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Expectations and the Role of ICIMOD: Reflections on Achievements and Lessons Learned

The International Centre for Integrated Mountain Development: From an Ignored Idea to a Global Voice

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From Munich to Paris: The Journey to Establish ICIMOD

The Hindu Kush-Himalayan (HKH) ranges, the largest mountain region on our globe and water reservoir for more than a billion people, still belongs to one of the most neglected and marginalised areas of the world. Political, technical, and economic developments since World War II have undoubtedly fundamentally changed the lives of most people on Earth – but is this also the case in the HKH region? Twenty-five years ago, ICIMOD, the International Centre for Integrated Mountain Development, officially opened its doors. Such special anniversaries are an opportunity to put achievements and failures, progress and setbacks, on record, and to draw conclusions and recognise new directions, objectives, and challenges. Standing at a new crossroads, ICIMOD is asking: Where do we go from here?

Long forgotten, but still relevant, are the 10 years in which many efforts were made to establish the centre that is known today as ICIMOD. An Indian manager of a multi-national food company, Aspi Moddie, and an American architect living in India, Joe A. Stein, can claim fatherhood of the idea for "A centre for mountain environment (CME)" developed in 1973. The outline written by Stein at that time contains most of the elements that are covered by the institute today.

The mountain-devoted duo soon became a quadriga of four horsemen, with the addition of John C. Cool from the Ford Foundation in New Delhi and myself, from GTZ in Germany. Together we formed this little union of like-minded individuals. Despite the distance between us and the lack of reliable means of communication, the start was promising. Only a year after the first get together in one of Delhi's old gardens, an international workshop on the development of the mountain environment was held in Munich in 1974. For the first time, about 40 participants from 14 countries and institutions met for one single reason: giving integrated mountain development a home and a voice. A remarkable group of highly respected, capable individuals devoted to mountain development spent a whole week hammering out a concept for a mountain centre somewhere in the Himalayas. In retrospect, perhaps this meeting was the first step on the long road towards ICIMOD. Although it had its shortcomings, at least three outputs, as well as a carefully written and published document, are worth putting on record: the Munich Mountain Environment Manifest, the Statement of Concern, and the Interest Mobilisation and Fund-raising Task Force.

The Mountain Manifest

This two-page 'Munich Mountain Environment Manifest – Mountains and the human future', has not lost its relevance and is worth citing here.

- "Man has been the maker of desert in the past, even with his bare hands, and often in the name of progress. Now that he is multiplying fast, and has more powerful technology, his capacity to endanger the balance between Man and Nature ('only on Earth') has been enhanced many times.
- About a third of the Earth's land surface, the mountain regions, seemingly permanent, are among the most fragile once deforestation and soil erosion begin. Yet their potential for human wellbeing, for agriculture, forestry, water and power systems, and recreation, can affect half the human race, for better or for worse. In many places the misuse of mountain land causes economic losses far in excess of any gains from development endeavours.
- Eco-stress in the mountains has a widening destructive impact in the plains with floods; the siltation of dams, reservoirs and ports; the loss of agricultural produce, and of homesteads; leading to irreplaceable human and economic losses.
- The combined eco-stress on mountains and plains affects the world's two major problems, food and energy, especially in the developing world. Eco-stress undermines national and international efforts in economic development.
- Yet, there is hope, and there is vast potential for human benefit, given awareness of the problem; and if conservation-oriented development techniques are explored. Eco-development also needs new levers for resources and employment generation, especially in poor developing mountain lands, which are in both an ecological and a resource trap. In many areas important possibilities exist especially where recreational potential and hydrological resources exist but are not availed of.
- New sources of energy for mountain people are the key to the problem of saving and spreading forest cover, the shield of agriculture in both mountains and plains. There is promising potential for such new sources of energy from hydropower, fuel forestry, and even solar energy.
- Urbanisation and population increases are driving millions of plainsmen to seek recreation and peace in the hills. This is a mounting environmental threat, but one which can be turned into potential benefit if ecologically planned tourism, which can respect landscapes and cultures, could provide alternative employment for populations whose subsistence technology is rapidly depleting their resources of land and forest.
- We, who are concerned with the implications of ecological degradation of mountain environments, believe that the dimensions of this problem call for an immediate transnational, multi-disciplinary response including the joint use of all available scientific, technical, economic and political possibilities. The time for such a response is now, in word and in action. The hour is already late!"

Statement of concern

A very brief and concise paper based on the Mountain Manifest, the Statement of Concern was designed to be signed by the most influential leaders of the world at that time and published in the world's leading newspapers. It was meant as an alert-notice to save the mountain ecosystems and to simultaneously protect the basis of the existence of the billions depending on mountain water. However, the document never went beyond the draft stage. Funds needed to publish it could not be generated. As the expertise to implement it was missing, a good idea was put to rest.

Interest-mobilisation and fund-raising task force

The four horsemen were assigned to explore the possibility of intellectual support and funding for a mountain centre in the US. This short mission in June 1975, prepared with the best of our knowledge, became a harsh lesson learned. Despite a lot of sympathy, we failed to market the idea professionally. We were not successful in raising the funds needed to get the idea to the public and the influencers of the world. Our group was too small to shoulder such a task.

But UNESCO, already represented at the Munich Conference in 1974, finally became interested in the Centre's establishment. In 1975, UNESCO organised a conference that opened new doors for another organisational structure. The first thoughts of an intergovernmental, regional development institution for the Himalayan region were formulated. However, another nine years had to pass until the UNESCO agreement was prepared, the member countries convinced, and all the administrative hurdles overcome.

At the beginning, there was resistance within the region, as well as within the group of promoters. The thoughts of the group at that time were strongly influenced by the success stories of the first international agricultural research institutions in the 1960s. The creation of the International Rice Research Institute (IRRI) is a typical success story of private foundations in the new world. At that time, Asia was confronted with a set of challenges not so different from today: food shortages, reduced crop yields, and shrinking production efficiencies, combined with high population growth rates and sky rocketing oil prices. The public administrations of the major countries were overstrained and the private sector widely handcuffed. The Rockefeller Foundation and the Ford Foundation didn't think in terms of food aid and surplus exports, as public administrations do until today. Their aim was to mobilise the national production potential based on a long-term development programme. The Rockefeller Foundation, with its maize and wheat experience in Mexico, and the Ford Foundation's financial resources were pulled together to develop a joint programme to create an international institute for rice research. The lesson learned: the creation of a new institution needs not only a vision, but professionally sound political, organisational, and financial support that can best be mobilised through existing organisations and individuals with the respective experience, influence, and persuasive power.

The idea of an international, financially, and politically independent centre for the development of the world's largest mountain region was a dream – a dream ignoring political realities. But the dream materialised in 1983 following an agreement signed between the Government of Nepal and UNESCO in 1981 in Paris. With all due modesty, it can be said that, despite its shortcomings, detours, and delays, ICIMOD might not be what it is today without the efforts of the four in the 1970s and early 1980s.

The Context at the Time of ICIMOD's Emergence

Preventing another world war, not the needs of future generations, has dominated public opinion and the political agenda in the East and West. Long-term thinking and looking beyond generally accepted horizons were largely left to people like the 'pre-ICIMOD group', who had good intentions, but lacked political influence. They had a sound professional base, but no financial base. But they were not alone in their concern. At a global level, enormous efforts have been made over the last 40 years to develop policies, strategies, and programmes towards shaping new attitudes vis-à-vis our environment, resource use, and the equitable sharing of wealth. These efforts were supported by highly respected international leaders – also with very limited success. However, at least the most important should be remembered here.

The Limits to Growth: Published by the Club of Rome in 1972, this document served as the first wake-up call. The authors might not have used the right indicators and parameters (their time horizon has already been proven to be wrong), but they were right in principle. Their warning, that growth in many aspects is limited, has been ignored. The reserves and resources, specifically the globe's non-renewable ones, would perhaps have been used differently if the world had listened at that point in time. Today, we know that oil and food prices might lead to a new validation of many globalisation effects.

