



Outcomes of the Asia Regional Workshop on Mainstreaming Biodiversity & Climate Change (06-11 April, 2003) Dehradun, India



IUCN-Regional Biodiversity Programme, Asia

<http://www.biodiversityasia.org>

**A Regional Workshop Report on
Mainstreaming Biodiversity and Climate Change
06-11 April 2003, Dehradun, India**

1. Introduction

The recently concluded World Summit on Sustainable Development (WSSD) in agreement with several national governments, international and multilateral organisations, stakeholders and communities declared specific goals with regard to sustainable development. WSSD comes 10 years after the Rio Earth Summit (1992), which pledged political and financial support to enhance the quality of human life through better environment and equity. WSSD also marks the 30th anniversary of the Stockholm Summit on Sustainable Development.

Despite all these commitments many are concerned with the lack of integrated on-the-ground work to deal with better environment. Even though Rio gave birth to three international Conventions, namely the Convention on Biological Diversity (CBD), UN Framework Convention on Climate Change (UNFCCC) and the Convention to Combat Desertification (CCD), the implementation of these Conventions are at varying stages. The Forestry Principles (FP) derived directly from the Rio Summit is often forgotten.

Each of these instruments focus on a particular set of problems, yet each also recognises that activities to address its own issues must also take into account those of the other instruments. Inter-dependency of these instruments is visible, imminent and required. Each of these individually aims to achieve sustainable development. However, one element often forgotten is how at ground level integration is possible and is needed.

Incidentally at national level all these three Conventions fall under the purview of agencies looking after environment and natural resources. Yet these are dealt by separate departments and institutions, often with a high degree of disconnect. Such disconnects lead to ineffective implementation, though not individually at Convention level, but collectively to achieve sustainable development.

The barriers to achieve synergies are technical (lack of understanding of cross-sectoral issues, information, impact assessments etc.), political (inter-departmental conflicts, issues of 'territoriality', lack of guiding principles and understanding at policy making

level) and cultural (thoughts of not overstepping boundaries and lack of insight to working at local or ground levels).

In the face of these challenges there is a need to develop and enhance synergies between the instruments in terms of their implementation at local, national, regional and global levels. In some cases synergies and integrated approaches exist and can be built upon and in some cases efforts are needed to stimulate collaboration, cooperation and harmonization.

The negotiation of the Convention on Biological Diversity, the Framework Convention on Climate Change and the Convention to Combat Desertification are aimed at establishing new global partnerships to ensure sustainable development. The need for improved coordination among the Rio Conventions – the UNFCCC, UNCCD and CBD is reiterated in Articles 7.2(I) and 8.2(e) of the UNFCCC, Articles 5 and 24(d) of the CBD and Articles 8.1 and 23(d) of the UNCCD (FCCC/SBSTA/2002/INF.16)

Appreciation of the interlinkages between climate change and biological diversity is essential in achieving commitments to limit and reduce greenhouse-gas emissions, biodiversity losses, reach Millennium Development Goals (MDGs) and WEHAB (Water, Energy, Health, Agriculture and Biodiversity) principles of the Johannesburg Summit to promote sustainable development. The enhanced understanding of the efficacy and reliability of different assemblages of species as potential carbon reservoirs and carbon sinks and the likely effects of climate change on these functions could help decision makers in determining how management of biological diversity in ecosystems can contribute most effectively to the mitigation of climate change. Further, scientific understanding of biological diversity and the goods and services it provides could help decision makers in identifying some priorities for adaptation measures.

2. Need for Synergies between Conventions

Despite a host of environmental commitments made over the past three decades in several global fora (e.g. the Stockholm, the Rio Earth and WSSD) additional attention is needed on how to integrate on-the-ground work to more effectively address environmental issues from a development perspective. The need for such synergies can be easily be mainstreamed into the policy and planning tools such as National Biodiversity Strategies and Action Plans (NBSAPs), National Communications and National Adaptation Programmes of Action (NAPAs) as well as National Action Plans to Combat Desertification (NAPs).

Each of these instruments focus on a particular set of problems, yet each also recognise that activities to address its own issues must also take into account those of the other instruments. Inter-dependency of these instruments is visible, imminent and required. Each of these individually aims to achieve sustainable development. However, one element often forgotten is how at ground level integration is possible and is needed.

As countries embark on the preparation of national reporting which is essential to assessing the implementation of the Conventions, many have felt the need for building capacities of key stakeholders for rationalizing this often burdensome process. Therefore,

there is a need to identify mechanisms and processes which effectively can promote synergies among many of the measures suggested by the instruments individually. Implementation of the conventions must also be founded in the overall plans and strategies for sustainable development in each country.

To facilitate coordination at the Convention level, a Joint Liaison Group (JLG) was established, that includes representation from the all the three Conventions, to improve exchange of information, to explore opportunities for synergistic activities and increase coordination between the three conventions and their secretariats. The JLG has identified the following 6 cross-cutting issues that are common to all three conventions and suggests identifying actions under these themes (FCCC/SBSTA/2002/INF.16):

- Technology development and transfer
- Education and Outreach
- Research and Systematic Observation
- Capacity Building
- Reporting
- Impacts and adaptation

It is therefore critical to address these issues to arrive at any meaningful conclusions on the ways and means of implementing synergies between conventions at country level.

3. The Workshop- Focus and Rationale

As a plan of action to implement capacity building and get the thinking process on synergies between conventions rolling, IUCN-RBP in partnership with UNDP and Ministry of Environment and Forests, Government of India organised a Regional Workshop targeting biodiversity and climate change focal points of Asia on Mainstreaming Biodiversity and Climate Change between 06-11 April, 2003 in Wildlife Institute of India, Dehradun, India.

The workshop agenda was developed after detailed consultations in the region as well as with the Secretariats to the Conventions. The focus of the workshop was to achieve awareness raising, knowledge creation, developing policy inputs and information dissemination activities (See Agenda in Annex-I). The structure of the workshop is designed to be interactive encouraging interactions between the resource person and participants during all sessions. To enhance teamwork and address issues of synergies more critically, two working groups were created on the merits of the participant interest and field of expertise, during the initial group discussions.

About 40 participants comprising of senior policy makers, academics, non governmental organizations, development institutions, financial institutions and representatives from the various Convention Secretariats such as UNFCCC attended this workshop.

This workshop addressed the linkages between these cross-sectoral areas through identification of current practices used by countries for effective integration, as well as through exploration of areas where further attention is needed to stimulate collaboration, cooperation, and harmonization. More specifically, the workshop investigated modalities of three conventions addressing biodiversity and climate change relate to one another (i.e.

the Convention on Biological Diversity - CBD, the UN Framework Convention on Climate Change - UNFCCC, and the Convention to Combat Desertification – CCD), and how can synergies among these conventions be realised during implementation at the local, national and regional levels.

Millennium Development Goals, WEHAB, Biodiversity and Climate Change

The workshop focussed on the broad issues such as MDG targets, WEHAB principles and their linkages with biodiversity and climate change that are central for achieving sustainable development through environment enrichment and poverty alleviation.

The key roles of the UNFCCC, CBD, and CCD to sustainable development were reinforced at WSSD. The Plan of Implementation strengthened the Conventions' mandates for sustainable development agenda over the next decade, in that it called for more effective integration and synergies among multilateral environmental agreements MEAs. All agree, that to achieve development objectives such as MDGs and WEHAB, it requires concerted efforts for cross-sectoral and inter-thematic cooperation and coordination.

