



UNIVERSITY
OF CENTRAL ASIA

MOUNTAIN SOCIETIES RESEARCH INSTITUTE

Mountain Societies Research Institute: Activities, Outcomes & Partnerships



2011-2012



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Research Institute:
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& Partnerships**

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Abbreviations

CACILM	Central Asian Countries Initiative for Land Management
CAMP	Central Asian Mountain Partnership
CDE	Centre for Development and Environment, University of Bern
CIDA	Canadian International Development Agency
DFID	Department for International Development
GIS	Geographic Information Systems
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IDRC	International Development Research Centre
MPS	Mountain Partnership Secretariat
MSDSP	Mountain Societies Development Support Programme
MSRI	Mountain Societies Research Institute
NCCR North-South	National Centre of Competence in Research North-South
PALM	GEF/UNEP/UNU Project on Sustainable Land Management in the High Pamir and Pamir-Alai Mountains
Rio+20 Summit	United Nations Conference on Sustainable Development
SDC	Swiss Agency for Development and Cooperation
UCA	University of Central Asia
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNU-EHS	United Nations University Institute for Environment and Security
WOCAT	World Overview of Conservation Approaches and Technologies

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The Mountain Societies Research Institute (MSRI) is dedicated to supporting and enhancing the resilience and quality of life of mountain societies through the generation and application of sound research. MSRI has five objectives:

- *To generate new knowledge on mountain societies from academically sound research;*
- *To enhance Central Asian capacity to conduct sound research relevant to mountain societies;*
- *To serve as a knowledge hub for scholars, development practitioners and decision-makers;*
- *To inform policy and practice through sound research; and*
- *To contribute to the development of UCA academic programmes relevant to mountain societies.*

Please visit: <http://msri.ucentralasia.org/>

“MSRI is UCA’s first research institute and, in just two years, exemplifies the commitment we have to being at the nexus between research and action as we promote the social and economic development of Central Asia, particularly its mountain communities.”

Dr Bohdan Krawchenko, UCA Director General



Director's Message



In March 2011, the Board of the University of Central Asia (UCA) approved the establishment of the University's first research centre, the Mountain Societies Research Centre (MSRC). The Centre was launched in June 2011 at the International Symposium on Pastoralism in Central Asia: Status, Challenges and Opportunities in Mountain Areas, which was co-sponsored by MSRC. In early 2013, the Centre officially became an Institute within UCA's Graduate School of Development and its name was changed to the Mountain Societies Research Institute (MSRI) to reflect MSRI's expanded role.

Supporting the mission of UCA to promote the social and economic development of Central Asia, particularly its mountain societies, MSRI supports and enhances the resilience and quality of life of mountain societies through the generation and application of sound research. Mountain societies face great challenges, while also harbouring unique physical and cultural resources and opportunities. The lack of rigorously investigated and documented scientific understanding of both, combined with the need to apply such scientific findings to policy and programmes that improve the quality of life in mountain communities inspired the creation of an institute dedicated specifically to the study of mountain societies at UCA. MSRI was designed as a collaborative effort and works closely with other stakeholders to create important networks and partnerships to further its mission.

In its first two years of operation, MSRI successfully laid the foundation for its role as a facilitator of research, information exchange and action by scholars, practitioners and policy makers on critical issues facing mountain societies of Central Asia. MSRI serves as a regional focal point for key international networks and agencies, including the Mountain Partnership Secretariat (MPS) and the National Centre of Competence in Research (NCCR) North-South, and has been a key player in international advocacy efforts to ensure that issues facing Central Asian mountain societies are well-represented at international fora such as the United Nations Framework Convention on Climate Change (UNFCCC COP17) and the United Nations Conference on Sustainable Development (Rio+20 Summit).

Closer to home, MSRI has engaged in joint research efforts, producing resources and guidelines to support efforts by Central Asian mountain communities as they harness their unique natural and cultural resources to address emerging issues. Our series of research reviews and background papers are underway in critical topics facing mountain societies in the region, documenting existing knowledge and identifying gaps to be addressed through future research and action. Last year, MSRI launched its Knowledge Hub, an on-line interactive platform for stakeholders to access and exchange information on mountain societies.

