Government of the People's Republic of Bangladesh
Ministry of Environment and Forests

Proceedings of the Regional Workshops on National Biodiversity Strategy and Action Plan

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Proceedings of the Regional Workshops on National Biodiversity Strategy and Action Plan

Compilation and Editing

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Preface

Responding to the callings of the Convention on Biological Diversity (CBD), the Bangladesh National Biodiversity Strategy and Action Plan (NBSAP) assesses the current state of biodiversity and suggests strategies to be implemented for attainment of the CBD objectives. It is a national document formulation process that requires the participation of concerned government and non - government organizations and all relevant stakeholders. The real owners of the document are the people and the Government of Bangladesh.

The Ministry of Environment and Forests has initiated this project, with financial support from the Global Environment Facility (GEF) funneled through the UNDP. IUCN - The World Conservation Union, Bangladesh Country Office has been implementing the project since October 2002, which is due to be completed by June 2004.

As regards its implementation in the field, in line with the 'participatory bottom-up' approach, six regional workshops in the country's six administrative divisions have been held to ensure the local people's stakes. The participants in the workshops comprised people's representatives, teachers, social leaders, lawyers, civil administrators, development workers, officials from various implementing agencies, researchers, representatives of ethnic communities, physicians and the media professionals. The selection of participants was carried out in a manner that ensured maximum gender balance.

The major objectives of the regional workshops were to identify specific problems, especially of the biodiversity users and capture the indigenous knowledge regarding the status and threats to the biodiversity of the respective regions. Each workshop was a daylong event and held in three sessions: the Inaugural, the Technical and the Plenary. This Proceeding of the Regional Workshops is a compilation of the six workshops held in Chittagong, Khulna, Jhalokathi, Tangail, Thakurgaon and Moulvibazar. I had the privilege to be present in all of them and I can say with confidence that all participants had come out with their views with both enthusiasm and concern.

I would like to express my gratitude to all the participants, who put in their best efforts into making this document. I am of the opinion that this Proceedings has correctly captured the main statements by the local level participants.

Dhaka
June,2004

Monowar Islam
National Project Director and
Deputy Secretary
Ministry of Environment and Forests

Acknowledgements

As a ratifying party to the Convention on Biological Diversity (CBD), Bangladesh has a national obligation to formulate its National Biodiversity Strategy and Action Plan (NBSAP). In the light of the CBD objectives of achieving sustainable use and equitable sharing of benefits, the Ministry of Environment and Forests and IUCN Bangladesh Country Office have been jointly implementing the Biodiversity Strategy and Action Plan (BSAP) Project activities with a view to developing the NBSAP.

To render the process thoroughly participatory, the NBSAP implementors decided to conduct a series of consultations to capture the location specific concerns. To ensure the participation of people from all walks of life, regional workshops were held in six divisions of the country. The rationale behind the six regional workshops stemmed from the need of adopting the 'participatory approach' to formulate the strategy and action plan document. People's ownership was endorsed by registering the concerns of the local people, Union Parishad representatives, teachers, imams of the mosques, researchers, journalists, lawyers, physicians, field level government employees and NGO representatives. Only two workshops for Chittagong and Khulna divisions were held at the divisional headquarters; the rest four were held outside the divisional cities. The decision to organize the regional workshops outside the principal cities also demonstrates the Government's will to effect participatory planning in development.

The objectives of the workshops were to identify the current status and threats to biodiversity in the regions, for ensuring a realistic action plan worth implementing. Through the group discussions and debates in the regional workshops, the participants highlighted the ways of combating biodiversity loss, capacity building needs, widespread use of appropriate biodiversity laws and awareness raising amongst all sections of the society. Through their untiring efforts at the daylong workshops held, the participants brought forth the concerns endemic in their respective regions. I would like to extend my heartfelt gratitude to them.

We are grateful to Mr. Shajahan Siraj, Hon'ble Minister and Mr. Jafrul Islam Chowdhury, Hon'ble Minister of State for the Ministry of Environment and Forests; Barrister Mr. Muhammad Shajahan Omar, Bir Uttam, MP, Hon'ble Minister of State, for Law, Justice and Parliamentary Affairs; Mirza Fakhrul Islam Alamgir, Hon'ble Minister of State, Ministry of Agriculture; Sheikh Tayebur Rahman, Hon'ble Mayor, Khulna City Corporation; Ms. Eshrat Sultana Ellen Bhuttu, Hon'ble Member of Parliament, Jhalokathi - 2; Syed Tanveer Hussain, Secretary, Ministry of Textiles and Jute; Mr. A H M Abul Qasem, Divisional Commissioner, Dhaka Division; Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division; Mr. Md. Nazmul Ahsan, Divisional Commissioner, Khulna Division; Mr. Md. Abdul Quddus, Divisional Commissioner, Barisal Division; Miah Mushtaque Ahmed, Divisional Commissioner, Rajshahi Division; Mr. Nazrul Islam, Divisional Commissioner, Sylhet Division and Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP for gracing many of the NBSAP occasions as chief and special guests.

The keen interest and cooperation of Mr. Sabihuddin Ahmed, Secretary, Ministry of Environment and Forests in this project has been noteworthy. I am thankful to him. Thanks must also be conferred upon Mr. S. M. Lutfullah, Joint Secretary, and Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests for their wholehearted support in the process.

The financial support from the GEF provided through UNDP is hereby duly acknowledged. Special thanks are due to Dr. M. Aminul Islam, Sustainable Development Advisor of UNDP. I must also mention the painstaking efforts of Dr. P Balakrishna, Head, Regional Biodiversity Programme Asia in providing us with all possible technical support.

I would like to recall the efforts of the divisional and district administrations, and mention the following individuals and their co-workers for their wholehearted support in successfully organizing the workshops in the six regions:

Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong

Mr. Md. Restadul Islam, Deputy Commissioner, Khulna

Mr. Md. Ehsanul Huq, Deputy Commissioner, Jhalokathi

Mr. Md. Abdul Hakim Mondal, Deputy Commissioner, Tangail

Mr. Maksumul Hakim Chaudhury, Deputy Commisioner, Thakurgaon

Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar

Last but not the least; I would like to mention the overwhelming support provided by Mr. Monowar Islam, National Project Director, BSAP Project and Deputy Secretary, Ministry of Environment and Forests, all through the project tenure. The efforts of the IUCN staff in organising and conducting the workshops successfully have also been praiseworthy. I am thankful to them. I would like to express my gratitude once again to the participants, who have invested their valuable time and energy in rendering this national process a success.

Dhaka
June,2004

Ainun Nishat
Country Representative
IUCN Bangladesh Country Office

List of Acronyms and Abbreviations

AIS: Alien Invasive Species

BARI: Bangladesh Agricultural Research Institute

BCSIR: Bangladesh Council for Scientific and Industrial Research

BFRI: Bangladesh Forest Research Institute

BRAC: Bangladesh Rural Advancement Committee

BSAP: Biodiversity Strategy and Action Plan

CBD: Convention on Biological Diversity

CHT: Chittagong Hill Tracts

CITES: Convention on International Trade in Endangered Species of Fauna and Flora

CoP: Conference of Parties

DAE: Department of Agricultural Extension

DoE: Department of Environment

ECA: Ecologically Critical Areas

EIA: Environmental Impact Assessment

FAO: Food and Agriculture Organization

FD: Forest Department

GDP: Gross Domestic Product

GEF: Global Environment Facility

GIS: Geographic Information System

GMO: Genetically Modified Organism

GoB: Government of Bangladesh

HYV: High Yielding Varieties

IAS: Invasive Alien Species

ICTP: International Conventions, Treaties and Protocols

IPM: Integrated Pest Management

IPRs: Intellectual Property Rights

IUCN: The World Conservation Union

LCO: Local Community Organizations

LGRD: Local Government Rural Development

LIK: Local Indigenous Knowledge

LME: Large Marine Ecosystem

LMO: Living Modified Organism

M& R: Monitoring and Reporting

MDG: Millenium Development Goals

MEA: Multilateral Environmental Agreements

MNCs: Multi-national Companies

MoEF: Ministry of Environment and Forest

MoFL: Ministry of Fisheries and Livestock

NAPA: National Adaptation Programmes of Action

NBSAP: National Biodiversity Strategy and Action Plan

NCS: National Conservation Strategy

NEMAP: National Environmental Management Action Plan

NGOs: Non-Government Organizations

NTFPs: Non Timber Forest Products

PA: Protected Area

PGRFA: Plant Genetic Resources for Agriculture

PRSP: Poverty Reduction Strategy Papers

SAARC: South Asian Association for Regional Cooperation

SEMP: Sustainable Environment Management Programme

ToT: Training of Trainers

TRIPS: Trade Related Intellectual Property Rights

UNDP: United Nations Development Programme

UP: Union Parishad

WTO: World Trade Organization

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CHITTAGONG WORKSHOP

KHULNA WORKSHOP

TANGAIL WORKSHOP

THAKURGAON WORKSHOP

Introduction

Background

Countries all over the world, including Bangladesh had collectively committed themselves to conserving life forms on this planet Earth through the Convention on Biological Diversity (CBD), one of the three outcomes of the Earth Summit held at Rio de Janeiro, Brazil in 1992. The Convention offers opportunities for countries to not only conserve biological diversity but also assist with identifying principles of sustainable use and sharing the benefits of such use equitably. However, the responsibility to translate such deliberations into action lies with individual nations.

The CBD is also significant because underscoring the issue of sovereignty, it encouraged the implementation of the Convention through local and national level actions. Thus, implementation of the CBD transpired to be an essential national responsibility. Article 6 of the CBD calls for an overarching framework for implementing the Convention through the development of National Biodiversity Strategy and Action Plans (NBSAP). Subsequent to the Rio Summit, countries responded pro-actively by suggesting the need for a common framework to carry forward the work programmes under the CBD with the development of National Biodiversity Strategy and Action Plans (NBSAPs), to ensure some degree of commonality and measure of rigour to assess the actions leading to the implemention of the CBD. The NBSAPs, therefore, are the stepping-stones to assessing a country's biological wealth, addressing the issues of threats and opportunities and suggesting collaborative actions.

Bangladesh ratified the CBD in 1994 and stood consequently obliged to develop an NBSAP first to ensure commonality and rigour in implementing the CBD. The NBSAP responds to the CBD as it assesses the current state of biodiversity and suggests strategies to be implemented in unison with all relevant sectors. It is a national planning document that requires the participation of concerned government and non-government organizations, researchers, civil society, academia, professionals and various other relevant stakeholders. It is supposed to be a 'living' tool-- in the sense that it should be

responsive, flexible and practical. The Government, that is, the representative grassroots as well as the professionals who have integrated their respective experienced views into the document are the real owners of the NBSAP.

To fulfil the commitment of the CBD, and for sustainable management of the nation's biodiversity, the Ministry of Environment and Forest, People's Republic of Bangladesh, has initiated a project to develop a National Biodiversity Strategy and Action Plan for the country. The Global Environment Facility-GEF is providing financial assistance in this project through the UNDP. IUCN- The World Conservation Union, Bangladesh Country Office has been contracted to implement the project. The project started in October 2002 and will be completed in June 2004.

Objectives of the Project

The primary objective of the project is

(a) To formulate a National Biodiversity Strategy and Action Plan for the conservation and sustainable use of Bangladesh's biological diversity in fulfilment of Bangladesh's obligation as a Party to the CBD.

Secondary to, and in support of the main objective, the project will also seek

(b) To identify the current status of pressure on, and options and priority actions for, the conservation and sustainable use of national biodiversity by the stakeholders.

(c) To complement, build on and strengthen the National Conservation Strategy (NCS) as well as the National Environment Management Action Plan (NEMAP) and other sectoral plans, through a participatory process, involving representatives from different sectors of the society.

(d) To raise community awareness on the sustainable use of biodiversity, thus creating a greater understanding of the ensuing responsibilities on the part of the grassroots with the hope that any further activities required to safeguard the biodiversity should rest with the local communities.

Expected Outputs

The country would benefit in the following manner by implementing the project:

- A combined and unified policy for biodiversity conservation and management would be in place.
- It would ensure people's ownership and formulation of clear objectives, strategy, plans, and sustainable use of biodiversity conservation.
- Implementation of activities concerning biodiversity conservation and management by the Government will be accentuated and enhanced considerably.
- Biodiversity conservation and management related local wisdom, norms, practices, etc will be documented, preserved and disseminated through fusing farmers' knowledge and science with a view to mainstreaming people's perceptions of conservation and sustainable management of biodiversity.

Inception Workshop

The first step in the NBSAP planning for Bangladesh was the development of methodology and implementation approach. This was accomplished through the Inception Workshop held on 29 December 2002. The NBSAP development being a participatory process universally, it involves multi-stakeholder participation. Through organizing discussions and culling the experiences of NBSAP development in other neighbouring countries, a participatory planning process has been struck upon for preparing the Bangladesh NBSAP. The participants at the Inception Workshop suggested the adoption of a combined 'top-down' and 'bottom-up' planning processes approach.

Five thematic groups were formed centred around the following areas:

- Species conservation;
- Ecosystem management;
- Legal, regulatory and policy issues;
- Education, training and awareness raising; and
- Linkages and institutional issues.

Each Thematic Group was then divided into several subgroups. The participants identified the major issues to be addressed during the thematic consultation meetings. As a top-down approach, a total of seveteen consultation meetings have been held. The project also held focus group meetings with different resource user groups.

Regional Workshops

In line with the bottom-up approach, the participants in the Inception Workshop endorsed holding six regional workshops in the country's six administrative divisions. Accordingly, six regional workshops were held in different districts under the six divisions as shown in the following table. The participants in the workshops were people from all walks of life comprising people's representatives, teachers, social leaders, lawyers, civil administrators, development workers, officials from various implementing agencies, researchers, and representatives of ethnic communities, physicians and media people. The selection of participants was carried out in a manner, which ensured maximum gender balance. In fulfilment of the government's commitment, each of the regional workshops was attended either by a Minister, State Minister or the local City Mayor.

List of regional workshops held

No.	Division	City/town	Date
1	Chittagong	Chittagong	18 May 2003
2	Khulna	Khulna	11 June 2003
3	Barisal	Jhalokathi	25 June 2003
4	Dhaka	Tangail	23 July 2003
5	Rajshahi	Thakurgaon	02 August 2003
6	Sylhet	Moulvibazaar	14 August 2003

Objectives of the regional workshops

The regional workshops were held to ensure the participation of the grassroots, as a gesture of effecting bottom-up planning approach. Major objectives of the regional workshops were to:

- Capture the ideas of cross sections of people representing the grassroots as well as the implementing agencies functioning at the field level;
- Identify the location/area/ region specific problems;
- Identify specific biodiversity user groups' specificic problems; and
- Create awareness among the people, local institutions and field based implementing agencies with a view to ensuring their ownership of the NBSAP through participation in the planning process.

Structure of the Workshops

A day was earmarked for each regional workshop. Each workshop was planned to be held in three sessions: the Inaugural, the Technical and the Plenary. All the workshops except that held at Jhalokathi started with the Inaugural as usual; the technical and the plenary sessions followed suit. At Jhalokathi, the workshop started with the technical session and then it was formally inaugurated in the middle of the technical session, in a bid to handle a specially arisen situation. During the technical sessions, the participants worked in groups. The number of working groups varied in accordance with the number of participants. The stakeholders' participation in a group was heterogenous, that is, each group had representatives from different stakeholder groups, ranging from the grassroots to the policy level.

Activities earmarked for each group

- Assessment of existing status of biodiversity indicators: once there were... now we do not see them any more/ or in lesser number or quantities...
- Uses and indicators...
- Causes of loss and threats...
- Identification of gaps: you will not find any study on..../ there is no action against..../no policy)
- Identification of issues: we consider these.... as the ways to conserve such and such species, such and such habitat.....
- Suggestions / options: these are the options...
- Suggestions on future course of actions
- Prioritization: .....such and such actions should be taken immediately, ... should get second priority

Structure of the Regional Workshop Proceedings

The proceedings of the regional workshops include the findings of all six workshops. Introduction to the National Biodiversity Strategy and Action Plan and the Workshop was presented in the inaugural sessions of all the regional workshops. So, it has been kept as a common separate chapter in this general section. Findings of the regional workshops follow this section and have been presented separately regionwise in a chronological order.

Each regional chapter contains the deliberations of the inaugural session and the group findings that the participants identified in the technical sessions. While documenting the group findings, the participants' lists have been incorporated to ensure facile linkages. At the end of each regional presentation the list of total participants has also been provided. The group findings have been rendered almost in the raw without much editing so that the original flavour of the participants' comments might be perceived clearly.

Introduction to the National Biodiversity Strategy and Action Plan and the Workshop

This presentation consists of an introduction to the National Biodiversity Strategy and Action Plan and the delineation of the objectives of the forthcoming regional workshops.

What is Biodiversity?

It is the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes which they form part of; this includes diversity within species, between species and of ecosystems.

Biodiversity is studied as:

Ecosystem diversity: the variety and frequency of different ecosystems

Species diversity: the frequency and diversity of different species

Genetic diversity: the frequency and diversity of different genes and/or genomes

Contribution of Biodiversity

Diversity in genes, species and ecosystems has contributed immensely to the productivity of agriculture, forestry, fisheries, and industry. Wild species provide people with foods, dyes, fibres, building materials, and medicinal plants, while home gardens and agricultural plots are planted with distinct domesticated crop varieties.

The state of biodiversity is being increasingly altered because of human interventions, viz.:

- New systems of agriculture
- Excessive harvesting
- Unplanned and the resultant unsustainable development
- Conversion of wilderness zones

The world population has been estimated to reach the 9 billion mark in the next 50 years. In view of this compulsive trend, we are faced with a couple of deeply disturbing questions like: what kind of extra pressures will that huge population put on the already dwindling global resource base? How would it affect us natioanlly and otherwise?

- The loss of biodiversity often reduces the productivity of ecosystems, thereby shrinking nature's basket of goods and services, from which we constantly draw.
- The loss of biodiversity destabilizes ecosystems, and weakens their ability to deal with natural disasters such as floods, droughts, and hurricanes, and with human-caused stresses as well, such as, pollution and climate change.

Biodiversity Under Threat

Globally, species have been disappearing recently at 50-100 times the natural rate. An estimated 34,000 plant and 5,200 animal species face extinction. Over the last 100 years, Bangladesh has lost about 10% of its mammalian fauna, 3% avifauna and 4% reptiles.

Possible drivers

- Population pressure on land and resources
- Unsustainable development activities
- Indiscriminate harvesting
- Habitat destruction
- Habitat fragmentation
- Impact of global climate change
- Introduction of Alien Invasive Species

Convention on Biodiversity Conservation (CBD)

Article-1- Objectives of this Convention are:

- conservation of biological diversity
- sustainable use of its components
- fair and equitable sharing of the benefits

Obligations under the CBD

Contracting parties shall develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity. (Article - 6)

Contracting parties shall integrate consideration of the conservation and sustainable use of biological resources into national decision making. (Article - 10)

Is Bangladesh Rich in Biodiversity?

Once distinctly biodiversity-rich, Bangladesh still boasts a considerable wealth of biodiversity. It supports 113 species of mammals, 628 species of birds, 126 species of reptiles, 22 species of amphibians, 708 species of fishes, 400 species of mollusks, 70 species of bees and wasps, about 5700 species of angiosperms, 1700 species of pteridophytes and 3 species of gymnosperms.

National Biodiversity Strategy and Action Plan (NBSAP) of Bangladesh

The Ministry of Environment and Forests with support from the GEF/UNDP has launched the Biodiversity Strategy and Action Plan (BSAP) Project. The NBSAP will focus on building a unifying framework to guide and coordinate various biodiversity - related programmes and projects that are under implementation or in the design stage, identifying national biodiversity priorities, and also allocating lead responsibilities.

Objectives of the NBSAP

- Formulate strategies and action plans for conservation and sustainable use of the country's biological diversity.
- Identify the current pressures on the biological resources, and options and priority actions for the conservation and sustainable use of national biodiversity by the stakeholders.
- Complement and build on the NCS as well as the NEMAP and other sectoral plans, through participatory processes involving representatives from different sectors of the society.
- Raise community awareness of the sustainable use of biodiversity.

Approach

Experiences of IUCN in preparing NBSAPs in the region and elsewhere have been deployed carefully after adapting them to suit our needs. The approach determined involved the formation, development and execution of the following chronologically laid down activities and products, viz.

- A National Steering Committee
- Inception Workshop
- Thematic groups and sub-groups
- Consultation meeting of thematic groups
- Regional Workshops
- National Workshops
- Draft Strategy and Action Plan
- Feedback
- Final NBSAP

Thematic Groups

In the Inception Workshop, five Thematic Groups were formed who would deal with the following broad areas:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness Raising
- Linkages and Institutional Issues

Sub-groups

Under Species Conservation

1. Wild and cultivated biodiversity
2. Invasive and Genetically Modified Organisms (GMOs)
3. Microorganism diversity, health and biodiversity

Issues

- Species diversity and integrity
- Inventory and state of knowledge
- Identification (taxonomy)
- Use patterns
- Threats
- Conservation status
- Species information for areas like Chittagong Hill Tracts, coastal areas, islands like Kutubdia, St. Martin's Island

Under Ecosystem Management

- Terrestrial ecosystems
- Aquatic and coastal ecosystems
- Hill ecosystems and mining
- Cultures and community conservation
- Ex situ and in situ conservation

Issues

- Diversity
- Threat
- Impacts of threats
- Coping strategies
- Livelihood linkages
- Links between culture and biodiversity
- Current status of protected areas
- In situ conservation
- Current policies and strategies

Under Legal, Regulatory and Policy Issues

Policies, laws and institutions

- National, regional and international obligations
- Tourism and related issues
- Poverty reduction, national planning

Issues

- Policies and laws, including regulations relating to biodiversity
- National and regional planning processes and institutions, their roles and responsibilities
- Implementation principles and options
- Access rights, tenure rights
- Customary laws, benefit sharing options and practices
- Indigenous knowledge, protection of LIK, IPRs, bioprospecting etc
- Linkages between poverty and biodiversity
- Biodiversity and EIA
- Current status of environmentally sustainable tourism that considers biodiversity
- Future priorities and geographical areas of focus, action plan(s)
- Elements of national planning processes

Under Education, Training, Awareness Raising and Capacity Building

1. Capacity building and training

2. Education, research and awareness raising
3. Gender, advocacy, media

Issues

- Assessment of existing capacities
- Capacities needed
- Specific training programmes, development of manuals, linking actors etc.
- Education and awareness raising
- Gender and equity issues
- Relevance of media to conservation and awareness raising

Under Linkages, Cross-sectoral and Institutional Issues

1. People, economics, livelihoods, technology
2. Institutional linkages and development cooperation

Issues

- Quantitative and qualitative assessments of the value of biodiversity
- Natural resources and budgeting - including financing
- Cost-benefit analyses of conservation
- Use and benefit sharing
- Livelihoods based on biological resources
- Biodiversity enterprise
- Poverty and biodiversity links and impacts of consumerism and globalization
- Implications of new technologies - including biotechnology, industrial policies and options
- Private sector involvement and roles

Under Inter-agency Cooperation

Implementation principles of NBSAP and role of agencies and departments in the government, status, options and action plans were considered.

Factors dependence of people on use of natural resources

- Status of biodiversity
- Loss and threats

- Identification of causes
- Gap analysis
- Identification of issues
- Prioritization of issues
- Linkages between biodiversity loss and poverty
- Role of NGO sector
- Flexible and innovative approaches to in situ conservation keeping in mind the high population density of Bangladesh
- Integration of biodiversity concerns into all relevant sectors

Expected Outputs

- A coordinating and unifying framework for management of the nation's biodiversity
- Clearer goals and objectives for conservation, sustainable use and benefit sharing
- A prioritized action plan for achieving the objectives and also focusing on eco-specific spatial distribution and land use planning concerns
- Strengthened GoB capacity to fulfil the commitments under the CBD
- Increased awareness of the importance and values of biodiversity at all levels
- Enhanced application of policy, legal, and financial instruments for conservation and management of biodiversity
- Institutional mechanism for implementation of the BSAP
- Improved level of government ownership of its natural resources through registration/ documentation of those resources

Regional Workshop on the National Biodiversity Strategy and Action Plan, Chittagong Division

Held in Chittagong
18 May 2003

The NBSAP Regional Workshop for Chittagong Division was held in Chittagong on 18 May 2003. In the Inaugural, the Chief Guest was Mr. Jafrul Islam Chowdhury, Hon'ble Minister of State, Ministry of Environment and Forests (MoEF), Government of Bangladesh. The Special Guests were Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh Country Office and Mr. S. M. Lutfullah, Joint Secretary, MoEF. Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division chaired the session. A total of 125 participants attended the Inaugural. More than 80 participants participated in the Technical Session, where they worked in four working groups namely, Groups A, B, C and D. Each group identified the issues and actions concerning biodiversity conservation in the Chittagong region in particular. The groups also identified the issues and relevant actions warranted at the national level.

The programme of the Chittagong regional workshop is rendered below.

Programme

Inaugural Session (9:00am-10: 30am)

8:00am- 9:00am	Registration
9:00am- 9:05am.	Recitation from the Holy Qura'n
9:05am- 9: 10am	Welcome address by Mr. S. M. Munjurul Hannan Khan Programme Coordinator, IUCN Bangladesh Country Office
9:10am - 9:25am	Introduction to the Workshop by Dr. Ainun Nishat Country Representative, IUCN Bangladesh Country Office
9:25am-9: 30am	Speech by the Special Guest Ms. Shireen Kamal Sayeed Assistant Resident Representative, UNDP Bangladesh
9:30am-9: 35am	Speech by the Special Guest Mr. S.M. Lutfullah Joint Secretary, Ministry of Environment and Forests
9:35am-9: 45am	Speech by the Chief Guest Mr. Jafrul Islam Chowdhury Hon'ble Minister of State for Environment and Forests Government of the People's Republic of Bangladesh
9:45am -9:55am	Speech by the Chairperson Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division
9:55am-10: 00am	Vote of thanks by Mr. Monowar Islam Deputy Secretary, Ministry of Environment and Forests
10:00am-10: 30am	Tea break

Technical Session (10:30am - 5:30pm)

10:30am-11: 00am	Workshop methodology and objectives
11: 00am -1: 30pm	Group discussions

1:30pm- 2:15pm	Lunch and prayer break
2:15pm- 4:15pm	Group discussions
4:15pm- 4:30pm	Tea break
4:30pm-5: 30pm	Plenary

THE INAUGURAL

Welcome Address by
S. M. Munjurul Hannan Khan
Programme Coordinator
IUCN Bangladesh Country Office

Hon'ble Chief Guest Mr. Jafrul Islam Chowdhury, Hon'ble Minister of State for Environment and Forests; Special Guests Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh and Mr. S.M. Lutfullah, Joint Secretary, Ministry of Environment and Forests; Mr. Monowar Islam, Deputy Secretary and National Project Director, BSAP project; respected Chair, respected participants, ladies and gentlemen.....

Assalamu Alaikum...

It is my privilege to welcome you to the first NBSAP Regional Workshop in Chittagong. I would like to thank the representatives from the local communities, academicians, research institutes, government and non-government organizations and development agencies for allocating time to attend this event despite their busy schedules. This first Regional Workshop in developing the NBSAP ushers in a learning process for us. Lessons learnt from this workshop will help us organize the remainder activities in the chain and thereby capture the relevant ideas for developing a sound NBSAP document. On behalf of IUCN Bangladesh Country Office, I would request you to share your knowledge and experience with aview to enriching the NBSAP document.

Thank you very much.

Allah Hafez

Bangladesh Zindabad

Speech by the Special Guest

Shireen Kamal Sayeed
Assistant Resident Representative
UNDP Bangladesh

Respected Chairperson Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division; Hon'ble Chief Guest Mr. Jafrul Islam Chowdhury, Hon'ble Minister of State for Environment and Forests; Special Guest Mr. S. M. Lutfullah, Joint Secretary, Ministry of Environment and Forests; IUCN Bangladesh Country Representative Dr. Ainun Nishat, Ladies and Gentlemen.....

Assalamu Alaikum...

I am glad to be present at the first NBSAP regional workshop being held here in Chittagong. As a representative of UNDP, I must mention the role of the Global Environmen Facility (GEF) and UNDP Bangladesh in bringing forth the National Biodiversity Strategy and Action Plan (BSAP) for Bangladesh.

Bangladesh as a known reservoir of biological diversity sustain diverse bounties of nature and natural resources. But poverty and population pressures are the main deterrents to biodiversity conservation in Bangladesh. Unique marine and estuarine ecosystems harboured by the Chittagong division are now under threat as a consequence of indiscriminate exploitation of resouces, resulting in serious decline in the natural reserves locally.

The need for a biodiversity doctrine is overdue for a country such as ours. In line with the BSAP objectives, participatory planning and resource appraisal formats can be the key to a successful national document. Your active participation will ensure the formulation of an implementable and sound NBSAP for Bangladesh.

I express my thanks to you for participating in the workshop and wish the workshop much success in documenting the regional issues and suggested actions leading to the formulation of the NBSAP.

Thank you all.

Speech by the Special Guest

S.M. Lutfullah
Joint Secretary
Ministry of Environment and Forests

Bismillahir Rahmanir Rahim...

Respected Chairperson Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division; Honorable Chief Guest Mr. Jafrul Islam Chowdhury; Hon'ble Minister of State for Environment and Forests; Special Guest Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh; Dr. Ainun Nishat, IUCN Bangladesh Country Representative, respected participants, ladies and gentlemenÖ.

Assalumu Alaikum...

Biodiversity is an integral part of the environment, providing the basis for livelihood sustenance in Bangladesh. You are all aware of the fact that the CBD was one of the outcomes of the first Earth Summit in 1992 held in Rio de Janeiro. As a signatory and ratifying party to the Convention, Bangladesh is morally obliged to formulate, adopt and implement the National Biodiversity Strategy and Action Plan.

