Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands

Handbook

Ramsar

CONVENTION ON WETLANDS

(Ramsar, Iran 1971)

THE CONVENTION ON WETLANDS

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty whose mission is "the conservation and wise use of wetlands by national action and international cooperation as a means to achieving sustainable development throughout the world". Presently 116 nations have joined the Convention as Contracting Parties, and more than 1000 wetlands around the world have been designated for inclusion in the Ramsar List of Wetlands of International Importance.

What are wetlands?

As defined by the Convention, wetlands include a wide variety of habitats such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas such as saltmarshes, mangroves, and seagrass beds, but also coral reefs and other marine areas no deeper than six metres at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.

About this series of handbooks

This series has been prepared by the secretariat of the Convention (the Ramsar Bureau) following the 7th Meeting of the Conference of the Contracting Parties (COP7) held in San José, Costa Rica, in May 1999. The San José conference was notable for adopting guidelines under each of the three main obligations under the Convention – Wise Use, Wetlands of International Importance and International Cooperation – to add to guidance adopted by previous COPs. These guidelines have been prepared as a series of handbooks to assist those with an interest in, or directly involved with, implementation of the Convention at either the international, regional, national, subnational or local levels.

The handbooks have been prepared in the three working languages of the Convention (English, French and Spanish) and incorporate, where appropriate, material from case studies designed to illustrate key aspects of the guidelines. The full text of most case studies can be found on the World Wide Web site of the Convention at http://ramsar.org/.

The table on the inside back cover illustrates the full scope of the subjects covered by this handbook series at present, though other handbooks may be added at a later date. For simplicity of presentation, the series are listed under the three main obligations under the Convention, but it is important to note that the Ramsar Convention promotes an integrated package of actions to ensure the conservation and wise use of wetlands. In recognition of these integrated approaches, the reader will find that within each handbook there are numerous signposts or cross-references to others in the series.

Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands

Handbook 5

Including Guidelines adopted by the 7th Conference of the Contracting Parties, San José, Costa Rica, May 1999

Photo: Ramsar/R. LeGuen

Acknowledgements

The Ramsar Convention Bureau gratefully acknowledges the work of Alex de Sherbinin in coordinating the development of the Resolution and annexed Guidelines presented to COP7, and in co-authoring the Resource Paper with Gordon Claridge, which provides more detailed guidance in establishing and strengthening participatory approaches in the management of wetlands. Working closely with a Steering Committee composed of representatives of the Ramsar Convention Bureau, IUCN-The World Conservation Union, World Wide Fund for Nature, Caddo Lake Institute (USA), and Kushiro International Wetlands Centre (Japan), Mr de Sherbinin has capably guided the documents through three workshops and numerous re-drafts to produce the Annexed Guidelines, adopted at COP7 in May 1999, and the Resource Paper.

The Bureau also acknowledges the financial contributions for this project from a number of agencies and partners. Early and significant contributors included Environment Australia; the Swiss Agency for Environment, Forests and Landscape; and the UK Department of Environment. Other major contributors include the Kushiro International Wetlands Centre (Japan), the National Fish and Wildlife Foundation (USA), the Terrene Institute (USA), and the U.S. Fish and Wildlife Service. Further contributions for technical workshops and the publication of this guide were made by the Aeon Foundation (Japan), Caddo Lake Institute (USA), Conservation Treaty Support Fund (USA), Ramsar Centre (Japan), Scottish Natural Heritage, WWF-International, and WWF-Japan. Special thanks is due to George Furness of the Conservation Treaty Support Fund, who provided significant fundraising assistance.

The authors of the Resource Paper wish to thank several individuals for their conceptual and analytical contributions at various stages in the preparation of these documents. With characteristic rigour, Grazia Borrini-Feyerabend, former Head of the IUCN Social Policy Group, put significant thought and effort into developing the project document and the case study guidelines, which were universally appreciated for their detail and specificity. The Ramsar Convention Bureau's Delmar Blasco and Bill Phillips provided significant input to the guidelines at key stages in their development, as did the project Steering Committee members Biksham Gujja, Constance Hunt, Barbara Ornitz, Jean-Yves Pirot, Dwight Shellman, and Hisashi Shinso. Steering Committee member Larry Mason deserves special recognition for spearheading the project, chairing technical workshops, drafting the revised guidelines, and shepherding Resolution VII.8 and the annexed Guidelines through COP7.

Last but not least, the authors of the case studies, whose names and contact details appear in Appendix IV, provided the "grounding" for this Handbook. Their detailed process descriptions, active participation in technical workshops, and comments on earlier drafts of the Resource Paper and the Guidelines have significantly shaped these documents throughout. This Handbook is dedicated to all those who are facilitating participatory processes for the management of wetlands and other natural resources around the world. May we continue to learn from your experiences.

[Note: the views expressed by the authors of the Resource Paper (Section II) and case studies presented here do not necessarily reflect the views of the Ramsar Convention, its Standing Committee or the Ramsar Convention Bureau. COP7 endorsed Section I of this publication as the Annex to Resolution VII.8].

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Foreword

Recommendation 6.3 of the 6th Conference of the Contracting Parties to the Convention on Wetlands (Brisbane, Australia, 1996) called upon the Parties to *"make specific efforts to encourage active and informed participation of local and indigenous people"* at Ramsar-listed (Wetlands of International Importance) and other wetlands. The Bureau was instructed, in consultation with the Caddo Lake Institute, IUCN-The World Conservation Union, Kushiro International Wetlands Centre, and the World Wide Fund for Nature, *"to produce an evaluation of the benefits derived . . . from conservation and wise use along with criteria and guidance for involving local and indigenous people in the management of wetlands"* for the next Conference of the Contracting Parties. The resulting *Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands*, adopted as Resolution VII.8 by the 7th Conference of the Contracting Parties (San José, Costa Rica, May 1999), and the associated Resource Paper are the culmination of a highly collaborative effort involving the above organizations and over 200 experts in participatory wetland management around the world.

This Handbook incorporates the Resolution and annexed Guidelines as well as the Resource Paper. It is intended to provide an easily accessible reference text on the implementation of participatory approaches in the context of wetland management. While it is primarily intended for Ramsar Contracting Parties, and particularly those government ministries or agencies charged with wetland management, it will also be of value to anyone interested in establishing or strengthening local and indigenous people's participation in wetland management. The Guidelines in Section I provide a summary overview of the major lessons learned from participatory management experiences around the world and the various steps in developing and implementing participatory approaches. The Resource Paper in Section II covers the same subject matter in greater depth. Both sections make full use of selected case studies on successful local involvement.

Readers should be aware that new experiences in participatory wetland management are being documented regularly. The wealth of material, together with the breadth of participatory management experiences, makes it impossible to provide a definitive text on this subject. Rather, this should be seen as a work in progress.

Acronyms

COP3   3rd Conference of the Contracting Parties to the Convention on Wetlands, Regina, Canada, 1987
COP6   6th Conference of the Contracting Parties to the Convention on Wetlands, Brisbane, Australia, 1996
COP7   7th Conference of the Contracting Parties to the Convention on Wetlands, San José, Costa Rica, 1999
FAO   Food and Agricultural Organisation of the United Nations
IKS   Indigenous Knowledge Systems
IUCN   The World Conservation Union
LEK   Local Environmental Knowledge
NGO   Non-Governmental Organization
SPG   IUCN Social Policy Group
WWF   World Wide Fund for Nature

Terminology

Involvement of local and indigenous people in resource management falls within the general resource management approach known as *participatory management*. Terms such as collaborative, joint, community-based or co-management are more or less synonymous. In the context of this handbook, *stakeholders* are taken to be bearers of separate interests and/or contributions for the management of a wetland, with a particular focus on *interest groups* within local and indigenous communities. By the same token, the government agencies responsible for wetland management and local authorities may also be considered as stakeholders.

The term *community* as used in this Handbook can be understood at two levels. On the one level it represents a more or less homogenous group that is most often defined by geographical location (e.g., a village), but possibly by ethnicity. At this level, the community may have very distinct interests compared with other major stakeholders (e.g., government agencies, businesses and NGOs). On another level, it represents a *collection* of different interest groups such as women and men, young and old, fisherfolk and farmers, wealthy and poor people, and different ethnic groups. Even in relatively unified communities, it is likely that these sub-groups have different interests and perspectives that need to be taken into account in the participatory management process.

For reasons of brevity and style, the reference to *local communities' and indigenous people's involvement in wetland management* has at times been shortened to *local involvement* or *community involvement*. Furthermore, indigenous people may have been the sole managers of wetlands for many centuries, so in these contexts it is more appropriate to speak of *acknowledging and strengthening* their management role than *involvement per se*. Finally, please note that local is a relative term; some stakeholders may live at a distance from the wetland (such as migrating fisherfolk or pastoralists) and still have traditional claims to its resources.

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Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands

(adopted as the Annex to Resolution VII.8 by the 7ᵗʰ Conference of the Contracting Parties, San José, Costa Rica, May 1999)

1 Introduction

1 Community involvement and participation in management decision-making for sites included in the List of Wetlands of International Importance (Ramsar sites) and other wetlands have been recognized as essential throughout the history of the Ramsar Convention, but very little guidance on this topic is available to the Contracting Parties. In recognition of this, Recommendation 6.3 of Ramsar COP6 (1996) called upon the Contracting Parties *"to make specific efforts to encourage active and informed participation of local and indigenous people at Ramsar listed sites and other wetlands and their catchments, and their direct involvement, through appropriate mechanisms, in wetland management"*, and assigned the Bureau of the Convention (secretariat), working with IUCN-The World Conservation Union, the World Wide Fund for Nature, Caddo Lake Institute (USA) and Kushiro International Wetlands Center (Japan), the task of commissioning case studies and developing guidelines to assist the Contracting Parties in such efforts.

2 These guidelines were conceived with the premise that local and indigenous people's involvement in wetland management can substantially contribute to effective management practices that further Ramsar's wise use objectives. As defined by Ramsar COP3 (1987), wise use of wetlands is *"their sustainable utilization for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem"*. Evidence from the 23 commissioned case studies and other experiences in participatory management indicates that local and indigenous people's involvement can, if carried out within the full framework of actions encouraged by the Convention, contribute significantly to maintaining or restoring the ecological integrity of wetlands, as well as contributing to community well-being and more equitable access to resources. In practical terms, the Ramsar Convention concept of "wise use" is equivalent to "sustainable use".

consult:
Handbook 1

Wise use of wetlands

3 These guidelines are intended to assist Contracting Parties in involving local and indigenous people in wetland management in a manner that furthers the wise use objectives of the Convention.

4 Experience has shown that it is advisable to involve local and indigenous people in a management partnership when:

(a) the active commitment and collaboration of stakeholders are essential for the management of a wetland (e.g., when the wetland is inhabited or privately owned);

(b) access to the natural resources within the wetland is essential for local livelihood, security and cultural heritage; and

(c) local and indigenous people express a strong interest in being involved in management.

5 The case for local and indigenous people's involvement is even stronger when:

(a) local stakeholders have historically enjoyed customary/legal rights over the wetland;

The Ramsar Convention on Wetlands aims to discourage policies, laws and attitudes that allow unsustainable-unwise actions such as this.

Photo: WWF-Canon/H. Jungius

(b) local interests are strongly affected by the way in which the wetland is managed;

(c) decisions to be taken are complex or controversial (e.g., different values need to be harmonised or there is disagreement on the ownership status of the land or natural resources);

(d) the existing management regime has failed to produce wise use;

(e) stakeholders are ready to collaborate and request to do so; and

(f) there is sufficient time to negotiate among stakeholders in advance of management decisions being made.

6   It is not possible to provide a definitive list of criteria that will guarantee successful establishment of local and indigenous people's involvement. The breadth of the term "involvement" (from consultation to devolution of management authority) and the variety of local contexts means that there are few if any prerequisites to establishing participatory management. One

consistent factor, however, is the possession of beliefs and values that support the Ramsar concept of "sustainable utilization".

7   Involvement of local and indigenous people in resource management falls within the general resource management approach known as *participatory management*. Terms such as collaborative management, co-management, or joint management are more or less synonymous.

8   In the context of these guidelines, *stakeholders* are taken to be bearers of separate interests and/or contributions for the management of a wetland, with a particular focus on interest groups within local and indigenous communities and the government agencies responsible for wetland management.

9   Note that the reference to "local communities and indigenous people" has been shortened to "local and indigenous people." Also, the term "indigenous people" may vary from country to country. Furthermore, "local" is a relative term; some stakeholders may live at a distance from the wetland (such as migrating fisherfolk or pastoralists) and still have traditional claims to its resources.

II   Summary of lessons learned from participatory management case studies

10   Incentives for local and indigenous people's involvement and wise use are essential: everyone must benefit in the long term
(refer to Section II, Chapter 2.1 for more detailed information)

(a) Local and indigenous people benefit from participatory management arrangements through the maintenance of sustainable livelihoods, including activities such as:
   i.   fishing and hunting;
   ii. farming and haying;
   iii. reed harvesting and collection of forest products;
   iv. salt extraction;
   v.   recreational uses and ecotourism (see page 10); and
   vi. water for domestic consumption.

(b) Other benefits of participatory management for local and indigenous people include:
   i.   maintaining spiritual and cultural values associated with a wetland;
   ii. more equitable access to wetland resources;
   iii. increased local capacity and empowerment;
   iv. reduced conflicts among stakeholders; and
   v.   maintaining ecosystem functions (e.g., flood control, improved water quality, etc.).

