

INTERNATIONAL CONFERENCE ON MOUNTAINS IN THE CHANGING WORLD

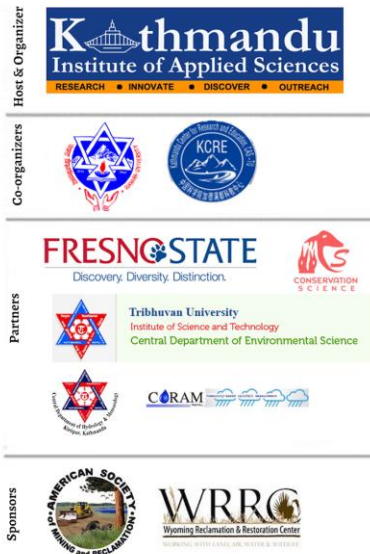
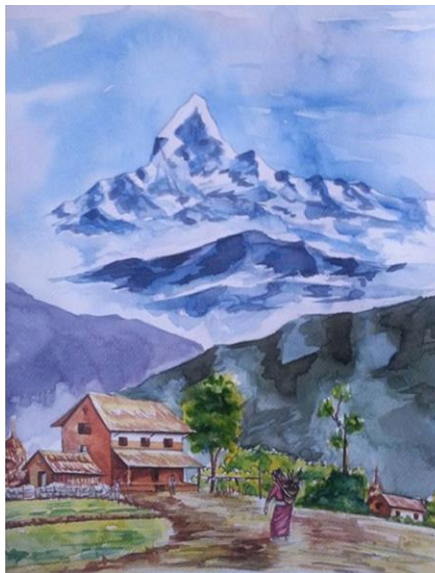


27-28 October, 2017 | Radisson Hotel, Kathmandu, Nepal

Major theme:

Air pollution: Mechanisms and consequences

CONFERENCE REPORT





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A *MoChWo* 2017 report prepared by Kathmandu Institute of Applied Sciences, Kalanki, Kathmandu, Nepal

MoChWo Secretariat

International Conference on Mountains in the Changing World (MoChWO) 2017

Kathmandu Institute of Applied Sciences

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Executive Summary

The second international conference on *mountains in the changing world (MoChWo)* was successfully organized at Radisson Hotel, Kathmandu, Nepal from 27-28 October, 2017. Major theme of the 2nd MoChWo conference was *air pollution: mechanisms and consequences*. Two hundred thirty participants from 13 different countries attended the technical sessions of the conference. The conference was comprised of an inauguration session, four symposia, nine parallel sessions, a poster session, and concluding session. There were 120 presentations including keynote talks and invited talks. Paper presenters and participants exchanged their research experience and findings during the conference. Cross cutting issues regarding mountains such as disaster risk reduction, climate change, biodiversity conservation, environmental pollution, forest management, agro-economy, sustainable development, citizen science, carbon farming etc. were discussed with oral and poster presentations throughout the sessions. The *MoChWo* conference was concluded with award distribution and appreciation to various individuals and organizations involved in making the event successful.



Discussion during the technical session. Photo: KIAS 2017

1. Introduction

The international conference on *Mountains in the Changing World (MoChWo)* was held at Radisson Hotel, Lazimpat, Kathmandu, Nepal from 27-28 October 2017. It was the second international conference of its kind, which focused various aspects of mountain sustainable development.

We received more than 300 abstracts via our online submission system and more than 120 abstracts were presented in the conference. The conference brought together over 230 professionals from 13 countries across the globe in technical sessions to share and exchange their research experiences on cross cutting issues regarding mountains such as disaster risk reduction, climate change, biodiversity conservation, environmental pollution, forest management, agro-economy, sustainable agriculture development, citizen science, sustainable waste management, smart carbon farming. The conference was structured into keynote session, four symposia, nine parallel sessions, a poster session, and a concluding session.

The conference was a key activity for many student researchers to experience international scientific conference and present their research findings. It provided the opportunity of various dimensions on mountain research and encouraged students and early career researchers to engage actively in the research work.