The Challenge of World Poverty: This document by Gunar Myrdal, published in 1970, could still serve as a handbook for dealing with the world's key problems today. His findings were internationally recognised with a Nobel Prize, but not with poverty eradication policies.

Speech by the World Bank President: In 1973 in Nairobi, McNamara, the World Bank President, confronted his governors with a historic speech about poverty, and specifically the rural poor. Even his strong pledge to eradicate absolute poverty by the end of the year 2000 remained unheard.

Global 2000: This 1500-page report to the US President Carter was published in 1980 and is perhaps the most comprehensive document of that time with clear perspectives for the decades to come. However, it did not have any long-term influence on the political and economic decisions of the US, or any other government.

A Program for Survival: This document was published in 1980 by the Brandt Commission. Despite the eminent, but retired, authors, the document was shelved after only a few short discussions.

Our Common Future: This 400-page document was presented by the United Nations Commission on Environment and Development under the chairmanship of Gro Brundtland at the request of the UN General Assembly in 1987. No mention of mountains or ICIMOD can be found in either the text or the index. It was not influencing "our common future" at all.

Our Global Neighborhood: Produced by the Commission on Global Governance in 1995, Our Global Neighborhood made a plea for a change in governance and values at the national and international level, a reform of the UN system, and the strengthening of the rule of law. The global problems and concepts for change carefully described in this, another 400-page document, were as neglected as all the others published before.

Millennium Development Goals: The UN Millennium Development Goal to reduce poverty by half by 2015 is the latest commitment raising expectations that will not be met. The world still seems to be unable to plan for realistic, honest goals and implementation.

Global Changes since the Establishment of ICIMOD

Global technological and political developments have taken place that have fundamentally influenced the lives of billions, although mainly outside the specific mandate area of ICIMOD and the other mountain regions of the world. Political discernment and adjustment to global changes has made this progress possible. The cold war has been replaced by negotiating tables, although the amount of funds invested in defence versus development hasn't changed. According to the latest publication of the Peace Research Institute in Stockholm, 1339 billion US dollars was spent globally for military purposes in 2007, compared to 15 billion for international agricultural research, and only 8 million for ICIMOD.

Since the establishment of the Centre, a revolution in technological innovations has taken place. This has changed most aspects of our lives. The Internet, a powerful source of information, has in the true sense interconnected continents and people. New transport systems have opened the door for a global exchange of goods, services, and labour, with all of its consequences. Some hundreds of millions – especially in Asia – are profiting from the growing job opportunities, leading to living standards previously unimagined.

Information technology has probably had the largest influence on people, even those living in remote mountain regions. A village television, far away from the urban world, not only influences community life, it transmits how life, living standards, habits, and customs are defined elsewhere. This 'dream world' has affected hopes and expectations in a very short time, especially those of the

young, dynamic part of village communities. The results are obvious: curiosity, discontent, resistance, resignation, and finally migration, which too often ends in unemployment and urban misery.

With environmental consciousness growing and population increases slowing down, the chance that we will be able to produce enough food – following generally responsible principles – for the expected 10 billion people 50 years from now has become brighter. But not without drastic adjustments: the necessary changes will take place and polices will be implemented due to a new understanding of the value of natural resources and the growing needs of urban dwellers. The perhaps unreal, but at any rate strongly anticipated, human influence on climate change today has put sustainability on the agenda of almost every political party and government, promoting ICIMOD's mission not just within the Hindu Kush-Himalayan region (HKH).

Emerging Challenges and ICIMOD's Growing Role

Over the years, ICIMOD has developed into a vital institution with a mission fascinating as ever. Its new strategy covers the major aspects influencing the future of the region. And, most importantly, there are dedicated staff and modern facilities to implement the plan. The Centre has published its findings widely and organised numerous conferences, workshops, and seminars. It has trained countless colleagues from within and outside the region. Moreover, it has become an internationally recognised, professional institution, solid enough to overcome financial and other periods of drought. The recent review has strengthened the base of confidence within ICIMOD's constituency through its clarity. With growing concerns about food security and self-sufficiency, and increased understanding of sustainability, biodiversity, and stable yield increases, the urgent need to safeguard our natural resource base has become commonly acknowledged. Compared to 30 years ago, the Centre today can expect another level of understanding and interest in its outputs and potential impact. At least five global concerns will justify ICIMOD's existence and growing importance in the future: water, food, energy, security, and carbon dioxide.

Water

With the global population growing to about 10 billion, water supply has to be seen as the most crucial growth limiting and survival factor in future. Still wasted in many parts of the world, water shortages in other parts have become a front-page newspaper item. Humans have lived for hundreds of generations without mineral oil – but never without water. Even today, too much or too little of this powerful resource directly affects the lives of hundreds of millions of people. Accurate figures do not exist, but it is estimated that about 20% of the world's population is suffering from water shortages. By 2030, this figure is expected to increase to 30%, influencing the health and life expectancy of about 2 billion people. By the middle of the century, water requirements for agriculture will presumably double – even if research is able to increase water use efficiency. Some 70% of the freshwater available today is already used by this sector, only 20% is left for industrial

purposes, and 10% for direct human consumption. Urban population pressure, especially in Asia, but also in Africa and Latin America, will force growing investment in the whole water supply chain. Where else should we start if not in the catchment areas of the mountain river systems? ICIMOD doesn't have to motivate urbanised lowlanders to think about mountain development. Their interest starts at their own water tap and their interest in keeping it functional. The scarcity and growing price of this valuable basic commodity have already led to hostile conflict in pre-historic times and will serve as ICIMOD's strongest promoter.

Food

For the first time, the G8 Summit in 2008 in Japan dealt with food-shortages, food-prices, and hunger, not for humanitarian reasons, but in view of potential worldwide unrest. It is expected that the discussions and decisions that will be taken will go beyond emergency and makeshift solutions. Stagnant yield increases, the absence of conducive, comprehensive rural policies, the price of agricultural inputs, land tenure, population growth, and urban demand are influencing the price of staple food. We should remember that in the early seventies food prices increased even faster than today. But, even under those circumstances, the call for a water-saving, erosion limiting, hazard preventing institution remained unheard.

Land resources that can be used for food production are limited. The competition, food versus fuel, has just started. Some countries already have plans to purchase farmland overseas to ensure that the domestic demand will be met. Saudi wheat farms in Russia and the Ukraine? Saudi sheep and beef production in Australia and Latin America? These are no longer dreams. Plans are already on the drawing board for very vital domestic policy reasons. Countries far away from mountain regions have a vital interest in the protection of water resources in future. An important key to the protection of such resources is – mountain development.

Energy

Present oil and gas prices have accelerated the search for alternative resources. Water power will remain the clean, renewable, safe, and environmentally-friendly first choice wherever feasible. Even in oil-rich Norway, 99% of electricity consumed is based on hydropower, in Brazil, hydropower consumption has already reached 83%, and in Switzerland 55% of the electricity used is water-based.

Since the 1970s, the world's energy consumption has more than doubled, and it is expected to double again over the next 20 years. Given the pace of industrialisation in China, India, Russia, and Brazil, to mention only the major growth poles of today, the landlocked mountain countries with their mostly untapped hydropower resources could be major energy exporters in the future.

Security

For centuries, mountain regions have been seen as remote, insecure, and underdeveloped. The fundamental reasons are rooted predominantly in unemployment, underdevelopment, poverty, and the absence of a development policy that balances the interests of the different fractions of society. The cost in lives, natural resources, and investment in military for wars fought in these regions will never be known. If instead these funds were invested in an integrated policy that provides perspectives for all those living in and from the environment, the HKH region would look different today. In the region's capital cities, such views might be seen as naive dreams. For those who live, suffer, and survive in the region, the desire for a new form of conflict resolution is growing.

