", and focuses on the establishment of criteria and indicators (quantitative and qualitative) for the evaluation of communicative function. These indicators form a model... to determine which specific information should be collected and how to assess it (Sureda).

Clearly evaluation is "a fundamental step towards the improvement of management" (Sureda), keeping people on their toes (Manzanero) as well as helping reveal the reasons for results. Not only must there be evaluation in terms of the protected area management objectives: there must also be evaluation of the communication results in terms of the communication objectives. Only with such evaluation can the "tipping points"³ in the strategic communication process be identified, helping improve future strategies (Hesselink). Yet, there remains a lack of substantive analysis regarding the impact of communication strategies and the reasons for this (Stern). There is a need for "renewed focus on the processes through which communications... take place and on the impacts of some specific types of decisions undertaken by parks managers" (ibid.).

Clear monitoring and evaluating methodologies and/or results – with, for example, the use of a control area, baseline and attitude awareness surveys, an evaluation survey and the use of an appropriately experienced independent observer, followed by comparative analysis of the data (Mahajan) – are rarely documented. This is closely related to the need to professionalize the discipline and provide an enabling environment for strategic communication, mainstreaming it in protected area management.

The future: professionalizing and systematically mainstreaming communication

Whilst there is much evolution in the theory of strategic communication, some suggest that practice is not keeping apace. Professionalizing communication is essential for it to add value to protected area management. With a professional approach there is an internal challenge to systematically mainstream communication in protected area management, so it can be used to strategically manage changing external challenges (Bronson). There are numerous efforts to build capacity in communication (see Hesselink, Hilbrunner, Castro, Manzanero etc.) as well as efforts to set a framework for recognition through the environmental conventions. However, efforts still need to be magnified.

Simultaneously, communicators need to be more systematic and assertive in providing empirical evidence on the impact and value of communication in development initiatives (Mefalopulos). Achieving this will strengthen the likelihood of communicators being able to position communication with managers and other decision-makers, stimulating investment in professionalizing communication and integrating communication interventions within management (ibid.). We can then look forward to seeing conservation efforts improve as protected areas are better able to use strategic communication and manage constant change.

Notes

1. *Communication as a policy tool*; IUCN Commission on Education and Communication, 8p brochure.
2. Ibid.
3. Gladwell, Malcolm (2000). *The Tipping Point: How Little Things Can Make a Big Difference*. Little, Brown and Company, Boston.

Chapter 32

"A Thirsty Place": drama performed during the Vth World Parks Congress

Tamara Guhrs (Copyright)

Introduction

In the interests of showing different ways of communicating and provoking reflection, the Commission on Education and Communication worked with ResourceAfrica to develop a play for the World Parks Congress, Durban 2003. ResourceAfrica is an NGO centred in southern Africa, which works with a range of partners to encourage and deliver new models of natural resource management, based on community participation in which the values of transparency, equity and respect for local people, their needs and customs are uppermost. Formerly known as Africa Resources Trust, ResourceAfrica works to support the rights and aspirations of rural communities to manage their natural resources.

From 1991 to 2001 ResourceAfrica ran a unique regional initiative that drew upon theatrical and other artistic traditions from within rural communities to enhance communication within and between communities at both national and regional levels – the community outreach theatre programme. The outreach team worked in Limpopo and North West Provinces dealing with issues identified by communities including land tenure and problem animals. ResourceAfrica then assisted in the identification of performers for an ongoing "commercial" theatre group, and undertook inter country exchanges. It was from these professionals that the play "A Thirsty Place" was created.

CEC asked the ResourceAfrica group to prepare a play to broaden Congress participants understanding of the ways to more effectively communicate – and show what happens when you tell people what to do as distinct from working with them.

In a short time, the actors were called from their homes to work together for 6 weeks before the Congress to develop and refine the play. Actors came from Mozambique, Zimbabwe, Botswana and South Africa, drawing on their experiences with protected areas. The result was a most engaging reflection on how protected area staff can improve their communication and build support with their public. The script is presented here to make sure that their rich offering to the Congress is not lost and to inspire others to bring humour and drama into their communication.

"A Thirsty Place"

Style, props and scenery

- *The style moves between abstract, physical mime sequences and realistic dialogue.*
- *The characters should be larger than life, especially the Parks Officials and Researcher.*
- *When the "play within a play" is performed, cut through the fourth wall and people play themselves – i.e. Chunky from Zimbabwe, the Transfrontier Mime Troupe, etc.*

- Explore using props in diverse ways to create the play's settings, including the Parks Office, a tavern, water pumps, a household, the bush etc. Props should include little everyday objects, crates, water containers and a tin bath. Also use physical mime to create settings.
- Every time there is a scene in the Park's Office, use the pin-board and a projection (statistics, charts etc) on a large screen behind the stage.
- Throughout the performance, use video and/or slides to create another 'layer': This is like an emotional layer rather than setting time & place. Dripping of a tap, a child playing with a milk bottle, a flashy postcard picture of a lion, etc.
- Use water containers and shakers (made from empty cans and milk bottles with stones, sand and other materials inside) as percussion during rhythmic sequences.

The actors: a play within a play

Within the play performed at the World Parks Congress, Park Official 2 (Kabelo) pushes for, and organizes, a drama festival. Prior to the festival, there are workshops during which "the community is given the chance to articulate their concerns, to communicate with the administration on matters that affect them. They will use drama to talk about their issues..." A drama group arrives for the festival... this drama group (within the play) includes the real "Transfrontier Mime Troupe": Chunky, Isabel and Kabelo. During the play's drama festival we have a "play within a play" in which the mime troupe play themselves: "I am Chunky Phiri – a traveller and a musician... These are my comrades – Isobel from Mozambique! Kabelo from Botswana!... We are the Transfrontier Mime Troupe..." During this part of the play, the actors interchange between themselves as actors and as actors playing characters in the play.

Lead characters

The Parks Officials (wearing traditional khaki jackets with epaulettes & caps):

- Official 1 (Tom): a "by the book" male bureaucrat/official; upright; conservative.
- Official 2 (Kabelo): upbeat young man; in touch with the communities; dances with people; drinks with people; not very well liked by his colleagues.
- Official 3 (Isobel): a gushing and enthusiastic woman; sympathetic. The other two officials vie for her attention.

Other

- Researcher (Chunky): American researcher; full of ideas about "Africa". His perceptions change very fast. He has been to other parks. His interest is animals and people, but he doesn't get the answers he expects. Well dressed.

Minor characters

The actors playing the lead characters and the remaining cast play various minor roles. Characters include: local women at the water pump; 'gangstas' in a tavern; spectators at a football match; participants in a pre-drama workshop meeting; members of a household; audience at the drama workshop; drama workshop actors. They also engage in numerous abstract physical mime sequences, ranging from miming as cows to water pumps, rain and the flow of information.

Scene One

(The cast enters in a stylized dance routine, enacting an abstracted 'searching for water' sequence. Pick up song using water containers as percussion. Gather around the notice board as the "National Parks Office" is put in place. Tom puts on his official jacket and dismisses the cast.)



Scene Two

The National Parks Office

(Projection on the screen at the back of the stage with a Park logo, sign, or slogan. A poster that says "The Park belongs to YOU". Flipchart to create office backdrop, with spider-charts and acronyms. A big piece of paper with the words "World Parks Congress 2003".)

- Official 2 (Kabelo): Hi Chief
- Official 1 (Tom): I'm telling you that it is too controversial. The senior management will never accept this as a workable strategy. I say we keep it simple, traditional.
- Official 2 (Kabelo): Chief, please, look at it again. Let us at least give it some thought. We cannot keep doing things in the old way all the time. No disrespect, Chief. I am just saying there can be another way...
- Official 1 (Tom): Twenty-five years Mr X has been in his job. He is the most experienced parks' manager in the country. Do you really think he is going to accept a new direction from someone like you, who has been in the job for three years?
- Official 2 (Kabelo): All that I am saying is look at the proposal...
- Official 1 (Tom): Twenty five years! And anyway, there definitely wouldn't be budget for something like this *(looking at the proposal)*.
- Official 2 (Kabelo): It's not a lot to spend on building community relations. And it's a project that would last – your department spent that amount on one launch party last year – you provided food and beer for a gathering of community representatives – so that – wait, let me finish – you could announce an unpopular policy change to a community that had no part in making the decision – wait – you fed them for one night, and now a year later we still have the same problems in that community.

