

Annual Report 2010

ICIMOD

2010 Biodiversity, Youth, and Remote Sensing

The year 2010 was full of
positive challenges ...

Strategic Programmes

ICIMOD would like its work to
be a strategic response to the
challenges of the region ...

FOR MOUNTAINS AND PEOPLE



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Annual Report 2010



Making bamboo stools, Retrai village, West Khasi Hills, Meghalaya, India

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Goyul village, Bhutan

Message from the Director General

Dear Readers, Friends, and Supporters of ICIMOD,

It is my pleasure to submit our Annual Report 2010 for your attention. I hope that the report provides a good overview of our activities during the last year. Our activities are designed to address the different concerns and demands at global, regional, and local levels.

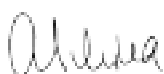
Our main vehicle to promote sustainable mountain development at international events has been climate change and the importance of the ecosystem services provided by mountain systems. We focus on raising awareness at global level of mountain issues and concerns in general, and those of the Hindu Kush-Himalayan region in particular, and encouraging inclusion of these in international conventions and other processes .

The main concerns in the region are adaptation to change, building resilient mountain communities, and the sustainability of natural resources as a prerequisite for reducing vulnerability and sustaining food production downstream and freshwater for urban centres. Addressing these concerns will require more intensive regional, transboundary cooperation. We are happy that our member countries are increasingly hearing and appreciating this message.

At the local level, we are convinced that the adaptation of livelihoods needs a sound basis. Our priorities for achieving a direct impact on livelihoods have been the promotion of high value niche products, pro-poor value chains, and the better use of remittances for rural development. Further activities are concerned with understanding the impacts of climate and other change at local level, identifying and sharing information about existing and new adaptation approaches, and reducing disaster risk.

I hope this report gives you an impression of the commitment and hard work of our staff. It might also provide you with an insight into the importance of the regular support from our Board of Governors, partners in the regional member countries, and international sponsors for our endeavour. Their continuous encouragement is a source of inspiration that helps us to overcome our weaknesses and hurdles in order to make ICIMOD a truly professional and dedicated service provider.

I take this opportunity to thank all well-wishers for their continued interest, support, and patience.



Andreas Schild



2010 Biodiversity, Youth, and Remote Sensing

The year 2010 was full of positive challenges, opportunities, and events, especially under the three topics of biodiversity, youth, and remote sensing. Each deserves a special mention and serves as an example of ICIMOD's evolution in the past year.

In general, ICIMOD had a year where it began to work more strategically to interconnect its main programmes. It utilised opportunities to link tourism into the environmental Kailash Sacred Landscape Initiative, youth outreach into a remote sensing symposium, livelihoods and poverty analysis to research on water availability, and economic analysis into payment for environmental services. Interconnecting these activities was challenging, but brought ICIMOD another step towards understanding and finding ways to address the vital issues of climate change in the Hindu Kush-Himalayan region.

By working more strategically, ICIMOD has attracted more attention this year from regional member countries and international sponsors. We had the honour of welcoming Shri Jairam Ramesh, Minister of Environment and Forest, Government of India, who stated, "ICIMOD is an anchor for regional cooperation for the Government of India." This was the first ever visit by a Minister of the Government of India to ICIMOD.

Other examples of regional and international interest are China's sponsorship of the Third Pole Environment Programme, for which ICIMOD was able to host the second workshop, and the visit of the Administrator of NASA, who came to Nepal explicitly to visit ICIMOD.

The accelerated pace and scale of our programmes had consequences for the operational budget of the Centre, which has increased more than expected. In 2010, ICIMOD organised close to 130 national, regional, and international workshops, conferences, and other meetings in Kathmandu with more than 3,000 participants, as well as training and other events in different countries in the region.

Shri Jairam Ramesh addressing participants



Women in a village in Almora, India, preparing a seasonal calendar



Advocating for Biodiversity

In 2010, the UN International Year for Biodiversity, with its international events and agenda, helped to mobilise interest in the biodiversity of the region. This year, ICIMOD had the chance to participate in meetings of the Subsidiary Body for Scientific and Technological Advice (SBSTA) that advises the Conference of the Parties (COP) to the Convention on Biodiversity on matters of science, technology, and methodology.



ICIMOD at CBD – COP10 in Nagoya, Japan

ICIMOD presented thematic papers highlighting the importance of mountain biodiversity and advocating for the increased application of the Convention in the regional countries. ICIMOD also carried out tangible activities, such as the launching of a regional biodiversity portal and starting field activities in Bhutan.

As with the COPs of the UN Convention for Climate Change, CBD COP 10 held in September in Nagoya, Japan, showed how ICIMOD as a regional organisation could argue the case of the Hindu Kush-Himalayas and present the mountain agenda at the highest level. However, both events revealed a limitation of the mountain agenda: that the Hindu Kush-Himalayan region is the only mountain area with a regional organisation like ICIMOD. At the COP 10 meeting, it became evident that it is also essential for other mountain regions, such as the Andes, to be represented at the global level. This makes the Mountain Initiative launched by Nepal even more important. But the COP 16 Climate Change conference in Cancun has shown the limitations of such an initiative if the country launching it does not have a government in place to lead the process.



Posters from the Youth Forum

Modern Technology and Climate Change

The launching of SERVIR-Himalaya at the GEOSS symposium demonstrated the interest of the regional member countries to cooperate at professional and regional levels. The regional and international participation in the symposium was overwhelming and showed the potential of using space-based technology for planning and decision-making.

The strategic role of ICIMOD in providing near real time mapping of the flooding in Pakistan is a good example of how the Centre is evolving from being a regional centre based institution to being a provider of important services to the regional stakeholders.

Youth as a Strategic Anchor for Outreach

A third new feature in 2011 represents a next step in the intensification of ICIMOD's outreach activities by reaching out to young people, as they will be the most affected by climate change. ICIMOD worked together with the British Council to organise the training of young Climate Champions from three different countries. In parallel with the launching of SERVIR, ICIMOD organised a Youth Symposium, presenting GIS instruments and discussing their use for climate change initiatives. These activities were complemented by the organisation of a herbal garden initiative with schools.

These outreach initiatives are based on the premise that youth plays an important role in bringing about change. The events also served to highlight a key challenge for outreach: how to present information, learning, and the use of top technology in a way that engages youth and the public in activities to make positive changes in the world in which we live.

A special role in the climate change agenda for mountain regions

Bindu N Lohani, Vice President, Asian Development Bank

"My memories go back to when the ADB was in collaboration with ICIMOD on several areas. On matters relating to environment and natural resources and in my own personal involvement with ICIMOD, ICIMOD has always done an outstanding job in carrying out its work in a most professional way in the Hindu Kush-Himalayan region. Today, environment and climate change are very pressing global issues. ICIMOD certainly has a special role in the climate change agenda for the Hindu Kush-Himalayan mountain region. I wish you continued success in future and look forward to greater collaboration. "

A supporting platform for regional cooperation

Union Minister of State for Environment and Forests **Shri Jairam Ramesh** visited ICIMOD on 4 October 2010. He reiterated India's commitment to deepening regional cooperation and institution building in the fields of environment, forestry, and climate change. Here some excerpts from his address:



"There's a need for more science to understand the complex behaviour of Himalayan glaciers, whose health is of deep concern. The behaviour of Himalayan glaciers is fundamentally different to that of the glaciers in polar regions, and they need special investigation and analysis ... [so we can] use scientific information as a basis for political decision making and improving governance..."

Biodiversity does not stop at geographical boundaries, and countries must work together for protection and management and to support adaptation. "

"The future lies in regional cooperation based on strong national institutions. ICIMOD can provide a supporting platform. The Government of India has a strong commitment to regional cooperation on issues relevant to the environment, including climate change.

The cooperation of India, Nepal, and China on the Kailash Sacred Landscape, facilitated by ICIMOD and supported by UNEP, is a new departure. India looks forward to supporting similar initiatives in the three other transboundary landscapes with parts in India. "

Bringing the mountain agenda to climate change negotiations

Notwithstanding the importance of mountain ecosystems, the UNFCCC climate deliberations have not addressed the mountain agenda. The **Prime Minister of Nepal** in his address to COP 15 at Copenhagen said:

"I therefore take this opportunity to call on all the mountain countries and stakeholders to form a common platform and ensure that mountain concerns ... are prominently represented in future COP negotiations and that our efforts towards adaptation obtain the required international support."

Following this, in 2010, Nepal, together with regional and global stakeholders including ICIMOD, the Mountain Partnership, and other development partners, launched the 'Mountain Initiative for Climate Change Adaptation in Mountains'. The Mountain Initiative (MI) aims to provide a framework under which mountain countries can collaborate with global and regional agencies to understand better the changes occurring in mountains and the challenges they face because of climate and global changes. The Ministry of Environment, Government of Nepal (MOE/GON), ICIMOD, development partners, and global stakeholders, especially key Asian and Andean mountain countries, are taking the lead to implement the Mountain Initiative. The first International Expert Consultation Meeting was held in Kathmandu in September 2010 where 15 mountain countries met to develop the agenda for the Initiative.



Jangothang, Bhutan

In the side event at COP 16, **Warren Evans**, Director of the Environment Department, World Bank, recognised the potential of the Mountain Initiative and lauded ICIMOD for supporting it with "high quality knowledge development and technical support," and further that,

"ICIMOD has become a key partner for the global mountain countries especially in looking into the challenges that mountains face across the world and bringing in technical expertise."

The **Hon Dr Dinesh Devkota**, Environment Division and Member of the National Planning Commission, Nepal, said:

"The world's mountain environments and ecosystems are facing a grave threat due to climate change. They have regional and global importance, and the global community must support long-term adaptation and resilience building in the mountains. A long-term adaption programme requires sustainable finance, scientific knowledge, technology transfer, and capacity building. The Government of Nepal has started the Mountain Initiative with the aim of bringing global mountain countries and communities together to ensure that the mountain agenda is addressed by the UNFCCC process. We are very pleased to see the support extended by the numerous countries and institutions to address this common agenda, which is also a global agenda."

Engaging young students in biodiversity: Promoting herbal gardens in schools

"If we learn as a student, then we can use it in our future. It also balances the ecosystem. I like that we can use these simple medicines for small diseases," says **Srijana Banjade**, a herbal garden participant

In collaboration with the National Trust for Nature Conservation (NTNC) and the Private and Boarding Schools Organisation of Nepal (PABSON), ICIMOD promoted the development of herbal gardens in schools in the Kathmandu Valley as a youth initiative to mark the 2010 Year of Biodiversity. The aim is to help schoolchildren learn about the conservation of medicinal and herbal plants; how to identify and use herbs, especially in medicines and food; and how to grow herbs in a garden.

The initiative had four main 'ingredients': a fun competition to create a herb and recipe poster, and make the recipe; a visit to ICIMOD's Demonstration and Training Centre at Godavari to see some of the many medicinal plants in the Himalayas and learn



about some of their wealth of uses; creation of a school herbal garden using the students' choice of herbs; and preparation of a herbal profile with a detailed account of the herbs growing in the garden. Awards were given for each part.

A monitoring team from ICIMOD and NTNC made three visits to monitor the progress of the gardens and found most of them well developed and impressively maintained, with informative labels. Each school had a core team of student guides who shared relevant information on the herbs with their fellow students and outsiders. In the coming year, these schools will create a chain of awareness by sharing the concept with government schools, some from outside the Kathmandu Valley.

As one of the monitoring team members remarked, *"I am happy to see that our objective to generate interest in students on various aspects of Himalayan medicinal and aromatic plants ... is developing positively as the herbal gardens in the majority of the schools have already been institutionalised."*

Empowering youth for climate change activities

"The Youth Forum was helpful in awaking and strengthening the youth of the Hindu Kush-Himalayan region to take initiatives for mitigating the impact of climate change using Earth observation techniques," says **Nanda Nautiyal**, a young researcher from India.

About forty young people from Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan attended a six-day long Youth Forum, Empowering Youth with Earth Observation Information for Climate Actions, in a special event organised in October 2010. These 40, more than half of them young women, were selected from some 750 applicants based on their essays, social involvement, and fields of study.

ICIMOD also started a youth for sustainable mountain development initiative to engage young people in climate change activities. In a first event, ICIMOD and the British Council organised a Café Climate in February to bring science to youth in an informal setting, with more than 75 young people participating in the debate. Later, a capacity-building workshop was organised for more than 40 youth climate champions from Bangladesh, Nepal, and Uzbekistan using information resources, networking, and climate adaptation methodologies they can apply at the community level.

The Youth Forum was another step in the youth strategy. It was organised by ICIMOD, Nepalese Youth for Climate Action (NYCA), and the GIS Society of Nepal, under the framework of the SERVIR Himalaya Youth Initiative, and supported by the United States Agency for International Development (USAID) and the National Aeronautics and Space Administration (NASA). The participants discussed emerging issues and learned about remote sensing and geographic information systems (RS/GIS), and resources such as Google Earth.

Pragati Shah, a participant from Nepal, is an environmental journalist:

"Participating in the International Youth Forum was a great opportunity that helped to deepen my learning on the technologies used to assess climate change and provide relevant data. It provided me a platform to know youth from different countries in the region and beyond to share and discuss views and experiences on climate change and its impacts in the region."

Nanda Nautiyal, added:

"I am applying my Youth Forum learning in my research work on climate change impact in the HKH region... I used my learning in an International conference on Cooling the Earth in November 2010 organised by our department... I hope we get a chance to work for the wellbeing of our vulnerable HKH region."