ICIMOD is not a peacekeeping, war-preventing institute. However, it could become the most knowledgeable centre on the causes of conflict – not only related to water – within the region. ICIMOD is in a position to help to define a more realistic strategy for development and, ultimately, peace.

Carbon dioxide

For a long time, the forests of the greater Himalayan region have been seen as one of the main resources waiting to be exploited. With all due respect to the authors of all the warning documents referred to already, it must be stated that, today, the world seems to understand that without retaining a protective vegetation cover our globe will not only become a dry, but an oxygen free, planet. The mountain regions of the world, and specifically in Asia, may soon be seen as an attractive place for the private sector in their search for carbon sinks. Planting trees will no longer be the concern of village movements or environmentally concerned non-government organisations (NGOs), but will become a profitable investment. Once the international agreements on carbon dioxide control are in force, sinks will be in high demand. Catchment area reforestation and its sound management will then serve at least five purposes: water storage, erosion control, carbon sink, oxygen resource, and biomass provider.

ICIMOD Beyond its 25th Anniversary: A Set of Dreams

The mountain world will not be protected because of its beauty alone, nor because of its uniqueness or ethnic and biological diversity, but for political, economic, and social reasons. Its future will be dictated by the interests of the billions living in the plains and urban agglomerations. With the growing demand for water, food, energy, security, and environmental protection, ICIMOD may become a Centre of prime political interest. For this to happen, ICIMOD will need an additional set of tools.

Using the power of the media

All major topics on ICIMOD's agenda have received global attention, but not the centre itself! There is an urgent need for a professionally sound media support service related to ICIMOD's broader mandate and client group. Seminars and workshops are needed, not only for mountain specialists, but for decision makers and those who advise and assist decision makers. Political journalists, TV moderators, and press officers of transnational companies should become a new target group for ICIMOD. A list of the 500 most important persons who can act as 'multipliers' should be made, these people should be seen as the Centre's unofficial ambassadors and treated accordingly.

The objective: To develop an increased, professionally sound, fact-based understanding by all multipliers in the public and private sectors in relation to urban industrial interests in protecting the resource base for the majority of the world's population, as well as the mountain regions – and the role of ICIMOD in achieving this.

Expanding ICIMOD's horizons

No doubt, in the decades to come, the Centre will concentrate its efforts on its present mandate region. However, there are good reasons for becoming a global advocate, an information and clearing house for mountain issues and related concerns worldwide. With its existing knowledge base and a new Information Centre, ICIMOD could be transformed into a premier resource at a global level for all aspects of mountain research and development and the interrelationship with the urban lowlands.

The objective: To become a global source of professionally assembled and assessed information on all aspects of rural-urban and upland-lowland interrelationships, including conducting related research and development activities. As a result, national and international mountain concerns will receive the attention and support that they deserve.

Creating a council of patrons

Regretting the ignorance of the public on the need for proper mountain development policies does not help. A strong political voice is needed. A council of patrons should become the protector of the world's most important natural resource: mountains. Such patrons could be active, prime government leaders or CEOs of multi-national or national companies, from within and outside the HKH region.

The objective: The council of patrons, as an independent body, will ensure that the mountain ecosystems of the world, as one of the most important life determining ecosystems, will receive and retain the attention, protection, and support that they deserve from the public and private sectors, as well as from the general public.

A new level of responsibility

Until recently, environmental aspects have dominated the research and development agenda of mountain regions. This will change in the future. Roads and transport, water and power, industry and trade, food, and fuel will influence policies related to mountain development. Sink potential for the trading of international carbon unit certificates may soon enter the international energy market. ICIMOD may soon be asked how much carbon certain regions in the HKH can absorb, through which systems of reforestation, with which species, in the shortest possible time. Since industrialisation, energy and environmental concerns have reached the present level of interdependency, the Board's country representatives should report, not to one sector ministry, but through the prime minister's office to all government institutions concerned. Such a change would automatically enhance ICIMOD's chances of promoting what its name promises: integration.

The objective: With worldwide attention on resource use and sustainability, the need to involve all relevant sectors of the government has become obvious. With country representatives on ICIMOD's Board linked to the respective regional member country's prime minister's office, multi-sector co-operation will be enhanced.

Formulating a new vision for ICIMOD

The political and economic influence of Asia has grown tremendously over the last two decades. The market force of China has already changed the world in many ways, and so will India. This dynamism and Asia's growing political and industrial strength will inspire ICIMOD to write a new vision for Asia's roof, the Himalayas, which needs major repair and protection. This may finally lead to an ambitious, broader research and development agenda, justifying the basis for an annual US$ 30 million budget.

The objective: The need for global change within the next 20 years is fundamental. The Centre has adjusted to these new demands with a vision closely interconnecting urban and rural, and lowland and upland interests. Providing the base for dynamic growth, ICIMOD is playing its role in shaping a new future for the mountains of, and beyond, the continent.

Accessing new resources

Today, ICIMOD's annual budget doesn't even reach US$ 10 million. Three times this amount was paid recently by the software developer Charles Simoney for a flight to the international space station. There are hundreds of other examples of imbalances in funding and priority setting. An accelerated effort is needed to safeguard the above-mentioned resources. ICIMOD's research and development agenda has to adjust to these new goals and objectives. Just to implement a critical mass of pilot resource saving schemes, a much larger investment is needed. ICIMOD's budget should come close to the proposed US$ 30 million within the next 5 years. This will also ensure the

financing of projects by member country institutions with a proven quality record, planned following ICMOD's strategies and principles. ICIMOD can then concentrate its efforts on project selection, financing, monitoring and evaluation.

Where will these resources come from? Three of ICIMOD's regional member countries are part of the international nuclear power club. If the Centre has been successful in reaching, briefing, and convincing the respective heads of state, it should be possible to increase the regional member country contributions to a total of about US$ 10 million per year. New for ICIMOD will be an effort to mobilise private sector funding. According to the latest publication in Focus Magazine, four Indian citizens are among the ten richest individuals in the world. Why not approach the other Asian billionaires on the Forbes list?

Conclusion

On birthdays, dreaming about the future is permitted, moving towards a new plateau of challenges to be taken up in the future. In view of the magnitude of the HKH mountain system and the problems to resolve, the Centre cannot be too ambitious or demanding. The time has come to open the doors to new ideas for actions in the second quarter century of ICIMOD's life – bringing the size of its role and its activities into harmony with the magnitude of the need for change. The time is now!

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Strategic Changes in the 21st Century: Remodelling ICIMOD for the Hindu Kush-Himalayan Region

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ICIMOD was established in 1983 with the dual mandate to conserve Himalayan ecosystems and improve the lives of the people of the Hindu Kush-Himalayan region. After 25 years, ICIMOD needs to consider the strategic issues of the 21st Century and remodel itself accordingly. All institutions have to change with the times to be relevant. Scientists and professionals also have to change with changing perspectives and sometime have to move beyond their disciplines. Perspectives and realities have changed significantly since ICIMOD was conceived and established in 1983.

ICIMOD now needs to ask itself the following:

- What are the strategic changes in the Himalayan and trans-Himalayan environment – political, social, economic, cultural, and scientific – since ICIMOD was founded in 1983, and what global changes have there been that influence the region?
- What changes are necessary to remodel ICIMOD's perspectives and revise its programmes?
- What are the lessons learned during the past 25 years? To answer this, calls for hard self-analysis, especially in relation to ICIMOD's impact on the eco-development policies of the Hindu Kush-Himalayan region at the government, district, and grassroots levels.

This paper will be primarily concerned with the first question, and will reflect on the second. I will leave the third question largely to ICIMOD.