A wide range of participants in including researchers, professors, students, and policy attended the MoChWo conference. Invited guests included executive officials of universities, distinguished professors Nepal, senior scientists and representatives from various research institutions from Nepal.

Participants were provided with conference kit which included pen, note pad, abstract book containing program details. Abstract book was published with all the abstracts to be presented in the conference. We did not publish proceedings for this conference. However, we have made agreements with four international peer-reviewed open-access journals for special issues on *MoChWo* conference. These journals: Atmosphere, Environments, Sustainability, and Conservation science each are going to special issue from papers presented at the *MoChWo* conference.

Participants interacted during the question & answer period after each presentation and during breaks. We received very positive feedback from the participants. Participants greatly enjoyed the chance to meet like-minded people from so many countries, the opportunity to network and to learn from one another, and the chance to explore ideas. They congratulated us on completing the conference on very timely basis.

Student presentation awards:

Following students were awarded with best student presentation awards.

1. Best poster presentation award:
 - a. Regan Sapkota (graduate category), Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal.
 - b. Muna Fuyal (undergraduate category), Kathmandu Institute of Applied Sciences, Kathmandu, Nepal.
2. Best oral presentation award:
 - a. Enna Mool (graduate category), Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal.
 - b. Anusha Pandey (undergraduate category), NAAMI College, The University of Northampton, Kathmandu, Nepal.

The convener of the conference concluded the *MoChWo conference* on the evening of October 28. The convener recognized and appreciated all the people and institutions involved and distributed token of love to volunteers and guests. Randomly selected four participants were allowed to share their experience of attending the conference. These three participants were: Vivek Bist and Anju Chaudhary from Agriculture and Forestry University, Nepal, Steve Lyon from Stockholm University, Sweden and Margot Haitsma Mulier from Delft University, The Netherlands. Certificate of participation and presentation were distributed at the end.

The second *MoChWo* conference 2018 was also announced, which is now eagerly awaited. The participants welcomed this announcement by a huge round of applause.

Conference scholarship recipients:

Following Nepali students received full/or partial scholarship to attend the *MoChWo* conference. Smartphone4Water, Central Department of Environmental Science, Tribhuvan University, and California State University, Fresno supported the scholarships.

Achyut Gaire	Keshab Raj Pant	Rashmita Shakya
Anish Shrestha	Kushum Regmi	Regan Sapkota
Anusha Pandey	Manoj Neupane	Sabitri Rai
Arati Joshi	Muna Fuyal	Sadiksha Rai
Ashok Kumar Shrestha	Nischal Devkota	Sangita Pachchai
Bhumika Acharya	Nita Khanal	Seema Bania
Bimala Mainali	Pratap Pandey	Sneha Bajracharya
Enna Mool	Punam Yadav	Sumana Devkota
Jharana Panthi	Ramesh Kumar Basel	Tshering Ongmu Sherpa

2. The International Conference on Mountains in the Changing World (*MoChWo*)

Mountains are a part of global biodiversity repository. They play vital roles in maintaining global ecosystems and support millions of people. Owing to a

large variation in biodiversity and landscape features in the mountains such diversities, mountains offer a 'niche or comparative advantage', at operational levels, such as medicinal herbs, tourism and hydropower. In the mean time, they are the most vulnerable to rapid environmental change. Accordingly, mountains offer a complex opportunities and challenges. Data suggest that mountain communities are among the poorest and most affected by development programs that are not tailored-made for mountain conditions. Furthermore, the cascading effects of climate change on water resources and biodiversity have severe consequences on local livelihoods, and consequently result in a downward spiral of poverty. The mountains as whole require tailor-made solutions based on mountain-specific research and knowledge. In such context, the international conference on Mountains in the Changing World (*MoChWo*) aims at creating a forum for exchanging scientific knowledge on mountain-specific research among scientists, decision makers (bureaucrats and politicians) and development practitioners.