"The message from the Youth Forum is going to be a beginning in itself – for advocacy based on good science, for building regional and international cooperation, for responsible action, and we hope, for good governance as well. I would like to share with you an inspirational quote by one of my friends, 'What will decide the destiny of our future is not the power of uranium or plutonium, but the power of this millennium's youthanium,'" remarked participant **Hari Priya** at the close.





Skardu valley, Baltistan, Pakistan

ICIMOD External Mid-Term Review[†]

ICIMOD's four major donors – Germany, Switzerland, Norway, and Sweden – organised an external review of progress in the third year of the present five-year cycle. Three international and three regional experts conducted the review. Overall, the assessment was very positive. The reviewers commended staff and management for bringing about important changes and improvements in the institution and its outreach and impact.

Major highlights of the report

What is on track?

- ICIMOD is being recognised increasingly as a relevant, responsive, results-oriented regional learning and knowledge organisation.
- The change management process ICIMOD is undergoing has the full support of the staff and has in general contributed to a more professional and efficient institution and to improvement of the organisational management systems and tools.
- In general, ICIMOD is on track in the implementation of the programme of the five years cycle and the long-term strategy.
- There are also positive trends in transboundary relationships and in the steady expansion and improvement of mechanisms for sustainable regional cooperation.
- Significant achievements have been made in positioning ICIMOD as a regional knowledge centre
- The work of ICIMOD is highly appreciated by the RMCs and regional institutions.

What needs to be improved?

- The process of change management needs consolidation to secure achievements in the remaining implementation period.
- The quality of outputs and ICIMOD products still needs to be improved for ICIMOD to be fully recognised as a centre of excellence in the region, as well as globally.

- The objectives related to ownership of ICIMOD by the regional member countries have yet to be achieved with regard to the member countries' financial contributions.
- The necessary common understanding of the role and position of ICIMOD among the various partners in the regional member countries also still needs to be improved.

Key recommendations confirmed by the ICIMOD Board of Governors

- The Strategy of ICIMOD shall be revisited in view of clarifying the relation with the regional member countries.
- ICIMOD needs increased long-term programme funding.
- The Board of Governors is invited to provide guidance to the ICIMOD management on how to best integrate the themes of global significance in its responses to the portfolio of regional member countries' priorities, which are relevant for the integrated mountain development agenda.
- The management is encouraged to promote annual 'ICIMOD-days' in the regional member countries where this is not yet instituted.
- ICIMOD should continue the dialogue with the regional member countries on how to meet the stated objective of 50% funding from member countries for the core budget, how to establish procedures for regional member countries to fund specific regional programmes, and on the modalities to make the ICIMOD Foundation operational.
- The Board should encourage ICIMOD Management to give higher priority to responding to international and regional demands for high quality integrated information and assessments on themes of global significance such as climate change, water resources, and biodiversity, and to develop the skill profiles of its staff accordingly applying an open minded recruitment policy.

[†] For details, the reader is invited to read the full report at www.icimod.org.



A pathway through the rice paddies, Rangamati district, Chittagong Hill Tracts, Bangladesh

ICIMOD would like its work to be a strategic response to the challenges of the Hindu Kush-Himalayan region in adaptation to climate change. To address this issue, ICIMOD works in three main programmes – water, environment, and livelihoods of the region’s inhabitants. Sharing the knowledge that ICIMOD gathers or generates is a framework supporting all the programmes.

This year the programmes have been working more closely together to respond to the realities of this mountainous region.

Strategic Programmes



A woman enjoys the benefit of a new safe water supply, Selbal Nakot, West Garo Hills, Meghalaya, India

Water, The Essential Resource

As climate change affects the availability of water, the region's countries are asking for a better scientific understanding of floods and droughts that may become more frequent and damaging. The 2010 monsoon floods in Pakistan were unprecedented in their duration and impact. In this year, ICIMOD's focus was on the linkages between climate change and reducing the risk of water-induced disasters in transboundary river basins.

The integrated activities of ICIMOD have created a platform for dialogue between countries on information and data sharing for flood forecasting, disaster risk reduction, and satellite rainfall estimates for operational purposes. The work on disaster risk reduction concentrated on research, networking, and the production of dissemination materials, intended to inform policy and decision makers. This year, ICIMOD launched a 'Disaster Preparedness in the Himalayas' portal within the ICIMOD website in order to share knowledge on disaster risk reduction within the region. It also tested a community-based early warning system for flash floods in Assam, India.

ICIMOD completed a risk assessment methodology on glacial lake outburst floods (GLOF). The methodology is now being used by private hydropower developers in Nepal. As well, over two dozen professionals in the region were given training in the field of glacier mass balance studies.

Mountains present an opportunity to detect initial impacts of climatic change with observations of the cryosphere such as changes in the snowline, duration of snow cover, rate of glacier recession, increases in hazards such as ice and snow avalanches, formation and break-out of moraine-dammed lakes, and thawing of permafrost. ICIMOD's work to map glaciers is now in accordance with international protocols – GLIMS, GlobGlacier, and Moderate-resolution Imaging Spectroradiometer (MODIS).

The work on glaciers and glacial lake inventory in the Himalayas has led to partnerships with researchers

from academic institutes like the Swiss Federal Institute of Technology (ETH) Zurich, the Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI) of the Chinese Academy of Sciences (CAS), and the US National Aeronautics and Space Administration (NASA). ICIMOD is working with ETH to

Flash flood in Nepal



build the capacity of Indus Basin partners in hydrological modelling of snow and glacier melt runoff and to develop models applicable to the study areas, and with NASA and United States Geological Survey (USGS) to develop and implement a prototype hydrological model that includes snow and glacier melt.

During 2010, ICIMOD strengthened its basin-wise approach and river basin information system (RBIS) especially in the Koshi and Indus river basins where we have been able to develop partnerships with stakeholders in some regional member countries and apply advanced space-based technology for satellite rainfall estimation for flood prediction. A concept has also been developed for a multidisciplinary transboundary Koshi Basin programme.

Climate change and water availability in the Indus Basin

Participants at a workshop in July 2010 agreed to improve collaboration on scientific and technical research in the Indus river basin. The workshop 'Climate and environmental change impacts on the cryosphere of the Indus basin and its implications for future water scenarios' brought together more than 70 experts, scientists, government officials, and policy makers from 13 countries including Afghanistan, China, India, Nepal, and Pakistan, from the region, and Germany, the Netherlands, Switzerland, the UK, and the USA.

The Indus river basin covers approximately 1,100,000 sq.km in the Hindu Kush, Karakorum, and Himalayan mountains

of Afghanistan, China, India, and Pakistan. With one-third of the upper basin above 5000m, the area is heavily glaciated and meltwater from snow and glaciers contributes a significant amount of the annual average flow of the river.



One of the difficult questions for scientists is the conflicting behaviour of glaciers, some of which are retreating, and some advancing or even surging, within close proximity. The participants stressed the vertical and horizontal variations in environmental processes and lack of adequate monitoring systems to capture these.

Scientists, senior government officials from the Indus basin countries, and representatives from international agencies expressed interest in collaborating in the Indus Basin Programme. The immediate aim is to support ongoing research and detailed monitoring of snow, ice, and

water resources in the region through capacity building and establishment of appropriate systems. The programme will also provide a platform for sharing knowledge and state-of-the-art approaches and interventions.

The initiative will help provide information for knowledge-based decision-making and planning to ensure water availability for household consumption, food production, power generation, and other uses in the Indus basin.

Dr Ghulam Rasul, Chief Climatologist, Pakistan Meteorological Department, Islamabad, said:

"Climate change is coming fast and negatively impacting on timely water availability in Pakistan. ICIMOD's support in building the capacities of national institutions and bringing together the Pakistani and Afghan institutions on one platform to study glacial melting and assess future water availability is highly commendable. This coordinating / facilitating role has been extremely useful for hydro-meteorological data generation and forecasting water availability. It will be appreciated, if ICIMOD continues its support to the HKH countries."

Flash floods in the Himalayas: Capacity building for risk management

“Being a trainer, I have started utilising the skills learnt – from developing training modules and designing the lectures to incorporating exercises, field visits, and emphasising the importance of stakeholder involvement in DRR. All this so that trainees can utilise the skills learnt in their field of activity, appreciating the importance of an integrated approach, ”

thus **Dr K J Anandha Kumar**, Associate Professor at the National Institute for Disaster Management (NIDM), India, after participating in a training course.

With partner institutions and support from USAID/OFDA, ICIMOD is working to increase the capacity in the region for managing the risk from flash floods. A regional knowledge-sharing workshop conducted in February 2010 suggested that the concept of ‘control’ has to be changed to ‘manage’. Risk awareness and the capacity to cope need to be raised in all countries of the region. Disaster preparedness is more effective than relief. Sustainable management of risk reduction of flash floods means strengthening the capacity of local people and mainstreaming disaster risk reduction (DRR) activities into development work.

In 2010, ICIMOD developed a draft Training of Trainers (ToT) manual on flash flood risk management based on two previous resource manuals and tested it at a ToT workshop organised jointly with the World Meteorological Organization (WMO) in October/November 2010 in Kathmandu. The revised manual is now being prepared for publication so that stakeholders across the region can benefit.

Dr K J Anandha Kumar continued:

“The ICIMOD workshop was a meticulously designed, well conducted, and nicely managed event, which provided a platform for learning and exchange of views on the topic. The venue allowed round the clock interaction with participants from different countries, on various relevant issues and perspectives. The well-planned field visit to various structures and social hazard mapping involving the participants provided an excellent opportunity to appreciate the ultimate importance of the integrated approach to flood management. ”



On the DRR website...

Chet Bahadur Tamang, Program Officer - Disaster Risk Reduction and Humanitarian Programme, Oxfam-GB Nepal, in Kathmandu, Nepal offers these comments on the DRR website.

"It's good to have this type of forum to discuss various issues on disaster management. This is one of the efficient ways of getting possible solutions for a problem in a short time from experts of various sectors."



It's a good platform to bring the technical experts and field practitioners together. It can help in bringing the technology to be used for the benefit of the most vulnerable people. Many studies are made on disaster risk reduction but less has been used for the benefit of vulnerable people. This platform can help to disseminate those knowledge banks. In addition, it is equally helpful to share the outcome of use of certain technology and share the success or failure. Good luck for its continuation."

Testing early warning systems

As part of the flash floods programme, four early warning systems were installed on an experimental basis. The local communities found the systems to be very useful during the flood season of 2010. This is the first time that such equipment was set-up in this river basin [Assam] to deliver an early warning of impending waves of flash floods.

The instruments successfully provided timely warnings about rising water levels on three occasions. As a result, the villagers were able to move their livestock and other important belongings to safe locations and avoid serious damage to life and property. The equipment is simple and easy to install and maintain, and set up under community ownership and care.

"People have received the system with enthusiasm. They are looking forward to using it again in the coming flood season with a stronger network of stakeholders for more efficient dissemination of the warning from upstream to downstream areas," says **Partha J Das**, Team Leader, Assam Flash Flood Project, Aaranyak, Assam, India.





Gandruk village with a view of Annapurna south, Nepal

Promoting the Sustainability of Ecosystem Services

The ecosystems of the Hindu Kush-Himalayas allow plants and animals to adapt to climate change by providing horizontal and vertical connectivity. The ecosystem services provide resources and amenities for the livelihoods of vulnerable mountain communities as well as for large populations downstream. These vast ecosystems are interconnected and not confined within the borders of individual countries. Hence, ICIMOD is focussing on transboundary landscapes and biodiversity conservation. It aims to promote resilience to environmental changes through research and advocacy on issues related to mountain ecosystems.

In 2010, ICIMOD was active in raising awareness and contributing to the international process of drawing future global agendas. Working with regional partners and global players, it organised various programmes in the regional countries and internationally to celebrate the International Year of Biodiversity and draw attention to vital environmental issues.

ICIMOD was an observer at the Tenth Conference of the Parties (COP-10) to the UN Convention on Biological Diversity (CBD) in Nagoya, Japan. The Centre followed the negotiation processes on many CBD agendas especially those for mountain biodiversity and mountain protected areas. It participated in the scientific body meeting at Nairobi in May 2010 where it presented an 'Access and Benefit Sharing (ABS)' regional framework to the countries of the Hindu Kush-Himalayas. During COP-10, three side events were organised on transboundary conservation, challenges in mountain biodiversity conservation in the context of climate change, and the International Year of Biodiversity, and the CBD Secretariat recognised ICIMOD as a partner for the implementation of the Programme of Work for Mountain Biodiversity. This global recognition of ICIMOD's competence shows that it has been successful in taking the issues of the region to global discussions and forums related to policy and laws on biodiversity.

The trans-Himalayan transect approach, which ICIMOD has facilitated since 2008, was seen to have enormous potential to meet the challenges of adaptation to climate change and biodiversity conservation and management in the Hindu Kush-Himalayas. It was adopted as a pilot in the Kailash Sacred Landscape, where China, India, and Nepal are cooperating on developing effective landscape management.

ICIMOD worked with partner countries to complete a first-of-its-kind vulnerability assessment in the eastern Himalayas, and collaborated with international strategic partners, such as the Global Biodiversity Information Facility and Global Mountain Biodiversity Assessment, to train institutions in regional member countries in using global standard instruments. It also developed and launched a conservation portal for regional partners.

Action research on the economic valuation of ecosystem services provided valuable learning and enabled ICIMOD to develop a framework paper on valuation of ecosystems. The framework will be instrumental in building the capacity of partners with various tools and approaches.

Other activities focussed on enhancing enabling policies and the capacities of stakeholders, and increasing socioeconomic resilience, tenure security, and equitable access and benefit sharing of land and other natural resources in rangelands and shifting cultivation areas. The Centre has also been piloting schemes for REDD (reduced emissions from deforestation and degradation) in Nepal with forest user groups and civil society to develop REDD payment mechanisms.

