

Mountain Initiative Status Paper

FOR MOUNTAINS AND PEOPLE

Prepared for the United Nations Framework Convention on
Climate Change (UNFCCC) and Rio+20 processes



Preamble

This document is a synthesis of the discussions and conclusions of the first 'International Expert Consultation Meeting: Mountain Initiative on Climate Change' held 23-24 September 2010 in Kathmandu. The Consultation Workshop was attended by high level policy and decision makers, national experts involved in the UNFCCC process, and representatives from academia, international organisations, and development partners. Participants came from **Afghanistan, Bangladesh, Bhutan, Canada, China, Columbia, India, Italy, Kazakhstan, Lao PDR, Nepal, Pakistan, Peru, Tajikistan, and Switzerland**, and included experts from **ICIMOD, the Mountain Partnership Secretariat (FAO), World Bank, UNDP, DFID, DANIDA, FINNIDA, UNEP, and ADB**. The meeting was organised jointly by the Ministry of Environment, Govt. of Nepal (MOE/GON) and ICIMOD.

The purpose of this document is to identify strategic issues and topics that are of significant importance to the global mountain community in the context of climate and global change. The Rio Conference (in the form of Agenda 21) and the International Year of Mountains (2002) Declaration highlighted the need to recognise and mainstream the sustainable mountain development agenda in the development dialogue, but so far it has received scarce attention. The aim of this document is to provide a basis for raising important mountain issues in the ongoing UNFCCC negotiations and the upcoming Rio+20 preparatory meetings and Summit to provide the Mountain Agenda with increased impetus and recognition in these multi-lateral environmental negotiations and agreements.

The '**Mountain Initiative for Climate Change Adaptation in Mountain Regions**' initiated by the Government of Nepal plans to bring the mountainous countries together and build a common platform to support the Mountain Agenda. The Mountain Initiative provides a framework within which mountain countries, in collaboration with specialised global and regional agencies, can work together for greater recognition of the critical role of mountain ecosystems in the context of global climate change. It highlights the need to better advocate for mountain ecosystems based on state-of-the-art knowledge so that mountain people can be supported more effectively in their struggle to adapt to the new challenges, and enabled to benefit from emerging opportunities. The International Centre for Integrated Mountain Development (ICIMOD) is providing technical support and backstopping to the governments in the region in this initiative led by the Government of Nepal, and especially to the Ministry of Environment.

This publication is a first step in building a concerted effort of the mountain countries to integrate their different agendas under the broader umbrella of the Mountain Initiative. The document has been prepared largely through the contribution of the Technical Expert Group members of the Mountain Initiative with active support from and facilitation by the Government of Nepal and ICIMOD.

Mountain Initiative Status Paper

Prepared for the United Nations Framework Convention on Climate Change (UNFCCC) and Rio+20 processes

by the Technical Expert Group of the Mountain Initiative

Contents

Background	1
Strategic Issues	2
Five Topics Needing Special Attention	5
Conclusion	11
References	12
Annex	13
Acronyms and Abbreviations	17

Background

A two-day 'International Expert Consultation Meeting: Mountain Initiative on Climate Change' was organised by the Government of Nepal and the International Centre for Integrated Mountain Development (ICIMOD) in Kathmandu from the 23 to 24 September 2010 (ICIMOD 2010). The full conclusions and recommendations are presented in Annex 1. From this meeting, clear messages emerged about five significant topics in mountain areas arising from climate and global change: 1) adaptation programmes in mountain areas; 2) global and regional responsibility for black carbon; 3) maintenance of forests, agriculture, and rangelands; 4) payment for environmental services (PES); and 5) country positions on the Mountain Agenda. This paper summarises these five topics and presents the action points that emerged from the Expert Consultation Meeting which governments can take to COP 16, COP 17, and the Rio+20 Summit, in order to highlight the Mountain Agenda in the discussions.

The Mountain Agenda was first featured at the 1992 Rio Earth Summit as part of Chapter 13 of Agenda 21. Mountains took centre stage a decade later in 2002, at the International Year of Mountains (IYM) held in Bishkek. The focus was on sustainable mountain development, and subsequent resolutions of the UN General Assembly stayed with this concern: the latest resolution on mountain areas was passed unanimously in March 2010. Even the latest resolution, however, does not fully reflect mountain issues related to climate change and global change perspectives. Equally, the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) published in 2007 under the United Nations Framework Convention on Climate Change UNFCCC framework, does highlight the vulnerability of mountain

areas from a climate change perspective and also recognises that lack of scientific data is a bottleneck to a comprehensive understanding of the changes that are occurring.

The Rio+20 Summit in 2012 will be an event of significant importance for the Mountain Agenda, not only because it will take place 20 years after the Rio pledges and 10 years after the International Year of Mountains, but also, more importantly, because it will be a time to review the Mountain Agenda through the lens of responses to climate change and sustainable development objectives by linking UNFCCC objectives to sustainable development goals.