Let me first briefly list the major strategic changes taking place and for the future to indicate their sweep and depth at the start.

Global and Regional Changes

Climate change: Climate change and the resultant impacts will be the biggest and most threatening global and regional change factor during the next 25 years. Climate change is not widely understood by people other than climate scientists, not even by governments.

Political changes: Political relations in the region, and in Asia generally, are also changing and will form the framework for future peace, prosperity, and international co-operation in a fast-changing world. Politics is of primary concern, even for professional and scientific people. ICIMOD must take this into account if it is to work in the real world. Only good governments can enable ICIMOD to deliver its services to the people of the Himalayas.

Cultural changes: Cultural changes in the traditional 'Abode of the Gods' play a role in all political, social, and economic changes.

Demographic changes: Demographic changes in the region have significant political, social, and economic consequences, as well as consequences on the depleting of ecosystems in mountain regions.

Decentralisation of government: There is a need to redress the centralisation of governance in the HKH region and to strengthen again the traditional capacities of local communities to manage natural resources and support eco-development . This is a challenge for countries and local communities in the region, in a time of changing political regimes. New Asian regimes tend to depend too much on central governments. The concurrent promotion of successful NGOs and self-help groups is vitally important as a bridge: a basic imperative for the success of all eco-development work and for ICIMOD. Has this been given sufficient importance in past ICIMOD policies and work?

Alternative energy science and technology: The development of science and technologies for the post-carbon age is very relevant in the context of climate change and impossibly high oil prices in one of the most vulnerable and remote regions of the world-far from oil, gas, and ports. This will be important for both economic development and quality of life in the region.

Tourism: Increases in global tourism will have environmental, economic, and cultural impacts on the traditional 'roof of the world' region, with its vulnerable ecological conditions. The region is no longer the pre-1950s 'Shangri-la' known to just a few explorers. Tourism can play a vital role, with both positive and negative impacts, in the development of the region, from hill stations to the South Col of Everest, and not least in the growing towns and cities like Kabul, Srinagar, Darjeeling, Kathmandu, Lhasa, Gangtok, and Punaka.

Implications of Global and Regional Changes for ICIMOD

Let me elaborate a little on each of these before coming to the changes required of ICIMOD and its self-analysis of lessons learned in the last 25 years.

Regional implications of climate change

Firstly, what are the indications of monsoon changes in and around the Himalayan region? There are already indications of less rain, changes in past annual weather patterns, a serious drying up

of hill springs, changes in horticultural zones, and, most publicised of all, receding glaciers. To what extent does ICIMOD have hard scientific data for the region, and what are the gaps, where are more and better scientific data needed?

A vast mountain system like the Himalayas has many sub-regions of climate, both in latitude and altitude. How much hard reliable data do we have about regional microclimates? How much evidence of microclimatic changes and their consequences comes from the first hand experience of local communities?

Whatever the global and macro data, in a multi-climate region like the HKH both local data and local responses are very important. What are the estimates of future water supplies in the sub-regions and of the consequences of different degrees of glacier retreat and changes in rainfall on downstream water resources? Are there reliable projections of all of these for the next 25 years? What of the future of Asia's major rivers, all rising in the wider HKH region, and all shared by many people and states? This is a major geo-political question for the present and the future.

Apart from climate change and future rainfall and water availability, what will be the impact on hill farming systems, dams, hill springs, and biomass? Contrary to apprehensions about extensive deforestation 25 years ago, both the Himalayan foothills and the Western Ghats have experienced as yet unresearched, but observable, increases in the natural regeneration of plants. This is probably the result of an increase in the supply of cooking gas and an increase in local incomes from the growth of industrial and service sectors in the early stage of development. How can this process of natural regeneration of biomass be promoted through the use of alternative energy from gas, solar, wind, and hydro sources?

What impact will carbon trading have in the region? Is it a realistic prospect, especially after the failure of Kyoto and the new Lieberman-Warner targets in the US designed to cut carbon levels to 70 per cent below 2005 levels by 2050, as well as the progress in reduction in the European Community? An International Monetary Fund study (April 2008) shows that smart carbon policies could contain climate change without harming the global economy. The political/business climate for the reduction of greenhouse gases is changing, even in America. Could India and China modify their post Kyoto positions in the future? The climate of informed opinion is also changing and no longer regards the environment and the economy as antithetical. Evidence is building of economies benefiting from environmental progress. Amory Lovins of the Rocky Mountain Institute says annual industry investments of $120 billion per year in improvements like green building and more efficient cars could yield an additional $900 billion per year in savings by 2020. This level of investment could reduce carbon emissions by 50 per cent keeping warming at no more than 2°C hotter than at present. Germany, the 'greenest' country in Europe, has much green technology to offer.

Can ICIMOD develop a new scientific vision and create a specialist division to bring environmental science and technology results to the HKH region that have already been developed by the corporate sector, and under state policies like that of California?

Such technologies are being developed by many companies in many different countries, for example the following:

- Acciosa, a growing Spanish company, is working on wind, bio-fuels, hydro, and solar thermal energy.
- The Sanyo eneloop rechargeable battery and solar charger provides a 'clean energy loop', opening the way for a path-breaking line-up of energy efficient products.
- Amyris Biotechnologies in the San Francisco Bay Area has developed ways to genetically modify bacteria to make better bio-fuels, side-stepping the food-energy debate.
- Suzlon has pioneered wind energy in India to become the world's sixth largest producer.
- The Honda IMA hybrid system (green car) with its clean diesel engine and intelligent gasoline engine and electric motor powered by combining hydrogen and oxygen in the ultimate power plant, could greatly help the transport sector in the HKH region, where transport costs are high.

Venture capital is opening up to clean, viable, alternative energy The American Energy Society estimates that the number of green jobs in the US could rise to 40 million by 2030, and they are rising elsewhere too. These are only a few of the many prospects. Can ICIMOD open this new promising window in the HKH region in cooperation with the region's governments and global corporations? Can it move into the post-carbon age by 2030, as Iceland is moving into the hydrogen energy age? This could be a major new and practical thrust area for ICIMOD in the next 25 years.

Soft-power to soften hard politics

The second major issue is 21st Century politics in the HKH region and Asia. ICIMOD may be a non-political body, but it can help all its regional member countries and people by offering cooperation in 'soft-power' options, for example making clean new technologies and other technologies to address climate change more viable – an inevitable need with high oil prices; enhancing employment, incomes, energy, and infrastructure; facilitating the infusion of more capital for these new technologies; promoting prospects for more trade within and beyond the region; and promoting cultural programmes within the HKH region for closer people-to-people relations.

Soft-power promotes prosperity, peace, and harmony

The new model of Bhutan and its concept of gross national happiness is an interesting study for ICIMOD. The HKH region is rich in traditional art and culture, which should not be swept away by

mindless unimaginative change and is as important as GNP, besides being a magnet for tourists. This is a challenging new area for ICIMOD, to be true to Himalayan tradition and the historical example of the prosperous Silk Routes, which were culture routes for progress as well as routes for cross-border trade and cooperation.

Impact of demographic changes

Demography is determined not only by the rise and fall of indigenous populations, but also by state-created and voluntary migration. Behind the forces of politics, economics, and technology, the world is becoming more aware of demographic impacts on the fate of nations. For example, the rise of China and India is underlined by an enormous growth in youth populations with new aspirations. Europe and Japan are apprehensive about the growth of their aging populations and declining numbers of youth, and the associated economic costs.

