



**Promoting South-South Knowledge Exchange and
Collaboration between Experts and Practitioners from the
Hindu Kush-Himalaya, Andes,
and Central Asian Mountains
for
Improved Adaptation and Resilient Livelihoods**

3-24 September: Field expedition

25-26 September: Knowledge sharing workshop

27-28 September Writers' workshop



**An International Expedition and Workshop Hosted by
The Mountain Institute (TMI)
and
International Centre for Integrated Mountain Development
(ICIMOD)**

Second International Workshop on Climate Change and Adaptation in Mountains

August, 2011

Executive Summary

The first eight-day workshop on “Adapting to a World without Glaciers--Realities, Challenges, and Actions,” was sponsored by USAID and the National Science Foundation and held in July 2009 by the Mountain Institute (TMI) and other partners in Lima and Huaraz, Peru. The workshop participants included Peruvian and other Andean researchers, graduate students, and policymakers; international researchers and graduate students, primarily from the US; and ICIMOD. Following the workshop, all the participants expressed keen interest in conducting a follow-up conference in the Hindu Kush-Himalaya (HKH) region. An HKH workshop would not only advance contemporary understandings of climate change challenges in the region, but would also increase opportunities for exchange and collaboration between Andean, Central Asian, and HKH scientists, graduate students, and policymakers.

"Promoting South-South Knowledge Exchange and Collaboration between Experts and Practitioners from the Hindu Kush-Himalaya, Andes, and Central Asian Mountains for Improved Adaptation and Resilient Livelihoods" is the result. This innovative workshop will be held in Nepal between 3-28 September, 2011. The workshop has three linked components: first, an invitation-only “mobile workshop” (3-24 September, 2011), which consists of an expedition to Imja Lake in the Khumbu/Everest region of Nepal. The knowledge and experiences gathered during this field expedition will feed into the 2-day “knowledge sharing workshop,” (25-26 September, 2011), to exchange experiences and lessons from the three regions. The accumulated knowledge and findings will then be captured and documented in a “writers’ workshop” (27-28 September, 2011) which will compile expedition and workshop recommendations for priority future research projects, climate change field projects, capacity and resilience-building strategies,

Background

Mountain areas are particularly vulnerable to the impact of climate change. Snow and glacier-dominated mountains play a major role in providing water to large populations, especially in the Hindu Kush - Himalaya- (HKH) (Singh and Bengtsson, 2004; Barnett et al., 2005) and Andes regions (Bradley et al., 2006). Continued and increasing snow and glacier melting may initially increase runoff in some regions, but lack of a glacial buffer ultimately will cause decreased reliability of dry season streamflow (Bradley et al., 2006), affecting water supply, agriculture, ecosystems, and hydropower. These changes are superimposed on other drivers in the society, and have profound impact on mountain communities and downstream populations. The changes also pose unique challenges for adaptation to climate change, including reduced dry season flows, more variable seasonal patterns, and increased threats of glacial lake outburst floods, all of which have strong impacts on regional social, environmental, and economic systems (Eriksson et al. 2009). Considerable uncertainty surrounds these scenarios of future water supply, storage, and hazards (Orlove et al. 2008).

In response, The Mountain Institute (TMI) and partners hosted an interdisciplinary, international workshop (7-15 July, 2009, in Lima and Huaraz, Peru) entitled “Adapting to a World without Glaciers.” The workshop gathered international scientists, practitioners, and policy makers to examine the impacts of glacier recession caused by contemporary climate change; and to identify priority research, collaboration, and pilot project initiatives.

Activities in the workshop included the presentation of papers (social and physical sciences); field trips to local glaciers, glacial lake control projects, and catastrophic event sites; training in the Vulnerability and Adaptation Approach to climate change resilience (USAID 2007); and the development of key recommendations within the water, biodiversity, and agricultural sectors that were formally presented to government officials in Lima at the conclusion of the workshop.

Workshop participants were quick to realize that Peru and other Andean countries are not alone in grappling with glacier hazards and changing water supplies under a changing climate. As an example, Peru experienced earlier what most experts are now predicting for the HKH: shrinking glaciers and potentially harmful glacial lake outburst floods. To make use of Peruvian expertise that has developed during more than a half-century of managing melting glaciers, the knowledge should be shared, and a program involving South-South collaboration (sharing knowledge between Peru and Nepal, for example) provides an innovative approach to climate change adaptation that could save lives, minimize infrastructural damage and increase knowledge about climate-glacier-water dynamics, and facilitate greater international exchange.

