CAPACITY BUILDING OF MOUNTAIN DEVELOPMENT ORGANISATIONS

This programme concentrates on strengthening the capacities of partner institutions and organisations in the HKH to implement their mandates in aspects of sustainable development with focused training programmes and tailor-made institutional strengthening activities.

Launching the Nepal SoE report

On 26 March 2001, 'Nepal: State of the Environment 2001' was launched by Dr. Klaus Töpfer, United Nations Under Secretary General and the Executive Director of United Nations Environment Programme (UNEP) – before 200 dignitaries, representing government, non-government and international agencies and universities – at Soaltee Holiday Inn Crowne Plaza, Kathmandu, Nepal.

The State of the Environment (SoE) report for Nepal, prepared through the project for Strengthening Environmental Assessment and Monitoring Capabilities in South Asia and the Greater Mekong Subregion (SEAMCAP) - was produced jointly by the Ministry of Population and Environment (MoPE), the UNEP/ Environmental Assessment Programme for Asia and the Pacific, South Asia Cooperative Environment Programme (SACEP), and ICIMOD. This report, prepared in coordination with government, non-government and private sectors working in different environmental fields, is one of nine national reports for the SEAMCAP regional countries: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka in South Asia and Laos and Vietnam in the Greater Mekong Subregion. The report will contribute to the 'Preparation of the Global State of the Environment Report 2002', which UNEP is to produce.

Dr. Töpfer was very impressed by the work carried out by the SEAMCAP and Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia (MALE) project and announced that UNEP will be opening an office in Kathmandu to coordinate air pollution research. The background to this occasion follows.

Dr. P. Crutzen, NobelLaureate

Nobel Laureate Paul Crutzen

An interaction on 'Atmospheric Pollution and Its Effects' was held on 23rd March 2001 at Hotel Yak and Yeti. The distinguished Nobel Laureate, Paul Crutzen, gave a talk on 'The Impact of Biomass Burning in the Tropics and Subtropics on the Chemistry of the Atmosphere, Regionally and Globally.' This was followed by a presentation on 'Global Atmospheric Pollution and Effects, with particular focus on South Asia' by Professor V. Ramanathan. The function was attended by participants from many government, non-government, donor, and other organisations. Following the lectures there was a lively discussion on the 'Asian Brown cloud' and its impacts on other parts of the globe.

In May 1999 an agreement was signed with the Nepalese MoPE and ICIMOD to implement the Nepal component to this project: 'Strengthening Environ-ment Assessment and Monitoring Capabilities in Nepal – State of Environment Report'. The project was assisted by the UNEP, the SACEP, and the Norwegian Agency for Cooperation and Development (NORAD). The project's aim was to produce data sets on important environmental components, and to prepare SoE based on this information. The intention was also to increase the capacity of the Nepalese government to make accurate environmental assessments.

UNEP's Executive Director Dr. K. Topfer launching the report 'Nepal State of Environment 2001'

Around 70 agencies and 150 individuals were involved in the process with ICIMOD designated as Nepal's national collaborating centre. First of all training programmes and orientations were held on collecting information and database design. The data were then collected, processed and entered into the SoE database format. MoPE played a crucial role in soliciting data from government agencies. Data and information were derived from government annual reports, statistical reports, published papers, unpublished official records and from informal discussions with experts and heads of various organisations. Several meetings were held with government and other environmental experts to gather further data.

A fundamental problem in determining the state of the environment and natural resources of Nepal and the countries in the HKH region is that data are scanty and scattered. The lack of adequate and aggregate data has made it difficult to evaluate the status of the environment of individual countries. Poor data also make it difficult to build a sound legal foundation and to support wise decision-making for sustainable development and conservation of the environment.

Nepal's SoE report is based on the best available data. It was processed in a consistent and compatible manner, but there were many limitations and gaps. The preparation of the report helped to highlight the need for more consistent collection of data in Nepal.

Once the data were processed, 56 environment experts were asked to select the five most important issues from amongst 18 environmental parameters. The index value for an issue was scored according to the percentage of experts selecting that issue. Of the five issues, forest depletion was selected by 85% and air pollution by 60%.