It is crucial to understand the MDGs and WEHAB principles which complement each other and get impacted due to biodiversity loss and changing climate. These are

MDG Goal	WEHAB
1. eradicate extreme poverty and hunger	W = Water and Sanitation Water and Sanitation is critical not only for life, but also for sustainable development.
2. achieve universal primary education	E = Energy Although energy is not a basic human need, it is critical for the fulfillment of all needs.
3. promote gender equality and empower women	H = Health Improve access to health services and eradicate major diseases
4. reduce child mortality	A = Agriculture Agriculture plays a central role in development and poverty eradication
5. improve maternal health	B = Biodiversity Biodiversity being integrated, as the living basis for sustainable development.
6. combat HIV/AIDS, Malaria and other diseases	
7. ensure environmental sustainability	
8. develop global partnerships for development	

4. Workshop Objectives

The objectives of the workshop were three-fold:

- Build a region and country-specific knowledge base critical to assessing, facilitating and implementing synergistic action on issues of biodiversity and climate change; mainstreaming biodiversity and climate change into MDGs
- Provide a forum for negotiators, policy makers, and NGOs from Asia to explore options for integration of biodiversity concerns into National Adaptation Programmes of Action (NAPAs) and climate change concerns in National Biodiversity Strategy and Action Plans (NBSAPs)
- Develop the capacity of key stakeholders on important legal and management issues, including possible communication and awareness raising components to employed when dealing with implementation of synergies at the national level

5. Outputs and activities

The outputs of the workshop essentially focus on the major areas of global targets:

- Mainstreaming Biodiversity into Millennium Development Goals (MDGs)
- Mainstreaming Biodiversity into Climate Change
- Mainstreaming Climate Change into MDGs
- Setting country priorities through identification of on-the-ground activities for the region, based on the above.

Recommendations

5.1 Mainstreaming Biodiversity in to the Millennium Development Goals (MDGs)

It is a matter of fact and concern that biodiversity does not get reflected directly anywhere in the 8 MDGs put forth for achieving sustainable development including poverty alleviation. It is an irony that of the 8 MDGs, only goal 7 addresses environmental sustainability without touching base on some of the core issues of biodiversity conservation and its sustainable use. To addresses some of these concerns, the participants discussed the real time issues with regards to mainstreaming Biodiversity Vis-à-vis Millennium Development Goals. The group also identified actions and interventions required under each goal. The major recommendations that emerged from extensive deliberations is compiled and presented as hereunder.

Goal 1 - Eradicate Extreme Poverty and Hunger

(Targets: Reduce by half the proportion of people living on less than a dollar a day; Reduce by half the proportion of people who suffer from hunger)

Action 1: Improve the Human Resources Capital

Intervention: Revision of education policies, training and capacity building

- Action 2: Population control targets achieved
Intervention: Raising of awareness, empowerment, education, equity through appropriate policies and their implementation – reduce the pressure on biodiversity
- Action 3: Develop income generation opportunities through sustainable livelihoods
Intervention: Public – Private Sector partnerships with supporting policies and investments
- Action 4: Achieve minimum nutritional standards of people
Intervention: Promotion of cultivation of nutritional crops; Provision of access to nutritional food; Raising awareness on removing hidden and transient hunger
- Action 5: Benefits of conservation efforts should be targeted to the poor (stakeholders)
Intervention: Supporting activities on ex-situ cultivation; Development of appropriate policies on sharing of benefits
- Action 6: Promotion of sustainable use practices and market linkages
Intervention: Policies and regulations developed through cooperatives and other appropriate mechanisms
- Action 7: Promote access and benefit sharing activities
Intervention: Develop policies/legislations including the mechanisms for enforcement; Raise awareness
- Action 8: Understand the economic values of biodiversity and empower local communities on achieving economic gains (within the legal ambit)
Intervention: Develop suitable market linkages and strategies
- Action 9: Raise the awareness of communities on values of biodiversity
Intervention: Assess the economic value of biodiversity; Raise awareness; Build capacities of communities; Identify and support elements of biodiversity in impacting livelihoods
- Action 10: Promote sustainable agricultural practices
Intervention: Provide incentives to farmers for following sustainable practices; Support use of modern and traditional technology blends; Support effective Public Distribution System

Goal 2 - Achieve Universal Primary Education

(Targets: Ensure all boys and girls complete a full course of primary schooling)

- Action 1: Integrate conservation into education programmes (formal and non-formal)
Intervention: Provision of education opportunities that particularly target the communities that are poor and those dependant on natural resources (eg. those living in PAs)

- Action 2: Provision of incentives for primary education
 Intervention: Develop appropriate primary education policies that are relevant to local needs
- Action 3: Promote policies to aim compulsory primary education
 Intervention: Develop methods to target local communities (like residential schools in rural areas – PAs)
- Action 4: Mainstream achieving primary education targets
 Intervention: Identify mechanisms to link primary education and rural development
- Action 5: Encourage primary education in rural and urban areas through policies and interventions
 Intervention: Develop mechanisms of incentives like ‘free education’; ‘food for education’

Goal 3 - Promote gender equality and empower women

(Targets: Elimination of gender disparity and secondary education preferably by 2005, and at all levels by 2015)

- Action 1: Provide better opportunities for encouraging education of girls
 Intervention: Provide incentives to encourage girl child education
- Action 2: Policies developed to promote incentives and create an enabling environment to remove disparities
 Intervention: Develop guidelines that address the importance of and gender roles and responsibilities in biodiversity conservation

Goal 4 - Reduce Child Mortality

(Targets: Reduce by two-thirds the mortality rate among children under five)

- Action 1: Strengthen primary health care and nutrition through use of traditional knowledge and traditional medicine
 Intervention: Identify and encourage use of medicinal plants and crop plants to achieve house-hold and primary health care
- Action 2: Promote conservation of biodiversity through ecosystem approach for watershed management
 Intervention: Develop appropriate management plans for watersheds and their use
- Action 3: Mitigate negative impacts of agricultural and forestry practices that affect child growth
 Intervention: Develop suitable management methodologies for addressing issues of ecosystem imbalance and increase in incidence of diseases (eg. Clearing of forests and vector borne disease)

Goal 5 - Improve Maternal Health

(Targets: Reduce by three quarters the maternal mortality ration)

Action 1: Provide alternate sources of energy for house - hold purposes for women
Intervention: Develop policies and mechanisms to replace existing methods of cooking and related activities

Action 2: Promote forestry activities with a focus on enhancing the harvesting of fuel wood and Non-Timber Forest Products (NTFPs)
Intervention: Support activities such as Joint Forest Management; Development of Community Wood lots etc.

Action 3: Promote innovative methods for using biodiversity as medicines
Intervention: Increase support to research and development; Raising awareness on medicinal plants and their usage.