(c) Government agencies benefit from participatory management arrangements through:
   i.   improved ecosystem viability;
   ii. reduced management costs;
   iii. assistance with monitoring and surveillance;
   iv. fewer infringements; and
   v.   enhanced social sustainability and quality of life for communities dependent on wetlands.

(d) Incentives such as tax concessions, subsidies, conservation easements, special

arrangements for licenses, increased market access, financial compensation schemes, increased infrastructure, and development activities can, if appropriately structured, further wise use objectives when directed to local and indigenous stakeholders.
(See also page 11 and Appendix III.)

11   Trust among stakeholders is essential and must be developed
(refer to Section II, Chapter 2.2 for more detailed information)

(a) Development of trust among stakeholders takes time, effort and attention. Elements that contribute to building trust include:
   i.   a willingness to seek joint objectives cooperatively;
   ii.   mutual effort;
   iii. mutual respect;
   iv.   open and ongoing communication;
   v.   clear and realistic expectations about process outcomes;
   vi.   satisfactory and timely completion of agreed tasks;
   vii. following through on commitments; and
   viii. participation of all sectors of the community.

(b) Participatory management works best when stakeholders' interests are openly stated.

(c) Clearly stated terms of reference and objectives assist in the establishment of management partnerships.

(d) Participatory management processes require strong facilitation that builds trust among stakeholders. Independent brokers with strong leadership skills are most effective (often this is a role for NGOs).

(e) Appropriate legal or policy frameworks (such as the right to organize, legal recognition of NGOs, conservation easements, etc.) assist in the establishment of participatory management arrangements.

(f) Forums, study groups, and workshops can be useful means to increase shared understanding of Ramsar principles and the value of resources being conserved or sustainably used.

Income from tourism

The costs and benefits of tourism, both in terms of environmental impact and the distribution of income from tourism-related activities, is an important issue in the context of local involvement. In the case of **Kampung Kuantan, Malaysia***, unique environmental conditions in these mangroves at the mouth of the Selangor River foster the reproduction of fireflies. Over the past 20 years the fireflies developed into a minor tourist attraction, and one local businessman and amateur ecologist was able to translate his love for the mangroves into a lucrative boating and tour operation. With time, however, tourism development – including new housing construction and motorboat rides – threatened the very firefly habitat upon which the industry was based. Stricter controls on tourism development were required in order to sustainably use this resource. The same situation is facing **Le Cesine, in eastern Italy***, where tourism development (primarily related to local beaches, but also to the wetland reserve) is a potential threat to ecosystem integrity.

The social costs and benefits of tourism need to be assessed. In the case of **Keoladeo National Park in Rajasthan, India***, several thousand Western tourists a year pass through the Park's gates, paying a modest 25 Rupee ($0.60) entry fee. Local hostelries have benefited from the large influx of outsiders, but these benefits are not widely shared within the community. Other Park policies prohibiting the grazing of water buffalo in the Park had a detrimental effect on local incomes. By raising Park entry fees modestly, all costs of running the Park could be covered and some of the excess could be used to aid the local communities. In the case of **Djoudj National Park in Senegal***, local residents were given training and resources to revive traditional crafts production, and were provided with shop space in which to sell their wares. This served to increase local income from tourism, gaining important support for the Park.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Wetland education and visitor centres, such as this at Lake Hornborga in Sweden, can boost local economies while providing a focal point for awareness-raising.

Photo: T. Larsson

Handbook of incentive measures for biodiversity: Design and implementation

by OECD
(Organization for Economic Co-operation and Development)

This book has drawn on the experiences described in 22 case studies. It offers a step-by-step process for identifying and implementing appropriate incentive measures for biodiversity conservation and the sustainable use of its components. The book identifies the incentive measures that are the most suitable for particular ecosystems and for addressing the specific sectoral pressures in effect, describing both the advantages and the disadvantages of each incentive measure.

A wide range of incentive measures are described, including both the more common economic and regulatory incentives and also the necessary framework conditions, such as scientific and technical capacity building, education and awareness-raising, and the involvement of local populations and other stakeholders.

Published in 1999 by OECD and available from:
OECD Publications
2, rue André-Pascal
75775 Paris Cedex 16, France
Web site: http://www.oecd.org

HANDBOOK OF INCENTIVE MEASURES FOR BIODIVERSITY
DESIGN AND IMPLEMENTATION

OECD

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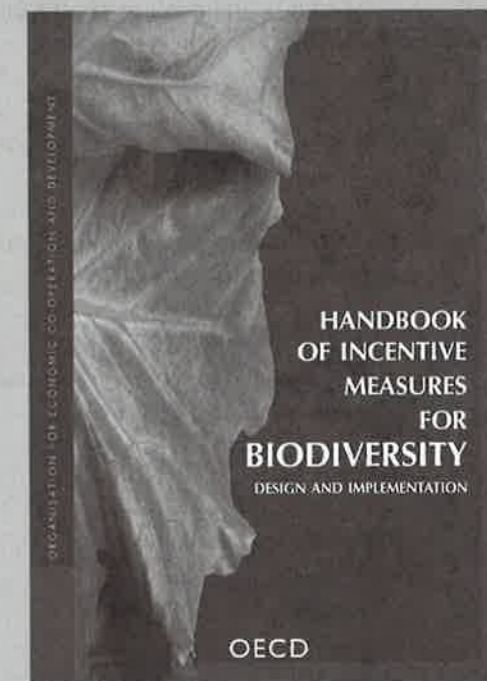
12 Flexibility is required
(refer to Section II, Chapter 2.3 for more detailed information)

(a) There is no one level of local and indigenous people's involvement that fits all contexts.

(b) There is no one approach or recipe that will make the process work in all contexts.

(c) For participatory management regimes to be successful, it may be necessary to meet basic development needs in the process of pursuing wise use objectives.

(d) "Learning by doing" approach (i.e., ongoing assessment of process and outcomes) allows for re-orientation as needed.

13 Knowledge exchange and capacity building are fundamental
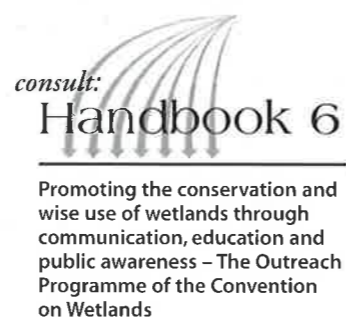*(refer to Section II, Chapter 2.4 for more detailed information)*

(a) Government agencies often require capacity building in participatory management approaches, such as those specified below for stakeholders.

(b) Stakeholders often require capacity building in:
i. establishing and maintaining appropriate organizations;
ii. effective relations with government agencies;
iii. negotiating and contributing to decision-making;

iv. technical aspects of wetland management and Ramsar's principles;

v. monitoring of wetland ecology and identifying changes in ecological character;

vi. evaluation of participatory processes; and

vii elaboration and design of project proposals to obtain funding.

(c) Local environmental knowledge can make a significant contribution to wetland management strategies, especially when blended with the best available science. (See page 14.)

(d) Engaging local stakeholders in site monitoring and process evaluation makes a valuable and substantive contribution to achieving participatory conservation objectives.

consult:
Handbook 8
Frameworks for managing Wetlands of International Importance and other wetlands

(e) A multidisciplinary approach utilizing biological and social science expertise is vital for establishing participatory management regimes.

(f) Site monitoring can take advantage of a "marginal cost" approach: technical experts may be engaged, and established facilities (such as university laboratories) may be used at minimal cost.

(g) Networking mechanisms such as regular meetings, newsletters, and radio programmes fulfil information exchange and educational purposes.

(h) Basic Ramsar concepts, stewardship principles and ecological values can be conveyed through the educational curriculum of local schools.

(i) Wetland Centres can:
i. catalyse active and informed participation of local and indigenous people;
ii. serve as demonstration sites for sustainable wetland management;
iii. support formal, informal and non-formal educational programmes that involve a wide range of stakeholders;
iv. help to bring local and indigenous people's concerns to the attention of decision-makers; and
v. provide information and advice on wetlands and their management.

consult:
Handbook 6
Promoting the conservation and wise use of wetlands through communication, education and public awareness – The Outreach Programme of the Convention on Wetlands

14 **Continuity of resources and effort is important**
(refer to Section II, Chapter 2.5 for more detailed information)

(a) Establishing participatory management takes time.

(b) As with any management regime, participatory management may never be fully self-financing.

(c) Financing through donor and/or government channels is important for sustainability.

(d) Appropriate legal and policy frameworks at national and local levels contribute to continuity.

(e) High-level political support, ideally from a number of the appropriate Ministries, is important for maintaining government commitment to participatory management regimes. (See page 15.)

On trust among stakeholders . . .

The need for written agreements

Different opinions exist on whether or not written agreements are necessary to "cement" either local involvement or government agreement to community involvement in wetland management. Written agreements may be most useful where private land owners with a high degree of autonomy in making land-use decisions in relation to their property are to be involved in wetland management.

In many cases, and probably in the early stages of all participatory arrangements, agreements need to evolve in parallel with the general understanding of the situation. Therefore consideration must be given to whether or not setting out agreements in writing would make it difficult to revise them in line with changing understanding and changed conditions.

Nevertheless there are other situations in which written agreements are useful. For example, in the establishment of a participatory coastal resource management regime in the **Tanga District of Tanzania***, clearly defining roles and responsibilities in written agreements signed by all concerned parties has been shown to be an effective measure for ensuring that all parties have the same understanding of the arrangements for resource management. It also contributed to establishing trust among the stakeholders.

In some cases written agreements may not be appropriate, for example, if they are not a part of the local culture, or if the local people have a history of being deprived of their resources through treaties or similar documents. For example, among local communities around **Lake Tegano in the Solomon Islands***, written agreements and contracts are not part of their culture. To ensure long-term commitment to a programme it is considered more effective to arrange an annual meeting of stakeholder groups to reaffirm their support for the participatory management agreement.

Among the Beafada people of **Rio Grande de Buba, Guinea-Bissau***, long traditions of reciprocity and respect for commitments means that local agreements to restrict fishing for barracuda are respected and enforced by local peoples, without a need for written agreements or new legislation.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.
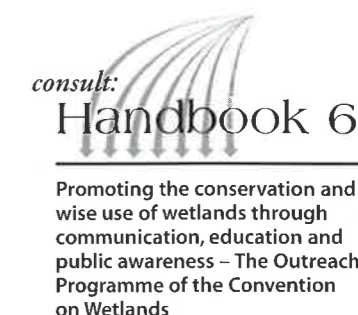
III Engaging local and indigenous people

(refer to Section II, Chapter 3 for more detailed information)

15 **When involving local and indigenous people in the participatory process, those who facilitate or coordinate such efforts should:**

(a) Ensure that all stakeholders understand the role of the facilitators/coordinators.

(b) Regularly verify that all stakeholders agree upon the basic objectives of the initiative.

(c) Raise awareness of wetland conservation and sustainability issues. Involve local and indigenous people in preparing and running awareness-raising activities.

consult:
Handbook 6
Promoting the conservation and wise use of wetlands through communication, education and public awareness – The Outreach Programme of the Convention on Wetlands

(d) Ensure the involvement of influential individuals in the community and all sectors of the population, and especially the women and youth of the community.

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Indigenous Knowledge Systems (IKS)

After hundreds or thousands of years of living in a landscape, indigenous communities often have complex practices for the sustainable management of their land. These systems may appear very different to those of western science, yet indigenous approaches can complement and improve on scientific conservation management in ways that can be much more relevant to landholding communities. Indigenous land management practices are often well tested, can produce similar results to western approaches, can be cheap, and, through religious or spiritual sanctions, can sometimes be more effectively enforced (Clay 1988).

The **Tonda people of the southern savannas of Papua New Guinea*** and the **Maya of Quintana Roo, Mexico,*** have a number of resource management approaches that are important for biodiversity conservation. These provide the basis for a more informed management approach in their respective regions.

1. **Landscape zoning:** Among the Tonda, land is traditionally divided by vegetative and use characteristics into big bush, open bush country, open places or clear places, and seasonal swamps. Among the Maya, forests are divided in respect to the types of limestone soil, of which they recognize 10 major categories. Only the four best categories are used for slash and burn agriculture; all other forest categories are used to gather plants and timber and for game hunting, including seasonally flooded forests and grasslands. Permanent wetlands are used for fishing.

2. **Areas with entry restrictions:** Among the Tonda, certain areas are barred from entry to all or certain parts of the population. Major and minor storyplaces generally have strong restrictions on entry or use, including hunting. Origin places, where a clan or moiety is thought to have been created, are often closed to entry or may be entered only on permission of a custodian.

3. **Areas with activity restrictions:** Among the Tonda, the areas with entry restrictions also generally carry restrictions on the harvest of wild animals, cutting of forest, planting of gardens or the removal of certain plants. Other significant sites include old village sites and burial sites which carry restrictions on certain activities such as building and gardening. The Mayan zoning scheme is a gradient including settlements, slash and burn agriculture, timber extraction and forest management, hunting/fishing and plant gathering, and strict conservation. Some pristine tracts of forests are conserved as a home for the forest spirits.

4. **Periodic harvesting restrictions:** Among the Tonda, seasonal restrictions can be placed on the hunting of animals or the collection of plants. This may be to prevent overuse during stressed seasons or for ritualistic purposes.

5. **Species harvest restrictions:** Among the Tonda, certain species, such as crocodile or eagle, have totemic significance and may be barred from hunting, and size limits are traditionally placed on some wildlife or fish.

6. **Fire control:** Among both the Tonda and the Maya, fire is a widely used management tool. However, there are traditional controls on when and why they may be lit.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Training local people in Sonora, Mexico.
Photo: CECARENA-ITESM/Pronatura Sonora

(e) Encourage stakeholder ownership of the process and participatory management arrangements, ensuring that no key participants are excluded.