In this evolving context, there are several general but strategically important mountain issues that could form the basis for comprehensive discussions during COP 16, COP 17, and the Rio+20 meetings. These strategic issues are presented in the next section of this report, as a background for the discussions of the five topics identified by the International Expert Consultation Meeting.

Strategic Issues

Revisiting the Mountain Agenda from a climate change perspective

Revisiting the Mountain Agenda implies that the specific impact of climate change on mountain systems has to be described and analysed. Mountain systems play an important role in the lives of mountain populations and of people living in the plains below. Climate change has created an awareness of the relevance of upstream-downstream relationships and the relevance of remote areas for global security. An effort to explain this has been made in the framework paper prepared by ICIMOD and the Government of Nepal (Macchi and ICIMOD 2010). Further discussion of this issue is required and a consensus needs to be forged among mountain stakeholders. This is essential in the light of UN conventions, particularly those of the UNFCCC and the Council on Biodiversity (CBD), and will be an important element of the Rio+20 Summit.

Research related to the cryosphere is of global importance

Lack of solid scientific data related to climate change and its effect on snow and ice is a stumbling block for the design of internally coordinated strategies. Discharge of water in adequate quantities and of acceptable quality from the cryosphere is essential for food security. Uncertainty of water supplies renders mountain and agricultural communities particularly vulnerable, especially in subtropical zones. At the same time, climate change and anthropogenic pollution have negative consequences, particularly for glaciers which are of global importance. Glacial melt is, to a substantial degree, the result of global warming; and hence a global phenomenon. Concomitantly, the state of the glaciers is an indicator of climate and global changes.



Lugde glacier and lake, Bhutan

Intensive and systematic research is required, therefore, and is justified not only by the different local impacts experienced but also by the need for development of a global yardstick. The international community needs to improve research work in these areas. It is important to strengthen national and regional institutions in order to train university professionals in issues of climate change and customise global research to local and regional circumstances. International resource centres need to reach out beyond their own research work and enter into collaboration. They are called upon to twin their efforts with those of universities and centres of excellence in countries with major mountain systems. This dimension has hardly been touched upon in the framework of the UNFCCC discussion and needs addressing urgently.

Adaptation to climate change requires regional transboundary answers

Climate change is affecting two resources that are essential bases for livelihoods: water and air. Flood or drought events due to increased climate variability are increasing the incidence of hazards for mountain populations and hence the vulnerability of populations both upstream and downstream. Availability of data, exchange of experiences, and development of coordinated management strategies are essential and require regional transboundary cooperation. Conservation, storage, and sustainable management upstream are of enormous importance for livelihoods, food and energy security, and basic availability of water



Mt Kailash transboundary landscape, TAR China

downstream. Atmospheric pollution in the form of aerosols (and black carbon) and ozone precursors calls for mitigation measures. Local and regional variability in terms of aerosols, particularly in relation to mountain systems, is not yet well known. Research into this aspect has global relevance but will increasingly have a regional focus. The incidence of black carbon and ozone as short-lived and largely regional products will need particular attention and intervention.

The call for additionality of adaptation measures requires careful, country-wise analysis and proposals

The Mountain Agenda, as debated in the UN General Assembly, is based on knowledge developed during the 1990s. It rests on the concept of 'sustainable mountain development' (General Assembly Resolutions 60/198 and 62/196). The arguments made do not consider the need for additionality of adaptation measures.

In the context of climate change, there are two aspects to additionality which are related. The first concerns additional funding relative to regular official development assistance (ODA); for example, the \$30 billion pledged at COP15 in Copenhagen by developed countries for adaptation in developing countries is supposed to be in addition to all other development funds pledged. Recent reports from Climate Analytics and from the World Development Movement

indicate that not only has very little of this funding materialised, but much that has been handed over is in fact not additional but taken from other funds through double counting (Khadka 2010).

The second concerns additionality of adaptation activities undertaken within developing countries; i.e., these are supposed to be activities that would not have been undertaken in any case. Proving this kind of additionality needs clear national adaptation strategies. The National Adaptation Programmes of Action (NAPA) in most countries were prepared rather hastily and do not emphasise concrete measures to the degree required to reduce climate-related hazards and to enhance the resilience of mountain communities to climate change. For future discussion, analysis cannot be confined to the description of negative impacts. Climate change in the mountains also creates opportunities: there are winners as well as losers. The definition and design of investment opportunities in this respect will be a prerequisite for the sustainability of mountain development. It is essential, therefore, that the NAPAs are revisited and country-wise strategies developed by looking beyond immediate adaptation measures.

Funding instruments need a more specific mountain focus

Mountain systems require specific attention and for that reason the discussion on mechanisms and instruments proposed at global level need to be influenced to ensure that mountain-specific concerns are included. At the same time, least-developed countries (LDCs), particularly, need to understand how the upcoming instruments are being used and what their implications are. A first attempt at such an analysis of instruments has been made (Schwank et al. 2010), but the instruments and their interpretation are subject to change within the dynamics of international negotiations. It is in the interest of countries depending on the ecosystem services of the mountains to ensure that there is regular access to relevant information about such changes. The mountain countries in the northern hemisphere (especially developed mountain countries) are therefore requested to support countries that do not have the resources to regularly update the state of the negotiations and the implications of these for mountain systems.