Action 4: Promotion of agronomic practices that can provide better house-hold nutrition
Intervention: Encourage development of home gardens, Medicinal Plant Conservation Areas, Mixed cropping etc.,

Goal 6 - Combat HIV/AIDS, Malaria and other diseases

(Targets: Halt and begin to reverse the spread of HIV/AIDS; Halt and begin to reverse the incidence of malaria and other major diseases)

Action 1: Support ethnobotanical studies on role of plants/microbes in treating diseases
Intervention: Enhance research and development; Promote use of traditional medicine in treatment of such ailments

Action 2: Promote option of using biological control agents
Intervention: Support research and development

Action 3: Promote integrity of ecos ystems
Intervention: Support initiatives such as land-use; Capacity building; Sharing of experiences

Action 4: Promote management of water resources and bodies to achieve reduction in incidence of diseases
Intervention: Identify and support appropriate management strategies

Goal 7 - Ensure Environmental Sustainability

(Targets: Integrate the principles of SD into country policies and programmes; Reverse loss of environmental resources; Reduce by half he proportion of people without sustainable access to drinking water; Achieve significant improvement in the lives of at least 100 million slum dwellers by 2020)

Action 1 : Integrate all national action plans (CBD, UNFCCC, CCD and other plans) and their implementation

Action 2: Identify monitoring mechanisms to achieve reduction of biodiversity loss (2010 targets) [Using indicators like threatened species]

- Action 3: Promote ecosystem approach to conservation
- Action 4: Integrate biodiversity concerns into EIA, SEA and others
- Action 5: Implement a forestation and reforestation programmes
- Action 6: Promote appropriate land use policies
- Action 7: Address issues of risk assessment and risk management with regard to GMO, Invasive Alien Species
- Action 8: Creation and management of National Biodiversity Conservation Areas, P As and Other areas of biodiversity hot spots and suggest appropriate actions to promote environmental sustainability
- Action 9: Link ecological sustainability with sustainable development (economic, social and environmental well-being)
- Action 10: Achieve environmental sustainability through CDM, buffer zone management, eco-development plans and Joint Forest Management (JFM)
- Action 11: Conjunctive use of water (surface and ground) for environmental sustainability
- Action 12: Support policies and plans for management of effluents to ensure environmental sustainability
- Action 13: Identify policies and interventions, where appropriate, to reduce out migration from rural areas by provision of employment opportunities

Goal 8 - Develop a global partnership for development

(Targets : Develop rule based, open, non-discriminatory trading and financial systems; Address special needs of LDCs, land locked countries; Deal with debt problems of developing countries; Provide work for youth; Provide access to drugs; Provide benefits of new technologies)

- Action 1: Encourage regional mechanisms and cooperation on addressing issues of open-trading systems
- Action 2: Provide inputs into the decision making process under WTO to deal with issues of rule based and non-discriminatory trading, including addressing the special needs of LDCs, SIDS and landlocked countries
- Action 3: Increase the awareness and understanding on issues of debt for nature swaps and structural adjustment policies and enhance capacities of countries in negotiating such agreements
- Action 4: Develop national policies on ensuring employment to youth that is based on

skill development and supporting environmental management (eg. Ecotourism)

Action 5: Encourage partnerships between private – public sectors to invest in research and development of pharmaceuticals besides encouraging incentives for private sector to adopt differentiated pricing policies aimed at provision of cheaper medicines to LDS and others.

Action 6: Encourage private sector collaboration on Information and Communication Technologies (ICTs) with an aim to achieving better environmental governance and environmental sustainability with an aim to achieving better environmental governance and environmental sustainability

5.2 Mainstreaming Biodiversity and Climate Change

The participants identified activities in this area with the overarching aim to synthesize scientific information relating to the three conventions. Activities common to all three conventions relate to elaboration and identification of indicator, scientific and technical assessments, development of methodologies, analysis of data sets and monitoring of processes and systems. However, the types of indicators and assessments may vary across the conventions. For the purpose of systematic analysis and classification, the Working group identified some Overarching/General Principles concerning issues of Mainstreaming Biodiversity and Climate Change prior to addressing core issues. However, issues/concerns differ from country to country due to varied priorities.

- All interventions should be based on effective participation of all stakeholders as far as possible with due consideration to gender and equity.
- Collective political will is essential for achieving long term vision of the conventions and the MDGs and WEHAB.
- Respect for cultural traditions and values, and ensuring rights of local communities.
- Support elimination of possible conflicts at national/regional/ global levels – to ensure that sustainable development is achieved.
- The participants also identified the following areas of Cooperation to achieve synergies and mainstreaming. Additionally, the relevance of each of the activity is classified under one of the following cross-cutting thematic areas of the UNCBD, UNFCCC and UNCCD as identified by the Joint Liaison Group of these conventions.

- Technology Transfer and Development
- Education and Outreach
- Research and Systematic Observation
- Capacity Building
- Reporting
- Impacts and adaptation
- Finances
- Policies, Legislations and Regulations
- Institutional Mechanisms

Further, the participants have seen the relevance of these above identified areas and identified the respective conventions which could have an impact due to this activity. For instance, letters C+B+D identified against the issues refer to the Rio Conventions of. C-Climate Change, B-Biodiversity and D – Desertification)

Impacts and Adaptation

- Support afforestation, reforestation processes that address carbon sinks, land degradation and BD conservation-**C+B+D**
- Develop early warning system for natural disasters and land degradation processes and effectively disseminate these warning to stakeholders at the grass-root level, - **C+B+D**.
- Encourage Integrated watershed management on basin-wide approach- **C+B+D**
- Strengthen the effectiveness of buffer zones and ensure representativeness of P As **C+B**
- Develop appropriate cropping system with drought, saline and flood tolerant species/varieties, adopting an ecosystem approach. **B+D**
- Support/facilitate stable human settlements in mountain areas **C+B+D**
- Setup marine biodiversity conservation areas with attention to coral reefs- **C+B**
- Promote means of sustainable landscape management **C+B+D**
- Ensure integrated management of coastal wetlands , with focus on protection of mangrove and coastal ecosystems- **C+B**
- Promote waste treatment that use the 3-R principles (reduce, re-use, recycle) **C+B**

Research and Systematic Observations

- Set up ecological benchmarks/ standards/baselines for monitoring vegetation changes and land degradation, and impacts of CC on biodiversity and carbon stock through appropriate R&D efforts, Monitoring and Evaluations-**C+B+D**
- Develop/compile combined database of scientific parameters, tools, techniques, experiences and lessons learnt; disseminate such knowledge and information-**C+B+D**
- Develop biological indicators for pollution monitoring and assessment of ecosystem health **C+B+D**
- Assess adverse impacts of CC and desertification on loss of BD; effectively disseminate the findings **C+B+D**
- Support use of modern methods of water harvesting and management that considers use of TK and practices **C + D**
- Develop pollution treatment and abatement methods that ensure environmental sustainability, conservation and sustainable use. **C+B+D**
- Develop a mechanism that ensure optimum down stream water flow (Env. Flow requirement). **C+B+D**
- Develop/compile tools and techniques for sustainable mountain area development, including addressing issues of EIA, soil conservation and WS management. **C+B+D**
- Support bioprospecting aimed at development of new drugs and medicines, carbon trading systems **C+B+D**
- Develop tools, techniques and management systems that address issues of forest fires (through appropriate actions/policies including through community participation) **E+L; C+B+D**

- Ensure that National Communications, NAPA, NAP and NBSAP are complimentary to each other as well with PRSP-**C+B+D**
- Initiate green accounting and valuation of ecosystem functions - **C+B+D**

Policies, Legislation & Regulations

- Develop policies that support watershed management, sustainable agricultural practices and reduce environmental degradation **C+B+D**
- Integrate EIAs, SIAs and SEAs into structural adaptation measures-**C+B+D**
- Establish systems of appropriate land use practices including policy monitoring and zoning through proper characterization of land types **C+B+D**
- Develop policy interventions to provide access to resources for *bonafide* users and needs - **C+B+D**
- Develop joint policy for implementation on Rio conventions –**C+B+D**
- Support policies in mountain areas that aim to achieve SD without compromising environmental sustainability **C+B+D**
- Develop/review disaster management strategies, also suggesting remedial actions **C+D**
- Develop/review policies that address issues of water supply, air quality to enhance human and animal health **C+B**
- Develop management strategies, including use of appropriate biological interventions, to deal with pathogens, vectors and diseases affecting human health that have linkages to environmental hazards **C+B**.
- Develop/identify soft and hard options to deal with SLR and associated adaptation **C+B**
- Develop/review policies that support reduction of use of chemicals and avoid introduction of invasive alien species **B+D**