This report describes these efforts, and the Institute's outputs, team and partnerships in our first two years of operation. As MSRI looks ahead, we anticipate building our human, knowledge and institutional capacity to better address the needs of mountain communities of Central Asia and look forward to strengthening and developing new partnerships. We invite you to join us in this endeavour to generate and advance solutions that will safeguard the unique resources, while addressing the critical issues, of mountain societies around the world.

Dr Horst Weyerhaeuser
Director

Events

International Symposium on Pastoralism in Central Asia: Status, Challenges and Opportunities in Mountain Areas

Mountain Societies Research Institute (MSRI) and National Centre of Competence in Research (NCCR) North-South with Mountain Partnership Secretariat (MPS) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

13-18 June 2011

Bishkek, Kyrgyz Republic

The Symposium was attended by 140 participants from over 20 countries to create a deeper understanding of the complex issues related to pastoralism in mountain regions and identify measures to inform policy and programmes. It was opened by His Excellency Torogul Bekov, Minister of Agriculture, Kyrgyz Republic, who highlighted the significance of pastoralism in the development of mountain societies. The keynote presentation was based on MSRI's first background paper, *Pastoralism and Farming in Central Asia's Mountains: A Research Review*, and sessions were held on historical and contemporary challenges of agro-pastoral production; pasture governance in transition; sustainable livestock management; plant-animal interactions and disease mitigation; and development interventions and pastoral committees. Field excursions to Chui and Naryn districts provided the opportunity to meet local herders, learn about current pasture use and management, and observe the impact of related policies and initiatives.



Dr Yuri Badenkov and MSRI Senior Research Fellows Dr Daniel Maselli and Dr Chad Dear present their research and participate in discussions at the International Symposium on Pastoralism, which engaged 140 participants from over 20 countries.

World Overview of Conservation Approaches and Technologies (WOCAT) Share Fair on Sharing Sustainable Land Management Knowledge to Respond to Global and Local Issues and 15th Annual WOCAT Workshop and Steering Meeting

Mountain Societies Research Institute (MSRI), National Centre of Competence in Research (NCCR) North-South and World Overview of Conservation Approaches and Technologies (WOCAT) management

21-22 June and 23-27 June 2011

Bishkek and Naryn, Kyrgyz Republic

One hundred participants from twenty five countries came together to create synergies, strengthen collaboration and harmonise activities between different stakeholders, and address climate change adaptation and mitigation, pasture and grazing land management, and new WOCAT modules. The events were opened by His Excellency Torogul Bekov, Minister of Agriculture, Kyrgyz Republic, who emphasised the importance of sustainable natural resource management and environmentally-friendly agriculture.



Participants at the WOCAT Workshop in Naryn engage in discussions, activities and field visits to Tolok and the surrounding areas of Naryn and Jergetal, addressing land management strategies and exploring potential partnerships.



His Excellency Murodali Alimardon, Deputy Prime Minister of Tajikistan, Talbak Salimov, Minister of Environment and Chairman of the Committee on Environmental Protection, Government of the Republic of Tajikistan and Olman Serrano, Coordinator of the Mountain Partnership are among panelists engaging 35 experts from Tajikistan, Azerbaijan, Iran, Kyrgyz Republic, Nepal and Mongolia to strengthen regional negotiations on climate change.

Regional Technical Consultation on Climate Change Impacts, Adaptation and Development in Mountain Regions

Mountain Societies Research Institute (MSRI) and Mountain Partnership Secretariat (MPS) with support from Government of the Republic of Tajikistan and the World Bank
9-11 November 2011
Dushanbe, Tajikistan

Thirty-five experts from Tajikistan, Azerbaijan, Iran, Kyrgyz Republic, Nepal and Mongolia came together to strengthen regional inputs for climate change negotiations and the integration of concerns over potential impacts of climate change and adaptation options in mountain ecosystems into international processes, including the United Nations Framework Convention on Climate Change (UNFCCC or COP17) and the United Nations Conference on Sustainable Development (Rio+20 Summit). For more information: <http://www.mountainpartnership.org/>.