Partners in research and advocacy

During the 2010 'International Year for Biodiversity', ICIMOD worked with partners to organise several events, especially three 'side events' during COP 10 of the Convention on Biological Diversity. The partners included the United Nations Environment Programme (UNEP), the World Conservation Union - World Commission on Protected Areas (IUCN-WCPA), Secretariat of the Convention on Biodiversity, Global Mountain Biodiversity Assessment, and ICIMOD member countries in the Hindu Kush-Himalayas.

The three events at COP10 highlighted the Mountain Biodiversity Agenda and provided a forum to discuss issues related to mountain biodiversity conservation and management and the approaches being applied. ICIMOD's regional member countries shared a common platform, committed to ICIMOD's work, and appreciated the Centre's regional cooperation approach, which they suggested was an example for replication elsewhere. Representatives from other mountain regions saw the 'Analysis of Implementation of the CBD' shared by ICIMOD as a good practice for replication. The COP-10 decision on the Programme of Work on Mountain Biodiversity identified ICIMOD as a centre for promoting the programme in the Hindu Kush-Himalayan region.

Professor Christian Körner, Chair of the Global Mountain Biodiversity Assessment, offered these comments:

"The Global Mountain Biodiversity Assessment (GMBA) of Diversitas that I am chairing aims at advancing knowledge about the organismic richness in the world's mountains, the causes of this richness, and the threats. GMBA is not able to conduct this global assessment and the associated research with its own resources and personnel, but rather acts as a facilitator or advocate.

I can say with no exaggeration, ICIMOD became our strongest partner in these attempts in Asia and perhaps worldwide. With its excellent infrastructure and trained personnel and the outstanding logistics, ICIMOD was able to advance the biodiversity agenda in the Hindu Kush-Himalayan region.

GMBA was able to directly translate its current action plan of advancing digital archives on mountain biodiversity into real working programmes and projects in the region, such as the Kailash Sacred Landscape project. The workshop organised jointly by ICIMOD, GBIF, and GMBA in 2010 started a new era of biodiversity sharing, providing a regional node to publish, harvest, and use biodiversity data in international data formats. It is to be hoped that the attempts of ICIMOD to foster sustainable land use and livelihoods and conservation in the Hindu Kush-Himalayan region will profit from the power of such new tools in biodiversity research and conservation.

To perform activities like these successfully, you need a partner that is well organised, has a critical mass of experts and resources, and, most importantly, has built trustful partnerships with the regional authorities and people. On its own, GMBA could never have had such an impact on the biodiversity agenda, or use synergies, such as implementing the mountain work programme for the CBD. "

Collecting wild herbs in Manang, Nepal



Towards transboundary cooperation

ICIMOD has piloted a transboundary landscape conservation project in the Kailash Sacred Landscape (KSL). The area is the source of four of Asia's great rivers and covers over 31,000 sq.km in the remote southwestern part of the Tibetan Autonomous Region (TAR) of China, adjacent areas of northwestern Nepal, and northern India.

The approach discussed focuses on enhancing biodiversity and cultural conservation, ecosystem management, sustainable development, and climate change adaptation. Through scientific and technical cooperation, it will enhance information exchange among the member countries to help in developing and managing a knowledge base that facilitates transboundary biodiversity, environmental, and cultural conservation.

The main strategic partner of the initiative is the United Nations Environmental Programme (UNEP). The regional member countries China, India, and Nepal are represented by focal ministries, such as the Chinese Academy of Sciences (CAS) in China, Ministry of Environment and Forest (MOEF) in India, and Ministry of Forest and Soil Conservation (MoFSC) and Ministry of Environment (MoE) in Nepal.

During the 18-month project, each country team completed a feasibility assessment, conservation strategy, and comprehensive environmental monitoring plan, which are being synthesised into documents for the whole

Village in the Karnali gorge, Kailash Landscape, Nepal



Mt Kailash, PR China

landscape. The researchers visited the project sites, developing direct contacts with the local communities and an understanding of the situation, and shared the results of studies on traditional knowledge, ecotourism, and community-based environmental assessment. Bringing scientists and policy makers from the three countries together helped in the development of a close working relationship and cooperation and created a platform for advocacy for KSL.

One important lesson learned was that the countries are at different stages of development, and a longer time span and greater understanding of the dynamics and mechanics of the countries will be needed. ICIMOD is now developing a long-term programme for the conservation and sustainable management of the fragile ecosystems in the KSL area.

As **Mr Surya Prasad Joshi** (Nepal) says:

"This KSLCI will have its own importance in Nepal. In the Conservation Strategy, we identified problems and gaps. Somehow, most are similar across the countries and it may be good to have a common strategy, but each country can have its own priorities. On behalf of our delegation, we express sincere thanks to the experts from China and India for their sharing of information, ICIMOD and UNEP for supporting the work, and to my colleagues for hard work."



Weaving on a hand loom, Chittagong Hill Tracts, Bangladesh

Sustainable Livelihoods in a Changing World

ICIMOD strives to build the resilience of mountain communities to adapt their livelihoods and diversify income opportunities. It aims to empower them, especially poor people and women, by supporting equitable institutional arrangements and innovations. ICIMOD facilitates evidence-based mountain policies for greater well-being, improved equity, and reduced poverty for mountain people.

In 2010, ICIMOD gave special emphasis to analysing the vulnerability of mountain communities to climate change and their capacity to adapt. Participatory action research, conducted jointly with partners, revealed community perspectives and recommendations for improved adaptation strategies and the design of appropriate support mechanisms. Other research on mechanisms to implement payment for environmental services in community forests in Nepal provided important lessons on the distribution of revenue to use in future initiatives.

ICIMOD focused on alternative livelihood options such as labour migration and remittances, and sustainable tourism. A regional study showed that labour migration and remittances have become increasingly important for mountain development and indicated options to leverage the positive effects of labour migration. A Himalayan Heritage Route was conceptualised and launched to strengthen the Kailash Sacred Landscape Conservation Initiative. ICIMOD analysed tourism value chains and made recommendations for responsible tourism practices, now being implemented as a pilot project in Upper Mustang, Nepal.

The Centre has adapted the value chain approach to the mountain context, with a focus on high-value products and ways of increasing returns to farmers and producers. The results are being seen with Malta oranges in India, Indian bay leaves in Nepal and India, and honey in the Chittagong Hill Tracts of Bangladesh. The governments of regional member countries have provided support in the form of land for constructing community facility centres that enable community groups to do sorting, processing, and value addition to mountain produce.

The knowledge of partner organisations, such as the Himalayan Action Research Centre (HARC) in India and Asia Network for Sustainable Agriculture and Bio-resources (ANSAB) in Nepal, has improved with ICIMOD's capacity building and technical backstopping for value chain interventions. All the activities incorporate a gender focus, which has increased the integration of gender and social inclusion in the planning and operations of ICIMOD's partners.

One highlight in 2010 was a study on the linkages between labour migration and water stress. The recommendations have been shared with IFAD project partners, who initiated follow-up activities. Another was

Making candles, East Khasi Hills, Meghalaya, India



an analysis of mountain poverty, which showed that mountain poverty has specific characteristics that need to be incorporated in policy and development planning for mountain communities. We are sharing the data with regional and international researchers to raise awareness on the specificity of mountain poverty, and support the inclusion of the poverty dimension, which is important in the basin and landscape approaches. This work has led to a contribution from ICIMOD on the Human Dimension of Climate Change in Mountains for the upcoming Asia Pacific Human Development Report.

Increased livelihood options for orange growers

"The project has created livelihood options in this region. Now, we are getting Rs 10-12/kg (double from last year) for our oranges. We send our children to good schools and provide better facilities to them. The most important thing is that due to our association in cooperatives and self-help groups, the people of the region now recognise our work, so we have self-assurance," says **Usha Simalti**, a member of the Growers' Federation and Cooperative.

In Chamoli district of India, Malta oranges were being sold at prices that barely covered the production and transport costs. Many farmers were cutting down the poorly producing trees. With the Himalayan Action Research Centre (HARC), ICIMOD has been implementing a project to develop the orange value chain and promote livelihood opportunities in the area. HARC representatives say,

"With the assistance of ICIMOD, we worked to build the capacities and skills of local people so they can make their development decisions themselves, and make optimum use of locally available resources and opportunities to ensure their livelihoods."

HARC worked among the growers to establish 27 self-help groups (SHGs), a cooperative, and seven common facility centres (CFC).

The project provided technical skill training and services to at least 600 Malta orange growers to manage the trees for increased production, diversify processing of the products, and develop better market linkages for better returns. By conducting 33 processing and value addition training events in the 7 village-level CFCs, growers came to understand that 'Malta fruit' could be a great source of income.

The adoption of processing and value addition techniques to make products like juice, dry peel, peel oil, and marmalade from Malta oranges created a large number of new employment opportunities for local households. In 2010, the self-help groups processed 50 tonnes of oranges at the CFCs and sold 10,000 litres of 'Malta squash'. The SHGs have converted a single product value chain into a multiple product value-chain venture. In the second year of this Ford Foundation-funded project, the investment of US\$ 125,000 has already achieved a business turnover of US\$ 68,000, with ample scope to increase many times more in the coming years. Now, Malta orange growers in other parts of Uttarakhand have stopped cutting down the orange trees and started seeing them as an economic opportunity.

A major impact of the project has been an increase in the confidence and business attitude among the rural women, who now have new sources of income generation.

"We never thought that with simple techniques the fruit could become the prime source of livelihood in the region. Now, we are aware of its uses, how to protect the trees, harvest, transport, and make and sell the produce. The middlemen used to play with us, but now we make decisions independently. SHGs are engaged, running self-reliant businesses," says **Usha Simalti**.

"Working with ICIMOD, we could also ensure better coordination at local and regional levels with businesses. We developed administrative skills especially for research with Malta fruits and bay leaf value chain mapping, which clarifies the roles and responsibilities of the stakeholders and builds joint working and good practice in the region," says **Mahendra Kunwar** of HARC.

Revitalising ancient travel trails...

The Kailash-Humla-Himalayan-heritage-route

ICIMOD has launched a Himalayan Heritage route programme in collaboration with regional partner institutions and ViaStoria, a Swiss partner with almost 30 years of experience developing heritage routes in the European Alps. ICIMOD prioritised mountain tourism in 1989 as a promising adaptation strategy to provide mountain people with alternative livelihood options and build on the strengths of the region's highest peaks, rich biodiversity, and unique cultures.

The concept of heritage routes refers to historic and culturally important routes in unique landscapes. An attractive heritage route provides historic, cultural, and religious insights in a special and intact heritage landscape through easily available basic information and documentation. The Route is complemented by typical products and services from the region, such as local food and beverages, and basic accommodation, such as locally run and managed teahouses and mountain lodges.

ICIMOD launched the Himalayan Heritage Routes programme at a Himalayan Trails Regional workshop in March 2010, with key tourism stakeholders from Bangladesh, Bhutan, India, Nepal, and Pakistan. ICIMOD and Eco-Himal organised the workshop, in collaboration with SNV Netherlands Development Organisation, University of Salzburg, and Eurasia Pacific Uninet. ICIMOD has set up a digital collaborative workspace and Himalayan Heritage Routes regional e-discussion group, to share knowledge and learning, maintain close contact across borders, raise common tourism issues, and discuss possibilities for further collaboration on the Himalayan Heritage routes vision and programme.

In July 2010, ICIMOD and the German International Cooperation Agency (GIZ) offered ViaStoria and partners in Nepal initial support to conduct an inception pilot study on a heritage route in the Kailash Sacred Landscape in Nepal. The study identified and assessed the main heritage sites and routes that would need to be conserved to maintain the integrity of the sacred landscape. It also identified other traditional travel routes in several poor districts of Far-Western Nepal and documented their historical significance.

Guy Schneider, of ViaStoria, underlined the significance:

"The revival and development of ancient heritage routes in the Hindu-Kush Himalayas would safeguard an immensely rich cultural heritage – currently at risk through insensitive road construction, strengthen the cultural identity of mountain people, and create substantial local income and employment opportunities."

With its contacts and long experience in mountain tourism in the whole Hindu Kush-Himalayan region, ICIMOD is well placed to play a leading role in coordinating the innovative Himalayan Heritage Routes vision developed with ViaStoria. It is linking key stakeholders, organising knowledge sharing platforms, and convincing donors to invest in the promotion of heritage routes as basis for an attractive, sustainable mountain tourism sector."

Small monastery close to Mt Kailash, PR China





School in Nonglang village, West Khasi Hills, Meghalaya, India

Managing Knowledge and Communicating

ICIMOD is positioning itself as a knowledge organisation by reaching out in as many ways as possible to raise awareness of findings, activities, issues, and solutions, as it advocates for the Mountain Agenda. Its knowledge programme provides framework support to capture and disseminate information in a coordinated way. ICIMOD's knowledge activities aim to stimulate people to be at the forefront of new ways of sharing knowledge.

Innovating knowledge and communication

In 2010, Knowledge Forums on mountain development were organised with distinguished speakers, including Jack Ives, David Malone, and Elinor Ostrom.

"Individuals have incomplete information but can learn and more effectively manage their resources. Learning is a core part of what we're doing, and how we enhance this learning to apply to grassroots conditions and develop community trust, are some of the important lessons that organisations like ICIMOD can apply," said Nobel Laureate Prof. Elinor Ostrom at the ICIMOD Knowledge Forum held in December.