Capacity Building

- Enhance/Build capacities for national focal points as well as other stakeholders on UNFCCC, CBD and CCD and their implementation through an integrated programme-**C+B+D**
- Enhance capacities of local communities to deal with sustainable ecosystem management including coastal zone management **C+B**
- Enhance capacities in SIDS and low -lying coastal areas to SLR **C+B**

Funding

- Develop community based funds to support local action dealing with issues of CC and BD-**C+B+D**
- Prioritise projects that address synergies **C+B+D**
- Modify/Simplify existing financial mechanisms to ensure and expedite flow of funds is appropriate and timely -**C+B+D**

Education and Awareness

- Ensure regular consultations between policy makers and other stakeholders for decision making purposes and to share knowledge and skills **C+B+D**
- Promote use of indigenous knowledge and skills to deal with issues of sustainable development and environmental management using ecosystem approach, including using the skills and knowledge for policy making **C+B+D**
- Launch intensive awareness raising programme using popular media to enhance

outreach **C+B+D**

- Influence policy makers to support actions on synergies at national/regional and global levels **C+B+D**
- Integrate MEA issues on educational curriculum (formal as well as non-formal) through appropriate programmes **C+B+D**
- Develop and disseminate tools, tool kits and findings on issues of assessment of adverse impacts of CC and desertification on BD loss **C+B+D**

Technology Development & Transfer

- Support and facilitate transfer of clean environment technologies (North-South, South-South, South-North) **-C+B+D**
- Develop mechanism (financial/technical) through CDM and bio-prospecting for BD conservation **C+B**
- Develop appropriate agro-silvi – pastoral technologies to deal with adaptation issues **C+B+D**
- Develop early warning and decision support systems for natural disasters and land degradation processes **C+B+D**.
- Promote appropriate water management practices to prevent wastage of water and support sustainable use. **C+B+D**
- Promote use of alternate and clean energy technologies **C+B**
- Develop/modify/transfer technologies for treatment of effluents that pollute coastal belts as well as coral reefs- **C+B**

Reporting

- Ensure that NAPA, NAP and NBSAP are complimentary to each other as well as PRSP **C+B+D**
- Encourage development of synergistic reporting (formats and contents) for CBD, UNFCCC, CCD; the related thematic reports **C+B+D**
- Develop and disseminate of CDI processes (NCSA and their implementation) that encourage synergies **C+B+D**
- Ensure synergies are reflected in the national MDG report preparation processes **C+B+D**

Institutional Mechanisms

- Resolve inter-sectoral conflicts through appropriate institutional mechanisms **C+B+D**
- Ensure regular consultations between policy makers and other stakeholders on participatory decision making processes **C+B+D**

Issues were identified for further discussion

- Intellectual Property Rights (IPRs); Traditional Knowledge (TK) **C+B**
- Biodiversity registration; documentation **C+B+CITES**
- Risk management options, coping strategies of the poor **C+D**
- Linkages with other conventions, agreements, and processes. **WTO, RAMSAR, CMS, POPs, GEF, CITES**
- Compliance and enforcement **C+B+D**

5.3 Mainstreaming Climate Change into Millennium Development Goals (MDGs)

The participants reviewed the 8 MDGs and considered WEHAB initiatives to meet WSSD goals as influenced by issues related to Climate Change. The group identified how climate change will play a significant role in MDGs and identified impacts of CC that are relevant to WEHAB and MDG. To address impacts of climate change on each of the MDG individually, the participants applied the following filters to eliminate 'background noise'.

- WSSD
- MDG
- WEHAB
- Climate Change and
- Climate Variability

The nucleus of discussion was on the process of mainstreaming climate change into MDGs, while the enabling processes were the satellites. Some of the major findings of the group includes

- Impacts will be different for different agro-ecological and physiographic regions.
- Vulnerability will be different depending on socio-economic and cultural regimes.
- Concerns emanating from climate variability need to be recognized as different from those of climate change.
- Climate variability will adversely impact food security as well as livelihoods.
- Hazard mapping for each possible impact of Climate Change and Climate Variability, Glacial Lake Outburst Floods (GLOF), Flash floods, droughts, Sea Level Rise (SLR) etc be taken up urgently.
- Early warning systems for each of the hazards be developed, warnings effectively disseminated to vulnerable communities
- Enhance adaptive capacities of local communities to current and future adverse situations
- Media be assisted with appropriate materials for effective dissemination of information to policy makers, and to people, in general, on probable adverse impacts of climate change
- Set up bench marks and decide upon indicators for future monitoring of impact of Climate Change on Biodiversity as well as on overall development process

Impact of CC on MDG1

- Minimise adverse effects of climate change and climate variability viz: Flood, drought, SLR, Rainfall variability and GLOF are of direct relevance to MDG1. For instance
 - Floods: Loss of agricultural productivity, and also livelihoods, leading to out migration.
 - SLR: Loss of coastal land, Saline water intrusion, Impact on fisheries.

Impact of CC on MDG2

- Encourage use of renewable energy for lighting
- Ensure supply of water so that children do not have to spend schooling hours in collecting drinking water, fuel wood, fodder etc.

Impact of CC on MDG3

- Incorporate gender concerns while designing disaster mitigation plans (e.g. Shelter), pay more attention to needs of children and women
- Support improved solar technologies and biogas plant
- Encourage organic farming
- Enhance access to micro-finance specially for those who are vulnerable to impacts of CC

Impacts of CC on MDG4/5

- Increase accessibility to remote but flood vulnerable areas
- Introduce special programme where drinking water is not readily available, especially in remote and backward areas.
- Introduce special child/mother clinics during flood and drought.
- Evacuate expectant mothers from high risk zones

Impact of CC on MDG6

- Steps to curb vector/water borne diseases for e.g: Tick borne encephalitis in Sweden with rise in temperatures
- Migrants from vulnerable areas are more exposed to disease, child abuse and harassment
- Heat strokes because of increase in temperatures

Impact of CC on MDG7

- Minimise unsustainable practises in development process which pushes activities to beyond nature's limit including climate change
- Encourage Modelling and anticipatory processes to integrate possible extreme events in design and planning
- Reduce use of fossil fuels
- Maintain right forest cover
- Conserve energy and prevent pollution through improved chullahs (cook-stoves)
- Enhance vegetal/canopy cover
- Encourage agro-silvi-pastoral systems for an integrated land use -land cover policy
- Avoid monocultures in plantations and ensure species diversity
- Afforestation and reforestation taken up with appropriate species, and prevent deforestation
- Establish protected area networks to promote biodiversity conservation

Impact of CC on MDG8

- Remove barriers for clean technologies and provide incentives
- Ensure equity in partnership projects
- Encourage technology transfers
- Simplify Global Environment Facility (GEF) disbursing mechanism
- Implement higher tax regimes for bad technologies
- Ensure regional and global partners for financial support through
 - GEF trust fund
 - Special Climate Change fund
 - Prototype Carbon Fund
 - Least Developed Country (LDC) fund
 - Potential Adaptation fund

5.4 Country priorities: Actions at National and Regional Levels

One of the important sessions of the workshop dealt with prioritizing the actions that need to be addressed on a urgent basis to cope/mitigate adverse impacts due to climate change on the biodiversity and livelihoods at country level . The participants who have better understanding on the priorities for their countries, have identified the following actions that could be taken up by their respective Governments. To synthesise and concretise the actions, the participants were requested to submit atleast 2-3 case studies on issues that are directly related to the issues concerning mainstreaming climate change and biodiversity.