To date, however, there have been few opportunities for exporting Andean expertise to other mountainous regions of the world. In response, The Mountain Institute and partners have developed a unique field and workshop conference designed to strengthen linkages and partnerships between south-south practitioners, researchers, and policy makers while helping high mountain communities in the Himalayas to reduce disaster risks from potential

GLOFs.

I. HKH, Andean, and Central Asian Knowledge Exchange & Collaboration Workshop in Nepal

Much knowledge and information has been gathered independently in the HKH region, Central Asia, and the Andes. But the professionals and practitioners of the three regions have not had the opportunity to share and exchange their knowledge and experiences. As a result, three workshops are planned between experts and practitioners from the HKH, Andes, and Central Asian Mountains in Kathmandu, Nepal in September 2011. (i) the TMI expedition-style field phase “HKH, Andean, and Central Asian Knowledge Exchange Mobile Workshop,” (ii) the Kathmandu-based workshop entitled “HKH, Andean, and Central Asian Knowledge Exchange & Collaboration Workshop for Improved Adaptation and Resilient Livelihoods,” and (iii) a Writers’ Workshop that will capture and synthesize the information for future use in research, communication, and outreach activities.

The workshops will foster cooperation between the three mountain regions, enabling participants to exchange information, create partnerships, learn from each others’ experiences, and put into action best-practice solutions already in use.

1. Organizers and Partners

This event is a joint workshop organized by TMI and ICIMOD. The two institutions have worked together to produce the concept paper and have been involved in all preliminary preparations for the workshop.

In partnership with the National Science Foundation (NSF), US Agency for International Development (USAID), Arkay Foundation, US State Department, International Resources Group (IRG), University of Texas, and other donors, TMI will organize and host the Imja glacial lake expedition and workshop in Sagarmatha (Everest) National Park (SNP) between 3-23 September, 2011. The subsequent Kathmandu workshops (25-28 September) are organized by ICIMOD and TMI in partnership with UNDP Nepal, and will be held at the ICIMOD Centre in Kathmandu.

2. Structure of the Workshops

- i. Expedition-style field phase “HKH, Andean, and Central Asian Knowledge Exchange and Collaboration Workshop,” (3-24 September). This is a small, expedition-style "mobile workshop" to the Imja lake in Sagarmatha National Park (SNP) that consists of Andean, Central Asian, HKH, European, and US physical and social scientists, led by TMI. The overall objective of this field-based workshop is to reduce the danger and hazard of Himalayan glacial lakes and to improve their management as water sources through collaboration, knowledge sharing, and identification of best practices.

- ii. Kathmandu-based workshop “HKH, Andean, and Central Asian Knowledge Exchange & Collaboration for Improved Adaptation and Resilient Livelihoods,” (25-26 September). This is a larger, Kathmandu-based workshop immediately following the mobile workshop that allows for a far greater number of participants from the researchers and partner institutions (themes are discussed in the next section). Organized by TMI and hosted by ICIMOD.
- iii. Writers’ Workshop (27-28 September), aimed at capturing the experiences that emerge from both the Imja Lake field expedition and follow-up workshops, intended to generate an overview of recommended research and action projects rather than the production of workshop proceedings only.

II. HKH, Andean, and Central Asian Knowledge Exchange & Collaboration Workshop for Improved Adaptation and Resilient Livelihoods

The primary goal of all three workshops is to catalyze, facilitate, and accelerate interdisciplinary exchange and collaboration among scientists, practitioners, and policy makers from the Andes, HKH, and Central Asia, as well as representatives from Andean, Central Asian, and HKH universities, research institutions, governments, donors, and NGOs.

1. Objective

The main objective of all three workshops is to create a platform for experts, practitioners, and decision makers from the Hindu Kush-Himalaya, Central Asia and Andes Mountains to come together with the following agenda of sharing experiences and learning:

- i. Encourage, enhance, and continue dialogue and sharing of data, knowledge, and experiences,
- ii. Engage in a process of identifying areas of partnership that could be of mutual benefit for mountain communities in adapting to the growing impacts of climate change,
- iii. Discuss and assess possible strategies of coping and adaptation, taking into consideration the lessons learned in the Andes as well as in the HKH and Central Asian regions.