Five Topics Needing Special Attention

Adaptation programmes in the mountains

Adaptation strategies are of paramount importance for mountain areas. Many mountainous countries do not have adequate capacity to gather information related to their urgent and immediate adaptation needs, let alone to prepare strategic adaptation plans. As a response to climate change, there are now numerous financial instruments available for developing measures to improve adaptation to climate change in least-developed countries (Schwank et al. 2010). As noted above, pledges were made in the Copenhagen Accord to provide USD 30 billion for the period from 2010-2012 for adaptation and mitigation; a further sum to assist developing countries of USD 100 billion a year by 2010 has also been promised.

Despite these pledges for partnership between developed and developing countries to address the challenges of climate change, finance for adaptation programmes is not yet reaching mountain communities and mountain ecosystems on the scale required by the urgency of the problem.

One reason for this failure to reach mountain areas is the fact that much of the funding promised has not yet materialised: in part, this may be due to the criteria for investment which require a test to ensure the additionality of the programmes. As noted above, this finance will only be given when it is proven that the proposed adaptation activity is additional and

would not have happened without the support of climate financing. The NAPAs, however, do not make a clear distinction between development activities and additional climate-related activities, and thus establishing the additionality aspect of any particular activity is a challenge. For example, during the prolonged dry season, water-borne vector diseases are rampant. Addressing this requires financial support for the health sector in affected areas. Climate change will make the impacts of water-borne diseases worse, but as health sector programmes already exist they are not considered additional, despite the fact that they are clearly in need of financial assistance. Experts have been stressing that climate change will indeed worsen poverty (or at least slow down the rates of improvement in wellbeing) in particular localities for a period of time, unless adaptation occurs (DFID 2002). In some mountain areas of the world, climate change is already having an impact on the economic, social, and ecological well-



being of communities and needs immediate action for long-term adaptation; but this may not be deemed additionality in climate-change terms.

As a result of this requirement, there is now a danger of labelling development programmes as adaptation measures; and this is generally done by hiring expensive experts who are able to justify climate additionality simply for the sake of meeting the conditions for receiving climate funds. What is urgently needed is a clear and fair definition of what additionality is

in the context of mountain adaptation needs and in situations in which development activities are already present but need to be strengthened, given that climate change is exacerbating development problems.

Global and regional responsibility for black carbon

Black carbon is becoming an important topic in the climate debate as rapid melting of snow and glaciers is being attributed equally to the deposit of soot or black carbon – in addition to global warming – on snow and ice surfaces, thus reducing the albedo process. In the Himalaya region, soot can cause a decrease in glacial albedo and the resulting heat can cause an increase in annual snowmelt, as suggested in a recent study by Yasunari et al. (2010). In Africa, black carbon emitted from burning biomass can contribute to increased radiative forcing and modify glacial albedo favouring the snowmelt on Mt. Kilimanjaro, even though this snow variation is mainly influenced by the reduced humidity favoured by drier conditions in East Africa during the last century – conditions which resulted in reduced precipitation and cloud cover and thereby in the increase of both incoming and net solar radiation (Thompson et al. 2009). Research is being carried out to establish more robustly claims relating black carbon to melting of snow and the cryosphere. UNEP is undertaking such research in the Himalayan region and it is expected that results will be made public in the spring of 2011; however, there is still a need for more conclusive research to firmly establish the impact of black carbon on the mountains.

Black carbon mitigation faces a two-pronged challenge in the mountains. Firstly, much of the black carbon is emitted from the lowlands where agricultural, transportation, and industrial processes are more intensified and the population is denser. The main source of emission of black carbon or soot, other than from fossil fuel combustion, is from biomass-based energy systems (use of biofuel) that are cheap but inefficient. In addition, in some regions of the world, it is common practice to burn agricultural residues in the field and/or burn trees for deforestation. The first problem is how to persuade populations in developing countries to use more efficient energy systems and how to facilitate the transfer of technology, as developing countries often do not have the financial resources to access the most up-to-date technological solutions. Unlike CO₂, which remains in the atmosphere over a hundred years, black carbon and other pollutants such as ozone are short-lived compounds and their climatic effects could disappear within weeks or months of reducing emissions, thus providing an effective way of mitigating anthropogenic causes of climate change. Additional co-benefits from reducing these air pollutants will be possible, including improvements in human health (indoor and outdoor pollution) and agricultural productivity for rural populations in developing countries. The second challenge is that global distribution of black carbon and related climatic effects is characterised by the presence of regional hotspots. Thus, international financial instruments are unlikely to be as available as they are for addressing greenhouse gas (GHG) mitigation.