ICIMOD is emphasising youth as a 'change agent' in sustainable mountain development and has initiated a number of activities to mobilise young people. The approach of reaching out to youth was reflected in several activities, including the GEOSS symposium, herbal garden competition, and climate champions activities. In collaboration with the British Council Nepal, ICIMOD conducted a successful Cafe Scientifique, to bridge science with a young audience. Over 75 young environmental professionals working at grass roots level in communities attended the event. These champions work on concrete climate awareness projects, which support ICIMOD's goals now and in the future. A five-day workshop was organised for climate champions from across the region to enhance their knowledge on climate change and share with them methodologies and tools to use in climate related activities.

Mainstreaming Earth information for the benefit of mountain communities

ICIMOD has formed partnerships with NASA to develop the SERVIR-Himalaya initiative, as well as with the Global Earth Observation System of Systems (GEOSS) and other regional and international agencies. These have helped the Centre to advance in providing access to and use of Earth observation data and information, and developing innovative applications for regional visualisation and decision support, including for climate change adaptation. The International Symposium on Earth Observation within the frame of GEOSS, and pre-and-post symposium events in connection with the launching of SERVIR-Himalaya, attracted high-level participation from the region and beyond.

Overheard at the coffee break

"The fact that the Indian Minister of Environment and Forestry inaugurated the Symposium is not only ground-breaking for ICIMOD but also for Nepal. It demonstrates the recognition of this partnership and issue to be of absolute relevance for the two countries. ICIMOD is being confirmed to be on the right track, where support from two important partners, the U.S. and India, will accompany and strengthen its work for the years to come."

Within the framework of the ICIMOD website, the Mountain GeoPortal has enhanced interactive mapping and database components and downloads of GIS datasets increased to over 2,500 over the year. ICIMOD's capacity to provide near real-time mapping support has been recognised internationally.

Facilitating external networks

In June 2010, ICIMOD was inaugurated as a knowledge hub of the Asia-Pacific Water Forum, an initiative of the Asian Development Bank, the Public Utility Board Singapore, and UNESCO-IHE to connect regional research institutes to strengthen regional collaboration and knowledge exchange on water related issues.



As part of its library modernisation programme, ICIMOD started digitising its library and information resources. A new online system, HIMALDOC, is being introduced to provide access to the library resources of ICIMOD and others, and provide a space for a repository of mountain relevant grey literature, especially theses. A workshop was organised for librarians from the Himalayan University Consortium to initiate the process of establishing regional connectivity between the library collections.



Communicating with stakeholders and the public

ICIMOD continued to provide general information about the Centre's activities through general publications like the Annual Report, periodical, calendar, and diverse flyers and posters for events, as well as a range of publications on programme activities and technical subjects, from information sheets to detailed reports. All publications are freely accessible in pdf format on the web site.

A coordinated communications and publications strategy supported the International Year of Biodiversity and COP 10 activities with posters, flyers, books, a website, and diverse announcements.

The newly integrated contacts database has more than 6,000 names of people and organisations, including a media database, tagged for specific types of communication, and is now used for all distribution and PR communications, including sending electronic newsletters, announcements, press releases, and others. Press coverage has greatly increased to more than 300 mentions of ICIMOD in 2010.



Information was provided to professionals and the general public through ICIMOD's Nepal Day and Open House and diverse activities to support celebrations of various UN Days. Requests for information and resources from journalists, film makers, professionals, and development workers have increased greatly, with more than 140 major requests addressed in 2010.

Launch of SERVIR-HIMALAYA for access to earth observation data

In October 2010, ICIMOD organised the international symposium **Benefiting from Earth Observation: Bridging the Data Gap for Adaptation to Climate Change in the Hindu Kush-Himalayas**.

More than 250 participants from 24 countries attended, including government officials, scientists, researchers, development practitioners, policy-makers, media representatives, and young people. Seven technical sessions covered the latest scientific knowledge on various applications of earth observation including remote sensing for monitoring snow and glaciers; air pollution; land cover change; spatial decision support systems for ecosystem management; and space-based information for disaster management.

The symposium was linked to the launching of the SERVIR-Himalaya node. Initiated by NASA and USAID, SERVIR is an earth observation, monitoring, and visualisation system that integrates satellite and other geospatial data to support decision-making. The programme is designed to build the capacity of countries to use earth observation and geospatial information technologies in different regions around the world. SERVIR-Himalaya is gradually being adapted to the specific needs and priorities of the Hindu-Kush Himalayan region and augments the capacity of ICIMOD to provide access to and use of earth observation for the benefit of mountain communities. The presence of the NASA Administrator and USAID Deputy Administrator during the launch showed the commitment and support of these agencies for the initiative.

The NASA Administrator, **Mr Charles F Bolden Jr**, remarked during the launch,

Basanta Shrestha, Charles F Bolden Jr, Michael Yates, and Andreas Schild at the launch of SERVIR-Himalaya



"It is indeed an honour to be here in Kathmandu for the inauguration of the SERVIR Himalaya Facility hosted by our newest partner, ICIMOD, and meet with the staff who work here from around the region. While it is USAID and NASA that provide the framework for the SERVIR project, it is ICIMOD on behalf of the regional member countries that will make this project a success... I encourage you to get connected with our team there as they are already doing outstanding work. We will only benefit from mutual cooperation."

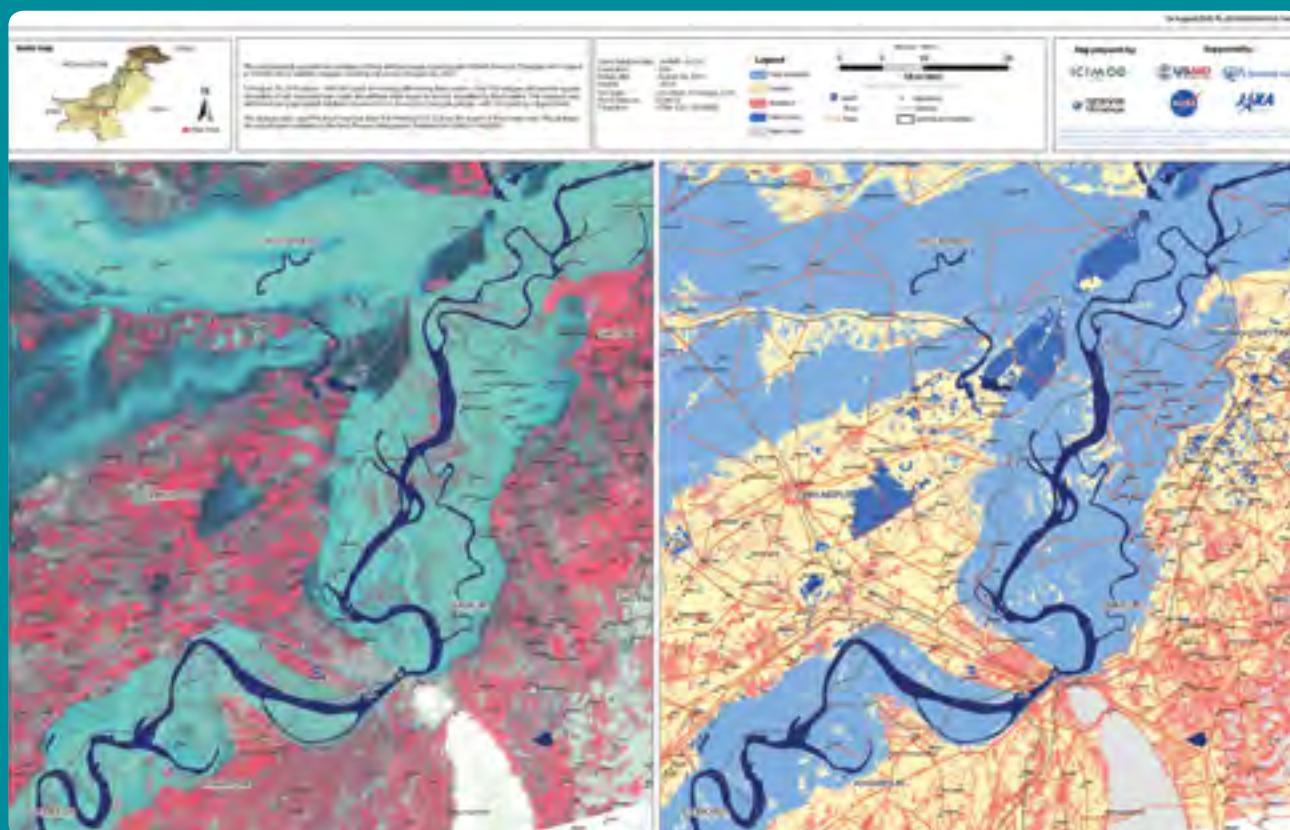
From space, this is a world without borders. Countries blend into one another and appear connected not divided. This breath-taking view makes it clear that we all have a responsibility to make our village, our country, our region, and our world better places in which to live."

Rapid response mapping of the Pakistan floods

ICIMOD played an active role in providing space-based information to support decision-making during the severe flooding in Pakistan in August 2010. Heavy monsoon rains hit northwestern Pakistan in late July causing flooding in areas to the south that affected at least 14 million people. The floodwaters covered nearly one-fifth of Pakistan and made many areas of the country inaccessible. In coordination with Sentinel Asia, the International Disaster Charter, and SERVIR-Himalaya, ICIMOD helped generate a range of earth observation products on a daily basis to support teams involved in damage assessment and disaster management. The products were provided to regional and international aid organisations and disaster networks in close coordination with the Space and Upper Atmospheric Research Commission (SUPARCO) in Pakistan. Images and data from 15 satellites gave a range of data from high to coarse resolution. The coarse resolution data was used to map the daily extent of the floodwater, its direction, and movement, in order to prepare time-series maps. Medium resolution data was used to identify flood-inundated areas, affected infrastructure (settlements, roads), and affected crop areas. The high-resolution data offered detailed information for identifying damage to bridges, roads, settlements, and cropland, and to prepare detailed maps of flood affected blocks.

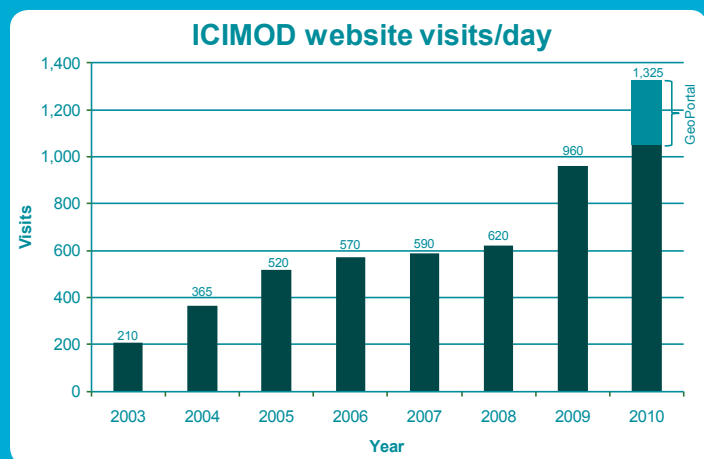
Mr Imran Iqbal, a Member of SUPARCO in Pakistan said, *"The Space and Upper Atmospheric Research Commission (SUPARCO) had a wonderful experience of working with the ICIMOD Headquarters and Country Office. During the unprecedented floods in 2010, ICIMOD worked closely with SUPARCO to provide updated maps of water movement and damage assessment. This information was extremely useful in planning for humanitarian assistance by the donor community, NGOs, and the Government of Pakistan. Enhanced regional information exchange is anticipated through ICIMOD's SERVIR project."*

Floods in Pakistan, map product from 24 August for damage assessment showing inundation relative to infrastructure



ICIMOD's Website – Double the hits

All of ICIMOD's communication, publicity, and dissemination systems have been redesigned since the introduction of the new brand in 2008. The redesign of the website has proven to be particularly effective, with a doubling of visits per day and more than doubling of



the number of publications downloaded. The website has become a consolidated platform with an integrated search function for all ICIMOD websites, including sites such as the GeoPortal and Disaster Risk Reduction sites, and activities such as the International Year of Biodiversity and the Mountain Initiative. All the activity-based websites have now been integrated into a single main site.

ICIMOD has made all its publications openly accessible through its website in the Books Online system. In 2010, ICIMOD set up Facebook and Twitter sites for newsfeeds that direct viewers to the website and established a YouTube site for uploading videos of selected lectures and presentations, documentary clips, and interviews.

Many appreciative emails are received from readers of publications and information mails, as well as users of the website. Comments included:

"Thank you for the timely and most useful comment from ICIMOD on the recent debate about the rate of retreat of glaciers in the Himalayas. This is a key role for ICIMOD to play in providing scientifically based and well-considered contributions to hotly contested topics within its competence." Canada

"Thank you very much really the publication is valuable information for all specialists in this sector." Afghanistan

"We all have to appreciate the efforts of ICIMOD to bring a separate portal on the eve of International Year of Biodiversity." India

"Your organisation is doing fantastic work and you are doing even a much better activity by sharing with the user community." India

Drying maize on the rooftops of traditional Tibetan houses, Jiagu Zangzhai, Sichuan, China



Reports from the Country Offices and Committees

CNICIMOD Secretariat

The Chinese Committee on ICIMOD (CNICIMOD) held a workshop for the project Geo-Surface Processes and Regional Adaptation to Climate Change in the Himalaya Region initiated by CAS in Chengdu in January 2010. The main objective was to discuss how to enhance collaboration with international partners in the implementation of the project to keep it running smoothly. Over 25 scientists and experts from Nepal, ICIMOD, and CAS institutions gave presentations.