Receiving the ESRI's presidential award, USA

ICIMOD receives special ESRI Presidential award

ICIMOD received a prestigious Presidential Award on 9 July 2001, before 10,500 geographers and GIS professionals at the 2001 ESRI User Conference. Jack Dangermond, President of ESRI, personally selected ICIMOD for this award for promoting GIS and developing the capacities of and networking with GIS users in the HKH region. The award reflects ICIMOD's substantial work, research, and dedication to GIS education in the last decade within the HKH region.

ICIMOD also had an excellent display of posters, publications, and training materials during the exhibition.

Training and Workshop

Geomatic and Space Science Workshop

A Geomatic and Space Science Workshop was jointly organised by the Ministry of Science and Technology, National Remote Sensing Academy, India, and ICIMOD in Kathmandu on 19 April 2001. Around 200 participants from Nepal and India took part. An exhibition on GIS/RS related themes was also organised and there were 15 exhibitors. The Workshop was presided over by the former Honourable Minister for Science and Technology, Mr. Surendra Prasad Chaudhary. Mr. Jack Dangermond, Founder and President of ESRI, gave the keynote address and inaugurated the exhibition.

Training on Application of GIS and Remote Sensing to Integrated Mountain Development

A four- week' training course on 'Application of GIS and Remote Sensing to Integrated Mountain Development' took place from September 17th to 12th October, 2001. Altogether 12 participants - 4 from Bhutan, 2 from China, and 5 from within ICIMOD participated in the training programme. This programme was organised mainly at the request of the Ministry of Agriculture of Bhutan.

Training for Managers

Training on application of GIS for managers was organised from 5 - 7 December, 2001. Altogether 10 participants from different government organisations of Bangladesh participated in the training course.