2. Outputs

The anticipated outputs of the Imja and Kathmandu-based workshops are:

- i. Improved understanding and exchange of knowledge on the similarities and differences between climate change impacts within the HKH, Andes, and Central Asian regions, with a focus on how people in the mountains are adapting to environmental and socioeconomic changes,

- ii. Enhanced engagement and linkages with research and partner institutions for future collaboration and exchange of experiences,
- iii. Prioritization of research and action projects in the areas of biodiversity, livelihoods, water, regional cooperation, and knowledge management; development of concrete follow-up research and pilot project ideas that can be submitted to funding partners, translating the results of South-South learning into direct action and benefits, and
- iv. Establishment of a platform to continue the exchange of information set within the parameters of the workshop objectives.

3. Venue & Date

The mobile workshop (by invitation only) will take place in the Sagarmatha (Everest) National Park between 3-23 September, 2011. The venue for the follow-up 2-day knowledge-sharing workshop and 2-day writers' workshop will be the ICIMOD Headquarters in Kathmandu, Nepal, between 25-26 September and 27-28 September respectively.

4. Kathmandu Workshop Themes

The workshop themes will focus on the sharing of HKH, Central Asian, and Andean experiences in adapting to the changes in glacier and climate change dynamics. The themes identified for the workshop incorporate those focal areas which will increase understanding and response capacity for enhanced resilience, while supporting adaptation of mountain communities within the HKH, Central Asia, and Andes regions. Sharing of knowledge and collaboration between the three regions is the underlining theme that will emphasize the importance of communications and exchange of information, data management, and establishment of partnerships within the HKH-Andean-Central Asian region.

The proposed themes relevant to all three regions for the workshop are:

- i. Developing Sustainable and Resilient Livelihoods in the HKH, Andean, and Central Asian region: This theme will focus on autonomous and planned adaptation strategies to support sustainable livelihoods, including options from improved value chains and the impact of migration.
- ii. Reducing Water and Hazard Risks in the HKH, Andean, and Central Asian region: This theme covers resilience, preparedness for disaster risk reduction, and tools for better risk management.
- iii. Knowledge Sharing and Cooperation in HKH, Andean, and Central Asian Regions: This theme spotlights the need for more cooperation between countries in the HKH, Central Asia, and Andes, with examples of good practices and potential for the exchange of information in data management systems.

5. Workshop Participants

Approximately 34 physical and social scientists from the HKH, Central Asia, Andes, and US with high-altitude experience, will participate in the mobile workshop to Imja Lake. Collectively, about 40 or more international participants from the HKH region, Andes, Central Asia, and international institutions are expected at the follow-up Kathmandu workshop, representing practitioners, planners, researchers, and development experts from all regions. Representatives from both the Imja and Kathmandu workshops will be invited to participate in the writers' workshop.

III. Writers' Workshop

This writers' workshop takes place as a follow-up to the Imja and Kathmandu workshops. It is unique in that it contains a focus on the actual identification and implementation of action projects rather than the generation of workshop proceedings only. It will be designed to assure that priority workshop recommendations and implementation strategies are adequately captured and, ultimately, funded and acted upon.

1. Objectives

The overarching purpose of the writers' workshop is to extract and develop the major points, insights, and recommendations from the mobile and Kathmandu workshop meetings as well as experiences from the HKH, Andes, Central Asia, and elsewhere in order to develop the following "blueprints" for action and/or deliverables:

- Capture and publish the proceedings that emerge from both the Imja Lake Field Expedition and ICIMOD follow-on workshop in Kathmandu,
- Develop a list of priority research and action pilot project needs in the HKH-Andes-CA regions re: (a) Conservation and biodiversity management, (b) Developing sustainable livelihoods, (c) Reducing water hazards risks, and (d) Promoting HKH-Andean-CA cooperation, based on the recommendations of the workshop proceedings,
- Identify best and most synergistic partnership combinations and target projects/proposals,
- Develop a strategy for funding high priority, high impact, and manageable research and action pilot projects based on partnerships between INGOs, NGOs, governments, and donors,
- Establish goals, objectives, responsibilities, and timeline for proposal production and submission.