The second international workshop on the Koshi River Basin Transboundary Project was held in Kathmandu in April. Experts from China and Nepal described progress, reached a consensus on sharing data and research, and proposed a blueprint for future cooperation. Over 20 experts from Nepal, ICIMOD, and China participated in the first field expedition to the Koshi river basin in late April. A second joint expedition to the Koshi river basin was held in early July. During the field trip, ten experts from China, Nepal, and ICIMOD travelled from the subtropical climate zone at an altitude of 1,700m to the cold mountains of the northern Himalayas at 5,300m to accomplish the expedition mission. CNICIMOD organised the third international workshop on the Koshi Project in Sichuan province in China in late August.

After two transboundary investigations and three workshops, the experts have obtained preliminary knowledge and statistics for the ecosystems in the Koshi river basin, which lay the foundation for future research. We have built a mechanism of cooperation and research among institutions between Nepal and China. ICIMOD has developed a proposal based on this collaboration. CNICIMOD coordinated the process for finalising and submitting the Koshi proposal to a United Kingdom sponsored programme on Environmental Services for Poverty Alleviation (ESPA).

More than 50 regional and international scientists and experts attended the second workshop on the Third Pole Environment at ICIMOD. This workshop presented the progress of research in 2010 and highlighted thematic areas, such as a regional framework for monitoring and water modelling in the Third Pole Environment Programme.

The second regional workshop on the Kailash Sacred Landscape Conservation Initiative (KSLCI) was held in early September in Sichuan, China. The workshop was supported by UNEP, organised by ICIMOD, and hosted by CNICIMOD and the Institute of Mountain Hazards and Environment (IMHE), CAS.

CNICIMOD received visiting experts from ICIMOD several times and made the arrangements for the ICIMOD evaluation expert Dr Othmar Schwant to visit China in April.

In 2010, CNICIMOD published two newsletters giving updates on the activities of ICIMOD and CNICIMOD and reporting topical information on mountain research and mountain development. On December 11, International Mountain Day 2010, CNICIMOD organised several promotional activities.



Band e Amir, Afghanistan

Afghanistan Office

Our work in 2010 proved to be instrumental in building the capacity of our Afghan partners, mainly in relevant ministries and universities; linking Afghanistan to other regional member countries; and improving our strategic programming approach in the country.

The five-year (2010-14) collaborative programme on Enhancing the Capacity of the Ministry of Agriculture, Irrigation, and Livestock for Improved Management of Natural Resources in Afghanistan (ECINR) was endorsed by the Afghan Ministry of Agriculture, Irrigation, and Livestock (MAIL) and circulated among relevant development partners in the country. While we explore funding for this country-focused programme, some of its components have been incorporated into the regional programmes managed from headquarters.

A strategic mission in April identified an urgent need for and scope of a three-year country intervention strategy comprising integrated water resource management, sustainable land use, and continued capacity building. In August, a cryosphere mission recommended developing a five-year cryosphere monitoring programme in Afghanistan.

In September, an Afghan professional assumed leadership of the country programme with backstopping from headquarters. Now, efforts to develop a broader programme are being pursued intensively and are resulting in productive country partnerships. Consultations continued with development partners, such as the EC, DFID, Dutch Embassy, SDC, and USAID; and with ICIMOD's collaborators, including MAIL, MRRD, Kabul University, Helvetas, and the Aga Khan Foundation.

ICIMOD continued to participate in country stakeholder forums and high-level workshops on natural resource management topics. We shared our experience from China, India, and Pakistan at the first International Workshop for Dryland Farming in Afghanistan in December. ICIMOD is conducting a national poverty analysis with linkages with the Central Statistics

Organisation of Afghanistan. The regional scope of the analysis could help the country compare its statistics with those in other regional countries.

ICIMOD's country office continued providing support to two regional programmes: Human Capacity Development of Afghan Universities; and the Indus Basin Project on Capacity Building for Improved Monitoring of Snow, Ice, and Water Resources. Under the first, the country office has undertaken coordination, facilitation, and local supervisory roles as needed especially for the Kabul University/Environment Protection and Disaster Management Mission. It also selected five masters' scholars for 2010-12; sent 26 professionals to Bangalore, India for a training in medicinal plants value chains; and conducted three separate in-country training/workshops on GIS applications, social science research, and strengthening environmental science faculty.

Support under the Indus Basin project, included coordinating with local partners for their timely inputs; facilitating the nomination of participants for snow and glacier melt runoff modelling training in Islamabad, Pakistan in March; and organising the cryosphere mission in August. The country office facilitated the participation of 26 Afghans from nine partner agencies in 14 international and regional training and workshops outside the country.



Pakistan Office

The Country Office was instrumental in effective implementation of several regional programme activities including the value chain of honeybees, an FAO-funded watershed management project, a conference on shisham dieback disease, and an inception and needs assessment workshop for SERVIR-Himalaya. ICIMOD also organised a regional sharing workshop on the experiences of the policy development processes as an input to the development of rangeland policy in Pakistan, and a mission to Attabad Hunza to collect first-hand information for developing an evidence-based preparedness plan for potential disasters in upstream areas of the Indus basin.

In collaboration with the Space and Upper Atmospheric Commission (SUPARCO) of Pakistan, ICIMOD was instrumental in processing the earth observation and flood damage assessment data received from satellites during the floods in Pakistan in 2010. On a daily basis, emergency response and humanitarian assistance providers had access to online views of near-real time flood inundation to assess floodwater direction and movement.

In 2010, implementation continued of the project Capacity Building for Improved Monitoring of Snow, Ice, and Water Resources in the Indus Basin funded by the German Embassy/GIZ. The Swiss Federal Institute of Technology and ICIMOD staff organised two training workshops to build the capacity of the partner institutions for monitoring. The participants from Pakistan and Afghanistan have organised online groups to share information and data and solve hydrological modelling problems. A follow up workshop in September 2010 reviewed the progress; participants are now fully capable of running the TOPKAPI model to make water availability simulations for the future. The participants were also trained in measuring water flows in turbulent mountain streams using tracer technology.

Experts from the Pakistan Meteorological Department and Water and Power Development Authority installed an automated weather and hydro station procured from Germany on the Passu glacier. The data from the Passu glacier about weather and water flow is being monitored regularly and will be used to improve understanding of and model the glacial melt-rate and water availability based on weather parameters.

The review of the ADB-funded project Promoting Climate Change Impact and Adaptation in Asia and the Pacific was completed and the results presented at provincial, national, regional, and international workshops. The study concluded that there is a lack of climate change policy, strategies, programmes, monitoring networks, detailed knowledge, financial resources, trained human resources, equipment and instruments, computational capacity, and interdepartmental and transboundary collaboration and coordination. The project compiled published information in a web-based databank, which should help in sharing the available information among stakeholders. A mountain risk screening and management guide was prepared to screen hydro-energy projects for the effects of climate change.

Based on these findings, a second phase of the project was prepared to focus on modelling rainfall and water availability patterns, strengthening the network of automated weather stations in glaciated areas, providing support to a network to raise awareness about climate change, and promoting data and information sharing.

Also at ICIMOD...

South Asian Network for Development and Environmental Economics (SANDEE)

SANDEE is a regional network that brings together analysts from South Asia to address environment and development problems. Its mission is to strengthen the capacity of individuals and institutions to undertake research on the inter-linkages of economic development, poverty, and environmental change and to disseminate practical information for development policies.

In 2010, SANDEE gave thirteen research grants, mostly for climate change related questions. We supported three projects that examine instruments to adapt to climate change. The first study seeks to examine the efficacy of government information campaigns about heat waves, the second to understand the efficacy of rainfall and area-based insurance schemes, and the third examines the implications to households of REDD payments. The themes of ongoing SANDEE research projects include land and agriculture, climate change, natural disasters, urban issues, and health.

This year, SANDEE trained over 90 participants on a range of issues. Our annual course in environmental economics in Bangkok continues to be our flagship course strengthening teachers and curriculum development in South Asia and helping to link research with training. We also provided advanced training on climate change for our researchers by collaborating with TERI in India. The 2010 trainees were from Nepal (41%), Sri Lanka (29%), India (19%), Bangladesh (6%), and Pakistan (5%).

SANDEE's under-served areas programme provides support to areas that need additional assistance. In 2010, we provided support to graduate students in Nepal to undertake field data collection and analyses. We organised a training course on quantitative environmental economics for teachers from Western Nepal.

We published ten working papers, nine policy briefs, and six peer-reviewed journal articles from SANDEE research. A highlight was completing the second SANDEE book, *Environmental Valuation in South Asia*, for publication by Cambridge University Press in early 2011.

Two activities dominated 2010. The first was the SANDEE Evaluation, which applauded SANDEE on various research and training achievements and identifies some governance-related issues that need careful consideration.

The second was the celebration of SANDEE's tenth anniversary in December 2010 with an international conference on Environment and Development in South Asia. Nobel Laureate Elinor Ostrom gave the keynote address and Prof. Karl-Goran Maler gave the Founder's address. About 150 participants attended the conference and parallel sessions with 70 presentations. Senior policy makers from the region also attended the conference, including several current and former members of planning commissions and environment and finance ministries. The conference provided a forum for regional researchers to present their work alongside international researchers, and for examining research across different countries.

SANDEE – Facts

- Established in late 1999
- Operates in Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka
- Based at ICIMOD in Kathmandu, Nepal
- Funded by IDRC, NORAD, SIDA, and World Bank

Activities include

- Research grants programme on poverty and natural resources, pollution and policy instruments, and climate change economics
- Basic and advanced training courses in environment and natural resource economics
- Institutional strengthening in underserved areas
- Policy dissemination and networking among individuals and institutions

Publications

From ICIMOD...

ICIMOD disseminates much of the information gathered during programme activities in the form of printed and electronic publications targeted at policymakers, development workers, government experts and decision makers, students, and the interested public. Full length books and manuals are still published, but increasingly publications are being prepared in shorter, more attractive, and easy-to-read information sheets and short formats. Long proceedings and more technical material are prepared in electronic format, for example on a CD-ROM with an introductory booklet or simply through web posting. Staff also publish more academic results in (usually peer-reviewed) journals. All ICIMOD's own publications can be downloaded free-of-charge from www.books.icimod.org. Hard copies are provided free to institutions actively involved in sustainable development of the greater Himalayan region.

Books and booklets

Formation of glacial lakes in the Hindu Kush-Himalayas and GLOF risk assessment Ives, JD; Shrestha, RB; Mool, PK. 56pp, ISBN 978 92 9115 137 0

Labour migration for development in the western Hindu Kush-Himalayas: Understanding a livelihood strategy in the context of socioeconomic and environmental change Hoermann, B; Banerjee, S; Kollmair, M. 26pp, ISBN 978 92 9115 139 4

Integrated value chain development as a tool for poverty alleviation in rural mountain areas: An analytical and strategic framework Hoermann, B; Choudhury, D; Choudhary, D; Kollmair, M. 41pp, ISBN 978 92 9115 146 2

Climate change vulnerability of mountain ecosystems in the eastern Himalayas: Climate change impact and vulnerability in the eastern Himalayas – Synthesis Report Tsering, K; Sharma, E; Chettri, N; Shrestha, A. 101pp, ISBN 978 92 9115 142 4 + CD-ROM with Synthesis report and 6 technical reports

Climate change in the eastern Himalayas: Observed trends and model projections, Technical Report 1 Shrestha, AB; Devkota, LP. 13pp, ISBN 978 92 9115 154 7

Biodiversity in the eastern Himalayas: Status, trends and vulnerability to climate change, Technical Report 2 Chettri, N; Sharma, E; Shakya, B; Thapa, R; Bajracharya, B; Uddin, K; Oli, KP; Choudhury, D. 23pp, ISBN 978 92 9115 148 6

Functions and services of wetlands in the eastern Himalayas: Impacts of climate change, Technical Report 3 Gopal, B; Shilpakar, R; Sharma, E. 21pp, ISBN 978 92 9115 161 5

Modelling climate change impact on the hydrology of the eastern Himalayas, Technical Report 4 Gosain, AK; Shrestha, AB; Rao, S. 11pp, ISBN 978 92 9115 151 6

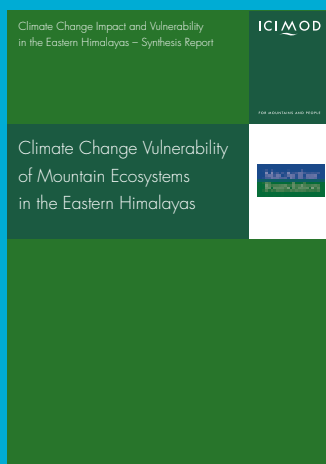
Mountains of the World – Ecosystem services in a time of global and climate change: Seizing opportunities – meeting challenges 21pp, ISBN 978 92 9115 165 3

Mountain biodiversity of the Hindu Kush-Himalayas: (pictorial booklet for IYB) 63pp, ISBN 978 92 9115 169 1 LCCN 2010 319012

Mountain initiative status paper 17pp, ISBN 978 92 9115 170 7

The glaciers of the Hindu Kush-Himalayan region: A summary of the science regarding glacier melt/retreat in the Himalayan, Hindu Kush, Karakoram, Pamir, and Tien Shan mountain ranges Armstrong, R. 16pp, ISBN 978 92 9115 176 9

Labour migration and remittances in Uttarakhand 31pp, ISBN 978 92 9115 177 6 LCCN 2010-347450



International Expert Consultation Meeting: Mountain Initiative on Climate Change: Convened by the Government of Nepal and ICIMOD, 23 - 24 September 2010, Kathmandu, Nepal 28pp.

International Symposium Benefiting from Earth Observation, 4-6 October 2010, Abstract Volume, 189pp.