Communicating Protected Areas

- Official 1 (Tom): And how exactly is this – this drama festival going to feed people?
- Official 2 (Kabelo): I didn't say it was going to feed people. Although it is a good skills and capacity building opportunity...
- (Enter Official 3 (Isobel) and Researcher (Chunky).)*
- Official 3 (Isobel): What are you two arguing about this time?
- Official 1 (Tom): We are not arguing!
- Official 2 (Kabelo): I am trying to breathe some new life into this system!
- Official 3 (Isobel): *(Goes to the document, takes it, looks at it)* Oh! This is your idea for the regional drama festival. I think it is interesting. We could use the performers for our next fundraising dinner.
- Official 2 (Kabelo): None of you are understanding me – this is not some ethnic display of local talent. It is about giving the community a voice!
- Official 3 (Isobel): The community has a voice! I didn't think it was up to us to provide that as well. Anyway, please, let me introduce our visitor – he is a researcher from America, and has come to do some studies on... urn... what was it again?
- Researcher (Chunky): Well, really, I am looking at the relationship between wildlife and indigenous peoples: the mythologies and beliefs, the mystical connections, totem animals, ancestors; the real beliefs, behind the myth of Africa.
- (Stunned silence)*
- Officials: Ok... Ahuu... mmmmm.
- Official 2 (Kabelo): I'm sure the department of Social Ecology will be able to assist you with whatever you need!
- Researcher (Chunky): Well, I just wanted to enquire about the proper procedure for introducing myself to the community – I mean, do I go to the Chief, or do you have some kind of representative structures...?
- Official 1 (Tom): No, don't worry about the Chief. Ask this young man *(referring to Official 2 (Kabelo))* to take you to Nhlambandlovu, the Community forum.
- (Official 1 (Tom) and Official 3 (Isobel) move to one side and put their heads together in a deep chat)*
- Official 2 (Kabelo): *(Muttering)* "Young man"...!?
- Researcher (Chunky): So tell me about your festival – it sounds interesting.
- Official 2 (Kabelo): *(Excited to have an audience)* Well. The idea is to have some workshops – whereby the community are given the chance to articulate their concerns, to communicate with the administration of the parks on matters that affect them. They will use drama to talk

about their issues. Schools, youth groups, drama groups, they can all participate. And then we have a similar programme in Gonarezhu, in Zimbabwe, in Coutado 16 Mozambique, and even in Botswana, and we host the festival, so that at the end of the day, communities are talking to parks directly, through the medium of theatre. And the best plays will go to the World Parks Congress in Durban! And – and! There is a big function – huge – Nelson Mandela is coming, you name it. Its part of the Transfrontier Park integration development programme. The groups can perform at this function!

Official 1 (Tom): *(To Isobel, on one side)* This is what is bothering me. How can you ask them to perform at such an important function? Small community dramas at such an event? Traditional dancers, maybe, ok. Something that appeals to the International Community. Johnny Clegg!

Official 3 (Isobel): Yvonne Chaka Chaka ! *(sings)* umqomboti!

Official 1 (Tom): Maybe you yourself should sing!

Researcher (Chunky): Can you teach me that song?

Scene Three

(Researcher (Chunky) encounters snippets of daily life. Each scene is punctuated by a video clip or a slide of water dripping.)

The Water Pump

(Researcher (Chunky) and three women – Isobel (not as Official), Sipiwe & Kaswell – at the water pump. Actors mime collection of water with an actor as the pump.)

Researcher (Chunky): Tell me, ladies – um, is this where you always get water?

(They look at him, suspicious.)

Researcher (Chunky): I just want to talk to you, I'm not trying to...

(They giggle and talk amongst themselves. Official 2 (Kabelo) appears. They greet him, friendly.)

Researcher (Chunky): What are they saying?

Official 2 (Kabelo): You look as if you have money. That lady – she wants to know if you are a tourist.

Researcher (Chunky): I'm not a tourist. Um – tell them I'm not a tourist. I'm a researcher. I am wanting to find out about their lives, their culture. I want to ask them about fetching water. Please ask them – how often do you fetch water? How long does the water last in the household?

(Women are laughing at him.)

Official 2 (Kabelo): I want to invite you to a meeting, to talk about something that the parks board is planning. A drama festival... *(he translates)*

Sipiwe (orlsobel): *(Respond to him, jeering.)*

Researcher (Chunky): What are they saying?

Official 2 (Kabelo): *(Irritated)* They said they don't want to go to any meetings. Now, if you will please excuse me. I have work to do.

(Slide: water dripping.)

(Women exit with water containers on their heads.)

(Researcher (Chunky) sits, takes out a postcard.)

(Slide: Postcard of Kruger National Park – maybe an elephant?)

Researcher (Chunky): *(Writes and talks)* Dear Em – I hope you are well. I have been having a pretty interesting time. I have spoken to all kinds of people – children at school, women on their daily chores, and men who do a lot of talking. I miss you.

The Tavern

(Researcher and men in a tavern. The hip-hop "gangstas" are there as well.)

Gangsta (Charles): *(Drunk)* You people who come here wanting to talk to us – you come here, you ask us questions. You don't even know us, you ask us questions. Now you are not giving us money – why must I give you answers to your questions.

You can't give me one cigarette!

(Gangstas in the background)

Gangsta (Charles): Gimme gimme, my name is jimmy,
I get what I can, I can what I get.

Researcher (Chunky): I don't smoke.

Gangsta (Charles): You are from? New York? California!

(Points to Official 1 (Tom) who is sitting at another table) That man – you see him – that one – eyyy. He is – from Nature. You know? From Nature parks. National Parks. My son – he got a job with them. But aai. Jobs? For us in Welverdien? We are forgotten. They have thrown us away...

Compensation! You talk of compensation. Aai. My uncle's donkeys were killed by a lion – he has been waiting 3 years for compensation! 3 years! And if a person goes into the national park...

(Official 1 (Tom) comes over to see what's going on.)

Official 1 (Tom): Do you have a problem here?

Researcher (Chunky): Well, you know I am just asking questions from all kinds of people. Trying to get a view of the community, and how people are around here.

Official 1 (Tom): I see. Well. Tomorrow my colleague is having his first workshop for the regional drama festival. You could go to the meeting and hear the perspectives of the community. I think you will get a more accurate view from there.

Researcher (Chunky): Well that would be great, thank you. Can I buy you a drink?

Official 1 (Tom): Actually no. I don't drink. I am just here to talk to my sister – she, um. She works here.

Gangsta (Charles): *(Laughing at Official 1 (Tom) and speaking to Researcher (Chunky))* Do you see that? Corruption. There's a meeting tomorrow, maybe some jobs for some people – so he comes to tell her first. So she has an advantage – because she is his sister.

Researcher (Chunky): Is that true?

Gangsta (Charles): *(Shrugs)* They never tell us anything.

(Song / Soundscape transition)

Soccer Match

(People start filling the stage – it's a soccer match. Some people are cheering; the referee is running around yellow carding the audience, etc.)

Researcher (Chunky): *(Talking to person next to him, who is politely answering, but more interested in the game)* So – tell me about your relationship to the animals in the Game Park. Do you, in this community, benefit from having the Big 5 on your doorstep?

Spectator 1(Nico): Yes, yes, of course.

Researcher (Chunky): And how do you feel about elephants? Do you like, worship them?

Spectator 1(Nico): Worship?

