

SUMMARY OF THE WORLD MOUNTAIN FORUM: 17-20 OCTOBER 2016

The 2016 World Mountain Forum (WMF) took place from 17-20 October 2016 in Mbale, Uganda. The Forum was preceded by the Special Africa Mountains Event that highlighted key issues affecting mountain ecosystems and communities in Africa, including poverty, climate change, food insecurity and land degradation. Gathering over 250 participants under the theme “Mountains for our Future,” the Forum provided a platform to discuss sustainable mountain development (SMD) in the context of the Paris Agreement on climate change and the Sustainable Development Goals (SDGs). The Forum convened sessions on four key themes: mountains and climate change; mountain communities and livelihoods; mountain ecosystem services; and sustainable mountain agriculture. Following the Forum, participants took part in local field trips.

This meeting of the WMF was jointly organized by the Albertine Rift Conservation Society (ARCOS) and the Ministry of Water and Environment, Uganda, with financial and technical support from the Swiss Agency for Development and Cooperation (SDC), the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety through the UN Environment Programme (UNEP), UNDP, the Embassy of France, and as well as diverse partners involved in the SDC-funded Sustainable Mountain Development for Global Change (SMD4GC) programme, including Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN) from Latin America, the International Centre for Integrated Mountain Development (ICIMOD) from Asia, the University of Central Asia, the University of Bern and Foundation for the Sustainable Development of Mountain Regions (FDDM). Other supporters include the Food and Agriculture Organization of the United Nations (FAO), UN Educational, Scientific and Cultural Organization (UNESCO), the Africa Mountains Partnership Champions Committee, the Mountain Partnership (MP) Secretariat and East African Community (EAC).

The WMF aims to bring together SMD stakeholders from around the world to foster political dialogue and promote collaborative action to protect mountain ecosystems and communities. Throughout the Forum, participants showcased and discussed local, regional and global experiences in SMD, and explored how to effectively implement the Paris

Agreement and the SDGs. The WMF 2016 resulted in a Mbale Call for Scaling Up Action, themed “Don’t leave the mountains behind,” which is expected to galvanize work on the ground and guide mountain-related interventions in ongoing international policy processes, including the implementation of the Paris Agreement on climate change and the SDGs, some targets of which explicitly mention mountains.

A BRIEF HISTORY OF SUSTAINABLE MOUNTAIN DEVELOPMENT INITIATIVES AND MEETINGS

Nearly half the world’s countries have significant mountainous regions. These regions are home to about 850 million people, and provide more than half of the world’s population with water for domestic use, agriculture, industry and power generation, among other uses. Additionally, mountains are home to half of the world’s biodiversity hotspots and many threatened and endangered species, which attract tourism and create recreation opportunities.

IN THIS ISSUE

A Brief History of Sustainable Mountain Development Initiatives And Meetings	1
World Mountain Forum Report	3
Pre-Session: Special Africa Mountains Event	3
Opening Addresses	4
Session 1: Mountains and Climate Change	5
Session 2: Mountain Communities and Livelihoods	6
Session 3: Mountain Ecosystem Services	6
Plenary	7
Session 4: Sustainable Mountain Agriculture.	7
Technical Wrap-Up.	8
High-Level Segment: Mountains and the Development Agenda	8
Closing of the Forum	9
Upcoming Meetings	9
Glossary.	10

Yet many mountain regions suffer from dire poverty, widespread land degradation, inequitable land rights, and are already enduring severe negative impacts from climate change, even as demand for mountain ecosystem services rises. Mountain regions are among the most sensitive environments to climate change, warming at a faster rate than global averages, with receding glaciers as one of the most visible indicators of this change. If current trends continue, many glaciers are expected to disappear completely by the end of this century, potentially leading to catastrophic changes in water availability for large parts of the world.

The first major international decision to address the issue of mountains and mountainous regions was at the UN Conference on Environment and Development (UNCED), also known as the Earth Summit, held from 3-14 June 1992 in Rio de Janeiro, Brazil. One of the principal outputs of UNCED was Agenda 21, a 40-chapter programme of action. On mountains, Chapter 13 of Agenda 21 recognizes the important ecological, economic and social functions of, and services provided by, mountainous regions. It makes a number of recommendations to governments on mountains, including: promoting erosion control; promoting alternative livelihoods; developing early-warning systems and disaster-response teams for hazardous areas; and creating information centers on mountain ecosystems to build expertise on sustainable agriculture and conservation areas.

INTERNATIONAL YEAR OF MOUNTAINS 2002: By its resolution 53/24, the UN General Assembly (UNGA) proclaimed 2002 as the International Year of Mountains (IYM), with the objective of raising international awareness about mountains, their global importance, the fragility of their resources, and the necessity of sustainable approaches to mountain development. During the “UN International Year of Mountains,” UNGA designated 11 December, from 2003 onwards, as “International Mountain Day.”

IISD RS coverage can be found at: <http://www.iisd.ca/crs/mountains/>

MOUNTAIN PARTNERSHIP: The Mountain Partnership (MP) was founded by the Governments of Italy and Switzerland, the Food and Agriculture Organization of the UN (FAO) and UN Environment Programme (UNEP) and launched at the World Summit for Sustainable Development (WSSD) in Johannesburg, South Africa, in 2002. Subsequently, four meetings of the MP have been held.

The first Global Meeting of the MP, held in Merano, Italy from 5-6 October 2003, identified common needs, priorities and concerns among mountain countries, and explored key issues related to the structure, membership and governance of the Partnership.

The second meeting was held in Cusco, Peru from 28-29 October 2004 and provided Partnership members with the opportunity to exchange experiences, review progress and chart the future course of the MP and its dynamic core, the “Partnership Initiatives.” The Cusco Conference endorsed the governance of the Partnership set out in the Organization Membership and Governance document and adopted the

Cusco Framework for Action. Participants also affirmed their collective commitment to the goals of SMD through the Declaration of the Andes.