Examples of prioritized research and action pilot projects could include, but are not limited to, the following:

- Enhanced glacial lake outburst flood (GLOF) management and control knowledge, based upon collaboration between Andes, HKH, Central Asian, and other physical and social scientists
- Improved water resources and availability scenarios that facilitate better adaptation planning and project implementation
- Enhanced understanding of scientific realities vs. media coverage of the HKH region's water-induced hazards (e.g., GLOF, rain induced floods, glacier recession and future water supply)
- Strengthened highland-lowland linkages to create diversified livelihoods and information sharing
- Strengthened transboundary communication and experiences
- Enhanced human adaptation and local knowledge of climate change adaptation approaches and impacts
- Strengthened communication and outreach strategies for knowledge products and services emerging from the mobile and Kathmandu-based workshops.

IV. Beyond the workshop

With the opportunity for improved understanding and exchange of knowledge between researchers, practitioners, and planners on the similarities and differences between the three regions, including more engagement as partners and discussions on community resilience and climate change adaptation, we will identify concrete research and pilot development topics. The proposed broad topics identified would be on management of biodiversity; sustainable livelihoods; water and hazard management; and regional cooperation between the HKH, Andes, and Central Asian regions. The importance of communications and exchange of information, data management, sharing, and establishment of partnerships in the HKH-Andes region will be an important part of the proposed research topics.

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ANNEX 1

I. Imja Glacial Lake Field Expedition and Workshop (3-23 September, 2011)

Day	Main Activity	Secondary Activities
September 3	Participants arrive in Nepal	Airport pickup, welcome, check into the Tibet Hotel, 7:00 p.m. dinner at the Nepali Chulo, Lazimpat
September 4	Preparations/logistics/purchase last minute trekking items	Invitation from ICIMOD to attend lecture by Dr Patchouli, UNFCC Climate Change group
September 5	Fly to Lukla (2840 m) early morning, trek to Monjo (2835)(5 hours); Overnight at the Summit Lodge , Monjo	Evening presentations: Maksey - Glacier recession impacts in Nepal; Ang Rita Sherpa, TMI HKH work
September 6	Trek to Namche Bazaar (3440 m) (2-3 hours); Overnight at the Khumbu Lodge	Welcome to the Sagarmatha (Mt. Everest) National Park! Evening presentations: Regmi, Topic TBD, Possible one more presentation
September 7	Acclimatization day (“climb high, sleep low”); overnight at the Khumbu Lodge	Circuit trek from Namche Bazaar to Khumjung (3780 m) to Kunde 3840 m) and back; field trip, Byers - presentations on glacial, vegetation, and cultural history of the region; optional visit to Khumjung monastery Evening presentations: Possible Continuation of afternoon discussion or two presentations
September 8	Trek to Tengboche (3860 m) (5-6 hours); overnight at the Hotel Himalayan	Optional visit to the Tengboche monastery; wildlife viewing; visit nearby landfill and discuss solid waste disposal problems in remote and popular national parks; Evening presentations: Portocarrero, Peruvian Glacial Safety Systems; Hoffmann, Glacial recession impacts in Bolivia
September 9	Trek to Dingboche (4410 m)(4 hours); overnight at the Khumbu Resort	Optional split into two groups, one taking the high trail through the fir-birch-rhododendron forest and across

		the Imja river to Pangboche; the other taking the traditional route through the village of Debouche. Lunch at the Mountain Guide Lodge , then continue on to Dingboche; Evening presentations: Postigo and Recharte, Adaptation in High Altitude Communities
September 10	Acclimatization day in Dingboche; overnight at the Khumbu Resort	Optional trek to 5100 m viewpoint and back (4 hours); visit the Khumbu Alpine Conservation Council (KACC) headquarters and visitor center across from the hotel. Evening presentations: ohn Furlow, Topic TDB, Borg, Topic TBD
September 11	Trek to Chukung (4730 m)(2.5 hours); overnight at the Chukung Resort	Evening presentations: Bury, Impacts of glacial recession on regional water supply; French, Topic TBD
September 12	Trek to Imja Lake (4830 m)(4 hours); establish tented camp south of the Imja Lake terminal moraine	Settle in at basecamp (5100 m) Evening discussion: Collaborative research projects – Himalaya
September 13	Survey of Imja Lake (4830 m); trek toward Island Peak basecamp and ascend northernmost lateral moraine of Imja Lake ; overnight in tented camp	Teiji - Field presentations on history of the lake’s development, risk factors, proposed mitigation strategies, applicability of Andean technologies to the HHK context Evening discussion: Collaborative research projects – Central Asia
September 14	Continued survey and study of Imja Lake (4830 m); optional trek to the Island Peak basecamp and beyond to visit the upper part of the receding Imja and Lhotse Shar glaciers; overnight in tented camp	Evening discussion: Collaborative research projects - Andes
September 15	Trek to Dingboche (4410 m)(3 hours); overnight at Khumbu Resort	Evening presentations; Dobhal, Glacier recession impacts in India] Wu, Glacier recession impacts in China
September 16	Trek to Lobuche (4910 m) (3 hours); overnight at the Himalayan Eco Resort	Evening presentations: Lhamo, Glacier recession impacts in Bhutan; Masood, Glacier recession impacts in Pakistan
September 17	Trek to Gorak Shep (5140 m)(2.5	Visit the Italian Ev-K2-CNR Pyramid