Researcher (Chunky): What other benefits? You get jobs?

Spectator 2 (Austin): Jobs? Who gets jobs? ...Defenda! Defend there! Oooh! That was close!

Researcher (Chunky): And how is the relationship between the Parks Authorities and yourselves?

(They don't answer him. One of the women – Sipiwe – has been listening closely.)

Spectator 3 (Sipiwe): Why are you asking these things?

Researcher (Chunky): I am interested. I'm doing research. About people and animals. In Africa.

(They shout over the cheering as someone scores!)

(Spectator 4 (Isobel) calls Researcher (Chunky) aside. They are walking away from the soccer)

Spectator 4 (Isobel): Maybe I can help you – What do you want to know?

Researcher (Chunky): Well, I've heard a lot of people complaining about Parks, saying they need compensation; they need benefits, that kind of stuff. I was wondering about that. I've read about a lot of projects in Southern Africa where people are getting control of the land and the animals and managing things themselves. Doesn't that happen here?

Spectator 4 (Isobel): You know, the reason there is tension between National Parks and people living near Parks is because the problems are real.

People are hungry, or have no water. Elephants destroy their crops, lions kill their livestock. Only a few get the benefits of jobs. There are places, like Makuleke, or like the Campfire project in Zimbabwe, where people can manage a conservation area of their own, and have access to hunting, or to resources like firewood, thatching grass. But sometimes – it's like there is no trust and no communication between the people – and the parks authorities. That's why people look at you like that when you ask questions.

Researcher (Chunky): And why is it that you are so prepared to talk to me?

Isobel as herself: *(She laughs)* I'm not from here! I'm from Mozambique. I'm just visiting. I'm here for the drama festival that Mr X is organizing. See, there is my group!

(Rest of cast has become a drama group – doing a circle game. As they approach, the drama group ends their dance with a dramatic clapping sequence (tata tatata ta)).

(Blackout)

Scene Four

National Parks Office

(Official 1 (Tom) and Researcher (Chunky))

Researcher (Chunky): Hi there!

Official 1 (Tom): Hello. What do you have there?

Researcher (Chunky): Well, these are my tapes – my material. I videoed yesterday's meeting – and since I'll be leaving soon I thought I would leave a copy with the park office. Would you like to watch?

Official 1 (Tom): Oh yes, I would love to! Am I in it?

Researcher (Chunky): Of course you are, yes.

(Researcher (Chunky) & Official 1 (Tom) look into the viewfinder of the video camera, watching the footage from the side whilst the others act out the video footage centre-stage).

- Official 2 (Kabelo): *(Acting out the video footage centre-stage)* Welcome everyone. The reason we have called you here today for this meeting is because we would like to tell you about the drama workshop programme that is coming up...
- Official 1 (Tom): *(Speaking to Researcher (Chunky))* Ok, that part's boring – we've heard non stop about his drama festival...fast forward.

(Actors centre-stage fast forward, with funny squeaky voices and quick gestures.)
- Official 2 (Kabelo): *(Acting out the video)* It is going to be a big, big occasion. We have actors from Mozambique, from Zimbabwe, Botswana. The theme will be – transfrontier parks –
- Official 1 (Tom): *(Speaking to Researcher (Chunky))* Give us the part with the discussions – stop – there!

(Fast forward, freeze – play)
- Participant 1 (Charles): *(Acting out the video)* Just because we are young doesn't mean we are not serious – or that we are blind – even this workshop that we are in- no-one asked us if we thought it was a good idea. Where is the consultation? We are never consulted on these...
- Participant 2 (Nico): Actually my friend is right. There have been a lot of problems in our community. Lack of water, crime, alcoholism – HIV and AIDS

(Murmuring, people disapproving, uncomfortable)

Its true! Some of the women here have only got one thing to sell! You think tourists are only interested in the Big Five?

But now some of these problems are becoming the problem of the parks as well. The hijacking of those tourists last month – these things are happening because people feel ignored. People feel that they are forgotten.

The parks have forgotten that the people here used to live there in the national park. But the people have not forgotten that. The parks have forgotten, but the people remember.
- Participant 3 (Austin): There should be special benefits for those who live on the boundary. We are the ones who suffer most! And now what about transfrontier? People are asking – will we be able to travel freely just as the animals are allowed to travel freely?
- Participant 2 (Nico): We should be given a piece of land that we can manage ourselves – where we can hunt, or have our own tourism.
- Participant 4 (Sipiwe): Or – we should be allowed to go into the National Park to collect firewood, honey, you know – just small things
- Participant 3 (Austin): But the government will never trust us. They don't even talk to us!

(Fast forward)

Official 2 (Kabelo): Southern Africa has the best examples of Community Conservation and Community Natural Resource Management in the world. I think, Chief, let us use those examples that have been successful, and let us make new successes in our area! And let us do it by letting the people say what they need to say!

Official 1 (Tom): *(Speaking to Researcher (Chunky))* Ok – now fast forward to my speech.

(They stare at each other)

Researcher (Chunky): *(To Official 1 (Tom))* Go! Go play your part! *(Indicating for him to get out from behind the video viewfinder and act out the footage)*

(Tom rushes in to the picture. As he speaks the workshop participants people keep nudging each other, asking one another what he is saying – they just shrug. As it progresses, his words just become gibberish and participants, increasingly frustrated, lose interest and begin to leave.)

The advantages of Transfrontier Parks include:

Providing mechanisms for increasing the amount of land under sound ecological management across international borders; Re-establishing key ecological functions, such as seasonal migration, previously disrupted by artificial limitations imposed by political borders; Improving the protection of internationally shared resources such as watersheds; Increasing the area available for wildlife and plant populations, thereby reducing the extinction risks due to stochastic events; Improving regional ecological management by providing mechanisms to develop capacity for inter-state co-operation, and creating opportunities for further collaboration in other, more politically sensitive areas.

5. Capacity building of the weaker partners can be assisted by the stronger partners, e.g., through staff exchange and training. This in turn would enable equitable participation in the development and management of trans-border ecosystems, and can enhance decision-making with regard to solving common ecological problems. Increasing economic opportunities, through promotion of sustainable use of natural resources, including joint eco-tourism development and marketing; Culturally, Transfrontier Parks and TFCA's can promote closer links between local communities, whose cultures and traditional land areas have been divided by international borders. Under the Transfrontier Park initiative, policies for the resumption – or at least legalisation – of cross border movement of tribal groups divided by international boundaries can be developed. This would offer opportunities to integrate scientific understanding and indigenous knowledge that would be valuable in successfully and sustainably managing trans-border ecosystems

(As the workshop participants leave, the blah blah words of Tom are slowly taken on by the group and turned into a rhythmic chant.)

Scene five

Household

(From scene five's closing rhythmic chant, the scene changes slowly into a household with sounds of cows. Men are sitting talking, women are working. Tom acts the part of the head of the household. Sipwe is mama – bossy and loud. Austin brings the cows – acted by a couple of the cast – to the family house to drink water. Kaswell is sipwe's daughter. Chunky, Isobel and Kabelo – the mime troupe – arrive as their visitors for the drama festival.)

- Mama (Sipwe): (To Austin) Take the cows away! What are you doing? Don't you know we have visitors coming?
- (Austin takes the cows away. The new visitors (Chunky, Kabelo and Isobel) arrive with their bags. Mama Sipwe brings them beer. They settle down)*
- Man 1 (Charles): So, are you ready for the drama festival?
- Chunky as himself: Ja, ja, getting there!
- Man 1 (Charles): You know – we as communities need to make ourselves heard with this thing. There is a lot of dissatisfaction with the way things are.
- Kabelo as himself: I know how it is. People always complain. But – there are good things happening. Makuleke, Campfire – many examples of Communities getting control of the land again, or at least of the resources.
- Chunky as himself: My friend, on paper those things are impressive, but have you seen real meaningful benefits, where people's lives are actually uplifted?
- Kabelo as himself: We start by talking. Then slowly we see things will happen. In many places now communities are permitted to harvest things from National Parks – things like reeds, thatching grass, honey. This changes the way people see the Parks, and the authorities.
- Man 1 (Charles): From the Park? That would be nice, hey?
- Daughter (Kaswell): Ma? Can I help you to prepare the food?
- Mama (Sipwe): Well, you can leave the men to their talking. Maybe you want to come with us to fetch water? There is not enough for everyone to have their bath tomorrow, so I will have to get more.
- (The men all put their heads together, deep in conversation as the women leave for water.)*
- (Enter Nico, Austin)*
- Man 2 (Nico): Are you a researcher?
- Kabelo as himself: No, I'm from Botswana.