(f) Involve and strengthen local organizations and traditional structures that represent different stakeholders among local and indigenous people. Assist in the establishment of such organizations if they do not already exist.

(g) Develop local capacity including organizational and negotiating skills, keeping of records and financial accounts, and conflict management, and provide (as necessary) the meeting place, telephone access, basic equipment, and transportation.

(h) Ensure that persons acting as facilitators and coordinators are properly trained in participatory assessment and planning techniques and possess the necessary facilitation skills.

(i) Work with public-sector stakeholders to build capacity for developing and administering participatory management processes.

(j) Ensure that key parties have a clear understanding of each other's needs, responsibilities and limitations.

(k) Ensure that local and indigenous people learn participatory assessment and planning techniques so that they can be applied to other community concerns.

(l) Ensure that all commitments are met.

(m) Develop a site monitoring and process testing programme using local resources to check progress.

(n) Ensure that tasks taken up by various stakeholders are within their capabilities.

(o) Keep funding agencies aware of issues and progress of participatory management approaches.

(p) Establish networks among communities involved in wetland management and encourage regular contact and sharing of experiences.

(q) Support the application of traditional knowledge to wetland management.

Political support

In the **Mexican wetlands of coastal Sonora***, where the introduction of participatory management is being facilitated by a local NGO, participation is officially accepted as a valid approach to wetland management. The municipal government is committed to its implementation but participatory management is apparently perceived as operating in parallel with (and to some extent, in competition with) existing sectoral approaches to resource management. The concept is not yet recognized at high levels as being an integrative approach requiring involvement of, and changes to, all sectoral interests in the wetland.

In contrast, high level support by the then governor of Quintana Roo, Mexico, led to the establishment of the **Sian Ka'an Biosphere Reserve*** and a plan for sustainable forestry management for surrounding areas. Sustainable use of the region's resources may have been aided by the fact that there were fewer, and less well established, competing economic interests than in Sonora State.

In the **Danau Sentarum Wildlife Reserve in Indonesia**, the UK-funded project to introduce conservation management was obviously approved at very high levels. However, the apparent lack of official endorsement*of the participatory approach, or recognition that significant changes would be necessary, resulted in a reluctance by regional officials to approve local people's enforcement of traditional management systems.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

including, where possible, the establishment of centres to conserve indigenous and traditional knowledge systems.

IV Measuring local and indigenous people's involvement

16 The following list is a brief, non-exhaustive checklist of indicators that can assist to measure the extent of local and indigenous people's involvement The sections below correlate with those in paragraphs 10-14 to assist cross-reference.

17 Incentives

(a) Local and indigenous people have achieved an economic stake or other interest in the wise use of wetland resources.

(b) The government agency has stated policies supporting participatory management.

(c) Appropriate legal and financial incentives for participatory management are in place.

(d) A more equitable sharing of benefits among stakeholders has resulted from the participatory management process.

(e) Stakeholders have expressed satisfaction with their involvement in the process.

18 Trust

(a) There is a clearly stated and widely known policy or legal document that makes a commitment to involving local and indigenous people.

(b) All key stakeholders (particularly government) acknowledge participatory management as legitimate and desirable.

(c) Local and indigenous people are now involved in making substantive decisions affecting the wetland resource use and management.

(d) Local organizations to advance participatory management are respected within the community.

(e) Representatives of the local and indigenous people are truly representative and accountable to them.

(f) There are resource use and participation rules which are appropriate to the local situation.

(g) A management agreement exists between stakeholders (oral or written, formal or informal).

(h) The management agreement has clearly defined boundaries and membership.

(i) The management agreement specifically defines stakeholders' functions, rights and responsibilities.

(j) The management agreement has been approved by at least the resource-using stakeholders and key decision-making groups.

(k) Parties to the agreement meet their commitments.

(l) Non-compliance with approaches, rules, rights, and responsibilities outlined in the management agreement is deemed to be at an acceptable level.

(m) Any system of graduated sanctions for infringement of rules has been agreed upon by all key parties.

(n) There is evidence that resource management controls are being implemented.

19 Flexibility

(a) There is the potential for collective modification of the rules relating to resource use by those affected. (See page 18.)

(b) There are "nested" management units (different bodies at different levels).

(c) There is evidence that the local and indigenous people can influence the speed and direction of change in relation to the resources with which they are concerned.

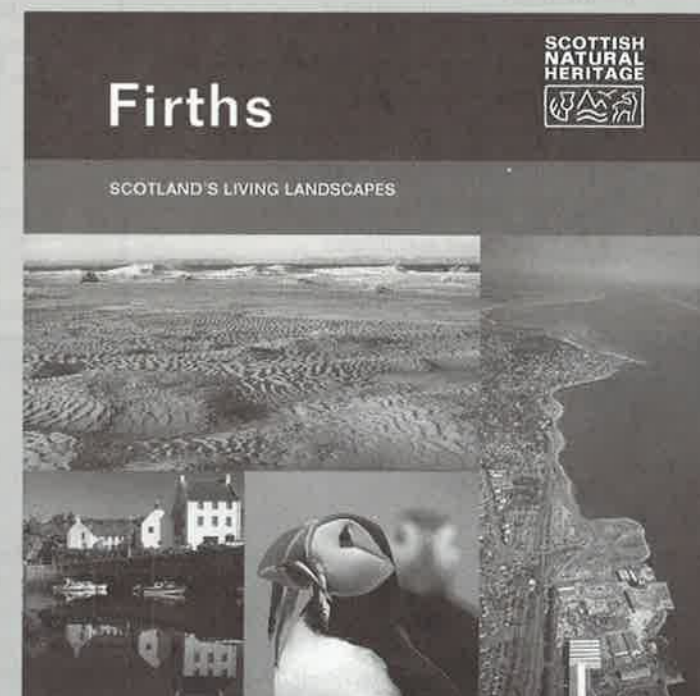(d) Facilitators/coordinators practice "learning by doing" and adaptive management.

20 Knowledge exchange and capacity building

(a) There is an awareness among stakeholders of new management approaches, rules, rights, and responsibilities.

(b) There is a two-way flow of information and communication between local and indigenous people and relevant government agencies.

(c) Information reaches local and indigenous people in a timely and accurate manner, and in a form which is readily understandable.

(d) Local and indigenous people participate in site monitoring and in evaluation of the participatory process.

(e) There is evidence of respect by key government agencies for local human systems and local ecological knowledge.

(f) Stakeholders are demonstrating necessary skills and empowerment (e.g., capacity to make decisions, monitoring skills, etc.).

(g) Measurement methods, established by the stakeholders, demonstrate and quantify the degree to which local participation was intended to, and actually has improved or conserved the recognized "functions and values" of the wetland and its wise use.

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21 Continuity

(a) There are one or more organizational structures that facilitate local and indigenous people's involvement (e.g., a council, management body, women's group, etc.).

(b) A random sample of local and indigenous people is able to identify the community's role in wetland management, and the individuals who are directly involved can accurately describe the objective of their involvement.

(c) The government agency and its staff have a demonstrated commitment to participatory management, and can accurately describe the objective of local and indigenous people's involvement.

(d) There is an appropriately long-term source of funding for ongoing participation and resource management.

(e) Local and indigenous people have provided in-kind support (time, labour, traditional knowledge and expertise) to implement the participatory management agreement.

(f) Conflict management mechanisms exist, and there is an appeals process in case of conflicts within the management partnership.

(g) There is integration between local wetland management and management of the entire catchment.

V Testing the participatory approach

22 Local participation in wetland management is a tool for advancing the Convention's objective to achieve wise use of all wetlands. Administrative Authorities of the Ramsar Convention, managers, and process facilitators and coordinators need to be aware of existing wise use guidance and need to continuously apply this guidance in the participatory management decision-making process. The decision-making process should, at each stage, consider the implications of actions in terms of the following Ramsar standards and principles:

(a) Ramsar's Wise Use Guidelines (Recommendation 4.10 and Resolution 5.6);

(b) Ramsar's Management Planning Guidelines (Resolution 5.7);

consult:
Handbook 8

Frameworks for managing Wetlands of International Importance and other wetlands

(c) Monitoring ecological character of the site (Article 3; Recommendation 5.2, Resolution VI.1, and Resolution VII.10).

(d) Standards for managing for wise use:
   i. there is an increase or maintenance of species diversity, size of wetland area, and water quality;
   ii. resource use is sustainable;
   iii. the precautionary principle is being applied;
   iv. cost-benefit analyses consider wetland functional values;
   v. the participatory process takes a catchment perspective and decisions within that framework consider what is best for the wetland(s); and
   vi. degradation of wetlands has been replaced by efforts to restore and rehabilitate them. ❐

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II Involving local communities and indigenous people in wetland management – a Resource Paper

by Alex de Sherbinin and Gordon Claridge

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[Note: the views expressed by the authors of this paper do not necessarily reflect the views of the Ramsar Convention Bureau and have not been endorsed by the 7th Meeting of the Conference of the Contracting Parties.]

Chapter 1: Introduction

1.1 Why local involvement is beneficial

Local and indigenous people's involvement in the management of wetlands is beneficial for two principal reasons. The first is that without it, the long-term sustainability of many wetland ecosystems would be in jeopardy. The second is that local and indigenous people benefit from the sustainable use of wetland resources for livelihoods, recreation, and socio-cultural or spiritual reasons. Although these are the most significant rationales for greater local involvement, there are many other management-related benefits that deserve consideration.

Experience has shown that management regimes that involve a variety of stakeholders – and especially local residents and indigenous communities – tend to be more sustainable than those which are developed in the absence of local involvement. By involving local and indigenous people in:

- identifying the problems;
- deciding upon the solutions;
- implementing management plans; and
- monitoring the effectiveness of agreed measures to address the problems and opportunities

it is possible to achieve enhanced sustainability of management activities. Some refer to this as "social sustainability", an inseparable component of the ecological sustainability of wetland resources.

Specifically, sustainability will be enhanced because of the following benefits of participation:

Acceptance of local responsibility
Local stakeholders become responsible and accountable for the sound management of the resource. The level of non-compliance, where communities look for ways to get around the restrictions placed on them by an outside body, begins to diminish and is replaced by an attitude of stewardship, partnership and cooperation. If one specific agency is in charge, that agency will see its burden shared and thereby lessened. If no specific body is in charge, the degradation of open-access lands due to lack of clarity on rights and responsibilities can also be avoided. The basic mechanism of joint-committees, in which

different groups have to account for their actions, provides the means of applying pressure to comply with jointly agreed measures.

Community commitment
Local stakeholders become co-owners of the conservation process and thereby develop a sense of commitment and are more prepared to make a longer-term investment in sound resource management. By building a partnership with communities in which there is a commitment to implement decisions taken together, greater trust is developed between government agencies and stakeholders. If communities are likely to lose out because of the conservation measures, management mechanisms can provide compensation. Most importantly, alliances between government agencies and local stakeholders are generally effective at fending off resource exploitation from non-local interests, which often represent the main threat to conservation and sustainable use practices.

Utilisation of local knowledge and skills
Local knowledge and skills are made available to assist in the ongoing identification of problems and solutions. Often this information is difficult to access and special participatory processes are needed to bring it to the surface (see Chapter 3).

Effective monitoring
By involving local stakeholders in day-to-day management, the monitoring of natural resources becomes easier and more effective. Since local people live and work on or near the site, problems are more likely to be identified and mistakes corrected more quickly than if monitoring is carried out by professionals on a sporadic basis. For instance, local people can guard against detrimental activities such as illegal hunting and polluting discharges.

Enhanced environmental awareness in the community at large
Involving local stakeholders in the management and monitoring of their natural resources raises the consciousness of citizens concerning the value of wetlands, and the impact of human activities upon them. The knowledge and networks they acquire through their involvement

can also increase their ability to identify and deal with future environmental and development problems in their region.

consult:
Handbook 6

Promoting the conservation and wise use of wetlands through communication, education and public awareness – The Outreach Programme of the Convention on Wetlands

Community reassurance
Local stakeholders are less likely to feel threatened by the restrictions on future use of the resource if they, or their representatives, have been involved in determining these restrictions and the compromises they may involve. This is particularly important when the communities are reliant on the wetland resources for their own survival.

Reduction of enforcement expenditures
Over the long term, delegation of some management responsibilities to local communities can be less costly than traditional "protectionist" approaches. Local involvement also contributes to a reduction in enforcement expenditures because of voluntary compliance.

In general, participatory processes contribute to building a society in which local stakeholders take upon themselves a variety of social functions and responsibilities. However, it is important to recognize that involving local communities in management initiatives can also involve costs as well as benefits. Briefly, these may include the following:

Initial investments
Local involvement may require substantial initial investments – especially in terms of the time required for participatory appraisals, awareness raising and education (if necessary), negotiations, and trust-building – in order to get the process underway. For many government agencies, it also implies a different way of doing business which may require capacity building of staff.

Costs to the community
It is sometimes overlooked that communities may incur substantial costs by being involved in a management partnership. This includes the cost of travelling to and attending meetings,

income foregone while participating in management tasks, and income foregone in curtailing activities that affect the wetland. At the very least, these costs need to be acknowledged. In the best case, they might be partially or fully covered by the relevant government agencies if the resources are available.

The balance of costs and benefits will vary from place to place, and depends on the level and scope of local involvement. Short consultations or "open meetings" with local communities in order to obtain input for management plans are not as costly, perhaps, as participatory appraisal and planning. Nor will the benefits necessarily be as great. In reality, the cost of implementing participatory management may sometimes appear to be high simply because there was no management in place before efforts to involve the community were initiated.