The HKH region has seen a tripling in its population in the last two generations, far beyond the ecological carrying capacity of the region. This has led to the migration of surplus poor to other Himalayan regions which has associated political and economic implications, and significant implications for ICIMOD's concern for 'mountains and peoples'. There are both political and non-political implications, which may not have concerned ICIMOD sufficiently in the past, but inevitably have a significant impact on its eco-development objectives. Can ICIMOD afford to ignore these impacts in the future? It may be unscientific to do so in one of the world's most ecologically deficit regions. Governments in the HKH region are not fully aware of the long-term impacts of changes in demographics, or of the inevitable rise of ecological deficits in Himalayan ecosystems, despite the rising expenditures on development in the region. This lack of awareness is reflected in the development policies of the last 50 years. Government expenditure, except where it was focussed on specific ecosystems, has not reduced past ecological deficits per capita in relation to biomass, water, and energy. Eco-deficits detract from true GNP, per capita wealth, and Human Development Index (HDI) criteria. Hence the importance of the decentralisation of natural resource management and the revival of local village/sub-catchment systems of management of natural resources with NGOs and self-help groups (see below).

Tourism: Cost or Benefit?

One of the modern world's great surges is the enormous rise in global tourism, which the HKH shares but with underdeveloped infrastructure and depleting ecosystems. The surge in the next 25 years is likely to be of Himalayan proportions in the wider HKH region, and to have significant consequences and economic benefits for the region. How far has ICIMOD made comparative studies of past tourism impacts in, say, Kashmir, Garwal, Nepal, Bhutan, and Tibet? What new policies are needed for eco-tourism and environmental management before the great surge of the future drowns, destroys, and diminishes the economic benefit to local economies and their ecosystems? What steps need to be taken to protect the most vulnerable areas, e.g., the Gangotri,

Nanda Devi, and Everest regions, and to protect urban tourist centres such as the Indian hill stations, Kathmandu, Gangtok, Lhasa, and Punaka from adverse impacts? How far can local people be stakeholders in, and co-beneficiaries of, tourism? The lessons learned in Ladakh and the Annapurna region may be helpful in providing a model of European 'pension' or 'bed and breakfast' style tourism, in which local families play host and benefit. Lastly, there is also the problem of mounting tourism waste disposal, from the capital cities to the mountain camps.

Non-government organisations/self-help organisations

The governments of the HKH region have limitations in terms of their capacity for eco-development. Past history has shown that centralised governments in colonial and post-colonial times have destroyed Asia's valuable traditional village system of managing local resources such as water and biomass, and even providing social security. This damaging process needs to be reversed. How can ICIMOD help promote a) the growth of good local village institutions, and b) the growth of NGOs and indigenous self-help organisations as a major instrument in mountain region eco-development? Even though in Asia the divine right of kings is being replaced with the right of political parties, let us not forget that Asian civilisations have their roots in non-government cultures. Centralised governments in the HKH region have produced failing states, unable to either centralise or decentralise effectively. Countries need to learn from the history of their own societies. Divine rule is vanishing (the latest in Nepal), and people's aspirations are rising. The political and economic fate of the modern world lies in the crucial new linkage between political parties and local people in all forms of government. The HKH region is facing this challenge in all its eight countries. How then can bridges be built constructively towards peaceful eco-development with the help of non-political NGOs and self-help organisations? How can ICIMOD make this a helpful new component of grassroots organisational delivery systems between state bureaucracies and the people?

Conclusions

So, if in its 25th year ICIMOD is considering 'ICIMOD and the Himalayan Region: Responding to Emerging Challenges', it needs to address three fundamentals.

Firstly, ICIMOD needs to conduct a self-analysis of how it has performed over the past 25 years, taking into account the context, circumstances, mindset, and challenges during that time. Have there been good internal and external evaluations? Should new ones be commissioned from independent professionals or qualified organisations? Secondly, the emerging regional and global challenges should be clearly identified (some of which have been indicated briefly in this paper). Thirdly, as a result of the first two, in what ways is it necessary to remodel ICIMOD's objectives, the organisation, and its activities in the future? To succeed, organisational innovation has to match innovative policies and plans.

Addressing these will require a meeting of many good innovative minds from many worlds, including government representatives, professionals, scientists, consultants, and representatives from NGOs and self-help organisations. Most of all, at the end of the day, a lot will depend on the leadership quality of ICIMOD itself. ICIMOD was set up as an international body with leaders from the government, academic, and development worlds. Does it need to imbibe the more pragmatic corporate culture of innovation, response to change, and results orientation, with annual operating plans and periodic internal and external evaluations; does the present methodology fulfil this?

These are the thoughtful offerings of one of ICIMOD's aging founding fathers, who recorded his early impressions of the decade of formation (1973–1983) in "Voices in the Wind". Times have changed, and will continue to change. New voices are being carried in the winds of the next 25 years. I hope that ICIMOD also listens to these voices.

The Evolution of ICIMOD: From Concepts to Good Practices

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Introduction

Twenty-five years ago, guided by concern for the widespread destruction of forests and natural resources, and the resultant burgeoning environmental and economic problems in the Himalayas, the international community and the eight countries of the Hindu Kush-Himalayan (HKH) region conceptualised and established ICIMOD as the first international centre to focus on the complex and multiple problems facing the mountain areas in the HKH region. The founding fathers of the Centre clearly stated ICIMOD's mandate as being to provide scientific and technical advice and backstopping to the regional member countries on contemporary issues concerning integrated mountain development by acting as an interface between research and development, often playing the role of an honest broker of knowledge and information.

ICIMOD's mandate (to contribute to sustainable and integrated mountain development in the HKH) presented a huge challenge to the Centre from the very beginning and has shaped its evolution over the last 25 years. The major challenges remain those related to ICIMOD's strategic goals and objectives, namely a) the promotion of an 'integrated and sustainable mountain development' agenda, and b) covering the vast and complex geographical landscape and diverse array of people in the HKH region. This paper recounts how ICIMOD has addressed the region's issues, faced challenges, and used opportunities in a way that has led to the successful evolution of the concept born in an international workshop in Munich in 1974, leading to the establishment of ICIMOD in 1983, and to today's ICIMOD spreading the message of pro-poor policies and good practices throughout the region and reaching out to the global mountain community. ICIMOD today is a vibrant centre of information, knowledge, and learning; although numerous challenges remain.

The First Challenge: Thematic Broadness

From its inception, ICIMOD's role has been broadly spelled out as a) a multidisciplinary information and documentation centre on mountain development, b) an agency for coordinating, supporting, and conducting participatory action research, and c) a centre for providing specialised training and technical backstopping on `integrated mountain development' (or IMD). It is perhaps due to the

awareness generated by the process of establishment of ICIMOD, which took almost 10 years, that 'integrated mountain development (IMD)', both as a slogan and as an indicative approach, has become a popular and attractive term in both policy-planning groups and donor circles, thus greatly increasing stakeholders' expectations and hopes for the Centre. However, the operational aspects of ICIMOD's rather ambitious mission, and the objectives, which were no less daunting, remained undefined. As expected, ICIMOD faced many financial, technical, institutional, and policy constraints and hurdles to putting its roots firmly in the ground and growing. To look more deeply into this predicament, the term 'integrated mountain development' has been widely used to mean different things by different people. One dominant view was that IMD programmes were designed sectorally, but implemented multi-sectorally through the involvement of compartmentalised departments. In contrast, the concept put forward by ICIMOD meant that programmes were designed in a multi-sectoral or multidisciplinary manner and implemented sectorally or by concerned agencies in a coordinated way based on prior agreement as to common processes and outcomes. Therefore, the challenge, as well as the reality, was how to articulate and adapt IMD to suit the complex and diverse policy, institutional, and implementation environments of the different member countries in the HKH region (Boxes 1 and 2).