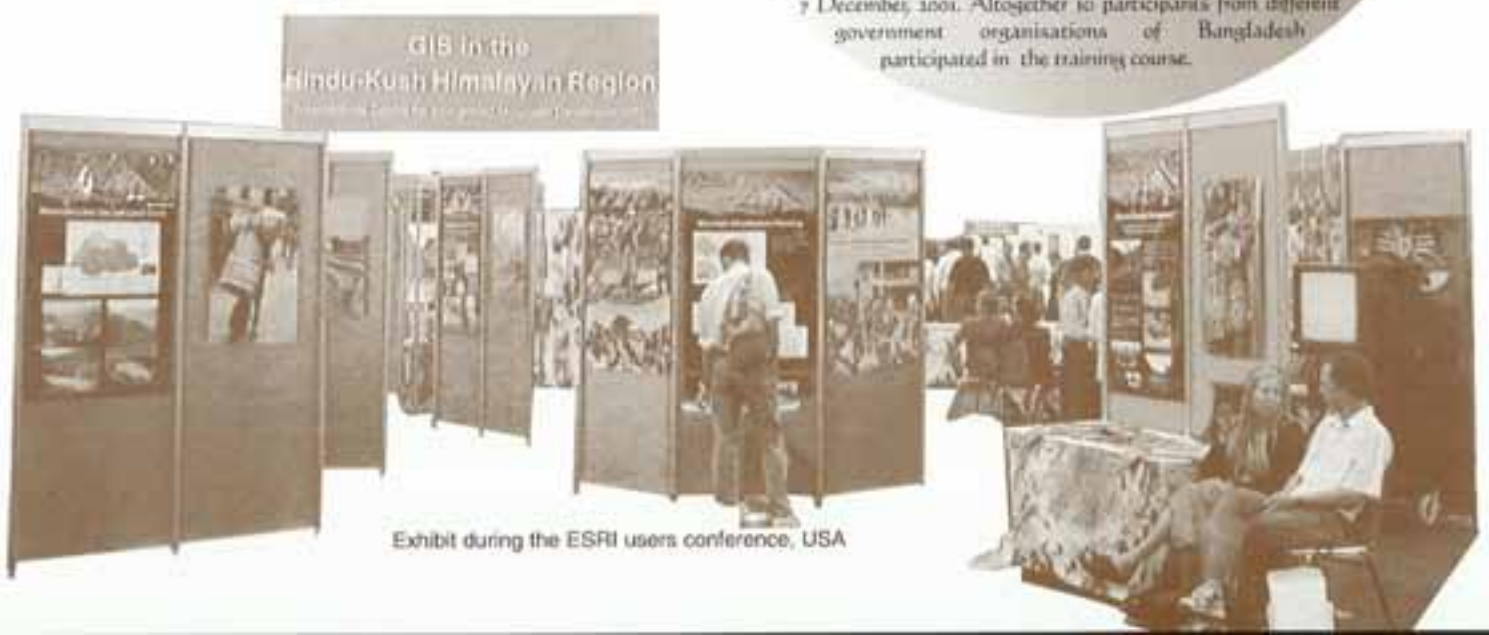
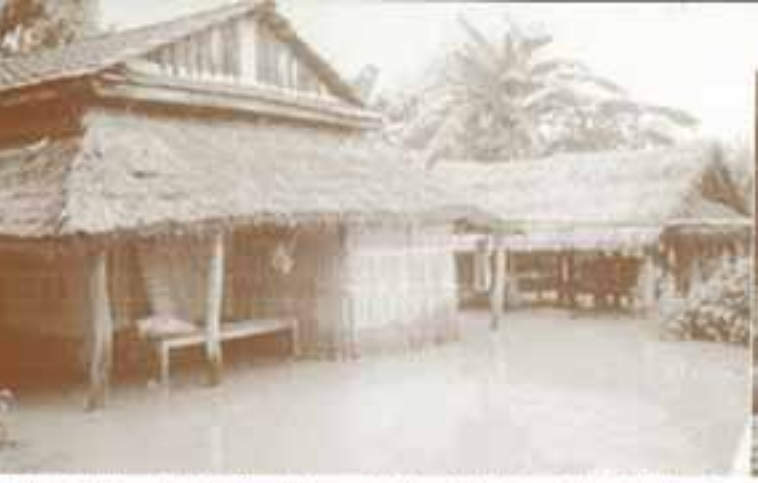
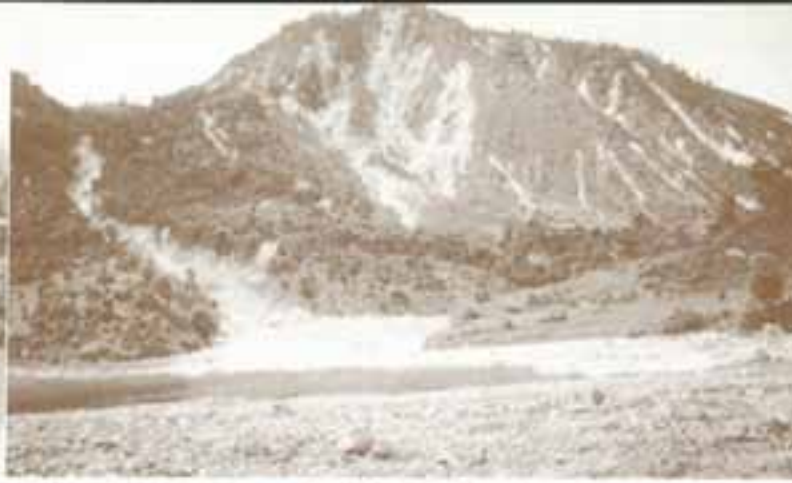


Exhibit during the ESRI users conference, USA



eet flood of Aug 2001 in Shanti Bazaar Kathar-4 of Chitwan District, Nepal



Landslide in Syangja District, Nepal

About mountain natural disasters and their impact on life in mountain hazard prevention

Improving local and national capacities to reduce and prevent the loss of life and property in vulnerable mountain areas is a task that not only involves coping with disasters as they occur but also preventing damage to expensive infrastructure. Natural disasters are many in the Himalayan region. In 2001 attention was focused on a number of activities designed to alert people to as well as address natural hazards and the damage they cause.