The Ministry of Environment and Forests is implementing the National Biodiversity Strategy and Action Plan. The current trends in today's development arena are poised towards the attainment of sustainable use and management of biodiversity. In the Bangladesh context, a considerable number of underlying causes can be identified as threats or causes of gradual extinction of biodiversity. The biodiversity resources are eroding at a considerable rate as a result of human interventions and by now, we have lost the swamp deer, rhinoceros, Nilgai, peacock, freshwater crocodile, vulture and common crane. Many plant species are also on the verge of extinction unawares. A large number of wetlands and swamp forests, haor, baor, beel and jheel are also rapidly getting dried up or deteriorating environmentally. According to an IUCN Bangladesh estimate, the existence of at least 54 species of fish, 8 species of amphibians, 58 species of reptiles, 41 species of birds and 40 species of mammals in the country now happens to be critically endangered. If steps are not taken to protect them, these species will be totally

extinct in the not-too-distant future.

Ladies and Gentlemen...

On behalf of the Government of Bangladesh, the Ministry of Environment and Forests has initiated this Biodiversity Strategy and Action Plan formulation exercise. The issues of biodiversity conservation, sustainable resource management and people's participation have been contemplated to be high priority issues in the national plan.

IUCN Bangladesh Country Office has been entrusted with the responsibility of developing this plan for biodiversity conservation and management. Many countries of the world have already completed their Strategy and Action Plan documents. We may freely consult those plans and use the 'lessons learnt' while formulating our own NBSAP during the next months. Experiences from several countries reveal that wider participation of people from different levels and occupations ensures the creation of an acceptable and pragmatic Strategy and Action plan.

Dear Participants...

The Strategy and Action Plan development process is a provenly participatory exercise and today's workshop has been organized in response to this very spirit. The aim of this workshop is to identify the current status of biodiversity, the causes of extinction and proper analysis thereof for developing realistic mitigation strategies. I believe, through group discussions and discourses, the participants will identify the root causes of biodiversity loss; tools necessary for conservation; capacity building mechanisms for biodiversity conservation; means of effectively using the existing laws and policies for biodiversity conservation; and the required additional policies and laws for biodiversity conservation and awareness building among various groups of stakeholders. I thank all of you and seek your sincere assistance in executing the implementation of the Biodiversity Strategy and Action Plan Project successfully.

Allah Hafez
Bangladesh Zindabad

Speech by the Chief Guest
Jafrul Islam Chowdhury
Honorable Minister of State
Ministry of Environment and Forests

Bismillahir Rahmanur Rahim...

Hon'ble Chairman, Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division; Special Guests Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh and Mr S. M. Lutfullah, Joint Secretary, Ministry of Environment and Forests; Mr. Monowar Islam, Deputy Secretary and National Project Director for Biodiversity Strategic Action Plan project; Dr. Ainun Nishat, IUCN Bangladesh Country Representative, respected participants, ladies and gentlemen.....

Assalumu Alaikum...

I am glad to be present at the first regional workshop of the National Biodiversity Strategy and Action Plan project. Furthermore, the venue being Chittagong has made me even more delighted. I sincerely welcome this timely initiative. Even though Bangladesh is a small country in the world map, it boasts many a hot spot of biological diversity. The lush green-rimmed watery expanses of wetlands, floodplains, mangroves, evergreen hill forests and village homesteads flourish a wide array of biological resources. We harness the wealth of nature to satisfy our basic needs such as food, clothing, shelter and health care. We are explicitly or indirectly dependent on biodiversity for all of our productive purposes. Hence, there exists an intricate relationship between biodiversity and livelihood sustenance in Bangladesh.

Ladies and Gentlemen...

Bangladesh signed the Convention on Biological Diversity (CBD) in the Rio de Janeiro world assembly in the year 1992. As a Contracting Party to the Agreement, Bangladesh remained obliged to formulate and implement its Biodiversity Strategy and Action Plan. In the light of its national commitments, however, the Government of Bangladesh has initiated several activities towards biodiversity conservation so far. But the formulation and enforcement of the 'National Biodiversity Strategy and Action Plan' is yet to be realized and the Government has quite opportunely undertaken the implementation of this vital activity now. I understand that by carrying out this particular activity, Bangladesh is going to fulfil a major

obligation towards accomplishing successful and sustainable biodiversity conservation and management through people's involvement at all levels starting from its planning through implementation.

Dear Participants...

I come from Chittagong, the prime port city, where I have spent my childhood. I'll not retreat to my earliest memories, but I can still recollect the large number of ponds we were used to seeing all around this city, nurturing indigenous varieties of fish, till as recently as twenty-five years ago. Today, a mere 50 kgs of small fish cannot be gathered from the markets in Chittagong. The diversity of the available sea fish species is also on the decline. In the past, our mothers and grandmothers utilized the medicinal plants and herbs for curing common ailments. They practiced the indigenous remedies and applied their knowledge in preparing those herbal cures. The medicinal properties in plants and animals are, in fact, derived from biodiversity. Currently, people all around the world are showing inclination towards the use of medicinal plants. Bangladesh can benefit both from the use of such plants and earn foreign exchange by exporting the raw materials. Our Hon'ble Prime Minister, Begum Khaleda Zia has also emphasized the revival of raising plantations and using medicinal plants. The present Government is keen to protect biodiversity and assures sustainable development in Bangladesh through both 'top - down' and 'bottom - up' approaches.

The presence of the Union Parishad representatives, teachers and academicians, researchers, journalists, lawyers, doctors, fieldworkers of the Government agencies, development and NGO workers in today's workshop can be identified as a milestone in implementing the participatory planning approach. I firmly believe that the participants will enrich and eventually implement the Biodiversity Strategy and Action Plan with all proficiency and dexterity. I sincerely hope that the representatives of Chittagong will be apt in voicing their concerns about the natural environment, specially the hill and marine ecosystems, plant and animal species, agricultural diversity and the desirable actions for biodiversity conservation and sustainable development.

Ladies and Gentlemen...

On behalf of the Ministry of Environment and Forests, I thank the GEF and UNDP for providing necessary financial support for the project. I am also grateful to the Divisional Commissioner of Chittagong for attending this workshop in spite of his busy schedule.

Last but not the least, I wish IUCN Bangladesh much success in facilitating the formulation of the Strategy and Action Plan. I thank all the participants and hereby formally inaugurate this workshop.

Allah Hafez
Bangladesh Zindabad

Speech by the Chairperson
Mohammad Katebur Rahman
Divisional Commissioner
Chittagong Division

Bismillahir Rahmanur Rahim...

Hon'ble Chief Guest, Mr. Jafrul Islam Chowdhury, State Minister for the Ministry of Environment and Forests, Government of Bangladesh; Special Guest Mr. S. M. Lutfullah, Joint Secretary, Ministry of Environment and Forests; Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh and Dr. Ainun Nishat, IUCN Bangladesh Country Representative and Ladies and Gentlemen

Assalumu Alaikum...

I am glad that the first regional workshop on the National Biodiversity Strategy and Action Plan is being held in Chittagong. On behalf of the Chittagong Division and Divisional Administration, I would sincerely like to thank the Ministry of Environment and Forests for affording us the opportunity of organizing the workshop.

The Chief Guest, the Special Guests and Dr. Ainun Nishat have enlightened the participants about the significance of biodiversity, linkages to livelihood and the need for this regional workshop. The Chittagong region is rich in biodiversity, which flourishes in the plains, hills, sea, and vast area of coastal zone and islands. Over 90% of the hills in Bangladesh are located in the Chittagong region. The Chittagong Hill Tracts are the abode of about 13 fragmented ethnic communities. Their culture and livelihood are intricately related to biodiversity and nature. Along with that, communities residing in the coastal and marine areas are also dependent on the marine resources for sustaining their livelihood.

On one hand, biodiversity resources are being harnessed indiscriminately for livelihood sustenance. On the other, the lack of proper planning in usage regimes has led to an overall decline in the stock of biodiversity. The people or the users of the natural capital are all, in fact, responsible for the depletion. Zealous participation of the people is absolutely essential now to reverse the current trends of large-scale biodiversity loss.

In the light of the given backdrop, the Government of Bangladesh has undertaken the task of

implementing a realistic National Biodiversity Strategy and Action Plan. The formulation and proper implementation of this holistic plan can only be possible through the participation of and discourses among the stakeholders. Various representatives from different occupations and socio-economic levels have been invited at today's workshop. Our discussions would have been more fruitful if we could involve an even more diverse group of participants. We have tried our best to gather here representatives and workers from the environment and development arena, given the limitations and constraints.

I hope you will enrich the proceedings of today's workshop with your experience and provide us with a unified direction for biodiversity conservation and sustainable development. I thank the organizers of this workshop on behalf of the Division and District Administration and wish you all much success in today's venture.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
Monowar Islam

National Project Director
Biodiversity Strategic Action Plan Project and
Deputy Secretary
Ministry of Environment and Forests

Respected Chairperson Mr. Mohammad Katebur Rahman, Divisional Commissioner, Chittagong Division; Honorable Chief Guest Mr. Jafrul Islam Chowdhury, State Minister for the Ministry of Environment and Forests, Government of Bangladesh; Special Guests Mr. S. M. Lutfullah, Joint Secretary, Ministry of Environment and Forests, and Ms. Shireen Kamal Sayeed, Assistant Resident Representative, UNDP Bangladesh and Dr. Ainun Nishat, IUCN Bangladesh Country Representative and Ladies and Gentlemen

Assalamu Alaikum...

On behalf of the Ministry of Environment and Forests, I must thank the participants for their time and effort into the NBSAP formulation process. I am honoured to be at the first regional workshop of the NBSAP project in Chittagong, which, incidentally, is my place of origin.

Biodiversity is significant to sustain life on earth and vital for a developing country, where the people extract the resources for their livelihoods. The Government of Bangladesh is genuinely concerned about the state of biodiversity and hence most willing to mainstream the issues into all its relevant organs. The successful completion and implementation of the BSAP Project will serve as a platform for biodiversity conservation in our country, reflecting the concerns of the people.

I would like to thank IUCN Bangladesh, Global Environment Facility and UNDP for their support in the BSAP Project.

Allah Hafez
Bangladesh Zindabad

Technical and Plenary Session Chair
S. M. Lutfullah
Joint Secretary (Development)
Ministry of Environment and Forests

Hon'ble Guests, IUCN Bangladesh Representatives, National Project Director and Dear Participants...

Assalamu Alaikum...

The Chief Guest, Special Guests and the representatives from IUCN have responded to all your relevant queries by now. The BSAP Project is based on the participation of relevant stakeholders, especially the local people. Instead of elaborating on the areas covered by the speeches and presentations, I would just request you to actively participate in today's workshop. I am confident that your expert opinions and experience sharing efforts will help in documenting the issues and actions needed for biodiversity conservation and management not only for Chittagong region but also for the whole country.

I thank you all for your time and wish you good luck.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The participants of the Chittagong regional workshop were grouped into four groups, namely, Group - A, Group - B, Group - C and Group - D. In the group discussions, the participants identified the national issues and actions along with the ones unique to Chittagong region. Their discussions were in line with the following thematic areas:

- Species conservation
- Ecosystem management
- Legal, regulatory and policy issues
- Education, training, awareness raising
- Linkages and institutional issues

Results of the group work are presented below:

GROUP A

Dr. Md. M. Maruf Hossain, Chittagong University steered the discussions and presented the findings. Mr. Rakibul Haque, Programme Officer, IUCNB facilitated the discussions. Ms. Halima Neyamat of IUCNB worked as the rapporteur.

Participants of Group A

1. Mr. Mohammad Yunus Hasan, Lecturer, Department of Zoology
1. Mr. M Mohibul Haque, UNO, Sitakund Chittagong
2. Al Haj Mr. Aminur Rahman Chowdhury, Chairman, No. 5 Kalipur Union
3. Mr. M Abdul Kayoum Sarker, UNO, Mirersharai
4. L N Mr. M Abdul Kalam Azad, Member, Bangladesh Timber Merchant Association
5. Mr. Haradan Banik, DFO, Khagrachhari Forest Division
6. Mr. M Fazlul Haque Khan, Department of Livestock Services
7. Dr. Mohammed Yusuf, Principal Scientific Officer, BCSIR Laboratories
8. Mr. Mohammed Zashimuddin, Senior Research Officer, BFRI
9. Mr. M Abdus Salam, District Training Officer, Department of Agriculture Extension
10. Mr. Shamsuddin Ahmed Mirza, Advocate, Chittagong District Bar Association
11. Mr. Sunil Kanti Dey, Consultant, Green Hill
12. Mr. A. M. M. Toha, Consultant, YPSA
13. Ms. Suprava Talukder, Senior Teacher, Agrabad Balika Biddayala
14. Mr. M Munabbir Hossain, Lecturer, Department of Economics, Chittagong Govt. Women's College

15. Mr. M M. Maruf Hossain, Professor and Director, Institute of Marine Sciences
16. Mr. M Abul Kalam Azad, Patwary, Senior Teacher, Collegiate school, Chittagong
17. Mr. Jahangir Alam, Bangladesh Betar

Findings

The participants of Group A looked into all the five themes and volunteered relevant suggestions concerning the issues and corresponding actions in their discussion. The findings of their discussions have been are presented in this section.

Species Conservation

Issues

- Incomplete species inventory for both flora and fauna
- Hill farming by spading and jhum cultivation
- Pollution of sensitive marine and coastal areas
- Tidal surges and storms causing severe damage
- Ship-breaking activities along the erstwhile pristine coasts
- Monoculture with HYV or cash crops
- Introduction of exotic species into ecosystems
- Illegal hunting of wildlife

Actions

- Preparation of checklists for terrestrial and marine flora and fauna
- Identification of rare, endangered and threatened species
- Prevention of the loss of unconventional marine species
- Development of agroforestry models for sustainable use of land
- Identification of alternative options for jhum cultivation
- Enhanced awareness of local people for tackling issues of pollution
- Identification and mapping of critical and sensitive coastal areas that are affected by pollution
- Establishment of greenbelts along the coasts with soil binding species
- Ensuring EIAs prior to undertaking ship-breaking activities
- Centralized ship breaking facilities at suitable sites
- Mixed cultivation with indigenous species
- Avoiding use and introduction of exotic species into the native system
- Motivating people through initiating incentive mechanisms such as 'trophy hunting'

Ecosystem Management

Issues

- Habitat loss due to anthropogenic activities
- Settlement in forest areas and land conversion
- Unplanned development activities without people's participation
- Hill cutting for soil and minerals
- Coastal aquaculture of shrimps

Actions

- Massive reforestation for creating a niche for species survival
- Controlled fishing in the Bay of Bengal through 'permits'
- Establishing 'Buffer Zones' of Protected Areas for preventing human intervention
- Identification and mapping of critical and sensitive coastal areas vulnerable to natural disasters
- Establishing settlement in confined areas to stop the encroachment and conversion of forest land
- Participatory approaches to planning by involving local communities
- Initiating environment friendly activities amongst the indigenous people
- Implementation of existing laws and by-laws to counter hill cutting
- Restoration of coastal mangroves by planting native species
- Coastal aquaculture in confined areas to check loss of fish fry

Legal, Regulatory and Policy Issues

Issues

- Inadequate provision of biodiversity related laws
- Conflictive sectoral policies
- Erosion of indigenous knowledge and practices
- Erosion of customary laws
- People's nonchalant attutude towards the law
- Existing curriculum excludes biodiversity issues

Actions

- Proper implementation of legal framework for biodiversity conservation
- Formation of laws for 'Access and Benefit Sharing' amongst the beneficiaries
- Flexibility in forest laws for selling homestead trees
- Policy review for sectoral coordination

- Incorporating traditional knowledge and practices into the national legislation
- Documentation of customary laws for resolving resource conflicts
- Community participation in law making process to ensure law abidance

Education, Training and Awareness Raising

Issues

- Existing curriculum excludes biodiversity issues
- Role of mass media not recognized
- Training opportunities for the locals lacking
- Limited role of GO-NGOs
- Insufficient research on biodiversity

Actions

- Inclusion of biodiversity issues in the existing schools, college and university
- Curricula motivating people about biodiversity conservation through presenting/ staging folk songs, jatra and theatres on biodiversity themes
- Training programmes for the local elite religious leaders
- Capacity building programmes for the GO-NGOs
- Research on biodiversity by teachers and students of relevant institutions

Linkages and Institutional Issues

Issues

- Weak inter-sectoral linkages
- Weak linkages with the grassroots
- Limited interaction between the local level entrepreneurs and policy makers
- No institutional mechanisms for access and benefit sharing
- Forward-backward linkages lacking

Actions

- Formation of coordination committee with relevant stakeholders to facilitate information exchange and dissemination
- Seminar-symposium on the issues relating to biodiversity conservation
- Coordination mechanisms among the stakeholders and user groups of biodiversity resources
- Involvement of local level entrepreneurs in policy making
- Ensuring 'Access and Benefit Sharing' through different institutional mechanisms
- Study on forward-backward linkages (e.g. post-larvae collection in the shrimp industry)

GROUP B

Group B activities at the Chittagong regional workshop were faciltated by Mr. Munjurul Hannan Khan of IUCNB. Ms. Sharmin Sultana from IUCNB was the rapporteur for the session. Dr. Shahadat Hossain of Bangladesh Fisheries Research Institute presented the findings on behalf of the group members' work. The participants of Group B discussed all the five themes but emphasized the issues and actions under the theme Ecosystem Management. The findings of their work are presented below along with the list of particiants.

Participants of Group B

1. Ms. Ferdousi Sultana, Lecturer, Botany, Chittagong Government Women's College
2. Mr. Abubakkar Siddique, Chairman, Namuchia UP
3. Mr. Sirazul Islam Chowdhury, Chairman, Chunati UP
4. Mr. M Abul Kashem, UNO, Rangunia, Chittagong
5. Mr. Humayun Kabir Chowdhury, Chairman, Kanchanalad UP
6. Mr. M.A. Sabur, Executive Member, Bangladesh Timber Merchant Association
7. Mr. M Shamsul Azam, DFO, Forest Department
8. Mr. Sk. Faridul Islam, Plant Protection Specialist, Department of Agricultural Extention
9. Mr. A. S. M Jahangir, District Fisheries Officer, Brahmmanbaria
10. Dr. A. T. M. Emdad Hossain, SRO, Bangladesh Forest Research Institute
11. Dr. Md. Shahdat Hossain, Senior Scientific Officer, Bangladesh Fisheries Reseach Institute
12. Dr. Abdul Momen, MUCS Health
13. Mr. Mohammed Shahawnaz, Staff Reporter, BSS
14. Mr. Sujit Chowdhury, Chief Executive, Mukti
15. Mr. S. M. Mahabub-ul-Alam, Executive Director, Muktipam Unnayan Kendra
16. Ms. Jharna Khanam, Assistant Professor, Chittagong College
17. Ms. Roksana Marzia, Lecturer Chittagong Government Women's College
18. Mr. Badrul Amin Bhuiya, Professor, Chittagong University
19. Mr. M Azizul Huq, Senior Teacher, Chittagong Government High School
20. Mr. M Shajahan Choudhury, Chairman

Findings

Though the participants of Group - B actively participated in debates and discussions spanning all the broad themes, they focused their deliberations especially on Ecosystem Management and presented those very findings in the plenary.

Ecosystem Management

Issues

- Destruction of forests for human settlements
- Destruction of fisheries resources
- Brick fields causing air pollution
- Hill cutting
- Natural calamities, viz. storms and tidal surges
- Over exploitation/ use of biodiversity
- Use of pesticides and insecticides
- Ship-breaking and oil spillage
- Unplanned industrialization and urbanization
- Filling of wetlands for expansion of habitats
- Use of antibiotics/chemicals in the shrimp hatcheries
- Lack of sanctuaries and game reserves
- Soil pollution
- Arsenic pollution from agricultural run-off
- Poverty and dependence on natural resources
- Education and awareness relating to biodiversity lacking
- Coral reef destruction in St. Martin's island
- Loss of wild animal species
- Air pollution from the transport sector

Actions

- Awareness creation for ecosystem management through various tools (drama, song, media, training)
- Awareness campaign for the brick-field owners
- Biodiversity survey and inventory for complete record
- Better forest management through afforestation and reforestation
- Participatory management of forest resources involving the local people
- Building social movement centred around tree plantation to check destruction of trees
- Proper implementation of rules and regulations related to ecosystem management and species conservation
- Introduction of Integrated Pest Management (IPM) and regulations for insecticide and pesticide use

- Land use planning for zoning areas for different activities
- Documentation of traditional knowledge for sustainable use
- Conservation of biodiversity through insitu conservation, fish and wildlife sanctuaries
- Alternative income generation for the fishermen to decrease pressure on fish resources
- Alternative brick making methods to reduce air pollution
- Waste management by recycling and development of proper guidelines
- Dredging of canals and rivers for proper drainage and flow of water
- Introduction of new tillage operation
- Separate body to check hill cutting and strict implementation of relevant laws
- Finding alternatives of wood and wood products to reduce demand for timber
- Preservation of surface water to check pollution of the environment
- Proper measures for resettlement of people in less ecologically significant areas

GROUP C

The Group C was faciltated by Mr. Anisuzzaman Khan, IUCNB and the group work results were presented by Dr. M. Shahidul Islam, Chittagong University. Mr. Anisuzzaman Khan, IUCNB helped Dr Islam in facilitating the discussions and Ms. Remeen Firoz, IUCNB worked as the rapporteur.

Participants of Group C

1. Mr. M Omar Faruque, UNO, Raozan, Chittagong
2. Mr. M Shafiqul Islam, Deputy Commissioner, Chittagong
3. Mr. Farid Ahmed Bhuiyan, UNO, Boalkhali, Chittagong District Administration
4. Mr. M Kamrul Ameen, UNO, Upazila Parishad, Anwara, Chittagong
5. Mr. M Nasiruddin Sabin, Chairman, Padna UP Rangunia, Chittagong
6. Mr. Manirul Islam, Chairman, 13 No Naopara Union Parishad, Raozan
7. Mr. Nasiruddin Bahadur, Chairman, Bangladesh Timber Merchant's Association
8. Mr. M. Kalimuddin Bhuiyan, Professor, Institute of Forestry and Environmental Sciences, Chittagong University
9. Mr. M Mokhlesur Rahman, DO (Admin) and SRO (Wildlife), BFRI, Chittagong
10. Mr. Rezaul Sikder, Divisional Forest Officer Chittagong Hill Tracks South Division, Rangamati
11. Dr. M.A. Sobhan, AD (A.P) District AI Centre, Livestock Services, Pahartali, Chittagong
12. Mr. M Zahid Hussain Bhuiyan, Director, Botanical Garden and Eco Park Sitakunda, Chittagong, Forest Department
13. Mr. Mohammed Mohiuddin, Senior Research Officer, BFRI

14. Mr. M Abul Kalam Azad, Deputy Director, Agricultural Extension DAE, Khagracchari
15. Mr. Jamaluddin Md. Shoaib, Principal Scientific Officer, Soil Resource Development Institute, Chittagong Regional Office, Ministry of Agriculture, Uttar Charta, Comilla
16. Mr. S. M. Hossain Dider, Bureau Chief, The Daily Sangram, Chittagong
17. Mr. Binodan Tripura, Assistant Coordinator, Zabarang Kalyan Samity, Khagracchari
18. Mr. M Muzammel Hoque, Assistant Headmaster Education Department, Haji Md. Moshin Government High School, Chittagong
19. Dr. M Shahidul Islam, Associate Professor, Department of Geography, Chittagong University
20. Dr. Mostafa Kamal Pasha, Professor of Botany, Chittagong University
21. Mr. Mahfuzul Haque Choudhury, Chairman

Findings

The participants of this group discussed all the five themes, but finally suggested actions relevant to biodiversity conservation in Chittagong region.

Background

Prof. Mostafa Kamal Pasha from Chittagong University stated that previous studies records about 1600 plant species from Chittagong and Chittagong Hill Tracts region. But from current studies it seems that number of plant species from the region will be about 3000 species in number.

Actions

- Chokoria Sundarbans restoration programme
- GIS mapping for biodiversity resources
- Preparation of land zoning maps
- Conservation of corals of St. Martin's Island
- Preservation of 'Red Cattle Breed' of Chittagong
- Establishment of natural history museum in Chittagong
- Continuous study and monitoring
- Documentation of indigenous technology related to biodiversity
- Protection of 'Halda Mouth' fish breeding ground
- Community based afforestation programme among tribal people
- Stopping tobacco cultivation in Chittagong Hill Tracts
- Participatory watershed management

Species Conservation

Actions

- Inventory of flora and fauna based on bio-geographic zoning
- A comprehensive list of the endangered species
- Review of existing documents and locally implemented projects
- Involving local people in biodiversity inventory, survey and mapping
- Mandatory EIA for all development projects
- Stopping shrimp larvae harvesting to protect other fish species

Ecosystem Management

Actions

- Careful adaptation of exotic species in view of their invasive properties
- Food chain management for environmental security
- Ensuring people's participation in ecosystem management
- Involving mosques, schools and local social organizations including NGOs in the planning processes
- Poverty alleviation and sustainable livelihood through alternative income generation

Legal, Regulatory and Policy Issues

Actions

- Strict implementation of the existing laws and policies
- Alternative hill Farming should be adopted instead of Jhum farming
- Implementation of Integrated Pest Management and fertilizer management
- Intersectoral integrated policies for better facilitation of conservation measures

Education, Training and Awareness Raising

Actions

- Adaptation of non-formal education programme
- Involvement of printed and electronic media in awareness development programme
- Involvement of local level electoral bodies for knowledge harnessing and dissemination
- GO-NGOs participation in training and awareness programme

Linkages and Institutional Issues

Actions

- Strong and fair political commitment
- Ministry of Environment and Forest to be the focal point
- Local level implementation by local government
- Interministerial linkages and coordination
- Linkage with industrial policies
- Linkage with local beneficiaries
- Linkage among academics and professionals

GROUP D

The faciltator and repporteur for this working group were Mr. Junaid Kabir Chowdhury, and Mr. Shekhar Ranjan Biswas, IUCNB respectively. Mr. Shafique Haider Chowdhury, Chittagong University presented the findings of this group.