Communicating Protected Areas

- Man 2 (Nico): I was wondering – because you have a camera, and the other guy was also having a camera.
- Man 1 (Charles): Where is that guy – the one who was asking all the questions?
- Man 2 (Nico): I heard he left already.
- Chunky as himself: Yes! He's gone, comrade! Back to America!
- Man 1 (Charles): He's gone? Why didn't he say goodbye? He promised me a video of my dancing. He even took pictures of us, man.
- Kabelo as himself: What are you expecting? How many people come here, asking this, that?
- Head Tom: Asking about ancestors, about hunting, about this, that? What food do you eat, how many children do you have? What are your problems.
- Chunky as himself: Then they go – gone, like rubbish when the wind comes. Do we have anyone coming back saying – hey – remember me?
- Man 2 (Nico): Here is the borehole you were asking about – here is some money for children's education. We help these people with everything – we get? Nothing...

(Lights fade)

Scene six

The Drama Workshop

(Lights come up on Official 2 (Kabelo), Official 1 (Tom), and Official 3 (Isobel) in their epaulettes. They sit and wait, while others are bringing crates to form audience seating. Workshop actors warm up in the background.)

- Official 2 (Kabelo): Mike check: one two one two
- Ok, everything is ready for the first showing. I'm telling you this is going to be fantastic! For the first time people have an opportunity to say what they really feel.
- Official 1 (Tom): *(to Isobel)* I still don't see why that is so important. They don't have a national park to run. They don't understand the first thing –
- Official 3 (Isobel): Oh, Tom. You know community consultation is important.
- Official 1 (Tom): I have consulted them! We had a very good launch party – we shot six kudus for that party! We gave four presentations on the transfrontier parks, the objectives, the projected outcomes, everything – we told them!
- Official 3 (Isobel): And now you have a chance to listen – to listen to what they have to say in return...

Official 1 (Tom): In my experience – all that happens when communities voice their concerns is a list of impossible complaints. Let us shoot elephants, give us boreholes, give us land, give us education – they don't understand our processes, or how tight our budgets are. How can National Parks be expected to provide incomes for thousands of people in a community like this?

(Setting out of chairs - crates being arranged into audience seating. The show is about to begin. Kabelo and others are calling people to the show.)

Official 2 (Kabelo): *(Addressing the onstage audience and the World Parks Congress audience)* Ladies and gentlemen, the shows are about to start!

Spectator 1 (Charles): When is Madiba coming?

Spectator 2 (Austin): Don't be stupid man, he's not coming today.

Spectator 3 (Kaswell): This is just for us.

Spectator 4 (Sipiwe): This is just the practice.

Spectator 5 (Nico): The preview.

Official 2 (Kabelo): That's right! And we have some important people from our surrounding borders – community outreach cultural practitioners –

Spectator 1 (Charles): Who?

Spectator 4 (Sipiwe): What?

Spectator 5 (Nico): Actors, man. Actors.

Spectator 1 (Charles): Oh.

Spectator 4 (Sipiwe): Ok.

Official 2 (Kabelo): This is a workshop. Madiba is not coming to the workshop! Our foreign guests will perform stories from their communities, and then you will have a chance to respond, to talk about how the same, or different, issues affect you here.

(Workshop begins)

The play within the play

Chunky as himself: *(Addressing the onstage audience and the Congress audience)* Welcome, welcome everybody! I am Chunky Phiri – a traveler and a musician. I have been to Zimbabwe, Zambia, Mozambique, Malawi, Namibia. I have been transfrontier-ing since I was 16 years old. These are my comrades – Isobel from Mozambique! Kabelo from Botswana! *(Introduces others also)* We are the Transfrontier Mime Troupe – please give us a warm, warm welcome.

(The onstage 'audience' members, who were watching, now jump to perform new big, actor-ish characters. Put on hats or T

shirts that mark them as part of a group. Except Tom who remains as Official 1 (Tom) (perhaps joining the Congress audience?) Chunky is the Master of Ceremonies (MC) during this, while others enact scenarios.)

Our first piece is called "Benefits, Boundaries and Bending the Rules". Actually, we are launching the first ever guide book for parks managers and others on Community Communication....
(Drum roll as Kabelo – as himself – brings on the guide book)

Thank you – thank you everyone. You think you know it all, eh? You think you don't need a guidebook? Ya – I can see that the gentleman in the third row is an expert – he looks like a good social communicator – well!

That's good – pay attention, because we'll be having a quiz just now. Great prizes to be won – a luxury weekend for two in the Kruger National park! Just pay attention –

Chapter One! (Drum roll)

"Meeting and Greeting" – do's and don'ts! This is very important ladies and gents!

On entering a new community – you tell us which is the correct way!

Method 1:

("Elders" seated around a fire. Blow the fire, talking amongst themselves. Nico and Isobel enter as communicators on behalf of a Park. Nico is in a t-shirt, with jeans low on his hips, very cool, chewing gum and Isobel in trousers, with papers, pens – which she hands out to everybody – a camera and flipchart.)

Communicator (Isobel): Hello everybody. Sorry we are late! Does everyone speak English here?



Communicator(Nico): We are here to tell you about the new land use policy! Yes? Do you understand?

(Elders show dissatisfaction...)

Chunky as himself: *(Addressing the audience whilst the scenario is enacted)* Write down everything they say! Take photos without negotiation! Draw diagrams on big pieces of paper so they can understand better! Throw in some figures, and statistics, and a flow chart or two – use lots of jargon and that way they won't ask any awkward questions, and your report will be much easier to write at the end of the day!

Method 2:

(Isobel wraps a cloth around her waist. Austin puts on a jacket. They go around, greet everybody respectfully. They speak a few words of shangaan and everybody laughs and is good humored.)

Communicator (Nico): Yes, thank you. We are here to spend some time in your village. We have spoken to the chief who says that we should come to you and find out when is a good time to join you, to talk about things with you.

Chunky as himself: *(Addressing the audience and speaking over the action)* Do your preparation! Learn the greetings that are specific to each area. If you don't speak the local language, bother to learn a few words! Find the best time of day to talk to people – when are they relaxed, not busy? Speak to everybody, men, women, children!

Isobel as herself: *(Removing the cloth and joining Chunky, addressing the audience)* And take your time! Not everyone understands deadlines!

Chunky as himself: And always *(with interjections from Isobel)* – Respect, respect, respect! What did I say? Re what?

All: ReSpect.

Chunky as himself: Re?

All: spect!

Chunky as himself: That's right – there's even a few people who are awake in the back over there.

You can read up the rest yourselves ladies and gentlemen. Right now – moving along to –

Chapter Two! *(drum roll)*

All: "Promises Made, Promises Broken!"

Chunky as himself: Oooooohh. Very important, folks. Very important! How many times have you let the words slip out of your mouth – the cheques in the mail! Oops! I'll have it done by Monday! Oops! Jaa – and when it comes to communities – ooh, i've seen it done so many times!