The country actions are prioritized by the participants following the 6 cross-cutting areas of UNCCD, UNFCCC and CBD as identified by the Joint Laison Group (JLG) of the conventions.

- Impacts and observations
- Research and systematic observations
- Policies, Legislation and Regulations
- Capacity Building
- Funding
- Education and outreach

Bangladesh

Impacts and Adaptation

Develop appropriate cropping systems with drought, saline and flood tolerant species/varieties, adopting an ecosystem approach.

Approach

- Undertake research on developing suitable varieties of rice using indigenous varieties as the base by considering type of seeds needed, early maturing Boro rice varieties to combat early flood, deep water varieties of High Yielding Varieties (HYV), Kharif to late planting of rice varieties suitable for semi-saline environment
- Use field tests to establish suitability
- Train extension workers
- Develop incentive structure for scientist
- Organize approvals of seed board
- Encourage continuous monitoring and feedback
- Developing a bigger stock of seeds

Research and Systematic Observations

Develop a mechanism that ensures optimum downstream flow (mainly for fish production).

Approach

- identify the locations where water flows are obstructed
- identify impacts of those obstructions
- carry out studies on fish spawning characteristics

- locate fish migratory routes
- establish obstruction pathways to migration of aquatic species
- quantify minimum flows support to sustain the aquatic species
- establish mechanisms to address the obstructions at national and regional levels.
- devise ways and means to address the impacts and remove the obstruction at national and regional basis.

Policies, Legislations & Regulations

Establish systems of appropriate land use practices including policy monitoring and zoning through proper characterization of land types.

Approach

- review of existing land use policies
- review the appropriate systems of land use practices
- identify the gaps
- suggest ways and means to plug those gaps
- advocate for policy reform and implementation.

Capacity Building

Enhance/build capacities for national focal points as well as other stakeholders on UNFCCC, CBD and CCD and their implementation through an integrated programme.

Approach

- reform the organizational structure of Ministry of Environment and Forests and Department of Environment to properly reflect the responsibilities for implementing MEAs
- develop appropriate human resources
- develop a system for the officials to continue this office for a minimum required period
- develop appropriate systems to maintain and strengthen institutional memory

Funding

Prioritise projects that address synergies.

Approach

- review of all the relevant MEAs
- find synergies between MEAs
- develop projects to implement the synergies

Education and Outreach

Develop and disseminate tools, tool kits and findings on issues of assessment of adverse impacts of CC and desertification on biodiversity loss.

Approach

- identify methodologies for assessing adverse impacts of climate change and desertification on biodiversity
- develop appropriate tools and tool kits based on the methodologies
- test application of the tools
- involve communities and other stakeholders at each stage
- disseminate nationwide to raise awareness through workshops, distribution of materials etc

Bhutan

Research and Systematic Observations

- Establish ecological benchmarks/standards/baselines for monitoring vegetation changes and land degradation, and impacts of CC on biodiversity and carbon stock through appropriate R & D efforts, monitoring and evaluation.

Approach

- collect baseline data
- analyze baseline data through a consultation process
- implement the standards

Capacity Building

Enhance/build capacity for national focal points as well as other stakeholders on UNFCCC, CBD and CCD and their implementation through an integrated programme.

Approach

- formulate committee of various focal points
- report integration of synergies (NAPA, NAPs and NBSAPs)

Education and Outreach

Develop awareness raising programmes at the community level - bringing in the recent decentralisation policy (dissemination of power to the GYT (block level) and DYT (district level)).

Approach

enhance the existing Micro-Environmental Action Plan implementation

India

Impacts and Adaptation

- Establish systems of appropriate land use practices/zoning adopting a landscape/ecosystem approach (such as terrestrial, mountain, aquatic coastal and marine ecosystems) with a focus on afforestation, reforestation, carbon sequestration and integrated watershed management.
- Develop early warning systems for natural disasters and land degradation processes and effectively disseminate these warnings to stakeholders at the grass-root level.

Research and Systematic Observations

Set up ecological benchmarks/standards/baselines for monitoring vegetation changes and land degradation and impacts of CC on biodiversity and carbon stock through appropriate R & D efforts, monitoring and evaluations.

Funding

- Prioritize projects that address synergies.
- Develop community-based funds to support local action dealing with issues of CC and BD.

Education and Awareness

Promote use of indigenous knowledge and skills to deal with issues of sustainable development and environmental management using ecosystem approach, including using the skills and knowledge for policy making.

Lao PDR

Impacts and Adaptation

Support stable human settlements in mountain areas.

Approach

- Improve human resources quality
- Augment better agriculture practices
- Control landslides
- Build capacities of farmers to better cultivation practices funding

Policies, Legislations and Regulations

- Integrate EIA, SIA and SEA concerns into structural adaptation measures.
- *Approach*
- Incorporate EIA as an essential element of project development
- Encourage better irrigation systems as a means for poverty reduction
- Support income generating activities (Ecotourism)
- Develop community based environment fund

Capacity Building

Enhance capacities of local communities to deal with sustainable ecosystem management.

Approach

- Train the trainers
- Initiate pilot projects in at least 2-3 areas
- exchange experiences with communities on sustainable ecosystem management through workshops and study tours)

Funding

Develop community-based funds to support local action dealing with issues of CC and BD.

Approach

Integrate the concept of climate change into national planning for allocate the finance establish fund

Education and Awareness

Influence policy makers to support actions on synergies at nation/regional and global levels.

Approach

- enhance information dissemination
- Organise a workshop to address synergies at policy makers level
- Encourage exchange of professionals from country to country
- Enhance mechanisms on synergies through study tours

Nepal

Research and Systematic Observations

Develop/compile tools and techniques for sustainable mountain area development including addressing issues of EIA, soil conservation and watershed management.

Approach

- Hire consultants or formation of inter-agency task force
- Prepare a draft report for expert review
- Create database on tools and techniques and post it on the website
- Use legal tools in EIA report preparation and review through existing regulatory framework, i.e., Environment Protection Act, 1996 and Environment Protection Rules, 1997
- Integrate soil conservation and watershed management aspects in the development programmes, particularly the infrastructure programmes through existing policies and strategies etc.

Capacity Building

Enhance/build capacities for the national focal points and stakeholders, including local communities, on UNCCD, UNFCCC and CBD through extensive awareness raising programmes.

Approach

- Collect/collate information
- Organise workshop/training
- Identify concerned specialists in the focal points
- Use mass media for information dissemination
- Orient programme to the media
- Prepare material for the press and local communities.

Technology Development and Transfer

Promote use of alternate and clean energy technologies (hydropower, solar and wind energy).

Approach

- Study and disseminate findings through Alternative Energy Promotion Centre/Rural Energy Development Programme
- assist in developing pilot project
- encourage to continue the use of subsidies particularly for the promotion of biomass
- develop a mechanism for subsidies in other areas such as micro-hydropower and solar energy.

Reporting and Research

Ensure that NAPAs, NAP and NBSIP (Implementation Plan) are complementary to each other as well as PRSP.

Approach

- Encourage process to form inter-sectoral coordination
- Identify task force to take stock of strengths and gaps
- Organise workshop and share information

- Support consultation amongst the focal points
- Synergise the programmes

Technology Development and Transfer

Develop mechanisms (financial/technical) through CDM and bioprospecting for BD Conservation.