The third Global Meeting took place in Rio de Janeiro, Brazil, on Tuesday, 19 June 2012, on the sidelines of the Rio+20 summit. The event was aimed at, *inter alia*: sharing lessons and best practices from joint action over the past ten years; identifying appropriate strategic objectives for effectively promoting SMD; and building the future cooperative efforts of the MP on a synergistic, inclusive and committed foundation. Three paragraphs (210, 211 and 212) on mountains were included in the Rio+20 Outcome document, “The Future We Want.”

The fourth meeting took place in Erzurum, Turkey from 17-19 October 2013. During the meeting, participants addressed: the new MP Strategy and Governance; mountains in Rio+20 and the post-2015 SDGs; the Mountain Forum knowledge platform for SMD; regional coordination mechanisms; and the selection of the Steering Committee. Thematic working groups considered how to put the MP into practice.

IISD RS coverage of the Fourth Global Meeting of the MP can be found at: <http://www.iisd.ca/mountain/gmmp4/>

INTERNATIONAL CONFERENCE ON THE GREEN ECONOMY AND SUSTAINABLE MOUNTAIN DEVELOPMENT: OPPORTUNITIES AND CHALLENGES IN VIEW OF RIO+20:

This UNCSD-associated event was hosted in Kathmandu, Nepal, from 5-7 September 2011, by the International Centre for Integrated Mountain Development (ICIMOD), supported by UNEP and the International Development Research Centre (IDRC). The “Kathmandu Declaration on Green Economy and Sustainable Mountain Development” made several recommendations to governments, calling for, *inter alia*, the establishment of mechanisms to compensate and reward communities for mountain ecosystem services and improvement in markets for these services and efforts to ensure access and rights for women and indigenous communities, including valuation and utilization of traditional knowledge and practices.

IISD RS coverage can be found at: <http://www.iisd.ca/crs/uncsd/gesmd/>

LUCERNE WORLD MOUNTAIN CONFERENCE: This conference took place from 11-12 October 2011 in Lucerne, Switzerland, and was co-organized by the SDC and the Swiss Federal Office for Spatial Development (ARE) within the framework of the MP. The conference presented regional and global experiences in mountain development since UNCED and identified challenges and opportunities for the future of global SMD. Among the themes discussed were: the role of the green economy in mountains; the importance of mountains to the Rio+20 summit; and a ‘Plan of Action’ to secure renewed political commitment for SMD.

MOUNTAIN DAY: The first Mountain Day took place on 4 December 2011 during UNFCCC COP17, in Durban, South Africa. The event highlighted the critical role that mountain ecosystems play in climate adaptation and sustainable development as well as the vulnerability of mountains, and

those who depend on them, to climate change. IISD RS coverage can be found at: <http://www.iisd.ca/climate/cop17/md/>

In 2012, “Mainstreaming Rio+20 outcomes in the UNFCCC processes for prosperous, resilient, and sustainable mountain ecosystems and communities,” was held in Doha, Qatar, on 3 December 2012, on the sidelines of COP 18. The discussion sessions focused on: climate change stories from different mountain regions of the world; integrated management of mountain water resources; and the role of mountains in food security and livelihoods. IISD RS coverage can be found at: <http://www.iisd.ca/climate/cop18/md/html/crsvol194num2e.html>

In 2015, “International Mountain Day: Celebrating International Cooperation on Climate Change Adaptation in Mountain Environments - from Rio to Lima to Paris,” was held on Friday, 11 December 2015, on the sidelines of UNFCCC COP19. The event considered the important role of mountains and cooperative measures in ecosystem-based approaches to climate change adaptation in mountainous regions.

IISD RS coverage can be found at: <http://www.iisd.ca/climate/cop21/enbots/#event-3>

WORLD MOUNTAIN FORUM: The World Mountain Forum (WMF) took place from 22-24 May 2014 in Cusco, Peru, and was a collaborative effort of eight partners: the SDC; Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN); International Centre for Integrated Mountain Development (ICIMOD); University of Central Asia; Foundation for the Sustainable Development of Mountain Regions; Centre for Development and Environment, University of Bern; and the University of Zurich. The Forum provided a platform to promote SMD, and included sessions on four topics: climate change; family farming; mountain communities; and mountain cities. These sessions included a particular focus on water and food security, sustainable investment and climate change adaptation. WMF 2014 showcased and discussed available local, regional and global experience in mountain development, and identified opportunities and challenges for global SMD.

IISD RS coverage can be found at: <http://www.iisd.ca/mountain/wmf/2014/html/crsvol194num4e.html>

AFRICAN MOUNTAINS REGIONAL FORUM: The First African Mountains Regional Forum, themed “Towards a Shared Mountain Agenda for Africa,” convened in Arusha, Tanzania, from 22-24 October 2014. The meeting was organized by ARCOS and the Africa Mountain Partnership Champions Committee, in partnership with the East African Community, UNEP, the Austrian Development Cooperation and the SDC, and gathered over 100 participants representing government, academia, research institutions, intergovernmental organizations and civil society.

During the meeting, participants: identified strategic actions to address major emerging issues; addressed the promotion of linkages and collaboration between different stakeholders for a regional framework on sustainable mountain development in Africa; and shared lessons learned and experiences in meeting

the conservation and development challenges including biodiversity, water, energy, food security and climate change in African Mountain regions. The meeting adopted the Arusha Outcomes, which many participants hoped would raise the profile of the African sustainable mountain development agenda.