1.2 Evolution of "local involvement" in the Ramsar context

Within the context of the Ramsar Convention, there has been recognition for well over a decade of the importance of community involvement and participation in management decision-making for Ramsar listed and other wetland sites. However, very little guidance on this topic is available to the Contracting Parties. The antecedents to Resolution VII.8 *(Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands)* can be traced back to COP3, held in Regina, Canada (1987). At this meeting the benefits of wetlands for people – and not just wildlife – were first given special emphasis as a rationale for the protection of wetlands. Under the umbrella of "wise use," which was defined as *"the sustainable utilization of wetlands for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem"*, the Contracting Parties identified a major entry point for the involvement of communities in wetland management.

consult:
Handbook 1

Wise use of wetlands

At the Montreux Conference of the Contracting Parties in 1990, this was further amplified in the Annex to Recommendation 4.10 *(Guidelines for the implementation of the wise use concept)*. The recom-

mendation includes provisions for *"the establishment, implementation and, as necessary, periodic revision of management plans which involve local people and take account of their requirements"*. The emphasis was upon increasing the awareness of decision-makers and the public of the benefits and values of wetlands, training of appropriate staff in the implementation of wetland policies, and reviewing traditional techniques of wise use. In other words, local people were seen as a source of information and knowledge for the decision-makers and staff to manage the resource wisely.

Following the Montreux Meeting, the Wise Use project and working group were established to study experiences and provide examples of wise use of wetlands. The working group's conclusions were adopted in Resolution 5.6 by COP5 in Kushiro, Japan (1993). The working group suggested that the Contracting Parties *"might establish procedures which guarantee that local communities are involved in the decision-making process related to wetland use, and provide local communities with sufficient knowledge of planned activities to ensure their meaningful participation in this decision-making process"*. Under a section on integrated management planning, it was also suggested that *"a management authority charged with the implementation of the management process should be appointed; [and] strong cooperation and participation from governmental and non-governmental agencies, as well as from local people, needs to be achieved"*.

Thus, the evolution of the idea of local involvement in wetland management began with a recognition of the interests in and traditional uses of wetlands by local communities throughout the world. This developed further to recognizing the need to consult local people so that decision-makers and resource managers can take their interests into account. Finally, it became clear that local people need to be actively involved in the decision-making and management processes along with other interest groups.

1.3 The project in response to Ramsar Recommendation 6.3

Based on these important precedents, Recommendation 6.3 of COP6 (1996) called upon the Parties *"to make specific efforts to encourage active and informed participation of local and indigenous people at Ramsar listed sites and other wetlands and their catchments, and their direct involvement, through appropriate mechanisms, in wetland management"*. The Parties assigned the Bureau of the Convention (the secretariat), working with IUCN-The World Conservation Union, the World Wide Fund for

Nature, Caddo Lake Institute (USA) and Kushiro International Wetlands Centre (Japan), the task of developing guidelines to assist the Contracting Parties in such efforts. In response to this request, a project was set up by the IUCN Social Policy Group (SPG) in close coordination with a steering committee composed of representatives from the aforementioned organizations, plus the USA's NGO Ramsar Committee, which became actively involved in the process.

It was decided early on that the project should exemplify the same participatory and open process that the project principles sought to promote for wetland management. The project began in May 1997 when the first of three workshops was held as part of an information gathering and knowledge sharing process. This first workshop, in Alexandria, Virginia, USA, considered case studies from North America and the Neotropics region. At this same workshop the Steering Committee, through the Ramsar Convention Bureau and the networks of its respective participants, distributed an announcement to Contracting Parties and NGOs involved in wetland management soliciting further case study proposals. Out of 60 proposals received, the project Steering Committee selected 21 case studies covering the seven Ramsar regions, to which were added two case studies from a previous IUCN project on ecosystems management (see Appendix IV). These case studies represent a balanced variety of wetland ecosystem types, conservation issues, and forms of local involvement. Table 1 summarises major participatory management issues addressed by the different case studies. In September 1997, the case study authors were sent detailed guidelines on topics to address in the case studies. SPG provided comments on first drafts, and authors submitted final drafts before the end of the year.

From the case study material, SPG synthesised the lessons learned and policy recommendations to produce a first draft of criteria and guidelines for local and indigenous people's involvement in wetland management. This draft was circulated to all the case study authors, the steering committee and wetland management experts in February 1998, and two further technical workshops were organized in order to discuss case study findings and review the draft guidelines, one at the Kushiro International Wetlands Centre, Hokkaido, Japan, in March 1998, and another at the American Wetlands Conference, Arlington, Virginia, USA, in April 1998. The technical discussions at these workshops, along with comments received from external reviewers, were incorporated into a subsequent draft of the guidelines, and a draft decision document

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Table 1

Participatory wetland management issues and related case studies

1. Traditional knowledge systems/Local environmental knowledge
- Australia – Blyth/Liverpool wetlands
- Mauritania – Diawling National Park
- Mexico – Sian Ka'an Biosphere Reserve
- Papua New Guinea – Tonda Wildlife Management Area
- Senegal – Djoudj National Park
- Solomon Islands – Lake Tegano
- Tanzania – Tanga Coast

2. Customary ownership
- Australia – Blyth/Liverpool wetlands
- Brazil – Bahia do Castelo
- Malaysia – Kampung Kuantan
- Mexico – Sian Ka'an Biosphere Reserve
- Papua New Guinea – Tonda Wildlife Management Area
- Peru – El Balsar de Huanchaco
- Solomon Islands – Lake Tegano

3. Gender issues
- Cameroon – Waza-Logone
- Guinea-Bissau – Rio Grande de Buba
- Mauritania – Diawling National Park

4. Tourism development/Management
- India – Keoladeo National Park
- Italy – Le Cesine
- Japan – Yatsu Tidal Flat
- Malaysia – Kampung Kuantan
- Mexico – Sian Ka'an Biosphere Reserve
- Papua New Guinea – Tonda Wildlife Management Area
- Russia – Dubna "Homeland of the Cranes"

5. Major commercial stakeholder (agricultural/fishing/mining/industrial)
- Brazil – Bahia do Castelo
- China – Yellow River Delta
- Mexico – Coastal Wetlands of Sonora
- Russia – Dubna "Homeland of the Cranes"
- Scotland – The Firths
- Tanzania – Tanga Coast

6. Research/Education
- Australia – Blyth/Liverpool wetlands
- England – Pevensey Levels
- Mexico – Sian Ka'an Biosphere Reserve
- Senegal – Djoudj National Park
- Slovak Republic – Morava River Floodplains
- USA – Caddo Lake

7. Ecosystem rehabilitation
- Cameroon – Waza-Logone
- Italy – Le Cesine
- Japan – Yatsu Tidal Flat
- Mauritania – Diawling National Park
- Senegal – Djoudj National Park

8. Participatory wetland monitoring
- Australia – Blyth/Liverpool wetlands
- Canada – Grand Codroy Estuary
- USA – Caddo Lake

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was produced. These were distributed for a much wider review by indigenous people's organizations, practitioners of participatory natural resource management, and wetland experts.

The draft Resolution and Guidelines were endorsed by the 21st meeting of the Ramsar Standing Committee (October 1998), discussed in a technical

session at COP7 in May 1999, and ultimately adopted by the Conference. This Resource Paper covers the same subject matter but in much greater depth, providing extensive resource material in the area of participatory management. The Resolution, Guidelines and this Resource Paper reflect the inputs of over 200 organizations and individuals around the world. (See also Box 1.1.)

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Box 1.1   On involving local communities and indigenous people . . .

When should local people be involved?

One of the tasks assigned to the project in response to Ramsar Recommendation 6.3 was to develop *criteria* for when the involvement of local and indigenous people in wetland management was needed, and if it was needed, whether it was likely to be feasible, effective and sustainable. In the course of the technical workshops, however, it rapidly became apparent that there are simply no universally acceptable criteria for determining this. The difficulty stems in part from the breadth of the term "involvement", which ranges from consultations with local people to full delegation of management authority (Borrini-Feyerabend 1996), and from the fact that many conditions, if not already present, can be created.

Many of the factors that are supportive of local involvement are covered in Chapter 2 on lessons learned. In the course of the technical workshops, some participants felt that there needed to be a legal basis for local involvement. And yet, examples from other parts of the world demonstrated that participatory management could be implemented even without supporting legislation. Others felt that there needed to be a strong "conservation ethic" and stewardship values; i.e., a belief that resources were held in trust for others such as future generations. But even here, it was recognized that awareness-raising and educational activities could reinforce stewardship values where they are weak.

In the end, it was agreed to include a set of conditions in the guidelines which, if met, would indicate that it is advisable to involve local and indigenous people in a management partnership. These conditions include the following:

- the active commitment and collaboration of stakeholders are essential for the management of a wetland (e.g., when the wetland is inhabited or privately owned);
- access to the natural resources within the wetland is essential for local livelihood, security and cultural heritage;
- local stakeholders have historically enjoyed customary/legal rights over the wetland;
- local interests are strongly affected by the way in which the wetland is managed;
- decisions to be taken are complex or controversial;
- the existing management regime has failed to produce wise use;
- stakeholders are ready to collaborate and request to do so; and
- there is sufficient time to negotiate among stakeholders in advance of management decisions being made.

Local people should be involved in decision-making and management in situations where the needs and demands of communities may be compromised by threats to wetland areas; a coastal region in Iran.

Photo: D.A. Scott

Chapter 2: Lessons from community involvement

Sections 2.1-2.5 of this chapter examine the key lessons learned from research undertaken on community involvement in wetlands management. In a sense these lessons can be interpreted as *requirements*, because they describe some of the supporting conditions and practices that are necessary for participatory management. Examples from the commissioned case studies and other relevant research are used to illustrate specific issues.

2.1 Incentives

A key lesson from the case studies is that, in order for local involvement to be successful, all parties must gain something. Although the guidelines are primarily focused on the benefits to local communities, indigenous people, and government agencies, it is equally true that research institutions, the private sector, and other parties should be included in management planning, and feel that they benefit from any agreements that are reached.

The principal ways in which local and indigenous people benefit from wetlands include direct support to livelihood, contributions to quality of life, and ecosystem services. Livelihood benefits of wetlands are especially prevalent in developing or transitional countries, where local people depend on wetlands for fishing and hunting; collection of reeds or forest products; and farming, aquaculture and haying. The use of wetlands in these cases can be both for direct subsistence and, through market mechanisms, for cash income. In addition, there are other "cash" benefits of wetlands such as ecotourism opportunities and hunting operations, which generate revenues by attracting people from outside the area (see text on 'Income from tourism' on page 9).

Communities also benefit from effective wetland management through improved quality of life, such as recreational opportunities, aesthetic benefits, and maintenance of spiritual or cultural values associated with wetlands. Lastly, wetlands perform important

Box 2.1   Additional resource material

From Theory to Practice
Incentive measures in developing countries

by WWF-World Wide Fund for Nature

This publication has been produced as part of the World Wide Fund for Nature's project on the implementation of the Convention on Biological Diversity in key developing countries or regions. It summarizes eight case studies and draws valuable lessons on how people have been motivated to conserve biodiversity and use it sustainably in Brazil, Cameroon, Colombia, Côte d'Ivoire, India, Kenya, Malaysia, and Uganda.

Published in 1998 by the World Wide Fund for Nature and available from:
WWF International
Avenue du Mont-Blanc
1196 Gland, Switzerland
Web site: http://www.panda.org/resources/publications/

See also Appendix III: Resolution VII.15 *Incentive measures to encourage the application of the wise use principle*
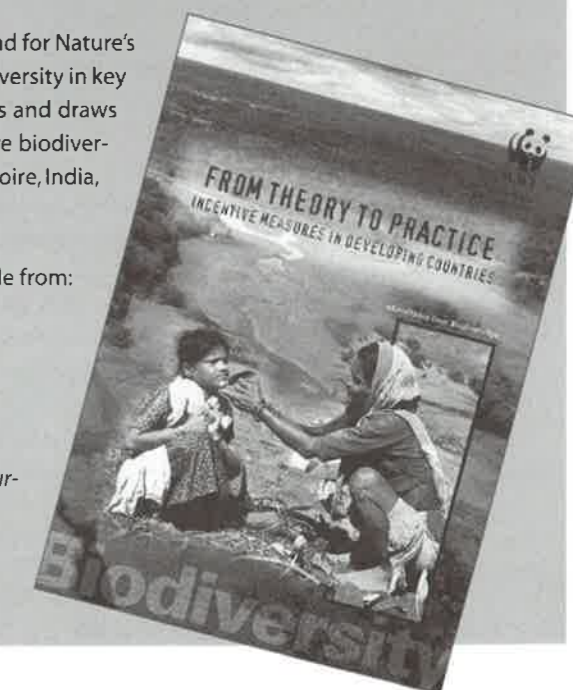
ecosystem functions (flood control, water filtering, habitat for a wide variety of flora and fauna, etc.) that directly and indirectly benefit humankind. All of these factors provide important justifications for greater community involvement.

Other incentives for local involvement have less to do with the values and functions of wetlands *per se*, and more to do with the benefits to communities of engaging in participatory management and taking on more responsibility for the health of the ecosystem. If properly implemented, participatory management can lead to more equitable access to wetland resources, increased local capacity and empowerment, and reduced conflicts among stakeholders.