	hours); overnight at Himalaya Hotel	Research Centre 15 minutes north of Lobuche enroute to Gorak Shep; Evening presentations: James McKinney, wilderness medicine; Brendan Hickey, TBD
September 18	Trek to Everest Basecamp (5364 m); return to Gorak Shep (5140 m)(2.5 hours); overnight at Himalaya Hotel	Evening presentations: Petrov, Glacier Recession in Central Asia; Shomodov, Glacier Recession in Central Asia
September 19	Trek to Kala Patar (5550 m) for best views of Mt. Everest, Nuptse, Lhotse, and surrounding snow peaks and glaciers; overnight at Himalaya Hotel	Evening presentations: Shatravin, moraine formation and dammed lakes in Central Asia Homidov, Glacier Recession in Central Asia
September 20	Trek to Dingboche (4410 m) (4 hours); overnight at Khumbu Resort	Evening presentations: McKinney & Somos, GLOF Flood Modeling & Glacial Lake Management
September 21	Trek to Namche Bazaar (3440 m) (6 hours); Overnight at the Khumbu Lodge	Evening presentations: Mark, Impacts of glacial recession on regional water supply, La Frenierre, Topic TBD
September 22	Trek to Lukla (2840 m)(5 hours); Overnight at the Northface Lodge	Evening presentations: Daniel Byers, Topic TBD, Anderson, Topic TBD
September 23	Fly to Kathmandu early morning; check into Summit Hotel (closer to ICIMOD)	
September 24	Rest day in Kathmandu	

II. Knowledge Sharing Workshop (25-26 September 2011), ICIMOD Centre

(DRAFT: FINAL AGENDA AND SPEAKERS FORTHCOMING)

HKH and Andes Knowledge Exchange & Collaboration Workshop at ICIMOD	
Day 1 -- Sunday 25 September, 2011	
Time	Programme
8:30-9:00	Registration
9:00-9:30	<ul style="list-style-type: none"> - Welcome remarks by Madhav Karky, ICIMOD - Welcome remarks by Alton Byers, TMI - Welcome remarks by John Furlow, USAID - Overview of the workshop & brief remarks, Alton Byers and Daan Boom - Introductions (3 minutes per attendee)
Session 1	<u>Theme 1: Ecosystem Services and Developing Sustainable and Resilient Livelihoods in the HKH, Andean and Central Asian region</u>
09:30-10:45	<u>Presentations by International Experts</u>

	This theme will cover autonomous and planned adaptation strategies to support sustainable livelihood including options from improved value chains and the impact by migration. Socio-economic vulnerabilities and disaster risk reduction; community resilience will be covered as well.
10:45-11:10	Teabreak
11:10-11:45	Discussions & end of session 1
11:45-12:00	---Group Photo
12:00-13:00	---Lunch---
Session 2	Theme 2: <u>Regional Cooperation and Knowledge Sharing in HKH, Andean and Central Asian Regions</u>
13:00-14:30	<u>Presentations by International Experts</u> Issues covered: The need for more regional cooperation between countries in the HKH, Central Asia, and Andes will be discussed with examples of good practices and scope for more cooperation including the exchange of information in data management systems.
14:30-15:00	Discussion & end of session 2 followed by teabreak
Session 3	Theme 3: <u>Reducing Water and Hazard Risks in the HKH, Andean and Central Asian region</u>
15:00-17:00	<u>Presentations by International Experts</u> Issues covered: This theme covers resilience, preparedness for disaster risk reduction and tools for better risk management, traditional knowledge and practices in dealing with water and hazards.
17:00-17:30	Discussion & end of session