IISD RS coverage can be found at: <http://www.iisd.ca/mountain/amrf/2014/html/crsvol194num5e.html>

RIO+20 and SDGs: The 2012 UN Conference on Sustainable Development, also known as Rio+20, marked the 20th anniversary of the UN Conference on Environment and Development that took place in Rio de Janeiro, Brazil, from 3-14 June 1992. During their ten days in Rio, government delegations concluded negotiations on the Conference outcome document, *The Future We Want*, which recognized, *inter alia*, the benefits derived from mountain ecosystems, the need for sustainable development in mountain regions, the importance of mountains as home to indigenous people and local communities and the crucial role mountains play in providing water resources to a large portion of the world’s population. *The Future We Want* warns about the vulnerability of fragile mountain ecosystems to the adverse impacts of climate change, deforestation and forest degradation, land use change, land degradation and natural disasters, the marginalisation of its communities, and invites States to, *inter alia*, adopt a long-term vision and holistic approaches to SMD, including through incorporating mountain-specific policies into national sustainable development strategies. The need to “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss” is set as Sustainable Development Goal 15 of the 2030 Agenda, and Target n.1 of SDG 15 explicitly mentions mountains among the ecosystems to be conserved, restored and sustainably used in line with international agreements.

WORLD MOUNTAIN FORUM REPORT

PRE-SESSION: SPECIAL AFRICA MOUNTAINS EVENT

The Special Africa Mountains Event took place before the World Mountain Forum (WMF) on the afternoon of Monday, 17 October. The event was facilitated by Jesca Eriyo, Deputy Secretary General of the East African Community (EAC), Uganda.

Paul Mafabi, Director of Environment Affairs, Ministry of Water and Environment, Uganda, welcomed participants to the Mount Elgon region for the first WMF to be held on the African continent. Sam Kanyamibwa, Executive Director, the Albertine Rift Conservation Society (ARCOS), recalled the context of the WMF and introduced the main theme of the WMF 2016, namely “Mountains for our Future”. Students of Mbale Senior Secondary School performed a vibrant poem titled “Unappreciated Resources, Our Mountains.” Shilaku James, the Resident District Commissioner, Mbale, highlighted the importance of the Mount Elgon in providing water and cash crops, and called for participants to overcome obstacles in SMD and achieve results. André Wehrli, SDC, stressed that mountain regions are a key focus for sustainable development, yet remain marginalized and underfunded.

In a keynote presentation, Musonda Mumba, UN Environment Programme (UNEP), stressed the importance of thinking globally when taking action locally with regard to sustainable mountain development (SMD) in Africa. She said that protecting biodiversity can help mountain communities adapt to the risks of climate change, and called for work on strengthening the resilience of mountain ecosystems.

Presentations: Jesca Eriyo, EAC, moderated a series of presentations on advancing the SMD agenda in Africa.

Noting that mountains are home to 14% of the world's population and provide 70% of the world's freshwater, Salome Alweny, ARCOS, described how her organization engages in SMD policy activity at local, national and international levels. She summarized the challenges mountain ecosystems and communities face, including poverty, food security, migration, lack of infrastructure and climate change risks. Alweny highlighted the importance of the Sustainable Mountain Development for Global Change (SMD4GC) programme. In response to some of these challenges, she outlined ARCOS activities to promote SMD, including capacity building, promoting the Sustainable Development Goals (SDGs), and engaging in international policy processes under the UN. Alweny invited participants to visit the ARCOS Regional Portal (arbmis.arcosnetwork.org) for accessing and sharing information on mountain-related issues.

Susan Taylor, African Mountain Research (AfroMont), South Africa, described her organization's work on gathering data for historical baseline comparisons and developing indicators for sustainable mountain management. Taylor noted that one of the main pressures on mountain ecosystems are large agricultural projects, and stressed the importance of assessing their impacts.

Charles Nyandiga, UN Development Programme, presented on the GEF Small Grants Programme (SGP) for indigenous mountain community based adaptation (CBA) initiatives that address climate-driven challenges. He said projects that empower local communities as "stewards of the landscape" improve livelihoods as well as biodiversity conservation. He called for partnership and a "much more aggressive" approach to integrating community knowledge into mountain ecosystems management.

Jesca Eriyo, EAC, presented an overview of EAC's mountain agenda. Noting that conflicts and wars in eastern Africa frequently occur in or near mountains, which provide hiding spots, she stressed that mountain ecosystems are especially prone to human impacts. She called for the transboundary management of mountain ecosystems in East Africa and appreciated ongoing collaboration between EAC, ARCOS and other partners.

Panel presentations on community, public and private sector stakeholders: Eriyo moderated the panel on the roles of community, public and private sector stakeholders in mountain regions, with panelists Hussein Matanda, Chairman, Mount Elgon Stakeholders Forum; Justice Sama Nchunu, Foundation for Environment and Development, Cameroon; Zewdu Eshetu, Addis Ababa University, Ethiopia; Taleb Mohammed, Morocco; Mohammed 5 University in Rabat; Moussa Conde, Ministry of Environment, Water and Forests, Guinea; and Rachael Kakungulu, Kakungulu Safaris, Uganda.

Matanda described the challenges posed by climate change to local livelihoods in the Mount Elgon region, such as increased flooding, erosion and prolonged dry seasons. Nchunu highlighted the significant role civil society can play in implementing national and global SMD instruments in communities. Eshetu said land degradation is a threat to community livelihoods and carbon sequestration, and underscored the need to adopt measures to adapt to climate change impacts. Mohammed highlighted the potential of Moroccan mountains for social and sustainable development. Conde said that Guinea has preserved its mountains, which form the water tower of West Africa. He underscored the need to preserve mountains, fight against poverty, protect soils and adapt to climate change to enhance community livelihoods. Kakungulu said Uganda is a fast-growing tourist destination because of its mountains. She underscored the economic benefits of local communities derived from tourism, and the importance of partnerships between all sectors to promote reforestation in the Elgon region.

The event closed with a traditional dance by the Ngoma Group from Mbale.

OPENING ADDRESSES

The WMF convened on Tuesday, 18 October and Wednesday, 19 October 2016, following the Special Africa Mountains Event on Monday, 17 October 2016.

In an opening address on Tuesday morning, Sam Kanyamibwa, ARCOS, called for a more effective framework to "give voice" to mountain ecosystems and communities in international policy settings, and said he hoped this could be achieved through formulating a Mbale Call for Action at this WMF. Shilaku James, Resident District Commissioner, Mbale District, Uganda, reviewed opportunities for SMD in the Mount Elgon region, including tourism and coffee production as tools for socioeconomic development.