Electronic only (online, CD-ROM, or DVD)

Climate change impacts on hazards in the eastern Himalayas: Climate change impact and vulnerability in the eastern Himalayas, Technical Report 5 Pathak, D; Mool, PK. 17pp, ISBN: 978 92 9115 164 6

Potential threats from climate change to human wellbeing in the eastern Himalayan region, Technical Report 6 Fang, Jing; Leduc, B. 17pp, ISBN: 978 92 9115 156 1

Global climate financing mechanisms and mountain systems – Working paper prepared for the Mountain Initiative of the Government of Nepal Schwank, O; Bruederle, A ; North, N. ISBN: 978 92 9115 172 1

Labour migration and remittances in Nepal 19pp ISBN 978 92 9115 187 5 LCCN 2010-347451

Labour migration and remittances in the mountains of Pakistan 15pp, ISBN 978 92 9115 195 0 LCCN 2010-347452

Kailash Sacred Landscape Conservation Initiative: Target area delineation report

Kailash Sacred Landscape Conservation Initiative: First regional workshop, 11-13 April 2010

Kailash Sacred Landscape Conservation Initiative: Second regional workshop, 4-6 September 2010

Biodiversity conservation and management in the Hindu Kush-Himalayan region (DVD) Selected publications, films, and others from 1985 to 2010

Climate change in the Hindu Kush-Himalayan region (DVD) Selected publications on impacts, adaptation, and others from 1986 to 2010

General publications

Gender perspectives in mountain development: New challenges and innovative approaches, Sustainable Mountain Development, No. 57 Summer 2010. 68 pp

Asia Pacific Mountain Courier Vol. 10, No. 2, January 2010

Asia-Pacific Mountain Courier Vol. 11, No. 1, October 2010

Asia-Pacific Mountain Courier - Special issue on youth and climate change, Vol. 11, No. 2, November 2010

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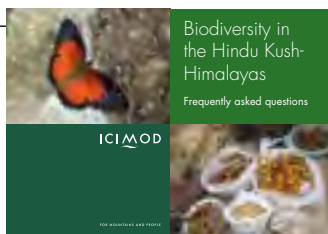
Annual Report 2009

Information sheets / Briefing papers / Project brochures

Biodiversity in the Hindu Kush-Himalayas, FAQ 2

Managing flash flood risk in the Himalayas, IS 1/10

Glacial lakes and associated floods in the Hindu Kush-Himalayas, IS 2/10



What is biodiversity?

Biodiversity is a combination of all the forms, including the interaction with the surrounding physical environment, and functional capacity. It is defined as "the variability of living organisms from all sources, including, but not limited to, genetic diversity within and among species, and the variability of ecosystems and the ecological processes that sustain them over time".

What is agro-biodiversity?

Agro-biodiversity means related to agriculture, and includes all crops and livestock, their wild relatives, and all the interacting species of pollinators, predators, pests, parasites, pathogens, and competitors. Agro-biodiversity has been continuously maintained and conserved by humans and human communities.

Why is biodiversity important?

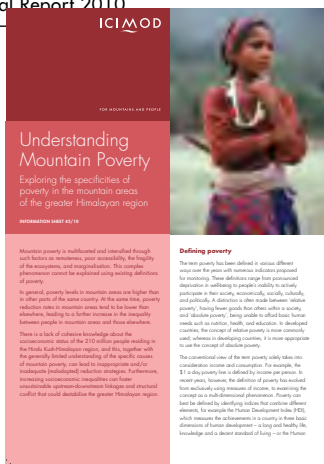
Biodiversity is the basis of life, and is essential to maintain the ecological system. It provides the food we eat, the clothes we wear, and materials for housing. It affects the ecosystem processes such as productivity, nutrient cycling, soil fertility, and resistance. These processes in turn provide multiple benefits to mankind through various ecosystem goods and services.

What are ecosystem services?

Ecosystem services are the benefits obtained by people from ecosystems. These include provisioning services, such as food, water, timber, fibre, genetic resources, and medicines; regulating services, such as regulation of climate, water and rainfall, and pollution; cultural services, such as recreation, aesthetic, and spiritual benefits; and supporting services, such as soil formation and nutrient cycling.

How does biodiversity affect human well-being?

The availability of a wide range of biodiversity resources, food security, and people's ability to adapt to climate change, while in low income people's vulnerability to disasters. Having a wide variety of food crops is one highly and cost-effective means to an important source of energy, particularly in developing countries. Continued loss of biodiversity risks the availability of water for household use and affects the productivity of the landscape upon which human livelihoods and security depend.



Understanding Mountain Poverty

Exploring the specificities of poverty in the mountain areas of the greater Himalayan region

INTERNATIONAL CENTER FOR CLIMATE CHANGE AND DEVELOPMENT

Mountain poverty is multifaceted and intensified through such factors as remoteness, poor accessibility, the fragility of the ecosystem, and marginalization. This complex phenomenon cannot be reduced to any simple definition of poverty.

In general, poverty levels in mountain areas are higher than in other parts of the same country. At the same time, poverty reduction efforts in mountain areas tend to be lower than elsewhere, leading to a further increase in the inequality between people in mountain areas and those elsewhere.

There is a lack of coherent knowledge about the socioeconomic status of the 27 million people residing in the Hindu Kush-Himalayan region, and this, together with the generally limited understanding of the specific causes of mountain poverty, can lead to inappropriate and/or inappropriate development strategies. Furthermore, increasing socioeconomic inequalities can foster unsustainable economic development strategies and structural conflict that could destabilize the greater Himalayan region.

Defining poverty

The term poverty has been defined in various different ways over the years with numerous definitions proposed for measuring, then addressing, and then preventing deprivation. These definitions range from purely economic to including a people's ability to actually participate in their society economically, socially, culturally, and politically. A distinction is often made between "relative poverty", having fewer goods than others within a society, and "absolute poverty", being unable to afford basic human needs such as shelter, health, and education. In developed countries, the concept of relative poverty is more commonly used, whereas in developing countries, it is more appropriate to use the concept of absolute poverty.

The structural nature of the term poverty itself takes into consideration income and consumption. For example, the \$1 a day poverty line is relatively income poor, but it is not poor. However, the definition of poverty has evolved from including only measures of income, to including the concept of a multidimensional phenomenon. Poverty can be defined by identifying where the greatest effects are felt, for example the Human Development Index (HDI), which measures the achievement in a country in three basic dimensions of human development – a long and healthy life, knowledge and a decent standard of living – and the human



Space-based information for Disaster Preparedness and Risk Management

Information series on geographical information and remote sensing systems in mountain environments

Geographical information and remote sensing systems play a key role in the Hindu Kush-Himalayan region in terms of informed decision making. This series of information sheets provides information on basic technology, operations, and institutions related to geographical information and remote sensing, and is intended for ICIMOD, as well as being used by other stakeholders for policy makers, development partners, and others.

The Hindu Kush-Himalayan region is one of the world's most complex, dynamic, and diverse basins of risk from natural hazards – including earthquakes, floods, landslides, avalanches, and wildfires. The region is home to fragile ecosystems that are very sensitive to changes in climate conditions and increasingly vulnerable to natural hazards. Over the past two decades, both the number of natural disasters that have occurred in the region and in the downstream areas of rivers, and the number of people that have been affected by them, has steadily increased.

The human, environmental, and socioeconomic costs and consequences of these disasters have been considerable. Governments around the world have made commitments to take action to reduce the risk of disasters, and have adopted guidelines to reduce vulnerability to natural hazards. These are summarized in the Hyogo Framework for Action. The framework addresses the need for, and identifies ways of, building the resilience of nations and communities to disaster by encouraging them to become more resilient to the hazards that threaten their development goals. In helping with the spirit of the Hyogo Framework, ICIMOD is helping to strengthen preparedness and response capacity and to improve the quality of disaster risk management and disaster response in the region.

The Hindu Kush-Himalayan region – A hotspot for natural hazards

According to the International Geosphere-Heliosphere Strategy for Disaster Reduction, Asia has the highest number of fatalities from natural disasters of any region, and within Asia, the countries of the Hindu Kush-Himalayas have the greatest number of disasters and casualties. There are several reasons for this vulnerability. The mountains are young and dynamic and all naturally occurring stresses are concentrated in this region. The rugged topography, and the human and infrastructure built in a fragile mountainous and seismic zone, and the degradation of natural resources, contribute to the risk.

Understanding mountain poverty: Exploring the specificities of poverty in the mountain areas of the greater Himalayan region, IS 3/10

Gender mainstreaming in biodiversity conservation and management in the Hindu Kush-Himalayan region, IS 4/10

Rural livelihoods and adaptation to climate change in the Himalayas, IS 5/10

GIS/RS Information sheets

Regional geo-data sharing initiative in the Hindu Kush-Himalayan region

Glacier mapping and monitoring tools and techniques

Atmospheric brown cloud regional monitoring and assessment

Implementation the Malé Declaration on Air Pollution in South Asia

Remote sensing of snow cover

Land cover mapping cast: Studies in three protected areas

ICIMOD geospatial and remote sensing resources

Decision support toolbox for mountain protected area management

SERVIR-Himalaya: From space to village, bringing people and their environment into harmony

Space-based information for disaster preparedness and risk management

Mountain GeoPortal: A regional gateway for geo-information and earth observation Resources

Project and other flyers

Climate change impacts on the water resources of the Indus Basin: Capacity building, monitoring and assessment for adaptation

Kailash Sacred Landscape Conservation Initiative

The Hindu Kush-Himalayan Conservation Portal

ICIMOD: partner in the Asia-Pacific Water Forum

Satellite rainfall estimation and rainfall-runoff modelling in the Hindu Kush-Himalayan region

Strengthening participation of marginal mountain communities in high value product value chains: *Cinnamomum tamala* (Indian bay leaf) in Uttarakhand, India

Eco-tourism for sustainable development in the Kailash sacred landscape

Help Save the Third Pole (Foundation Brochure)

Mountain Alliance Initiative for Climate Change Adaptation in Mountains

HKH glacial lakes (in Nepali)

Nepal glacial lakes (in Nepali)

Thulagi glacial lake (in Nepali)

Tsho Rolpa glacial lake (in Nepali)

Imja glacial lake (in Nepali)

ICIMOD also prepares flyers to inform partners and others about the transient events, posters for long and short-term display, and other materials like a calendar, wall planner, posters and bookmarks to raise awareness of the Centre and its mission.

.....other publications by ICIMOD Staff

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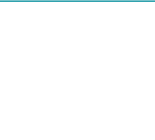
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Dr Andreas Schild, Director General, ICIMOD, is a member of the ICIMOD Board of Governors Ex-officio

* elected Chair of the Board of Governors at the meeting held in Mussoorie, India, November 2010

** to November 2011, succeeded by Mr Pal Pestrud, Director, CEO, CICERO, Norway



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Chaudhary, Sunita, Research Associate, Biodiversity Cons and Mgt
Chettri, Nakul, Transboundary and Biod Specialist, Deputy AATL

Dhakal, Madhav Prasad, Research Associate, Soil and Water Conservation
Ghale, Neetu, Programme Assistant
Ismail, Muhammad, Assistant Research Officer-RRP III/CBNRM Specialist
Jaiswal, Suman, Database and Web Content Manager
Joshi, Sami, Senior Programme Assistant
Kerkhoff, Elisabeth E, Agro-forestry/Agro-biodiversity Specialist*
Kotru, Rajan, Watershed Management Specialist
Oli, Krishna Prasad, Regional Coordinator, KII
Phuntsho, Karma, NRM Specialist, AATL
Pradhan, Navraj, Consultant, Technical Research
Providoli, Isabelle Anita, Soil and Water Cons. Specialist, AATL*
Rana Magar, Eak Bahadur, Project Coordinator, REDD
Shakya, Bandana, Research Associate, Transboundary Biod Mngt
Sharma, Eklabya, Programme Manager/Sr Agricultural Specialist
Sherpa, Samden Lama, Godavari Centre Manager
Shrestha, Ram Kumari, Garden Consultant
Sthapit, Keshar Man, Watershed Specialist, PTL
Tamang, Jiwan, Godavari Centre Assistant
Xi, Han, Intern*
Yi, Shaoliang, Coordinator-Regional Rangelands Programme, PTL
Zomer, Robert, Deputy Programme Manager/Environment Change Specialist

Sustainable Livelihoods and Poverty Reduction

Banerjee, Soumyadeep, Research Analyst, Labour Migration and Remittances
Bhandari, Shova, Programme Assistant, Beekeeping
Bhattarai, Basundhara, Gender Specialist*
Bhattarai, Nirmal Kumar, MAPs Conservation and Research Specialist
Choudhary, Dyutiman, MAPs Marketing and Enterprise Development Specialist
Choudhury, Dhruvad, Programme Coordinator, IFAD and Livelihood Specialist
Golam, Rasul, Division Head, Policy Development Specialist
Gurung, Min Bahadur, Inst. Development Officer, Beekeeping
Hoermann, Brigitte, Economist, AATL
Hunzai, Kiran Izhar, Poverty Analyst
Joshi, Laxman, Payment for Environmental Services Specialist
Karki, Seema, Consultant
Karky, Bhaskar Singh, Resource Economist
Kinal, Giridhar, HVP and V, AATL
Kollmair, Michael, Programme Manager/Sr Social Scientist
Kruk, Ester, Tourism Specialist
Leduc, Brigitte, Division Head, Gender Specialist*
Macchi, Mirjam, Associate Professional Officer
Nazari, Noorin, Governance Specialist
Pant, Basant, Programme/Research Associate
Partap, Uma, Research Officer, Pollination Specialist, Beekeeping
Sharma, Bikash, Energy Specialist*

† doesn't include short-term assignments, students, volunteers, and similar; *retired or left during 2010; ** deceased
AATL = action area team leader; PTL = project team leader