Day 2 -- Monday 26 September, 2011	
Time	Programme
Session 4	Special Session: Output of workshop
9:00-11:00	<ul style="list-style-type: none"> - Four groups to be divided by Theme (Sessions 1-3) - Selection of Group Leaders - Teabreak heading to meeting rooms
11:00-13:00	Group discussions <ul style="list-style-type: none"> - Discussion focused on objective & output of workshop - Group Leaders prepare presentations for session 3 with inputs from group members End of session 4
Session 5	Special Session: Output of workshop
10:15-11:00	<ul style="list-style-type: none"> - Four groups to be divided by Theme (Sessions 1-3) - Selection of Group Leaders - Teabreak heading to meeting rooms
11:00-13:00	Group discussions <ul style="list-style-type: none"> - Discussion focused on objective & output of workshop - Group Leaders prepare presentations for session 3 with inputs from group members End of session 5
13:00-14:00	Lunch
Session 6	Special Session: Group Presentations
14:00-15:00	Presentation by the 3 Group Leaders and discussions
15:00-15:15	---Tea Break---
Session 7	Plenary Session
15:15-17:00	<ul style="list-style-type: none"> - 3 Group Leaders to present final workshop outputs - Agreement on the outputs by all participants - Declaration of the final workshop output
17:00-17:30	Closing session <ul style="list-style-type: none"> - Remarks by TMI and ICIMOD representatives - Way forward End of session
Closing dinner	

III. Writers Workshop Agenda (27-28 September 2011), ICIMOD Centre

HKH and Andes Knowledge Exchange & Collaboration Workshop for Improved Adaptation Learning	
<i>Day 1-- Tuesday 27 September, 2011</i>	
Time	Programme
9:00-17.00 a.m.	Theme 1: Proceedings and Priority Research and Action Projects
Outputs:	<ul style="list-style-type: none"> ▪ Capture and publish the proceedings that emerge from both the Imja Lake Field Expedition and ICIMOD follow-on workshop in Kathmandu, ▪ Develop a list of priority research and action pilot project needs in the HKH-Andes-CA regions re: (a) Developing sustainable livelihoods, (b) Reducing water hazards risks, and (c) Promoting HKH-Andean-CA cooperation

<i>Day 2—Wednesday 28 September, 2011</i>	
Time	Programme
9:00-17.00 a.m.	Theme 2: Partnerhsips, Funding Strategies, and Proposal Submission Plan
Outputs:	<ul style="list-style-type: none"> ▪ Identify best and most synergistic partnership combinations and target projects/ proposals ▪ Develop a strategy for funding high priority, high impact, and manageable research and action pilot projects based on partnerships between INGOs, NGOs, governments, and donors, ▪ Establish goals, objectives, responsibilities, and timeline for proposal production and submission

ANNEX 3

Prospective Andean speakers and participants

	Name	Organization	Country
1	César Portocarrero	UGRH	Peru
2	Jorge Recharte	TMI-Andes	Peru
3	Teresa Oré	IPROGA	Peru
4	Dirk Hoffmann	Instituto Boliviano de la Montaña	Bolivia
5	Edson Ramírez	Instituto de Hidráulica e Hidrología UMSA	Bolivia
6	Bert De Viebre	CONDESAN	Ecuador
7	Mario Aguirre	IUCN	Ecuador
8	Conrado Tobón	Universidad de los Andes	Colombia
9	Carlos Tapia	Instituto Humboldt	Colombia
10	Marisa Escobar	SEI	Colombia/USA
11	Xavier Zapata Ríos	Florida International University Department of Earth Sciences and Environment	Ecuador
12	Julio Postigo	The University of Texas at Austin	Peru
13	Marlon Calispa	IRD	Ecuador
14	Raúl Loayza	University of Wageningen	Peru
15	To be defined		Colombia
16	To be defined		Bolivia
17	Cayo Ramos	UNALM	Peru
18	Galo Ramón	IAF	Ecuador
19	Marco Zapata		Peru
20	Vladimir Gil	CIUP	Peru

ANNEX 5

MW: Mobile Workshop (Imja Field Expedition)