Presentations: Paul Mafabi, Director of Environment Affairs, Ministry of Water and Environment, Uganda, moderated presentations on the theme of "Mountains for our Future."

Francis Nkako, Kenya Water Towers Agency, underscored the importance of long-term mountain policies to ensure the ongoing contributions of mountain ecosystems to livelihoods, noting that mountain stakeholders of all sectors are at once "beneficiaries, part of the problem and part of the solution."

Behruz Emomov, Ministry of Foreign Affairs, Tajikistan, highlighted the importance of mountains as a provider of economic resources and biodiversity. He said that if appropriate actions are not taken, mountain ranges will stop being a "source of life" and become a "threat to life." He recommended the effective use of regional water resources to reduce poverty and ensure food, energy and ecological security.

Eric Nanchen, Foundation for the Sustainable Development of Mountain Regions (FDDM), observed that countries in the global North had achieved economic development at the cost of land degradation and natural resources, and emphasized the importance of taking responsibility and fostering cooperation and partnerships in shaping sustainable development in mountain ranges and lowlands.

Sonia Salas, President, Agroindustrial Rural Network of Peru, highlighted the contributions of Andean communities, and particularly women, to socioeconomic development in South America. She called for a new approach to SMD that respects local knowledge and promotes the dignity of women.

His Holiness Kyabgön Chetsang, Ambassador for the UN Mountain Partnership, discussed the impacts of climate change in Ladakh, a region in northern India increasingly prone to catastrophic flooding and landslides. He noted that Himalayan mountain communities face enormous challenges as the planet warms and glaciers melt, with serious implications for downstream communities, and called for cooperation among mountain countries to tackle these challenges.

Participants watched a video on mountains and climate change (<https://www.youtube.com/watch?v=KssExEWfR2k>), then partners, supporters and regional representatives of the WMF made brief remarks. Eklabya Sharma, on behalf of SMD4GC Partners, noted that mountains are the hotspots of climate change, yet fail to receive proportionate resources or attention. Thomas Hofer, MP, called for “upscaling action” on SMD as a means of implementing the Paris Agreement and the SDGs. Frank Turyatunga, UNEP, noted the vulnerability of mountain ecosystems to natural disasters and poor waste management. Jesca Eriyo, EAC, highlighted threats to mountain communities and ecosystems in east Africa and called for more SMD partnerships. Noting the mismatch between the indispensability of mountain ecosystem services (ES), and the lack of policy attention and resources devoted to mountain regions, André Wehrli, SDC, called for: recognizing mountains as key areas for development in policy fora at all levels; creating a scientific knowledge hub on mountains; innovative approaches for actions on the ground; and increased funding.

Sam Cheptoris, Minister for Water and Environment, Uganda, noted that humanity’s environmental behavior “might lead to our own destruction” unless we change, and said he hoped the implementation of SDGs in mountain areas would be galvanized by this Forum. He urged participants to become “mountain ambassadors” and leave a positive legacy in vulnerable mountain ecosystems.

SESSION 1: MOUNTAINS AND CLIMATE CHANGE

Arun Shrestha, ICIMOD, moderated the session on actions to address climate change impacts in mountainous regions of the world.

Presentations: Eklabya Sharma, ICIMOD, discussed transforming knowledge into action in the context of mountains and climate change. Highlighting the lack of mountain-specific policies at all levels, he called for efforts focused on transboundary and regional issues and for closing knowledge gaps by gathering long-term data. He said the implications of the Paris Agreement are different for mountains, given a small temperature increase at low elevations translates to a larger increase at higher elevations. He called for more inclusive value chains, watershed restoration and livelihood diversification in mountain regions.

In the discussion that followed, participants commented on, *inter alia*: the need for strategies for implementing policies on the ground; opportunities related to the Paris Agreement for funding and resources for adaption measures; and the importance of fostering biodiversity stewardship among local communities.

Akylbek Rakhmanberdi, Alliance of Central Asian Mountain Communities (AGOCA), Kyrgyzstan, presented on climate resilience in Central Asian mountain communities, which he said suffer from “too much or too little water.” He highlighted projects by AGOCA in mountain villages in Tajikistan, Kyrgyzstan, and Kazakhstan that, *inter alia*, mapped vulnerability, built protective walls against floods and planted fruit tree nurseries. He concluded that climate adaptation measures should be developed at the local level, and that policy solutions should be backed up by funding for implementation.

In the ensuing discussion, participants addressed how to: scale-up AGOCA projects; cope with extreme weather impacts; establish proactive early-warning systems; and foster strong leadership by identifying “climate champions” in villages.

Shazia Chaudhry, University of Nairobi, presented on climate change and human security with a focus on the challenges facing Mount Kenya communities. She outlined the negative impacts climate change has on human security, including food, water, health, political, economic, personal and cultural security.

In the ensuing discussion, participants commented on the importance of gathering traditional knowledge and mobilizing communities to take action and get more involved in decision making.

Panel discussion: Arun Shrestha, ICIMOD, moderated the panel, with panelists Matthias Jurek, UNDP; Maria Arguello, CONDESAN; Elbegzaya Batjargal, University of Central Asia; John Kaddu, Makerere University; and Pitamber Prasad Dhyani, G.B. Pant Institute of Himalayan Environmental and Sustainable Development.

Panelists discussed: critical knowledge and policy gaps related to climate and related impacts on mountain ecosystems and ES; concrete means and gaps for strengthening gender-sensitive climate change actions; and strategies for bringing the mountain agenda into the global discourse.

Kaddu stressed the need for economic assessments of climate and related impacts in mountain environments in order to mobilize politicians into action. Dhyani discussed Indian Government initiatives to close knowledge gaps in Himalayan ecosystem studies. Arguello called for more consistent, systematic and long-term research into climate impacts on mountains. Batjargal highlighted the migration of male populations out of Central Asian mountain communities in search of work, leaving more agricultural work to women, highlighting the need for more gender-sensitive policies. On promoting the mountain agenda at the global level, Jurek commended the specific mention of mountains in the SDGs.