Approach

- Organise consultation programme/workshop on CDM and bioprospecting
- Identify taskforce to implement Cleaner Technologies
- Develop mechanism to reduce fossil fuel burning
- Conduct workshop and finalise the mechanism.

Sri Lanka

Develop conservation financing mechanisms through bioprospecting and carbon trading.

Approach

- Develop community based funds
- Support afforestation, reforestation programs that address BD, carbon stock and LD
- Establish bioprospecting mechanisms aiming at providing inputs from new drugs and medicine
- Develop CDM projects that address land degradation and CBD issues
- Identify joint steering committees

Technology Development and Transfer

Develop appropriate agro/silvi-pastoral technologies to deal with adaptation issues.

Approach

- Develop drought resistant agri/silvi/pastoral varieties
- Encourage cropping systems that are resilient to natural hazards
- Augment warning systems to the grass root level to adapt appropriate agro/silvi/pastoral systems
- Adapt ecosystem approach to agri/silvi/pastoral systems.
- Establish joint programmes to develop ecological benchmarks, baselines and indicators for monitoring biodiversity, land degradation and climate change variables for synergistic reporting and disseminating.

Approach

- Identify ecological benchmarks, baselines and indicators
- Improve combined database on the 4 Rio Conventions
- Encourage synergistic reporting format and procedures for submitting report to UNFCCC, CBD and UNCCD
- Develop a joint monitoring system
- Establish joint system to prepare NAP, NBSAP, CCAP, NATCOM
- Adapt a joint dissemination programme.

Education and Awareness

Integrate MEA issues on educational curriculum (formal as well as non-formal) through appropriate programmes.

Approach

- Introduce MEA issues in curricula at all levels of University education
- Encourage a non-formal education system
- Develop joint public awareness programme
- Raise awareness for key stakeholders e.g. politicians.

Policies, Legislations and Regulations

Develop joint policy for implementation on Rio conventions.

Approach

- Ensure regular consultation between sectors, policy makers, stakeholders
- Promote participatory decision making
- Develop regulatory framework to provide strong foundations for synergistic implementation.

Vietnam

Impacts and Adaptation

Support afforestation, reforestation processes that address carbon sinks, land degradation and biodiversity conservation.

Approach

- Development of guidelines and manuals on selection of suitable species and forest planning
- Build capacities on the application of these techniques for practitioners.
- Encourage integrated watershed management on basin-wide approach.
- Develop mechanisms to disseminate lessons learnt
- Encourage public -private partnership in management of watershed
- Develop and expand Marine Protected Area (MPA) network system.

Policy, Legislations and Regulations

Establish systems of appropriate land use practices including monitoring and zoning through proper characterisations of land types.

Approach

Review and strengthen land allocation policy and regulations.

Capacity Building

Enhance/build capacities for national focal points as well as other stakeholders on UNFCCC, CBD, CCD and their implementation through an integrated programme.

Approach

- Encourage information sharing
- Organize workshops, seminars, training

- Publish guidelines, booklets, resource kits etc for dissemination
- Support the participation of the focal points at the convention events (eg CoP, SBSTA etc)
- Enhance capacities of local communities to deal with sustainable ecosystem management including coastal zone management.
- Support development of eco-villages
- Develop community-based marine protected areas

6. Impact and Achievement

This workshop was considered as a milestone event in that it was the first time that CBD and UNFCCC national focal points from Asia came together to discuss mainstreaming climate change into biodiversity, biodiversity into MDGs, climate change into MDGs and prioritizing actions at national and regional scale for implementing the conventions on biological diversity, desertification and climate change at the country level. This was accomplished through a sharing of country experiences linking CBD, CCD and UNFCCC, country prioritization of possible actions and interventions, and development of two sets of recommendations on means of encouraging synergies, as well as linkages with the MDGs. The workshop was also seen as to contribute to capacity development of national actors on synergies, creating new channels for exchanging practices, views and options.

Through the presentation on MDGs and WEHAB and the related discussion, participants were able to identify areas where climate change and biodiversity have the potential to impact on the achievement of MDGs, not only in goal seven related to environmental sustainability, but across a number of other MDGs. This aided in facilitating cross-sectoral thinking and situating these two areas in the broader development discourse, particularly related to poverty reduction.

7. Workshop follow-up: The way forward

The participants from the region were encouraged to submit a half page note on their country experiences drawing case studies that were completed recently. The resource persons of the workshop who shared their experience through lecture sessions, are requested to contribute a full paper highlighting elements of mainstreaming biodiversity and climate change. A full set of proceedings will be published shortly but before UNFCCC COP 9.

It is expected that the outcomes of this workshop that would feed into following events of the three Conventions -

UNFCCC

- SBSTA-18 and SBI-18 in Bonn during 04-13 June 2003.
- Workshop on Synergies in Finland during 02-04 July 2003
- LDC expert group and NAPA meetings in Bhutan between September 2003
- CoP-9 in Milan during 01-12 December 2003

UNCCD

- Conference of Parties (CoP -6) to be held in Havana, Cuba in August 2003.

CBD

- SBSSTA-9 in Montreal during 10-14 November
- CoP-8 in Montreal during March 2004

In addition, the outputs from this workshop would also feed into the process of

- SCBD and UNEP meeting on 'Achieving the 2010 Targets' to be held in London during 21-23 May 2003.

The preparation of scientific guidance for the integration of biodiversity considerations in the implementation of the UNFCCC requires an understanding of the relevant provisions of the instrument, and actions taken to implement it. Based on the lesson learned from this activity and the feedback from the national focal points of CBD and UNFCCC of Asia region, IUCN-RBP, Asia has initiated a pilot phase of activity to demonstrate country level implementation of synergies between conventions. As RBP is already working with countries like Lao PDR and Bangladesh in preparation of NBSAPs, incorporating climate change consideration into NBSAPs along with facilitation for development of NAPA in these two LDCs would be good case studies to demonstrate how synergies can work at ground level.

It is also intended to disseminate the findings of this activity wide and extensively to raise the voice of Asia in key intergovernmental discussions and replicate the methodology in other parts of Asia incorporating 'lessons learnt'. Efforts are also put in to partner with other like-minded institutions (eg. IISD) to carry forward this initiative for a larger Climate Change portfolio.

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Thanks are also due to all the participants and resource persons whose interest and commitment have made this workshop fruitful and outputs meaningful.



IUCN Regional Biodiversity Programme, Asia

**Regional Workshop on Mainstreaming Biodiversity and Climate Change
Wildlife Institute of India, Dehra Dun India
06th – 11th April, 2003**

6th April, 2003 Inaugural Ceremony (Hotel Madhuban, Rajpur Road, Dehra Dun, India)

1800 hrs	Invocation Song
1805 hrs	Lighting of Lamp – Shri N.D. Tiwari, hon'ble Chief Minister, Uttaranchal and Dignitaries
1810 hrs	Welcome address – Dr Balakrishna Pisupati, Head, Regional Biodiversity Programme, Asia
1815 hrs	Address by Ms, Nadine Smith, UNDP-SURF, Bangkok
1820 hrs	Address by Mr Yolando Velasco, UNFCCC Secretariat
1825 hrs	Message by Srhi K.C. Mishra, Secretary, MoEF, New Delhi
1830 hrs	Address by Mr D.D. Verma, IAS, Joint Secretary, MoEF
1840 hrs	Presidential address – Shri N.D. Tiwari, Hon'ble Chief Minister, Uttaranchal
1855 hrs	Presentation of Mementos – Shri S. Singsit, Wildlife Institute of India
1900 hrs	Vote of Thanks – Dr. Vinod B. Marthur, Professor and Workshop Coordinator
1904 hrs	National Anthem
1905 hrs	Dinner – Lawns of Hotel Madhuban (All are invited)