The *MoChWo* conference is an annual conference that aims to develop a long-term partnership with academic institutions and other organizations. The main purpose of the *MoChWo* conference is to bring scientists, experts and researchers from government agencies, development practitioners and academia to share research frontiers on sustainable mountain development. Specific objectives include:


1. To share mountain specific research findings;
2. To identify critical issues affecting livelihoods and well-beings of mountain people;
3. To foster collaboration and networking among academia, NGOs and governmental agencies;
4. To promote knowledge based policy interventions by creating a discussion forum among three key players: (a) academic institutions, (b) government agencies, and (c) international development agencies through a policy dialogue.

The target audiences of *MoChWo* include:

1. University professors, graduate students and scientists (please visit Himalayan University Consortium at <http://www.icimod.org/huc>).
2. International organizations and research groups working in mountain issues.
3. Development practitioners (national and international NGOs, CBOs etc.)

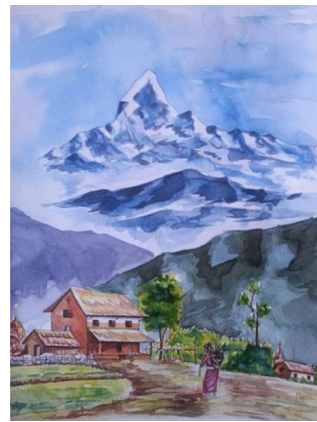
Organizer: Kathmandu Institute of Applied Sciences (KIAS) is a not-for-profit multidisciplinary research organization founded by a group of scientists with proven excellence in research that ranges from biodiversity, climate change to development of new technology for biological and chemical analyses. Currently KIAS has seven centers for excellences. Major aim of KIAS is to serve our society and nation via scientific research. KIAS aims to foster knowledge based intervention to tackle with existing and emerging challenges faced by people. To realize this goal, KIAS conducts

multidisciplinary research devoted to specific problem through its specified research centers. Apart from regular research, KIAS organizes trainings and workshops, and science outreach programs including short-term schools and conference etc. targeting students, researchers and scientists. Furthermore, KIAS encourages dialogue among academia, practitioners and decision makers to share evidence-based solutions to real-world problems. The #MoChWo is one of the initiatives that aim to serve as a major networking outlet for people working on sustainable mountain development.

If you are interested in becoming a part of the *MoChWo* conference in coming days, please contact us at the address given at the end of this report. 

3. Conference partners

We would like to thank to our co-organizers, partners and sponsors, without their assistance the conference would not have been possible. The *MoChWo* conference 2017 was organized and supported by following institutions.



Co-organizers

Faculty of Health Sciences, Pokhara University, Kaski, Nepal
Kathmandu Center for Research and Education – A Chinese Academy of Sciences and Tribhuvan University center, Kathmandu, Nepal

Partners

Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal
Central Department of Hydrology and Meteorology, Tribhuvan University, Kathmandu, Nepal
California State University-Fresno, CA, USA
Community Rainfall Measurement Program, Nepal
Conservation Science journal

Sponsors

American Society of Mines and Reclamation, USA
Wyoming Reclamation and Restoration Center, WY, USA

Further information

MoChWo conference secretariat

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Phone: +977-01-6924204

Email: conference@kias.org.np, info@kias.org.np

Website: www.conference.kias.org.np

4. People involved

The *MoChWo* conference 2017 was made possible by continuous effort from large number of people at various capacities. The conference secretariat would like to thank following individuals.

Organizing committee: This committee was responsible for overall management of the conference.

Dr. Basant Giri (Convener), Kathmandu Institute of Applied Sciences, Nepal
Dr. Bhanu Neupane, Tribhuvan University, Nepal
Dr. Dibas Shrestha, Tribhuvan University, Nepal
Dr. Hemu Kafle, Kathmandu Institute of Applied Sciences, Nepal
Dr. Mahendra Thapa, Kathmandu Institute of Applied Sciences, Nepal
Dr. Prakash K. Paudel, Kathmandu Institute of Applied Sciences, Nepal
Dr. Rashila Deshar, Tribhuvan University, Nepal
Dr. Susma Giri, Kathmandu Institute of Applied Sciences, Nepal

Scientific committee: Scientific committee was responsible for moderating the abstract review process and making final decision on acceptance and rejection of the abstracts.