In discussions, participants and panelists commented on, *inter alia*: strengthening the voice of indigenous mountain communities at local, national and international levels; the environmental risks of increasing agricultural productivity in

fragile mountain ecosystems; and the need for investment in education on mountain issues in order to empower youth. They also noted that issues of livelihoods, deforestation and climate change are also relevant to lowlands, and called for more attention to issues unique to mountains.

SESSION 2: MOUNTAIN COMMUNITIES AND LIVELIHOODS

On Tuesday afternoon, WMF participants split into two parallel sessions, one on mountain communities and livelihoods and the other on mountain ecosystem services. The session on mountain communities and livelihoods was facilitated by Eklabya Sharma, ICIMOD, and Salome Alweny, ARCOS.

Presentations: Thomas Kohler, University of Bern, presented on the future of mountain communities. Noting that mountain regions “fare very badly” on top priority SDGs concerning ending poverty and hunger, Kohler highlighted that mountain regions suffer a backlog in development, yet face increasing demands for their ecosystem goods and services, including water, minerals, biodiversity and scenic value for tourism. To reduce the backlog, Kohler suggested diversifying livelihoods; establishing rural-urban linkages; and providing quality skills to youth, although he stressed that “we must understand livelihoods before providing interventions.”

In the ensuing discussion, participants spoke to: the cultural and spiritual values of mountains, noting such values are crucial to both conservation and community livelihoods; access and benefits sharing; and the importance of long-term immersion in a mountain community prior to making recommendations to improve livelihoods.

Jean Paul Kubwimana, ARCOS, discussed addressing SMD through nature-based community enterprises (NBCE) in Rwanda, Uganda and Burundi. Noting that “mountainous landscapes are life insurance,” he described the environmental, social and economic dimensions of NBCEs and explained their contributions to SDGs. He outlined ARCOS’ “BEST” approach for climate resilience interventions, which involves: building capacity through sustainable institutions and leadership; enhancing environmental resilience; sustainable nature-based business solutions; and transforming and inspiring others.

Lira Sagynbekova, University of Central Asia, presented on the effects of labour migration on sustainable rural livelihoods in Kyrgyzstan. She said the impacts of transitioning from a planned to a market economy in Kyrgyzstan prompted the mass outflow of labour-age rural populations in search of employment opportunities. She called for improved policies and legal protections for labour migrants, and for financing to enable migrants to translate the skills and knowledge they learned abroad into livelihoods in their home countries.

In the ensuing discussion, participants noted the tension between livestock as capital investments and the impacts of livestock herds as agents of degradation in mountainous regions.

Panel discussion: Sharma moderated the panel on mountain livelihoods and communities, with panellists Beatrice Kabihogo, Uplift the Rural Poor; Chagat Almashev, Foundation

for Sustainable Development Altai; Dirk Hoffman, Bolivian Mountain Institute; Richard Weingarten, former Executive Secretary of the UN Capital Development Fund; Justine Khainza, Member of Parliament, Uganda; Patrick Shawa, Wildlife and Environmental Conservation Society of Zambia.

Panelists discussed strategies for: enhancing mountain livelihoods; supporting mountain livelihoods through policy, knowledge and action on the ground; raising the voices of mountain communities in global fora; and reducing vulnerabilities while increasing the resilience of mountain communities.

On enhancing mountain livelihoods, Weingarten suggested providing small-scale financing to women in mountain communities, noting that microfinancing was a particularly useful strategy in post-conflict or post-natural disaster environments. Shawa described the capacity limitations mountain communities confront when applying for the GEF SGP and other funding sources. Hoffman noted that small-scale rainwater harvesting schemes can have a positive impact on mountain livelihoods, and suggested inviting more participants from local communities to attend future WMFs. Kabihogo suggested gathering grassroots ideas from mountain communities and engaging them in project planning and implementation. Almashiev stressed the importance of ecotourism to livelihoods in remote mountainous areas. Khainza suggested that countries develop mountain-specific disaster management plans.

Following the panel, participants and panelists discussed, among other things: woman as agents for change in mountain communities; the need for communities to innovate for themselves using traditional knowledge and resources; soil and water conservation programs and high value crops as a means of conserving ES in the mountains; the need for long-term engagement with mountain communities on projects lasting many years.

SESSION 3: MOUNTAIN ECOSYSTEM SERVICES

Frank Turyatunga, Deputy Director, Regional Office for Africa, facilitated the session.

Presentations: Thomas Hofer, Mountain Partnership (MP) Secretariat, gave a keynote talk on mountain ES, including the provision of food and water, the regulation of air, water and soil quality and the support of habitats and cultural services. He highlighted the important of ES management and community incentives to conserving, protecting and enhancing natural resources. He highlighted a scheme to develop a mountain product label to raise awareness and demand for fair-trade, locally-made mountain goods, and said communities in any country could apply to use the label if their mountain product meets sustainability standards.

Richard Mwesigwa, WWF, Uganda, presented on the restoration of Rwenzori mountain ecosystems functions using payment for watershed services (PWS) to improve water quality and quantity and by engaging water consumers downstream. He summarized project outcomes, namely: engaging the private and public sector to participate in financing; developing a PWS to conserve the ecosystem while providing benefits to local

communities; and developing a national policy and institutional framework to establish payment for ecosystem services (PES) to support sustainable conservation finance.

Philbert Nsengiyumva, ARCOS, outlined the economic valuation of mountain ecosystems in the Albertine Rift region. He highlighted the importance of accounting for the monetary value of ecosystems in decision-making procedures. He noted that ARCOS had conducted a total economic valuation of Uganda's mountains, and highlighted the importance of this exercise as a basis for PES, conservation efforts and informing decision-makers of the value of mountain ES.