Forest fire on a hillside, Trashigang, Bhutan

There is, a need for developed countries and developing countries to work in collaboration to identify the relationship between black carbon and its impact on the mountains; and to find appropriate options for mitigation. As shown by recent studies in the Himalayas (Bonasoni et al. 2010), large amounts of black carbon can be transported efficiently to the highest mountain areas. Moreover, black carbon is one of the principal components of atmospheric brown clouds (ABC), i.e., transboundary regional-scale plumes of air pollutants able to affect regional climate, hydrological cycles, glacial melting, agriculture, and human health (Ramanathan et al. 2008). For these reasons, calls can be made for research and technology transfer solutions from the developed world.

Maintenance of forests, agriculture, and rangelands

In the mountain ecosystem, human sustenance is directly linked to forests, agriculture, rangelands, and biodiversity. 'Reducing emissions from deforestation and forest degradation' (REDD+), which is under negotiation at the moment with UNFCCC, has made some progress as it extends the window for supporting mitigation through afforestation and reforestation, forest-related activities earlier allowed under the Clean Development Mechanism (CDM), to include reduced emissions from deforestation and forest degradation, conservation, sustainable management, and enhancement of forest biomass.

Although the forestry sector has made progress in this respect, the REDD+ instruments are mainly designed for tropical rainforests. Forests in the mountains are scattered spatially, often managed by local and indigenous peoples, and do not have the economies of scale of forests in tropical regions, but they are still important ecosystem providers, reservoirs of carbon, and generators of carbon credits. In addition, the major finance for REDD+ is moving towards centrally-driven REDD+ programmes at the national level. Mountain ecosystems and mountain communities would benefit from decentralised REDD+ mechanisms implemented at sub-national levels: at the very least, a layered system in which decentralised approaches are permitted within an overall national programme needs to be advocated.

Agriculture has not made the same level of progress as the forestry sector in climate negotiations. In 2009, under the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), it was recognised by all that agriculture is important and needs to be brought into the post-2012 climate agreement. Nevertheless, how to bring it in and where to house it has not yet been determined. The text mentions “cooperative sectoral approaches and sector-specific actions in agriculture” and will be discussed in the upcoming meetings.

From a climate perspective, rangelands are a potential reservoir of carbon because they are so extensive, although analytical study is required to substantiate their potential capacity in this regard. Rangelands can act as both sinks and sources of GHG, so more scientific research is needed to identify improved carbon management options.

Notwithstanding their ecological significance, however, rangelands are not featured or mentioned in the climate negotiation text, unlike coastal ecosystems. Rangelands need to be featured in the negotiations as a distinct ecosystem on a par with coastal ecosystems so that local people and the ecosystem can benefit from climate finance; and this will also render benefits to the lowland populations that depend on ecosystem services generated from the rangelands in the mountains.

Payment for environmental services (PES)

Payment for environmental services (PES) will be a new paradigm when dealing with forests, agriculture, rangelands, and biodiversity in mountain ecosystems. Payment for environmental services is an incentive-based mechanism that is being promoted throughout the developing world by claiming that the provision of economic incentives is vital to bring about sustainable management of ecosystems, and thus lead to improved livelihoods. The incentive-based mechanisms stimulated by PES primarily help to realign private and social costs and benefits by accounting for externalities.

PES that deals with upland poor populations and provides economic incentives for sustainable management of water, land, and biodiversity resources is actually fulfilling the objectives of agreements on climate change (for adaptation and mitigation) as well as sustainable

development objectives, engendering a win-win situation. Nevertheless, more work needs to be done in terms of valuation and creating markets for ecosystem services. Policy reorientation is required as well as public and state awareness to create a willingness to pay. It also requires the development of appropriate and robust governance and institutional settings that address equity and equality issues while implementing PES incentive-based mechanisms. Developing suitable property rights and benefit-sharing issues so that compensatory payments reach the actual providers of ecosystem services will be a major issue; and, in this respect, capacities of local communities in advocacy and participation need to be built.

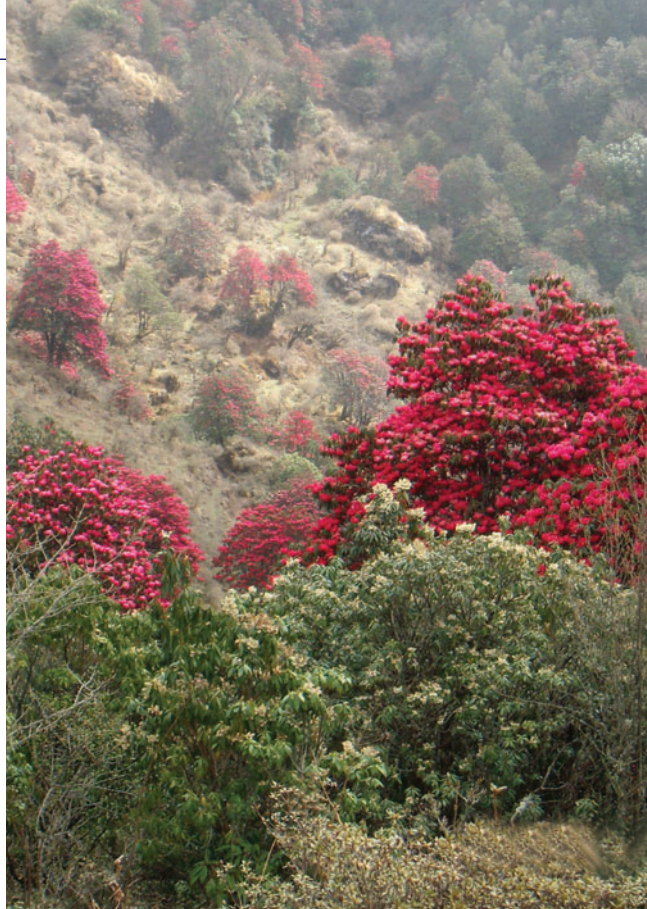
While PES is not an additional programme in terms of climate change discourse, the Mountain Initiative could make out