Communicating Protected Areas

- Kabelo as himself: *(Reading off a clipboard, as if to a large gathering)* The expected benefits for this community will be – increased income from tourism; employment opportunities; projects to train communities in literacy, hospitality industry skills, medical facilities.
- Official 1 (Tom): That is not a promise! That is a projected outcome.
- Chunky as himself: To you! But for us it's a promise...
- Aha – disappointment, comrades...
- But moving on, mmm, lets see – "Cultural assumptions" mmmm, chapter four:
- All: "Who is this community you keep talking of anyway?"
- Chunky as himself: mmm – Chapter 6: "transparency for beginners"; chapter 8:
- All: "Report back!"
- Chunky as himself: Oho – that's the one I wanted!
- Kabelo as himself: You know – this thing of reporting back. Information – should be like water. *(Cast mime this)* It rains down on to the ground. The sun is hot, it turns to steam, it rises – above. It joins the clouds, until it rains down again. Some of it falls below the earth, deep down, to be kept safe until it is needed again. Some of it rises again, to join the clouds. Some of it flows, on the ground, to be collected by all the people who need it. And just like water – everybody needs it!
- (Cast still miming as he talks)* But in some places – its like – the rain falls once in a while. Just enough to make people thirsty. It sinks in. Then people come with pumps and they pump, and they take whatever they need. And leave us, in this thirsty place. With maybe a twenty litre container that everybody has to share.
- Chunky as himself: Information should flow two ways, ladies and gents. If you come to ask questions, and gather statistics, or make promises, you have to take your information –
- All: "Back to the people!" *(emphasizing this with gestures)*
- Kabelo as himself: Let it be up there in the clouds of government offices or Harvard University, and then – let it rain back down, and fill the tanks, and flow into the classrooms, and flood the minds of the young and thirsty – and...
- Official 1 (Tom): *(Jumping up and interrupting the drama workshop)* Ok, please that is enough – we don't have time for this! We have a whole programme to get through...
- Chunky as himself: *(Cutting off Official 1 (Tom) and moving the workshop along)* Thank you Kabelo! Comrades – this is just a short preview of this fantastic new book. You know in my country, in Zimbabwe – what?

- Official 1 (Tom): Ahem –
- (Isobel and Kabelo are nudging Chunky, shaking their heads)*
- Chunky as himself: Oh, sorry, yes.
- Chunky as himself: If you would like to win copies of this book – just answer a few simple questions – and don't forget – a grand prize goes to the person who can offer a workable solution for the issue of elephants, boundary fences and compensation – details coming up after the show! But right now, let's move onto play number two.
- (Drum)*
- (Two women on stage, Isobel and her grandmother. Grandmother dies. Isobel sings a funeral song. Actors lay the deceased woman to rest, singing. Singing quiets as Isobel speaks over the top. The cast mimes whilst she speaks)*
- Woman (Isobel): I came from a place where there was war, and no food. I lived with my family in this place. Drought came, every year to stare at us with hot eyes. And to starve us. My grandmother used to tell me of a place where she came from when she was a child. It was a beautiful place. *(Others start miming as she speaks)* There were animals, that her father killed for meat. Fish in the rivers. Clean clear water. Plenty of strong trees for firewood, and trees that had medicine for her to use.
- She had to leave that place when she was just ten years old. She never told me why. Maybe it was to marry my grandfather, I don't know. My mother and my father were killed in the fighting in that place. It was hard to survive. My second child was tall to my waist. My 3rd child was just a baby. One day I woke, and my grandmother was dying. She said *(Others echo the words of the grandmother in chorus)* "go – take the children and go back to the land of my ancestors. You will find help there. Don't stay in this land of war and fighting. She said go with Shaddie – he knows the way".
- (Moving / travelling song.)*
- Man (Nico): *(Acting it out as he speaks, miming the sequence as they travel through the bush – the other actors as animals, rain, trees)* We traveled for more than two weeks. We ate fruit and a little bit of what we had brought with us. We dodged wild animals, and slept under the stars. And the rain. The baby – *(Isobel cries out No!)* the baby did not make the journey.
- Woman (Isobel): When we arrived in the place of my grandmother's birth, we did not find the land she had promised.
- (Slide: Boundary fence. There is a roadblock, someone asking for papers.*
Scouts with guns – questioning them threateningly in a language they don't understand.)

Communicating Protected Areas

- Scout 1: Shnelingulipulnti nashnalpark sherini shanguloominbu nashnal park?
- Scout 2: Eh? Shenlengash Nashnal park? Shnengash Nashnal Park?
- Man (Nico): *(Running)* We ran away from everyone. Until we found the place where gogo's people were moved to.
- Woman (Isobel): I came from a place of war, and hunger. The new place I came to was changed forever. And people remembered a better time.
- Spectator 2 (Austin): Here – people say "we were moved from our place" they say – "this is what we cannot forget. We were moved to a thirsty place"
- Man (Nico): Now – the land belongs to the animals. The animals belong to the government. But we also belong to the government, don't we? That's why they call it a National Park. Why has the government forgotten us?
- Official 1 (Tom): *(Interrupting the play)* Excuse me – can I say something here?
- Spectator 1 (Charles): *(Continuing despite Official 1 (Tom) 's interruption)* A million tourists pass through this place every year. How does that look to us? Like they have money – and we have nothing.
- Official 1 (Tom): *(Interrupting again, becoming more aggressive/defensive)* That money is used for –
- Man (Nico): *(Raising his voice)* We are not asking for the land back. The past is past. We are asking – for a little bit of help. Because this is the Sophiatown of the bush. A forgotten District 6 that no one talks about.
- Official 1 (Tom): I'm sorry – this has to stop. You can't say all of this – in front of – *(turning towards the World Parks Congress audience)*
- Chunky as himself: *(Cutting Official 1 (Tom) off)* Comrade- its better that you sit down. We haven't finished...
- (Kabelo takes the mike. From across the stage, Official 1 (Tom) starts making a move on him, to steal the mike.)*
- Kabelo as himself: I have an important message that comes from a place that for many is a rich land, full of resources of many kinds. Except one essential resource – water. Mogetse Kaboikanyo is no longer alive, ladies and gentlemen, his heart stopped beating in February last year. But he has left these words, to be shouted around the world.
- (Others start clapping rhythmically and humming. Chunky joins Kabelo centre stage with props and clothes in which Kabelo takes on the guise of Mogetse Kaboikanyo. Chunky moves aside.)*
- (In the guise of Mogetse)* "Gugama, the creator, made us. That was a long time ago – so long ago that I can't know when it happened. That is the past, but our future is rooted in the hunt, and in the fruits which grow in this place. When we hunt, we are dancing. And

when the rain comes it fills us with joy. This is our place, and here everything gives us life...

God made us, and He made the animals for us. Why does the government think they are more important than the people? The government just wants to take all our good things. The government is like a poor fellow who sees a rich man and wants to take what he has. Now we must live in the shadow of being thrown off our land. There can no longer be any rest...

I was born in this place, and have been here for a very long time. Now this relocation thing has come, but I don't have the full truth about it. They come and say that I have to move, that this place is for animals. But why must I leave the animals? I was born with them, and must stay with them. I have that right."

(Throughout this Official 1 (Tom) has become more and more agitated. He has been whispering to people, and then approaching Nico, to take over the mike. It's a power struggle.)

Kabelo as himself: *(No longer in the guise of Mogetse, addressing Official 1 (Tom))*
Can't you see I haven't finished?!

Official 1 (Tom) I'm sorry, we are out of time.

Kabelo as himself: But this is my turn on the mike!

(Tom signals for him to hand it over. Staring him down.)

Kabelo as himself: *(Frustrated)* It's my chance – this is an important message from someone who cannot speak for himself –

Official 1 (Tom): *(Authoritatively)* Come on, go sit over there. It's over.

(To the onstage audience and to the World Parks Congress audience) Ladies and gentlemen, I would like to declare this performance – over! You may give feedback.

Official 3 (Isobel): *(Puts on Official jacket)* Well, I think it was very beautiful. Thank you, everybody. As a woman who has children of her own, I feel inspired to, to look again, with new eyes, at the way we always do things! What do you think, eh Tom?