Shrestha, Anu Joshi, Value Chain Development Specialist
 Shrestha, Govinda, Programme Assistant
 Shrestha, Mamata, Programme Assistant
 Subedi, Nani Ram, Livelihoods and Governance Specialist
 Verma, Ritu, Division Head, GGD/Senior Gender Specialist

Integrated Knowledge Management and Capacity Development

Bajracharya, Leena, Intern, APMN Project Support*
 Baral, Nabin, Consultant, Digital Photo Catalogue
 Boom, Daan, Information and Knowledge Management
 Coordinator/Division Head
 Dhakal, Ashish, Consultant, Mountain Partnership*
 Gauchan, Aneeta, Research Assistant, HID
 Gurung, Nira, Communications Officer
 Jha, Anil, Library Assistant
 Joshi, Anusha, ERP Specialist
 Karmacharya, Jay, ICT Systems Support Analyst
 Khatri, Shiva Hari, Distribution Assistant
 Maden, Utsav, Consultant
 Maharjan, Dharma Ratna, Desktop Publisher
 Mahat, Tek Jung, APMN Node Manager
 Mendez, Joyce, Communications Specialist
 Mishra, Udayan, Knowledge Management and Web Associate
 Mohanty, Ashutosh, Capacity Development Officer
 Murray Shrestha, A Beatrice, Division Head
 Pandey, Sushil, ICT Specialist
 Pant, Alok, Intern, ITC Help Desk
 Pradhan, Punam, Desktop Designer-cum-Publisher
 Pradhan, Saisab, Systems Administrator
 Prakke, Diederik, Unit Head/Capacity Development Officer
 Rana, Pavitra, Intern, Public Relations
 Sharma, Bishwonath (Sudas), Executive Programme Associate
 Sharma, Sandhya, Consultant, Library Database*
 Sherchan, Ujol, Senior Programme Officer
 Shrestha, Erina, Intern, IT Help Desk*
 Shrestha, Junu, Intern*
 Shrestha, Subasana, Intern, Public Relations*
 Tandukar, Deependra, Knowledge Management
 and Web Specialist
 Thaku, Asha Kaji, Cartographer/Graphic Artist
 Thapa, Ram Sharan, Assistant Librarian
 Tuladhar, Anjesh, Applications Systems Analyst*
 Upadhyay, Basudev, Intern, APMN

IKM-MENRIS

Akhter, Mariam, RS Analyst/Consultant*
 Amarnath, Giriraj, RS Specialist/Modeler
 Aung, Khun San, Remote Sensing Data Analyst
 Bajracharya, Birendra, GIS Specialist
 Bajracharya, Rajan Man, Systems Analyst
 Bajracharya, Sameer, Intern
 Bajracharya, Samjwal Ratna, Geomorphologist/GIS Analyst
 Dangol, Bikash, GIS/Web Programmer
 Dangol, Gauri Shankar, Graphics/Multimedia Designer
 Dangol, Pradeep Man, Field Data Analyst
 Gilani, Hammad, Remote Sensing Analyst
 Gurung, Deo Raj, GIS Analyst for Capacity Building and Training
 Joshi, Govinda, Senior Cartographer/GIS Analyst
 Maharjan, Sudan Bikash, GIS/RS Analyst

Manandhar, Liza, Programme Assistant
 Moktan, Monika, Programme Assistant**
 Pradhan, Bidya Banmali, Environment Officer
 Pradhan, Paribesh, Mnt GeoPortal Web Assistant*
 Pradhan, Sudip, DSS Programme Officer
 Pradhan, Suyesh Chandra Singh, GIS Programmer
 Shrestha, Basanta, Division Head/Systems Specialist
 Shrestha, Finu, GIS Data Analyst
 Siddiqui, Salman Asif, DSS Programme Officer*
 Uddin, Kabir, GIS Analyst

Administration and Finance

Amatya, Shree Mani, HRD Associate Officer
 Bajracharya, Nani Keshari, Senior Admin Assistant
 Bajracharya, Narendra, Equipment Support Supervisor
 Gurung, Dipshikha, Communications Assistant
 Jirel, Birkha, Security Guard
 KC, Dhurba, Senior Driver
 KC, Rishi Ram, Senior Travel Assistant
 KC, Sudama, Senior Driver/Procurement Assistant
 Kansakar, Chandra Bir Singh, HRD Officer
 Magar, Bishnu, Senior Driver
 Maharjan Ram, Senior Driver
 Maharjan, Chinikaji, Senior Driver
 Maharjan, Kishore, Technician
 Maharjan, Krishna, Senior Driver
 Maharjan, Pancha Narayan, Mechanic/Senior Driver
 Mali, Rajendra Prakash, Budget and Finance Officer
 Nepal, Akil, Senior Mail Messenger
 Rana, Ganga, Reproduction Clerk
 Ranjit, Rabindra, Senior Technician, Store
 Sadasankar, Pashupati, Senior Mail Messenger
 Shakya, Kiran, Web/GIS Programmer*
 Shrestha, Kiran Man, Payment Processing Incharge
 Shrestha, Kishore, Assistant Motorpool Supervisor
 Shrestha, Mohan Krishna, Motorpool Supervisor
 Shrestha, Nabindra Raj, Controller Receipts
 Shrestha, Prabha, Controller Payments
 Shrestha, Pramila, Finance Assistant
 Shrestha, Shyam, Reproduction Clerk
 Singh, Sabak, Senior Driver
 Subedi, Jai Bahadur, Senior Driver
 Thapa, Shambhu, Gardener
 Tshering Sherpa, Doma, Communications Associate
 Upreti, Rajen, Travel Officer
 Vaidya, Jenny, Store and Inventory Controller

Visiting Scientists and Advisors

Vaidya, Ramesh Anand, Senior Advisor
 Sporleder, Marc, Associate Professional Officer (CIP)

South Asian Network for Development and Environmental Economics (SANDEE)

Joshi, Malvika, Finance Assistant
 Kafle, Anuradha, Communication Research Officer
 Nepal, Mani, Senior Environmental Economist
 Shrestha, Krisha, Administrative Associate
 Shyamsundar, Priya, Programme Director

Financial Report

ICIMOD Income and Expenditure Accounts 2001-2010

The financial management of the Centre is implemented through the establishment of programme and core funds, and co-financing project funds. All unrestricted contributions made by sponsors and member countries are credited to the core programme funds. All restricted contributions made by sponsors, governments, and non-government sources for specific projects are credited to co-financing project funds.

Core Programme Funds

In US Dollars

SOURCE	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Regional	137,158	76,553	170,880	220,563	344,805	276,196	245,249	359,116	334,209	630,277
Afghanistan				5,000		10,000	5,770	7,873	10,742	14,658
Bangladesh	18,594	10,000	10,000	28,300	10,000	20,000	10,000	11,240	11,758	-
Bhutan	-	15,000		7,500	15,000	7,500	8,243		32,543	25,651
China	45,000	45,000	45,000	145,000	45,000	100,000	100,000	100,000	100,000	150,000
India	42,050	0	84,695	11,284	155,456	113,106	72,075	50,794	149,189	160,223
Myanmar	10,000	0	9,667	9,956			19,706	29,223	10,746	35,222
Nepal	13,359	6,553	12,903	13,523	14,154	13,784	21,246	23,566	19,231	20,175
Pakistan	8,155	0	8,615		105,195	11,806	8,209	136,420	-	224,348
B. Non-Regional	2,276,530	2,364,407	2,562,469	2,703,124	2,592,999	2,733,819	2,860,492	4,739,611	4,066,646	3,858,895
Austria	86,160	99,402	114,118	125,460	122,349	120,357	137,097	160,883	136,364	94,444
Denmark	-	-		400,572	200,901		214,264			-
Finland	133,555	133,554								-
Germany	541,543	574,904	854,625	494,694	630,416	931,632	888,988	1,002,060	1,536,038	1,225,203
Netherlands	500,000	450,000	585,714	660,438	600,000	600,000	540,000	60,000	-	-
Norway	387,816	464,087	508,012	521,960	539,333	581,830	580,143	1,843,281	817,625	841,652
Sweden	127,456	142,460						779,676	714,550	714,550
Switzerland	500,000	500,000	500,000	500,000	500,000	500,000	500,000	893,711	862,069	983,046
C. Other Income	200,868	187,368	172,209	175,155	130,360	334,535	632,666	1,296,940	1,182,790	1,105,367
Total Core(A+B+C)	2,614,556	2,628,328	2,905,558	3,098,842	3,068,164	3,344,550	3,738,407	6,395,667	5,583,645	5,594,539
Project Co-financing	1,840,082	2,535,816	3,124,694	2,596,420	3,237,024	3,072,532	4,002,301	5,801,899	6,112,452	7,732,803
GRAND TOTAL	4,454,638	5,164,144	6,030,252	5,695,262	6,305,188	6,417,082	7,740,708	12,197,566	11,696,097	13,327,342

EXPENDITURE	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Programme Cost	1,315,311	1,529,717	1,403,669	1,730,067	1,805,625	1,938,261	2,395,461	3,672,008	4,447,710	4,654,126
Project Cost	1,986,899	2,495,511	2,598,643	3,018,022	3,242,531	3,103,868	3,808,778	4,785,076	5,998,834	7,653,146
Admin Support Cost	610,486	642,656	699,467	675,486	515,203	493,003	537,721	752,133	541,655	1,067,357
Directorate Cost	436,209	389,368	383,728	366,075	419,671	523,626	552,520	714,544	701,408	650,827
Total Expenditure	4,348,905	5,057,252	5,085,507	5,789,650	5,983,030	6,058,758	7,294,480	9,923,761	11,689,607	14,025,456

Note : Support cost in 2010 includes exchange loss account amounting to US\$ 439,993.

Project Co-financing Funds

In US Dollars

SOURCE	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Australia	75,835									
Austria	164,181	283,198	462,558	339,977	432,394	523,798	538,037	615,087	586,667	267,555
Canada	11,693									-
Finland									602,410	-
Germany	2,800	78,159	101,509	51,826	191	252,528	95,891	214,436	204,378	878,025
Netherlands	45,277	96,000	420,814	352,894	169,012					-
Norway					100,630				647,354	1,379,884
Sweden		64,246							350,925	343,425
Switzerland	594,408	407,757	404,820	547,166	648,496	420,477	510,690	1,179,487	190,307	271,158
USA	25,565	82,434	91,950	98,816	158,320	161,641	364,858	742,374	426,354	422,452
ITALY/IUCN		12,000	47,969	72,441	9,275	152,062	510,381	583,702	200,262	111,832

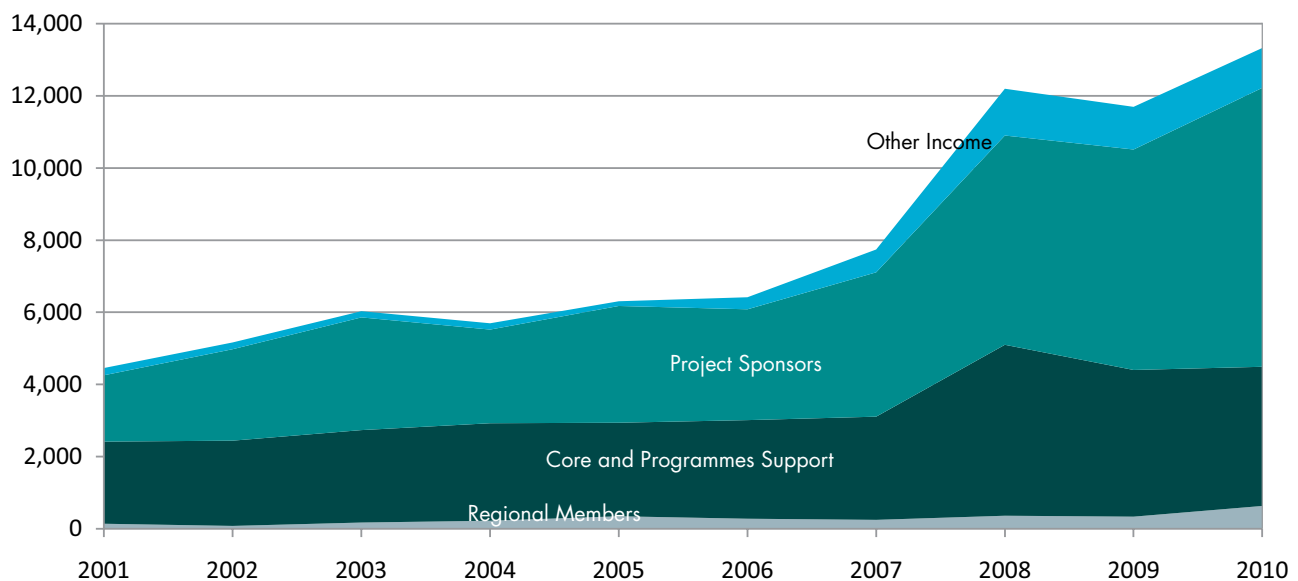
ADA										228,472
ADB	129,010			20,000	4,000	19,340			57,090	213,737
EU	-				33,631	429,077	30,717	136,875	71,228	-
CIP	-		8,100	9,000			85,690	31,990	40,000	43,173
FAO	36,500	121,330	70,500	165,200	83,025	50,425	106,785	101,274	98,700	384,118
ILRI	20,000									-
ISNAR	217,982	60,000	72,000							-
UNEP	46,932	242,056	125,000	100,558	119,337	101,560	55,500	176,300	270,000	424,534
UNESCO	9,650	500	18,000	9,000	8,000	4,000	12,400	14,600	2,000	65,000
WWF	-		28,614	24,825				5,000		-
IFAD	36,545	345,000	428,000	127,000	433,000	95,391	469,430	10,000	379,506	573,019
UNOPS	98,000	30,000								-
UNIFEM		50,596	48,760							-
ESA					44,609					-
WI					124,649			69,636		-
FORD	250,000		200,000	200,000	143,127		100,000	200,000		200,000
IDRC	48,392	143,415	177,784	132,290	338,707	517,383	297,398	784,121	833,867	632,098
MacArthur	-	175,000	100,000	75,000	175,000	100,000	150,000	240,000		400,000
ICCO		207,715	133,436	24,021	140,015	168,845	146,790		152,779	164,403
CEH, UK		22,858	52,888	7,248						-
CFC/FAO							301,143			-
APN/START		65,606	71,734	68,600	13,400					-
ITC		19,910	35,467	41,991						-
Twente			24,791	81,953	30,096	71,209	132,183	172,767		-
Sandia				41,969	24,909					-
CICERO								34,814	238,533	356,350
World Bank								23,385	202,541	70,815
UNDP								337,075	327,375	-
Others	27,312	28,036		4,645	3,201	4,796	94,408	128,976	230,176	302,753
TOTAL	1,840,082	2,535,816	3,124,694	2,596,420	3,237,024	3,072,532	4,002,301	5,801,899	6,112,452	7,732,803