a strong case in favour of the LDC mountain countries, or the Mountain Initiative countries eligible for the PES criterion could be assisted through a common carbon fund as an additional development resource. Within the developing countries, incentives are now being provided through royalties and other concessions built into national sectoral policies as mountain ecosystems are invariably a major source of perennial water, used downstream for drinking, irrigation, and hydropower. Such incentive-based mechanisms deserve to be brought to the notice of developing countries through Mountain Initiative advocacy initiatives.

Country positions on the Mountain Agenda

When dealing with specific topics under consideration by UNFCCC negotiations, it is essential to understand and respect the interests of different countries. There are countries with mountainous regions, there are countries where mountains are a small proportion of their area, and there are yet other countries that may not themselves have mountains but are affected by mountains elsewhere. In addition, even mountain ecology can differ as there are arid mountain systems and snow-covered mountains: the issues are significantly different among them also.

When countries such as China and India align themselves under BASIC (Brazil, South Africa, India, and China), they form a powerful economic block and function as a major player



in UNFCCC negotiations. Their agendas at the national level give priority to joint BASIC concerns in which mountain interests do not play a part. At state level, however the Mountain Agenda may be given high priority, for example in India, where particularly the 11 mountain states signed the 2009 'Shimla Declaration on Sustainable Himalayan Development'. The Mountain Agenda, as adopted by the Shimla Declaration (GoI 2010) reflects sustainable mountain development's (SMD) latest manifestation in an economically emerging country like India. The very high priority given to establishment of development forums for regular interaction amongst the mountain states underlines the fact that all developing nations, economically emerging or otherwise, should have a mountain agenda firmly in place to ensure that their mountain regions receive the attention they urgently deserve.

When the Mountain Agenda is discussed, it is important to recognise the respective positions of countries in the UNFCCC negotiations; for example, the fact that the Mountain Agenda is in line with key national and regional positions and at the same time addresses state-level mountain issues. For effective emphasis on the Mountain Agenda at global, national, and state level, mountain issues need to be addressed under the Sustainable Development Framework which is aligned with all other multilateral environmental agreements.

Conclusion

This paper has identified and presented five strategic issues to set the stage for discussing the five significant topics that emerged from the 'International Expert Consultation Meeting: Mountain Initiative on Climate Change' organised by the Government of Nepal and ICIMOD. The strategic issues and the five topics help us to understand how the Mountain Agenda has been marginalised, despite its significance, and what can be done. This paper reiterates the key strategic issues and important topics for the Mountain Initiative to flag in the forthcoming UNFCCC and Rio+20 meetings, so that mountain voices will be heard globally and given due recognition in the agreements. Only in this way will global mountain ecosystems and livelihoods be safeguarded now and in the future.