Participants of Group D

1. Mr. Zahir Uddin Babar, UNO, Hathazari, Chittagong
2. Mr. M Monjur Hossain, UNO, Lohagara, Chittagong
3. Mr. Nur Mohammad Majumder, UNO, Banskhali, Chittagong
4. Mr. Zafar Ahmed Khan, Deputy Commissioner, Rangamati
5. Mr. Lutfur Rahman Motin, Chairman, Doom UP, Chittagong
6. Mr. M A.K.S Mahbubur Rahman, UNO, Chandanaish, Chittagong
7. Ln. Mr. Emdad Hossain, Vice Chairman, Bangladesh Timber Merchant Association, Chittagong
8. Mr. M Fokhrul Alam, Scientific Officer, Marine Fisheries Survey Management Unit, Chittagong
9. Mr. Sunil Chandra Ghosh, Deputy Director, Livestock Services, MOFL,Chittagong
10. Mr. Mohammed Shafiul Alam Chowdhury, Deputy Commissioner of Forests, Forest Department Chittagong
11. Dr. M. Sabjal Uddin, Principal Scientific Officer, BARI, Khagracchari
12. Mr. Ahmed Karim, Staff Reporter, The Daily Inquilab, Chittagong
13. Mr. M Ruhul Amin, Deputy Director, Department of Agricultural Extension, Feni
14. Ms. Najmaa Ali Khan, Office Manager, CARE Bangladesh, Chittagong Field Office
15. Mr. Sudibya Kanti Khisa, Project Manager, Chittagong Hill Tracks Development Board, Khagracchari
16. Mr. Mohammad Abu Solaiman, Senior Teacher, Shahwaliullah Institute, Chittagong

17. Ms. Naila Huq, Lecturer, Chittagong Government Women's College
18. Dr. Mohammed Kamal Hossain, Professor and Director, Institute of Forestry and Environmental Sciences, Chittagong University
19. Dr. Shafique Haider Chowdhury, Professor of Zoology, University of Chittagong
20. Mr. Gofram Bahar, Chairman
21. Mr. Chutton Barua, World Vision
22. Mr. Mong Mong Sing, Village Social Organizer, Kraikhyong Para, Bandarban

Findings

The group work results were grouped together as issues and actions under the five thematic groups as follows:

Species Conservation

Issues and Actions

- Favourable habitat for biodiversity conservation
- Conservation of flora and fauna according to different geographical region
- Reduction or extinction of species
- Population census and authentic enumeration of species
- Destruction of habitat/overexploitation of natural resources
- Genetically Modified Organisms (GMOs) and High Yielding Varieties (HYVs)
- Protection of islands and coastal areas
- Introduction of alien invasive species
- Afforestation and forest restoration for biodiversity conservation

Ecosystem Management

Issues and Actions

- High population pressure due to people into the Chittagong Hill Tracts areas
- Absence of integrated forest management
- Lack of areaspecific information on biodiversity
- Fragmentation of the ecosystems
- Fishing and ship-breaking activity threatens coastal and marine biodiversity
- Insitu conservation
- Identifying biodiversity hot spots and designating them as special conservation areas
- Traditional jhum cultivation

- Indigenous knowledge/technologies in hill ecosystems
- Community development/improvement of ecosystem management for biodiversity

Legal, Regulatory and Policy Issues

Issues and Actions

- Delay in implementation of present form of law for biodiversity conservation
- Strengthening conservation laws
- Land tenure issues
- Regulatory measure on resource users
- Formulation of national policy on biodiversity conservation
- Involving research institutes in biodiversity conservation

Education, Training and Awareness Raising

Issues and Actions

- Developing and incorporating biodiversity and its importance up to secondary education level curriculum
- Mass media should highlight the important biodiversity themes and disseminate the information
- Ensuring multi-sectoral participation (also both male and female) in biodiversity conservation and management
- Awareness raising on use of agrochemicals
- Raising awareness among the people through formal and non-formal education
- Capacity building of teachers, policy makers and administrators to deal with the biodiversity issues
- Use of Jari, Sari, Jatra, folklores to make people aware of the benefits of biodiversity

Linkages and Institutional Issues

Issues and Actions

- All public and private developmental work should be approved by conservation authorities through Environmental Impact Assessment (EIA)
- Intersectoral cooperation and coordination
- Cooperation and coordination between government and NGOs
- There should be proper information base on biodiversity and its importance
- New department for biodiversity, as a part of the Ministry of Environment and Forest

List of Participants

1. Dr. M Shahidul Islam, Associate Professor, Department of Geography, Chittagong University
2. Mr. A. M. M. Toha, Consultant, YPSA
3. Mr. A. S. M Jahangir, District Fisheries Officer, Brahmmanbaria
4. Mr. Abubakkar Siddique, Chairman, Namuchia, UP
5. Mr. Ahmed Karim, Staff Reporter, The Daily Inquilab, Chittagong
6. Al Haj Mr. Aminur Rahman Chowdhury, Chairman, No. 5 Kalipur Union
7. Mr. Badrul Amin Bhuiya, Professor, Chittagong University
8. Mr. Binodan Tripura, Assistant Coordinator, Zabarang Kalyan Samity, Khagracchari Chittagong, Forest Department
9. Mr. Chutton Barua, World Vision
10. Dr. A. T. M. Emdad Hossain, BFRI, Chittagong
11. Dr. Abdul Momen, Medical Officer, MOCS, Chittagong
12. Dr. Jafar Ahmed Khan, Deputy Commissioner, Rangamati
13. Dr. Kazi Mozhar Uddin, MO EDI, Chittagong Division
14. Dr. M Sabjal Uddin, PSO, BARI, Khagracchari
15. Dr. M.A. Sobhan, AD (A.P) District AI Centre, Livestock Services, Pahartali, Chittagong
16. Dr. Md. Nurul Alam, Deputy Director, Health Office, Chittagong Division
17. Dr. Md. Shahdat Hossain, Senior Scientific Officer, Bangladesh Fisheries Reseach Institute
18. Dr. Mohammed Kamal Hossain, Professor and Director, Institute of Forestry and Environmental Sciences, Chittagong University
19. Dr. Mohammed Yusuf, Principal Scientific Officer, BCSIR Laboratories
20. Dr. Mostafa Kamal Pashas, Professor of Botany, Chittagong University
21. Dr. Shafique Haider Chowdhury, Professor of Zoology, University of Chittagong
22. Mr. Farid Ahmed Bhuiyan, UNO, Boalkhali, Chittagong District Administration
23. Ms. Ferdousi Sultana, Lecturer, Botany, Chittagong Government Women's College
24. Mr. Gofram Bahar, Chairman
25. Mr. Haradan Banik, DFO, Khagrachari Forest Division
26. Mr. Humayun Kabir Chowdhury, Chairman 1No, Kanchanalad UP
27. Mr. Jahangir Alam, Bangladesh Betar
28. Mr. Jamaluddin Md. Shoaib, Principal Scientific Officer, Soil Resource Development, Chittagong Regional Office, Ministry of Agriculture, Uttar Charta, Comilla
29. Ms. Jharna Khanam, Assistant Professor, Chittagong College

30. L N Mr. M Abdul Kalam Azad, Member, Bangladesh Timber Merchant Association
31. Ln. Mr. Emdad Hossain, Vice Chairman, Bangladesh Timber Merchant Association, Chittagong
32. Mr. Lutfur Rahman Motin, Chairman, Doom UP, Chittagong
33. Mr. M. Kalimuddin Bhuiyan, Professor, Institute of Forestry and Environmental Sciences, Chittagong University
34. Mr. M. A. Sabur, Executive Member, Bangladesh Timber Merchant Association
35. Mr. Mahfuzul Haque Choudhury, Chairman
36. Mr. Manirul Islam, Chairman, 13 No Naopara Union Parishad, Raozan
37. Mr. Mb. Abubakar Siddique, Chairman, Amuchia, Chittagong
38. Mr. M Mohibul Haque, UNO, Shitakund Chittagong
39. Mr. M A.K.S Mahbubur Rahman, UNO, Chandanaish, Chittagong
40. Mr. M Abdul Kayoum Sarker, UNO, Mirsari
41. Mr. M Abdus Salam, District Training Officer, Department of Agricultural Extension, Chittagong
42. Mr. M Abu Solaiman, Senior Teacher
43. Mr. M Abul Kalam Azad Patwary, Senior Teacher
44. Mr. M Abul Kalam Azad, Deputy Director, Agricultural Extension DAE, Khagracchari
45. Mr. M Abul Kashem, UNO, Rangunia, Chittagong
46. Mr. M Azizul Huq, Senior Teacher, Chittagong Government High School
47. Mr. M Fazlul Haque Khan, Department of Livestock Services
48. Mr. M Fokhrul Alam, Scientific Officer, Marine Fisheries Survey Management Unit, Chittagong
49. Mr. M Hasan Buhan, Chairman, Moradpur
50. Mr. M Kamrul Ameen, UNO, Upazila Parishad, Anwara, Chittagong
51. Mr. M M. Maruf Hossain, Professor and Director, Institute of Marine Sciences
52. Mr. M Mahbubur Rahman, UNO, Chandanaish
53. Mr. M Mohibul Haque, UNO, Sitakunda
54. Mr. M Mokhlesur Rahman, DO (Admin) and SRO (Wildlife), BFRI, Chittagong
55. Mr. M Monjur Hossain, UNO, Lohagara
56. Mr. M Munabbir Hossain, Lecturer
57. Mr. M Munabbir Hossain, Lecturer, Department of Economics, Chittagong Govt. Women's College
58. Mr. M Nasiruddin Sabin, Chairman, Padna UP Rangunia, Chittagong
59. Mr. M Ruhul Amin, Deputy Director, Department of Agricultural Extension, Feni
60. Mr. M Shafiqul Islam, Deputy Commissioner, Chittagong

61. Mr. M Shafiul Alam Chowdhury, DFO, Chittagong South
62. Mr. M Shajahan Choudhury, Chairman
63. Mr. M Shamsul Azam, DFO, Forest Department
64. Mr. M Yunus Hassan, Lecturer, Chittagong College, Chittagong
65. Mr. M Zahid Hussain Bhuiyan, Director, Botanical Garden and Ecopark, Sitakunda
66. Mr. M Zahir Uddin Babar, UNO, Hathazari
67. Mr. M Abdus Salam, District Training Officer, Department of Agriculture Extention
68. Mr. M Muzammel Hoque, Assistant Headmaster Education Department, Haji Md. Moshin Government High School, Chittagong
69. Mr. M Omar Faruque, UNO, Raozan, Chittagong
70. Mr. Mohammad Abu Solaiman, Senior Teacher, Shahwaliullah Institute, Chittagong
71. Mr. Mohammad Yunus Hasan, Lecturer, Department of Zoology
72. Mr. Mohammed Mohiuddin, Senior Research Officer, BFRI
73. Mr. Mohammed Shafiul Alam Chowdhury, Deputy Commissioner of Forests, Forest Department Chittagong
74. Mr. Mohammed Shahawnaz, Staff Reporter, BSS
75. Mr. Mohammed Zashimuddin, Senior Research Officer, BFRI
76. Mr. Mong Mong Sing, Village Social Organizer, Kraikhyong Para, Bandarban
77. Mr. A. M. M. Toha, Consultant
78. Mr. A. S. M. Jahangir, District Fisheries Officer, Brahmanbaria
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80. Mr. Chuton Barua, DMS, Chittagong
81. Mr. Haradhan Banik, DFO, Khagracchari Forest Division
82. Mr. Hossain Dider, Bureau Chief, The Daily Sangram
83. Mr. Humayun Kabir Chowdhury, UP Chairman, Chandinash, Chittagong
84. Mr. Jalal Uddin M Shoaib, PSO, SRDI Chittagong
85. Mr. M Asif Siraj, Staff Reporter, Daily Azadi
86. Mr. M Fokhrul Alam, Scientific Office, Marine Fisheries
87. Mr. M Kalim Uddin Bhuiyan, Professor, Institute of Forestry, Chittagong University
88. Mr. M Kamrul Ameen, UNO, Anwara Upazila Parishad
89. Mr. M Nasir Uddin Salim, Chairman Padua Union Parishad, Chittagong
90. Mr. M Ruhul Amin, DD, Department of Agricultural Extension, Feni
91. Mr. Mahfuzul Haque Chowdhury, Chairman Jamal Khan Ward, Chittagong

92. Mr. Mohammad Shahnowaz, Journalist, BSS Chittagong Bureau

93. Mr. Mong Mong Sing, Village Social Organizer, Krykhong Para, Bandarban

94. Mr. Rezaul Sikder, DFO, Chittagong Hill Tract South Division

95. Mr. S. M. Mahbub-ul Alam, Executive Director, Muktipath Unnayan Kendra

96. Mr. Shamsul Azam, D.F.O. Chittagong Coastal

97. Mr. Sirajul Islam Chowdhury, Chairman, Chunati U.P., Chittagong

98. Mr. Sudibya K Khisa, Project Manager, CHTDB, Khagrachari

99. Mr. Sujit Chowdhury, Advocate and Chief Executive, Mukti, Cox's Bazar

100. Mr. Zahidul Karim, Journalist and Bureau Chief, Dainik Dinkal

101. Ms. Ferdousi Sultana, Lecturer, Chittagong Government Women's College

102. Ms. Jharna Khanam, Assistant Professor, Chittagong College

103. Ms. Naila Huq, Lecturer, Zoology, Chittagong Government's Women's College

104. Ms. Rokhsana Marzia, Lecturer, Chittagong Government's Women's College

105. Ms. Suprava Talukder, Teacher

106. Ms.Naila Huq, Lecturer, Chittagong Government Women's College

107. Mr.Najmaa Ali Khan, Office Manager, CARE Bangladesh, Chittagong Field Office

108. Mr. Nasiruddin Bahadur, Chairman, Bangladesh Timber Merchant's Association

109. Mr. Nur Mohammad Majumder, UNO, Banskhali, Chittagong

110. Ms. Roksana Marzia, Lecturer Chittagong Government Women's College

111. Mr. S.M. Mahabub-ul-Alam, Executive Director, Muktipam Unnayan Kendra

112. Mr. S.M.Hossain Dider, Bureau Chief, The Daily Sangram, Chittagong

113. Mr. Shamsuddin Ahmed Mirza, Advocate, Chittagong District Bar Association

114. Mr. Sirazul Islam Chowdhury, Chairman 8 No, Chunati UP

115. Mr. Sk. Faridul Islam, Plant Protection Specialist, Department of Agricultural Extention

116. Mr. Sudibya Kanti Khisa, Project Manager, Chittagong Hill Tracks Development Board, Khagracchari

117. Mr. Sunil Chandra Ghosh, Deputy Director, Livestock Services, Chittagong

118. Mr. Sunil Kanti Dey, Consultant, Green Hill

119. Mr. Suprava Talukder, Senior Teacher, Agrabad Balika Biddayala

120. Mr. Zafar Ahmed Khan, Deputy Commissioner, Rangamati

121. Mr. Zahir Uddin Babar, UNO, Hathazari, Chittagong

122. Dr. Md. Ashraful Haque, BFRI, Chittagong.

123. Mr. M. Sirajdiulla, BFRI, Chittagong.

124. Mr. A K M Waziullah, BFRI, Chittagong.

125. Ms. Shayesta Begum, BFRI, Chittagong.

126. Dr. Ainun Nishat, IUCNB

127. Mr. S M Munjurul Hannan Khan, IUCNB

128. Mr. Junaid K. Chowdhury, IUCNB

129. Mr. Anisuzzaman Khan, IUCNB

130. Mr. Rakibul Haque, IUCNB

131. Dr. M. Khairul Alam, IUCNB

132. Mr. A S M Moniruzzaman, IUCNB

133. Ms. Sharmin Sultana, IUCNB

134. Ms. Halima Neyamat, IUCNB

135. Ms. Remeen Firoz, IUCNB

136. Mr. Shekhar Ranjan Biswas, IUCNB

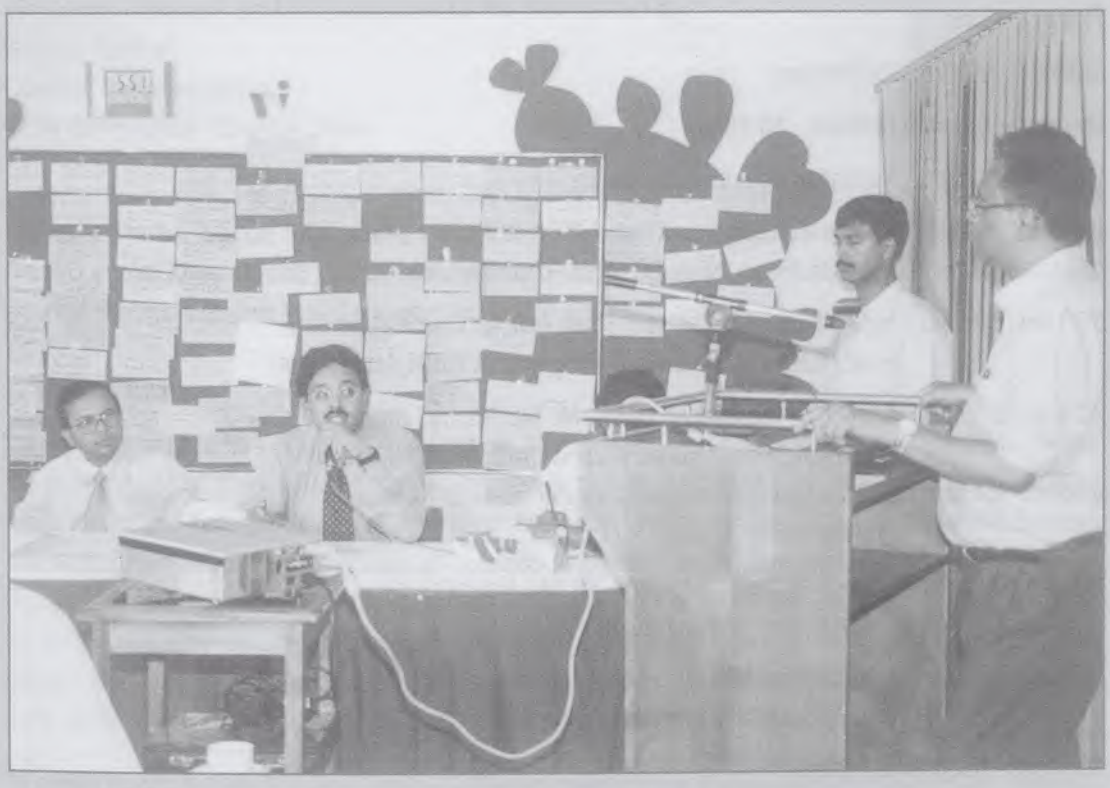
137. Mr. Arif M. Faisal, IUCNB

138. Mr. Sk. Asaduzzaman, IUCNB

139. Mr. Abul Kalam Azad, IUCNB

140. Mr. Kazi Abdul Mannan, IUCNB

Regional Workshop on Biodiversity Strategy and Action Plan, Khulna Division



Held in Khulna
11 June 2003

The Regional Workshop on NBSAP for Khulna division was held in Khulna on the 11th of June 2003. The Chief Guest in the inagurual was Sheikh Tayebur Rahman, Hon'ble Mayor, Khulna City Corporation. Mr. Md. Nazmul Ahsan, Divisional Commissioner, Khulna was also present in the forum as the Special Guest. Mr. Md. Restadul Islam, Deputy Commissioner, Khulna chaired the session. Dr. P. Balakrishna, Head Biodiversity Programme, Asia, IUCN - The World Conservation Union was present in this workshop.

The Technical Session followed the Inaugural Session. The participants worked in three Groups in the Technical Session. The participants in the Technical session identified the pressing issues and the actions entailing for reviving the biodiversity of the Khulna region through threadbare discussion, debate and consultation.

The total number of participants was about 85 in the Inaugural Session and about 60 partcipants worked in three groups through the Technical Session. The workshop programme is laid down below:

Programme

8:00am - 10:00am	Registration
Inaugural Session (9:00am - 10:30am)	
9:00am - 9:05am	Recitation from the Holy Quran
9:05am - 9:20am	Welcome Address and Introduction to the Workshop by Dr. Ainun Nishat,Country Representative, IUCN - Bangladesh Country Office
9:20 am- 9:25 am	Implications of NBSAP for South Asia by Dr. P. Balakrishna Head, Regional Biodiversity Programme, IUCN Asia Region
9:25am - 9:35am	Speech by the Special Guest, Mr. Md. Nazmul Ahsan Divisional Commissioner, Khulna Division
9:35am - 9:45am	Speech by the Chief Guest, Sheikh Tayebur Rahman Hon'ble Mayor, Khulna City Corporation
9:45am - 9:55am	Speech by the Chairperson, Mr. Md. Restadul Islam Deputy Commisioner,Khulna
9:55am - 10:00am	Vote of Thanks by Mr. Monowar Islam Deputy Secretary, Ministry of Environment and Forest
10:00am - 10:30am	Tea Break
Technical Session (10:30am - 5:30pm)	
11:30am-11: 00am	Workshop Methodology and Objectives
11: 00am -1: 30pm	Group Discussions
1:30pm- 2:15pm	Lunch and Prayer break
2:15pm- 4:15pm	Group Discussions
4:15pm- 4:30pm	Tea Break
4:30pm-5: 30pm	Plenary

THE INAUGURAL

Welcome Address and Introduction to the Workshop by

Ainun Nishat
Country Representative
IUCN Bangladesh Country Office

Respected Chair Mr. Md. Restadul Islam, Deputy Commissioner, Khulna; Chief Guest Sheikh Tayebur Rahman, Hon'ble Mayor, Khulna City Corporation; Special Guest Mr. Md. Nazmul Ahsan, Divisional Commissioner, Khulna Division; Dr. P. Balakrishna, Head, Regional Biodiversity Programme, IUCN Asia; distinguished participants, ladies and gentlemen...

Assalamu Alaikum...

I welcome you all to this Regional Workshop on National Biodiversity Strategy and Action Plan. To fulfil the commitment of the CBD and to conserve the nature for sustainable development, the Ministry of Environment and Forests, Government of Bangladesh has undertaken the National Biodiversity Strategy and Action Plan (NBSAP) project with an objective to develop the Biodiversity Strategic Action Plan for Bangladesh. Many countries of the world have, by now, formulated NBSAPs and adopted measures towards sustainable use of resources. Bangldesh is now in the process of developing its NBSAP. This belated start may be a blessing for us, when we'll be able to bypass the mistakes and lapses that the early starters had committed and thus save our time and resources.

To obtain feedback from the wider strata of different stakeholders, it was decided in the Project Inception Workshop to hold six regional workshops in the six administrative divisions of the country. Today's workshop for Khulna division is of special significance, as the Sundarbans, a World Heritage Site and the largest natural mangrove forest in the world is situated in this very region. Besides, biodiversity is linked with our lives and livelihood in the region in many other ways. The indigenous herbs with medicinal properties in Bangladesh are on the verge of extinction today. The NBSAP aspires to conserve the plants and animals that have been of crucial importance to our lives for ages.

There are various approaches to biodiversity conservation. India and Vietnam had adopted slightly different methods of drafting their respective NBSAPs. India developed separate NBSAPs for her individual states and Vietnam had to revise their NBSAP before actually implementing it.

In Bangladesh, the debates on environment and development are centered on natural resources. The forest cover in Bangladesh is about seven percent wherein land is being increasingly encroached upon for shrimp cultivation. The clear felling of trees is another area of concern that needs to be addressed urgently. The valuations of the pollination services by insects and pest control by frogs are biological functions that also need to be recognized.

I would like to highlight the fact that adjustments and coordination through combining both 'top - own' and 'bottom up' approaches is the only way forward for Bangladesh, by which we'll have consulted everybody concerned with this most vital national activity. That's why we have gathered here to get input from the representatives from all walks of life. I look forward to your suggestions and all-out cooperation in developing the strategies and actions towards the conservation of biodiversity in the Khulna region.

Thank you very much.

Allah Hafez
Bangladesh Zindabad

Implications of BSAP for South Asia by

P. Balakrishna
Head, Regional Biodiversity Programme
IUCN Asia Region

Distinguished Guests, Dear Participants and Ladies and Gentlemen...

Bangladesh has a wealth of experiences from the lessons of 15 countries implementing their NBSAPs with the technical support of IUCN. IUCN has long-standing experience in nature and natural resources and was a pioneer in structuring the World Conservation Strategy following the Rio Earth Summit in 1992. The Johannesburg Summit in 2002 stressed on the issues of development, livelihoods and biodiversity, which are also crucial for Bangladesh.

Nature and natural resources are 'life insurance policies for life itself'. I would urge the authorities to pledge themselves to establishing inter - sectoral coordination among all concerned biodiversity user groups and stakeholders. The poor people are, in fact, the best protectors of biodiversity resources, as communities happen to be the inheritors and practitioners of the pools of traditional conservation and best use related knowledge. In the NBSAP process, the poor have to be engendered to enable them to articulate both their concerns and recommendations.

The NBSAP is a 'living' document owned by multiple stakeholders. The responsibilities are 'joint but differentiated' and hence need to be integrated into all development planning initiatives of the PRSP, NCS and the NEMAP in Bangladesh.

I thank you all for your contribution in the BSAP Project.

Speech by the Special Guest

Md. Nazmul Ahsan
Divisional Commissioner
Khulna Division

Bismillahir Rahmanir Rahim...

Respected Chairperson Mr. Md. Restadul Islam, Deputy Commissioner, Khulna; Hon'ble Chief Guest, Sheikh Tayebur Rahman, Mayor, Khulna City Corporation; IUCN Bangladesh Country Representative Dr. Ainun Nishat; Dr. P. Balakrishna, Head, Asia Regional Biodiversity Programme, IUCN, respected guests, ladies and gentlemen...

Assalamu Alaikum...

I am glad to be present at the Khulna Regional Workshop of the National Biodiversity Strategy and Action Plan implemented by the Ministry of Environment and Forests. Biodiversity is one of the primordial components of sustainable development, because of the inseparable linkages between biodiversity and livelihoods. Indiscriminate use of biodiversity resources and unscientific harvest has pushed numerous species to the verge of extinction. A growing number of species are being rendered critically endangered as a result of human interventions. The lack of awareness and total absence of valuation of nature in development planning can be identified as the root causes of biodiversity loss.

Ladies and Gentlemen...

You may be aware that the CBD (Convention on Biological Diversity) was one of the outcomes of the Earth Summit held in Rio de Janeiro in 1992. Bangladesh is a signatory to that Convention, and hence obliged to implement the relevant CBD clauses. The implementation of a National Biodiversity Strategy and Action Plan is an obligation under the CBD to be fulfilled as soon as possible. The establishment of inter - departmental linkages and incorporating biodiversity conservation and sustainable principles in all development policy and planning is another commitment that the CBD ratifying parties must live upto.

The Ministry of Environment and Forests, Government of Bangladesh has initiated the Biodiversity Strategy and Action Plan Project activities to ensure biodiversity conservation along with sustainable

development and people's participation. IUCN Bangladesh as the implementing agency aims to develop a comprehensive strategy and action plan required for Bangladesh.

To ensure the participation of local people, regional workshops representing the six divisions of the country are being held. It has come to my knowledge that the Biodiversity Strategy and Action Plan document is ensuring people's ownership by recording the concerns of the local people. IUCN Bangladesh on the principles of sustainable development has taken a 'Participatory Approach' to this project.

The objective of today's workshop is to identify the current status, the causes and threats to biodiversity and the strategies to overcome the declining trend of biodiversity of this region. I believe, it will also focus on national issues. As I could understand that through group discussions and debates, you will be able not only to identify the threats and losses but also the gaps in implementation of biodiversity - related laws and the ways of creating awareness amongst the people.

Allah Hafez
Bangladesh Zindabad

Speech by the Chief Guest
Sheikh Tayebur Rahman
Honorable Mayor
Khulna City Corporation

Bismillahir Rahmanir Rahim...

Hon'ble Chairperson Mr. M. Restadul Islam, Deputy Commissinoner, Khulna; Special Guest Mr. Md. Nazmul Ahsan, Divisional Commissioner, Khulna; IUCN Bangladesh Country Representative Dr. Ainun Nishat; IUCN Asia Regional Biodiversity Programme Head Dr. P. Balakrishna and respected Ladies and Gentlemen...

Assalamu Alaikum...

I am extremely glad to be present at Khulna Regional Workshop on the National Biodiversity Strategy and Action Plan. I welcome this timely initiative aimed at conserving the biodiversity of the country. Bangladesh is blessed with a rich reserve of flora and fauna, nurtured in the plain lands, floodplains, coastal areas, evergreen hills and mangrove forests. We are all directly or indirectly dependent on the natural resources, to sustain our lives and livelihoods. The endowments of nature also fulfil our basic needs in terms of food, clothing, shelter and medical care, creating a multifarious relationship with our lives and livelihoods.

Ladies and Gentlemen...

Bangladesh signed the Convention on Biological Diversity or CBD in 1992, in Rio de Janeiro, Brazil. In the light of the commitments expressed there, the Government of Bangladesh has undertaken a number of initiatives. As a ratifying party to the Convention, it is a national obligation for Bangladesh to formulate and implement the National Biodiversity Strategy and Action Plan. I believe that the participation of the local people is a crucial element in sustainable development planning, which must be ensured for the successful implementation of the NBSAP Project.

Distinguised participants...

I am from Khulna and have spent my childhood swimming in the Bhairab and Rupsha rivers, braving the

attacks of sharks, skates and rays in the rivers. These days, those very rivers are so polluted that and if one casts a fishnet in those waters, that will fetch only waste products and garbage. The formerly abundant fish species of pomfret, large catfish and indigenous chitra, pangas and topshe fish are now nearly extinct. Gone with them are the fish and migratory birds of Beel Dakatia.

The Sundarbans, the prized mangrove forest of the South Asia region is the pride of the whole world. It is referred to as a 'World Heritage Site', highlighting its significance globally. The Sundarbans is the source of livelihood for a large number of people living in the southern part of the country. The Bawali, Mawali and fisher communities are dependent on the forest natural resources for their livelihoods. Ecologically, apart from hosting a wealth of resources, the Sundarbans also functions as a 'Green Belt', protecting the region from storms and tidal surges.

Even in the recent past, the lush green Sundarbans forests were a sanctuary for the crocodiles, tigers, the spotted deer and monkeys. Over extraction of resources and withdrawal of water by the upper riparian countries have gradually rendered the plants and animals scarce.

In the past, medicinal plants used to be applied for curing various illnesses in this country. The developed world has recently been showing positive inclinations towards using medicinal plants and herbs increasingly. The Hon'ble Prime Minister Begum Khaleda Zia has officially launched a number of initiatives to reintroduce medicinal plants nationally, along with undertaking massive plantation activities, with a view to enhancing livelihoods.

Today's workshop has been a success with the presence of Union Parishad representatives, teachers, researchers, journalists, physicians, fieldworkers, and Government and NGO representatives. I believe that the participants will enrich today's workshop with their expertise and provide necessary inputs into the National Biodiversity Strategy and Action Plan Project. I would like to request the participants to emphasize on the issues pertaining to the Sundarbans, water logging issues in Beel Dakatia, coastal ecosystems, village homestead forests and sustainable agro biodiversity models in their discussions. I would also like to request you to highlight the detrimental effects of shrimp farming on the biodiversity of the region.

Ladies and Gentlemen...

I must thank the organizers of this workshop for their keen interest in the biodiversity of this region. I wish the Ministry of Environment and Forests and IUCN Bangladesh the best of successes in their initiative. I thank all of you for your participation and hereby inaugurate the workshop formally.

Allah Hafez
Bangladesh Zindabad

Speech by the Chairperson

Md. Restadul Islam

Deputy Commissioner

Khulna

Assalamu Alaikum...

Hon'ble Chief Guest Sheikh Tayebur Rahman, Mayor Khulna City Corporation; Special Guest Mr. Md. Nazmul Ahsan, Divisional Commissioner Khulna; NBSAP National Project Director Mr. Monowar Islam; IUCN Bangladesh Country Representative Dr. Ainun Nishat and respected guests...

I am honoured that the regional workshop of the National Biodiversity Strategy and Action Plan for Khulna region is being held in Khulna. Biodiversity is one of the important elements of sustainable development, because of the relationship between biodiversity and livelihoods. Unfortunately, population pressures and unplanned urbanization have resulted in the extinction of many indigenous species. Indiscriminate use of biodiversity resources and unscientific harvesting has led numerous species to disappear gradually. The Sundarbans, the mangrove forests in this region is known as a 'World Heritage Site' because of its ecological significance. The Sundarbans is also the source of livelihood for about 500, 000 people of various communities: the Bawali, Moual and fishermen. The forest also serves as a 'Green Belt', protecting the Khulna region against natural calamities. Until the recent past, the dense vegetation and marshes of the Sundarbans were a refuge for the crocodiles, tigers, deer and monkeys. Extraction of resources beyond the natural regeneration rates has led these animal species to near depletion.

Ladies and Gentlemen...

The Ministry of Environment and Forests has initiated the Biodiversity Strategy and Action Plan Project activities to ensure biodiversity conservation and sustainable development through people's participation. IUCN Bangladesh as the implementing agency aims to develop a comprehensive strategy and action plan suitable for Bangladesh. The regional workshop in Khulna is an illustration of the participatory approach adoption fordevelopment.

Ladies and Gentlemen...

I would request you to identify the status and threats to the Sundarbans, Beel Dakatia, the effects of shrimp farming on the ecosystems and sustainable agricultural models through their discussions. I thank you all for your contributions and wish you success in today's workshop.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
Monowar Islam

National Project Director
Biodiversity Strategic Action Plan Project and
Deputy Secretary
Ministry of Environment and Forests

Hon'ble Chief Gust, Special Guest, IUCN Bangladesh Country Representative, Head, IUCN Regional Biodiversity Programme and ladies and gentlemen...

Assalamu Alaikum...

Globally, the issues in the environmental arena everywhere are temperature increase and ozone layer depletion, population boom, denuded forests, seawater pollution and biodiversity extinction leading to the disruption of the delicate natural balance of the earth. The concept of 'sustainable development' that was introduced in the Earth Summit requires us to consume sensibly and not deprive our future generations of their rightful shares. An example of an attempt to forestall the current decadent trends is the ban clamped on catching 'jatka' or hilsa fish fry in Bangladesh.