In some cases, the livelihood benefits to local people may be the only incentive necessary for them to take an active role in site management. In other cases, it may be necessary to provide additional incentives such as tax concessions, subsidies, conservation easements, privileged access to resources (compared with non-locals), increased market access, infrastructure and development activities, or outright payment (Box 2.2). Government agencies and international NGOs need to determine the appropriate level of incentives depending on the context. Experience in many developing countries suggests that if basic development

needs are not met, establishing meaningful local involvement in wetland management is difficult.

Sometimes the incentives to government agencies or local authorities are overlooked. However, if there are insufficient incentives for the agencies responsible for wetland management to engage in participatory approaches, their successful implementation is far from guaranteed. Briefly, some benefits to government agencies and local authorities may include the following: improved ecosystem viability, reduced management costs (over the long term), assistance with monitoring and surveillance, fewer infringements, reduced conflict and enhanced social sustainability (see Chapter 1 for a longer description of these benefits).

By entering into a management partnership, a government agency necessarily gives up full control over a resource (even if in practice its control may have been limited by infringements, illegal poaching, etc.). This may not be easy for the agency or its staff, and facilitators of participatory management agreements need to think through the kinds of incentives that exist or may need to be created in order to sustain the partnership. One incentive that should not be overlooked is the legal framework governing resource access and use. If agencies are mandated by parlia-

ment or the judicial system to involve communities, this can provide a strong incentive for agencies to develop the necessary capacity to carry out participatory management.

2.2 Trust

Participation in wetland management involves a number of different parties working closely with the common goal of sustainable resource management. At the present time, involvement in participatory processes is a new experience for most stakeholders, including government agencies and communities. As a result, involvement requires changes in roles and expectations for all parties – changes that are often seen as being fraught with risk. For the process to be successful it needs to be implemented in an atmosphere of trust.

Development of trust among stakeholders takes time, effort and attention. Two key attributes of trust are benevolence and reciprocity. Essentially, these reflect a willingness to seek joint objectives cooperatively (rather than being solely motivated by individualistic concerns), and a willingness to put some effort into the maintenance of a beneficial arrangement with the expectation that other parties will put in a similar amount of effort (Moore 1995). Other ingredients of trust include: mutual respect; open and ongoing communication; clear and realistic expectations about process outcomes; and satisfactory and timely completion of agreed tasks and commitments. Note that trust is not just important between "the community" and government representatives, but among different interest groups within the local community. A community may have a variety of different interest groups, such as women and men who harvest reeds, collect salt, fish or herd cattle, and for each party there needs to be a willingness to work cooperatively for mutual gain, to compromise, and to put some effort into maintaining beneficial arrangements.

Participatory management is based on transparent dealings among all parties and democratic decision-making. It works best when stakeholders' interests are openly stated, when the roles of the parties involved are clearly spelled out, and the objectives of the exercise are understood by everyone. Government agency staff or project managers require a sense of receptivity, modesty, honesty and sensitivity so as not to raise expectations unduly. Key process steps for the early stages of establishing community involvement, such as using local languages, cultural sensitivity, etc., are outlined in Chapter 3.

In the early stages, facilitation is a crucial factor. Participatory management processes require strong facilitation that builds trust among stakeholders. The facilitators need to exercise leadership without overly influencing the process or outcomes – a difficult balance to strike (Box 2.3).

Appropriate legal or policy frameworks are important for building trust and assist greatly in the establishment of participatory management arrangements. Perhaps the most important factor is a recognition of the rights of access to wetland resources. If local people know that they, individually or collectively, have the legal right of access, then they will be more willing to put effort into managing the ecosystem and safeguarding their natural resources. The rights and claims of indigenous people to traditional resources or territories need to be addressed forthrightly as part of a negotiation process. Other rights that are important to the establishment of participatory processes include the rights to organize, form NGOs, and freely choose local representatives. In the absence of any of these, participatory processes will have difficulty getting underway.

Mutual understanding and trust can be developed through forums, study groups, and workshops, though moderation is important. Too many meetings and workshops without concrete results can, over time, serve to reduce trust levels and incentives to participate.

consult:
Handbook 3

Reviewing laws and institutions to promote the conservation and wise use of wetlands

It is important to recognize that trust among the parties to a participatory management arrangement is fragile and can only be maintained through continuous effort. Simple misunderstandings, such as arise from a failure to explain the significance of an action to other parties before carrying it out, can damage trust. Similarly, failure to keep commitments can undermine trust. This applies to such apparently minor details as holding meetings at agreed times and carrying out commitments made at those meetings. (See also Box 2.4.)

Box 2.2   **On incentives . . .**

Two examples of use of incentives

In the Inuvialuit Final Agreement for Co-Management of the **Western Arctic in Canada***, the Inuvialuit people are paid stipends for meetings they attend to develop management plans for the several parks and wildlife refuges that exist in their territory. This is in recognition of the fact that there are opportunity costs for local people to participate in workshops and meetings. In addition, a certain number of paid positions are reserved for Inuvialuit in any research activities that are undertaken in the territory, greatly increasing the interchange of traditional and scientific understanding on various topics of importance to wildlife management.

One approach that is being experimented with in the area surrounding **Waza National Park in northern Cameroon*** is conditional territorial exclusion, in which local residents and some traditional resource users (including herders and migrating fishermen) are granted preferential access to grazing lands and fishing holes in the Park and its buffer zone. Those without traditional ties to the area (either through residence or seasonal resource use) are excluded from participation in these agreements, and therefore from access to the resources. This arrangement provides an incentive for local residents to sustainably manage resources, and to prevent illicit use by outsiders.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

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Box 2.3   On trust . . .

Facilitation

In virtually every situation of significant involvement of local people in wetland management in developing countries, there has been some third party, usually an NGO or a project group, which facilitated the establishment of involvement. The facilitator has many important roles: facilitating participatory processes; providing expertise; and acting as a channel for funds and as an "honest broker" among different parties.

Even in developed countries the facilitation model has been recognized as increasing the likelihood of successful involvement. In Australia, with many years of experience in Landcare and more recently with Coastcare, facilitators are typically engaged at government expense to assist in the establishment of community activities. Sometimes the facilitation may be an unintentional role adopted by a "neutral" government agency such as a research institute.

It seems likely that involvement of local people will proceed more smoothly when there is a conscious decision to utilise the services of a facilitator with appropriate expertise in this area. All of the case studies commissioned for this project included a facilitation agency in some form.

A good example of the importance of external facilitation is **El Balsar in Peru***, an artificial coastal wetland that was established by the Moche-Chimú indigenous people over 1,500 years ago and used to this day for reed cultivation. Because their management system has such deep historical roots, the communities surrounding El Balsar never had a need for external facilitation until recently. However, with the advent of increased development and tourism activities near their wetland, they gladly participate as a key stakeholder on an externally facilitated committee that considers land-use policies and practices in the area. El Balsar is a good example of a traditional use of wetlands that has been maintained and even encouraged through government action and the collaboration of NGO partners.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Developing public awareness of environmental issues is a major focus at Paracas Nature Reserve, Peru.

Photo: WWF-Canon/H. Jungius

2.3 Flexibility

Participatory management implies a new way of doing business. Flexibility and adaptive management, as opposed to blueprint plans and top-down decision-making, are keys to success. There will not necessarily be one "right" approach or recipe that will lead to the desired goal, and the goal itself will depend upon the circumstances.

Examination of a very wide range of case studies of local involvement in wetland management reveals an equally wide range of approaches to establishing that involvement. Each situation is clearly tailored to the prevailing ecological and socio-economic situation, and particularly to the capabilities of the stakeholders (including both local communities and government agencies). The range of different participatory mechanisms has been likened to a spectrum that includes (from most to least involvement):

- local community control of wetland areas;
- delegation of management responsibility from government to local community;
- sharing of wetland resource management responsibility between government and the local community;
- consultation with the local community on major issues and decisions;
- participation by the local community in physical management activities;
- review of management plans by the local community;
- advice from local experts to government managers; and
- participation through election of local officials.

While it may seem that local control is the most desirable situation, in fact experience and common sense suggest that there is no universally "right" level or mechanism for local involvement in wetland management. This conclusion has been reached in a number of studies of community involvement in resource management (e.g., Ostrom 1990; Claridge and O'Callaghan 1997). What is important is that the involvement is meaningful and appropriate to the capabilities and characteristics of the community concerned and to the administrative and ecological situations.

Often, the level of involvement will be greater in developing country contexts, where dependence on wetlands for livelihoods is greater, than in transitional or developed countries, but this is not always the case (Box 2.5). In developed countries the range of agencies with wetland management responsibilities can restrict local people's involvement. Statutory controls and sectoral mechanisms can tend to limit the involvement of local people even where there is a desire on the part of the government and local people for participatory management. Until now, most local community involvement in wetland management in

Box 2.4   On trust . . .

Taking time to listen: understanding leads to trust

In the development of a participatory management approach to **Canada's Grand Codroy Estuary*** in Newfoundland, one of the crucial factors in promoting involvement was winning the trust of local people. The most effective approach seemed to be a non-judgemental assessment carried out by a field crew who spent an entire summer season in the local area. This select group, headed by a person with world-wide experience in conservation stewardship with the Canadian University Service Overseas, conducted a door-to-door contact programme, gathering local opinions and knowledge. This effort developed trust. The crew also spoke to the local school and community groups on the value of the wetlands and wildlife of the estuary. They offered to lead bird watching groups and took the time to listen to the experiences and observations of bird sightings among those amateur naturalists. A critical factor was a knowledge of local culture and traditions which was tested and proven every day in contacts with the people.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Box 2.5   On flexibility . . .

Participatory management in different development contexts

Developing Countries

Among developing regions, full community control of wetlands is commonly found in Oceania, where customary ownership of natural resources is relatively common. In Asia, the extensive **Indonesian Danau Sentarum** wetland complex in West Kalimantan Province has a traditional wetland management system dividing the area into village territories. Within village territories, resource use is controlled by the community according to their own set of rules, including a system of land-use zonation. These controls are continually evolving in an attempt to meet emerging pressures. Government influence over resource use in the area is very limited, so that this situation is effectively very close to local community control over the wetland area (Harwell 1997).

Transitional Economies

In the case of the **Dubna wetlands of Russia*** and the **Morava River Floodplains of the Slovak Republic***, the movement toward participatory management is beginning with education and awareness-raising activities by local or national conservation NGOs. After years of central planning, environmental education provides the "door" through which greater citizen involvement is generated. Still, current economic difficulties and citizen apathy towards community affairs means that active involvement is only slowly taking root.

"If it's good for nature then it's good for people". Information presented to the public near the Dubna wetlands, Russia.

Photo: L. Smirnova

Developed Countries

Local communities in the vicinity of the **American Caddo Lake wetlands*** in the states of Texas and Louisiana are involved in wetland management through the participation of local academics and students in monitoring and research activities. The information gathered is channelled to decision-makers by the Caddo Lake Institute, a local NGO with four full-time staff. This represents an expert advisory structure that is somewhat unusual in that it utilises the human and technical resources of local educational institutions to carry out wetland surveys and monitoring.

There *are* instances of greater involvement in wetland management in the developed world. Small-scale fishermen in developed countries provide a common example, as do reed harvesters in Japanese wetlands. Sturgess (1996) describes a fairly complex fishery management arrangement developed and implemented by local estuary and lake fishermen in southeastern Australia. This "informal" system includes most of the elements of a fully fledged fishery management regime, but operates outside of, and is more effective than, the official management regime.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

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developed countries has tended to be either at an advisory level or a practical level, such as monitoring or rehabilitation activities. However, a promising new array of stewardship tools has been developed that involves agreements with land owners to protect ecosystems on their properties (Box 3.1). Clearly, approaches to fostering local involvement in wetland management in developed countries need to take into account the different social and bureaucratic situations which are found there.

Because of the range of variables and risks inherent in the process of establishing local involvement in wetland management, it is important that those facilitating the process show a great deal of flexibility in their approach. The need for flexibility is particularly great in the common situation where the community has not been involved in the early stages of needs assessment and project design. In such cases it will generally be better to commence the process of establishing involvement with an open mind as to the techniques to be used and the time that it will take (see text on 'Process flexibility', page 18).

Because of the need for flexibility in the establishment of participatory management, funding support needs to be similarly flexible. Insistence by funding agencies on sticking to initial estimates of inputs and timetables will defeat the overall objective (Box 2.6). Similarly, funding agencies need to recognize the long-term nature of the process (see Section 2.5). Case studies clearly show that a lack of continuity of inputs is one of the greatest threats to the process of establishing involvement. Even periods of a few months when project support is withdrawn, for whatever reason, can severely undermine the process of establishing community involvement and reduce community confidence in government commitment to the process.

Funding to support the participatory process and funding of associated development or income-generation activities, vital for the establishment of participatory management, need to be treated equally. The funding of these activities needs to be particularly flexible, since relevant priorities and opportunities only emerge as the process unfolds. The need for flexibility in establishing local involvement in wetland management is an important lesson for funding agencies.

Box 2.6   On flexibility . . .

Flexibility on the part of donors

The development of infrastructure in the **Diawling National Park in Mauritania*** provides a number of examples of the need for flexibility. During project implementation, local people pointed out that sluice gates were needed to allow fish migration. These had not been foreseen in project planning, but with the agreement of the funding agency the money provided for an embankment was diverted to this more important purpose. A sluice gate at another location, which had been included in the project planning, was found to be unnecessary and its construction would have destroyed a beautiful site. The funding agency agreed that it need not be built.

On another occasion, when the local population requested an expensive all-season road and a piped water supply for isolated coastal communities, another donor was located who was willing to fund this. The flexibility shown by the project managers and the funding agency not only improved the sustainability of the initiative but also demonstrated clearly to the local people that their knowledge and concerns were being taken seriously, and this increased their trust in the participatory management approach.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

32   ✦ Ramsar handbooks for the wise use of wetlands

✦ Handbook 5 ◇ Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands   33

Box 2.7　　　　　On knowledge exchange . . .