Namche Bazaar, Nepal

References

- Bonasoni, P; Laj, P; Marinoni, A; Sprenger, M; Angelini, F; Arduini, J; Bonafè, U; Calzolari, F; Colombo, T; Decesari, S; di Biagio, C; di Sarra, AG; Evangelisti, F; Duchi, R; Facchini, MC; Fuzzi, S; Gobbi, GP; Maione, M; Panday, A; Roccato, F; Sellegri, K; Venzac, H; Verza, GP; Villani, P; Vuillemoz, E; Cristofanelli, P (2010) 'Atmospheric brown clouds in the Himalayas: First two years of continuous observations at the Nepal-Climate Observatory at Pyramid (5079 m).' *Atmospheric Chemistry and Physics Discussions* 10(2): 4823-4885
- DFID (2002) *Predicted impact of global climate change on poverty and the sustainable achievement of the Millennium Development Goals*, Phase 1 Draft report: Volume 1, May 2002. London: DFID
- ICIMOD (2010) *Report of the International Expert Consultation Meeting: Mountain Initiative on Climate Change*. Kathmandu: GoN and ICIMOD
- Gobbi, GP; Angelini, F; Bonasoni, P; Verza GP; Marinoni, A; Barnaba, F (2010) 'Sunphotometry of the 2006–2007 aerosol optical/radiative properties at the Himalayan Nepal Climate Observatory – Pyramid (5079ma.s.l.).' *Atmospheric Chemistry and Physics Discussions* 10: 1193–1220
- Gol (2010) *Report of the Task Force*. Delhi: Government of India, Planning Commission
- Khadka, NS (2010) 'Faking It.' *Kathmandu Post*, 14 October 2010. www.ekantipur.com/the-kathmandu-post/2010/10/14/oped/faking-it/213896 (accessed 15 October 2010)
- Macchi, M and ICIMOD (2010) *Mountains of the world – Ecosystem services in a time of global and Climate Change*. Kathmandu: ICIMOD
- Ramanathan, V; Agrawal, M; Akimoto, H; Aufhammer, M; Devotta, S; Emberson, L; Hasnain, SI; Iyengararasan, M; Jayaraman, A; Lawrance, M; Nakajima, T; Oki, T; Rodhe, H; Ruchirawat, M; Tan, SK; Vincent, J; Wang, JY; Yang, D; Zhang, YH; Autrup, H; Barregard, L; Bonasoni, P; Brauer, M; Brunekreef, B; Carmichael, G; Chung, CE; Dahe, J; Feng, Y; Fuzzi, S; Gordon, T; Gosain, AK; Htun, N; Kim, J; Mourato, S; Naeher, L; Navasumrit, P; Ostro, B; Panwar, T; Rahman, MR; Ramana, MV; Rupakheti, M; Settachan, D; Singh, AK; St. Helen, S; Tan, PV; Viet, PH; Yinlong, J; Yoon, SC; Chang, WC; Wang, X; Zelikoff, J; Zhu, A (2008) *Atmospheric brown clouds: Regional assessment report with a focus on Asia*. Nairobi: UNEP
- Schwank, O; Bruederle, A; North, N (2010) *Funding mechanisms, instruments and facilities for mountain systems*. Working paper prepared by ICIMOD for GoN.
- Thompson, LG; Brecher, HH; Mosley-Thompson E; Hardy DR; Marka, BG (2009) 'Glacier loss on Kilimanjaro continues unabated.' *PNAS* 24(106): 19770-19775
- Yasunari, TJ; Bonasoni, P; Laj, P; Fujita, K; Vuillemoz, E; Marinoni, A; Cristofanelli, P; Duchi R; Tartari, G; Lau, KM(2010) 'Estimated impact of black carbon deposition during pre-monsoon season from Nepal Climate Observatory – Pyramid data and snow albedo changes over Himalayan glaciers'. *Atmospheric Chemistry and Physics* 10: 6603–6615

Annex

International Expert Consultation Meeting: Mountain Initiative on Climate Change

Preparing a Roadmap for the Ministerial Conference of Mountain Countries and UNFCCC process

Conclusion and Recommendations of the Experts on the Mountain Initiative on Climate Change

23 to 24 September 2010, ICIMOD

Recognising that there is an urgent need for mountainous countries and countries with mountain ecosystems of the world to reinforce the Mountain Agenda in response to global change into ongoing multilateral environmental negotiation processes, notably in the upcoming UNFCCC meetings and the Rio+20 conference, by developing a common vision, strategy, knowledge base, and approaches, an International Expert Consultation Meeting on the Mountain Initiative on Climate Change was organised jointly by the Ministry of Environment, Government of Nepal and the International Centre for Integrated Mountain Development (ICIMOD) in Kathmandu on 23-24 September 2010.

The main purpose of the meeting was to start a process of global and regional consultation involving the climate change experts concerned, for charting out a future roadmap for the Mountain Initiative (MI) with a long-term strategy reiterating the global Mountain Agenda in the UNFCCC and the Rio+20 processes and beyond. The Mountain Initiative was launched by the Government of Nepal in response to the call made by the Right Honourable Prime Minister of Nepal during the COP 15 summit asking all mountain countries and stakeholders to come together and form a common platform to better advocate mountain issues in climate change negotiations so as to ensure that mountain concerns get due attention in the climate change agreements and related decisions.

The meeting was attended by high-level policy and decision makers, national experts involved in the UNFCCC process, and representatives from academia, international organisations, and development partners. Experts came from Afghanistan, Bangladesh, Bhutan, Canada, China, Columbia, India, Italy, Kazakhstan, Lao PDR, Nepal, Pakistan, Peru, Tajikistan, and Switzerland. Experts from ICIMOD, the Mountain Partnership Secretariat (FAO), World Bank, UNEP, UNDP, DFID, ADB, DANIDA, FINNIDA and others participated in the meeting. Observers also joined from academia, research centres, networks, and in their individual capacities.

The workshop was inaugurated by the Hon. Minister of Environment of the Government of Nepal, Mr. Thakur Prasad Sharma. The Hon. Dr. Dinesh Devkota, Member of the National Planning Commission, participated in the opening and closing sessions. Dr. Andreas Schild, DG ICIMOD; Dr. R.S. Tolia, Uttarakhand, India; and Mr. Klas Sanders, WB HQ gave keynote speeches. Two analytical papers specifically prepared as background documents for the Consultation on 1) 'Mountains of the World – Ecosystem Services in a Time of Global and Climate Change: Seizing Opportunities – Meeting Challenges', and 2) 'Funding Mechanisms, Instruments and Facilities for Mountain Systems' were presented by the authors. This was followed by the presentation of a synthesised paper on 'Key issues for the Mountain Initiative'.