The Mountain Pavilion at the Rio+20 Summit was a hub of exhibitions and presentations. Yismail Dairov, Adviser to the Minister of Environment Protection and Forestry of the Kyrgyz Republic, presents the country's position for Rio+20. Ms Elbegzaya Batjargal, Coordinator of Mountain Partnership Secretariat Central Asia Decentralized Hub discusses joint MPS-MSRI activities with Kyrgyz Vice Prime Minister Joomart Otorbaev, who also addressed participants at the Pavilion.

United Nations Conference on Sustainable Development (Rio+20) and Mountain Pavilion

*Mountain Societies Research Institute (MSRI), Mountain Partnership Secretariat (MPS), Zoï Environment Network and GRID-Arendal
20-22 June 2012
Rio de Janeiro, Brazil*

MSRI and MPS Central Asian Hub were involved in the lead-up to the United Nations Conference on Sustainable Development (Rio+20 Summit). They jointly coordinated the Central Asian regional assessment of progress related to the 1992 Earth Summit goals specific to the sustainable development of mountain areas (Chapter 13 of Agenda 21) with Zoï Environment Network and GRID-Arendal and facilitated pre-conference strategy sessions with MP members and other stakeholders. MPS Central Asian Hub and MP members participated in the Rio+20 conference. At the Mountain Pavilion, an area showcasing sustainable mountain development practices, MPS and MP members spearheaded the high visibility event, *Central Asian Mountains on the Road to Green Economy: The Kyrgyz Case of Learning and Good Practices*, and participated in the Third Global Meeting of Mountain Partnership, technical workshops and events, and multi-media presentations.

“The Mountain Partnership Secretariat Central Asian Hub and MSRI worked with our partners in government and mountain communities to strengthen capacity and ensure that the concerns of Central Asian mountain communities were represented at the United Nations Conference on Sustainable Development. We will continue to focus on the commitments made at the Conference.”

*Elbegzaya Batjargal,
Regional Programme Officer for Mountain Partnership Secretariat
Decentralized Hub for Central Asia*





Participants at the interactive marketplace for sustainable mountain development share information, visit booths and learn about best practices in the region from Mountain Partnership members from Central Asia, Altai and Dagestan (group photo below), the Aga Khan Development Network, Aga Khan Foundation and other participating organisations.

International Mountain Day

Mountain Partnership Secretariat (MPS), Mountain Societies Research Institute (MSRI), MP members, United Nations Food and Agriculture Organisation Country Office, the Aga Khan Foundation and the Aga Khan Development Network in the Kyrgyz Republic.

11 December 2011 and 2012

Bishkek, Kyrgyz Republic

In 2011, International Mountain Day (IMD) celebrations included a Mountain Stakeholder Gathering to facilitate information exchange between MP members and partners; an exhibition *The Beast and Beauty of the Forests and Mountains* by environmental activist and photographer Vlad Ushakov, which traveled to the three UCA campus sites; and traditional cuisine catered by the Babuskhas-Baibiches of Kemin village. In 2012, IMD celebrations marked the 10th anniversary of the International Year of Mountains and the MPS Central Asian Hub organised an interactive market place for sustainable mountain development best practices, with participation of MPS members from Central Asia, Altai and Dagestan.





The 2012 CAMP Forum in Dushanbe provided a unique opportunity for MSRI to present its research review on sustainable land management, engage in discussions with partners, distribute new MSRI publications and launch the MSRI Knowledge Hub

CAMP Forum on Sustainable Development of Central Asian Mountain Regions 2012: Sustainable Land Management: Up-scaling Benefits for Rural Communities

*CAMP Kukhiston, Mountain Societies Research Institute (MSRI) and Mountain Partnership Secretariat (MPS)
4-6 October 2012
Dushanbe, Tajikistan*