Official 1 (Tom): *(Straightening his clothes and puffing up, addressing the on-stage audience and the Congress audience)* Well, yes, ladies, gentlemen, community members, distinguished guests. It has been wonderful for everyone to have a chance to display their talent to us. Unfortunately we did not have time to continue *(nervous laughter)*. I will give you my official response to the issues, once I have consulted my superiors.

Spectator 2 (Austin): What about the prizes?

Chunky as himself: What prizes? No man – that was a joke. Now – I would like to lead us in a song.

(End song)

Chunky as himself: *(Addressing the World Parks Congress audience)* Comrades – it is just the beginning. Let us remember that even though you are frustrated now, someone, somewhere, is listening to your voice.

Quietly and slowly, we are fixing the mistakes of history. In some places, people are being separated from the land they love and live from. In other places, the land and the people are reunited. This issue of land is never without problems. It is always controversial. That's why it is time now to sit down and discuss the way forward. To find a way that can work for everybody. Thank you.

Spectator 5 (Nico): Hey! This is not an election!

(End)

Biographical Summaries

Robin ABADIA manages the Network of Communicators for the Global Communications Division at Conservation International (CI). In this role she manages awareness campaigns, builds the capacity of a network of CI communicators working around the world, and facilitates workshops to create communications strategies. Robin began her career by producing a television documentary for public television before working on a movie-set for Warner Bros. She then moved to Los Angeles where she worked for National Geographic Television. She studied Environmental Science and Policy at Duke University, followed by a Masters in Public Communication at American University. Combining these two disciplines has been her life goal – to use the power of communications to change the hearts, minds, and behaviours of key audiences in favour of biodiversity conservation.

Deanne ADAMS attended college at the University of Alaska, Anchorage and received a BA in Anthropology in 1977. She began her career with the US National Park Service in 1972 and has worked in Denali National Park (Alaska), Yellowstone National Park (Wyoming/Montana/Idaho), Shenandoah National Park (Virginia), and in regional offices in Seattle, Washington and Oakland, California. Most of Deanne's career has been as a park interpreter or manager of park interpretation and education programs. While in Yellowstone she managed hotels for five years, for the park concessioner. Active with the Association of National Park Rangers, she has served four years as national president. She is also active with the International Ranger Federation (IRF) and currently serves as the North American Representative, whilst working as for the National Park Service, Pacific West Region as Regional Chief, Interpretation and Education.

Dawn BRONSON is the Superintendent of the Manitoba Field Unit (MFU) of Parks Canada. The MFU is responsible for the protection and presentation of 7 National Historic Sites which are owned by Parks Canada, including Lower Fort Garry NHS and Prince of Wales Fort. As well, the field unit is responsible for the management and operation of Wapusk National Park on the shores of Hudson Bay. Dawn has an Honours B.A. in Recreation from the University of Waterloo and started her career with Parks Canada in 1981. She has occupied a number of different positions at the national, regional and field unit level, and has been the Superintendent of the Manitoba Field Unit since 1998.

Margalida CASTELLS graduated in History and has geared her professional life towards heritage interpretation and cultural management. She collaborates with projects undertaken by the Education and Citizenship research group in the Department of Education of the University of the Balearic Islands. Such projects include the evaluation of facilities and resources for environmental education and interpretation (2001) and the development of interpretative resources and equipment for the Ferrutx Project: towards a municipal model of environmental interpretation for saturated tourist areas (2002). She is now planning a footwear museum conceived by the Inca City Council (Majorca, Spain).

Haroldo CASTRO is an award-winning video director, producer and photojournalist. As a Vice President for International Communications at Conservation International (CI) he is responsible for designing and implementing conservation awareness strategies for conservation initiatives around the world. Having directed more than 40 video programs – from television spots to documentaries – Haroldo is a keen promoter of environmental reporting. In 1999, he initiated a contest for environmental journalists: the Biodiversity Reporting Award. Before joining CI, he worked in Washington DC, as a correspondent for the Brazilian media and as an independent television producer. He has published four books, hundreds of articles and thousands of photographs worldwide.

Daniele CALABRESE works at the World Bank as Development Communication Specialist. He works with clients in design and implementation of communication programs for water supply and sanitation and sustainable development programs in Nigeria, Albania, Nicaragua and Iran. Previously he worked for the Italian Parliament as a policy advisor for the European Union and Finance committees, as well as for an Italian communication firm. He holds a Master's degree in International Development from the George Washington University, and is a Laureate in Political Sciences with a focus on Middle Eastern Studies from the Instituto Universitario Orientale of Napoli (Italy).

Marco ENCALADA is the general manager of the Ecuadorian NGO Corporacion OIKOS and the regional Chair of the IUCN Commission on Education and Communication in South America. Marco has a Bachelor degree in communication and information (Universidad Central del Ecuador); a Masters degree and post-graduate studies in communication for development (Stanford); as well as D.Ed and post-graduate studies in education (Walden University, Minnesota and City University of Los Angeles). With much experience as an independent consultant to international organizations and foreign governments on the planning of educational and social communication programmes, and the evaluation of community development projects, he now manages the CEC input into the UNEP-GEF Environmental Citizenship project.

Patricia FERNÁNDEZ-DÁ VILA is the Permanent Representative of the International Resources Group, Sucursal, Perú.

Lucia GRENN heads the Communication for Sustainable Development in Operations Unit of the World Bank's Development Communication Division (DevComm-SDO), leading the Bank's effort to root communication in Development and Good Governance projects. Under her leadership the Unit is working on 30 country related projects, with a focus on Environment and Rural Development. She has worked extensively in Eritrea, Guinea, Jordan, Mexico and Nicaragua, and has numerous publications reflecting her commitment to promoting sustainable development.

Infáide Patrícia do ESPÍRITO SANTO is a biologist, and an officer of the Brazilian State Forestry Institute (IEF) of Minas Gerais, where she is a specialist in environmental education and participatory methodologies.

Chandra GURUNG is the Country Representative of the WWF Nepal Program. He received a PhD in Geography from University of Hawaii, USA (1988), an MSc. degree in Rural Development Planning from the Asian Institute of Technology, Bangkok, Thailand (1981), and an MA in geography from Tribhuvan University (1978). He designed the first community-based integrated conservation and development project – the Annapurna Conservation Area Project (ACAP) – and implemented this as its Director under the aegis of the King Mahendra Trust for Nature Conservation, which he served as Member Secretary (CEO) from 1992-1994. He was appointed visiting Professor at IUCN Headquarters in Switzerland, 1998/99, since which he has been the Country Representative of WWF Nepal program. His expertise includes ecotourism, sustainable development, integrated conservation and development and protected area management, and he has written several articles on various subjects which have been published in many national and international books and journals.

Frits HESSELINK (born 1945) has a background in International Law. He started his career in 1970 as Fellow at the Institute for International Law of the State University of Utrecht. Subsequently he was engaged in national curriculum development for social studies and environment in the Netherlands. In 1975 he co-founded the Dutch Institute for Environmental Communication (currently SME MilieuAdviseurs), of which he was a managing director from 1983-1997. Today he is managing director of HECT Consultancy (www.hect.nl), specialized in strategic planning, marketing and stakeholder management in

a sustainable development context. He has carried out projects in many countries in Europe, Asia, Africa and Latin America. Among clients are British American Tobacco (BAT), World Bank, UNDP, European Commission, IUCN, WWF, Ministries of Foreign Affairs and Ministries of Environment of different states. Since 1992 he has served the IUCN Commission on Education and Communication as Deputy Chair (1992-4), Chair (1994-2000) and Steering Committee Member (2000-4).