In the absence of conceptual clarity and a lack of clear operational guidelines, ICIMOD had to search for its own understanding of the 'what', 'how', and 'where' of 'integrated mountain development' in a practical context, in order to define the scope of, and guide, its work. The

BOX 1: Integrated mountain development and ICIMOD

In response to an informal question, during a conference dinner in 1987, on the "what and how of integrated mountain development and the way ICIMOD should approach it?", one European participant (reflecting the dream of the 1974 Munich Workshop), responded as follows: "With the help of ICIMOD, the Himalayas should replicate the history of regeneration of the Alps". I am sure the participant was aware of the vast differences in terms of geology, history, demography, and socioeconomic status between the Alps and the Himalayas. The Himalayas – the youngest, highest, and most fragile mountain system – is beset by problems such as high population pressure and poor access to education, roads, electricity, food, and medicine, that create a heavy dependence on forests and other bio resources for food, shelter, and energy. In addition, the existing highly exploitative and unequal highland-lowland links, which evolved through historically feudal and colonial rule, have contributed to the severe depletion of natural resources and led to a vicious cycle of poverty, environmental degradation, and deprivation.

existing formal knowledge, information, and data on hill and mountain development were largely driven by individual disciplines and sectorally focused, and the policymakers did not really know how to handle the puzzle of 'integrated mountain development'. The major challenge was that the idea of 'mountain' as a context was rarely understood or even perceived. The somewhat poetic statement in Box 2 broadly conveys the essence of our argument.

In an attempt to start its long and arduous journey towards IMD, ICIMOD extensively reviewed expert writings, reinterpreted the recommendations of several workshops and seminars, and analysed the available information to define the components of 'integrated mountain development', which it hoped would eventually lead to sustainable mountain development (SMD). The process was comprised of knowledge gathering, especially literature review, critical assessment, and the targeted dissemination of synthesised knowledge through a series of policy discourses and participatory colloquia to the practitioners and policymakers of ICIMOD's member and sponsor countries.

BOX 2: To understand the greatness of mountains

"To see the greatness of a mountain, one must keep one's distance; to understand its form, one must move around it; to experience its moods, one must see it at sunrise and sunset, at noon and at midnight, in sun and in rain, in snow and in storm, in summer and in winter, and in all other seasons."

One might complete this poem by adding "to understand the mountains better, one must examine them with and without people and their age old culture and agricultural practices".

Mountains grow and decay, they breathe and pulsate with life. They create wind, clouds, thunderstorms, rain, waterfalls, and rivers.

Lama Anarika Govinda
The Way of the White Clouds

An important dimension of the above tasks included ICIMOD's efforts to create its own professional (technical) capacity and build a team of 'mountain development experts'. Accordingly, it engaged relatively senior professionals from the regional member countries (RMCs), invariably having specialised in a particular sector in their past work as multi-sectoral experts were not yet trained and available. The challenge for ICIMOD was how to use sectoral expertise to create multi-sectoral human resources to focus their work on integrated mountain development options and methods. ICIMOD introduced team thinking and group work, which made it somewhat easier to develop regional collaborative programmes.

ICIMOD also faced the challenge of how to go through the available holistic development related literature and distil from it the parts relevant to planning and designing development packages to improve the livelihoods of highly vulnerable communities in the mountain and hill terrain of the

Hindu Kush-Himalayan region (HKH). ICIMOD had to combine the romantic perceptions held by the plains dwellers about the serene `Himalayas' with the stark reality faced by the mountain inhabitants daily struggle with problems such as poverty, hunger, overpopulation, rapidly depleting natural resources, and the poor reach of government projects and programmes.

The Second Challenge: ICIMOD's Large Geographical Mandate

The vast geographical coverage of the HKH, spanning 3500 kilometres from east to west, and dissected by eight political boundaries, with less than healthy political relationships between some of them, posed a major challenge to ICIMOD in promoting regional cooperation. Although the eight member countries did share common mountain specific problems, such as high poverty, illiteracy, environmental degradation, and underdevelopment, many of them had serious differences in their perspectives and approaches to addressing these problems. Their political differences, which are deeply rooted in the tumultuous history and geography of the region, constrained the cooperative planning and implementation of ICIMOD's programmes in the region in a variety of ways for some years.

In contrast to the high interest and expectations of ICIMOD's sponsors, the RMC governments, especially the larger ones, took time to set their priorities for their policies on mountains. ICIMOD promoted and championed the cause of the HKH using comparative advantages like the dependence of important industries in these countries, for example the pharmaceutical industry, on the niche natural resources sourced from the mountains; and the high value attached to the `Himalaya' as the 'abode of gods', a pristine tourist destination, and a strategic landscape. ICIMOD's position as an intergovernmental agency with a neutral agenda and a non-political status was an added advantage. The mountain people, their institutions, and their representatives from all the member countries needed massive awareness building and involvement, and this happened to be the basis of many of ICIMOD's initiatives, making them receptive to ICIMOD sponsored activities. ICIMOD's people-centred participatory approach to development was

BOX 3: Conserving Himalayan mountains: harmonising people and nature

The Himalayan mountains present two contrasting realities – 'beauty' and 'poverty' – but at the same time they offer an opportunity to use the unique natural landscapes and products to alleviate poverty and thus resolve the dichotomy and bring about some form of harmony. Himachal Pradesh (HP) in India and Yunnan province in China are moving towards such a balance, thanks to the huge expansion of tourism, outsider investment, and efficient governance systems. The local governments in these areas have developed mountain focused economic development plans reflecting their own priorities and building competitiveness based on their comparative advantages. They have also created good infrastructure, established mountain focused education and research institutions, and are promoting sustainable mountain development.

attractive to local institutions, especially NGOs. Therefore, despite initial difficulties operating as a regional organisation, ICIMOD was able to rally and sustain the support of the RMC policymakers to stand together on a common platform to address the problems of mountain areas in each of the RMCs. During its first decade, ICIMOD staff started to gain a better understanding of the administrative procedures, ethos, and practices, as well as decision makers' perceptions, in the RMCs, and started getting them to listen to their views, approaches, proposals, and collaborative ideas. The decision makers slowly started to appreciate that the genuine gathering and sharing of information and knowledge could help them to address problems in their work on mountain development. Regular interactions and joint meetings involving scientific and technical personnel from different RMCs were used to open the way for dialogue with senior policymakers across the geo-political divide (see Boxes 3 and 4).

Constant Reflection and Reappraisal

ICIMOD staff, during the second decade of its existence, started gaining a better understanding of the mountain specificities and imperatives through systematic field assessments, constant dialogue with national partners, and collective reflection. They started coming up with new ideas and packages of practices to promote IMD. The Mountain Farming Systems (MFS) division of ICIMOD, set up in the mid 90s, took the lead in changing the conventional focus on mainstream or lowland agriculture, and started to work on diversified and market-oriented agricultural systems, based on the premise that mountains possessed specific constraints and opportunities and, therefore, needed a different approach in terms of diagnosis and designing plans and programmes. Based on an in-depth analysis of the mountain situation and its distinguishing features, mountain agriculture was redefined in terms of five mountain specificities: inaccessibility, fragility, marginality, diversity, niche opportunities, and human adaptation mechanisms. This farming system based concept quickly broadened its scope and started evolving into what has became widely known as the Mountain Perspective Framework or MPF.

BOX 4: Reflections of the First Deputy Director of ICIMOD

"I spent seven years at ICIMOD, during which time I learned a lot. My stay at ICIMOD gave me tremendous experiences and knowledge about the problems of the Hindu Kush-Himalayas. At that time, Myanmar and Afghanistan had not formally joined the ICIMOD Board. During my tenure 'water' was a very sensitive word and programmes on rivers and their water level or rainfall data were very difficult to get off the ground. Now I see a tremendous change. Currently, one of ICIMOD's three main programmes is on water resources."

Dr Ram Prakash Yadav

Development of the Mountain Perspective Framework: A Major Milestone

Due to the enthusiastic response of a large number of readers, the 'Mountain Perspective Framework' (MPF) quickly extended far beyond the boundaries of mountain farming systems and was applied to the study and understanding of natural resource management as well as sustainable mountain development policies and programmes in the HKH region. The MPF was developed through a process of extensive review and re-interpretation of the available literature and through field studies in China, India, Nepal, and Pakistan in partnership with and with the contribution of national institutions, becoming a new mantra for mountain development worldwide.