MSRI and MPS had high-profile roles at the 2012 CAMP Forum. In a special plenary session, MSRI Research Fellow Zhyldyz Shigaeva facilitated a stakeholder feedback session on the preliminary findings of the MSRI Background Paper on Sustainable Land Management in Central Asian Mountain Areas. In another plenary session, MSRI launched its on-line Knowledge Hub and registered its first users (see page 16). MSRI also distributed the special issue of the journal *Mountain Research and Development on Central Asian Mountain Societies in Transition* and the Russian version of the *Sustainable Mountain Development in Central Asia: From Rio 1992 to Rio 2012 and Beyond* report. The report was developed by MPS, MSRI, Zoï Environment Network and GRID-Arendal, with support from the Swiss Agency for Development and Cooperation. The MPS Central Asian Hub facilitated a strategic planning session with 20 members from the Kyrgyz Republic, Tajikistan, Kazakhstan, Dagestan and Altai Republic of Russia, and MSRI to review the tools and instruments designed to assess member contributions, enrich regional and local platforms serving mountain communities and facilitate joint initiatives, and update an inventory of member needs and demands, to better enable the Hub and its members to address them.

Rapid Rural Appraisal Training Workshop: Mountain Societies Research Institute (MSRI) and the Mountain Partnership Secretariat (MPS) Central Asian Hub organised a one-day Rapid Rural Appraisal (RRA) workshop facilitated by Visiting Research Fellow/Fulbright Fellow Ailey Hughes. RRA is a family of methodologies designed to encourage the participation of local communities in the collection and use of information to improve their livelihoods. The workshop introduced 30 participants from the region to RRA theories, research tools and practical training exercises. A critical outcome of the process was the Russian translation and production of the manual *Tree and Land Tenure: Rapid Appraisal Tools*, (Karen Schoonmaker Freudenberger, Food and Agriculture Organisation, 1994) by MSRI and MPS, for use in the region (see page 19).

“Rapid Rural Appraisal is a practical participatory research tool that gathers a great depth of information on local realities in a short period of time. RRA encourages community participation in the research exercises and the final review of the information gathered.”

Ailey Hughes, MSRI Visiting Research Fellow/Fulbright Fellow



Mountain Partnership Shared Learning Sessions: In 2012, the Mountain Partnership Secretariat (MPS) Central Asian Hub launched Shared Learning Sessions, a series of knowledge sharing platforms for MP members and other stakeholders to review best practices, assess available resources and explore joint initiatives. Two Learning Sessions were hosted at the Mountain Societies Research Institute (MSRI): *Study-Tour to India* and *Launching of the Regional Report and Briefing on the Rio+20 Conference Outputs*.

Mountain Partnership Meetings with Donors: In 2012, the Mountain Partnership Secretariat (MPS) Central Asian Hub launched a new platform for MP members and donors to come together and share information on member projects and donor resources. The first meeting was attended by 12 MP member organisations in the Kyrgyz Republic and donors, Food and Agriculture Organisation and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Discussions focused on natural resource management and sustainable mountain development.

World Overview of Conservation Approaches and Technologies (WOCAT) Meeting for Sharing Updates and Discussing Future Collaboration: As part of an ongoing regional collaboration, the National Centre of Competence in Research (NCCR) North-South Regional Coordination Office, together with Mountain Societies Research Institute (MSRI) Senior Research Fellow Bettina Wolfgramm and



Participants practice Rapid Rural Appraisal methods at the MSRI/MPS training workshop, based on the manual ‘Tree and Land Tenure: Rapid Appraisal Tools’ made available in Russian by MSRI and MPS.

WOCAT Director, University of Bern, Hanspeter Liniger, organised the WOCAT meeting at University of Central Asia (UCA) in Bishkek on 24 May 2012. Nineteen participants participated from CAMP Alatoo, Deutsche Gesellschaft für Internationale Zusammenarbeit/Central Asian Countries Initiative for Land Management (GIZ/CALCILM), Mountain Societies Development Support Programme Tajikistan, United Nations Development Programme, the United Nations University Institute for Environment and Human Security/Sustainable Land Management in the High Pamir and Pamir-Alai Mountains (UNU-EHS/PALM), PALM, Helvetas, NCCR North-South and the Centre for Development and Environment (CDE), University of Bern. MSRI was represented by Director Horst Weyerhaeuser, Senior Research Scientist Chad Dear, Senior Research Scientist Roman Lahodynsky and Research Fellow Zhyldyz Shigaeva.