Panel discussion: Sebukeera invited panelists to address issues related to the importance of economic valuation in: raising the awareness of politicians concerning the economic losses that come with the loss of ES; addressing knowledge gaps and moving from knowledge to action; and attracting investments.

Godwin Kowero, African Forest Forum, highlighted the conceptual gap between how mountain communities value mountains and the concept of mountain ES, and suggested bridging it through capacity building among mountain communities and raising awareness of ES in downstream communities.

Rob Marchant, University of York, noted that ES encompasses "everything we are, eat and do" and highlighted the importance of REDD and REDD+ to recognizing and rewarding ecosystem services. He underscored the need to avoid the elite capture of ES benefits, which can lead to resentment and continued degradation.

Golam Rasul, ICIMOD, Nepal, noted ES are difficult to capture and value, in part because they are different on global, regional, national and local levels, and he underscored the need to identify the beneficiaries at each level.

In the ensuing discussion, participants highlighted the importance of measuring the cultural services provided by mountain ecosystems, in addition to regulatory and provisional ES, as well as the need for PES to reach local communities.

PLENARY

SESSION 4: SUSTAINABLE MOUNTAIN AGRICULTURE

Following the parallel sessions on Tuesday afternoon, participants reconvened in plenary for presentations and discussions on sustainable mountain agriculture. The session was moderated by Gabor Figeczky, IFOAM.

Presentations: Gete Zeleke, Water and Land Resources Center, Ethiopia, gave a keynote presentation on ensuring the sustainability of investments in land and water management in mountain regions of Africa. He noted that African mountains cover a small land area but have significant downstream and transboundary impacts, and are heavily affected by land degradation due to poor agricultural management, forest fires, illegal logging and high population growth. He noted that policies and institutions are often top-down, lack sustainable natural resource management (NRM) guidelines and directives, and suffer from poor capacity. He called for a paradigm shift

in NRM toward giving local communities and authorities ownership of NRM initiatives, and making NRM investments economically attractive and sustainable through strategies such as by bordering fields with cash crops.

Hannes Van den Eeckhout, AGROECO Project, Belgium, presented on market connections as a key driver for sustainable mountain food systems. He described a low-technology organic capacity building programme that linked women farmers with top-level restaurants in Cusco, Peru in order to shorten the agro-gastronomic supply chain in the Andes mountains, promote organic farming and improve family diets. He said the project used and disseminated communications technology in order to connect costumers and producers as well as organizing tools to facilitate logistics.

MacPherson Nthara, MP, Malawi, presented on sustainable agriculture intensification in northern Malawi. He outlined the approaches and techniques used in the Mount Mulanje region of Malawi to improve the resilience of the mountain ecosystems and provide ES. He said sustainable agriculture intensification (SAI) could, in certain contexts, increase farmers' yields, sustain ES provisions, and improve food security and livelihoods. He noted that SAI practises in Malawi have increased rainwater storage and yields, producing high value crops such as apples.

Panel discussion: Figeczky moderated the panel on sustainable mountain agriculture, with panelists Krystina Swiderska, International Institute for Environment and Development (IIED); Hanta Rabetaliana, Permanent Secretary, Ministry of Environment, Ecology, Sea and Forests, Madagascar; Marisa Young, MP; Boniface Kiteme, Centre for Training and Integrated Research in ASAL Development (CETRAD); and Julius Arinaitwe, Birdlife International.

Panelists discussed the key drivers in enabling mountain agriculture in a changing climate; ways for agriculture to be the engine of inclusive and sustainable mountain communities; and methods for developing, scaling-up and mainstreaming sustainable market based food systems.

Kiteme underscored the importance of recognizing ownership of innovations in capacity building projects in mountain regions. Swiderska highlighted the importance of the spiritual and cultural values of mountain communities to coping with risks and improving resilience. Arinaitwe emphasized the need to replicate adaptation projects and support the capacity building of monitoring skills. Rabetaliana raised issues that need addressing, including changing the economic behaviour of target populations; promoting land and market security in terms of climate change; and enhancing partnerships with the private sector. Young said building on the traditional knowledge of local communities was key increasing food production in mountain ecosystems.

In the ensuing discussion, participants commented on: the importance of plant diversity in mountain agriculture due to the risks posed by climate change to monocultures; the role of traditional knowledge in promoting more sustainable and resilient agricultural; the importance of strong institutions to maintaining traditional knowledge on agriculture in indigenous communities.

TECHNICAL WRAP-UP

On Wednesday morning, participants met in plenary to hear reports on key questions and gaps from the four thematic sessions. Several of the moderators addressed specific outcomes for policy-making, knowledge development and implementation activities.

Nadine Salzman, University of Fribourg, summarized the mountains and climate change session, noting discussions took place in the context of evidence of accelerated warming with elevation, making mountains significantly more vulnerable to climate change than lowlands. She said participants had identified, *inter alia*, the need to: study changing precipitation patterns and conduct baseline scientific assessments in mountain ecosystems; develop context-specific frameworks for building resilience on the regional level; and foster leadership in communities, especially among youth, by identifying and supporting “climate champions.” She noted that all these actions require financial resources.

Salome Alweny, ARCOS, presented the outcomes from the mountain communities and livelihoods session, noting that mountain communities remain marginalized as a focus for sustainable development. In terms of policy, she underscored the need for country-specific action plans for mountain areas, access to environmental justice for mountain communities and SMD indicators. On knowledge, she highlighted the need for more clearly communicating mountain issues to policymakers and for improving the access of mountain communities to livelihood and funding opportunities. In terms of actions, she highlighted: enabling microfinance opportunities for vulnerable groups, particularly women; promoting rainwater harvesting schemes as adaptation measures; involving mountain communities in decision-making fora and platforms; and recognizing and enforcing indigenous land and resource ownership rights.

Faustin Gashakamba, ARCOS, summarized the mountain ecosystem services session, noting that more attention has been paid to provisioning and regulatory services, such as water and food, to the neglect of cultural services, such as spiritual values. He highlighted the need for more work on, *inter alia*: assessing the cultural services provided by mountain ecosystems; identifying and targeting impacts of climate change unique to mountain environments; developing regulations for sustainably using and maintaining ecosystem services; and economic evaluations of mountain ecosystem services.