LEK in ecosystem rehabilitation

In the **Diawling National Park in Mauritania***, local ecological knowledge contributed to both the design of the wetland hydraulic system and its management. Different groups of fishermen pointed out the need for one sluicegate to allow fish migration and for another to allow shrimp migration, based on their detailed knowledge of the life histories of wetland fauna.

This case study also highlighted the need to be sensitive to gender differences in LEK. Whereas men proposed an early flooding of the wetland because they knew that *Tilapia* wrasses were ready to spawn as early as July, women insisted that *Sporobolus* and other grasses used for handicraft production needed rain before flooding to achieve optimal growth, suggesting a need to delay flooding of the wetland. As a compromise it was decided to simulate rainfall by initially flooding with a shallow layer of water to cover the crucial grasslands in the floodplain, with a delay of one month before full flooding.
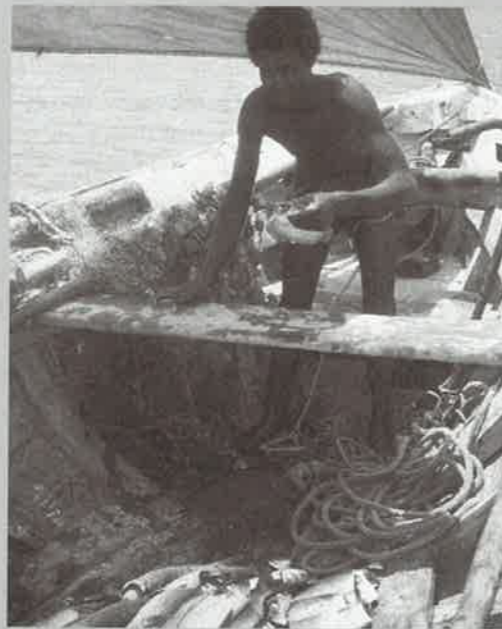
*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Local fisherman in Mauritania.　　*Photo: J. Thorsell*

2.4 Knowledge exchange and capacity building

One of the greatest advantages of participatory management is its potential to blend local environmental knowledge with scientific understanding for more effective wetland management. Local people, particularly if they are users of wetland resources, have the opportunity for continuous observation of their surroundings, and often have detailed knowledge of the local ecosystem.

Often this local environmental knowledge (LEK) has been built up over many generations, so that a good understanding is accumulated of the long-term cycles acting in the area and the long-term impacts of particular resource uses. Where wetland resource managers are receptive to LEK they can avoid costly mistakes and eliminate or reduce the need for extensive research programmes. In order to benefit from LEK, resource managers need to show respect for local knowledge and a willingness to involve local people in wetland management (see text on 'Indigenous

Knowledge Systems', page 13). They also need to accept and interpret local ecological, taxonomic and other concepts which may be quite different to western scientific approaches.

Combining local knowledge systems with scientific ways of looking at wetland ecology and resource management in a participatory and non-judgemental manner is no small task and requires dedicated effort and an open mind. The process needs to be viewed as a legitimisation of LEK rather than exploitation of it for useful information. However, if the management is to be truly participatory there needs to be a two-way flow, with relevant scientific knowledge being translated into terms relevant to the indigenous knowledge system as well as *vice versa* (Box 2.7).

In addition to the knowledge exchange aspects of local involvement, there are often specific capacity building needs that arise. Government agency staff need to *understand* the participatory approach and to be *committed* to it as a key part of carrying out their

responsibilities. Once this understanding and commitment exists, government staff also need to have the capability to carry out their roles within the participatory process. This frequently requires further training because of the new skills involved (Box 2.8). It is important that the range of government staff receiving training is not restricted to only those having day-to-day contact with the local community. Supervisors at district, regional and national level need to understand these issues, as do planners, magistrates, prosecutors, and police. It is also important that staff in government agencies which are likely to impact on the wetland and its communities also receive some training in these matters.

Attitudinal issues can represent a significant constraint to effective implementation. Where rangers or other government agents once looked down on local people as "uneducated" or "poachers", they may now be required to work closely alongside them to manage the natural resource. Commitment on the part of the agency and effective communication between line managers and field workers can help to ease this transition by explaining the rationale for collaborative management.

Government agents are not alone in their need for capacity building: dealing with government agencies and more organized stakeholders (such as business interests) may be new to local communities and they may need training in a variety of organizational and negotiating skills. They may need to learn how to establish and maintain appropriate organizations, develop effective relations with government agencies, and negotiate and contribute to decision-making. In addition, they may need technical training in aspects of wetland management and monitoring of wetland quality (e.g., biodiversity or water quality).

Box 2.8　　　　　On knowledge exchange and capacity building . . .

Government capacity

In the **Tanga Coastal Zone in Tanzania***, collaborative management of coral reefs and fisheries could not get under way until training had been given to:

- extension workers in different agencies in communication and facilitation skills, animation approach, coastal ecology, coastal culture, and planning;
- supervisors of extension workers at District and Regional levels in coastal ecology, planning and analysing skills, community-based project planning and implementation, monitoring and evaluation, the animation approach, and community-based/collaborative resource management;
- magistrates, prosecutors, and marine police in coastal ecology.

This has led to improved understanding and cooperation and villagers having a strong sense of ownership of the process.

The Office of Environment and Conservation in Papua New Guinea has a strong policy framework of recognition of indigenous management rights and capacity, supported by the PNG constitution. However, putting this into practice in the **Tonda Wildlife Management Area*** has been constrained by:

- a lack of understanding of strategies and tools for community involvement;
- limited recognition of successes of community involvement;
- difficulties in dealing with conflict within and between communities;
- limited resources for maintaining relationships with communities; and
- poor relations with local and provincial authorities.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

The fact that the community is involved in the process of establishing participatory management suggests that they have objectives which they want to see met. These may or may not be the same as those of the government agencies involved and, even if similar, are likely to be perceived differently by community and government. Communities will be able to identify indicators which would tell them whether or not their objectives are being met. These indicators can then form the basis for a monitoring programme, possibly carried out by the community (but certainly "owned" by them), to determine whether or not the process is on track to provide successful involvement and to achieve the management goals that they have in mind (see Guidelines, paragraphs 17-22, as examples). Until now very few projects have assisted communities to establish monitoring programmes. Most monitoring programmes are based on government or funding agency perceptions of project objectives and are oriented toward providing information that those agencies require.

Participatory management benefits greatly from multi-disciplinary research drawing on biological and social science expertise. The importance of creating a sense of ownership of the participatory process applies to this aspect of management as much as others. Thus, management-related research should not be seen solely as an activity identified, carried out and interpreted by "experts". Local people with an interest in the wetland need to be involved and can be encouraged to develop a degree of ownership of research activites that is consistent with the level of their interest in the resources (Boxes 2.2 and 2.9).

Networking mechanisms such as regular meetings, newsletters, and radio programmes, achieve information exchange and educational purposes (see text on 'Information exchange among stakeholders' page 17). Basic Ramsar concepts, stewardship principles and ecological values can be conveyed through the educational curriculum of local schools. Lastly, Wetland Centres can catalyse active and informed participation

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Box 2.9   **On knowledge exchange and capacity building . . .**
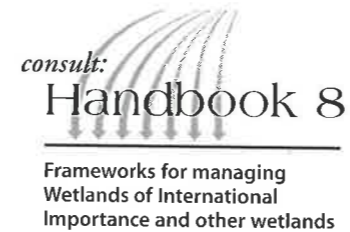
Management-related research

In the development of a management regime for the **Blyth/Liverpool wetlands in northern Australia***, aboriginal people were closely involved in research and survey work. The steps that were taken to establish their ownership of this process provide some excellent guidelines for other such activities, for example:

- identification of the research issues by the local community with assistance from researchers;
- visits by members of the community to the research headquarters and laboratories;
- local community participation in agreed surveys as advisors, guides, field assistants;
- participation of local community members in research based on interest, traditional land ownership and availability;
- training of local community rangers in some sampling techniques (one community ranger was given short-term employment in the research centre);
- initial interpretation of the results being done in the field; and
- the aim of rapid submission of technical reports to the community, with later "popularised" accounts planned.

Clearly these efforts have been appreciated by the local people. The community is building a ranger station which includes a field laboratory so that they will be more closely involved in collaborative research which will be a part of ongoing management of the wetland.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

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of local people; serve as demonstration sites for sustainable wetland management; support formal, informal and non-formal educational programmes that involve a wide range of stakeholders; help to bring community concerns to the attention of decision-makers; and provide information and advice on wetlands and their management.

consult:
Handbook 8

Frameworks for managing Wetlands of International Importance and other wetlands

2.5 Continuity

One of the most important lessons of the case studies and other experiences is that setting up a participatory management arrangement takes time. The need to allow relatively long periods for the establishment of involvement is closely related to the need for flexibility and derives from the same considerations. There is a need for time to plan and carry out activities jointly, and sufficient flexibility to try different paths. In addition, it must be recognized that local communities have their own time schedules and their own priorities, and these need to be respected. The time that must necessarily be taken to establish trust among the parties to a participatory management arrangement (see Section 2.2) also plays a part in prolonging the process.

Naturally the time taken will depend on the level of involvement that is desired (remembering that even the appropriate level of involvement is often not known at the outset). Projects which have sought to develop a significant level of local involvement in wetland management typically take several years to achieve this goal. Time spans of five years or more are not at all unusual.

Funding is also important to continuity. It is generally agreed that the establishment phase of securing local involvement in wetland management requires funding over and above that required for existing management. In the short term there will be additional expenditure on items such as meetings, surveys, training, and community development priorities.

In the long term, participatory management can lead to reductions in the cost of management through such effects as:

- reduced need for law enforcement;
- community contribution to monitoring;
- reduced need for research due to utilisation of local ecological knowledge; and
- reduced need for rehabilitation.

However, as with any management regime, participatory management may never be fully self-financing.

Continuity can be assisted greatly by high- and mid-level political support. Participatory management is almost always a radical change from previous approaches to resource management. Unless there is high level official approval of the concept, government officials at the regional and local levels are unlikely to provide the cooperation necessary to put participatory management into effect (see text on 'Political support' on page 14).

This high level involvement cannot be restricted to mere signing of papers approving the introduction of participation. It is important that consent to develop participatory mechanisms is accompanied by understanding of the ramifications of the participatory approach and support for its implementation, including support for necessary changes to administrative structures and approaches. For example, if participation is to be effective it needs to be carried out within an integrated approach to resource management which cuts across sectoral administration. Such integration will be unlikely to occur unless there is official commitment to the change. Experience shows that official statements about the desirability of involvement, without official commitment to adoption of participatory processes and associated changes, do not lead to sustainable changes.

Good governance and legal and policy frameworks can greatly facilitate participatory processes and contribute to continuity. In well functioning democracies there is a recognition of citizens' rights to participate in decision-making which affects them. Citizens also have rights to organize, freedom to access information, and recourse through the legal system should one party take unfair advantage of the agreements in

consult:
Handbook 3

Reviewing laws and institutions to promote the conservation and wise use of wetlands

36   ✦ Ramsar handbooks for the wise use of wetlands

✦ Handbook 5 ◇ Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands   37

place. If these safeguards are not present, or if excessive corruption exists, there may not be the confidence in place to sustain local interest in the process.

In many countries there is a process of decentralisation of government functions underway, which grants significant power to local authorities and even to communities over management of natural resources (Box 2.11). This represents an opportunity for participatory management, and one that creates an important basis for sustainability. Nevertheless, the decentralisation process can be hampered by lack of resources and capacity at the local level, poor coordination between national policies and local administrations in environmental management, or passivity on the part of local governments towards problems they view as being outside their purview (OAS 1997).

Box 2.10   On continuity . . .

The pace of implementation is important

As well as allowing sufficient time to develop involvement, it is also important that the pace of the process is acceptable to the community. Sometimes communities may feel that the process being used is taking too much time. In the **Tanga District in northern Tanzania*** local people expressed concern at the time they were spending on developing a management plan. Their solution was to give the management committees which they had established the mandate to further develop the management actions. This was conditional on the final action plan being approved by a meeting of resource users, but demonstrated that considerable trust had been generated during the process as well as clearly showing that the community felt comfortably in charge of the process.

In other situations there is a risk that the pace may be too rapid for local people. Those assisting the Bawinanga people in the **Blyth/Liverpool wetlands of northern Australia*** to establish a management plan for their wetlands, were aware of a need to ensure that the pace of technical input did not outstrip the local capacity to participate and give direction.

*Summary of this case study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Box 2.11   On continuity . . .

Policy frameworks and decentralisation

In Madagascar, a new law was passed in 1996 on local management of natural resources. The policy, which is known as GELOSE (an acronym for *Gestion Locale Securisée*, or "secure local management"), is intended to hand over many management rights to local communities. This shift from government control to community control greatly assisted a process in the **Antsalova wetlands** to re-establish traditional rules, taboos and sanctions related to fisheries in a set of three lakes that are home to the endangered Madagascar Fish Eagle. The participatory process, facilitated by The Peregrine Fund, took advantage of the policy shift to reassert the rights of the traditional *Tompondrano* ("keeper of the lakes") to manage lakes that had been increasingly settled by migrating fisherfolk.