KW: Kathmandu Workshop

WW: Writers' Workshop

X: Attending

T: TMI funded

I: ICIMOD funded

S: Self funded

S.N	Participant list	Organization/Contacts	Country	MW	KW	WW	Funding
1	Dr. Lok Man Singh Palni , Director (Seeking Nomination)	G. B. Pant Institute of Himalayan Environment and Development, Almora, Uttarakhand, India director@gbpihed.nic.in, psdir@gbpihed.nic.in, lmspalni@rediffmail.com	India		x		I
2	Dr. D.P. Dobhal	Wadia Institute of Himalayan Geology and Environment Wadia Institute of Himalayan Geology 33, Gen. Mahadev Singh Road, Dehradun 248 001. India. Tel: +0091 – 135-2525404 Mobile: +0091-9837731452 dpdobhal@rediffmail.com; dpdobhal@wigh.res.in	India	x	x	x	I
3	Director General Dr. Keshav Prasad Sharma (Seeking Nomination)	Department of Hydrology and Meteorology, P.Box No: 406, Babar Mahal, Kathmandu, Nepal keshav@dhm.gov.np Phone No: 4255920, 4262374, 4262974, 4248808, 4248876	Nepal		x		I
4	Regional program Coordinator	WWF- India, Programme172-B Lodi Estate, New Delhi 110003	India		x		I
5	Gautam Rajkarnikar Chief Koshi River Basin Management Cell	Water and Energy Commission Secretariat (WECS) wecs@mos.com.np	Nepal		x		I

6	Dr. Roshan Man Bajracharya (Seeking Nomination)	Associate Professor Himalayan Cryosphere, Climate and Disaster Research Center (HiCCDRC) Kathmandu University, Dhulikhel, Kavre, Phone: 977 11 661399; Fax: 977 11 661443 E-mail: rmbaj@ku.edu.np	Nepal		x		I
7	Ms. Bhawana Thapa	Tribhuvan University, Department of Geography, Glaciologist	Nepal	x	x	x	SF
8	Dr. Dhananjay Regmi	Tribhuvan University, Department of Geography, Glaciologist, dj.regmi@gmail.com	Nepal	x	x	x	SF
9	Ms Sonam Lhamo ,Geologist	Glaciology Division, Department of Geology and Mines, Royal Government of Bhutan,Thimphu, Bhutan	Bhutan	x	x	x	TMI
10	Dowchu Dukpa	Geological Survey of Bhutan, Geophysicist	Bhutan	x	x	x	I
11	Ajay Dixit, Deepak Gyawali	Institute for Social and Environmental Transition ISET-Nepal Ajay Dixit Director	Nepal		x		I
12		Wildlife Institute of India, Department of Wildlife Habitat Ecology,Chandrabani, Dehradun – 248 001 Uttarakhand, India, Email: rawatg@wii.gov.in			x		I
13	Mr. Ram Prasad Lamsal Joint Secretary (Seeking Nomination)	Ministry of Forests and Soil Conservation (MoFSC)Singha Durbar, Kathmandu, Nepal, joshi_spj@yahoo.com Phone no: +977-1-4211862, 4211567	Nepal		x		I
14	Pravin Raj Maskey	Ministry of Irrigation, Nepal, Irrigation Engineer, prmaskey@gmail.com	Nepal	x	x	x	TMI
15	Dr. Ghulam Rasul	Research & Development Division, Pakistan Meteorological Agency, rasulpmd@gmail.com	Pakistan		x		TMI
16	Ghazafar Ali	Global Change Impact Studies Centre (GCISC), Saudi- Pak Tower (First Floor),61/A Jinnah Avenue, Islamabad. Glaciologist	Pakistan		x		TMI
17	Amjad Masood	Engineer, GCISC, NCP Complex, Near Quaid-i-Azam University, Shahdara Road, Pakistan	Pakistan	x	x	x	TMI

18	Aftab Ahmad Khan	Global Change Impact Studies Centre (GCISC), Phone : +92 - 51-9230226 (Off), +92 -344-9070090 (Cell)	Pakistan		x		I
19	Mr. Danial Hashmi Hydrology and Research Directorate	Water and Power Development Authority (WAPDA), Lahore, Pakistan memberwater@wapda.gov.pk	Pakistan		X ??		
20	Ornella Puschiasis	PHD Student Department of geography, Laboratory GECKO - University Paris 10 Nanterre CNRS Center of Himalayan Studies (France) Tribhuvan University, Kathmandu (Nepal)	France	x	x	x	SF