Humans are the worst destroyers of biodiversity resources, although they have the sole authority of harnessing them. The forest cover in Japan is 64% (vide Forest Resource Assessment by FAO, 2003), as opposed to barely 8% in Bangladesh! I must urge the NGOs and the civil society to work in tandem with the Ministry of Environment and Forests to redeem this situation. The principle of people's participation and consultation for the success of any initiative are a well accpeted fact. I would like to thank everyone for his or her interest and conclude by pointing at the success story of polythene reduction in Dhaka City.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The participants of the Khulna regional workshop were divided into three working groups in the technical session, viz. Groups A, B and C. In addition to identifying the national issues, the participants also listed the Khulna regional issues and actions during their discussions under the following five major themes identified in the Inception Workshop:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness Raising
- Linkages and Institutional Issues

The outcomes of the technical groups are presented below:

Group A

Other than the facilitator and the rapporteur, 24 participants assembled in this group. Mr. Anisuzzaman Khan, IUCNB facilited the group discussion and Ms. Remeen Firoz, IUCNB helped him as the rapporteur. Ms. Shahana Razzaque from General Hospital, Khulna presented the findings on behalf of the group.

Participants of Group A

1. Mr. M. Abdul Ahmed, UNO, Bagerhat
2. Mr. Seikh Liton, Chairman, Bagerhat
3. Mr. M. Abdus Samad Mondal, Joint Director, BADC
4. Dr. M. Ismail M B, PSO, RARS
5. Ms. Sahana Razzaque, Gynaecologist, General Hospital, Khulna
6. Ms. Shameema Sultana, ADC, Khulna
7. Mr. Munir U Ahmed, Special Correspondent, Daily Prabaha
8. Mr. Md. Mofazzel Hossain, UNO, Khulna
9. Mr. Sk. Shakhawat Hossain, UNO, Jhenaidah
10. Mr. M. Shahiduzzaman, UNO, Narail
11. Mr. Tapon Mondol, PO, WUB
12. Mr. M A Wahab, Chairman, Sundarbans Timber Merchants Association, Khulna
13. Mr. Md. Rokibuddin Biswas, Assistant Director, Department of Fisheries, Khulna
14. Mr. Md. Abdul Hakim, Teacher, St. Joseph's High School, Khulna
15. Mr. Provash C Mondal, Assistant Teacher, Adarsha Government Primary School
16. Mr. Nalini K Jodder, Assistant Teacher, Sonapota Primary School, Khulna
17. Mr. Morol Noor M, Executive Director, RUSTIC

18. Mr. M. Delwar Hossain, Forest Office, Jessore
19. Mr. M Abul Hashem, Government Pioneer Girls College, Khulna
20. Mr. K M Aminur Rahman, City Correspondent, Bangladesh Betar, Khulna
21. Ad. Ms. Taslima Khatun C, Judge's Court, Khulna
22. Mr. S K Didarul Alam, Khulna
23. Mr. Golam Mostafa, Public Relations Assistant, Khulna City Corporation
24. Mr. Bappi Khan, Photo Journalist, Prothom Alo

Findings

Though there had been threadbare discussion on most of the aspects of the local biodiversity, this group emphasized the issues and actions related to ecosystem management.

Ecosystem Management

General Strategy

The ecosystem diversity in the southwestern region has reduced enormously such as the reed lands, the grasslands and freshwater swamp ecosystems. Despite that, this region still supports some of the most important global biodiversity hot spots. For example, the Sundarbans World Heritage Site and the coastal and marine ecosystems in the region are of global significance. Therefore, this group urges everyone to protect this national as well as world heritage by prioritizing these issues while formulating the National Biodiversity Strategy and Action Plan.

Issues

- Farakka Barrage and the water flow problems
- Unplanned barrages and embankments
- Water logging
- Increased salinity in water and soil
- Siltation of the river basins
- Unplanned shrimp cultivation
- Indiscriminate use of inorganic fertilizers and pesticides
- Environmental pollution from the discharge of industrial water
- Improper waste disposal and pollution
- Population boom and increase in human demands
- Lack of awareness about ecosystems and its functions
- Unplanned fishing in the Sundarbans water areas by bag nets, bottom trawl fishing and indiscriminate use of different fishing gears and traps

Threats

- Loss or change of ecosystem due to salinity and siltation
- Unsustainable harvest of aquatic biodiversity including mollusks, turtles
- Excessive extraction of ground water
- Degradation of diverse flora and fauna species
- Destruction of marine fisheries nursery ground
- Tremendous loss of indigenous fauna and flora of the region
- Depletion of local fish species because of habitat destruction

Actions

- Research on local ecological and traditional knowledge by involving regional institutions such as Khulna University
- Local biodiversity inventory and measures to claim property rights
- Enforcement of existing laws and patent laws
- Environment friendly shrimp cultivation techniques
- Use of alternate fuel
- Establishment of sanctuaries and safari parks
- Restoring encroached wetlands
- Restoration and rehabilitation of degraded habitats such as Hogla (grassland)
- Use of surface water
- Soil and water testing for pollution assessment
- Population control
- Awareness raising amongst the people about ecosystems
- Re-excavation and dredging of silted rivers and canals
- Afforestation with indigenous plant species
- Mandatory EIA (Environmental Impact Assessment) for all development projects
- Implementation of the Fisheries Conservation Act

Finally, this group recommends the development of a regional biodiversity conservation forum with special emphasis on the protection of mangroves, reduction of siltation and salinity. Priorities should be given to study and address the issues of water logging, impact of shrimp cultivation and impact of unplanned water structures like barrages and embankments. This group also recommends the establishment of a World Mangrove Institute in Khulna.

Group B

Twenty participants from multiple disciplines actively participated in debates and discussions in this group. The faciltator for this group Dr. M. Khairul Alam from IUCNB steered the discussion. Mr. Saiful Islam Khan of IUCNB helped in organizing the inputs from the participants. Md. Anwar Hussain, Chairman, Soro Deara Union Parishad, Jessore presented the findings on behalf of the group.

Participants of Group B

1. Mr. Gopal Chandra Das, Q.A.O, BFFEA, Khulna
2. Mr. S. K. Ainul Islam, R.O, MSD, Khulna
3. Mr. Anwar Hossain, DFO, MPO, Bogra, Khulna
4. Mr. M Omar Faruque, ACD, Jessore
5. Mr. Anwar Hussain, Chairman, Soro Deara Union Parishad, Jessore
6. Mr. F. M. Abdur Rony, Scientific Officer, Regional Aquil-Research Station, BHRI, Jessore
7. Mr. M Abdus Salam Sander, Assistant Professor, Daulatpur College, Daulatpur, Khulna
8. Mr. K. M. Ali Azam, UNO, Satkhira Sadar
9. Ms. Umme Kulsum Ruma, Research Assistant, CDP, Khulna
10. Mr. Sheik Atahan Hossain, U.N.O, Magura Sadar
11. Mr. S. M. Jawadur Rahman, Chairman, Raikgang
12. Mr. Md. Ashraful Haque, Editor, Daily Probaho, Khulna
13. Advocate Mr. Firoz Ahmed, Khulna
14. Mr. Md. Abdul Gaffar, assistant Teacher, Khulna
15. Mr. M. Beniaz Zaman, Lecturer Zoology, Khulna Public College, Khulna
16. Mr. Sk. Mustafizur Rahman, Assistant professor, Fisheries and Marine Resource Tech Div, Khulna University
17. Mr. Manash Roy, Head Teacher, Rupsha Govt., Khulna
18. Mr. Humayun Kabir, Editor, Daily Janmabhumi, Khulna
20. Mr. Manik Saha, President, Khulna Press Club

Findings

This group presented the Issues and Actions separately for four major thematic areas except Education, Training and Awareness. For this theme, only Actions were identified. The findings are as follows:

Species Conservation

Issues

- Indiscriminate use of chemical fertilizers
- Destruction of date palms because of brick fields in Jessore
- Decline in the population of native species of flora and fauna
- Low flow of freshwater and saline water intrusion
- Loss of agricultural varieties of rice species
- Construction of dams and embankments that spoil the breeding ground of indigenous species
- Destruction of beneficial insects

Actions

- Revival of homestead forestry practices for preventing loss of species
- Need to identify, collect and establish gene bank, especially in case of rice varieties
- Specific use of indigenous varieties, especially through in situ conservation measures
- Replantation of species should take into account the social, economic as well as sentimental values
- Research and experimentation before introduction of species
- Dissemination of information amongst the people about the important species
- Identification of species and specific laws to conserve them

Ecosystem Management

Issues

- Loss of endemic fish species in Beel Dakatia
- Water logging and siltation because of dam in Beel Dakatia
- Ecosystem destruction in Jessore because of pesticide use
- Shrimp cultivation increases salinity and decreases soil fertility
- No demarcated shrimp cultivation area

Actions

- Identify the salinity zones in the coastal areas
- Preferring native fish species to the exotic species
- Jhapar and Bukbhora Baors should be managed as Protected Areas
- Sundarbans specific actions:
- Research on the migratory species of the Sundarbans

- Awareness raising programme for the people who visit the Sundarbans frequently
- Strong Political Committee for protection of the Sundarbans
- Loan should be given in kind but not in cash
- Sundarbans should not be seen as a source of revenue only for the Government
- Fisheries resource are depleted
- Alternative livelihood for the Sundarbans resource dependent people
- Protection of selected blocks
- Participatory control over resource harvesting at selected points
- No fishing during the breeding season
- Eco - tourism promotion as major source of revenue from the Sundarbans

Legal, Regulatory and Policy Issues

Issues

- Absence of laws to prevent the indiscriminate collection of shrimp destroying other species in the process
- Lack of policy guiding the harvest of hybrids and GMOs
- No specific laws for mangrove forest management
- Existent conflicts between the CBD and TRIPs in terms of patenting
- Apparent lack of expression of strong political will to improve law and order situation

Actions

- Enactment of laws regulating the sustainable harvest of snails
- Initiation of 'Rice - Shrimp' mixed cultivation
- Specific rules and proper implementation laws regarding coastal resources
- Political will favouring implementation of laws
- Updating forest laws in view of the current situation

Education, Awareness Raising and Capacity Building

Actions

- Counter campaigns to discourage cultivation of exotic species introduced by MNCs and BRAC
- Disseminate knowledge of biodiversity at the grassroots level ensuring 'trickle - down' effect
- Awareness raising among the women fisherfolk about the breeding season and relevant laws
- Documentation of local and traditional knowledge

- Awareness raising on biodiversity issues through formal and informal education
- Make aware, train and orient people in the surrounding areas of the Sundarbans about the biodiversity issues

Linkages-Cross - Sectoral and Institutional Issues

Issues

- Loss of native species because of the introduction of exotic species like silver and grass carps
- Use of chemical fertilizers in agricultural fields
- Monoculture resulting in depletion of crop diversity
- Use and release of industrial effluents into the water
- Inert and corrupt law enforcing agency personnel in the Sundarbans
- Unplanned tree plantations and improper maintenance of ponds and homestead gardens
- No linkage between the Government and stakeholders for ensuring proper implementation of laws

Actions

- GIS mapping of land under current practice of shrimp cultivation for studying land use patterns and trends in future patterns
- Water management regimes formulation for the Magura Dam incorporating the traditional practices
- Coordination and effective linkages between the Government ministries
- Regular meetings between the Government ministries
- Integrated cultivation practices

Group C

Dr. Ainun Nishat, IUCNB faciltated this group and Ms Remeen Firoz and Halima Neyamat were the rapporteurs. Mr. Shaheen Reza, UNO, Phultala, Khulna presented the group findings.

Participants of Group C

1. Mr. M Moshair Rahman, Chairman, Auria union Parishad, Narail
2. Mr. Sk. Md.Shahid Husain, Lecturer, Botany, Govt. Sundarban College, Khulna
3. Mr. Thakurdash Torofder, Assistant Teacher, Govt Coronatias girls school, Khulna
4. Mr. M ABdul Khalem, Lecturer Botany, Khulna Govt. Girls College, Khulna
5. Mr. Habibur Rahman Khondker, District Fisheries Officer, Khulna
6. Mr. S. Humayun Kabir, M.D. Aman Seafood Industries Ltd and Ret. Seceretary General, BFFEA, Khulna

7. Mr. Abdul Jalil Khan, Chairman, Brick Manufacturer
8. Mr. M Monirul Alam, Assistant Com. and Magistrate, Khulna
9. Mr. Mostafa Kamal Ahmed, Chief Reporter, Dainik Probaha, Khulna
10. Mr. M Shahabuzzaman Mian, Deputy Director, Agricultural Extension, Khulna
11. Dr. M. Masudur Rahman, Senior Research Officer, Bangladesh Forest Research Institute, Khulna
12. Mr. M Laisul Rahman, UNO, Sharsha, Jessore
13. Mr. A. S. M Shaheen Reza, UNO, Phuttala, Khulna
14. Mr. M Monirul Islam, Assistant Teacher, Tootpara Model Government Primary School, Khulna
15. Mr. M Tariqul Islam, Divisional forest Officer, DFO, Sundarban East, Bagherhat
16. Mr. M Fieroz Ahammed, Shrimp Farmer, Khulna
17. Mr. M. A. Mannan, Additional A. E., Jessore
18. Mr. A. K. M Syedur Rahman, Azizi, Unit Coordinator, Khulna

Findings

The Group C participants considered all the five themes but suggested the issues and actions for all the thematic areas except Species Conservaton. For this thematic area, only actions were suggested. The group findings are as follows:

Species Conservation

Actions

- Inventory of medicinal plants
- Inventory of marine flora and fauna
- Sanctuaries for certain species including fish
- Management of indigenous species
- Conservation of species of religious value such as fresh water crocodiles of Khan Jahan Ali tank

Ecosystem Management

Issues

- Habitat is not identified
- Lack of management of natural nurseries of fish
- Lack of grazing land in coastal areas
- Outer anchorage waste disposal by sea going vessels causing damage to marine flora and fauna

Actions

- Identify habitats and organise management accordingly
- Preservation of cultural heritages such as khejur gurh (date palm molasses) production, nakshikantha (embroidered quilt) and 'Jessore Stich' handicrafts
- Identification and maintenance of natural nurseries
- Regulations regarding the use of fishing gears (site specific)
- Management of pastures
- Sustainable harvesting of natural resources
- Ex situ preservation through establishing gene bank and seed bank

Legal, Regulatory and Policy Issues

Issues

- Faults and inconsistencies in sectoral law
- Absence of laws in different sectors
- Lack of awareness in law enforcing authorities
- Poverty alleviation issues not incorporated in policies
- Introduction of exotic and alien species

Actions

- Updating laws and acts
- Proper sensitization for concerned authorities
- Judicial regulation in chemical fertilizer use

Education, Training and Awareness Raising

Issues

- Lack of formal and non-formal ethical instruction
- Lack of inclusion of biodiversity issues in formal educational curricula
- Lack of awareness at all levels

Actions

- Incorporation of lessons on biodiversity in primary, secondary and higher level educational cuuricula, as appropriate
- Organising subject training and regular workshops at the grassroots level, involving local government bodies

Linkages and Institutional Issues

Issues

- Lack of coordination at interdepartmental, interministerial and interinstitutional levels
- Lack of alternative livelihood
- Lack of service oriented NGO activities
- Weak institutional support for mangrove management and shrimp cultivation
- Unplanned infrastructural development
- Lack of local people's participation in planning and implementation stages

Actions

- Arrange coordination at local and national level in planning and implementation phases
- Organise alternative livelihood
- Make NGOs accountable for service oriented activities

List of Participants

1. Mr. A. K. M Syedur Rahman Azizi, Unit Coordinator, Khulna
2. Mr. A. S. M Shaheen Reza, UNO, Phultala, Khulna
3. Mr. Abdul Jalil Khan, Chairman, Brick Manufacturer
4. Advocate Ms. Taslima Khatun C, Judge's Court, Khulna
5. Advocate Mr. Firoz Ahmed, Khulna
6. Mr. Anwar Hossain, DFO, MPO, Bogra, Khulna
7. Mr. Anwar Hussain, Chairman, Soro Deara U/P, Jessore
8. Mr. Bappi Khan, Photo Journalist, Prothom Alo
9. Dr. M. Ismail M B, PSO, RARS
10. Dr. M. Ismail M B, PSO, RARS
11. Dr. M. Masudur Rahman, Senior Research Officer, Bangladesh Forest Research
12. Mr. F. M. Abdur Rony, Scientific Officer, Regional Aquil-Research Station, BHRI, Jessore
13. Mr. Golam Mostafa, Public Relations Assistant, Khulna City Corporation
14. Mr. Gopal Chandra Das, Q.A.O, BFFEA, Khulna
15. Mr. Habibur Rahman Khondker, District Fisheries Officer, Khulna
16. Mr. Humayun Kabir, Editor, Daily Janmabhumi, Khulna
17. Mr. K M Aminur Rahman, City Correspondent, Bangladesh Betar, Khulna
18. Mr. K. M. Ali Azam, UNO, Satkhira Sadar
19. Mr. M A Wahab, Chairman, Sundarbans Timber Merchants Association, Khulna
20. Mr. M Abul Hashem, Government Pioneer Girls College, Khulna
21. Mr. M Fieroz Ahammed, Shrimp Farmer, Khulna
22. Mr. M. Abdul Ahmed, UNO, Bagerhat
23. Mr. M. Abdus Samad Mondal, Joint Director, BADC
24. Mr. M. Beniaz Zaman, Lecturer Zoology, Khulna Public College, Khulna
25. Mr. M. Delwar Hossain, Forest Office, Jessore
26. Mr. M. Shahiduzzaman, UNO, Narail
27. Mr. M. A. Mannan, Ad.AE.Jessore
28. Mr. Manash Roy, Head Teacher, Rupsha Govt., Khulna
29. Mr. Manik Saha, President, Khulna press club.
30. Mr. M Abdul Hakim, Teacher, St. Joseph's High School, Khulna
31. Mr. M Mofazzel Hossain, UNO, Khulna

32. Mr. M Monirul Alam, Assistant Comissioner and Magistrate, Khulna
33. Mr. M Omar Faruque, ACD, Jessore
34. Mr. M Rokibuddin Biswas, Assistant Director, Department of Fisheries, Khulna
35. Mr. M Shahabuzzaman Mian, Deputy Director, Agricultural Extension, Khulna
36. Mr. M Abdul Gaffar, Assistant Teacher, Khulna
37. Mr. M ABdul Khalem, Lecturer Botany, Khulna Govt. Girls College, Khulna
38. Mr. M Abdus Salam Sander, Assistant Professor, Daulatpur College, Daulatpur, Khulna
39. Mr. M Ashraful Haque, Editor, Daily Probaho, Khulna.
40. Mr. M Laisul Rahman, UNO, Sharsha, Jessore
41. Mr. M Md.Moshair Rahman, Chairman, Auria union Parishad, Narail
42. Mr. M Monirul Islam, Asst. Teacher, Tootpara Model Government Primary School, Khulna
43. Mr. M Tariqul Islam, Divisional forest Officer, DFO, Sundarban East, Bagherhat
44. Mr. Morol Noor M, Executive Director, RUSTIC
45. Mr. Mostafa Kamal Ahmed, Chief Reporter, Dainik Probaha, Khulna
46. Mr. Munir U Ahmed, Special Correspondent, Daily Prabaha
47. Ms. Nalini K Jodder, Assistant Teacher, Sonapota Primary School, Khulna
48. Mr. Provash C Mondal, Assistant Teacher, Adarsha Government Primary School
49. Mr. S K Didarul Alam, Khulna
50. Mr. S. Humayun Kabir, M.D. Aman Seafood Industries Ltd and Ret. Seceretary
51. Mr. S. K. Ainul Islam, R.O, MSD, Khulna
52. Mr. S. M. Jawadur Rahman, Chairman, Raikgang
53. Ms. Sahana Razzaque, Gynecologist, General Hospital, Khulna
54. Mr. Seikh Liton, Chairman, Bagerhat
55. Ms. Shameema Sultana, ADC, Khulna
56. Mr. Sheik Atahan Hossain, U.N.O, Magura Sadar
57. Mr. Sk. Mustafizur Rahman, Assistant professor, Fisheries and Marine Resource Tech. Discipline, Khulna University.
58. Mr. Sk. Shakhawat Hossain, UNO, Jhenaidah
59. Sk.Md.Shahid Husain, Lecturer, Botany, Govt. Sundarban College, Khulna
60. Mr. Tapon Mondol, PO, WUB
61. Mr. Thakurdash Torofder, Assistant Teacher, Govt Coronatias girls school, Khulna
62. Ms. Umme Kulsum Ruma, Research Assistant, CDP, Khulna

63. Dr. Ainun Nishat, IUCNB
64. Mr. Anisuzzaman Khan, IUCNB
65. Mr. M. Khairul Alam, IUCNB
66. Mr. A S M Moniruzzaman Khan, IUCNB
67. Ms. Remeen Firoz, IUCNB
68. Ms. Halima Neyamat, IUCNB
69. Mr. Saiful Islam Khan, IUCNB
70. Mr. Sk. Asaduzzaman, IUCNB
71. Mr. Kazi Abdul Mannan, IUCNB
72. Mr. P. Balakrishna, IUCN

Regional Workshop on the National Biodiversity Strategy and Action Plan, Barisal Division

Held in Jhalokathi
25 June 2003

The NBSAP Regional Workshop for Barisal division was held in Jhalokathi on the 25th June 2003. In the Inaugural Session, the Chief Guest was Barrister Md. Shahjahan Omar, Bir Uttam and Hon'ble Minister of State, Ministry of Law, Justice and Parliamentary Affairs. The Special Guests of the session were Ms. Ishrat Sultana Ellen Bhuttu, Hon'ble Member of Parliament, Jhalokathi - 2 and Mr. Md. Abdul Quddus, Divisional Commissioner, Barisal. The session was chaired by Mr. Md. Ehsanul Haque, Deputy Commissioner, Jhalokathi. About 65 participants attended the workshop. In Jhalokathi, the workshop started in a different manner, as immediately after the registration, the Technical Session was started and in the middle of the programme after launch and prayer break, the formal Inaugural was held. After the Inaguarual, the technical session continued and ended with the plenary discussion. In the technical session, the participants were divided into three working groups viz. Group A, Group B and and Group C. All members of all the groups worked to identify the issues and the actions needed for biodiversity conservation of Barisal region in particular and for national level in general. Despite the changes made in the flow of activities, the Inagural has been presented first while documenting the Proceedings as usual.

The programme of the workshop is laid down below:

Programme

8:00 - 9:00:	Registration
Technical Session (9:00 - 13:00)	
9:00 - 9:05am	Recitation from the Holy Quora'n
9:05 - 9:30am	Brief Introductions to NBSAP
9:30 - 9:45am	NBSAP Process Outline and Group Formation
9:45 - 10:15 am	Tea break
10:15 -13:00pm	Group Discussions
13:00 - 14: 00pm	Lunch and Prayer break
Inaugural Session (14:00 - 15:00)	
14:00 -14 : 10pm	Speech by the Special Guest, Mr. Md. Abdul Quddus Divisional Commissioner, Barisal.
14:20 -14:30pm	Speech by the Special Guest, Ms. Eshrat Sultana Ellen Bhuttu Hon'ble Member of Parliament, Jhalokathi - 2
14:30 - 14:45pm	Speech by the Chief Guest, Barrister Muhammad Shajahan Omar Bir Uttam, M P, Hon'ble Minister of State, for Law, Justice and Parliament Affairs, Government of the People's Republic of Bangladesh.
14:45-14:55pm	Speech by the Chairperson, Mr.Md. Ehsanul Huq Deputy Commissioner, Jhalokathi

14:55-15:00pm	Vote of thanks by Dr. M. Khairul Alam IUCN Bangladesh Country office

Technical Session (continued)

15:00 - 15:40pm	Group Discussions
15:40 - 16:00 pm	Preparation of Groups' Presentations

Closing Session (16:00 - 17:00)

16:00 - 16:45pm	Group Presentation
16:45 - 17:00pm	Concluding Remarks

THE INAUGURAL

Speech of the Special Guest
Md. Adbul Quddus
Divisional Commissioner
Barisal

Bismillahir Rahmanir Rahim...

Respected Chair, Hon'ble Chief Guest Barrister Md. Shahjahan Omar, Bir Uttam and State Minister for Law, Justice and Parliamentary Affairs; Special Guest Mrs. Eshrat Sultana Ellen Bhuttu, Member of Parliament, Jhalokathi - 2; National Project Director, Md. Monowar Islam; Representatives from IUCN Bangladesh Country Office, Ladies and Gentlemen...

Assalamu Alaikum...

I am glad to be present at the regional workshop on the Biodiversity Strategy and Action Plan organized by the Ministry of Environment and Forests, and IUCN Bangladesh Country Office. Biodiversity conservation is one of the most important national issues to be addressed today in Bangladesh. Bangladesh, in line with the rest of the world, has to attune all its developmental efforts to those of sustainable development. Until recently, Bangladesh had a rich diversity of flora and fauna. The various anthropogenic interventions are leading to the extinction of many biodiversity species. The dense forest covers and the natural resources occurring in the haor, baor, beel and jheel are also on the decline. Unless necessary actions are taken opportunely to reverse this declining trend, we are likely to lose our natural heritage along with our rich pools of traditional knowledge.

Ladies and Gentlemen...

I have come to know that Bangladesh had signed the Convention on Biological Diversity in 1992, during the first Earth Summit. As a party to the Convention, the country has a responsibility to develop and implement the National Biodiversity Strategy and Action Plan.

The Ministry of Environment and Forests has undertaken the Biodiversity Strategy and Action Plan

Project and IUCN Bangladesh is implementing it with the aim of facilitating the conservation of biodiversity and ensuring sustainable development through the participation of local people. Many countries of the world have completed their strategy and action plans by now. Bangladesh has the advantage of learning from the experiences of those countries, wherein people's participation has been the key to success.

Ladies and Gentlemen...

The objective of today's workshop is to identify the current status and threats to biodiversity in this region, for creating a realistic action plan. Through the group discussions, I believe, you will be able to suggest the strategies to counter biodiversity loss, build capacity amongst local organizations, apply appropriate biodiversity laws and raise widespread awareness amongst all sections of the society of the issues in question.

I would like to thank you for your overall support and wish you the best of luck in today's workshop.

Allah Hafez
Bangladesh Zindabad

Speech of the Special Guest
Eshrat Sultana Ellen Bhuttu
Honorable Member of Parliament
Jhalokathi - 2

Hon'ble Chair, and Chief Guest Barrister Md. Shahjahan Omar, Bir Uttam and State Minister for the Ministry of Law, Justice and Parliamentary Affairs; Mr. Md. Abdul Quddus, Divisional Commissioner, Barisal Division; National Project Director Mr. Monowar Islam; IUCN Bangladesh representatives and Ladies and Gentlemen...

Assalamu Alaikum...

I am glad that the regional workshop on the National Biodiversity Strategy and Action Plan for Barisal Division is being held in Jhalokathi. I would like to thank the Ministry of Environment and Forests and the Barisal Divisional Administration for organizing the workshop in Jhalokathi.

Dear Participants...

The IUCN Representatives have enlightened you about the role and significance of biodiversity conservation, the Government's initiatives and the rationale behind today's workshop in the Technical Session. The unique ecosystems in the floodplains and coastal islands have made Barisal a reservoir of biodiversity. People's livelihood, culture and heritage are all inseparable, hinged upon the natural resources available. In addition to that, communities residing in the coastal areas harness the fisheries resources to sustain their livelihoods.

There is no denying the fact that the poor rural communities have to draw from the biodiversity resources beyond their natural regeneration rates. But these issues are not adequately addressed in the development planning and infrastructure projects. The compound effect of unregulated activities has led to the depletion of species, leaving certain ones endangered. Hence the need for concerted efforts to ensure a participatory conservation strategy and action plan.

Ladies and Gentlemen...

In the past, medicinal plants were used extensively in our part of the world to cure illnesses. The extinction of medicinal plants has not only led to the loss of biodiversity, but also eroded the traditional knowledge and practices regarding its use. Contrarily, developed countries have become inclined

towards using medicinal plants and herbs in the recent past. Bangladesh can grow and export medicinal plants and earn lucrative foreign exchange. The Hon'ble Prime Minister, Begum Khaleda Zia has heralded a number of praiseworthy initiatives, including the plantation of medicinal plants and fruit trees. The Government of Bangladesh advocates sustainable development that requires the ownership of the local people in all development plans.

The folk culture in Bangladesh portrays the intricate linkages between biodiversity and livelihood. The role of women, though unrecognized, is also significant in biodiversity conservation, starting with seed collection to many other activities. The Hon'ble Prime Minister Begum Khaleda Zia also advocates the empowerment of women. I believe that women, entrusted with the responsibility of biodiversity conservation can make a positive difference in Bangladesh.

Dear Participants...

The Government aims to formulate a realistic Biodiversity Strategy and Action Plan for the country. I believe that your discourses in today's workshop, potent with the experiences drawn from all walks of life will provide a good direction in the formulation of the document.

I know that your contribution will be invaluable and you will share your experiences for a better strategy and action plan. I request all of you to not only aid in the policy formulation, but also to create awareness among your contemporaries.

I would like to express my gratitude to the Jhalokathi District administration, Ministry of Environment and Forests and IUCN Bangladesh Country Offfice for organizing today's workshop. I wish you all much success.

Allah Hafez
Bangladesh Zindabad

Speech of the Chief Guest
Barrister Shahjahan Omar, Bir Uttam
State Minister
Ministry of Law, Justice and Parliamentary Affairs

Bismillahir Rahmanir Rahim...

Hon'ble Chairperson Md. Ehsanul Haque, Deputy Commissioner, Jhalokathi; Special Guest Mrs. eshrat Sultana Ellen Bhuttu, Hon'ble Member of Parliament Jhalokathi - 2; Mr. Abdul Quddus, Divisional Commissioner, Barisal Division; National Project Director Mr. Monowar Islam; IUCN Bangladesh representatives and Ladies and Gentlemen...

Assalamu Alaikum...

I am honoured to be present at the regional workshop on the Biodiversity Strategy and Action Plan for Barisal Division. I welcome this timely initiative for the conservation of biodiversity in our country. Bangladesh is endowed with rich floral and faunal diversity contained within its plain lands, floodplains, coastal areas, evergreen hill forests and mangroves. The intricacy of our relationship with nature is also illustrated in our day-to-day life, as we use its bounties to meet basic needs in terms of food, clothing, shelter and medical care.

Ladies and Gentlemen...