As a conceptual and operational framework, MPF defines the uniqueness of mountain situations as a basis for designing and implementing integrated mountain development solutions for sustainable livelihoods and the environment. Put in simple terms, MPF recognises and takes in to consideration the unique conditions of mountain landscapes – mountain specificities – that broadly differentiate the mountains from the plains.

As an initial validation of MPF as a conceptual and operational framework, ICIMOD compared successful and unsuccessful development initiatives, linking them to their implicit or explicit adherence or non-adherence to the imperatives of mountain specificities. In this way, the Centre managed to establish the validity and utility of an integrated approach to sustainable mountain development. This sort of cutting-edge approach also helped in understanding and articulating the issues of sustainability/unsustainability of mountain agriculture and natural resource sectors in international forums.

The MPF also helped ICIMOD to participate in global discourse and initiatives such as arguing for the Mountain Agenda during the Rio Conference, the Millennium Ecosystem Assessment, the International Year of Mountains (IYM), and Mountain Partnership related discourses.

The key components of the Mountain Perspective Framework were translated into Chinese, Nepali, Hindi, and Spanish (by collaborating researchers in the Andes) for use

BOX 5: What is the Mountain Perspective Framework?

In simple terms, the Mountain Perspective Framework, or MPF, implies definition, recognition, understanding, and adoption of the landscape specific status and imperatives of mountain conditions (mountain specificities), such as a high degree of inaccessibility, fragility, marginality, diversity, niche opportunities, and human adaptations, and takes these into account when designing and implementing interventions in hill and mountain areas. Most of these mountain features are interlinked and have both biophysical and socioeconomic (including cultural and political) dimensions, and thus call for an integrated and multi-stakeholder approach.

by decision makers at different levels. MPF components have been used in a few major initiatives such as the Agriculture Perspective Plan (Nepal), the Himalayan Action Plan (India), the UNDP supported development initiative in Tibet Autonomous Region (China), and deliberations on the Environmental Strategy (Bhutan). A number of NGOs, with ICIMOD's guidance, have used components of the MPF in their fieldwork.

Within ICIMOD, the MPF was used in MENRIS training programmes; in the study of market towns and settlement patterns; in the study of globalisation and its implications for mountains, poverty, and livelihoods; and in a number of other initiatives.

The development policies in mountain areas of ICIMOD's RMCs were also reviewed using the MPF and shared with policy programme groups in the RMCs. The MPF is described by the external reviewers of ICIMOD as a major conceptual contribution (Coward 2003). ICIMOD's new strategy and programmatic framework (2008-2012) describes the 'integrated approach' with elements of MPF which were used at the programme planning level, not only at the national level, but also at the regional and global levels.

Gaining Wider Acceptance and Ownership by the RMCs

From its inception, ICIMOD's underlying goal was to achieve greater acceptance of its approaches and increased ownership of its programmes by its regional member countries. However, due to its relatively new agenda, inter-governmental status, and advisory role, progress understandably remained slow.

During the first 10 years, ICIMOD's efforts were concentrated more on creating, documenting, and sharing information and knowledge on mountain development principles and practices. The demand for GIS and RS tools and technologies was high, to which ICIMOD responded quickly and, therefore, became popular as a training centre among its member countries. In fact, during its development phase, ICIMOD was better known as a training and documentation centre, than as an applied research centre. Instead of dealing only with central government agencies, ICIMOD also started developing contacts and collaborative programmes with regional and provincial government agencies to work in mountain areas.

This approach, combined with a reciprocal response from the RMCs, took ICIMOD's activities where mountain specific issues and possible solutions needed greater attention. It also targeted ICIMOD programmes better to address key mountain specificities, i.e., socioeconomic marginalisation, physical inaccessibility, and ecological fragility. Gradually, ICIMOD's ecosystem-based innovative integrated mountain development approach and activities started to match its RMC's government programmes and priorities. Some examples of its new orientation are described below.

BOX 6: The process of gaining recognition and meeting expectations

The evolution of ICIMOD is partly reflected in the following statements made by RMC representatives in different meetings/ workshops.

- We used to ask, 'What is ICIMOD?' (1988), now we ask, 'What can ICIMOD do for us?' (1995).
- ICIMOD used to be like a street vendor, trying to project and sell its products (1993), now ICIMOD acts as a mall, where people visit to obtain better/new knowledge input and advice (2007).
- Earlier, ICIMOD evolved and pushed advice and options on its own (1994), now ICIMOD designs and shapes options on a demand driven basis and in a collaborative manner (2007).

Increased ownership by the RMCs

Under its first five-year Medium-Term Action Plan (MTAP), which started in 2003, and its new long-term strategy introduced in 2008, ICIMOD has been reaching out to its eight regional member countries through more intensive consultation. The main aim is to better align ICIMOD's programmes with its RMCs' national programme needs and priorities.

The RMCs have responded positively to this new programmatic approach, and a strong indicator of their increased ownership is the marked increase in their annual financial contribution to ICIMOD's core budget. The RMCs have already committed to raising their aggregate share of the core budget from 7% to 12.5% by the end of the current five-year period ending in 2012. It is hoped that the aggregate RMC contribution will eventually reach one million US$ per annum and cover approximately 25% of ICIMOD's operational budget.

Increased support in programme co-financing

As per its new strategy and second MTAP (2008-12), ICIMOD is increasingly designing scaled-up joint programmes in each RMC involving key national partners, especially government organisations (GOs). Through this carefully planned approach, ICIMOD hopes to contribute directly to improving the implementation of development programmes in the mountains of each of the eight RMCs and expects as a result to receive annual funding for the scaling up of programmes and operational activities. The project funds can come from larger development programmes as parallel or co-funding, but co-financing arrangements will further enhance national ownership of ICIMOD's regional programmes. ICIMOD is also intending to implement cost recovery arrangements for specific technical and scientific support for national programmes and organisations that are not covered by project finances.

Increasing the relevance and effectiveness of ICIMOD's programmes

ICIMOD will make specific efforts to increase the relevance and effectiveness of its programmes through its clear orientation and focus on adding value to national development programmes operating in the mountain regions of each of its eight RMCs, as well as achieving a greater positive impact on the wellbeing of mountain people. By systematically implementing this operational policy, ICIMOD expects to see a higher rate of adoption of its programmes by its national partners including GOs, NGOs, and CBOs. This will be possible through enhanced technical and scientific capacity of the staff within ICIMOD, as well as a pro-actively designed and run knowledge development and management cycle that will follow innovation systems and joint-production approaches to knowledge management in order to meet the specific requirements of ICIMOD's collaboration partners and thus improve the quality, deliverability, and sustainability of ICIMOD initiated and supported programmes in each RMC.

Addressing chronic poverty in the Himalayas

Realising that chronic and widespread poverty in all its dimensions prevails in a large part of the HKH mountains, and considering the fact that all the RMCs are signatories to the Millennium Development Goals (MDGs), ICIMOD has consciously redirected its programme-strategy to contribute to the achievement of MDG 1: halving national poverty by 2015. ICIMOD's programmatic approach in this regard is to focus on the improved management of water and hazards; ecosystem services such as biodiversity, forest, rangelands, and watersheds; and livelihood sources such as mountain niche products (for example, honeybees and medicinal plants) and services (for example, tourism and clean energy) to achieve a quick and lasting impact on the livelihoods of mountain poor and marginalised people, and especially women.