Susan Taylor, AfroMont, presented the outcomes of the sustainable mountain agriculture session, noting that sustainable NRM benefits from community involvement and ownership. Among the session’s outcomes, she highlighted the importance of: identifying market gaps and helping farmers reach relevant markets; restoring heritage and indigenous farming methods, which “might hold answers for the future of agriculture in the context of climate change”; and helping farmers meet the challenges of organic farming, especially in under-resourced mountain areas.

Mbale Call for Scaling Up Action: Don’t Leave the Mountains Behind: André Wehrli,^[1]^[2] SDC, introduced the draft Mbale Call for Action, amended to the Mbale Call for Scaling Up Action, in which WMF 2016 calls on governments, politicians,

decision makers, development and multilateral agencies, financing institutes as well as mountain stakeholders to form policy, gather knowledge and take action on, *inter alia*: reaching the targets of the Paris Agreement and SDGs through specific attention to mountains regions; recognizing upstream and downstream links, especially with regards to mountain ecosystem services; speaking with one global mountain voice; and promoting the inclusion of mountains in international processes and negotiations.

Participants suggested amendments to the draft, including further emphasis on, among other things, traditional knowledge, access and benefits sharing, biopiracy and indigenous peoples’ rights, the important links between mountains and lowlands and private sector engagement.

HIGH-LEVEL SEGMENT: MOUNTAINS AND THE DEVELOPMENT AGENDA

The high-level segment took place on Wednesday morning and was facilitated by Eugene Anangwe, Rwanda.

Ronald Kibuule, State Minister for Water, stressed that local communities depend on mountain habitats and called for action on improving capacity within these communities and financing SMD. Kibuule concluded by reaffirming Uganda’s commitment and support for the outcomes reached at this Forum.

Thomas Hofer, MP, summarized past technical discussions and the draft Mbale Call for Action, noting it addresses mountain challenges related to, *inter alia*, climate change, ES, poverty reduction, SDGs and financing mechanisms, especially the Green Climate Fund and the GEF SGP. Hofer highlighted the need to link science, policy and the traditional knowledge of local communities, and stressed the importance of ensuring mention of mountains in international negotiation processes, particularly the upcoming IPCC report.

High-level panel discussion: In introductory remarks, Andrew Taber, Mountain Institute, highlighted the need to disaggregate mountain issues, especially those relating to gender and equity, and called for a mountain country block at multilateral environmental negotiations.

Hanta Rabetaliana, Permanent Secretary, Ministry of Environment, Ecology, Sea and Forests, Madagascar, noted the need for, *inter alia*: technical, political and legal support for SMD, interministerial talks; and bottom-up decision making approaches.

His Holiness Kyabgön Chetsang, Ambassador for the UN Mountain Partnership, underscored the “universal problems” mountain communities face, including climate change, landslides and other natural and human-caused hazards, and the importance of “doing good deeds” for plants, animals and all living beings, noting that “we need prayers, but they must be complemented by actions.”

On moving beyond recognizing problems and toward implementing solutions, Marisa Young, MP, said working with local communities to build capacity and identify needs should dictate the actions civil society undertakes.

Jesca Eriyo, EAC, said that working with partners and communities is key to implementing global frameworks, especially in transboundary ecosystems, and noted that national and regional policies must be harmonized in order to scale-up and mainstream SMD pilot projects in SMD.

Rustam Latifzoda, Member of Parliament, Tajikistan, underscored the need for continuity and consistency in government work, stressed the importance of private-public partnerships and supported the Mbale Call for Action.

In the ensuing discussion, participants highlighted work done to promote SMD, measures undertaken to link science to policy and also to traditional knowledge and the need for increased participation by local mountain communities in meetings such as the Forum.

High-level panel discussion: Anangwe moderated a panel on mountains and climate change, with high-level panelists Lawrence Songa, Member of Parliament, Uganda; Flavia Nabugere, former Minister for State for Environment, Uganda; Said Asanov, Aga Khan Foundation; Nasirul Alam, Ministry of Chittagong Hill Tracts Affairs, Bangladesh; Ambassador Mumtaz Kassam, Uganda Embassy in Italy; and Pitamber Prasad Dhyani, G.B. Pant Institute of Himalayan Environmental and Sustainable Development.

In introductory remarks, Golam Rasul, ICIMOD, highlighted the threats that climate change poses to mountain livelihoods and ecosystems, and called for policy action and strong partnerships to mitigate its impacts and adapt.

Songa said cost-benefit analyses of action versus inaction on climate change are a valuable tool for prompting political action, and stressed the need to address corruption to ensure resources reach mountain communities for which they are intended. Munaaba highlighted the increasing intensity and frequency of floods in mountain communities in Uganda, and the implications of climate-related events on livelihoods and households. Asanov discussed his work with communities in remote mountain areas of Kyrgyzstan, including a project to improve irrigation channels, noted that climate change should be a cross-sectoral priority for health, education and NRM. Alam highlighted Bangladesh's vulnerabilities natural disasters, including extreme flooding and cyclones, and called for commitment from countries to address climate change. Kassam reviewed the importance of FAO's work in addressing climate change as well as equity and gender issues, and highlighted the substantial fund established for climate change activities by the European Union, urging mountain countries to tap into this resource. Dhyani identified climate change, the overexploitation of natural resources and human migration as key problems in the Himalayan region, and said that further research on disaster reduction measures and the empowerment of local communities in the Himalaya were ways to address them.

The Minister of State for Tourism, Kiwanda Godfrey, thanked all participants and closed the High Level Segment.