7th April, 2003

0900 – 0915	Introduction to the workshop - Balakrishna Pisupati (Head, IUCN Regional Biodiversity Programme, Asia)
0915 – 0945	Overview of CBD – Balakrishna Pisupati (IUCN – RBP, Asia)
0945 – 1015	Overview of UNFCCC – Yolando Velasco (UNFCCC)
1015 – 1045	Tea/Coffee break
1045 – 1115	Overview of CCD – Mr. E.H. Mahanama (Director, Ministry of Environment and Natural Resources)
1115 – 1145	Introduction to MDGs and WEHAB – Nadine Smith (UNDP)
1145 – 1215	Synergies between Conventions: Balakrishna Pisupati (IUCN)
1215 – 1245	V & A of Ecosystems and Species to Climate Change – Bhujang Dharmaji (IUCN – RBP, Asia)
1300 – 1400	Lunch
1400 – 1430	Assessment of growing stock, biomass and carbon in India's Forests – Dr Alok Saxena (FSI)
1430 – 1700	Discussion on mainstreaming MDGs, WEHAB, roles and responsibilities

8th April , 2003

- 09.00 – 0945 Overview of day 1
0945 – 1030 Vulnerability and Adaptation issues in Climate Change – Suruchi Bhadwal (TERI)
1030 – 1045 Tea/Coffee break
1045 – 1115 Sectoral issues – Water – Dr Ainun Nishat (IUCN Bangladesh)
1115 – 1145 Sectoral issues – Agriculture – SD Singh (IARI)
1145 – 1215 Biodiversity in Development : N.H. Ravindranath (IIS)
1215 – 1345 Lunch
1345 – 1415 Techniques and Tools – Mitigation – Kalipada Chatterjee (DA) Nepal
1415 – 1445 Techniques and Tools – Modelling – P.S. Roy (IIRS)
1445 – 1515 Risk Management options – Kamal Kishore , (UNDP – India)
1515 – 1530 Tea
1530 – 1830 Group work on linkages between climate change and biodiversity

9th April, 2003

- 0900 – 0915 Overview of Day 2
0915 – 1215 Presentation by Countries and Agencies (10 min by each participants)
1215 – 1300 Experience of agencies
1300 – 1400 Lunch
1330 – 1400 NBSAPs – G.V. Sarat Babu, (MoEF – India)
1400 – 1430 NAPAs – Mizan Khan (MoEF – Bangladesh)
1430 – 1500 NAPs – S.K. Ratno, (MoEF – India)
1500 – 1700 Group work on implementation options and reporting

10 April, 2003

- 0900 – 0945 Overview of Day 3
0945 – 1300 Group discussion on “Making synergies work”
- Country level group work
1300 – 1400 Lunch
1400 – 1700 Visit to Mussaurie

11th April, 2003

- 0900 – 0945 Overview of Day 4
0945 – 1030 Discussion on Issues and follow up
Group work on Sustainable Development, Regional and National Action Plans and Capacity Building
1030 – 1100 Coffee
1100 – 1200 Closing Session
1200 – 1300 Lunch
1315 Departure



IUCN Regional Biodiversity Programme, Asia

**Regional Workshop on
Mainstreaming Biodiversity and Climate Change
Wildlife Institute of India, Dehra Dun India
06th – 11th April, 2003**

LIST OF PARTICIPANTS

Name	Country	Contact details
Dr. Mizan R Khan, Policy Specialist (UNFCCC F.P) Sustainable Environment Management Programme, Ministry of Environment and Forests, Dept. of Environment 1 st Floor, Documentation Building, E/16, Agargaon, Sher-e-Bangla Nagar, Dhaka 1207, Bangladesh.	Bangladesh	Tel:+88 2 8128913-4 Fax: 882 812 8914 Email:mizan@semp-pmu.org
Mr. Monowarul Islam, Dep. Secretary, CBD F.P Ministry of Environment and Forests Government of Bangladesh, Dhaka Bangladesh.	Bangladesh	Tel: 8802861 0551 Fax: 882 812 8913
Dr Ainun Nishat Country Representative IUCN Bangladesh Country Office House # 11, Road # 138, Gulshan-1, Dhaka -1212	Bangladesh	Tel: 880-2-9890395, 9890423 Fax: 880-2-9892854 E-mail:iucnbd@citechco.net, nishat@iucnbd.org
Mr Thinley Dorji Programme Officer National Environment Commission Secretariat P.O. Box 466 Thimpu, Bhutan.	Bhutan	Tel: 975 2323384/324323 Fax: 975 2323385 Email: thinleydorji@nec.gov.bt

	Name	Country	Contact details
	Tshewang Zangmo Asst Programme Officer National Environment Commission Secretariat, P.O. Box 466 Thimpu, Bhutan	Bhutan	Tel: 975 2323384/324323 Fax: 975 2323385 Email: tzangmo@nec.gov.bt>
	Mr Somsonouk Phommakhoth Department of Environment Science, Technology and Environment Agency (STEA) B.P. 2279, Vientiane Lao People's Democratic Republic	Lao DPR	Tel: 856 21 213 470 Fax: +856-21-213-472/ 218-712 Email: som_nouk@yahoo.com
	Mr Batukrishna Upreti Ministry of Forests and Soil Conservation Singh Durbar, Kathmandu Nepal.	Nepal	Tel/Fax: 977 1 223868 Email: upretybk@wlink.com.np
	Mr Purushottam Kunwar Ministry of Population and Environment, Singh Durbar, Kathmandu, Nepal.	Nepal	Tel/Fax: 9771 242138 Email: kunwarp@hotmail.com
	Mr Suren Batagoda Director Environmental Economics & Global Affairs Division, Air Resource Management Centre "Parisara Piyasa", 104, Robert Gunawardena Mawatha, Battaramulla.	Sri Lanka	Tel: 94 1 887452 Fax: 94 74 410236 Email:envecon@sltnet.lk
	Mr Gamini Gamage Ministry of Environment and Natural Resources, "Sampathpaya" Rajamalwatta Battaramulla.	Sri Lanka	Tel: 94 1 887454 Fax: 94 1 877292 Email: envgreen@sltnet.lk
	Mr E.H. Mahanama Ministry of Environment and Natural Resources, "Sampathpaya" Rajamalwatta Battaramulla.	Sri Lanka	Tel: 94 1 887454 Fax: 94 1 877292