EXPENDITURE	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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Total Expenditure	1,986,899	2,495,511	2,598,643	3,018,022	3,242,531	3,103,868	3,808,778	4,785,076	5,998,834	7,653,146
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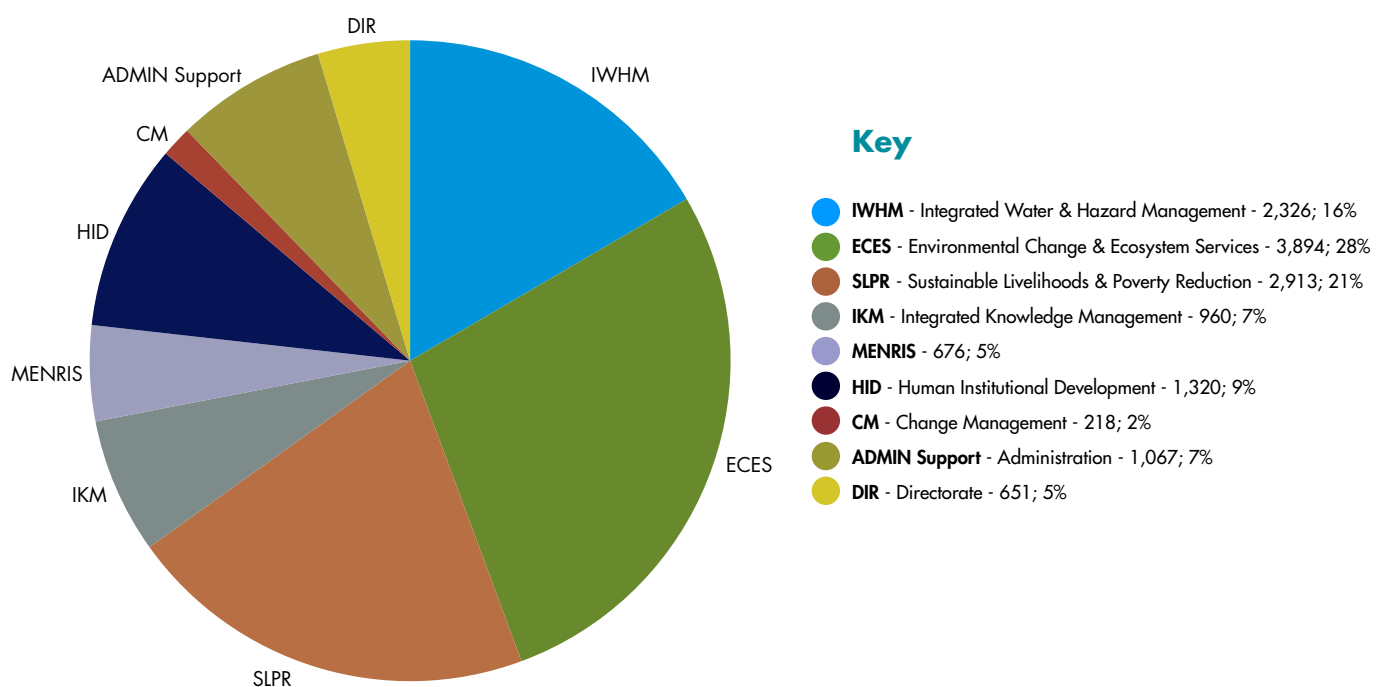
ICIMOD Funding Sources 2001-2010

In thousand US Dollars



ICIMOD Expenses by Programme 2010

In thousand US Dollars



Total expenditure US\$ 14.025 million

International Centre for Integrated Mountain Development

Statement of Assets, Liabilities, Loan and Fund Balances

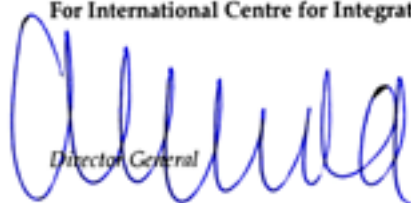
as of 31 December 2010

All amounts in United States Dollars

	Schedule	As at 31 December 2010	As at 31 December 2009
Fund Balances			
General Reserve	1	3,175,749	3,239,249
Operational Reserve	1	250,788	587,778
Exchange Equalisation Reserve	1	503,606	503,606
Restricted Programme Support Fund Balances (net)			
[Note 2 (f) on Schedule 14]			
Government of Germany		(96,137)	(15,665)
Swedish International Development Cooperation Agency		<u>-</u>	<u>360,309</u>
Special Project Fund Balances (net):	6C		
Amounts to be incurred on projects		3,713,971	4,000,715
Amounts to be recovered		<u>(828,102)</u>	<u>(1,194,503)</u>
Total Sources of Funds		<u>6,719,875</u>	<u>7,481,489</u>
Assets and Liabilities			
Fixed Assets	2	1,620,526	1,802,373
Current Assets, Loans and Advances:			
Cash and Bank Balances	3	7,399,200	8,203,168
Loans and Advances	4	<u>1,123,611</u>	<u>1,307,670</u>
		8,522,811	9,510,838
Less: Current Liabilities and Provisions	5	<u>(3,423,462)</u>	<u>(3,831,722)</u>
Net Current Assets		5,099,349	5,679,116
Total Application of Funds		<u>6,719,875</u>	<u>7,481,489</u>
Notes to the accounts	14		

Schedules referred to above form an integral part of the Statement of Assets, Liabilities and Fund Balances

For International Centre for Integrated Mountain Development



Director General

Place: Kathmandu, Nepal
Date: 10 March 2011



Director, Administration and Finance



Budget & Finance Officer

International Centre for Integrated Mountain Development

Operating Statement for the Year Ended 31 December 2010

All amounts in United States Dollars

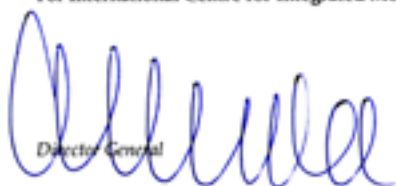
	Schedule	Year ended 31 December 2010	Year ended 31 December 2009
INCOME			
Contribution from Donors	6		
Restricted Programme Support	6A	1,939,753	2,250,588
Core and Other Programmes Support	6B	2,549,419	2,150,267
Special Projects	6C	7,732,803	6,112,452
Other Income	7	1,105,367	1,182,790
	(A)	<u>13,327,342</u>	<u>11,696,097</u>
EXPENDITURE			
Programme Cost			
Restricted	8	2,380,534	2,075,765
Others	9	1,847,456	1,986,969
Special Projects Cost	10	7,257,553	5,171,049
Scaling Up Cost	11		
Programmes	11A	208,107	136,145
Special Projects	11B	395,593	827,785
Core Support Cost			
Directorate	12	1,204,113	1,342,809
Administrative Support	13	803,023	657,555
Depreciation [Note 2 (a) (iii) on Schedule 14]		66,415	49,154
Less: Indirect Cost Allocation [Note 1 (xii) on Schedule 14]		<u>(577,331)</u>	<u>(599,176)</u>
Foreign Exchange Loss (net)		439,993	41,552
	(B)	<u>14,025,456</u>	<u>11,689,607</u>
Surplus/(Deficit) of Income over Expenditure	(A-B)	(698,114)	6,490
Less: Surplus of Special Projects' income over expenditure transferred to Special Project Fund Balances (net)		79,657	113,618
Less: Surplus/(Deficit) of Restricted Programme Support's income over expenditure transferred to Restricted Programme Support Fund Balances (net)		<u>(440,781)</u>	<u>174,823</u>
Net (Deficit) adjusted to Operational Reserve		<u>(336,990)</u>	<u>(281,951)</u>

Notes to the accounts

14

Schedules referred to above form an integral part of the Operating Statement

For International Centre for Integrated Mountain Development



Director General

Place: Kathmandu, Nepal
Date: 10 March 2011

Director, Administration and Finance



Budget & Finance Officer

International Centre for Integrated Mountain Development

Cash Flow Statement for the Year Ended 31 December 2010

All amounts in United States Dollars

Particulars	Year ended 31 December 2010	Year ended 31 December 2009
A. Cash flow from operating activities		
Net (Deficit) as per Operating Statement	(336,990)	(281,951)
Adjustment for:		
Depreciation	66,415	49,154
Capital expenditure charged in the programmes	125,440	256,040
Interest Income	(59,000)	(108,686)
Non Programme Assets written off	-	120
Profit on sale of fixed assets	(25,728)	(5,845)
Exchange fluctuation - unrealised	10,909	-
Operating (deficit) before working capital changes	(218,954)	(91,168)
Adjustments for:		
Loans and Advances	193,578	(845,806)
Current Liabilities and Provisions	(293,170)	1,466,472
Net cash from / (used in) operating activities	(318,546)	529,498
B. Cash flow from investing activities		
Purchase of fixed assets	(187,985)	(370,468)
Sale of fixed assets	25,728	5,845
(Increase) / Decrease in time deposits with banks	566,349	(445,643)
Interest received	55,317	130,406
Net cash from / (used in) investing activities	459,409	(679,860)
C. Cash flow from financing activities		
Movements in Special projects funds	30,577	113,618
Movements in Restricted programme Support funds	(440,781)	174,823
Net cash from / (used in) financing activities	(410,204)	288,441
D. Effects of Foreign Exchange Differences on Cash and Cash Equivalents	(4,776)	-
Net (decrease)/ increase in cash and cash equivalents (A + B + C + D)	(274,117)	138,079
Cash and cash equivalents at the beginning of the year	355,071	216,992
Cash and cash equivalents at the end of the year (Refer Schedule 3)	80,954	355,071

Schedule referred to above form an integral part of the Cash Flow Statement

For International Centre for Integrated Mountain Development

Director General

Place: Kathmandu, Nepal
Date: 10 March 2011

Director, Administration and Finance

Budget & Finance Officer

ICIMOD Members, Sponsors and Funding Partners

Regional member countries

Afghanistan
Bangladesh
Bhutan
China
India
Myanmar
Nepal
Pakistan

Non-regional strategic partners and regular supporters

Austria
Finland
Germany
Norway
Sweden
Switzerland
UNEP
FAO
IFAD

Co-financing project partners

- Austrian Development Agency (ADA)
- Capacity Building International Germany (Inwent)
- Centre for Climate and Environment Research (CICERO)
- Common Fund for Commodities (CFC)
- Consortium for the Sustainable Development of the Andean Ecoregion (Condesan)
- Department for Business Innovation Skills (DBIS)
- Elsevier Foundation
- European Commission (EC)
- Food and Agriculture Organization of the United Nations (FAO)
- Ford Foundation
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Interchurch Organization for Development Cooperation (ICCO)
- International Development Research Centre, Canada (IDRC)
- International Fund for Agricultural Development (IFAD)
- International Potato Centre, Peru
- MacArthur Foundation
- National Aeronautics and Space Administration (NASA)
- Overseas Development Institute (ODI)
- Swiss Agency for Development and Cooperation (SDC)
- The World Bank
- Twente University, the Netherlands
- United Nations Environment Programme (UNEP)
- United States Agency for International Development (USAID)
- University Corporation for Atmospheric Research (UCAR)
- Wetlands International
- World Wildlife Fund (WWF)
- World Agroforestry Centre (ICRAF)

About ICIMOD

ICIMOD – the International Centre for Integrated Mountain Development – is an independent nonpolitical intergovernmental organisation established in 1983, whose primary objective is to promote the development of economically sound mountain ecosystems and to improve the living standards of mountain populations in the Himalayan region. ICIMOD encourages technical cooperation among governments in the region, and over the past 25 years has acted as a knowledge, learning and enabling centre working to build awareness and taking action to preserve the unique role that the Hindu Kush-Himalayan mountain system must continue to play. ICIMOD's long history of working in the region, its well-honed core competencies, and its strategic position and comparative advantages put it in a unique position to make significant contributions to helping the region take on new challenges. A holistic approach ensures that centre-wide policies on economic analysis, gender and equity mainstreaming, and governance are an integral part of a complete solution.

ICIMOD's partners are agencies and organisations in the regional member countries – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – that interact with development practitioners, policymakers, and advocates. A feedback loop among these groups ensures that as conditions and policies change inputs are continuously revised. ICIMOD also encourages long-term partnerships with international centres of excellence from outside of the region as a means of acquiring the specific expertise it needs in technical areas. ICIMOD's donors are its financial partners, in recognition of the fact that developments in the region benefit both the people of the region and the larger global community.



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