3rd International Conference on Research for Development (ICRD): Research for Global Transformation: Mountain Societies Research Institute (MSRI) Research Fellows and staff participated in this conference organised by the National Centre of Competence in Research (NCCR) North-South in Bern, Switzerland from 20-22 August 2012. MSRI Research Fellow Ainura Nazarkulova (with J Strobl and M Belgiu) had a poster presentation on *Cloud GIS as a Collaboration Platform for Development Research and Implementation*, and MSRI Research Fellows Zhyldyz Shigaeva and Bettina Wolfgramm and Senior Research Scientist Chad Dear presented on *Sustainable Land Management in Mountain Regions of Central Asia: A Review of Literature from the Last 20 Years*.

1st International Graduate School North-South Summer School and NCCR North-South Integrative Training and Capitalising on Experience (ITC 2012): These events took place from 23-29 August 2012 in Meiringen, Switzerland. The course focused on institutions, livelihoods, conflicts; approaches for research on global change and sustainable development. Mountain Societies Research Institute Research Fellow Zhyldyz Shigaeva and University of Central Asia Graduate Fellow Farrukh Nazarmavloev participated in the training, and Farrukh presented his PhD research entitled *A Soil Spectroscopy Library and its Application for Soil Fertility Assessment on Agricultural Lands of Tajikistan* during the poster sessions.

Roundtable on Enhancing Food Security and Natural Resource Management for Mountain Societies in Central Asia: The Roundtable was hosted by the Mountain Societies Research Institute on 10 June 2011 in Dushanbe, Tajikistan. Discussions focused on the function, structure and substance of a collaborative research programme on food security and natural resource management in mountain areas of Central Asia. Over 30 participants attended, including representatives from Michigan State University and four other United States land grant universities, the Aga Khan Foundation, the Mountain Societies Development Support Programme, the World Food Programme, the United States Agency for International Development and researchers from other organisations in Tajikistan and the Kyrgyz Republic.

Mira Arynova, Coordinator of the Central Asian Regional Office of NCCR North-South presents the MSRI/NCCR North-South Herders' Manual for Kyrgyz Pastures (see page 19) to Mr Abdimalik Egemberdiev, Pasture Department Director, Kyrgyz Republic, at the Manual launch. The event was attended by herders, scientists and representatives of non-governmental and international organisations.



Projects

Geographic Information Systems

Geoprocessing for Natural Resource Monitoring – Capacity Strengthening in Tajikistan and Kyrgyzstan (SCOPEs): This project was a three year partnership between the University of Central Asia (UCA), Kyrgyz-Russian Slavic University, Tajik Agrarian University and the Centre for Development and Environment, University of Bern. The partnership was designed to increase geographic information systems (GIS) capacity by building skills and resources, as well as opportunities in research, education and data management in Kyrgyzstan and Tajikistan. Funded by the Swiss National Science Foundation and the Swiss Agency for Development and Cooperation, the project established GIS facilities and online data management systems, facilitated training and curricula development, linked partners, and provided financial support for participation in conferences, educational and training programmes. Workshops were facilitated on *GIS Education and Training*, *GIS in Research*, *GeoData Management* and *Spatial Data Infrastructure*. Training modules were translated into Russian and taught at universities in the region. The partnership also provided support for Central Asian scholars to attend GIS conferences and workshops. It also supported the enrolment in masters level programmes and doctoral research projects by Central Asian scholars, including Graduate Fellows of the UCA Central Asian Faculty Development Programme.