- We mapped hazards using remote sensing and GIS in 8 Village Development Committees (VDCs) and 4 districts of Nepal: Syangja, Tanahu, Bardiya and Chitwan.
- We carried out disaster vulnerability analysis and developed a vulner-ability index.
- Training reference materials on landslide and debris flow hazard mitigation were prepared. These were used for national and regional training to support training activities organised by the Participatory Disaster Manage-ment Programme/UNDP.
- A Regional Workshop on Water-induced Disasters in the Hindu Kush-Himalayan Region was held in December 2001 in Kathmandu, Nepal (see inset).

Regional Workshop on Water-induced Disasters in the HKH Region

ICIMOD and the Participatory Disaster Management Programme/UNDP organised a four-day regional workshop on Water-induced Disasters in the Hindu Kush-Himalayan Region from 11 to 14 December 2001 in Kathmandu with support from the Japanese Women in Development Fund/UNDP. The workshop aimed to (i) share information on disaster preparedness, management, (ii) facilitate understanding and implementation of disaster mitigation activities based on a community disaster management approach, including integration of the gender perspective into disaster mitigation.

The workshop participants, about 40 in all, included senior government officials engaged in disaster management; academic experts from Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan; resource persons from Japan, the Philippines and Thailand; and representatives of Asia Disaster Reduction Centre (ADRC), Asia Disaster Preparation Centre (ADPC) and UNDP/Nepal. Twenty-four papers were presented at the workshop. They dealt with risk and vulnerability analysis and hazard mapping; flash flood forecasting, community awareness and disaster response preparedness; natural hazards, and poverty and development and gender aspects in disaster management.

On the basis of presentations and discussions in the plenary sessions and intensive discussions in three groups on Types of Regional Level Hazards, National and Community Approaches to Mitigate Disasters, Replication of New Techniques, Exchange of Information at National and Regional Level, and Regional/ International Cooperation, the workshop arrived at a number of conclusions and made detailed recommendations on various aspects of effective disaster management in the Hindu Kush-Himalayan region.

Building together: The second advance

Under new leadership, ICIMOD initiated an organisational development (OD) process to steer the Centre towards the new direction it has envisioned. To shape ICIMOD in order to meet the challenges of the 21st Century, the management of the Centre has, over the last 12 months, launched different learning processes. Advance 1 began the OD process. Advance 2 was organised to consolidate the achievements and to make plans for continuing the next phase of the process.

Advance 2 was organised by the management of ICIMOD with the main objective of reviewing progress made since Advance 1; formulating a vision for the future of the Centre, and developing strategies for 2003 - 2007.

Specific Objectives of Advance 2

- Develop ICIMOD's future vision
- Develop strategies for working with partners (memorandum of understanding, criteria for selecting partners, data sharing, co-financing, capacity building objectives)
- Finalise an action plan for the proposed OD process
- Review ICIMOD's personnel policy
- Prepare for the forthcoming QQR

Several issues were raised and discussed over the five days of the meeting. A summary of key issues raised is presented below.

- Formulation of a vision and the development of long-term strategies to guide the management of the Centre over the next five years
- Significant progress made since Advance 1, in terms of achievements of objectives and goals of projects and other activities initiated during Advance 1
- Dealing effectively with personnel issues: employment and separation, training and development, terms and conditions of service, ethical issues at the work place, conflict of interest of employees and job satisfaction
- Developing a new organisational culture: openness, multinational, multiracial, religious tolerance and trust and respect of all for all

Participates of 2 Advance

Envisioning a brighter future for the HKH - ICIMOD staff at the Advance 2, Dhulikhel, Nepal

- Dealing effectively with the issue of gender: employment of women to management positions, training of all staff on issues of gender and gender sensitivity, establishing a gender sub-unit within the Institutional Strengthening Unit (ISU)
- Finding effective ways of working and strengthening ICIMOD's partners: developing partnership strategies, selection of partners and determining type and mode of partnerships
- Developing project proposals: deciding on the rationale for writing the proposal, purpose and objective and contents of the proposal, proper procedure for producing a convincing final report for submission to donors
- Preparing for the quinquennial review (QQR): report on self-assessment, final date, logistics and organisation

Key Achievements of Advance 2. The meetings achieved the stated objectives. Some of the key specific achievements are presented below:.