Poverty in the hills and mountains is generally attributed to physical characteristics, but the poor governance of development resources and programmes is equally responsible. Greater economic investment and the flow of suitable technologies into the region are essential to address the physical constraints. However, to improve governance and increase the voice of poor and marginalised people in decision making, there is a need for adequate and proper representation of all marginalised communities in the governance system of the country or province.

One of the contributors to poverty in the countries of the Hindu Kush-Himalayan region is the centralised system of government wherein marginalised people are excluded from the decision-making process. Unless this is corrected, poverty cannot be alleviated in the region. Under the centralised system, local institutions are merely an extension of the central level sectoral government line agencies. Programmes designed and implemented by the central government through sectoral line agencies have not succeeded in alleviating poverty or improving resource management. ICIMOD's new thrust linking upstream problems with downstream opportunities and vice-versa is a welcome change in helping reduce rural poverty.

BOX 7: Upland-lowland relationships and poverty: a different perspective

Over the years, ICIMOD has drawn attention to the dominance of the plains over the hills and mountains in most of the countries in the Himalayan region. Although this appears to be the case in many of those countries where the plains cover the largest area, contain most of the population, and are the base of the country's government system, in some situations the hill and mountain regions are dominant, covering the largest area and with the largest population. Hence, there is a need to give a balanced picture, and meaningful participation of the plains in decision making must also be ensured to capitalise on their potential for economic growth and national development. In Nepal, for example, the potential of the plains for development is very high; however, due to low investment in irrigation and physical infrastructure, the plains are as poor as the hills.

In Nepal, the Agriculture Perspective Plan (APP), prepared in the early 90s, placed a high priority on the installation of deep and shallow tube wells and the development of rural access and agricultural roads in the Terai. As the investment needed to implement the Plan has not materialised, the Terai is becoming poorer by the day. The young people of the Terai are migrating to foreign countries, as are those in the hills. This has contributed to the food deficit in Nepal and to poverty.

ICIMOD's Coming of Age

The last 25 years have been an important trial and testing period for ICIMOD, during which it developed meaningful programme partnerships with its RMCs, as described above. According to some RMC officials, this period was important to inspire ownership and ensure the functional involvement of the RMCs in ICIMOD's activities. The most challenging and rewarding outcome of this process has been the RMC government agencies' increased ownership of ICIMOD's programmes. In the early stages of ICIMOD, the RMCs were only represented in ICIMOD's governance, whereas in the current phase, there is not only representation, but more importantly increased participation by the RMCs in ICIMOD's programmes. The key factor that led to this progress was the realisation of the need for, and development of, an improved alignment between ICIMOD-supported programmes and government-supported national and sub-national programmes, ensuring greater participation by GOs, NGOs, and CBOs, which in turn increased RMC ownership in ICIMOD. ICIMOD is gradually matching its programme priorities with those of its RMC partners, especially its government partners, as demonstrated by the following:

- There is an increasingly better fit between the strategies, approaches, and activities of ICIMOD and those of the government agencies/decision makers in the eight RMCs dealing with mountain regions. This has increased the quality and frequency of interaction processes and led to more meaningful joint decisions and actions.

- ICIMOD can demonstrate convincingly some practical examples such as simple clean energy technologies, application of geo-ICT tools and technologies, suitable soil and water conserving agricultural practices, and in-situ/ex-situ management of high value products such as medicinal plants and honeybees. ICIMOD is improving the quality of its outputs and advocacy, which will encourage RMC decision makers to adhere to multi-sectoral and integrated approaches to development.

- Building on past work and replicable results, ICIMOD has embarked on evidence-based scaling up of good practices, which it hopes will convince the RMCs to enhance jointly planned and implemented programmes. The success of these efforts depends on how far ICIMOD is able to add value to national programmes in a complementary and synergistic manner. The increased collaborative activities between ICIMOD and RMC institutions are an indicator of success in this regard. This reflects a major shift in ICIMOD's programmatic approach, i.e., to establish and demonstrate its credibility and niche position by responding to the expressed needs of the RMCs. To sum up, ICIMOD is gradually understanding and embracing its RMCs' priorities and concerns in its programmes better and is able to mainstream them in its collaborative work to produce joint outputs over time.

- Strategic and sustainable partnerships based on a shared vision, mission, and objectives on major agendas such as poverty alleviation are considered to be the way forward to add value and create impact in the lives and livelihoods of mountain people. One such example is ICIMOD's strategic and collaborative partnership with Nepal's Poverty Alleviation Fund (PAF). In 2008, ICIMOD and PAF held discussions to plan a joint collaboration in Nepal to address poverty alleviation in selected hill and mountain areas. ICIMOD will provide new improved technology and technical assistance, while the PAF will provide the financial assistance to community organisations for the poor (COP). ICIMOD is also providing specialised training to some of the PAF staff in the application of GIS tools. Thus, this collaboration between PAF and ICIMOD will be mutually beneficial and the target group will draw considerable advantages. ICIMOD will then be able to disseminate the ground realities in terms of improved practices to other ICIMOD countries.

- Under ICIMOD's new strategy, regional cooperation and collaboration among the eight RMCs will be mediated through commonly required and generated data, information, and knowledge. ICIMOD's regional role in documenting and sharing knowledge can be used to take the lead in convening medium-term and long-term applied research based on the latest scientific know-how – often accessed from the global knowledge base – so as to produce frontier knowledge and cutting-edge solutions to help address future problems such as climate change, globalisation, human security, and the growing need to create knowledge-based societies.

Conclusion and Future Directions

ICIMOD's evolutionary history, positive current status, and promising future strategies allow us to be optimistic about ICIMOD's increasing role, recognition, and relevance in addressing the increasingly severe problems faced in the HKH region. After learning lessons from its 25 years of work and periods of conceptualisation, gaining acceptance for the idea of `integrated mountain development' and seeing it put into practice, and following the development of constructs such as the `Mountain Perspective Framework', which defines the uniqueness of the mountain situation, ICIMOD feels strongly that it has the foundation to design and implement viable options for sustainable mountain development. ICIMOD is already recognised as a) a focal point for applied research in a number of areas; b) a multidisciplinary centre for the systematic exchange of knowledge and information in the HKH region; c) a regional focal point for specialised training of partners in different fields including GIS/RS and community initiatives; and d) a centre that fosters networks and partnerships regionally and globally to address mountain issues.

Looking into the future, we consider that in order to enhance the Centre's visibility, credibility, and effectiveness, ICIMOD must do the following:

1. Maintain the central emphasis on the mountain context and the imperatives of mountain specificities as outlined in the Mountain Perspective Framework, while addressing complex issues with knowledge and anticipatory or forward planning
2. Improve linkages amongst ground realities, research-based understanding, and development change analysis at the local level with macro-level policy reform and implementation processes
3. Identify, assess, document, and replicate best practices/success stories from specific micro-catchments to broader landscape level mountain areas by involving the respective RMC partners
4. Develop a variety of partnership arrangements, ranging from strategic to collaborative, for partnership-based work involving RMC government agencies, NGOs, universities, and rural communities
5. Facilitate and support community-centred initiatives and partnerships including those with a focus on community-owned resources and indigenous knowledge systems, and strengthen traditional institutions through iterative training and institutional capacity building
6. Link upstream-downstream concerns, highlighting their intrinsic relationship and potential synergies in the changing global scenario focusing on balanced regional development and the interdependence of each region and community

7 Develop large scaling up projects and programmes through programmatic partnerships with RMC organisations, especially government agencies, wherein the role of ICIMOD is to provide the latest know-how and quality technical advice

8 Respond in a timely manner to emerging challenges such as climate and environment change, globalisation, and economic migration, and capitalise on new opportunities such as carbon finance, through collaborative programme development and implementation

9 Move towards a think tank role by creating a suitable 'think tank' cell, within the organisation so that ICIMOD becomes a thinking institution that seeks out and makes available frontier knowledge to solve emerging and unexpected problems.

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