Roberta HILBRUNER has been a Communication for Sustainable Development Specialist with the Natural Resources Management Office of the U.S. Agency for International Development (USAID) since 2000. She manages a global project called GreenCOM that has worked in over 40 countries, for the past 11 years, to scale-up development impact through social change processes. She also chairs the USAID Sustainable Tourism Working Group and manages AgCOMM, an agricultural communication project. Before joining USAID, Roberta worked for the Forest Service of the US Department of Agriculture for almost 25 years as a recreation planner, interpreter and public affairs officer. She was Project Manager for design and construction of an award-winning visitor centre in the Columbia River Gorge and managed the Smokey Bear fire prevention program. Roberta graduated from Oregon State University with a degree in Technical Journalism and holds a Master of Science degree from Colorado State University in Recreation Resource Management and Public Information.

Tomas INHETVIN is an economist holding a PhD. He studied at the Free University of Berlin, Germany, and is now an International Consultant for the Germany-based GFA Terra Systems GmbH and the cooperating company Institut für Projektplanung (GFA/IP). He is team leader of the Doces Matas Project in Brazil.

Alex KOUTSOURIS graduated from the Department of Agricultural Economics & Rural Development, Agricultural University of Athens (AUA) and has an M(Agr)Sc degree from the Department of Agricultural Extension, University College Dublin, Ireland as well as a PhD degree from AUA. He has worked as Head of the Agricultural Extension & Rural Development Unit of the Development Agency of Karditsa and General Director of the Pindos Centre for Strategic Planning. Currently, he is a lecturer (Agricultural Extension – Agricultural Education) at AUA and is involved in national and international projects. He has authored articles in national and international journals and books, edited books and been the Chairperson of the International Farming Systems Association-European Group.

Lisbet KUGLER completed her Bachelor's degree in Biology at Brown University, USA, with a focus on animal behaviour and ecology. She graduated from the Yale School of Forestry & Environmental Studies, USA, with a Master of Environmental Science degree, concentrating on conservation biology and policy. She currently works as an environmental consultant at PRIZIM Inc. on issues related to the US National Park Service and other US government agencies.

Margarita LAVIDES is the Acting Director of Marine Ecosystems Program of Haribon Foundation for the Conservation of Natural Resources, Philippines. She has served Haribon since 1997 in various capacities. She was Assistant Professor at the Biology Department of University of the Philippines and De La Salle University, Manila. Currently, she manages a national project on marine protected areas in the Philippines. She is a recipient of the Ford Foundation-International Fellowship Program and shall commence her PHD in the United Kingdom in 2005.

Lêda LUZ is a Forest Engineer and National Consultant for the GFA Terra Systems GmbH and Institut für Projektplanung (GFA/IP) in the Doces Matas Project, Brazil, for participatory management and sustainable local development.

Prashant MAHAJAN has been associated with Bombay Natural History Society (BNHS) since 1993. In charge of the conservation education division, he is responsible for planning, implementing and monitoring conservation education programmes for children, teachers, teacher trainers, university students, corporate groups, government and non-governmental organizations, professionals and the general public. He provides technical advice to state Forest Departments on developing Environment Education Strategies and Action Plans for protected areas in India, and has been designing and developing conservation education centres for government and corporate industries.

Ishmael MAKWAEBA was born in the then Transvaal Province of the Republic of South Africa where he grew as a village boy herding cattle. In 1986, at the age of 22, he became an assistant teacher while corresponding with the University of South Africa. Actively involving the school in conservation awareness programmes, he was in 1991 employed by Bophuthatswana National Parks as a Conservation Clubs Organizer. In 1992 he did a Diploma in Nature Conservation with the Technikon Southern Africa and in 1993 joined the National Cultural History Museums as the first Education Officer based at Tswaing Crater Museum, developing his interest in ethno-conservation education and traditional interpretation. In 1996 he was recommended to coordinate the Imbewu programme of South Africa National Parks. Taking a break from this, he received the Rotary Ambassadorial Scholarship in Manchester, UK, 1997-8, where he completed a Postgraduate Diploma in Conservation Biology which he then linked to an MSc. Returning to South Africa he resumed his job with Imbewu, since becoming a manager of the Youth Outreach programme.

Rafael MANZANERO started his conservation career in 1986 as a wildlife educator at the Belize Zoo. In 1989 he then joined the Belize Forest Department as a Conservation Officer. In 1995 he was promoted to Belize's first Protected Areas Officer and Chief Conservation Officer. After ten years with the Forest Department, Manzanero joined RARE's staff. Over the last seven years he has provided technical support to various educators in Latin America, the Caribbean and in the Pacific. Rafael has also served as Guatemala's Country Manager for three years serving as RARE's representative under a UNESCO partnership program at Tikal National Park and World Heritage Site. Presently he is attached to the University of Guadalajara as the International Conservation Education Diploma Course Manager, Mexico and is the Assistant Director of RARE's Education Global PRIDE program. In Belize he is President of a local NGO named Friends for Conservation and Development and is a member of the IUCN since 2002.

Anthony MAPAURA joined the National Herbarium and Botanic Garden of Zimbabwe in 1991 and worked there as a senior research technician until January 2004. His main interest is in plant conservation and he has been involved in several research projects on plant conservation and the uses of indigenous plants – with a number of publications on these topics. He is currently the Curator of Botany at Mutare Museum, where he is responsible for the Chase Herbarium and the study and conservation of vegetation in the Eastern Region of Zimbabwe.

Paolo MEFALOPULOS holds a doctorate degree in communication from the University of Texas, Austin. His professional career started in the private sector in Italy, where he worked for a national television network and for the training institution of a major corporation (ISVOR-FIAT). Since, he has worked extensively in the field of information, education and communication for a number of international agencies such as UNESCO, the Food and Agriculture Organization of the United Nations and the European Union. Currently he is a communication officer in the Development Communication Division of the World Bank. One of the authors of a handbook on the innovative methodology known as PRCA- Participatory Rural Communication Appraisal, he is also the main author of two other books (one in English and one in Spanish) on the use of participatory communication for planning development projects and programs.

Tracy MOLEFI holds an MSc in Environmental Science and a Post Graduate Diploma in Education. She worked as a secondary school teacher from 1998-2000. She joined Kalahari Conservation Society (an NGO) as Community Outreach Officer for the Every River Has Its People transboundary natural resource management project in 2000 where she drew and implemented, among other things, the education and communication strategy for the project. She is now the Project Coordinator. She has been a member of the IUCN Commission on Education and Communication since 2000.

Solly MOSIDI is working as Head of the Department: Environmental Affairs and Tourism for Govan Mbeki Municipality in South Africa. Prior to this, he was Head of Environmental Education with the national Department of Environmental affairs and Tourism, in Pretoria. He holds an MA in Ecotourism from University of Pretoria and MEd in Environmental Education from Rand Afrikaans University. He is currently vice chair of IUCN CEC Southern Africa and a strong advocate of Environmental education in the South African Development Community region. He also serves as a Technical Advisor on Environment, Tourism and Local Economic Development for the South African Local Government Association.

Miquel OLIVER TROBAT is a lecturer in the Department of Education of the University of the Balearic Islands (UIB). He is specialized in the analysis of teaching needs, didactic subjects, educational planning and environmental education – on which is currently doing some research. He has been Director of the Educational Services in the Palma de Mallorca City Council, and Director of the Municipal Education Council in the same city. He has collaborated on several media publications and is an adviser on some educational publications.

Anabelle PLANTILLA is an Environmental Planner, holding a Bachelor of Science degree in Environmental Planning from the Miram College (formerly Maryknoll College) and a Masters Degree in Urban and Regional Planning from the School of Urban and Regional Planning, University of the Philippines. Since June 2001 she has been the Executive Director of the Haribon Foundation, and prior to this she was the Special Assistant to the Secretary of the Department of Natural Resources and Environment. Her previous positions include: Institutional Development Specialist for the Subic Bay Metropolitan Authority (SBMA); Environmental Planner for Palafox Associates architectural and urban planning and design consultancy; Environmental Manager – San Pascual Corp; and Component Coordinator for the Environmental Impact Statement (EIS).