The expert meeting wholeheartedly expressed happiness and pledged support for the Mountain Initiative launched by the Government of Nepal. They also appreciated the excellent technical inputs and support provided by ICIMOD.

The experts appreciated the fact that the meeting was conducted in a highly consultative, open, and participatory manner comprising two working group exercises and plenary discussions. After two days of intensive discussions on the agenda items, and having listened to the latest information on the impacts of climate change on the world's mountains, the experts came up with a set of recommendations to the proposed International Ministerial Meeting of Mountain Countries on Climate Change, and also proposed that their conclusion be forwarded for sharing with the mountain country delegations participating in the future UNFCCC negotiations and Rio+20 meetings. The experts reinforced the following points as the basis for their common understanding.

- The critical roles played by the world's mountains should be recognised by the global community as they are a) water towers of the world, b) providers of critical ecosystem goods and services, c) harbingers of global climate change, d) repositories of critical biodiversity, and e) destinations for global travellers and those seeking adventure.
- The experts felt the need to fill the information and knowledge gaps by supporting generation of research-based data with intensification of mountain-specific research work in key areas on topics including climate variability, water availability, glacier hydrology, and other aspects of cryospheric changes, adaptation and mitigation measures, and the effects of black carbon in both the short and long term.
- The experts recognised that multiple factors mainly related to climate change are increasing the vulnerability of mountain people and ecosystems, and this requires urgent and immediate effective approaches to build the resilience and adaptive capacities of human and natural systems in mountain areas.
- Development of a long-term and good understanding of high mountain ecosystems and glacier hydrology and their socioeconomic implications will be critical to provide robust future water and environmental scenario, which are critical for downstream populations

and global food security: this will require global investment in knowledge and capacity development as well as regional and global networking and sharing of research and development information and knowledge.

- Mountain ecosystems such as biodiversity, watersheds, forests, and pasturelands are bearing the brunt of rising temperature extreme events such as flash floods, wild fires, and landslides; and invasion by non-native species due to multiple global changes. These impacts have degraded the vital ecosystem services critical for supporting livelihoods for millions of people both upstream and downstream: the global community must take on the responsibility to help mountain countries take appropriate measures to better cope with and adapt to these vulnerabilities and risk factors by supporting a range of mountain-specific programmes, such as the implementation of national adaptation plans, and enhance these multiple ecosystem services for human survival.

The International Expert Consultation Meeting agreed on the following conclusions.

1. Commends and supports the Mountain Initiative of the Government of Nepal and recommends sharing the conclusions and recommendations of this International Expert Meeting in future forums including the proposed Ministerial Conference.
2. Establishment of a Contact Group based on the membership of the participating countries in this expert meeting to disseminate the conclusions of the meeting as well as to raise awareness of the key stakeholders and policy and decision makers in their respective countries and the UNFCCC COP meetings.
3. Establishment of a Technical Working Group comprised of Dr. Dinesh Devkota (Nepal), Mr. Douglas McGuire (Mountain Partnership), Ms. Laura Madalengoitia Ugarte (Peru), Ms. Gulmira Sergazina (Kazakhstan), and Ms. Lorena Santamaría Rojas (Columbia). Dr. R.S. Tolia, Mr. John Drexhage, and Mr. Gianluca Lentini (EvK2CNR) will be independent members; the Ministry of Environment, Nepal, and ICIMOD will be represented by Dr. Ganesh Raj Joshi, Secretary, and Dr. Madhav Karki, respectively. A draft of the Terms of Reference for the Technical Working Group will be developed and shared within a month of the finalisation of this document.
4. All the countries invited will be requested to nominate a Focal Institution and/or Focal Person for future communication for improved and effective coordination.
5. Advocacy activities, especially by improving the knowledge management and communication capacities of the participating countries, will be planned and implemented to promote the inclusion of a mountain-specific funding priority within the UNFCCC financing framework; this will require proactive and coordinated efforts at the COP-16 meeting and beyond; and in this Nepal and ICIMOD should lead and seek support from mountain countries and other stakeholders.