In Cameroon, a similar decentralisation process took place in tandem with a move toward multi-party democracy. In the early stages, however, democracy was misinterpreted as total liberty and open access to all natural resources within an area, irrespective of existing rules. This served to undercut the authority of traditional chiefs. The project managers for the **Waza-Logone*** conservation and development project had to educate local stakeholders that "democracy" implied responsibilities as well as freedoms, while also working with the chiefs to reassert some control over local resources (with citizen input). At the same time, the government's forestry law – which mandates the involvement of local people in forest and protected areas management – has facilitated the project's work. However, just as the notions of democracy were unknown to local people, project field workers have had to raise awareness of the new law among local authorities and to educate them about its implications for the way they work with communities.

Local fisherfolk selling smoked fish, Waza-Logoni conservation and development project, Cameroon.   *Photo: A. de Sherbinin*

*Summary of this case Study in Appendix IV; full text available from the Ramsar Convention Bureau's Web site: http://ramsar.org/wurc_index.htm.

Chapter 3: Implementing participatory approaches

The following operational guidance on implementing participatory approaches has been developed on the basis of the lessons learned from the commissioned case studies and the experience of many individuals working in the area of participatory natural resource management. It is not a blueprint. Rather, it is intended as a checklist of actions to be taken which can be referred to at different points in the establishment of local involvement in wetland management. Tick boxes are provided to the left of each step as a way of monitoring implementation. Contracting Parties wishing additional guidance on how to set up participatory management processes are recommended to contact the Ramsar Convention Bureau or to review some of the publications and Internet resources contained in the Additional Resources following Chapter 4.

The steps listed below will not be equally relevant in every situation. In particular, there will be a difference between situations where local people's livelihoods are strongly dependent on wetland resources and situations where they are not. Box 3.1 provides a brief description of stewardship approaches which are particularly relevant to developed country contexts in which many wetlands are privately owned.

The following step-by-step checklist of actions is particularly relevant for the implementation of participatory wetland management in contexts where there is a significant degree of dependence on wetland resources. Furthermore, it is assumed that there will be two main sets of partners: local/indigenous communities (including interest groups within them) and government agencies.

3.1 Getting started

☐ **(1) Ensure that the community understands the reason for the presence of the facilitators, project team, etc:**
- make sure all stakeholder groups share this understanding, including government agencies whose responsibilities may impact on the wetland;
- elicit the involvement of appropriate subgroups (e.g., student groups, nature societies, etc.) within the community;
- check regularly during the course of establishing participatory management that all groups understand the basic objectives of the initiative.

☐ **(2) Raise awareness of wetland conservation and sustainability issues:**
- explain the cause and effect of resource sustainability problems;
- involve local people in preparing and running awareness-raising activities to develop improved understanding and skills;
- use appropriate social communication techniques (e.g., community meetings, street theatre, school curriculum, newsletters, etc.);
- involve government agency staff in awareness-raising activities.

☐ **(3) Involve key stakeholders in the community (Box 3.2):**
- identify individuals in subject areas such as resource use, ecological knowledge, etc.;
- identify respected individuals who are enthusiastic and supportive;
- include both women and men.

☐ **(4) Involve local organizations that represent different stakeholders among local and indigenous people:**
- identify organizations that are representative and accountable to the local people;
- assist in the establishment of such organizations if they do not already exist;
- give preference to adapting existing, traditional structures over creating new organizations.

☐ **(5) Provide the necessary assistance to local organizations to increase their capacity and capability:**
- include basic organizational skills such as conducting meetings, keeping records and accounts, conflict resolution, etc.;
- do not overlook necessary basic infrastructure such as a meeting place, telephones, transport, etc.

☐ **(6) Encourage ownership of the process and the participatory management arrangements at every opportunity:**
- ensure that the key government agencies are not excluded by community ownership; in a partnership these agencies also need to feel identification with, and ownership of, the process.

Stewardship tools

Based mostly on experience in North America, a new array of flexible tools is being developed to enable protection of land and biodiversity outside of protected areas, and especially on privately held lands. The new approaches fall under the umbrella of "land stewardship", which is defined broadly as people taking care of the Earth. These approaches are actively employed by state and local authorities, land trusts, and conservation organizations. The following are the most important tools, listed according to the level of formal commitment, effort and involvement required (from least to most).

Education and information: this is the most basic stewardship technique, which entails raising awareness among land owners of the natural values of their land and the simple measures they can take to protect them.

Recognition: this can be achieved through, for example, stewardship award programmes which can create enthusiasm for the approaches among landowners.

Verbal agreement: such agreements between the landowner and a stewardship organization create a sense of duty to landowners unwilling to pursue devices that are more legally binding. These are sometimes associated with technical assistance to the land owner.

Creative development: in some areas it may be appropriate to allow certain types of development on parts of a property, especially development that seeks to cluster commercial or residential uses while leaving larger blocks of open space.

Management incentives: this includes any programme designed to keep land in an appropriate use, such as wet meadow or swamp forest.

Management agreement: these fixed-term written agreements are used when active management of an area is sought, sometimes with compensation by the landowner. For example, the North American Waterfowl Management Plan has negotiated voluntary agreements with private land owners for improved management of wetland habitats.

Conservation easement: this is the fastest growing method for conservation in North America. It entails a restriction on the land deed prohibiting certain uses and allowing others. Owners may benefit materially through tax relief, though often the greatest motivation is a concern for the decisions future owners of the land might make (e.g., to develop or drain the wetland).

Acquisition: acquiring all rights to a property through purchase or donation is the most clear cut technique. The greatest impediment to this approach is the cost of purchasing and then managing the land.

Adapted from Mitchell and Brown, 1998.
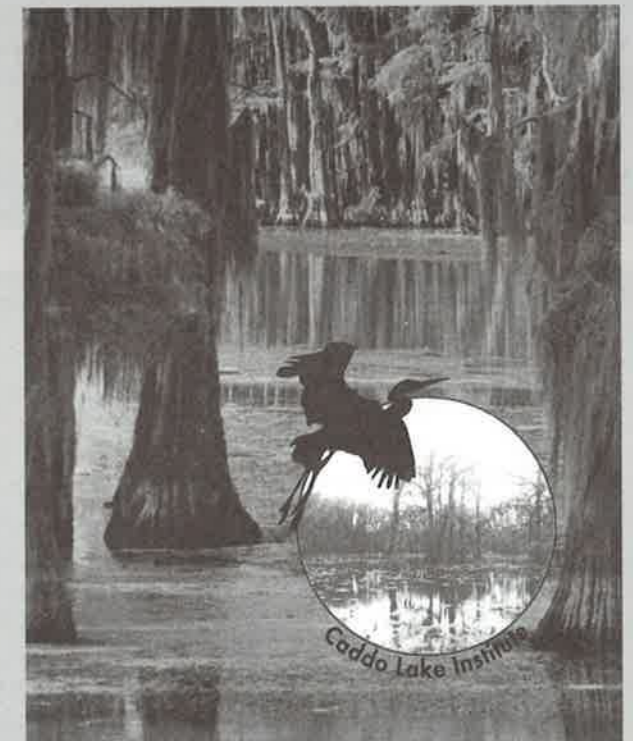
The Caddo Lake Institute enlists the support of environmental scientists at universities and colleges in the region to undertake a variety of ecosystem stewardship projects.

Whose claims are valid?

Given the potential variety of social actors who could play a role in wetland management, which ones are actually entitled to do so? This question can be approached by examining how the various actors justify their claims to management. The following are some examples:

- existing legal rights to land or resources (e.g., ownership, right of use, tenancy, legally recognized customary rights);
- direct dependency for subsistence (e.g., food, medicine, communication);
- mandate by the state (e.g., statutory obligation of a given government agency);
- dependency for gaining basic economic resources;
- historical, cultural and spiritual relationships with the wetland resources;
- unique knowledge of, and ability to manage, the concerned land and natural resources;
- ongoing relationship with the land and resources (e.g., local residents compared with recently arrived immigrants, visitors, tourists);
- loss and damage suffered as a result of management decisions and activities;
- present or potential impact of the social actor's activities on the land or resources;
- opportunity to share the access to resources and the benefits of resource use in a more equitable way;
- general, social recognition of the value of a given point of view/position (e.g., based on scientific knowledge, local traditional knowledge, etc.); or
- compatibility with national policies or international conventions and agreements.

Obviously, not all societies or groups within a society recognize *all* management claims from all other social actors. In an ideal process, the groups would organize themselves, express their interests and concerns, define themselves as institutional actors, stimulate society to recognize their claims as entitlements, and participate in negotiating an equitable division of management benefits and responsibilities. In this process, the actors with socially recognized entitlements could then be subdivided between primary and secondary institutional actors, and thus accorded different roles in management.

Adapted from Borrini-Feyerabend, 1999

3.2 Participatory assessment and planning

☐ **(7) Use participatory assessment techniques to describe the existing situation and to identify community concerns (a wide array of participatory assessment tools and techniques are available; see Additional Resources following Chapter 4):**

- ensure facilitators of participatory assessment are skilled and experienced in the technique;
- make sure that root causes of problems are identified and not merely the results of problems;
- involve all groups in the community;
- ensure that there is scope for the local people to identify and prioritise all of their development concerns, not just those relevant to wetland resources;

- ensure that concerns with aspects of government agencies are raised if these are relevant - do not restrict the issues to those within the community;
- identify wetland resource access and tenure arrangements and any associated issues;
- identify any traditional resource management mechanisms and rules, including the rules for conflict resolution, and build upon them;
- avoid raising false expectations;
- avoid creating the impression that the activity is to gather data for "others" - make sure information coming out of the process is shared with the community and that they share in its interpretation;
- use data collected as a baseline for later monitoring and evaluation of the results of the participatory management process;

- make sure that local people learn the participatory assessment technique so that it can be used for other issues of community concern, and so that they can train members of other communities who seek extension of the approach.

☐ **(8) Carry out a needs analysis of key government agencies and local authorities (where appropriate) to determine what inputs will be required to allow them to play their role in participatory management, and provide necessary training and infrastructure:**

- do not overlook the need for new skills and major changes in attitude relating to participatory processes;
- pay attention to the level of understanding of local wetland ecology, local culture, traditional resource management regimes, extent of local ecological knowledge;
- use members of the local community to provide training inputs;
- avoid a reliance on classroom approaches; for example, field visits led by local community members can be used;
- do not focus only on field staff – supervisors and regional managers must share the understanding gained by local workers and support the new approaches to wetland management.

☐ **(9) Ensure that key parties have a good understanding of each other's needs, responsibilities, limitations and culture:**

- facilitate communication between the various stakeholders within (and outside) the community;
- explain to the stakeholders the framework and constraints within which government agencies work;
- do not assume that communities understand the roles of government agencies, even if they have regular contact with them;
- arrange workshops where local people and government staff can communicate and explore their separate objectives in relation to wetland resources;
- establish mechanisms for regular communication between community representatives and staff of key government agencies.

☐ **(10) Carry out participatory planning and negotiation among stakeholders to develop a strategy for achieving local involvement in wetland management:**

- ensure facilitators of participatory planning are skilled and experienced in the technique;
- avoid raising false expectations;
- involve different stakeholders in the community;
- ensure that necessary training and infrastructure required for local people to carry out management responsibilities are included as part of the plan;

Participatory mapping

Community mapping is a fully participatory methodology. The role of community organizers is to conduct training in the mapping technique, facilitate group discussions and village assemblies to discuss natural resource mapping, village land-use planning and institution building. Mapping facilitators should actively promote and explain the necessity of involving all neighbouring communities and ensure a broad representation of social groups within a village community in order to avoid land-use conflicts among villagers or neighbouring villages. Community mapping should be perceived as a tool for conflict resolution to foster practical, harmonious solutions to competing interests and claims to land territories and natural resources. Whether mapping is facilitated by a professional team, or by trained volunteers from villages that have expressed interest in mapping their customary lands, depends on the objectives of the mapping programme.

Adapted from Momberg et al., 1996

Results of the participatory assessment and planning phases

Too often the phases of participatory assessment and planning end without a clear sense of the steps needed to transform the acquired information and plans into an operational participatory management agreement. If the following results are achieved at the end of the participatory planning and negotiation phase, there is a reasonably good chance that the management partnerships and "institutions" (defined in the broadest sense) will be sustained over the long term.

1. A **common vision** of the long-term future desired by all the actors concerned. The vision is legitimated by an appropriate socio-cultural ritual which renders it sacrosanct.
2. A **strategy** to achieve that vision, sub-divided into key performance areas, with clear ecological, social and economic objectives in the short and medium term.
3. Some **agreements** (possibly contractual agreements) among the institutional actors to pursue objectives for each key performance area (including an analysis of feasibility, impacts, cost, etc.). These specify the sharing of functions, tasks, benefits and responsibilities of natural resource management.
4. One or more **participatory management institutions** to implement and remain in charge of the activities specified in the agreements for each component of the strategy.
5. A **follow-up protocol** to monitor and learn from the participatory management agreements, institutions and rules (performance, results and impacts).

Adapted from Borrini-Feyerabend, 1999

- ensure that any necessary community development and alternative livelihood initiatives are identified;
- negotiate agreements;
- circulate the results of the participatory planning and allow time for informal discussion before holding a review meeting to revise the strategy;
- organize a debriefing session and, and in order to "legitimate" the participatory planning and negotiation, invite authorities with more extensive powers than those who participated in the process;
- ensure that local people learn the participatory planning technique so that it can be used for other issues of community concern, and so that they can train members of other communities who seek extension of the approach.

3.3 Implementation and learning-by-doing

(11) **Ensure that all commitments are carried out, including arranging meetings and carrying out tasks agreed at meetings (this applies to all parties – local community members, government staff and project staff):**

- have the community elect or appoint individuals or committees to carry out agreed upon tasks;
- ensure that theses committees and individuals are accountable to the community;
- see that agreements by government agencies to provide material or financial assistance are adhered to.