CLOSING OF THE FORUM

On Wednesday afternoon, Paul Mafabi, Ministry of Water and Environment, Uganda, facilitated the closing session. The Forum came up with a Mbale Call for Scaling Up Action in SMD called "Don't Leave the Mountains Behind," which was summarized by Salome Alweny, ARCOS, during the closing session of the Forum. The Call includes several actions at local, national, regional and global level in terms of policy, knowledge and action. Noting that the Mbale Call for Scaling Up Action

offers a guide for participants to take home and translate into SMD, André Wehrli, SDC, said "we need to move from words to actions, and we need to do it now." Sam Kanyamibwa, ARCOS, thanked the Ugandan government and co-organizers for making the Forum possible, and participants for discussing the challenges and opportunities of SMD during the meeting.

His Holiness Kyabgön Chetsang, Ambassador for the UN Mountain Partnership, described efforts to promote SMD in the Himalaya, including through "ice stupas" that store glacial meltwater for irrigation, and concluded with a blessing. This was followed by a ceremonial handover from Africa to Central Asia, the region that will host the next World Mountain Forum in 2018.

Ronald Kibuule, State Minister for Water, Uganda, noted that this Forum was the first of its kind in Africa, and said it showed Uganda's clear commitment to sustainable mountain management.

Presenting a statement on behalf of Ugandan President Yoweri Museveni, Vice-President Edward Ssekandi noted that "mountains are a cornerstone of humanity and of sustainable development," pledged to continue supporting SMD initiatives in Uganda and called on other mountainous countries to integrate SMD into their national development agendas.

Ssekandi officially launched four new publications: Uganda Sustainable Mountain Development Strategy, published by Uganda's Ministry of Water & Environment; Sustainable Mountain Development in East Africa in a Changing Climate, published by UNEP, GRID-Arendal, ARCOS and EAC; Climate Change Adaptation Strategies – An Upstream-Downstream Perspective, published by SMD4GC Partners; and Towards an Integrated Approach to Nutrition Security in the Hindu Kush Himalayan Region, published by ICIMOD.

The meeting closed at 5:22 pm.

UPCOMING MEETINGS

6th International Symposium for Research in Protected Areas: This symposium will gather researchers and protected areas managers, as well as individuals from government, business, non-governmental organizations, to discuss protected areas in mountains and other landscapes. **date:** 2-4 November 2016 **location:** Salzburg, Austria **contact:** University of Salzburg **phone:** +43 (0)6562 40849 **email:** symposium2017@salzburg.gv.at **www:** <http://www.nationalparksaustria.at/de/pages/6th-international-symposium-for-research-in-protected-areas-2017-d-95.aspx>

UNFCCC COP 22: The 22nd session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) and associated Mountain Partnership side events will take place in Marrakesh, Morocco from 7-18 November 2016. **dates:** 7-18 November 2016 **location:** Marrakesh, Morocco **contact:** UNFCCC Secretariat **phone:** +49-228-815-1000 **fax:** +49-228-815-1999 **email:** secretariat@unfccc.int **www:** <http://unfccc.int>

CBD COP 13: The thirteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP 13), including the eighth meeting of the Conference of the

Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP 8), and the second meeting of the Conference of the Parties serving as the Meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing (COP/ MOP 2), will be held concurrently. **dates:** 4-17 December 2016 **location:** Cancun, Mexico **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

Mountains and Sacred Landscapes: This international conference on the theme of mountains and sacred landscapes will be held in New York City on 20-23 April 2017. The conference will include the latest research on the intersections of religion, nature and culture, and sustainable futures in the Himalaya and other mountain regions. **dates:** April 20 – 23, 2017 **location:** New York City, USA **contact:** India China Institute **phone:** +1-212-229-6812 **email:** indiachina@newschool.edu **www:** <http://www.indiachinainstitute.org/2017conference/>

Fifth Global Meeting of the Mountain Partnership: The Fifth Global Meeting of the Mountain Partnership (MP) was to take place 21-22 October 2016 in Mbale, Uganda, but has been postponed to 2017. The new date and venue are to be determined. This meeting will discuss the vulnerability of mountain peoples and strategies for delivering on SDGs, as well as take stock of the progress on the MP work plan. **dates:** March 2017 **location:** to be determined **contact:** Thomas Hofer, Mountain Partnership Secretariat **email:** thomas.hofer@fao.org **www:** <http://www.mountainpartnership.org>

World Mountain Forum 2018: The next World Mountain Forum will convene in 2018 in a Central Asian country to be determined to continue discussions on local, regional and global

experience in mountain development, and strategies to further SMD. **dates:** 2018 **location:** Central Asia **contact:** Mountain Forum Global Node Office **phone:** +51-1-618-9400 **email:** mtnforum@mtnforum.org **www:** <http://www.mtnforum.org>

GLOSSARY

ARCOS	Albertine Rift Conservation Society
CONDESAN	Consortium for the Sustainable Development of the Andean Ecoregion
EAC	East Africa Community
EBA	ecosystem-based adaptation
ES	ecosystem services
FDDM	Foundation for the Sustainable Development of Mountain Regions
GEF	Global Environment Facility
ICIMOD	International Centre for Integrated Mountain Development
MP	Mountain Partnership
NRM	natural resources management
PES	payments for ecosystem services
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
WMF	World Mountain Forum

EVENT PARTNERS

The event partners section features a grid of logos. The top row includes ARCOS NETWORK, Mountain Partnership, CONDESAN (Consortio para el Desarrollo Sostenible de la Ecorregión Andina), and the Swiss Agency for Development and Cooperation SDC (Schweizerische Eidgenossenschaft, Confédération suisse, Confederazione Svizzera, Confederaziun svizra). The second row shows FDDM, ICIMOD, UNIVERSITÄT BERN (with a 'u^b' logo), UCA, and Universität Zürich (UZH). The 'In collaboration with' section includes EAC (East Africa Community), FAO (Fédération Agricole des Nations Unies), UNEP (United Nations Environment Programme), and UNESCO (United Nations Educational, Scientific and Cultural Organization). The bottom row features UNDP (United Nations Development Programme), IUCN (International Union for Conservation of Nature), the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, and the République Française (Liberté • Égalité • Fraternité).