Bangladesh signed the Convention on Biological Diversity (CBD) in 1992. As a party to the Convention, it is a national obligation to implement the National Biodiversity Strategy and Action Plan. The Ministry of Environment and Forests has initiated this praiseworthy project for formulating the National Biodiversity Strategy and Action Plan. The participation of local people is a precondition for sustainable management planning. I agree that widespread participation is absolutely crucial for the successful implementation of the project.

Dear Participants...

Barisal was once famous for its paddies, rivers and canals. It was the reservoir of food grains for the entire country, being called 'the Granary of Bengal'. Balam rice and Hilsa fish were produced in quantities envied by others. These are all actually components of biodiversity, which have been gradually eroding. As a result of such degradation, the livelihoods of the locals have also been negatively affected. Unplanned development activities and over-exploitation of natural resources have led to the gradual degeneration and at times, total extinction of species. The Government of Bangladesh is obliged to conserve its nature, ecology and biodiversity. The Government has enacted the Environment Conservation Act and Rules (ECA and ECR) and the Prime Minister heads the National Environment Committee.

Ladies and Gentlemen...

I am a lawyer and hence possess no considerable expertise in biodiversity issues. But even to a layman here, the degradation of nature would seem starkly apparent. Today's workshop is to ensure the participation of people from all strata of the society for the successful planning and implementation of the Biodiversity Strategy and Action Plan. I must say that this workshop has been a success with the participation of Union Parishad representatives, teachers, researchers, journalists, physicians, fieldworkers, Government and NGO representatives. I strongly believe that the participants will enrich the strategy and action plan with their expertise and provide ideas for the implementation of the existing biodiversity related laws. I hope that the environment issues particularly pertaining to the Barisal region coastal ecosystem management, and village homestead forests, plant and animal diversity and sustainable farming techniques will be addressed in today's workshop.

Ladies and Gentlemen...

I sincerely thank the Divisional Commissioner of Barisal and the Deputy Commissioner of Jhalokathi for their keen interest and successful organization of this workshop, in spite of their busy schedules. I wish the Ministry of Environment and Forests and IUCN Bangladesh all the best in their noble initiative and success in today's venture.

Thank You

Allah Hafez
Bangladesh Zindabad

Speech of the Chair

Md. Ehsanul Haque
Deputy Commissioner
Jhalokathi

Hon'ble Chief Guest Barrister Md. Shahjahan Omar, Bir Uttam and Minister of State, Ministry of Law, Justice and Parliamentary Affairs; Special Guest Mrs. Ishrat Sultana Ellen Bhutto, Mr. Md. Abdul Quddus, Divisional Commissioner Barisal; National Project Director, Monowar Islam; IUCN Bangladesh Country Office representatives and Ladies and Gentlemen...

Assalamu Alaikum...

I am glad that the regional workshop on the National Biodiversity Strategy and Action Plan for the Barisal Division is being held in Jhalokathi. On behalf of the Jhalokathi District Administration, I must thank the Ministry of Environment and Forests and the Divisional Commissioner for entrusting us with the responsibility of organizing this workshop.

The Hon'ble Chief Guest, Special Guests and IUCN Bangladesh representatives have highlighted the role and significance of biodiversity conservation in their speeches. Floodplains, coastal areas and the islands in Barisal have created diverse ecological settings nurturing a unique reserve of biodiversity. The livelihood and heritage of the people of this region are intricately linked to the local biodiversity. In addition to that, the life of the fishing communities in the coastal zones is entirely dependent on aquatic resources of the rivers and canals.

The over-extraction of resources for livelihood sustenance is one of the major reasons for the depletion of biodiversity. Along with that, development initiatives that do not consider the biodiversity component can also be held responsible for the loss of biodiversity. All resource users and stakeholders are accountable and hence have to work in synergy towards a better future.

The Government of Bangladesh has taken up this project with the vision that it will be a participatory and realistic process. I believe that your contribution through today's discussion and debate will build upon the formulation of a holistic strategy and action plan. In today's workshop, we have tried to accommodate

various stakeholders and professionals working in the development and environment issues. People from all levels concerned with biodiversity have been invited to give a realistic direction to the biodiversity planning process for Bangladesh.

You have identified issues and actions during the group discussions held since morning. I hope you will enrich the National Biodiversity Strategy and Action Plan with your experiences in your relevant field of expertise. I would like to thank the organizers of this workshop on behalf of the Jhalokathi district administration and the participants who have made this event a success.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
Monowar Islam
National Project Director
Biodiversity Strategic Action Project and
Deputy Secretary, Ministry of Environment and Forests

Hon'ble Chairperson Md. Ehsanul Haque, Deputy Commissioner, Jhalokathi; Chief Guest Barrister Md. Shahjahan Omar, Bir Uttam, Minister of State, Ministry of Law, Justice and Parliamentary Affairs; Special Guest Mrs. Eshrat Sultana Ellen Bhuttu, Mr. Md. Abdul Quddus, Divisional Commissioner Barisal, representatives from IUCN Bangladesh Country Office; Ladies and Gentlemen...

Assalamu Alaikum...

The informative speeches by the chief guest and special guests must have instilled in you the significance of biodivsersity and the dire need for a Biodiversity Strategy and Action Plan for Bangladesh. I will just accentuate their speeches by saying that 'participation' is the key to success and the BSAP project follows that principle. As the participants of this regional workshop in Jhalokathi, you can all steer the Biodiversity Strategy and Action Plan towards a good direction with your knowledge and expertise.

On behalf of the Ministry of Environment and Forests, I would like to thank the participants for their investments into the NBSAP. Thanks must also be conferred upon the GEF, UNDP for support as well as IUCN Bangladesh, which is implementing the project with much dexterity. Last but not the least, I must acknowledge the support from the Jhalokathi District Administration for extending their support in organizing this event.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The participants of the Jhalokathi regional workshop worked in three working groups during the technical session. Their discussions and discourses resulted in articulating the description of the natioanl and regional issues and actions needed for biodiversity conservation. The following five themes were the guidelines for all groups:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness Raising
- Linkages and Institutional Issues

The findings obtained from all the groups are given in the following space:

Group A

The participants of group A discussed the issues of environmental conservation and recommended specific issues and actions for each theme for the Barisal region along with a list of the gradually dissapearing species. The facilitator for this group was Mr. Raquibul Amin, IUCNB and Ms. Remeen Firoz, IUCNB helped him as the rapporteur. Following is the list of participants of group A.

Participants of Group A

1. Mr. M. Azmal Hossain, DC, Pirojpur
2. Mr. M. Hazrat Ali, ADC, Jhalokathi
3. Mr. M. Rustom Ali Khan, DFO, Patuakhali
4. Mr. M. Delwar Hossain, Advocate, Jhalokathi
5. Ms. Kanak Prova Barall, Jhalokathi
6. Mr. M. Rafiul Islam, Proprietor, Jhalokathi
7. Dr. A K M Anisul Haque, Civil Surgeon, Jhalokathi
8. Mr. Talukder A Kabir, Chairman, Jhalokathi
9. Mr. M. Nurul Islam Chowdhury, Principal, Barguna Govt. College
10. Dr. M. A Rashid Howlader, UNO, Jhalokathi
11. Mr. Shamsul Islam Chand, Journalist, Jhalokathi
12. Mr. Joydev K Biswas, Deputy Director Fisheries, Jhalokathi
13. Mr. M. Rafiqul Islam, Asst. Professor, Barisal B M College
14. Dr. Mazibar Rahman Khan, Associate Professor, Patuakhali Govt. College
15. Mr. M. Basir Uddin, Deputy Director Agricultural Extension, Jhalokathi

16. Mr. M. Shahalam Khalifa, Director JDS, Jhalokathi
17. Mr. Abdul Mannan, Head Teacher, Kathalia Model, Jhalokathi
18. Mr. M. Shokor Ali, BRAC, Jhalokathi
19. Mr. M. Monimul Haque Haidang, Executive Engineer LGED, Jhalokathi
20. Mr. M. Shahjahan Ali, UP Member, Jhalokathi
21. Mr. M. Anwarul Islam, Professor, Jhalokathi

Findings

Species Conservation

Gradually disappearing species:

Boichi, Loha Gora, Kao, Sharpa gondha, Gandha bhedul, Hijal, Tamal, Local variety of rice, Gharial, Shushuk, Wild boar, Ghughu, Shokun, Golda Chingri, Taki Machh, Khalisha, Baim, Bheda, Roina

Issues

- Use of pesticides in rice cultivation - contamination of the Food Chain
- Catching fish fry or post larvae
- Catching fish during the egg carrying season
- Catching fish during the breeding period, in Chaitra - Baisakh - Jaishtha
- Use of Current net for catching fish
- Siltation of rivers and canals
- Natural disasters
- Introduction of Alien Invasive Species such as Carp, African Magur and Eucalyptus plants
- Use of fuel wood in brick fields
- The impact of Boyalia Badh and Pakhimara Badh (Embankments)
- Shortage in the supply of animal fodder
- Lack of grazing land
- Climate change and water level rise

Actions

- Use of organic fertilizer and green manure (for natural nitrogen fixation)
- Biological control of pests instead of use of pesticides (IPM)
- Establishment of sanctuaries
- Fishing only in rivers and ponds seasonally

- Identification and conservation of threatened species
- More encouragement for tree plantation
- Encouraging use of tissue culture and biotechnology for the conservation of threatened species
- Banning the use of Current net (small mesh fishnet)
- Banning fuel wood burning in brick fields
- Providing incentives for cultivation of indigenous fish species
- Raising awareness regarding the production of animal feed and fodder
- Ensuring appropriate use of bi - products generated from crops
- Re - excavation of dead rivers and canals for increasing fish population

Ecosystem Management

Issues

- Unplanned farming practices
- Shrimp cultivation
- Salinity increase
- Destruction of the pond ecosystem through draining out water
- Silting up of the Kala Badal river and destruction of Hilsa fish habitat
- Disrupted food chain

Actions

- Conducting further research on integrated farming practices
- Protecting habitats of different species, viz. stopping encroachment into forest areas and beels
- Documenting traditional knowledge
- Eco-friendly agricultural development of an area
- Conducting research on salinity tolerant crops

Legal, Regulatory and Policy Issues

Issues

- Lack of coordination
- Lack of political transparency and accountability

Actions

- Proper implementation of laws relating to environmental protection

- Increasing awareness among general mass
- Adopting development plan based on the real situation of a locality
- Ensuring coordination among different departments
- Monitoring

Education, Training and Awareness Raising

Issues/Actions

- Traditional knowledge base getting eroded or lost due to lackings in documentation
- Incorporation of biodiversity issues into primary/secondary school curricula
- TV, radio and newspapers not optimally utilised in awareness raising
- Imams and other community religious leaders lack training on biodiversity issues and they should create the environment for dissemination of information
- All departments should have more active role in development planning and implementation
- Ensuring participation of all stakeholders
- Awareness raising with the help of NGOs, political leaders and civil society
- Capacity building of employees of all relevant departments
- Increasing awareness and efficiency through inter-department consultations

Linkages and Institutional Issues

Issues/Actions

- Monitoring the activities of fuel wood collectors possessing legal permits
- Proper role of community in decision making
- Empowering local people as stewards of natural resources and biodiversity of their locality
- Training organisation by the local government for biodiversity conservation
- Linking representatives of the Union Parishad with other government for biodiversity conservation
- An exclusive management authority for biodiversity conservation

Group B

The Group B participants listed several species that were endangered and suggested issues and actions for their revival or restoration. They also identified the issues and recommended relevant actions for other NBSAP themes. The facilitator for this group was Mr. A. S. Moniruzzaman Khan, IUCNB and Ms. Farida Shahnaz, IUCNB acted as the rapporteur.

The participants' list is as follows.

Participants of Group B

1. Mr. A K M. Monzurul Huq, Additional Commissioner, Barisal
2. Mr.Kabedul Islam, ADC, Patuakhali
3. Mr. M. Quamruzzaman Chowdhury, ADC, Bhola
4. Dr. M. Anwar Hossain, District Fisheries Officer, Pirojpur
5. Mr. M. Haider Hossain, Advocate, Jhalokathi
6. Mr. Sudhir Ranjan Shil, District Training Officer, Jhalokathi
7. Mr. M. Feroj Ahmed, Asst. Teacher, N Merchant High School, Jhalokathi
8. Mr. M. Rafiqul Islam, Research Officer, Plantation Trial Unit, BFRI Barisal
9. Mr. M. Sohrab Hossain, President Saw Mill Owner's Association, Jhalokathi
10. Professor Mr. M A Khaleque, Principal, Barisal Govt. Women's College
11. Mr. Rafiqul Islam, Chairman, Jhalokathi
12. Mr. Abdul Gafur, Assistant Professor, Bhola Govt. College
13. Mr. David Shalil Bala, Regional Coordinator, Annesha Foundation, Jhalokathi
14. Ms. Momtaz Parvin, Head Teacher, Rayapur Govt. Primary School, Jhalokathi
15. Ms. Nasima Begum, Head Teacher, Shahi Model Government Primary School, Jhalokathi
16. Mr. Zahid Hossain Munshi, AC Land, Jhalokathi
17. Mr. Md. Abdur Rashid, President, Jhalokathi Press Club
18. Mr. Abu Hanif Chowdhury, Credit Coordinator, Hilful Fuzul Sangshta, Barisal
19. Mr. Md. Ehsanul Haque, DC, Jhalokathi

Findings

The group members identified and grouped the issues and actions under the five thematic areas, as appropriate. The findings are given below:

Species Conservation

The gradually declining species in the region have been identified to be:

Animals

- Holdey Pakhi
- Dahuk
- Several types of kingfishers
- Several types of grasshoppers
- Arjina
- Some snakes
- Shial
- Shamuk/Jhinuk
- Tuntuni
- Fingey Pakhi
- Kokil
- Ghughu
- Kokka
- Shakoon
- Halood Chil

- Okka
- Chanda Boicha
- Boicha

Plants

- Ashshathya
- Dheki Shak
- Jamrul
- Golap Jam
- Thankuni Pata
- Deua
- Katabahru
- Rokto Lata
- Mama Kola
- Hati Shur
- Sharnno Lata

Issues

- Over harvesting of crops
- Hunting of endangered species
- Lack of food security
- Lack of planning
- Natural disasters
- Pesticide/ chemical/ fertilizer for HYVs
- Unplanned collection of shrimp fries
- Lack of awareness of the importance of biodiversity
- Habitat destruction
- Unplanned forest management
- Use of current net
- Intensive use of land to reap commercial benefits
- Uncontrolled pesticide use
- No conservation measures
- Loss of wilderness
- Siltation of water bodies
- Unplanned infrastructure development
- Noise pollution
- Over population
- Lack of environmental awareness
- Decreasing plant species
- Non-availability of land for habitat
- Commercial exploitation of cultivation

Actions

- National level sectoral planning
- Developing biodiversity planning
- Use of bio-fertilizer
- Sanctuary establishment
- Developing awareness programme
- Sustainable harvest
- Enhancing plantation (timber, fruit)
- Shunning pesticide use
- Preventing killing of brood fishes during the breeding season
- Controlling population growth
- Conserving habitats for specific species
- Implementation of the Department of Fisheries and Livestock recommendations
- Management of existing sanctuaries of Char Kukri Mukri , Dhal Char
- Restoration of habitat in Khas land and creating wilderness
- Controlling chemical fertilizer use
- Strictly implementation of the existing law
- Re-excavation of degraded wetlands
- Banning hunting of birds and other wildlife species
- Creating alternative livelihood for fishermen communities
- Awareness raising activities
- Planned road construction
- Increasing plantation of indigenous species
- Drainage of stagnant water
- Research work before introducing invasive species
- Stopping tree felling
- Equitable harvesting
- Banning current net
- Restoring degraded water bodies

Ecosystem Management

The major ecosystems of the region are:

- Coastal plains
- Riverine plains
- Green moist ecosystem
- Agro ecosystems
- Haor-baor (Kumarkhali)

Issues

- River siltation
- Erosion due to wave action
- Construction of unplanned embankment
- Degradation of environment
- Breakdown of food chain
- Unplanned agricultural activities
- Reduced rice production
- Scarcity of land
- Natural calamities
- Construction of unplanned sluice gates
- Adverse impact of the Farakka Barrage

Actions

- Initiate massive plantation activities
- Conserve roadside wilderness
- Carry out dredging/afforestation
- Launch mass awareness programme
- Reexcavate canals to facilitate drainage sustainably, that is, should be continued for at least 10 years under "Kajer Binimoye Khaddyo" or Food for Work Programme

Legal, Regulatory and Policy Issues

Actions

- Eco-friendly planning
- Strict implementation of environment related laws

- Obtain patents following international rules
- Political leaders to allocate time for environmental awareness raising while addressing public meetings
- Proper implementation of planned activities without interference
- Participation of political leaders in policy formulations
- Implementation of environmental friendly activities through active involvement of the political leaders

Education, Training and Awareness Raising

Actions

- Incorporate biodiversity issues in the curricula of national education system
- Community level training
- Motivation through documentary films
- Introducing discussion on health and environment at mosque during Friday noon prayers
- Awareness raising through illustrated leaflets
- Improvement of slum
- Erection of permanent bill boards at different public points

Linkages and Institutional Issues

Actions

- Coordination and development profile at upazila level
- Integration of local people into local level planning
- Livestock and fisheries development under an umbrella
- Strengthening district and upzila level coordination
- Linking biodiversity conservation with local culture

Group C

The facilitator for group C was Dr. M. Khairul Alam, IUCNB and Mr. Sazedul Islam, IUCNB assisted him as repporteur. This group discussed the issues and actions for all the themes for the Barisal region. The list of participants is as follows.

Participants of Group C

1. Mr. M. Abdur Rahim, Professor, Barisal Govt. B M College
2. Mr. M. Golam Mostafa, Asst. Professor, Barisal Govt. Women's College
3. Ms. Shipra Samadder, Asst. Project Officer, Care Barisal, Jhalokathi
4. Mr. Bikash Indu Mandal, Upazila Agricultural Officer, District Livestock Officer, Jhalokathi

5. Mr. M. Nurul Islam, District Livestock Officer, Jhalokathi
6. Mr. Nurul Islam Talukder, Businessman, Jhalokathi
7. Mr. A Razzak Khan, Chairman, Magar UP
8. Dr. T. Ahmed, Private Practitioner, Jhalokathi
9. Mr. Syed Ahsanul Hoq, ADM, Barisal
10. Mr. Pear Mohammad, UNO Kawkhali, Pirojpur
11. Mr. Hemayetuddin Himu, District Representative MMC, Jhalokathi
12. Mr. M. Nazrul Islam, Head Teacher, Purbu Fuluher Govt. Primary School, Jhalokathi
13. Mr. Manjurul Hoque, Asst. Conservator of Forests, Barisal
14. Mr. M. Fazlul Hoque, Asst. Teacher, Rajupur Pilot High School, Jhalokathi
15. Mr. Dulal Saha, Journalist, Jhalokathi Press Club
16. Ms. Nasima Begum, UP Member, Jhalokathi
17. Mr. Zahir Uddin, ADM, Barguna
18. Mr. Shahabuddin Khan, Asst. Commissioner, Jhalokathi

Findings

Species Conservation

Issues

- Local varieties of rice are disappearing
- Medicinal plants such as kalomegh, sarpagandha, apang, talamgach, haritaki, boyra are disappearing
- High Yielding Varieties of rice are replacing the local varieties
- Due to environmental pollution, beneficial insects and animals are gradually declining
- Threatened species such as monitor lizard, vulture, porcupine, langur etc need to be protected
- A number of fish species are disappearing because of the use of insecticides
- Gene bank of critically endangered crops/grains

Actions

- Practice of Integrated Pest Management
- Ban on catching fish fry
- Conservation of local varieties of rice such as najirshail and kalijeera
- Ban on the plantation of exotic plant species

- Increased culture of endangered species of fish
- Conservation of critically endangered species of birds, monitor lizard, porcupine, snail, spider and leeches

Ecosystem Management

Issues

- Encroachment of rivers, canals, khals and beels
- Plantation of exotic species such as mahogany and teak are replacing the native species of medicinal plants and fruit trees in the homestead gardens
- Deforestation of natural forests
- Various species of fish are becoming extinct as a result of unplanned construction of embankments and culverts for irrigation projects
- Decline in the number of fruit bearing trees are leading to the extinction of many species of birds
- Decline in natural forests
- Lack of interest regarding tree plantation, preservation and protection
- Salinity intrusion in crop fields

Actions

- Allocation of land for plantation of medicinal plants in every union/thana
- Establishment of eco - park for conserving endangered plants and animals
- Establishment of fish sanctuary
- Conservation of natural forests
- Separate Directorate for management of parks and medicinal plants

Legal, Regulatory and Policy Issues

Issues

- Use of current jal, bendi jal, mosharir jal
- Illegal hunting of animals and birds
- No implementation of existing laws
- Improper use of environmental laws
- Indiscriminate catching of fish fry

Actions

- Total ban on the culture of invasive fish species
- Limiting use of insecticides

- Ban on fishing during the breeding season
- Total ban on the use of wood as fuel for burning bricks
- Punitive measures against the environmental offenders/polluters
- Enforcement of rules and regulations
- Proper implementation of Fisheries Sector Laws
- Regulation of fishing net manufacturing

Education, Training and Awareness Raising

Issues

- Lack of awareness regarding air and water pollution
- Degradation of the environment through pollution of air and water
- Unplanned use of chemical fertilizers
- Indiscriminate extraction of fish resources
- Promotion, conservation and use of local varieties of fruit bearing trees
- Lack of proper farming practices

Actions

- Education and alternative income generation for fishermen and their families
- Alternative income generation for hilsa fry harvesting fishermen and bird catchers
- Awareness programmes on conservation of fisheries for the mass
- Inclusion of biodiversity conservation in the educational curricula
- Training on environment for the students of school, college and madrasah
- Training of the local youth on biodiversity conservation
- Training for Imams for dissemination of awareness on biodiversity conservation
- Introducing awards for environmental conservation initiatives and successes
- Arrangement of workshops and follow up of issues related to conservation

Linkages and Institutional Issues

Issues

- Burning of wood in brick fields
- Unplanned installation of houses, sawmills, bidi factories
- Replacement of indigenous tree species by exotic ones
- Alternative income generation sources for environment-dependent livelihoods

- Management of critically endangered species
- Water logging and pollution due to land filling for agriculture and households
- Unplanned construction of roads, highways, bridges and culverts

Actions

- Project on scientific fish processing
- Proper use of roadside canals
- Appropriation of compensation from the developed nations for environmental pollution
- Development of eco - village and environment friendly housing structures
- Planned construction of houses

List of Participants

1. Mr. M. Abdur Rahim, Professor, Barisal Govt. B M College
2. Mr. M. Golam Mostafa, Asst. Professor, Barisal Govt. Women's College
3. Ms. Shipra Samadder, Asst. Project Officer, Care Barisal, Jhalokathi
4. Mr. Bikash Indu Mandal, Upazila Agricultural Officer, District Livestock Officer, Jhalokathi
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16. Ms. Nasima Begum, UP Member, Jhalokathi
17. Mr. Zahir Uddin, ADM, Barguna
18. Mr. Shahabuddin Khan, Asst. Commissioner, Jhalokathi
19. Mr. M. Azmal Hossain, DC, Pirojpur
20. Mr. M. Hazrat Ali, ADC, Jhalokathi
21. Mr. M. Rustom Ali Khan, DFO, Patuakhali
22. Mr. M. Delwar Hossain, Advocate, Jhalokathi
23. Ms. Kanak Prova Barall, Jhalokathi
24. Mr. M. Rafiul Islam, Proprietor, Jhalokathi
25. Dr. A K M Anisul Haque, Civil Surgeon, Jhalokathi
26. Mr. Talukder A Kabir, Chairman, Jhalokathi
27. Mr. M. Nurul Islam Chowdhury, Principal, Barguna Govt. College
28. Dr. M. A Rashid Howlader, ULO, Jhalokathi
29. Mr. Shamsul Islam Chand, Journalist, Jhalokathi
30. Mr. Joydev K Biswas, Deputy Director Fisheries, Jhalokathi
31. Mr. M. Rafiqul Islam, Asst. Professor, Barisal B M College

32. Dr. Mazibar Rahman Khan, Associate Professor, Patuakhali Govt. College
33. Mr. M. Basir Uddin, Deputy Director Agricultural Extension, Jhalokathi
34. Mr. M. Shahalam Khalifa, Director JDS, Jhalokathi
35. Mr. Abdul Mannan, Head Teacher, Kathalia Model, Jhalokathi
36. Mr. M. Shokor Ali, BRAC, Jhalokathi
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40. Mr. A K M. Monzurul Huq, Additional Commissioner, Barisal
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42. Mr. M. Quamruzzaman Chowdhury, ADC, Bhola
43. Dr. M. Anwar Hossain, District Fisheries Officer, Pirojpur
44. Mr. M. Haider Hossain, Advocate, Jhalokathi
45. Mr. Sudhir Ranjan Shil, District Training Officer, Jhalokathi
46. Mr. M. Feroj Ahmed, Asst. Teacher, N Merchant High School, Jhalokathi
47. Mr. M. Rafiqul Islam, Research Officer, Plantation Trial Unit, BFRI Barisal
48. Mr. M. Sohrab Hossain, President Saw Mill Owner's Association, Jhalokathi
49. Professor Mr. M A Khaleque, Principal, Barisal Govt. Women's College
50. Mr. Rafiqul Islam, Chairman, Jhalokathi
51. Mr. Abdul Gafur, Assistant Professor, Bhola Govt. College
52. Mr. David Shalil Bala, Regional Coordinator, Annesha Foundation, Jhalokathi
53. Ms. Momtaz Parvin, Head Teacher, Rayapur Govt. Primary School, Jhalokathi
54. Ms. Nasima Begum, Head Teacher, Shahi Model Government Primary School, Jhalokathi
55. Mr. Zahid Hossain Munshi, AC Land, Jhalokathi
56. Mr. Md. Abdur Rashid, President, Jhalokathi Press Club
57. Mr. Abu Hanif Chowdhury, Credit Coordinator, Hilful Fuzul Sangshta, Barisal
58. Mr. Md. Ehsanul Haque, DC, Jhalokathi

Regional Workshop on the National Biodiversity Strategy and Action Plan, Dhaka Division

Held in Tangail
23 July 2003

The NBSAP Regional Workshop assemblies for Dhaka Division were held in Tangail on the 23rd of July 2003 at the JRL Elenga Resort, Kalihati, Tangail. The Chief Guest for the Inaugural was Mr. Shahjahan Siraj, Hon'ble Minister, Ministry of Environment and Forests. The Special Guests of the session were Mr. S M Lutfullah, Joint Secretary, Ministry of Environemnt and Forests and Mr. A H M Abul Qasem, Divisional Commissioner, Dhaka. Mr. Abul Hakim Mandol, Deputy Commissioner, Tangail District chaired the session. The technical session followed the Inaugural. The number of participants in the Technical Session was about 40, who worked in two working groups, namely Group A and Group B. The participants of the two working groups identified the issues and the actions required for biodiversity conservation in the Dhaka Division. Following is the programme of the workshop.

Programme

9:00am - 10:00am	Registration
Inaugural Session (10:00am - 11:00am)	
10:00am - 10:05am	Recitation from the Holy Quran
10:05am - 10:10am	Welcome address by Mr. Monowar Islam Deputy Secretary, Ministry of Environment and Forests
10:10am - 10:25am	National Biodiversity Strategy and Action Plan by Dr. Ainun Nishat, Country Representative, IUCN - Bangladesh Country Office
10:25am - 10:30am	Speech by the Special Guest, Mr. S. M. Lutfullah Joint Secretary, Ministry of Environment and Forests
10:30am - 10:35am	Speech by the Special Guest, Mr. A H M Abul Qasem Divisional Commissioner, Dhaka Division
10:35am - 10:50am	Speech by the Chief Guest, Mr. Shajahan Siraj Hon'ble Minister for Environment and Forests
10:50am - 10:55am	Speech by the Chairperson, Mr. Md. Abdul Hakim Mondal Deputy Commisioner, Tangail District
10:55am - 11:00am	Vote of thanks by Dr. M. Khairul Alam Project Manager, IUCN Bangladesh Country Office
11:00am - 11:20am	Tea Break
Technical Session (10:30am - 5:30pm)	
11:20am-11: 30am	Workshop Methodology and Objectives
11: 30am -1: 30pm	Group Discussion
1:30pm- 2:15pm	Lunch and Prayer Break
2:15pm- 4:15pm	Group Discussion
4:15pm- 4:30pm	Tea break
4:30pm-5: 30pm	Plenary Presentation

THE INAUGURAL

Welcome Address

Monowar Islam
National Project Director
Biodiversity Strategic Action Plan Project and
Deputy Secretary, Ministry of Environment and Forests

Respected Chairperson Mr. Abul Hakim Mondal, Deputy Commissioner, Tangail District; Hon'ble Chief Guest Mr. Shahjahan Siraj, Hon'ble Minister, Ministry of Environment and Forests; Special Guests Mr. S M Lutfullah, Joint Secretary, Ministry of Environment and Forests and Mr. A H M Abul Qasem, Divisional Commissioner, Dhaka, Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen...

Assalamu Alaikum...

It is an honour for me to be able to welcome you all to the NBSAP regional workshop being held here in Tangail. This workshop is of special significance, because of the presence of indigenous communities and the Madhupur Sal forests in this region. The NBSAP aims at conserving the plants and animals that are important for sustaining the ecological balance in our country.

The NBSAP follows the philosophy of participation through adoption of both 'top-down' and 'bottom-up' development approaches in the formulation and implementation of the envisaged activities. Today's regional workshop has gathered participants from all walks of life under the aegis of one motto, which is conservation of biodiversity. I wish you suceess in the discussions and request you all to participate actively.

Allah Hafez
Bangladesh Zindabad

Speech of the Special Guest

A H M Abul Qasem

Divisional Commissioner, Dhaka

Respected Chairperson Mr. Abul Hakim Mondal, Deputy Commissioner, Tangail; Hon'ble Chief Guest Mr. Shahjahan Siraj, Hon'ble Minister, Ministry of Environment and Forests; Special Guest Mr. S M Lutfullah, Joint Secretary, Ministry of Environment and Forests; Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen...

Assalamu Alaikum...