(12) **Assist the community to develop a monitoring and evaluation programme to check progress and success of the strategy (see Chapter 4):**

- assist the community to identify indicators of success that are meaningful to them;
- provide any necessary advice on indicators and monitoring programme design that will improve the validity of the results, making sure that the community retains ownership of the programme and is satisfied with the indicators;
- provide assistance, if necessary, on how to collect and interpret monitoring data through on-site training with members of the community;
- aim to leave complete data sets with the community;
- be willing to sacrifice statistical rigour in

favour of approaches that the community understands and in which it has confidence;
- make sure that monitoring results are widely disseminated and understood in the community;
- remember to include government agencies in the monitoring programme (to monitor their performance) and its interpretation.

(13) **Ensure that tasks taken up by various stakeholders are within their capabilities and that they have the time available to do them:**

- have regard to their level of understanding of the nature of the task;
- have regard to seasonal demands on local people's time, e.g., agricultural and ceremonial cycles;
- be aware of prejudicial attitudes (e.g., lack of trust between local people and agency staff);

(14) **Ensure that funding agencies are kept up to date with the emergence of issues and the development of participatory management approaches (in this way they will be more prepared to accept necessary changes in direction or allocation of funds).**

(15) **Establish networks among communities involved in wetland management and encourage regular contact and sharing of experiences:**

- organize study tours among such communities;
- organize conferences and/or regular informal information exchange;
- extend networks to key local figures such as media representatives, business people, politicians, etc., who may be able to support the community's participatory initiatives.

(16) **Prepare for replication and extension from the beginning of the initiative:**

- avoid the trap of facilitators feeling that they are the only ones who can extend the approach to new communities;
- train local people and build their confidence so that they can train people in other communities;
- do not attempt replication too early in the project;
- beware of "me too" requests for replication in other communities which are motivated only by a general impression that there are material benefits associated with participation in the initiative.

Participatory assessment and planning require detailed consultation with stakeholders, such as here in Bolivia.

Chapter 4: Monitoring and evaluation

The subject of monitoring and evaluation is well documented. This chapter is intended to provide a summary of the most important issues. As with the previous chapter, it is recommended that those seeking additional guidance on this subject contact the Ramsar Convention Bureau or refer to the Additional Resources section following this chapter.

Monitoring is a continual process of checking to see if project activities are being completed in a timely and participatory manner, and the desired outputs are being achieved. Evaluation is usually carried out towards the middle and at the end of a project cycle, and is intended to measure the degree to which the project has achieved project outputs, the effects of those outputs (on the local population or the wetland), and progress towards achievement of project goals. Monitoring and evaluation can be defined as the collection, analysis and use of information (data) about project inputs, activities, outputs, objectives and goals so as to increase project effectiveness. Such data can also be useful for replication of project approaches in other communities.

In most resource manuals, a distinction is made between monitoring and evaluation that is carried out by experts or professionals and that which is participatory. In participatory wetland management, local stakeholders should be involved in selecting relevant indicators and, wherever possible, in carrying out the monitoring and evaluation. This will ensure that the initiative is meeting community goals and expectations. Involving local people in this way is likely to increase their commitment to wetland conservation

Box 4.1 On participatory monitoring . . .

Four kinds of project monitoring

Monitoring is the collection and management of data that relate to predefined target values for specified indicators. Monitoring information is collected on a continuous basis throughout the implementation phase of a project.

Institutional monitoring: this category refers to internal monitoring of financial, physical and organizational issues affecting the project. Financial monitoring tracks project inputs and costs by activity within predefined categories of expenditure. Physical monitoring tracks the distribution and delivery of project activities and outputs/interventions. Organizational monitoring tracks sustainability, institutional development and capacity building in the project and direct partners.

Context monitoring: the process of tracking the context in which a project is operating, as it affects critical assumptions and risks to the project. This includes monitoring institutional and policy issues that may affect the capacity of the project to act or the capability of the target population to respond to the project. These concerns are handled to some extent during monitoring, but principally during evaluation.

Results monitoring: the process of tracking project effects (target population responses to project outputs/interventions) and project impacts (the contribution that the project makes to fundamental and sustainable change for the target population). Concerns about effects are handled to some extent during monitoring, but mostly by evaluation. Assessment of impacts is rarely dealt with by monitoring and is principally in the domain of evaluation.

Objectives monitoring: the process of tracking project objectives and strategies for continuing relevance to the target population and its changing needs.

From Barton, 1997.

and the participatory management process, as well as their sense of ownership of that process. Other reasons for involving people include the following:

- people like to know what the results of their efforts have been;
- people feel more committed to a community project when their opinions about it are asked for and valued;
- people generally like to learn how to do things better; and
- people feel more in control and comfortable if they can critically evaluate their own work rather than having it judged by outsiders (Woodhill and Robins 1998).

4.1 Participatory monitoring

Terminology in the field of monitoring and evaluation is specialised, and terms such as "outcomes" and "impacts" often take on very specific meanings. An example of some common forms of project monitoring and their related terminology is found in Box 4.1. For the sake of simplicity, the discussion which follows is restricted to two important aspects of monitoring. The first is *process monitoring* which measures progress in securing project inputs (such as money, training, etc.) and delivering project outputs (such as training sessions conducted, number of hectares revegetated, etc). This is generally required by funding agencies and is relatively simple to carry out, and relevant indicators are easily established. Often the indicators can be taken directly from the goals and objectives as described in a project document or from a logical framework approach.

The second is *performance monitoring* which reveals trends towards or away from the objectives of the project. These might include, for example, measures of biodiversity conservation, ecosystem health, improvements to local livelihoods from the sustainable harvest of natural resources, or the extent of local involvement. An example of some measures of the success of local involvement can be found in paragraphs 17-21 of the Guidelines (pages 16-18). The indicators contained in the Guidelines are not exhaustive, but represent a first approximation of whether or not participatory management has taken root and is likely to be effective and sustainable in the long term.

An example of community-established indicators for biodiversity monitoring is found in Box 4.2. Here, the community had a stake in the sustainable harvest of one particular species of shellfish, which, as it happened, was also dependent on the quality of the coral

reefs. Similar examples of community-based ecological monitoring are found in the case studies for Australia and Tanzania (see Appendix IV). Choosing a species of direct relevance to local communities for livelihood purposes will often ensure that biodiversity conservation objectives are also met. Monitoring can also be integrated into something that community members are already doing, such as monitoring water quality when they collect water or measuring the quantity of fish harvested during a specified time period.

If the community is sufficiently vested in the participatory management process, specialised training can be provided in the use of various tools and techniques for ecological monitoring. Facilitators can help the community to design a well-targeted, culturally appropriate, and simple monitoring plan. A number of the same participatory techniques that are used in participatory assessment and planning (e.g., mapping, semi-structured interviews, flow diagrams, matrix analysis, etc.) can also be very useful for participatory monitoring. A large and growing number of manuals provide descriptions of these techniques (see Additional Resources, following this chapter).

Although it is important to involve locals in the analysis and use of monitoring data, this does not mean that local people must necessarily collect the monitoring data itself. Being involved in the identification of indicators of success and in receiving and interpreting the monitoring results already constitutes a significant role. Some local groups may have lifestyles that are not conducive to regular monitoring (due, for example, to agricultural planting and harvesting cycles), or may lack some of the skills and knowledge necessary for the task. Furthermore, where a donor or conservation NGO has specific conservation objectives (e.g., increased migratory bird counts) that are not a direct priority for the community, it would be better for this data to be collected by outsiders with the relevant interest and expertise.

4.2 Participatory evaluation

In the literature on monitoring and evaluation, there is often an assumption of a distinct project that has been conceived and implemented by a single agency with well-defined objectives in mind. This is not always the case with participatory wetland management. A government agency or NGO may begin working with a community on one set of issues (e.g., nutritional status of the population or contaminated water), and find that these are tied to environmental concerns such as the health of the wetland ecosystem

An example of community-based ecological monitoring

For centuries, the people of Fiji have relied on marine ecosystems for their food and livelihood. Today, however, community members in **Verata Tikina**, a county of seven villages, are worried about threats to their marine resources caused by overharvesting and siltation. They want to control overharvesting and, at the same time, find alternative sources of income.

In Fiji, marine resource tenure is community-based, and communities know the reefs extremely well. Fijians live in highly structured, tight communities and possess strong traditional ecological knowledge of their ecosystems. In 1996, the Verata communities participated in resource assessments that prioritised their villages' needs. Community members mapped their villages, identified perceived problems, and discussed how to solve them. Then, in April 1997, a two-week workshop in participatory biological monitoring was held in Verata. Representatives from all seven communities participated and numbers swelled as more villagers, intrigued by the activity, joined in. Participants identified local marine resource-management problems, developed action plans to meet the challenges, and designed monitoring plans to judge the success of the interventions. Two *tabu* sites (no-harvest zones) were identified and approved by villagers to allow comparison of the levels of organisms in harvested and non-harvested sites, to study recovery rates, and to conserve biodiversity.

At the end of the workshop, the villagers invited 40 government managers on a field trip to view the monitoring in action. They were so impressed that they asked for a training workshop to be held for their own government departments and also brought in NGOs. Through the monitoring, communities are seeing, for example, that controlled harvesting is allowing the recovery of the saltwater cockle, known as "kaikoso," in the no-harvest areas. Kaikoso was chosen by the community as an impact indicator. It is easy to count and measure, and it is a resource that the community values. As a result of this monitoring, the Verata council produced a motion to ban coral harvesting.

Adapted from Biodiversity Support Programme, Lessons from the Field, No. 1, 1998.
(Available from http://www.BSPonline.org/publications/index.html).

Marine resources are vitally important to many communities in Fiji.   *Photo: WWF/C. Holloway*

(e.g., declining fish catches). Thus, the work on wetland ecosystems may evolve organically from community concerns, not from a predefined project plan. In these cases, objective-based evaluations (measuring project outputs and impacts in relation to predefined objectives) will not provide a full picture of the project's impacts. Rather, a more open-ended approach is needed, examining how the project succeeded or failed, or if there were any unintended (good or bad) outcomes. This is often termed "learning-by-doing" or "adaptive management" (Box 4.3).

To facilitate learning-by-doing, it is important not only to collect data but also to adopt an appropriate management attitude. If mistakes are regarded as an opportunity for learning and if people are rewarded for identifying problems and promoting innovative solutions, learning-by-doing will be strongly encouraged. On the other hand, it is important that innovations, and in particular innovations to management plans agreed to by all stakeholders, are not introduced without the prior consent of all parties. Even if these innovations are potentially useful, they could invalidate the monitoring and evaluation, and thus the process of learning-by-doing.

Unlike monitoring, which is a continual process, evaluation usually implies a longer period of analysis and reflection. Evaluation might occur on an annual or bi-annual basis, or at the end of a specific phase of implementation. The focus of a participatory evaluation will be on matters of concern to the community, with an emphasis on what the community can do, together with government or NGO stakeholders, to improve upon the participatory management arrangement. After all, communities do not think in terms of "project periods"; the question of wetland management is part of their day-to-day life and may be critical to their own survival.

Many of the participatory techniques used for assessment, planning and monitoring can also be used during the evaluation phase. However, evaluation goes beyond measuring outputs (activities accomplished) and outcomes (changes in behaviour or in the environment), but also measures the impacts (degree to which project goals are achieved) and changes in the context that may invalidate the assumptions upon which the project is based. Examples of the latter could be a change in government, a new market for wetland products, expanded licenses to multinational fishing fleets, or political instability. All of these are factors external to the project context over which the community has little control, but which the participatory management agreement will need to address.

The results of participatory evaluation should be fed back into the management process so that both community livelihood concerns and ecosystem sustainability can be addressed. As the term "learning-by-doing" implies, this is an ongoing process of adjustment and re-negotiation of plans and agreements. ❐

Adaptive management and evaluation: learning-by-doing

For some projects it is easy to identify from the outset what needs to be done and why. For example, in building a community centre it is easy to have a very clear set of goals and objectives and an ordered approach to monitoring and evaluation. However, for natural resource management, many of the problems are ill-defined and complex, making it necessary to learn as you go and continually adapt the goals and objectives of the project. This non-linear, cyclical or learning approach is now commonly referred to as adaptive management.

The implications of this for monitoring and evaluation are two-fold. First, textbook approaches that consider evaluation as a neat, linear process – defining measurable objectives and performance indicators at the outset of a project and then monitoring those indicators over the project's life – are often unrealistic. Second, in such a situation, monitoring and evaluation actually becomes much more important as it provides information critical to adapting the project objectives and implementation. Where initial knowledge and objectives are unclear, more regular cycles of feedback are needed.

Adapted from Woodhill and Robins, 1998.

Additional resources

This list of publications and Internet resources is intended to help practitioners locate additional materials on participatory management. Reference manuals and Internet resources of particular interest are preceded by an asterisk (*).

Publications

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Internet Resources

Biodiversity Support Program Web site, http://www.BSPonline.org. The publications section of this web site has an electronic version of *Beyond Fences*, listed above, as well as other resources.

* Collaborative Management Forum list server. This Internet discussion list can be subscribed to by sending an email message to hq@indaba.iucn.org with "subscribe cm-forum" in the text of the message.

FAO's Community Forestry Web site, http://www.fao.org/montes/fon/fonp/cfu/default.htm. Participatory wetland management holds much in common with participatory management of any other natural resource. This site includes many useful tools for community natural resource management.

50 ✦ Ramsar handbooks for the wise use of wetlands

✦ Handbook 5 ◇ Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands **51**