6. The conclusion of the Expert meeting will be used to plan and organise regional consultation meetings in major mountain regions in the year 2011 so as to prepare better for the ministerial-level meeting planned by the Govt. of Nepal in 2011: the Ministerial Meeting is expected to endorse a clear structure and roadmap for the Mountain Initiative.
7. The Meeting further opined that, while specifying the scope of the Mountain Agenda, it is important to give cognisance to the respective positions of countries in the UNFCCC negotiations so that the Mountain Initiative is in line with key national and regional positions.
8. Regarding the membership, the meeting recommends that mountainous countries as well as countries having mountain ecosystem priority from both the developed as well as the developing countries will be encouraged to join the Mountain Initiative.
9. In order to make the Mountain Initiative more effective and garner international support for it, the meeting set the objective of mobilising more countries, notably from Africa and Latin America, reflecting the lack of representation from Africa and presence of only two representatives from Latin America in this International Expert Consultation Meeting.
10. The Meeting highlighted the need for initiating knowledge development, capacity building, and communication-related activities in future under the Mountain Initiative in all regions.
11. The Experts also emphasised the need to launch more effective capacity building, training and advocacy-related activities, regionally and globally, using the recommendations of this Expert Group meeting so as to enable mountain countries to advocate for the inclusion of mountain-specific issues and funding priorities within the UNFCCC process starting from the preparatory meeting of the Parties in China and the COP-16 meeting in Cancun, Mexico.
12. The meeting also recommended that the Ministry of Environment, Nepal, prepare for the international ministerial conference by organising regional consultation meetings in different regions and building the capacities of mountain country teams, including that of the Mountain Initiative Secretariat at the Ministry of Education, in order to raise a coordinated and stronger voice at future international climate meetings, especially COP-16 in Cancun and beyond — including the Rio+20 preparatory meeting in Switzerland.

The Meeting acknowledged the significant contribution made by ICIMOD and other experts in the form of analytical and discussion papers prepared and presented by the Govt. of Nepal and ICIMOD. The meeting thanked the Govt. of Nepal and ICIMOD for their warm hospitality and for successfully and professionally organising the consultation meeting which has contributed immensely to highlighting the current status of mountain systems, especially in the context of climate change. The meeting also deeply appreciated and gave thanks for the financial support provided by InWEnt, Germany, to fund the costs of the consultation meeting.

Acronyms and Abbreviations

ABC	atmospheric brown cloud
ADB	Asian Development Bank
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action under the Convention
CBD	Council on Biodiversity
CDM	Clean Development Mechanism
DANIDA	Danish International Development Agency
DFID	Department of International Development
FAO	Food and Agriculture Organization
FINNIDA	Finnish International Development Agency
GHG	greenhouse gas
ICIMOD	International Centre for Integrated Mountain Development
IPCC	Intergovernmental Panel on Climate Change
IYM	International Year of Mountains
LDC	least-developed country
MI	Mountain Initiative
NAPA	National Adaptation Programme of Action
ODA	official development assistance
PES	payment for environmental services
REDD+	reducing emissions from deforestation and forest degradation
SMD	sustainable mountain development
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNEP	United Nations Environment Programme

Copyright © 2010

Government of Nepal

International Centre for Integrated Mountain
Development (ICIMOD)

All rights reserved. Published 2010

Published by

ICIMOD (for the Government of Nepal)
GPO Box 3226, Kathmandu, Nepal

ISBN 978 92 9115 170 7 (printed)
978 92 9115 171 4 (electronic)

LCCN 2010 319013

Cover photo: Rolwaling, Nepal *Nabin Baral*

Photo credits: p3 Karma Toeb; p4 Robert Zomer;
p6 Nabin Baral; p8 George Joseph*; p10 Kamal Raj
Rai; p11 Alex Treadway

* Entry from the 2010 'ICIMOD Photo Contest on Mountain
Biodiversity'. Details of the competition can be found at
<http://www.icimod.org/photocontest/2010/>

Printed by Quality Printers (P) Ltd., Kathmandu, Nepal

Citation: Technical Expert Group of the Mountain
Initiative (2010) *Mountain Initiative Status Paper for
UNFCCC and Rio+20 processes*. Kathmandu: GoN and
ICIMOD

This publication may be reproduced in whole or in part
and in any form for educational or non-profit purposes
without special permission from the copyright holder,
provided acknowledgement of the source is made.
ICIMOD would appreciate receiving a copy of any
publication that uses this publication as a source. No
use of this publication may be made for resale or for
any other commercial purpose whatsoever without prior
permission in writing from ICIMOD.

The views and interpretations in this publication are those
of the author(s). They are not attributable to ICIMOD and
do not imply the expression of any opinion concerning
the legal status of any country, territory, city or area of its
authorities, or concerning the delimitation of its frontiers
or boundaries, or the endorsement of any product.

This publication is available in electronic form at
www.icimod.org/publications

About ICIMOD

The International Centre for Integrated Mountain Development, ICIMOD, is a regional knowledge development and learning centre serving the eight regional member countries of the Hindu Kush-Himalayas – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – and based in Kathmandu, Nepal. Globalisation and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people. ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues. We support regional transboundary programmes through partnership with regional partner institutions, facilitate the exchange of experience, and serve as a regional knowledge hub. We strengthen networking among regional and global centres of excellence. Overall, we are working to develop an economically and environmentally sound mountain ecosystem to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream – now, and for the future.





© ICIMOD 2010

International Centre for Integrated Mountain Development

GPO Box 3226, Kathmandu, Nepal

Tel +977-1-5003222 **email** info@icimod.org **web** www.icimod.org

ISBN 978 92 9115 170 7