Trans-European Mobility Programme for University Studies - Geoinformatics: Managing Energy, Resources, Environment (Tempus-GEM): The University of Central Asia (UCA) receives support from Tempus-GEM to develop and implement an international, interdisciplinary postgraduate curriculum in Geoinformatics, with a focus on managing critical resources and the emerging economies of Central Asia. The project is jointly coordinated by the Centre for Geoinformatics, University of Salzburg, Austria and the Austria-Central Asia Centre for Geoinformatics. Through the grant, the UCA Knowledge Management Unit was involved in e-Learning activities and implemented an e-Learning Moodle platform (<http://gem-moodle.ucentralasia.org/>) to support the project's remote and geographically distributed training requirements. Researchers involved in the project include researchers working with the Geoprocessing for Natural Resource Monitoring - Capacity Strengthening in Tajikistan and Kyrgyzstan (SCOPEs) project and UCA Central Asian Faculty Development Programme Graduate Fellows.

GIS Mapping: Base maps of Osh city, Kyrgyz Republic were prepared as part of the University of Central Asia (UCA) Osh Business Mapping Project, which utilised various technologies, including geographic information systems (GIS), for data collection on small businesses to support microfinance planning and marketing strategies. Maps were also prepared using GIS data from the Naryn Baseline Survey on Natural Resources of Naryn Oblast, Population Density of Naryn Oblast, Household Survey in Naryn Oblast and Sentinel Sites in Naryn Oblast.



Participants utilise geodetical equipment at a GIS training workshop at the Tajik Agrarian University (TAU), facilitated through a Swiss-funded partnership between UCA, TAU, Kyrgyz-Russian Slavic University and the Centre for Environment and Development, University of Bern to increase GIS capacity in the region.

Research Reviews and Studies

Research Review on Sustainable Land Management (SLM): The SLM review is the second in a series of Mountain Societies Research Institute (MSRI) research reviews which assess the state of knowledge and develop recommendations for research in key thematic areas. A review of over 130 English and Russian publications on SLM was conducted to assess existing knowledge; identify key policies and relevant organisations, programmes, projects and individuals; assess the impact of scientific knowledge on policies, programmes and practices; and consider gaps in knowledge and lessons learned to generate a refined research agenda for SLM to improve the resilience and quality of life of Central Asian mountain societies. The findings will be published in 2013 as a *MRSC Background Paper*.

Naryn Baseline Study (NBS), Kyrgyz Republic: The NBS was conducted to enhance understanding of quality of life issues and challenges in mountain communities and highlight opportunities for agencies to adapt or initiate programmes. It included a comprehensive inventory and mapping of the infrastructure of Naryn district using secondary data sources; six qualitative sentinel site studies to assess how people view their quality of life; and a survey of 1600 households. The NBS generated information on mountain communities, and built research capacity through the creation and support of local research teams. Outcomes include an *Inventory of Socio-Economic Institutions and Infrastructure*; a *Household Survey Report*; a *Sentinel Studies Report* and six individual case studies on the sentinel sites; and a *Summary Report*.

Increasing Biodiversity and Economic Development in Mountain Areas of Kyrgyzstan: This project sought to identify native species of fruit trees, berries, and shelter breaks which grow in high elevation areas of the Pamir Alai and Tien Shan region and (re)introduce these species to prevent soil erosion and increase food security. The Mountain Societies Research Institute (MSRI) coordinated and provided oversight for the research component of this project, which was funded by the Prince Sadruddin Aga Khan Fund for the Environment and implemented with the Mountain Societies Development Support Programme (MSDSP). The research team produced two reports: a practitioner-oriented report for MSDSP that provides specific recommendations for (re)introducing native fruit tree, berry and shelter-break species to high-elevation areas; and a comprehensive literature review of all known fruit, berry, and shelter break tree species that grow in high elevation areas, their basic characteristics, status and needs.

Technical Expertise in the Field of Knowledge Management for Sustainable Land Management: In collaboration with the Centre for Environment and Development, University of Bern, the Mountain Societies Research Institute (MSRI) used support from the Swiss Agency for Development and Cooperation Integrated Watershed Management and Disaster Risk Reduction Programme to support the creation of the MSRI Knowledge Hub (see page 16).