Dr. Achyut Aryal, The University of Sydney, Australia
Dr. Achyut Tiwari, Tribhuvan University, Nepal
Dr. Anzar Khuroo, University of Kashmir, India
Dr. Basant Raj Adhikari, Tribhuvan University, Nepal
Dr. Binod Pokharel, University of Wyoming, USA
Dr. Jan Sipos, Institute of Botany, ASCR Czech Republic
Dr. Meghnath Dhimal, Nepal Health Research Council, Nepal

Dr. Mohan Dangi, California State University-Fresno, USA
Dr. Nabin Malakar, JPL, CalTech/NASA, California, USA
Dr. Olga Ameixa, University of Aveiro, Portugal
Dr. Peter Stahl, University of Wyoming, USA
Dr. Prakash K. Paudel (Chair), Nepal Academy of Science and Technology,
Nepal
Dr. Rajan Ghimire, New Mexico State University, USA
Dr. Ram Prasad Regmi, Tribhuvan University, Nepal
Dr. Sadikshya Rana Dangi, USDA-Agricultural Research Service, Parlier, USA
Dr. Shankar Raj Barsila, Agriculture and Forestry University, Nepal
Dr. Suresh K. Ghimire, Tribhuvan University, Nepal
Dr. Tamir Klein, Weizman Institute of Science, Israel
Dr. Thakur Bhattarai, CQ University, Australia
Dr. Uttam Babu Shrestha, University of Southern Queensland, Australia
Dr. Vasileios Bontzorlos, Institute for Research & Technology of Thessaly;
Technology of Thessaly, Greece
Dr. Wentao Wang, The Administrative Centre for China's Agenda 21 (ACCA21)
Ministry of Science and Technology, China
Mr. Roshan Ojha (Secretary), Nepal Agriculture Research Council, Nepal

Evaluation committee:

An evaluation committee of Dr. Rashila Deshar and Dr. Bhanu Neupane was mandated to evaluate student presentation for best presentation awards. Respective session chairs evaluated oral presentations. Three independent national and international experts evaluated poster presentations.

Session chairs:

Session chairs moderated the sessions and led discussions during session-assisted by rapporteurs.

Dr. Achyut Tiwari, Professor, Tribhuvan University, Nepal
Dr. Agamuthu Pariatamby, Professor, University of Malaya, Malaysia
Dr. Anish Ghimire, Professor, Nepal Engineering College
Dr. Anna Sinisalo, Program Coordinator, International Centre for Integrated
Mountain Development, Nepal
Dr. Annamaria Giorgi, Professor, University of Milan, Italy
Dr. Dipak Aryal, Professor, Tribhuvan University, Nepal
Dr. Hemu Kafle, Scientist, Nepal Academy of Science and Technology, Nepal
Dr. Kedar Rijal, Professor, Tribhuvan University, Nepal
Dr. Madan Lall Shrestha, Academician, Nepal Academy of Science and
Technology, Nepal
Dr. Mohan B. Dangi, Professor, California State University, Fresno, USA
Dr. Narayan P. Koju, Professor, NAAMI College, Nepal

Dr. Prakash K. Paudel, Scientist, Kathmandu Institute of Applied Sciences, Nepal

Dr. Ram Devi Tachamo Shah, Himalayan Biodiversity and Climate Change Center, Nepal

Dr. Rashila Deshar, Professor, Tribhuvan University, Nepal

Dr. Rejina Manskey, Professor, Tribhuvan University, Nepal

Dr. Rishi Ram Sharma, Director General, Department of Hydrology and Meteorology, Nepal

Dr. Steve Lyon, Professor, Stockholm University, Sweden

Dr. Susma Giri, Scientist, Kathmandu Institute of Applied Sciences, Nepal

Logistic arrangement: Bishal Sharma and Roshan Gurung

Rapporteurs: They assisted the session chairs.

Muna Fuyal

Prabin Pokharel

Shishilia Bania

Jiban Sharma

Tshering Ongmu Sherpa

Deepa Poudel

Bhumika Acharya

Meena Saru