I am glad to be present at the regional workshop for Dhaka Division, held in Tangail on the National Biodiversity Strategy and Action Plan being implemented by the Ministry of Environment and Forests. Biodiversity conservation is one of the primordial components of sustainable development, because of the multifaceted linkages between nature and livelihoods. Unscientific harvest and indiscriminate use of biodiversity resources have led numerous species to extinction. A great number of species are also critically endangered or are on the verge of extinction. The lack of awareness and improper valuation of nature in development planning are possibly the major causes of biodiversity loss.

Ladies and Gentlemen

You are aware that the Convention on Biological Diversity (CBD) was one of the outcomes of the Earth Summit held in Rio de Janeiro in 1992. Bangladesh as a ratifying party to that Convention is morally obliged to comply with the CBD clauses. A National Biodiversity Strategy and Action Plan for the country is a prerequisite of the CBD implementation and it is also a national commitment. The establishments of inter - departmental linkages and mainstreaming biodiversity conservation and sustainable development principles in all development policy and planning is the other major obligation that the CBD ratifying parties must live up to.

The Government of Bangladesh through its Ministry of Environment and Forests has initiated the Biodiversity Strategy and Action Plan project activities to ensure biodiversity conservation through people's participation along with attainment of sustainable development. IUCN Bangladesh Country

Office as the implementing agency aims to develop a holistic strategy and action plan appropriate for Bangladesh.

To ensure the participation of the local people, regional workshops are being held in the six divisions of Bangladesh. The regional workshop being held in Tangail today is to represent the Dhaka division. I have come to know that the strategy and action plan document is being formulated by recording the concerns of the local people and ensuring people's ownership. The conviction that people's participation is a prerequisite for sustainable development is a widely accepted fact. IUCN Bangladesh's participatory approach to this project is thus an opportune and praiseworthy venture.

Ladies and Gentlemen...

The objective of today's workshop is to identify the current status, the causes and the threats to biodiversity extinction and the appropriate strategies to combat this hazard. I believe that through group discussions and debates, today's workshop will be a step forward in determining the causes of species depletion; the strategies to counter the declining trends; modes of capacity building and training; stricter implementation of biodiversity related laws and widespread awareness dissemination among all levels of people.

I thank all of you for your overall support and cooperation.

Allah Hafez
Bangladesh Zindabad

Speech of the Special Guest

S M Lutfullah
Joint Secretary
Ministry of Environment and Forests

Mr. Abul Hakim Mondal, Respected Chairperson and Deputy Commissioner, Tangail; Hon'ble Chief Guest Mr. Shahjahan Siraj, Hon'ble Minister, Ministry of Environment and Forests; Special Guest A H M Abul Qasem, Divisional Commissioner, Dhaka;

Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen...

Assalamu Alaikum

I am glad to be present at the regional workshop of the 'National Biodiversity Strategy and Action Plan' Project being implemented by the Ministry of Environment and Forests. Sustainable development and biodiversity conservation rule the current development trends in Bangladesh, as the extinction of various species is already threatening the core of our existence. Bangladesh in the recent past was endowed with natural beauty and a wealth of biodiversity resources. Due to anthropogenic interventions, biodiversity is being eroded or facing the threats of extinction. We have already lost the swamp deer, rhinoceros, nilgai, peacock, gharial, king vulture and crane amongst the diverse wildlife our country used to boast. Various plant species are also extinct, along with the dense swamp forests in the haors and baors. According to IUCN Bangladesh statistics, 54 species of fish, 8 species of amphibians, 58 species of reptiles, 41 species of birds and 40 species of mammals are critically endangered. This is the time to act - to save the remaining resources from disappearing.

Ladies and Gentlemen...

You are aware that the Convention on Biological Diversity (CBD) was the outcome of the Earth Summit held in 1992. To live up to the commitments as a ratifying party to the CBD, Bangladesh is obliged to implement the National Biodiversity Strategy and Action Plan for the country.

The Ministry of Environment and Forests has undertaken the Biodiversity Strategy and Action Plan

Project with the aim of conserving biodiversity and ensuring sustainable management through people's partnership. IUCN Bangladesh is implementing the project for formulating a comprehensive strategy and action plan document. Many countries of the world having completed the strategy and action plan are already implementing the same. Although Bangladesh's start has been a little delayed, yet we have the advantage of learning from the experiences of other countries.

Ladies and Gentlemen...

The rationale behind today's regional workshop stems from the need of adopting the 'participatory approach' to formulate the strategy and action plan document. The objective of this workshop is to identify the current status and threats to biodiversity in this region, for ensuring an action plan worth implementing. I believe that through the group discussions today, you will highlight the ways of combating biodiversity loss, capacity building, widespread use of appropriate biodiversity laws and awareness raising amongst all sections of the society.

I thank all of you for your overall support in organizing and attending this workshop.

Allah Hafez
Bangladesh Zindabad

Speech of the Chief Guest

Shahjahan Siraj
Honorable Minister
Ministry of Environment and Forests

Hon'ble Chairperson Mr. Abul Hakim Mondal, Deputy Commissioner, Tangail District; Special Guests Mr. S M Lutfullah, Joint Secretary, Ministry of Environemnt and Forests and Mr. A H M Abul Qasem, Divisional Commissioner; Dhaka, Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen...

Asalamu Alaikum...

I am truly glad to be at the regional workshop on National Biodiversity Strategy and Action Plan for the Dhaka Division. I welcome this timely initiative by the Ministry of Environment and Forests, Government of Bangladesh. To a layman, biodiversity means all the plants and animals existing in the terrestrial, aquatic and arboreal environments. Bangladesh is endowed with diversity in plants, animals and ecosystems in the floodplains, coastal islands, evergreen hill forests, mangroves and village homesteads. For our lives and livelihoods, we are all dependent on biodiversity. The 'sustainable development' theme of today's workshop is the only way forward, for our sustenance and biodiversity conservation.

Ladies and Gentlemen...

Bangladesh ratified the Convention on Biological Diversity (CBD) in the year 1992 and subsequently signed the same. As a party to the Convention, Bangladesh is obliged to develop the National Biodiversity Strategy and Action Plan (NBSAP). The Government of Bangladesh has since initiated a number of pro - environment activities in the light of its commitments. The Ministry of Environment and Forests as the implementing agency of the NBSAP project subscribes to the philosophy of local 'people's participation' in carrying out this project.

Today's workshop is a materialization of the participatory approach to sustainable development planning. To guarantee the stake of the grassroots, the Ministry of Environment and Forest and IUCN Bangladesh

are organizing the BSAP workshops in six divisions of the country. I have been informed that the regional workshop for Barisal was held in Jhalokathi and the workshop for Rajshahi is to be held in Thakurgaon. The decision to organize the regional workshops outside the principal cities depicts the Government's will to effect participatory planning in development.

The participants in today's workshop are a heterogeneous mix of Union Parishad representatives, teachers, imams of the mosques, researchers, journalists, lawyers, and physicians, field level government employees and NGO representatives. I strongly believe that all of you will participate actively and further enrich the NBSAP document, drawing from your experiences in the respective fields of development. At the end of today's workshop, I expect a realistic model for the sustainable management of charland, Sal forests, village homesteads, agro - forestry and other ecosystems that nurture and support the biodiversity in this region.

Ladies and Gentlemen...

I am from Tangail and I can still recall the rich biodiversity of this area in the not-too-distant past. This district used to boast the floodplains, the river Jamuna, beels and the Madhupur Sal forests. This area was also renowned as the habitat of indigenous tribes and their cultural diversity. Madhupur was also the habitat for peacocks that remain as mere lores today.

As you all know, we have been traditionally dependent on medicinal plants for curing most common illnesses. Most of the developed countries are these days becoming more and more interested in medicinal plants and herbs and there are considerable opportunities for us of exporting the medicinal plants and their products abroad. The Hon'ble Prime Minister Begum Khaleda Zia has quite opportunely stressed upon the plantation of fruit and timber species, along with the medicinal plants for sustainable development and livelihood enhancement. The Government of Bangladesh follows the principle of participatory planning and management, which requires the active participation of the local people.

Ladies and Gentlemen...

I must convey my gratitude to the Deputy Commissioner, Tangail and the District Administration for organizing this event, in spite of their busy schedules. I wish the best of luck to the Ministry of Environment and Forests and IUCN Bangladesh Country Office in their venture and thank all the participants for their support.

Allah Hafez
Bangladesh Zindabad

Speech of the Chairperson
Md. Abdul Hakim Mondal
Deputy Commissioner, Tangail

Hon'ble Chief Guest Mr. Shahjahan Siraj, Hon'ble Minister, Ministry of Environment and Forests; Special Guests Mr. S M Lutfullah, Joint Secretary, Ministry of Environment and Forests and Mr. A H M Abul Qasem, Divisional Commissioner, Dhaka; Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen....

Assalamu Alaikum....

I am glad that the regional workshop of the National Biodiversity Strategy and Action Plan for Dhaka Division is being held in Tangail. On behalf of the Tangail District Administration, I would like to thank the Divisional Commissioner, the Ministry of Environment and Forests and IUCN Bangladesh Country Office for affording us the opportunity to organize this workshop.

The chief guest, special guests and IUCN Bangladesh Country Office Representative have enlightened you about the significance of biodiversity in livelihood sustenance and the government's initiatives for safeguarding the natural wealth of the nation. The culture and heritage of the people of Tangail have remained intricately related to biodiversity and hence need special attention.

The major cause of biodiversity loss is indiscriminate extraction of resources and faulty development planning that does not take into account the important role of biodiversity. We are directly or indirectly responsible for the currently perceived degradation and hence our concerted active participation in reviving the lost glories.

The government has adopted the 'participatory approach' in implementing this project and aspires to create a realistic strategy and action plan with the local people's ownership. Wide ranges of professionals have gathered in today's workshop with the aim of inter - relating various development and biodiversity stakeholder groups. The turnover could have been more broad-based, but due to time constraints, representatives of some strata might have been excluded. I sincerely apologize for any such oversights.

I am hopeful that through the group discussions, you will provide meaningful direction to this biodiversity conservation and sustainable development venture. I thank the organizers of this workshop on behalf of the Tangail District Administration and I wish you success in your efforts.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
M. Khairul Alam
IUCN Bangladesh Country Office

Respected Chairperson Mr. Abul Hakim Mondal, Deputy Commissioner, Tangail District; Hon'ble Chief Guest Mr. Shahjahan Siraj, Honorable Minister, Ministry of Environment and Forests; Special Guests Mr. S M Lutfullah, Joint Secretary, Ministry of Environemnt and Forests and Mr. A H M Abul Qasem, Divisional Commissioner, Dhaka; Mr. Monowar Islam, National Project Director and Deputy Secretary, Ministry of Environemnt and Forests; Dr. Ainun Nishat, Country Representative, IUCN Bangladesh Country Office, Ladies and Gentlemen...

Assalamu Alaikum...

On behalf of IUCN Bangaldesh, I must thank the participants for their time and efforts into the NBSAP formulation process. Biodiversity is crucial for sustaining life on earth, in addition to providing livelihoods to the majority of population for a developing country such as Bangladesh. Your perceptions articulated today will be recorded as the concerns of the Tangail region and will provide the guidelines for development plans in this region. I thank all of you again.

I must also express my gratitude to GEF and UNDP for their financial suppport and the Ministry of Environment and Forests for undertaking this project. Special thanks are due to the District Administration for organizing and supporting this venture in Tangail. I wish you all the very best.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The participants were divided into two working groups, namely Group A and Group B in the technical session of the workshop. In the group discussions, the participants identified the issues and suggested the actions needed for biodiversity conservation, especially in the Dhaka division. Their discourses related to the five earmarked themes of the NBSAP viz:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness Raising
- Linkages and Institutional Issues

GROUP A

Dr. Ainun Nishat, IUCNB and Ms. Remeen Firoz, IUCNB were the facilitator and rapporteur respectively for the working group A. The list of participants is as follows.

Participants of Group A

1. Mr. Md. Ilias, ADC (General)
2. Mr. Mahbub Alam Talukder, SAC, Tangail
3. Mr. Rostam Ali, Upazila Agriculture Officer, Kalihati, Tangail
4. Dr. Md. Abdul Hamid, District Livestock Officer, Tangail
5. Mr. Kajol Talukder, ACF, Tangail (South), Tangail Forest Division, Tangail
6. Dr. Hassan Imam, Unani Medical Officer, Tangail Sadar Hospital, Tangail
7. Moulana Mr. Abul Hossain, President, Tangail Imam Samity, Korotia Zame, Masjid, Tangail
8. Mr. Md. Shafi Khan, Chairman, Ellenga Union Parishad, Kalihati, Tangail
9. Mrs. Maya Begum, Member, Ellenga Union Parishad, Ellenga, Kalihati, Tangail
10. Mr. Babul Norek, Lecturer, Madhupur
11. Mr. Jalal Ahmed, Deputy Coordinator, BELA Tangail
12. Mr. Harun-Ar-Rashid, ED, GDS, Tangail
13. Mrs. Shamsunnahar Siddiqe, Ellenga Primary School, Kalihati, Tangail
14. Mr. Tapan Kumar Sarker, Assistant Teacher, B. B. Girls' School, Tangail
15. Mr. Abdul Bari, Asst. Professor, Ibrahim Kha College, Bhuapur, Tangail
16. Dr. Mohammad Abu Taher, Asstt. Professor, Department of Zoology, Govt. Saadat College, Tangail
17. Mr. Jafar Ahmed, Editor, Daily Majlumer Kantha, Tangail

18. Mr. Abdur Razzak, Siuli Nursery and Chairman, Nursery Owners' Association
19. Mr. Abul Kalam Mastafa Labu, Secretary, Babusaiyi okkayo Jot, Tangail
20. Principal, Mr. Lutfur Rahman Matin, Mahila College

The group discussed all the five themes, with special emphasis on the issues of ecosystems and the role of awareness in biodiversity conservation.

Findings

Ecosystem Management

Issues

- Deforestation
- Encroachment of wetlands
- Climate change
- Introduction of exotic fish species
- Introduction of cash crops (ginger, pineapple)
- Unplanned embankments
- Saw mills and brick fields

Actions

Through brainstorming, the group identified the following actions for conservation of ecosystem diversity:

- Ban on wildlife hunting
- Awareness raising through religious sermons
- Sustainable harvest
- Planned afforestation with indigenous species
- Increasing the number of Protected Areas
- Re - excavation and dredging of water ways
- Ban on fish catch in the egg - laying season
- Ban on the manufacture, import and use of current nets
- Ecosystem - wise planning
- Implementation of environmental laws
- Establishment of botanical gardens
- Awareness raising
- Legal measures to stop the dewatering of ponds

- Extensive research on indigenous species
- Creation of an information cell
- Incentives for best management practices
- Use of alternative fuel/energy (Biogas)
- Use of block bricks

Legal, Regulatory and Policy Issues

Under this thematic area, the group identified the following actions:

Actions

- Formulation and strict implementation of environment laws
- Proper implementation of forest laws
- Effective implementation of existing laws and regulations
- Penalty for non - compliance, both at individual and collective level

Education, Training and Awareness Raising Issues

- Lack of awareness
- No biodiversity components in the primary, secondary and madrasa level curricula
- Insufficient capacity of the local institutions

Actions

- Exotic species of fruits, fish and trees should be prohibited from being imported to Bangladesh
- Short lecture on environmental themes mandatory at all seminars/conferences
- Regular broadcasts in television, radio and newspapers
- Imams as mentors to disseminate biodiversity and environment related information through their khutba
- Documentary shows at haats and bazaars
- Posters and leaflets to be distributed focusing on themes of documentaries aired
- Creation of specific biodiversity committees
- Workshops and discussions at the grassroots/Union level
- Awareness campaigns in schools

Linkages and Institutional Issues

Issues

- Lack of coordination

Actions

- Establish monitoring cell/committee
- Develop institutional linkages

Group B

Dr. M. Khairul Alam, IUCNB facilitated group B deliberations and Mr. A S Moniruzzaman Khan was the rapporteur. This group listed the names of the endangered species of plants, animals and fish in the Tangail region. Group B participants discussed the issues and actions under all the five themes and provided meaningful and positive direction to the NBSAP process. The list of participants is as follows.

Participants of Group B

1. Mr. Habibur Rahman, UNO, Kalihati, Tangail
2. Mr. Fazlul Hakim, Deputy Director, Department of Agriculture, Tangail
3. Mr. A K M Kaicobad, District Fisheries Officer, Tangail
4. Mr. Md. Abu Hanif Patwary, Divisional Forest Officer, Tangail
5. Advocate Mr. Bazlur Rashid, I. D. G. P., Tangail
6. Dr. Parves Amin, Asst. Registrar (Medicine), Tangail Sadar Hospital, Tangail
7. Moulana Mr. Shafiqul Islam, Secretary, Tangail Imam Samity, Boro Bashalia Zame, Masjid, Tangail
8. Mr. Zakir Hussain, Chairman, Aourankhula Union Parishad, Modhupur, Tangail
9. Mrs. Monowara Begum, C/O Mr. Mubarak Ali, Vill: Hatibari, Mogra Union, Parishad
10. Mrs. Maria Chiram, Headmistress, Carposchristy High School, Jolchatra Madhupur
11. Mr. Abdul Hamid Bhuiya, ED, SSS, Tangail, Mrs. Jesmin Sultana, Rasulpur Primary School, Tangail
12. Mr. Haider Habib, Asst. Head Master, Ellenga High School, Kalihati, Tangail
13. Principal Mr. Mustafizur Rahman, Principal, Kalihati College, Kalihati, Tangail
14. Mr. Mirza Md. Mohiuddin, Department of Zoology, Ibrahim Kha College, Bhuapur, Tangail
15. Mr. Md. Shafiqul Islam, Lecturer, Department of Botany, Govt. Saadat College, Tangail
16. Mr. Mahmud Kamal, District Reporter, Daily Manob Jamin
17. Mr. Abdur Rahim Haji, Ashekpur, Tangail
18. Mr. Mujiber Rahman, Brickfield Owner, Basail, Tangail
19. Principal, Mr. Ataur Rahman, Ellenga College

Findings

List of biodiversity species being lost:

- Shimul tree
- Bot tree
- Sal tree
- Tomal tree
- Arjun tree
- Pathat Chuna tree
- Chaitan tree
- Chela fish
- Pabda fish
- Nodda fish
- Bajila fish
- Kholshe fish
- Mini fish
- Bheda fish
- Baila fish
- Deshi Puti fish
- Gulsha fish
- Kalabaush fish
- Rajshakun bird
- Bajpakhi bird
- Peacock
- Hanuman
- Squirrel
- Bagdasha
- Ghugu
- Dahuk
- Kora
- Horikel
- Shat Bhayla
- Kingfisher
- Mynah
- Duck (Balihash)

Species Conservation

Issues

- Decline in the Gharial and Shushuk population
- Indigenous variety of rice called Kalbachum is critically endangered
- Flood resilient local variety of rice called Digha is nearly extinct
- Local extinction of flowers used for oil extraction
- Indigenous fruit and plant varieties on the decline
- Medicinal plants and herbs are hardly planted or used

Actions

- Complete inventory of extinct and endangered species of flora and fauna, followed by conservation activities
- Capacity enhancement of institutions researching into species diversity
- Initiatives at the local level
- Ban on fish catch during the egg - laying season

- Ecosystem approach to conservation for protecting 'flagship' species
- Proper initiatives for reviving waterways and wetlands
- Plantation of environment friendly plant species
- Activities geared towards the revival and conservation of the Madhupur (Sal) Forest
- Minimal intervention in the natural habitat of animals
- Ban the use of pesticides
- Incentives to fishermen for harvesting endangered native fish species
- Creation of sanctuaries for critically endangered animals
- Planned and eco - friendly construction of roads and culverts
- Increase use of surface water as opposed to ground water extraction
- Establishment of natural history museum
- Extensive plantation of Neem plants
- Ensuring 'fish pass' through the Pungli river at Kalihati Sadar
- Appropriate use of land

Ecosystem Management

Issues

- Filling up of rivers and rivulets, leading to reduction in wetlands area
- Decline in the forested areas
- Shrinking pasture lands
- Natural flow of water disrupted
- Encroachment of wetlands for construction of markets
- Decline in the extraction of ground water (is it a critical issue?)
- Felling of immature trees from the Government's afforestation projects
- Loss of forests in the Jamuna floodplain due to river bank erosion
- Use of chemical preservatives for conserving fruits

Actions

- Establishment of sanctuaries for the conservation of plants and animals
- Restoring the habitat for flora and fauna, including the plantation of trees as provision for various species of birds

Legal, Regulatory and Policy Issues

Issues

- Little or no implementation of existing laws
- Lack of awareness among the people regarding the Environment Acts and Rules
- Lack of local participation in the planning and implementation of projects
- Support of the governmental agencies minimal
- Weak linkages between the non - governmental organizations
- Political interference in the implementation of laws
- Illegal felling of trees in school compounds and along feeder roads

Actions

- Environmental Impact Assessment should precede all infrastructure development initiatives
- Strategies must be designed considering their long - term impacts
- Existing laws need updating
- To protect the Madhupur Forest, strict measures against illegal loggers must be taken, sound legal grounding of the Forest Department ensured and exotic tree species have to be boycotted
- Necessary measures have to be taken to prevent use of chemical fertilizers in the production of pineapple and banana
- The felling of Anai Gota and Jeera Gota have to be prohibited in the Madhupur forest
- Laws restricting the extraction of medicinal plants have to be enforced
- For endangered species, wood harvesting to require permission from the Local Government

Education, Training and Awareness Raising

Issues

- Biodiversity component missing in primary and secondary school curricula
- Lack of awareness and training on environmental issues
- Knowledge of existing environmental laws limited to scanty receptors
- Various usage of trees mostly unknown
- Ignorance of the medicinal plant properties
- Lack of awareness about the impacts of environmental pollution
- Lack of exclusive, dedicated and adequate space in the NBSAP for water related issues

Actions

- Programmes focusing on environmental matters to be aired via TV and radio
- Upazila based environmental education programmes
- Environmental component to be incorporated into the syllabi of schools, colleges and madrasahs
- Highlighting the significance of plants and animals in religious discussions and assemblies
- Training of local govt Chairmen, Members and Imams on biodiversity issues
- Formation of area - wise youth clubs for environmental conservation
- Extensive coverage of environmental agenda in the electronic and print media

Linkages and Institutional Issues

Issues

- Unplanned construction of roads and houses
- Lack of coordination among the inter - governmental agencies
- No synergy between Ministries, schools, colleges, universities and NGOs

Actions

- Coordinated interaction between governmental agencies and departments

List of Participants

1. Mr. Md. Ilias, ADC (General)
2. Mr. Mahbub Alam Talukder, SAC, Tangail
3. Mr. Rostam Ali, Upazila Agriculture Officer, Kalihati, Tangail
4. Dr. Md. Abdul Hamid, District Livestock Officer, Tangail
5. Mr. Kajol Talukder, ACF, Tangail (South), Tangail Forest Division, Tangail
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10. Mr. Babul Norek, Lecturer, Madhupur
11. Mr. Jalal Ahmed, Deputy Coordinator, BELA Tangail
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15. Mr. Abdul Bari, Asst. Professor, Ibrahim Kha College, Bhuapur, Tangail
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28. Mr. Zakir Hussain, Chairman, Aourankhula Union Parishad, Modhupur, Tangail
29. Mrs. Monowara Begum, C/O Mr. Mubarak Ali, Village Hatibari, Mogra Union, Parishad
30. Mrs. Maria Chiram, Headmistress, Carposchristy High School, Jolchatra Madhupur
31. Mr. Abdul Hamid Bhuiya, ED, SSS, Tangail, Mrs. Jesmin Sultana, Rasulpur Primary School, Tangail

32. Mr. Haider Habib, Asst. Head Master, Ellenga High School, Kalihati, Tangail
33. Principal Mr. Mustafizur Rahman, Principal, Kalihati College, Kalihati, Tangail
34. Mr. Mirza Md. Mohiuddin, Department of Zoology, Ibrahim Kha College, Bhuapur, Tangail
35. Mr. Md. Shafiqul Islam, Lecturer, Department of Botany, Govt. Saadat College, Tangail
36. Mr. Mahmud Kamal, District Reporter, Daily Manob Jamin
37. Mr. Abdur Rahim Haji, Ashekpur, Tangail
38. Mr. Mujiber Rahman, Brickfield Owner, Basail, Tangail
39. Principal, Mr. Ataur Rahman, Ellenga College

The Regional Workshop on Biodiversity Strategy and Action Plan, Rajshahi Division

Held in Thakurgaon
02 August 2003

The regional workshop for Rajhasi Division was held in Thakurgaon on 02 August 2003 at the Circuit House, Thakurgaon. The Chief Guest at the event was Mr. Mirza Fakhrul Islam Alamgir, Hon'ble Minister of State, Ministry of Agriculture. Present among the special guests were Mr. Sabihuddin Ahmed, Secretary, Ministry of Environment and Forests; Syed Taveer Hussasin, Secretary, Ministry of Textiles and Mr. Mian Moshtaque Ahmed, Divisional Commissioner, Rajshahi Division. The chairperson of the Inaugural was Mr. Maksumul Hakim Chowdhury, Deputy Commissioner, Thakurgaon. A total of 55 participants were present at the inaugural session. In the technical session, the participants were grouped into two working groups, A and B. The participants of the two working groups provided a comprehensive list of the critically endangered species of Rajshahi region and identified the issues and the actions required for biodiversity conservation of the region. The workshop programme is as follows.

Programme

8:00am - 9:00am Registration

Inaugural Session (9:00am - 10:30am)

9:00am - 9:05am	Recitation from the Holy Quran
9:05am - 9:10am	Welcome address By Mr. Monowar Islam Deputy Secretary, Ministry of Environment and Forests
9:10am - 9:20am	Introduction to the workshop by Dr. Ainun Nishat Country Representative, IUCN - Bangladesh Country Office
9:20am - 9:25am	Speech by the Special Guest, Mr. Miah Mushtaque Ahmed Divisional Commissioner, Rajshahi Division
9:25am - 9:30am	Speech by the Special Guest, Syed Taveer Hussain Secretary, Ministry of Textiles
9:30am - 9:35am	Speech by the Special Guest, Mr. Sabihuddin Ahmed Secretary, Ministry of Environment and Forests
9:35am - 9:45am	Speech by the Chief Guest, Mr. Mirza Fakhrul Islam Alamgir Hon'ble Minister of State, Ministry of Agriculture
9:45am - 9:55am	Speech by the Chairperson, Mr. Maksumul Hakim Chaudhury Deputy Commisioner, Thakurgaon District
9:55am - 10:00am	Vote of thanks by Dr. M. Khairul Alam Project Manager, IUCN Bangladesh Country Office

10:00am - 10:30am Tea Break

Technical Session (10:30am - 5:30pm)

10:30am-11: 00am	Workshop methodology and objectives
11: 00am -1: 30pm	Group discussion

1:30pm- 2:15pm	Lunch and prayer break
2:15pm- 4:15pm	Group discussion
4:15pm- 4:30pm	Tea break
4:30pm-5: 30pm	Plenary presentation

THE INAUGURAL

Welcome Address by
Monowar Islam
National Project Director
Biodiversity Strategic Action Project and Deputy Secretary
Ministry of Environment and Forests

Hon'ble Chief Guest, Special Guests, Chairperson, IUCN Bangladesh Country Representative and respected Ladies and Gentlemen...

Assalamu Alaikum

I am glad to welcome you all to the fifth regional workshop on National Biodivesrity Strategy and Action Plan for Rajshahi Division. The fact that the workshop is being held in Thakurgaon, representing the Rajshahi division indicates the commitment of the Government to follow a participatory approach in development planning. Through your consultation meetings today, we hope that the issues and actions unique to the Rajshahi region will emerge. Local level consultations are beneficial for all projects and the Ministry of Environment and Forests has accepted this fact.

Ladies and Gentlemen...

It gives me great joy to see representatives from all walks of life gathered here today. I wish you all the best in your endevours and also success in today's workshop.

Allah Hafez
Bangladesh Zindabad

Speech by the Special Guest
Mian Mushtaque Ahmed
Divisional Commissioner, Rajshahi Division

Respected Chairperson Mr. Maksumul Hakim Chaudhury, Deputy Commissioner, Thakurgaon District; Hon'ble Chief Guest Mr. Mirza Fakhrul Islam Alamgir, Hon'ble Minister of State, Ministry of Agriculture, Special Guests Mr. Sabihuddin Ahmed, Secretary, Ministry of Environment and Forests, Syed Tanveer Hussain, Secretary, Ministry of Textile; IUCN Bangladesh Country Representative Dr. Ainun Nishat and Ladies and Gentlemen...

Assalamu Alaikum...

I am honoured to be present at this regional workshop on National Biodiversity Strategy and Action Plan. Sustainable development encompasses biodiversity conservation, as it is crucial for human lives and livelihoods. Over extraction and overuse of biodiversity resources have seriously threatened the survival of species and even led some to extinction. The crux of the problem can be identified as the general lack of awareness and consideration of the biodiversity issues in development plans.

Ladies and Gentlemen...

You must be aware that the Convention on Biological Diversity was an outcome of the Earth Summit held in Rio de Janeiro in 1992. As a ratifying party to the Convention, Bangladesh is morally obliged to formulate the National Biodiversity Strategy and Action Plan. Biodiversity conservation, sustainable use of resources and establishment of interdepartmental coordination are the goals of the CBD that Bangladesh must adhere to.

In light of the CBD objectives, the Ministry of Environment and Forests and IUCN Bangladesh Country Office are implementing the BSAP Project. Through the successful completion of this project, a holistic strategy and action plan for Bangladesh will be formulated for biodiversity conservation and sustainable development in Bangladesh.

To ensure people's participation, six regional workshops are being held in six divisions of the country, the

Thankurgaon workshop representing the Rajshahi division. I have learned that people from different levels of the society are being consulted to formulate a realistic and socially acceptable plan. It is a widely accepted fact that participation and ownership of local people is a precondition for the successful implementation for any activity. IUCN's approach to biodiversity conservation is hence a well directed and praiseworthy venture.

Ladies and Gentlemen...

The objective of this workshop is to determine the current status, threats and causes of biodiversity erosion in Rajshahi. I believe that today's workshop will be a stepping stone in determining the causes of species depletion, strategies to combat it, modes of capacity building and training and most importantly, ways of implementation of biodiversity related laws and creating awareness amongst everyone. I thank you all for your overall support and wish you best of luck.