Name	Country	Contact details
<p>Ms Le Anh Ngoc Climate Change Assistant National Office for Climate Change and Ozone Protection Ministry of Natural Resources and Environment of Vietnam International Cooperation Department 83, Nguyen Chi Thanh Road, Hanoi, Vietnam.</p>	Vietnam	<p>Tel: 844 8228 974 Fax: 00844 8263847 Email: vnccoffice@fpt.vn Ozoneoffice@fpt.vn</p>
<p>Ms Hoang Tji Thanh Nhan Nature Conservation Division 67, Nguyen Du, Hanoi Vietnam.</p>	Vietnam	<p>Tel: 84 9424557 Fax: 00 844 8223189 Email: hnhan@nea.gov.vn</p>
<p>Mr Nguyen Cong Minh Biodiversity Support Officer IUCN Vietnam Office I.P.O Box 60 , 13 A Tran Hung Dao Street, Hanoi, Vietnam</p>	Vietnam	<p>Tel: ++ 84 4 9 330 012/3 Fax: ++ 84 4 8 258 794 E-mail: minh@iucn.org.vn</p>
<p>Yolando Velasco UNFCCC Secretariat Programme Officer Sustainable Development Programme Secretariat - UN Framework Convention on Climate Change Martin Luther King Strasse 8, 53175 Bonn, Germany.</p>	Germany	<p>Tel: +49228-815-1427 Fax +49228-815-1999. Email: Yvelasco@unfccc.int</p>
<p>Nadine Alice Smith Junior Professional Officer Bureau for Development Policy (BDP), Pacific Northeast and Southeast Asia Sub Regional Resource Facility UNDP - Bangkok SURF</p>	Thailand	<p>Tel/Fax: +66 2288 3032 Email: nadine.smith@undp.org</p>
<p>Anne Hammil Project Manager, Climate Change & Energy International Institute for Sustainable Development (IISD) 13, chemin des Anemones, 1219 Chatelaine, Geneva, Switzerland.</p>	Switzerland	<p>Tel: +41 (22) 979-8637 Fax: +41 (22) 979-9054 E-mail: ahammill@iisd.ca</p>

Name	Country	Contact details
Dr Kamal Kishore UNDP-India 55, Max Mueller Marg New Delhi 110 003	India	Tel: 00 91 11 24628877 Fax: 91 11 2462 7612 Email:Kamal.kishore@undp.org
Ms Shireen Samrasuriya Energy, climate change UNDP Sri Lanka Bauddhaloka Mawatha Colombo 7.	Sri Lanka	Tel: +94 1 580691 Fax: +94 1 581116 Email: shireen.samarasuriya@undp.org
Suruchi Bhadwal Tata Energy Research Institute Darbari Seth Block Habitat Place, Lodhi Road New Delhi 110 003	India	Tel: +91 11 2468 2100 Fax: +9111 2468 2144 Email: suruchib@teri.res.in
Prof. N H Ravindranath Centre for Ecological Sciences Indian Institute of Science Bangalore - 560 012	India	Tel: 91- 80- 360 1455 (D); 91- 80- 360 0985 extn 216 Fax: 91- 80- 360 1428; 91- 80 - 360 0683 Email: ravi@ces.iisc.ernet.in
Mr Kalipada Chatterjee Head, Climate Change Centre Development Alternatives B-32, Tara Crescent Qutab Institutional Area New Delhi 110 016	India	Tel: 91 11 2696 7938, 2685 1158 Fax: 91 11 2686 6031 Email: kc@sdalt.ernet.in, c_kalipada@hotmail.com
Mr. G.V. Sarat Babu Additional Director Ministry of Environment & Forests Paryanvaran Bhawan CGO Complex, Lodi Road New Delhi 110 003 India.	India	Tel: 91 11 2436 2497 Fax 91 11 2436 7669 Email: sarat@menf.delhi.nic.in
Dr Alok Saxena Jt Director-Forest Survey of India Ministry of Forestry and Environment Kaulagarth Road, Dehra Dun- 248195	India	Phone: 91 135 (0) 755037 Fax: 91 (0135) 759104 Email: dr_aloksaxena@usa.net

	Name	Country	Contact details
	<p>Dr P.S. Roy Dean, Indian Institute of Remote Sensing (IIRS) 4, Kalidas Road Dehra Dun -248 001 India</p>	India	<p>Tel: +91 135 2744583 Fax: +91 135 2741987 Email: dean@iirs.gov.in</p>
	<p>Dr V.B. Mathur Professor Wildlife Institute of India Chandrabani Dehra Dun-248 001 India</p>	India	<p>Tel: 91135 2640111 to 2640990 Fax: 91 135 2640117 Email: vbm@wii.gov.in</p>
	<p>Dr. T. Ravishankar Associate Director and Principal Scientist, Coastal Wetlands: Mangrove Conservation and Mgmt. Andhra Pradesh, Orissa and West Bengal, M. S. Swaminathan Research Foundation, Field Research Centre, 7- 5A-2/1, Gopalakrishna Street, Ramaraopet, Kakinada – 533004, India.</p>	India	<p>Tel: 00 91 884 2365604 and 2377177 Fax: 00 91 884 2380095 Email: Rthupalli@hotmail.com</p>
	<p>Balakrishna Pisupati Head, IUCN-Regional Biodiversity Programme, Asia 53, Horton Place, Colombo-7 Sri lanka</p>	Sri Lanka	<p>Tel: +94 74 710 439 Fax: +94 1 662 941 Email: pbala@slt.net.lk</p>
	<p>Bhujangarao Dharmaji Senior Programme Officer, IUCN-Regional Biodiversity Programme, 53, Horton Place, Colombo-7 Sri Lanka.</p>	Sri Lanka	<p>Tel: +94 74 710 439 Fax: +94 1 662 941 Email: bhujang@slt.net.lk</p>
	<p>Ms Ranjana Saikia Communications Specialist Tata Energy Research Institute Darbari Seth Block Habitat Place, Lodhi Road New Delhi 110 003</p>	India	<p>Tel: 00 91 11 2468 2100 Fax: 00 91 11 2468 2144 Email: ranjana@teri.res.in</p>

Name	Country	Contact details
Ms Livleen Kahlon Tata Energy Research Institute Darbari Seth Block Habitat Place, Lodhi Road New Delhi 110 003	India	Tel: 00 91 11 2468 2100 Fax: 00 91 11 2468 2144 Email: kahlonl@teri.res.in
Dr. Sarnam Singh Professor Forestry & Ecology Division Indian Institute of Remote Sensing (NRSA) Department of Space 4, Kalidas Road, Dehra Dun 248 001 India	India	Phone: Tel: +91 135 2744518 extn. 2429; Fax: +91 135 2741987 email: sarnam@iirs.gov.in
Mr D.D. Verma IAS, Joint Secretary MoEF, New Delhi Dr Arun Kumar Addl. Director Zoological Survey of India Kaulagarh Road Dehra Dun	India India	Tel: 91 11 2436 7213 Fax: 91 11 2436 Email: ddverma@nic.in Tel: 91 33 4786893, 4783383 Fax: 91 33 786893
Dr. D.K. Singh Addl. Director Botanical Survey of India Kaulagarh Road Dehra Dun	India	Tel: 91 33 2424922 Fax: 91 33 2429330 Email: envis@cal2.vsnl.net.in
Dr. S.K. Ratho Assitant Inspector General of Forests Ministry of Environment and Forests 767, Paryaravaran Bhavan CGO Complex, Lodhi Road New Delhi 110003.	India	Tel: 91 11 2436 2497 Fax: 91 11 2436 1704 Email: sisir_ratho@yahoo.com
Sanjay Srivatsava Dept. of Conservator of Forests Wildlife Institute of India Dehra Dun 248001	India	Tel: 91 135 2640111 to 115 Ext. 212 Fax: 91 135 2640117 Email: sks@wii.gov.in
Dr. Rajeev K. Srivatsava Assistant Director General (M & E) Head – NBFGR KFRE (HQ), New Forest Dehra Dun	India	Tel: 91 135 275 7485 Fax: 91 135 2750 298 Email: srivatsavark@icfre.org

Name	Country	Contact details
Mr P.S. Sodhi National Coordinator UNDP-GEF Small Grants Programme Centre for Environment Education B. 73, 2 nd Floor, Soami Nagar (N) New Delhi 110017	India	Tel: 91 11 2649 7049, 705 1 Fax: 91 11 26497041 Email: Prabhjot.sodhi@ceeindia.org