Prospective Andean and Central Asian speakers & participants

S.N	Senior Scientist	Institution	Country	MW	KW	WW	Funding
1	Alton Byers	The Mountain Institute Director, Science and Research, abyers@mountain.org	US	x	x		TMI
2	Daene McKinney	University of Texas at Austin Professor of Hydrology, daene@aol.com	US	x	x		TMI
3	Jeff Bury	University of California at Santa Cruz Professor of Geography, jbury@ucsc.edu	US	x	x		TMI
4	Bryan Mark	Ohio State University Professor of Geography, mark.9@osu.edu	US	x	x		TMI
5	Julio Postigo	University of Texas at Austin, jpostigo@mail.utexas.edu	US	x	x		TMI
6	Marcello Somos	University of Texas at Austin, marcelo.somos1@gmail.com	US	x	x		TMI
7	Adam French	University of California at Santa Cruz, akfrench@ucsc.edu	US	x	x		TMI
8	Jeff La Frenierre	Ohio State University, jeff@lafrenierre.net	US	x	x		TMI
9	Jorge Recharte	The Mountain Institute Director , Andes Programs, jrecharte@mountain.org	Peru	x	x		TMI

10	Ing. Cesar Portocarrero	Glaciological and Hydrological Resources Unit, Glaciologist/ Engineer, cesar.a.porto@gmail.com	Peru	x	x		TMI
11	Ing. Jesus Gomez	Glaciological and Hydrological Resources Unit, Glaciologist	Peru	x	x		TMI
12	Ing. Alejo Cochachin	Glaciological and Hydrological Resources Unit, Glaciologist	Peru	x	x		TMI
13	Dirk Hoffman	Bolivian Mountain Institute, Geographer, dirk.hoffmann@berlin.de	Bolivia	x	x		TMI
14	Daniel Byers	Independent Filmmaker, daniel.a.byers@gmail.com	US	x	x		TMI
15	Kayumov A., Rajabov I.	State Agency for Hydrometeorology, Hydrologist, office@meteo.tj	Tajikistan	x	x		TMI
16	Dr. Murataly Duishonakunov	Department of Physical Geography, Kyrgyz National University, Glaciologist, dmuratalyt@mail.ru	Khirghizstan	x	x		TMI
17	Gleb E. GLAZIRIN	National University of Uzbekistan, Glaciologist, gleb.glazirin@gmx.net	Uzbekistan	x	x		TMI
18	Igor Severskiy	Institute of Geography, Ministry of Education and Science, Glaciologist, i_severskiy@mail.kz	Kazakhstan	x	x		TMI
19	Teiji Watanabe	Department of Geography, Hokkaido University, Japan, Glaciologist, teiwata@mac.com	Japan	x	x		S
20	John Furlow	USAID/Washington, Climate Change Specialist, jfurlow@usaid.gov	US	x	x		S
	Brendan Hickey	Social Media Specialist, brendan.m.hickey@gmail.com	US	x	x	x	S
21	McKinney	University of Texas at Austin, High Altitude Physician	US	x	x		S
22	Mattias Borg Rasmussen	Department of Antropology, University of Copenhagen, Teléfono +45 35 32 43 76	Denmark	x	x		S
23	Karsten Pærregaard	Meteorologist, Copenhagen University, Denmark, rasulpmd@gmail.com	Denmark		x		S
24	Jorge Recharte,	Director, Instituto de Montaña, The Mountain Institute, (51-1) 719-2570					TMI
25	Ms. Svetlana Jumaeva	Close collaboration with UCA	Tajikistan		x		S
26	Dr. Maxim Petrov	glacio-geomorphologist and geologist, State Agency for Hydrometeorology, maxpetr1962@gmail.com	Uzbekistan	x	x		TMI

27	Dr. Vladimir Shatravin	geologist and glacio-geomorphologist, Lead scientist at the Kyrgyz Academy of Science, shatravin@yandex.com	Kyrgyzstan	x	x		TMI
28	Anvar Sherinovich Homidov	Hydrology/glaciology specialist, State Agency for Hydrometeorology, anvar.homidov@gmail.com	Tajikistan	x	x		TMI
29	Shodmonov Tursunovich Muzaffar	Climatology/glaciology specialist, State Agency for Hydrometeorology, mshodmonov@gmail.com	Tajikistan	x	x		TMI