Allah Hafez
Bangladesh Zindabad

Speech of the Special Guest
Syed Tanveer Hussain
Secretary, Ministry of Textiles and Jute

Hon'ble Chief Guest Mirza Fakhrul Islam Alamgir, Hon'ble Minister of State, Ministry of Agriculture; Special Guests Mr. Sabihuddin Ahmed, Secretary, Ministry of Environment and Forests; Mian Mushtaque Ahmed, Divisional Commissioner, Rajshahi Division;IUCN Bangladesh Country Representative Dr. Ainun Nishat; respected Chirperson Mr. Maksumul Hakim Chaudhury, Deputy Commissioner, Thakurgaon; Ladies and Gentlemen...

Assalamu Alaikum...

I feel honoured to be present at this Regional Workshop on the National Biodiversity Strategy and Action Plan.The Ministry of Environment and Forests is the focal point to take care of the Convention on Biological Diversity (CBD) implementation. This ministry is also responsible for management and sustainable development of biodiversity. As a layman, I understand that biological diversity or biodiversity is the varied different life forms on the earth's surface. It is an integral component of the environment. Lives and livelihoods of the people are also linked with biodiversity.

Over exploitation, indiscriminate use of biodiversity resources and lack of scientific management have led biodiversity of many habitats to critically endangered conditions, or even extinction in many cases. I came to know from my IUCN colleagues that a good number of species of our country have become threatened. Human interventions and development planning without considering the biodiversity are some of the major causes of the degradation of biodiversity. The lack of awareness and improper valuation of nature in development planning can also be identified as other root causes of biodiversity loss.

Ladies and Gentlemen...

Many development activities are centered on biodiversity, and thus it is a cross sectoral issue. So, inter - departmental linkages and incorporating biodiversity conservation and sustainable principles in all development policy and planning is very much needed.

The Ministry of Environment and Forests, Government of Bangladesh has initiated the Biodiversity Strategy and Action Plan Project activities to ensure biodiversity conservation along with attaining sustainable development through people's participation. IUCN Bangladesh as the implementing agency aims to develop a comprehensive strategy and action plan required for Bangladesh in this connection.

To ensure the participation of local people, regional workshops representing the six divisions of the country are being held. It has come to my knowledge that the Biodiversity Strategy and Action Plan document is ensuring people's ownership by recording the concerns of the local people. IUCN Bangladesh in accordance with the principles of sustainable development has taken a 'Participatory Approach' to implementing this project.

The objective of today's workshop is to identify the current status, the causes and threats to biodiversity and the strategies to overcome the declining trends of biodiversity in this region. I believe, it will also focus on the emergent alpervading national issues. As I could understand that through group discussions and debates, you will be able not only to identify the threats and losses, but also the gaps in implementation of biodiversity - related laws and the ways to awareness dissemination aiming all levels of people.

Allah Hafez
Bangladesh Zindabad

Speech of the Special Guest
Sabihuddin Ahmed
Secretary, Ministry of Environment and Forests

Respected Chirperson Maksumul Hakim Chaudhury, Deputy Commissioner, Thakurgaon; Hon'ble Chief Guest Mr. Mirza Fakhrul Islam Alamgir, Hon'ble Minister of State, Ministry of Agriculture; Special Guests Syed Tanveer Hussain, Secretary, Ministry of Textiles; IUCN Bangladesh Country Representative Dr. Ainun Nishat and Ladies and Gentlemen...

Assalamu Alaikum...

The Minisrty of Environment and Forests is implementing the Biodiversity Strategic Action Plan project with an objective to develop the National Biodiversity Strategy and Action Plan. As a part of the planning process, six regional workshops at six divisions are scheduled. Today's workshop is the fifth one for Rajshahi Division being held in Thakurgaon. As a Secretary of the implementing Ministry, I feel obliged to be present in this workshop.

Biodiversity conservation is one of the most important issues in contemporary development thinking. Bangladesh in line with the rest of the world has to attune all its developmental goals with those of sustainable development. Until recently, Bangladesh was rich in floral and faunal diversity. Population pressures, over extraction of resources and other human interventions are leading to the extinction of a number of native species. We have already lost the swamp deer, rhinoceros, nilgai, peacock, gharial, king vulture and crane. The dense forest covers in the haor, baor, beel and jheel are also on the decline. According to IUCN Bangladesh estimates, 54 species of fish, 8 species of amphibians, 58 species of reptiles, 41 species of birds and 40 species of mammals are critically endangered. The great variety of medicinal plants and crop grains that were once abundant are being rendered scarce. Unless the necessary actions are taken, we might lose our traditional knowledge along with our natural heritage.

Ladies and Gentlemen...

You all know that Bangladesh signed the Convention on Biological Diversity in 1992, during the Earth Summit held in Johannesburg. As a party to the Convention, the country has the onus of implementing

the National Biodiversity Strategy and Action Plan. As citizens of the country, it is our obligation to pass on to the next generation, the rich wealth of biodiversity.

The Ministry of Environment and Forests and IUCN Bangladesh have undertaken the implementation of the Biodiversity Strategy and Action Plan Project with the aim of conserving biodiversity, ensuring sustainable development and the participation and stake of the local people. Many countries of the world, having completed the strategy and action plan are implementing it. Bangladesh has the advantage of learning from the experiences of other countries, where widespread participation has been the key to success.

Ladies and Gentlemen...

The objective of today's workshop is to identify the current status and threats to biodiversity in this region, for creating a realistic action plan. Through the group discussions, I believe you can suggest the strategies to counter biodiversity loss, build capacity amongst local organizations, use appropriate biodiversity laws and create widespread awareness in all sections of the society.

I would like to thank the Rajshahi Divisional Commissioner and the Thakurgaon District Administration for organizing this workshop. On behalf of the Ministry of Environment and Forests, I would like to thank you all for your overall support and wish you best of luck.

Allah Hafez
Bangladesh Zindabad

Speech by the Chief Guest
Mirza Fakhrul Islam Alamgir
Honorable Minister of State, Ministry of Agriculture

Respected Chairperson Mr. Maksumul Hakim Chowdhury; Hon'ble Special Guests Mr. Sabihuddin Ahmed, Secretary, Ministry of Environment and Forests, and Syed Tanveer Hussain, Secretary, Ministry of Textile; Mr. Mian Mushtaque Ahmed, Divisional Commissioner, Rajshahi Division; IUCN Bangladesh Country Representative Dr. Ainun Nishat and Ladies and Gentlemen...

Assalamu Alaikum...

I am glad to be present at the regional workshop of the Biodiversity Strategy and Action Plan Project. I welcome this timely initiative for the conservation of biodiversity in Bangladesh. The ecosystems in Bangladesh are still quite diverse with the paddy fields, floodplains, coastal regions, hill forests and mangrove forests. To sustain our livelihoods and meet our basic needs, we extract and cultivate natural resources. Biodiversity resources, apart from meeting our food, shelter and medical requirements, also influence our culture and heritage.

Ladies and Gentlemen...

In 1992, Bangladesh signed the Convention on Biological Diversity (CBD). It is a national commitment to implement the National Biodiversity Strategy and Action Plan for Bangladesh. The Government of Bangladesh has taken up the project to formulate the plan, in line with the neighboring countries. The approach is participatory, with the ownership of the local people. I am happy to inform you that like the Rajshahi regional workshop is being held in Thakurgaon, Barisal and Dhaka workshops were held in Jhalokathi and Tangail. This reflects the Government's policy of decentralization and is undoubtedly a novel, praiseworthy venture.

Ladies and Gentlemen...

Bangladesh is rich in both floral and faunal biodiversity, but the agricultural diversity is no less

noteworthy. Past historical records reveal that there were 12, 000 varieties of rice in this country. Unfortunately, the indigenous varieties of crops and vegetables are losing out in competition to the High Yielding Varieties. We can revive the dwindling population of the local crops and medicinal plants by investing in them and exporting them to other countries. The Hon'ble Prime Minister Begum Khaleda Zia has emphasized the plantation of fruit trees and medicinal plants this year. By planting trees in village homesteads, two targets can be met simultaneously, that of plant sustainability as well as ensuring people's participation.

The participation of the UP Members, teachers, journalists, doctors and development workers is a milestone of achievement in today's workshop. I believe that the participants will enrich the Biodiversity Strategy and Action Plan with their expert knowledge and suggest practical measures to protect the plant, animal and agricultural diversity of the char lands and homestead forests contained in this region.

Ladies and Gentlemen...

I must express my gratitude to the Deputy Commissioner of Thakurgaon and the Divisional Commissioner of Rajshahi, who have organized this workshop in spite of their busy schedules. I wish you all the best of luck.

Allah Hafez
Bangladesh Zindabad

Speech of the Chairperson
Maksumul Hakim Chowdhury
Deputy Commissioner, Thankurgaon

Hon'ble Chief Guest, Special Guests, IUCN Bangladesh Country Representative and Ladies and Gentlemen...

Assalamu Alaikum...

I am glad that the Rajshahi regional workshop of the Biodiversity Strategy and Action Plan Project is being held in Thankurgaon. I would sincerely like to thank the Thankurgaon District Administration, Rajshahi Divisional Administration and the Ministry of Environment and Forests for holding the workshop in Thakurgaon.

The Hon'ble Chief Guest, Special Guests and IUCN Bangladesh Representative have provided you with a detailed account of the significance of biodiversity in our lives and the initiatives by the Government of Bangladesh for biodiversity conservation. The livelihood, culture and heritage of this region are closely knit to nature and the people sustain on the natural resources.

Ladies and Gentlemen...

Perhaps the over extraction of resources is one of the major reasons for the erosion of biodiversity. But development programmes that do not take biodiversity into account can also be held responsible for such depletion. This dismal situation has to be reversed with the involvement of all stakeholders and resource users.

The objective of this workshop is to capture the current trends, threats and causes of biodiversity loss in Rajshahi. I believe that through group discussions and dialogues, you will suggest strategies that are realistic and applicable. We have tried to gather representatives from all levels of the society, including development workers and biodiversity stakeholders. Through experience sharing and discourses, I hope you will provide us with a proper direction in the path of attaining sustainable development in Bangladesh.

On behalf of the Thakurgaon District Administration, I thank the organizers of this workshop. I thank all the participants and wish you good luck.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
M. Khairul Alam
IUCN Bangladesh Country office

Hon'ble Chairperson, Chief Guest, Special Guests, dear participants, ladies and gentlemen...

Assalamu Alaikum...

Delivering the vote of thanks has never been a more gratifying task. First and foremost, I must thank the Thakurgaon District Administration for organizing the regional workshop successfully. My heartiest gratitude to the respectable guests, who have apportioned time to attend this asembly, from their rather busy schedules. Special thanks are due to the Ministry of Environment and Forests for assigning IUCN with this project, and UNDP and GEF for their financial assistance.

Ladies and Gentlemen...

The real owners of the Biodiversity Strategy and Action Plan are the people, whose concerns are being documented in the NBSAP. The participants in today's workshop are thus the stakeholders, who can rightfully determine the genuine strategies and actions required for their region. I request all of you to enrich the proceedings of today's workshop with your knowledge and experiences. I would like to extend my gratitutde to them in anticipation. I thank all of you again for extending your support to us.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The participants of the regional workshop in Thakurgaon were divided to form two groups, viz. A and B. Their discussions were based on the issues and actions needed for the five thematic areas of the NBSAP in the Rajshahi division. Following are the five themes of discussion:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness raising
- Linkages and Institutional Issues

Group A

Mr. Farid Uddin Ahmed, Director, Intercooperation VFFP facilitated the Group A deliberations and Ms. Farida Shahnaz, IUCNB acted as the rapporteur for the group. The participants identified the endangered species, discussed the five themes in details and identified the possible actors and activities for biodiversity conservation specifically. Following is the list of participants of group A.

Participants of Group A

1. Mr. Md. Khalilur Rahman, Imam, Goalpara, Thakurgaon
2. Mr. Md. Rezaul Haque, CEO Zila Parishad, Thakurgaon
3. Mr. Md. Badruddoja, Deputy Director HADS, Thakurgaon
4. Mr. Shahed Kamal Chowdhury, Social Worker, Thakurgaon
5. Mr. Abdul Haque, Hajipara, Thakurgaon
6. Mr. Md. Shahjahan-e-Habib, Chairman
7. Mr. Md. Taja Khan, Thakurgaon
8. Mr. Md. Mujibur Rahman, District Fisheries Officer, Thakurgaon
9. Mr. Md. Abdus Salam, Deputy Director, Agricultural Extension, Thakurgaon
10. Mr. Narayan Chandra Barma, Secretary Z P, Thakurgaon
11. Mr. Md. Rafiqul Alam, Senior Vice President, Chamber of Commerce and Industries, Thakurgaon
12. Mr. Harius Jude, Advocate, Thakurgaon
13. Ms. Ummey Kulsum, Teacher, Government Primary School
14. Ms. Sultana Ferdousi, Teacher, Dinajpur Zilla School
15. Ms. Kamrun Nessa, Teacher, Kokil Government Primary School, Thakurgaon
16. Ms. Foratun Nahar, Teacher, Puratan Thakurgaon Girls' High School
17. Dr. Md. Shazzadul Alam, Thakurgaon Sadar Hospital

18. Mr. Rabiul Azam, Manab Kalyan Parishad, Thakurgaon
19. Mr. Md. Akhtar Hossain Raja, Secretary, Press Club, Thakurgaon
20. Mr. Syed Merajul Hossain, District Correspondent, The Bangladesh Observer and BSS
21. Mr. Haridas Chandra Mohanta, Senior Scientific Officer, ARS BARI, Thakurgaon
22. Mr. Farid Uddin Ahmed, Director, Intercooperation VFFP, Uposhahar Rajshahi
23. Mr. Sudhangshu Shekhar Biswas, ADC (R), Thakurgaon
24. Mr. Moksumul Hakim Chowdhury, DC, Thakurgaon
25. Mr. Aual Hussain, ADC (G), Thakurgaon
26. Mr. Md. Sohrab Hossain, SP
27. Mr. M A Mannan, NDC

Findings

This group identified some plants and animals that are declining or becoming extinct from the region. The group members also identified the issuses and actions for all themes except Species Conservation, for which they suggested actions only. Group findings are as follows:

Identified threatened species

Animals

Fish

- *Pabda*
- *Veda*
- *Koi*
- *Shoil*
- *Boal*
- *Hilsa*
- *Gajar*
- *Mahashol*

Birds

- *Shokun*
- *Ghughu*
- *Chil*
- *Pencha*
- *Kaak*
- *Danrhkaak*
- *Dahuk*
- *Lakshipencha*
- *Gangchil*
- *Banmorog*
- *Bak*
- *Tia*
- *Kokil*
- *Harial*
- *Babui*

Plants

- *Horitoki*
- *Bohera*
- *Shatomuli*
- *Ashshwogandha*
- *Ashok*
- *Shimul*
- *Joggmo dumur*
- *Bat*
- *Basak*
- *Pudina*
- *Prithirag*
- *Kurchi*
- *Lajjaboti*
- *Tentul*
- *Pterodopytes*

Rice varieties

- *Enda (coarse rice)*
- *Lohajang*
- *Malchera*
- *Bachi*

- *Jashua*
- *Nania*
- *Kalonania*
- *Begun bichi*
- *Pani shail*
- *Kalam*
- *Katha*
- *Sapahar*
- *Dud kalam*
- *Gazal garia*
- *Pathar nuti*
- *Kakua*
- *Panathi (khoi)*
- *Binni*
- *Jhulan*
- *Harmaphara*
- *Radhuni pagal*
- *Sona kathi*
- *Dad khani*
- *Ashami hazir*
- *Sona shail*
- *Chenga*
- *Mugi muchera*

Species Conservation

Actions

- Conservation of endangered species in specific ecosystems and provision of government assistance in the form of compensation for allocating privately owned land, when necessary
- Conservation of culture and heritage related to different crops
- In situ and ex situ conservation of endangered species and their reintroduction in natural habitats
- Establishment of eco-park and sanctuary for birds and other animals including fish
- Plantation of indigenous trees and medicinal plants
- Planting Government owned land with banyan, pakur, kadam, shimul, neem, etc. in lieu of exotic species such as eucalyptus, acacias, sissoo and rain trees
- Research to improve indigenous plant varieties and establishing supply chain from the site of production to the users
- Retrieval of indigenous knowledge should be emphasised

Ecosystem Management

Issues

- Excessive use of chemical fertilizers, insectides and pesticides
- Habitat destruction for plants and animals
- Deforestation
- Encroachment on water bodies

- Loss of beneficial organisms viz. frog, earthworm etc.
- Unplanned urbanization, road/highway development, household sharing
- Declining ground water table.
- Unplanned embankment
- River siltation
- Massive afforestation
- Desertification

Actions

- Re-excavation of silted river-beds
- Restriction on chemical fertilizer uses
- Classifications of ecosystems like Chalan beel, river, flood plain, etc.
- Irrigation management
- Afforestation
- Introduction of coal in brick-field
- Stopping use of logs as fuel in brick-field
- River dredging

Legal, Regulatory and Policy Issues

Issues

- Deforestation stopped
- Well planned roads/highway development
- Supervision and monitoring of chemical fertilizer use
- Legal application of fishing and marketing regulations
- Quarantine of plants and animals
- Intrusion of illegal plant varieties
- Fertilizer adulteration
- Intrusion of illegal insecticides

Actions

- Use of mineral coal in brick field may be made mandatory
- Implementation of laws
- Implementation of existing laws

Education, Training and Awareness Raising

Issues

- Awareness of population growth and birth control
- Awareness of environmental protection

Actions

- Curriculum should be updated (agriculture/environment/ culture/ literature)
- Training for social elite/ Local Govt worker, civil societies, political leaders
- Awareness on prevention and protection of environment for the grass roots
- Awareness building through mass media

In addition to identification of issues and actions, this group also identified different actors for different activities. This is shown in the following table:

Actor	Activities
DAE	Agriculture related conservation activities
School Text Book Board	Primary/Secondary level education curricula development and material production
Mass media	Awareness
NGOs, Local Govt and people	Will be involved in conservation
Livestock and Fisheries Ministry, Agriculture Ministry, MoEF	Implementation
LGRD, NGO, Social worker	Awareness
Religious leaders e.g. Imam	Awareness
Political leaders	Awareness
Interested donors e.g. Norwegian Embassy, SDC, IUCN, FAO etc	Funding
Department of Health Education	Primary health education especially for school children and alternative medical care such as medicinal plant conservation and utilization.

Group B

Dr. M. Khairul Alam, IUCNB facilitated group B deliberations of the workshop in Thankurgaon. The participants compiled an extensive list of the endangered species of Rajshahi region and discussed the issues and actions specially required for and suited to the region, with special emphasis on the conservation of species. The list of the participants is as follows.

Participants of Group B

1. Mr. Monsur Ali, Secretary, Uttaranchal Federation, Shangbadik Parishad, Thakurgaon Zilla Unit
2. Mr. Firoz Amin Sharker, Office Secretary, Uttaranchal Federation, Shangbadik Parishad, Thakurgaon Zilla Unit
3. Mr. Md. Enamul Haque, Secretary, Press Club, Thakurgaon
4. Mr. Md. Zahangir Alam Khan, Executive Engineer, BMDA Thakurgaon
5. Mr. Md. Abu Taleb Bhuiya, Executive Engineer, BMDA Unit 2, Thakurgaon
6. Mr. Md. Mozahedul Karim, Principal, Salander College, Thakurgaon
7. Mr. Md. Saifur Rahman, Principal, Garugh College, Thakurgaon
8. Mr. Shahidur Rahman Chowdhury, O C Forest Extension, Thakurgaon
9. Dr. Afazuddin Ahmed, Civil Surgeon, Civil Surgeon Office, Thakurgaon
10. Ms. Zesmin Ara Begum, Member, Jagannath U P, Thakurgaon Sadar
11. Ms. Golap Banu, Member, Nargun U P, Thakurgaon Sadar
12. Mr. Md. Anwar Hossein (Lal), President, Brick Field Owner's Association, Thakurgaon
13. Mr. Md. Abdul Hamid, Professor, Shibganj Degree College
14. Mr. Md. Poygam Ali, Chairman, Nargun
15. Mr. Md. Samayun Haq Chowdhury, Social Worker, Thakurgaon
16. Mr. Md. Iakub Ali, Principal, Thakuirgaon River View High School, Thakurgaon
17. Mr. Md. Reazul Karim, Lecturer of Botany, Panchagarh Government Women's College and Conveyor, Environment Protection Society, Thakurgaon
18. Mr. Md. Waliur Rahman, Public Prosecutor, Hajipara, Thakurgaon
19. Professor Mr. A T M Naderuzzaman, Sopura, Rajshahi
20. Dr. Md. Ebrahim Hossain, District Livestock Officer, Thakurgaon
21. Mr. Masud Ahmed Suborno, ESDO, College Para, Thakurgaon
22. Mr. Krishna Kanta Biswas, Senior Assistant Commissioner, DC Office, Thakurgaon
23. Mr. A T M Serajul Islam, S. E., BMDA
24. Dr. Matiur Rahman, Retired Director, DAE
25. Professor Mr. Md. Sadrul Amin, Haji Danesh S & T University, Dinajpur

Findings

List of gradually disappearing species:

- Rabbit
- Fox
- Snakes
- Monitor lizard
- Cheetah cat
- Snails
- Squirrel
- Wild cat
- Buffalo
- Frog
- Sheep
- Deer
- Tortoise
- King vulture
- Nilgai
- Kite
- Eagle
- Crow
- Vulture
- Porcupine
- Wild fowl
- Kingfisher
- Neul
- Kuichcha
- Bichhuti gachh
- Raag Jhor
- Bhadoi Dhan
- Nenia Dhan
- Banyan Tree
- Shimul
- Spinach
- Kochu
- Bangi
- Joti Gachh
- Bagjhor
- Kutki Gachh
- Lojyami
- Akand
- Durba ghas
- Golap jam
- Karamcha
- Boichi fal
- Bahera gachh
- Arjun gachh
- Bhutuk gachh
- Banana (seeds)
- Deua
- Tamarind tree
- Chirata
- Nageshwar
- Chhoto jam
- Haritaki
- Kathalia phul
- Ghugu
- Tuntuni
- Dahuk
- Chil
- BagdDasha
- Khatash
- Chinese duck
- Pati ghughu
- Noda Ghughu
- Hargila
- Holud gala bok
- Lal bok
- HoldecChil
- Baj pakhi
- Noon chora pakhi
- Chand tara machh
- Koi machh
- Nayan tara machh
- Malamachh
- Batashi machh
- BoalmMachh
- Air machh
- Bheda machh
- Kaikla machh
- Khoilka machh
- Gajar machh
- Futki machh
- Mola machh
- Dhela machh
- Shing machh
- Tengra machh
- Gajar machh
- Bhodshi machh
- Shol machh
- Tona machh
- Sharpunti machh
- Pabda machh
- Deshi magur machh

Species Conservation

Issues

- Illegal hunting
- Deforestation
- Over extraction of resources
- Unplanned use
- Habitat destruction
- Lack of awareness
- Increase in the cultivation of HYVs
- Use of chemical fertilizers
- Unplanned urbanization
- Population increase
- Monocropping
- Reduced crop rotation period
- Culture of exotic fish species
- Extraction for fuel wood
- Felling of medicinal plants because of ignorance
- Encroachment of wetlands, rivers and canals
- Poverty
- Lack of species conservation
- Lack of informed initiatives
- Use of 'current nets' for fishing
- No environment component in the educational curricula
- Encroachment and siltation of wetlands due to human interventions
- Climate change
- Dewatering and use of poison for fishing
- Lack of popular awareness of the role and value of biodiversity
- Lack of incentives for cultivating local or indigenous varieties
- Cultivation of 'cash crops' vis-a-vis indigenous varieties
- Lack of aggregated initiatives towards development
- Unsustainable use of land
- Decline in the use of organic fertilizers

- Measures to counter water logging
- Less water flow in Tangon river
- Noise and water pollution

Actions

- Establishment of sanctuaries
- Poverty alleviation
- Reduction in the population growth rates
- Initiatives for the establishment of a 'gene bank'
- Widespread dissemination through the mass media
- Conservation activities
- Formulation, dissemination and implementation of laws
- Ban on fish fry harvesting
- Incorporation of biodiversity as a component in the educational curricula
- Increased awareness of people through GO- NGO initiatives
- Ensuring proper pricing mechanisms for encouraging the cultivation of native species
- Government initiatives for the production and distribution of endangered plant species
- Tree plantation programmes
- Initiatives for the conservation of diversity
- Ban on the use of pesticides and chemical fertilizers
- Planned and eco - friendly roads and housing
- Use of natural manure (cow dung)
- Village level institutional arrangements for biodiversity education
- Alternative livelihood for fishermen catching fish fry (for example, jatka)
- Indiscriminate use of chemical fertilizers
- Destruction of ecosystems because of excessive groundwater extraction
- Runoffs (pesticides and chemical fertilizer residues) from agricultural lands contaminating water bodies
- The depletion of large vascular plants leading to natural calamities such as storms and biodiversity loss
- Noise pollution
- Water pollution
- Use of polythene bags polluting the water and soil (that are not biodegradable)

- Creation of market opportunities for plants, fisheries, animal fodder and organic manure
- Use of organic manure
- Regulation of the drainage system
- Introduction of the concepts of 'crop rotation'
- 'Rain water harvesting' for irrigation
- Appropriate laws for the protection of natural wealth
- Initiatives by the Union Parishad for greater awareness of people
- Initiatives by the educated mass
- Discussions and dialogues at the hamlet level
- Proper implementation of laws for increasing people's awareness
- Agricultural production without the use of chemical fertilizers
- Measures to increase the water retention capacity of wells
- Re-excavation of ponds for retaining water
- Training of locals for proper implementation of projects
- Planning and implementation of projects on the basis of local people's opinion
- Government or private initiatives to popularize environmental projects locally
- Training and skill development of farmers
- Excavation of Tangon and other rivers for regulating the flow of water
- Several levels of training and capacity enhancement for local farmers
- Popularization of native species through scientific research
- Afforestation
- Proper drainage

Legal, Regulatory and Policy Issues

Issues

- Lack of proper implementation of Rules and Acts

Actions

- Laws to prevent the burning of wood in brick fields
- Implementation of Fisheries Sector Policies
- Proper implementation of Wildlife Act
- Awareness raising amongst the people in terms of laws
- Training of Local Government representatives in the legal aspects and provisions

Education, Training, Awareness Raising

Issues and Actions

- Information dissemination about the degrees and ways of extinction and the path to conservation
- Basic training for the public for the identification of the threatened species
- Broadcast of environmental messages through mass media and entertainment industry (folk songs and drama)
- Training of local leaders, Imams and teachers
- Activities at school/college and amongst the local people to increase awareness
- Village based training schemes and follow - up for monitoring the effectiveness of people's participation

Linkages and Institutional Issues

Issues and Actions

- Integrated programmes for involving all relevant stakeholders
- Use of alternatives to curtail the use of renewable materials
- Ban on the use of 'current nets' and alternative livelihood generation for fishermen
- Use of iron or other materials instead of wood
- Encouraging people's participation through addressing their concerns and emphasizing their needs
- Identification of biodiversity related stakeholders at the village level
- Identification of the pros and cons of different occupations and their effects on biodiversity
- Diversity in terms of livelihood to reduce the pressure on nature
- Ensuring financial sustainability of alternative livelihoods
- Creation of village level educational institutes for biodiversity education

List of Participants

1. Mr. M Khalilur Rahman, Imam, Goalpara, Thakurgaon
2. Mr. M Rezaul Haque, CEO Zilla Parishad, Thakurgaon
3. Md. Badruddoja, Deputy Director HADS, Thakurgaon
4. Mr. Shahed Kamal Chowdhury, Social Worker, Thakurgaon
5. Mr. Abdul Haque, Hajipara, Thakurgaon
6. Md. Shahjahan-e-Habib, Chairman
7. Mr. M Taja Khan, Thakurgaon
8. Mr. M Mujibur Rahman, District Fisheries Officer, Thakurgaon
9. Mr. M Abdus Salam, Deputy Director, Agricultural Extension, Thakurgaon
10. Mr. Narayan Chandra Barma, Secretary Z P, Thakurgaon
11. Mr. M Rafiqul Alam, Senior Vice President, Chamber of Commerce and Industries, Thakurgaon
12. Mr. Harius Jude, Advocate, Thakurgaon
13. Ms. Ummey Kulsum, Teacher, Government Primary School
14. Ms. Sultana Ferdousi, Teacher, Dinajpur Zilla School
15. Ms. Kamrun Nessa, Teacher, Kokil Government Primary School, Thakurgaon
16. Ms. Foratun Nahar, Teacher, Puratan Thakurgaon Girl's High School
17. Dr. Md. Shazzadul Alam, Thakurgaon Sadar Hospital
18. Mr. Rabiul Azam, Manab Kalyan Parishad, Thakurgaon
19. Mr. M Akhtar Hossain Raja, Secretary, Press Club, Thakurgaon
20. Mr. Syed Merajul Hossain, District Correspondent, The Bangladesh Observer and BSS
21. Mr. Haridas Chandra Mohanta, Senior Scientific Officer, ARS BARI, Thakurgaon
22. Mr. Farid Uddin Ahmed, Director, Intercooperation VFFP, Uposhahar Rajshahi
23. Mr. Sudhangshu Shekhar Biswas, ADC (R), Thakurgaon
24. Mr. Moksumul Hakim Chowdhury, DC, Thakurgaon
25. Mr. Aual Hussain, ADC (G), Thakurgaon
26. Mr. M Sohrab Hossain, SP
27. Mr. M A Mannan, NDC
28. Mr. Monsur Ali, Secretary, Uttaranchal Federation, Shangbadik Parishad, Thakurgaon Zila Unit
29. Mr. Firoz Amin Sharker, Office Secretary, Uttaranchal Federation, Shangbadik Parishad, Thakurgaon Zila Unit
30. Mr. M Enamul Haque, Secretary, Press Club, Thakurgaon

31. Mr. M Zahangir Alam Khan, Executive Engineer, BMDA Thakurgaon
32. Mr. M Abu Taleb Bhuiya, Executive Engineer, BMDA Unit 2, Thakurgaon
33. Mr. M Mozahedul Karim, Principal, Salander College, Thakurgaon
34. Mr. M Saifur Rahman, Principal, Garugh College, Thakurgaon
35. Mr. Shahidur Rahman Chowdhury, O C Forest Extension, Thakurgaon
36. Dr. Afazuddin Ahmed, Civil Surgeon, Civil Surgeon Office, Thakurgaon
37. Ms. Zesmin Ara Begum, Member, Jagannath U P, Thakurgaon Sadar
38. Ms. Golap Banu, Member, Nargun U P, Thakurgaon Sadar
39. Mr. M Anwar Hossein (Lal), President, Brick Field Owner's Association, Thakurgaon
40. Mr. M Abdul Hamid, Professor, Shibganj Degree College
41. Mr. M Poygam Ali, Chairman, Nargun
42. Mr. M Samayun Haq Chowdhury, Social Worker, Thakurgaon
43. Mr. M Iakub Ali, Principal, Thakurgaon River View High School, Thakurgaon
44. Mr. M Reazul Karim, Lecturer of Botany, Panchagarh Government Women's College and Conveyor, Environment Protection Society, Thakurgaon
45. Mr. M Waliur Rahman, Public Prosecutor, Hajipara, Thakurgaon
46. Professor Mr. A T M Naderuzzaman, Sopura, Rajshahi
47. Dr. Md. Ebrahim Hossain, District Livestock Officer, Thakurgaon
48. Mr. Masud Ahmed Suborno, ESDO, College Para, Thakurgaon
49. Mr. Krishna Kanta Biswas, Senior Assistant Commissioner, DC Office, Thakurgaon
50. Mr. A T M Serajul Islam, S. E., BMDA
51. Dr. Matiur Rahman, Retired Director, DAE
52. Professor Mr. M Sadrul Amin, Haji Danesh S & T University, Dinajpur

Regional Workshop on the National Biodiversity Strategy and Action Plan, Sylhet Division

Held in Moulvibazar
14 August 2003

The Regional Workshop for Sylhet Division on National Biodiversity Strategy and Action Plan was held in Moulvibazar on 14 August 2003. Like other regional workshops, it was also structured to be held in the inaugural and technical sessions The Chief Guest for the ceremony was Mr. Nazrul Islam, Divisional Commissioner, Sylhet Division. Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests was present as the Special Guest and Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar District chaired the Inaugural. About 50 participants attended the workshop. The Technical Session followed the Inaugural. In the technical session, the participants worked in two working groups namely, groups A and B. The groups through discussions identified the issues and actions concerning biodiversity conservation that were unique to the Sylhet region in particular and at national level, in general. Following is the programme of the regional workshop in Moulvibazar.