Ana PUYOL is an Ecuadorian environmental educator, involved in several national planning initiatives, such as coordinating the development of the National Policy of Environmental Education and Communication in Ecuador and the process of stakeholder management for the National Biodiversity Strategy. Ana has been involved with the IUCN Commission on Education and Communication for almost 10 years, developing the regional programme for South America and later as the executive assistant of the Chair. She organizes international courses on Environmental Education/Communication and Sustainable Development, is a university professor, and was involved in the several international environmental negotiations as part of the Ecuadorian delegation for the Convention on Biological Diversity.

Shannon QUESADA is Manager of the Communication Partnerships Program at Conservation International (CI). Shannon develops and implements capacity building initiatives for conservation education and communication. She has experience designing and implementing community-based education and communication programs in the United States, Latin America, Asia and Africa. Before joining CI, Shannon managed an adult environmental education program for the state of North Carolina. She has also developed science education programs and materials for the Institute for Learning Innovation; taught at the elementary, secondary and university levels; developed and implemented environmental education programs for a community-owned protected area in Costa Rica

and worked as an interpretive ranger for Canyonlands National Park, U.S. She received her BA in Anthropology from the University of North Carolina and her M.S. in Natural Resources and Environment from the University of Michigan.

Marcos Antônio REIS ARAÚJO is a Biologist with a PhD. He was a student at the Federal University of Minas Gerais, Brazil. Now he works as a National Consultant (GFA/IP) on the Doces Matas Project for participatory management plans and management effectiveness of Protected Areas.

Martha Isabel "Pati" RUIZ CORZO is the Federal Director of the Sierra Gorda Biosphere Reserve. 20 years ago Pati moved to the Sierra Gorda mountains with her young family and in 1987 founded the Grupo Ecologico Sierra Gorda with a group of concerned citizens reaching 170 schools in 120 communities. Programs include environmental education, community and economic development, and forest management. In 1997 she became the Federal Director of the largest Natural Protected Area under community management in the world and was designated the regional coordinator of the GEF project "Biodiversity Conservation in the Sierra Gorda Biosphere Reserve 2001-2007." She was commended as an Outstanding Social Entrepreneur of Ashoka: Innovators for the Public and Schwab Foundation, as well as a Rolex Associate Laureate in 2002.

Marco SANCHEZ LIRA is the Director de Comunicación Estratégica e Identidad for the Comisión Nacional de Areas Naturales Protegidas (CONANP) in Mexico.

Emanuele SANTI is a Development Communication Specialist at the World Bank. He provides technical assistance and advice to governments in developing countries on the design and implementation of communication strategies for World Bank funded projects. He has been working mostly on environmental and rural development projects in Eastern Europe, Latin America and West Africa. Prior to joining the World Bank, he worked for a network of Italian development NGOs, where he was responsible for advocacy campaigns on development issues. His academic background is in political sciences, communication and economics.

Andrea SCHWETHELM MUNLA was formerly Director of the Environmental Information Centre associated with the Society for the Protection of Nature in Lebanon (SPNL).

Soul SHAVA is the Principal Research Officer responsible for coordinating Environmental Education and the Curator of the Botanic Garden at the National Herbarium and Botanic Garden, Division of Agricultural Research and Extension, Ministry of Agriculture and Rural Development, Zimbabwe. His research interests include indigenous knowledge research and its applications in environmental education processes and the ethno-botany of wild food plants. Soul has co-coordinated the development Environmental Education Policy for Zimbabwe. He is a current council member of the Environmental Education Association of Southern Africa (EEASA) and member of the IUCN Commission on Education and Communication.

Neelima SHRESTHA has been working as Assistant Education Officer in WWF Nepal Program since 2001. She is a graduate in Business Studies from Tribhuvan University, Nepal (2000) with specialization in Communications and is currently in her final year of Masters in Business Administration, Pokhara University, Nepal. As Assistant Education Officer for WWF Nepal, she has been developing and implementing conservation educational programs, supporting field projects to enhance the conservation education programs, as well as developing and distributing educational materials at local and central level. Programmes have been at school level and community levels. Previously she gained sound experience organizing, coordinating and monitoring promotional campaigns as Marketing Officer for Nebico Private Limited.

Marc STERN is a Ph.D. candidate at Yale University in the School of Forestry and Environmental Studies. His doctoral research focuses upon the relationships between protected areas and the people who live within their immediate vicinities. His background includes environmental education as an instructor and evaluator, natural resource damage assessments in the U.S., Canada and the Middle East, and original research in Nepal, Ecuador, the Caribbean, and the United States. Mr. Stern is currently a member of the IUCN's Commission on Education and Communication.

Jaume SUREDA NEGRE is Professor from the Department of Education at the Balearic Islands University (UIB). His field work is focused on Environmental Education and Heritage Interpretation. He was one of the founders and President, from 1993 to 1996, of the Balearic Islands Society of Environmental Education; has been vice-principal of the UIB from 1995 to 2003; and nowadays he is the head of the faculty of Social Education at the UIB. During the last years he has been involved and has directed some research in new and innovative fields of Environmental Education (EE), such as New Technologies and EE and the Tourism and EE. He is in charge nowadays of the first postgraduate course online in Spain (where two universities participate: UIB and Open University of Catalonia UOC) about Environmental and Heritage Interpretation course that is in its fifth edition.

Gwen VAN BOVEN has a background in nature conservation, and has lived and worked as an advisor in strategic communication, participation and capacity development processes in protected areas in Cameroon and the Philippines. Since 2001 she has been affiliated with SPAN Consultants in the Netherlands, her home country. Her area of work has since widened to include other Southeast Asian countries, Central Europe and the Middle East. As such, she took part in the implementation of the IUCN-CEC project "Nature Management in Partnership" in Central Europe.

Jan VAN DER PLOEG conducted fieldwork in North Cameroun on herder-peasant conflicts for his MA thesis in Anthropology from Leiden University. He is currently the program coordinator of the Cagayan Valley Program on Environment (CVPED) the academic partnership of the Isabela State University in the Philippines and Leiden University in the Netherlands. He is the team leader of the CROC project.

Merlijn VAN WEERD received a MSc degree in Biology from Groningen University where he specialized in animal ecology and environmental issues in developing countries. He subsequently worked for the IUCN Waza-Logone Project in Cameroon and for the Northern Sierra Madre Natural Park – Conservation Project in the Philippines. In the Philippines he conducted wildlife surveys, assisted in protected area management planning and trained a local group of forest biodiversity researchers. He discovered a remaining population of the critically endangered Philippine crocodile and is now leading a conservation project for this species. In addition he is writing a PhD thesis on biodiversity conservation in the Philippines at the Institute of Environmental Science of Leiden University.

Rosa María VIDAL RODRÍGUEZ is a biologist, ornithologist, and gender-environment specialist. She was the Founder and Executive Director of Pronatura Chiapas A.C. (1989-2000), and the Programs Director (2000-2004). Rosa is the focal Point for the IUCN Commission of Education and Communication in Mexico. In 2002 she was awarded the International Conservation Achievement Award by the National Wildlife Federation. Her work has been oriented to find social approaches to conservation, including participatory planning, population-environment approaches and social empowerment. She has experience in protected areas planning, community development and institutional strengthening along with 15 years of conducting programs and projects in southern Mexico. She established the Environmental Communication Center at Pronatura, with the aim of using strategic communication for conservation. Currently she is president of the Moxviquil Training Center, from where she coordinates the Diploma on Social participation in Protected Areas in Mexico.

Commission on Education and Communication
IUCN – The World Conservation Union
Rue Mauverney 28
CH-1196 Gland
Switzerland
Tel: +41 22 999 0283
Fax: +41 22 999 0025
Email: cec@iucn.org

IUCN Publications Services Unit
219c Huntingdon Road
Cambridge CB3 0DL, UK
Tel: +44 1223 277 894
Fax: +44 1223 277 175
Email: info@books.iucn.org