- Approval of a new draft vision for ICIMOD
- Review of achievements made in the past 12 months and defined work to be completed
- Developed new concepts for working with partners – more work to be done on developing strategies during the OD process
- Clarified some important policy issues – including personnel policy issues such as terms and condition of employment: maternity leave, paternity leave, ethical issues conflicts of interest, and training and development
- Important decisions taken on gender issues – including employment of women at professional and managerial levels and developing gender sensitive HR policies
- OD Action plan was presented and accepted
- QQR self-assessment reports were presented and discussed - some modifications were suggested in light of new materials produced that were not included in the report

The Advance enabled staff members at all levels to participate in important processes that aim to prepare the Centre to respond to the changing environments of the HKH. The Advance also brought all staff members together in a way that has not been experienced for a long time. Such an initiative will encourage staff to be more relaxed, trusting and develop confidence as well as to be motivated to perform their duties effectively. The key outcome of Advance 2 in terms of developing positive interpersonal relationships was the positive feedback given at the end of the last day. All participants acknowledged that the meeting has enabled them to deal with important issues such as working to develop effective interpersonal relationships within ICIMOD and with partners. It has helped management and staff to break communication barriers and has enabled staff to improve the way they communicate within the Centre. The meeting also enabled them to make decisions on major, challenging policy and strategic issues such as partnerships, personnel policy and the OD process.

The third quinquennial review

The Centre has reason to be grateful to its reviewers for undertaking their task in difficult circumstances but with a commitment and thoroughness of which both they and the Centre can be proud.

The members of the review team were Dr.Mohan Man Sainju (Team Leader), Dr.Uwe Kievelitz (Report Coordinator), Professor Li Wenhua (Member), Mr. Ivar Jorgensen (Member) and Ms. Bharti Gupta Ramola (Member). Coming from different nations and different disciplines, the team concluded a comprehensive evaluation over the course of a month which included field visits in the HKH region.

In brief, the team found that ICIMOD had achieved significant impact in a number of areas. Most importantly it had *"infused a mountain perspective into the work of many of its more than 200 partner organisations in the region and by capacity building of 6,000 participants in 280 training workshops and programmes"*. The team mentioned specific highlights of the different areas of work at ICIMOD as commendable achievements, at the same time pointing out the structural weaknesses that remain. The Centre was urged to pay direct attention to programme monitoring and evaluation to ensure an impact in its two key areas, poverty alleviation in mountain areas and conservation of natural resources. Increased integration of programmes was strongly recommended.

The review team acknowledged the role of ICIMOD in preparing and disseminating mountain-specific knowledge in a policy relevant manner, its advisory capacity, and promoting the use of knowledge gathered in its member countries.

Other recommendations include establishment of a Trust Fund, strategic focus of thematic and regional priorities, a sound programme monitoring and evaluation (PME) system, strategic networking and partnerships, and an 'innovative, electronically-based, knowledge-sharing network that can push the region into the 21st century.' Finally, the QQR recommended aligning internal structures to priorities through an organisational development process.

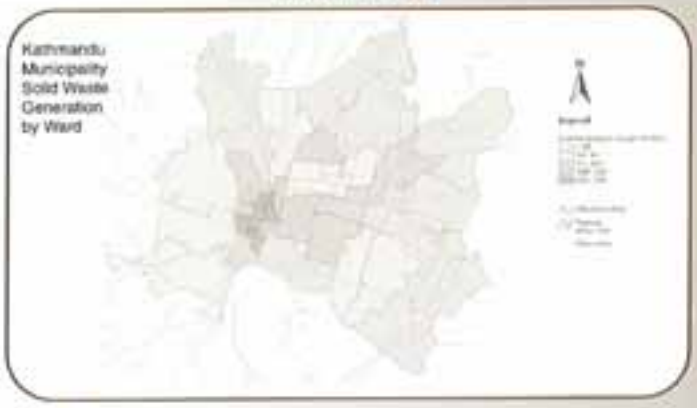
To quote Charles Dickens, "It was the best of times and it was the worst of times." In times to come, the Centre will be able to look back on receiving a fair and insightful evaluation of its work and guidance for the future during the diffcult times in its host nation.