Programme

9:00am - 10:00am Registration

Inaugural Session (10:00am - 11:00am)

10:00am - 10:05am	Recitation from the Holy Quran
10:05am - 10:15am	Welcome address By Mr. Monowar Islam Deputy Secretary, Ministry of Environment and Forests
10:15am - 10:30am	Introduction to the National Biodiversity Strategy and Action Plan Mr. S. M. Munjurul Hannan Khan, Programme Coordinator IUCN - Bangladesh Country Office
10:30am - 10:40am	Speech by the Special Guest, Dr. Mahfuzul Haque Deputy Secretary, Ministry of Environment and Forests
10:40am - 10:50am	Speech by the Chief Guest, Mr. Nazrul Islam, DivisionalCommissioner, Sylhet Division
10:50am - 10:55am	Speech by the Chairperson, Mr. M. Mokhlesur Rahman Deputy Commissioner, Moulvibazar District
10:55am - 11:00am	Vote of thanks by Dr. Khairul Alam Project Manager, NBSAP Project, IUCN Bangladesh Country Office.
11:00am - 11:20am	Tea Break

Technical Session (10:30am - 5:30pm)

11:20am-11: 30am	Workshop Methodology and Objectives
11: 30am -1: 30pm	Group Discussions
1:30pm- 2:15pm	Lunch and prayer break
2:15pm- 4:15pm	Group Discussions
4:15pm- 4:30pm	Tea break
4:30pm-5: 30pm	Plenary Presentation

THE INAUGURAL

Welcome Address by
Monowar Islam
National Project Director
Biodiversity Strategic Action Project and Deputy Secretary
Ministry of Environment and Forests

Respested Chairperson Mr. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar District; Hon'ble Chief Guest Mr. Nazrul Islam, Divisional Commissioner, Sylhet Division; Respected Special Guest Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests; Representatives from IUCN Bangladesh Country Office; and Ladies and Gentlemen...

Assalamu Alaikum...

On behalf of the Ministry of Environment and Forests, I welcome you to this regional workshop for Sylhet Divison on the National Biodiversity Strategy and Action Plan for Bangladesh. People's participation is the key to success of a planning process and the NBSAP planning follows that principle. As the participants of this regional workshop in Moulvibazar, you can all lead the Biodiversity Strategy and Action Plan towards a well-meant direction with your professional knowledge and dexterity. I thank the participants of the workshop for their kind presence and efforts for making the NBSAP planning process a success. Thanks must also be accorded to the GEF, UNDP for their financial support and IUCN Bangladesh for implementing the project. Last but not the least, I must acknowledge the wholehearted support from the Moulvibazar District Administration for organizing this event.

Allah Hafez
Bangladesh Zindabad

Speech by the Special Guest
Mahfuzul Haque
Deputy Secretary, Ministry of Environment and Forests

Bismillahir Rahmanir Rahim...

Hon'ble Chief Guest Mr. Nazrul Islam, Divisional Commissioner Sylhet; Chairperson Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar; Mr. Monowar Islam, National Project Director BSAP Project and Deputy Secretary, Ministry of Environment and Forests; Mr. S M Munjurul Hannan Khan, Programme Coordinator, IUCN Bangladesh Country Office and Ladies and Gentlemen...

Assalamu Alaikum...

It is certainly an honour for me, to be able to attend the last regional workshop of the Biodiversity Strategic Action Plan Project in Moulvibazar. On behalf of the Ministry of Environment and Forests, I must thank IUCN Bangladesh for implementing this project and the Moulvibazar District Administration for organizing this workshop.

Bangladesh is a deltaic country, with fertile lands and a network of rivers. The majority of the population harness and cultivate natural resources for sustaining their lives. Agriculture and fishing are the largest productive sectors in the country. Unfortunately, population boom, industrialization and unplanned urbanization have compelled us to stretch the carrying capacity of nature. Resources are extracted beyond the natural rate of regeneration - posing serious threats of extinction of several biodiversity species. By this time, we have lost many important species of plants, crops, animals and birds and many are critically endangered.

Ladies and Gentlemen

As a party to the Convention on Biological Diversity (CBD), Bangladesh stands committed to conserving its biodiversity and distributing the natural wealth equitably among all stakeholders. In tandem, we also have the moral obligation towards our future generation to enable them enjoy the fruits of nature sustainably. From the experiences at home and abroad, it is evident that all stakeholders must participate

in the conservation of nature and natural resources.

The Government of Bangladesh subscribes to the philosophy of 'local people's participation' in the formulation and implementation of development projects. The Biodiversity Strategic Action Plan Project is a praiseworthy initiative of the Government that incorporates the concerns of the local populace in developing the National Biodiversity Strategy and Action Plan. Today's workshop is a demonstration of the participatory approach to conservation adopted in our country.

Ladies and Gentlemen...

I am overwhelmed by the response demonstrated here in Moulvibazar, to see all of you gathered with the common purpose of biodiversity conservation. Through the Thematic Group Discussions, I hope you will identify the issues and actions unique to the Sylhet region. I thank you all for your time and efforts and wish you best of luck.

Allah Hafez
Bangladesh Zindabad

Speech by the Chief Guest
Nazrul Islam
Commissioner, Sylhet Division

Bismillahir Rahmanir Rahim...

Hon'ble Chairperson Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar; Special Guest Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests; Mr. Monowar Islam, National Project Director BSAP Project and Deputy Secretary, Ministry of Environment and Forests; Mr. S M Munjurul Hannan Khan, Programme Coordinator IUCN Bangladesh Country Office and Ladies and Gentlemen...

Assalamu Alaikum...

I am pleased to be a part of the Sylhet Regional Workshop of the National Biodiversity Strategic Action Plan Project. I welcome this timely initiative consummated by the Ministry of Environment and Forests for biodiversity protection in Bangladesh. Although area wise the country is not significant in the world map, Bangladesh can be identified to house many biodiversity hotspots. It hosts a diverse wealth of plants and animals within the plain lands, floodplains, coastal areas, hill forests and homestead forests. We are both explicitly and implicitly dependent on these natural resources for our lives and livelihood. Our relationship with nature is multifaceted; biodiversity is a part of our culture and heritage, apart from being the source of the natural wealth extracted to meet our basic needs.

Ladies and Gentlemen...

Bangladesh signed the Convention on Biological Diversity (CBD) in 1992. As a party to the Convention, it is a national obligation to implement the National Biodiversity Strategy and Action Plan. The Government of Bangladesh has accordingly adopted a number of initiatives to fulfil its obligations. The participation of the local people is crucial for successful implementation of a project and today's workshop in Sylhet is a step towards ensuring local people's participation. The Sylhet Divisional Workshop is being held in Moulvibazar; following the workshops in Jhalokathhi representing Barisal, Tangail representing Dhaka

and Thakurgaon representing the Rajshahi Division. The initiatives by the Ministry of Environment and Forests and IUCN Bangladesh are certainly worthy of praise, for reaching out to the people with their activities.

Ladies and Gentlemen...

The hills, floodplains and the haors congregate in the Sylhet region and create a diverse range of ecosystems here. The evergreen tropical forests and sweet water springs add character to the regional biodiversity hotspots.

Bangladesh was once blessed with very rich agro - biodiversity, agriculture being the largest production system of the country. Historical records reveal that over twelve thousand varieties of rice were found in Bangladesh. The variety of fruits and vegetables has also been noteworthy; for example, Satkora (citrus vegetable) is a traditional product of Sylhet. Most of these indigenous crops and vegetables are endangered now, gradually losing out to commercial mono cropping or cash crops.

Recently, many developed countries have started investing in medicinal plants and herbs that we used traditionally. We can revive the trend by growing and exporting medicinal plants and earn foreign exchange. The Hon'ble Prime Minister Begum Khaleda Zia has initiated the plantation of medicinal plant and fruit trees in the country. The Government of Bangladesh believes in sustainable development and encourages the ownership of the local people in all development plans.

The presence of Union Parishad representatives, teachers and academicians, researchers, journalists, lawyers, fieldworkers and development NGO workers is a sure sign of success of today's workshop. I believe that the participants will enrich the Biodiversity Strategy and Action Plan with their proficiency and dexterity.

Ladies and Gentlemen...

I must thank the Deputy Commissioner of Moulvibazar for organizing this event, in spite of his busy schedule. I wish all the best to the Ministry of Environment and Forests and IUCN Bangladesh and thank all of you for your support.

Allah Hafez
Bangladesh Zindabad

Speech by the Chairperson
M. Mokhlesur Rahman
Deputy Commissioner, Moulvibazar District

Bismillahir Rahmanir Rahim...

Hon'ble Chief Guest Mr. Nazrul Islam, Divisional Commissioner Sylhet; Special Guest Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests; Mr. Monowar Islam, National Project Director BSAP Project and Deputy Secretary, Ministry of Environment and Forests; Mr. S M Munjurul Hannan Khan, Programme Coordinator, IUCN Bangladesh Country Office and Ladies and Gentlemen...

Assalamu Alaikum...

I am honoured that the regional workshop on the National Biodiversity Strategy and Action Plan for Sylhet Division is being held in Moulvibazar. On behalf of the Moulvibazar District Administration, I must thank the Sylhet Divisional Administration and the Ministry of Environment and Forests for holding the workshop in Moulvibazar.

The Chief Guest, Special Guest, IUCN Bangladesh Representative and the National Project Director have enlightened you with an account on biodiversity and its significance in our lives and livelihoods. The culture and heritage of the people of this region stems from biodiversity and nature itself.

Ladies and Gentlemen...

On one hand, biodiversity is extracted beyond its natural regeneration rates and on the other, these issues are not properly addressed in the development plans. The compound effect of unchecked activities has led to the extinction of various species, leaving many of them endangered. Concerted efforts are needed with the participation of all stakeholders to get to the crux of the problem.

Today's workshop is a materialization of the participatory approach to sustainable development planning. To ensure the stake of the grassroots people, the Ministry of Environment and Forests and IUCN Bangladesh are organizing regional workshops representing the six divisions of the country. The

participant turnover is a heterogeneous mix of all professionals and we have tried to gather them all in today's workshop.

Through discussions and experience sharing, I hope you will be able to provide a sustainable direction to the biodiversity conservation efforts in Bangladesh.

I wish you all success in today's workshop and thank you all for participating.

Allah Hafez
Bangladesh Zindabad

Vote of Thanks by
M. Khairul Alam
IUCN Bangladesh Country Office

Respested Chairperson Mr. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar District; Hon'ble Chief Guest Mr. Nazrul Islam, Divisional Commissioner, Sylhet Division; Respected Special Guest Dr. Mahfuzul Haque, Deputy Secretary, Ministry of Environment and Forests; Mr. Monowar Islam, National Project Director BSAP Project and Deputy Secretary, Ministry of Environment and Forests; colleagues from IUCN Bangladesh Country Office; and Ladies and Gentlemen...

Assalamu Alaikum...

First and foremost, I would like to thank the Moulvibazar District Administration for organizing the regional workshop on the National Biodiversity Strategy and Action Plan. Special thanks must be conferred upon the respectable guests, who have allocated time from their extremely busy schedules for attending the workshop. I must also mention the ceaseless efforts of the Ministry of Environment and Forests for their continuous support and UNDP-GEF for their financial assistance.

Ladies and Gentlemen...

The Biodiversity Strategy and Action Plan is a 'living'document and hence aspires to capture the concerns of the local people. You, the participants in today's workshop are the true stakeholders, can enrich this document through striking upon the appropriate strategies and actions that this region calls for. I take the opportunity to extend my gratitude to you for your participation. I would like to request all of you to extend your cooperation for the development of a holisitic strategy and action plan. I thank all of you again and wish you success in your endevours.

Allah Hafez
Bangladesh Zindabad

TECHNICAL SESSION

The worksjop participants were divided into two groups - A and B in the technical session of the workshop. The discussions to determine the issues and actions for the Syhet region in particular and Bangladesh in general revolved around the five earmarked themes under the NBSAP, namely:

- Species Conservation
- Ecosystem Management
- Legal, Regulatory and Policy Issues
- Education, Training and Awareness Raising
- Linkages and Institutional Issues

Group A

Mr. Rasheduzzaman Ahmed, IUCNB, facilitated group A activities of the regional workshop held in Moulvibazar. Ms. Remeen Firoz, IUCNB assisted him as the rapporteur and Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar presented the findings of the group. Group A covered all the five themes of the NBSAP and identified the list of endangered biodiversity species of the region. The participants' list is as follows.

Participants of Group A

1. Mr. M. Mokhlesur Rahman, Deputy Commissioner, Moulvibazar
2. Additional Deputy Commissioner (General), Sunamganj
3. Deputy Director, Department of Agricultural Extension, Moulvibazar
4. District Fisheries Officer, Moulvibazar
5. Assistant Coservator of Forests, Moulvibazar
6. Mr. Sunil Kumar Das, Secretary, District Lawyers Association, Moulvibazar
7. Dr. Sadek Ahmed, Additional Secretary, Homeo Association, Moulvibazar
8. Moulana Mr. M Aminul Bahar Jamaly, Imam, Choumohoni Jame Mashjid, Moulvibazar
9. Mr. Md. Jamshed, Chairman, Giyasnagar Union Parishad, Moulvibazar
10. Ms. Ferdousi Sultana Nina, UP Member, Ward 3 Munmukh Union Parishad, Moulvibazar
11. Minister, Magucchara Paan Punji, Kamalganj
12. Mr. M A Rub, Clinic Manager, Mary Stopes Clinic, Moulvibazar
13. Dr. Shah Nurul Islam, Editor, BNSB, Moulvibazar
14. Ms. Malaya Home Roy, Principal, Amjad Ali Government Girl's High School, Moulvibazar
15. Principal, Shishu Government Primary School, Moulvibazar
16. Mr. A Z M Manzur Rashid, Lecturer, Department of Forestry, Shahjalal Science and Technology University, Sylhet

17. Ms. Begum Mahmuda Kabir, Lecturer, Moulvibazar Government Women's College
18. Advocate Mr. Nurul Islam Sheful, Editor, Shaptahik Patakurir Desh, Moulvibazar
19. Mr. Surajit Roy, Secretary, The Moulvibazar Chamber of Commerce and Industries, Court Road, Moulvibazar
20. Mr. Md. Abdul Huq, Fishermen Association Representative, Bejbari, Moulvibazar
21. UNO, Srimangal
22. UNO, Kulaura
23. UNO, Rajnagar

Findings

Findings of Group- deliberations are presented below:

Biodiversity that are at threat or declining:

Plants

- Satkora (citrus family)
- Jaldubi pineapple (local variety)
- Rice (indigenous varieties)
- Barley
- Agar tree

Animals

- Rani fish
- Frog
- Monkey
- Lacho fish
- Orange
- Mohashol fish
- Pabda fish
- Wild boar
- Jungle fowl
- Barking deer
- Hill mynah
- Migratory birds
- Monitor lizard
- Chital fish
- Butterfly

Species Conservation

Issues

- Population pressure
- Encroachment of water bodies, including haors
- Illicit felling of trees
- Use of chemical pesticides and insecticides
- Harvesting of fish fry
- Deforestation
- Poor management of bird sanctuaries
- Use of current and capri fishing nets
- Failure in enforcement of laws
- Illiteracy and lack of awareness
- Lack of alternative sources of income
- Commercialization
- Vicious poverty
- Air and water pollution

Actions

- Ban on hunting wild animals
- Establishing sanctuaries for fish and wild animals
- Awareness building
- Community based resource management
- Penalty for bird and animal hunters/poachers
- Generation of alternative income sources
- Strict enforcement of laws
- Awareness raising by the imaams of mosques
- Plantation of Hijal and Karoch trees
- Annulment of the leasing system
- Promotion of indigenous plant varieties
- Conservation of local tall plant varieties
- Ban on the use of current fishing nets
- Protection of the Hijal and Karoch forests

Ecosystem Management

Issues

- Construction of unplanned dams, roads and culverts
- Destruction of forest cover
- Encroachment of wetlands
- Raising human settlements without considering the carrying capacity of the concerned site/ecosystem
- Introduction of exotic plant and animal species into the native environment
- Indiscriminate use of pesticides and chemical fertilizers
- Siltation of the tributaries
- Denudation of the hill forests
- Unaccounted extraction of water, sand, stones and bamboo

Actions

- Release of fish fry into open water
- Terrace method of jum cultivation
- Community based environmental management

- Adopting precautions while using pesticides
- Ban on fishing during the breeding season
- Ban on manufacture, export and use of current nets
- Plantation of indigenous varieties (Karoch) in wetlands
- Awareness raising
- Plantation of cane/bamboo
- Conservation of panpunji (betel leaf orchards of the Khasi)
- Use of block bricks instead of fired ones
- Setting 120 feet as standard height for brickfield chimneys

Legal, Regulatory and Policy Issues

Actions

- Introduction of Community Policing
- Strict implementation of laws regarding wildlife conservation
- Pile fishing
- Ban on leasing beels on political grounds
- Ban on hill cutting
- Total ban on the sale of birds
- Boycotting illegal wood harvesters/traders
- Implementation of forest policies and rules
- Implementation of fisheries policy and rules

Education, Training and Awareness Raising

Issues

- Lack of awareness
- Lack of biodiversity related discussions in primary, secondary, madrasah textbooks
- Insufficient capacity

Actions

- Incorporation of discussions on biodiversity issues into text books
- Carrot and Stick' approach for biodiversity stakeholders

- Dissemination of the fact that trees are crucial for human existence
- Coverage of legal aspects in various types of media
- Creation of environmental awareness through the television, radio and newspapers
- Acknowledgement and reward for pro - environment individuals/ interventions
- Research on citrus species

Linkages and Institutional Issues

Actions

- Special emphasis on the language/dialect and culture of indigenous tribes
- Increased use of medicinal plants
- District level offices for environmental protection
- Alternative sources of income for fishermen
- Implementation of laws regulating mining and quarrying
- Investment of a quarter (25%) of the income from wetlands for haor development
- Ban on leasing of wetlands (Sairat Mahal) on political or partisan grounds

Group B

Dr. M Khairul Alam, IUCNB facilitated Group B deliberations and Mr. Rakibul Haque, IUCNB assisted him as the rapporteur. Group B discussed all the five themes of the NBSAP, with special emphasis on species conservation. They also listed the endangered species of fish, fruits and animals of the Sylhet region. The list of participants is as follows.

Participants of Group B

1. Additional Deputy Commissioner (General), Sylhet
2. Additional Deputy Commissioner (General), Hobiganj
3. Chief Scientific Officer, BARI Centre, Akbarpur, Moulvibazar
4. District Livestock Officer, Moulvibazar
5. Additional Conservator of Forests, Moulvibazar
6. Civil Surgeon, Moulvibazar
7. Moulana Kari Mr. M Mokiur Rahman, Imam, Collectorate Masjid, Moulvibazar
8. Mr. Alhaj Abdul Adud Alam, Chairman Ekatuna Union Parishad, Moulvibazar
9. Ms. Jousna Begum, UP Member, Ward 1, Akhaura Union Parishad, Moulvibazar
10. Ms. Dhaneswari Sinha, Indigenous Community Member, Teaching Assistant, Pashchim Government Primary School, Moulvibazar

11. Mr. Rabindra Kumar Dev, Cluster Manager, FIVDB, Borokapon, Moulvibazar
12. Mr. Sunil Kumar Sinha, TLCS Heed Bangladesh, Old Hospital Road, Moulvibazar
13. Principal, Mr. Ali Amjad Government Primary Girl's School, Moulvibazar
14. Mr. Priti Bikas Paul Chowdhury, Headmaster, Moulvibazar Government High School
15. Professor Mr. Nani Gopal Roy, Moulvibazar Government College
16. Mr. Niranjan Paul, Associate Professor, Department of Botany, M C College, Sylhet
17. Mr. Syed Md. Atahar, Secretary, Press Club, Moulvibazar
18. Mr. Mostaq Ahmed, Owner, Moulvibazar Furniture, Shamsher Nagar Rd, Moulvibazar
19. Mr. Syed Abu Shahjahan, Secretary, Brickfield Owner's Association, Moulvibazar
20. UNO, Moulvibazar Sadar Upazila
21. UNO, Kamalganj Upazila
22. UNO, Barolekha Upazila
23. Ms. Shyamoli Bhattacharya, Teaching Assistant, Barshi Jora Primary School

Findings

Findings of group- B are presented below:

Biodiversity that are being threatened:

Plants

- Kharut trees
- Dumur
- Gab
- Kalmi
- Cane
- Hijal
- Karoch
- Barun
- Nal
- Khagra
- Hartuki
- Lal awal
- Chapalish
- Syedi
- Guava
- Ulat kambol
- Nishinda/ bashak

Animals

- Baghmachh
- Turtles
- Rani machh
- Shing machh (cat fish)
- Koi machh (cat fish)
- Air machh
- Kaing machh
- Chital machh
- Bheda machh
- Radhuni machh
- Mohashol machh
- Pabda machh
- Nandina machh
- Titpunti machh
- Dove
- Kite
- Crow
- Peacock
- Jungle fowl
- White hen
- Python
- Cheetah

- Bear
- Wild cat
- Otter
- Frog
- Deer
- Mynah
- Bull frog
- Elephant

Species Conservation

Issues

- High population density
- Encroachment of wetlands
- Felling of trees
- Climate change
- Use of pesticides
- Catching of fish fry
- Deforestation
- Lack of awareness
- Lack of bird sanctuaries
- Natural disasters
- Use of harmful nets for catching fish
- Lackings in implementation of laws
- Illiteracy
- Lack of alternative sources of income
- Commercialization
- Poverty
- Water and air pollution
- Habitat alteration

Actions

- Establishment of sanctuaries
- Widespread awareness

- Increase in the rate of education
- Ban on the killing of animals and birds
- Extension of protected areas
- Creation of alternative livelihoods
- Strict implementation of laws
- Awareness creation through religious institutions, viz. mosques, temples, churches etc.
- Declaring beels as biodiversity reserves
- Cancellation of lease system
- Afforestation through plantation of indigenous species
- Mandatory environmental and agricultural education
- Prevention of tidal surges by planting chailla (wetland grass variety)
- Ban on the release of alien invasive species in open water

Ecosystem Management

Issues

- Shrinking forest cover
- Filling up of haor and chhara
- Hill cutting
- Encroachment of forests
- Change in farming techniques/practices
- Constriction of the navigable routes
- Felling of the shade trees in tea gardens
- Siltation of the Monu and Dhaloi rivers
- Barsi jora, Bhanugachh forests denudation and hill cutting for expanding human settlements
- Encroachment of Chatla and Kanthi beels
- Excessive sand mining from the Monu river

Actions

- Formulation and implementation of area wise plans for biodiversity conservation
- Capacity enhancement of the Forest Department
- Ban on establishing saw mills near forests
- Ban on the sale of fish fry
- Dredging and excavation of khals and beels

- Engineering interventions to prevent siltation or deposition in riverbeds
- Education extension into fishermen communities
- banning draining wetlands for catching fish
- Increasing the number of sanctuaries
- Cancellation of leasing system for beels

Legal, Regulatory and Policy Issues

Issues and Actions

- Laws regulating the use of land must be implemented
- Strict implementation of the existing laws
- Implementation of realistic environmental laws
- Strict penalty for polluters
- Ban on the lease of jalmahal (wetlands)
- Strict implementation of the fishery laws for stopping fish-fry harvesting
- Transparency and accountability in all activities
- Incentives for pro - environment initiatives

Education, Training and Awareness Raising

Actions

- Awareness at the grassroots level
- Widespread awareness on environmental laws
- Dissemination of information related to the adverse consequences of biodiversity loss and environmental degradation
- Eco - village models for creating more awareness
- Telecasts and radio broadcasts
- Airing documentaries
- Incorporation of the mitigation and conservation measures into the text books/syllabus, especially under the aegis of the academic social studies and commerce faculties
- Seminars and discussions at the upazila and union levels

List of Participants

1. Mr. M. Mokhlesur Rahman, District Commissioner, Moulvibazar
2. Additional District Commissioner (General), Sunamganj
3. Deputy Director, Department of Agricultural Extension, Moulvibazar
4. District Fisheries Officer, Moulvibazar
5. District Forestry Officer, Moulvibazar
6. Mr. Sunil Kumar Das, Secretary, District Lawyers Association, Moulvibazar
7. Dr. Sadek Ahmed, Additional Secretary, Homeo Association, Moulvibazar
8. Moulana Md. Aminul Bahar Jamaly, Imam, Choumohoni Jame Mashjid, Moulvibazar
9. Mr. Md. Jamshed, Chairman, Giyasnagar Union Parishad, Moulvibazar
10. Ms. Ferdousi Sultana Nina, UP Member, Ward 3 Munmukh Union Parishad, Moulvibazar
11. Minister, Magucchara Paan Punji, Kamalganj
12. Mr. M A Rub, Clinic Manager, Mary Stopes Clinic, Moulvibazar
13. Dr. Shah Nurul Islam, Editor, BNSB, Moulvibazar
14. Ms. Malaya Home Roy, Principal, Amjad Ali Government Girl's High School, Moulvibazar
15. Principal, Shishu Government Primary School, Moulvibazar
16. Mr. A Z M Manzur Rashid, Lecturer, Department of Forestry, Shahjalal Science and Technology University, Sylhet
17. Ms. Begum Mahmuda Kabir, Lecturer, Moulvibazar Government Women's College
18. Advocate Mr. Nurul Islam Sheful, Editor, Shaptahik Patakurir Desh, Moulvibazar
19. Mr. Surajit Roy, Secretary, The Moulvibazar Chamber of Commerce and Industries, Court Road, Moulvibazar
20. Mr. Md. Abdul Huq, Fishermen Association Representative, Bejbari, Moulvibazar
21. UNO, Srimangal
22. UNO, Kulaura
23. UNO, Rajnagar
24. Additional District Commissioner (General), Sylhet
25. Additional District Commissioner (General), Hobiganj
26. Chief Scientific Officer, Akbarpur, Moulvibazar
27. District Livestock Officer, Moulvibazar
28. Additional Conservator of Forests, Moulvibazar
29. Civil Surgeon, Moulvibazar
30. Moulana Kari Mr. M Mokiur Rahman, Imam, Collectorate Masjid, Moulvibazar

31. Mr. Alhaj Abdul Adud Alam, Chairman Ekatuna Union Parishad, Moulvibazar
32. Ms. Jousna Begum, UP Member, Ward 1, Akhaura Union Parishad, Moulvibazar
33. Ms. Dhaneswari Sinha, Indigenous Community Member, Teaching Assistant, Pashchim Government Primary School, Moulvibazar
34. Mr. Rabindra Kumar Dev, Cluster Manager, FIVDB, Borokapon, Moulvibazar
35. Mr. Sunil Kumar Sinha, TLCS Heed Bangladesh, Old Hospital Road, Moulvibazar
36. Principal, Mr. Ali Amjad Government Primary Girl's School, Moulvibazar
37. Mr. Priti Bikas Paul Chowdhury, Headmaster, Moulvibazar Government High School
38. Professor Mr. Nani Gopal Roy, Moulvibazar Government College
39. Mr. Niranjan Paul, Associate Professor, Department of Botany, M C College, Sylhet
40. Mr. Syed Md. Atahar, Secretary, Press Club, Moulvibazar
41. Mr. Mostaq Ahmed, Owner, Moulvibazar Furniture, Shamsher Nagar Rd, Moulvibazar
42. Mr. Syed Abu Shahjahan, Secretary, Brickfield Owner's Association, Moulvibazar
43. UNO, Moulvibazar Sadar Upazila
44. UNO, Kamalganj Upazila
45. UNO, Barolekha Upazila
46. Ms. Shyamoli Bhattacharya, Teaching Assistant, Barshi Jora Primary School