Many thanks to the review team who lived through it with us and worked with sincere and industrious commitment. This Review will be presented to the Board of Governors and ICIMOD Support Group for their consideration at the forthcoming meeting in Thimphu, Bhutan, in the first week of December

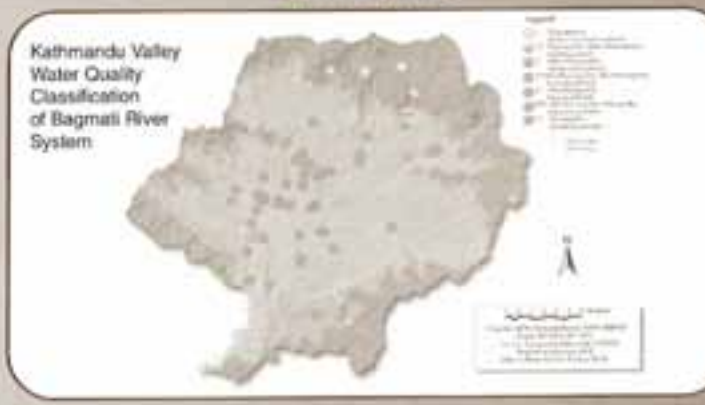
Mountain Environment Management

State of the environment of Nepal

Solid waste



Water quality



STATE

- Implementation of the Solid Waste Management Project with support of the German government (1990)
  - Establishment of Solid Waste Management and Resource Mobilisation Centre (SWMRMC)
- Currently SWMRMC is only a small unit under the Ministry of Local Development

PRESSURE

- Rapid and haphazard urban growth (6.5 % per annum, the highest in South Asia)
- Migration to the cities especially from the hill areas
- Composition of municipal waste has changed tremendously with the introduction of new materials such as plastics, paper, and glass.
- People in large cities dump their waste on the streets or in other public places and only a very small portion of the waste is recycled
- Use of chemical fertiliser in place of organic fertiliser derived from waste

Garbage dumped into the river polluting the water and detracting from its aesthetic value

Think of the health of people living near such a haphazard garbage site!.

RESPONSES

- Solid Waste Management National Policy 1996
- Local Self-Governance Act, 1999 makes the municipalities totally responsible for solid waste management
- Cities such as Kathmandu and Biratnagar Have begun involving the private sector in waste management

RECOMMENDATIONS

- The government should take action for proper management of wastes and institutions at the local strengthened to support response rates
- Community and private action for solid waste management should be replicated on a larger scale
- The Solid Waste Management National Policy should be implemented and legislation to replace the Solid Waste Act (1987) enacted

STATE

Total estimated water demand in 1998 (domestic, industry, commerce)1240 mld Gro

- Main source of drinking water in the Terai
- Annual potential of extraction 5.8- 9.6 billion m3; current withdrawal 0.52 bill m3/year
- High concentrations of iron and manganese; widespread coliform contamination

Kathmandu Valley

- Total sustainable withdrawal of groundwater ....28.3 mld - current extraction 58.
- dropping water table
- Headwaters of almost all major rivers have been tapped for drinking water
- Supply of (piped) drinking water at best ... 115 mld; estimated daily demand 145

Use of polluted water from the Bagmati River in Kathmandu Valley for bathing

PRESSURE

- Rapid growth of population
- Rapid urbanisation
- Increase in industries
- Development of agricultural infrastructure: irrigation
- Damage caused to water reservoirs, and irrigation canals by landslides, floods, and other disasters
- Poor maintenance of existing water resource infrastructure

RESPONSES

- Legislation like the Water Resources Act (1992)
- Limited public efforts to treat waste water; some successful local initiatives

Disturbance in the river ecology due to sand quarrying in the Manohara River, Kathmandu Valley

RECOMMENDATIONS

- Managing waste disposal, maintain drinking water and sewer pipelines, control open defecation, and impose minimum urban housing standards
- Set up a lead agency to coordinate water-related organisations, control water quality
- Invest in provision of potable water to all
- Establish waste water treatment plants for all effluents in urban areas, and cease disposal of solid waste in rivers
- Adopt and enforce industrial effluent standards
- Minimise leakage of piped drinking water