Meeting in Jardy-Suu to discuss community planting decisions



Knowledge Hub



<http://msri-hub.ucentralasia.org/>

The Mountain Societies Research Institute (MSRI) Knowledge Hub is an interactive source of information on Central Asian mountain societies and an interface for researchers, practitioners and policymakers. The Hub is a dynamic platform created by the University of Central Asia (UCA) Knowledge Management Unit and includes an extensive library database and an advanced search function with multiple filters to aid users to locate specific information. Materials are primarily in English and Russian, but also include Central Asian and other languages, and users can specify language in their search.

Key Knowledge Hub Features



MSRI Library, including special collections and the collected works of projects conducted in Central Asia with fully searchable archives.



Experts Database where users can upload and access biographical details of experts contributing to mountain studies.



Project databases and information, such as the archives of the Kyrgyz-Swiss Forestry Support Programme and information on the Swiss Agency for Development and Cooperation (SDC)-supported Integrated Watershed Management project, the Central Asian Countries Initiative for Land Management (CALCILM), and National Centre of Competence in Research (NCCR) North-South projects.

Applications to search for information and networks studying mountain communities and related issues in Central Asia;



Information and data on thematic studies on the region, with a current focus on Sustainable Land Management (SLM);



Information on partners and contributors to the Knowledge Hub.

Publications

“There are a large number of people living in mountain areas in the region who are custodians of the vast natural resources but live under difficult conditions which increase their economic and social vulnerability. MSRI works with national, international and regional experts to conduct research that captures existing knowledge and generates new data to inform policy makers, development projects and civil society organisations to improve the standards of living of mountain communities.”

Dr Nasreen Dhanani, UCA Director of Research



Special issue: Central Asian Mountain Societies in Transition. Mountain Research and Development

University of Central Asia (UCA) and International Mountain Society (IMS)

Mountain Societies Research Institute (MSRI) researchers served as guest editors of this special issue of Mountain Research and Development (MRD), an international peer-reviewed journal published by the International Mountain Society, of which UCA and MSRI are institutional members. The issue features a synthesis of MSRI's first background paper on mountain pastoralism as well as a statement highlighting MSRI's establishment and recent activities. Other articles include analyses of development initiatives on pasture governance reforms, climate change adaptation, large carnivore conservation, thermal insulation, and the quality of life in remote mountain communities in Afghan Badakhshan. The issue also includes innovative scientific research on differing meanings of pasture, changing pasture use, pasture tenure, farming system modeling, and livelihoods in conflict areas. UCA translated and produced the issue in Russian, making it more accessible to scholars and practitioners in the region. This was the first time a full issue of MRD was translated. (English & Russian, 2012). <http://www.bioone.org/toc/mred/32/3>



Sustainable Mountain Development in Central Asia: From Rio 1992 to Rio 2012 and Beyond

University of Central Asia (UCA), Mountain Partnership Secretariat (MPS), Zoï Environment Network and GRID-Arendal

This report is based on a Central Asian regional assessment of progress related to the 1992 Earth Summit goals specific to the sustainable development of mountain areas (Chapter 13 of Agenda 21) conducted by the Mountain Societies Research Institute (MSRI), the MPS Central Asia Hub, Zoï Environment Network and GRID-Arendal. The assessment contributed to a global synthesis report calling attention to the unique natural resources and vulnerabilities of mountain areas at the United Nations Conference on Sustainable Development (Rio+20 Summit) in June 2012. The report includes background information on mountain ecosystems and societies in Central Asia; case studies of innovative responses to the challenges and opportunities facing mountain communities in the region; and recommendations for action. (English & Russian 2012)

MSRI Background Papers

Launched in 2011, the Mountain Societies Research Institute (MSRI) Background Paper Series strategically identifies research priorities and pathways to application for each of MSRI's core thematic areas. Through structured and thorough analysis of various types of literature and stakeholder engagement, the papers assess the state of knowledge in each thematic area as they relate to Central Asian mountain societies, identify and prioritise knowledge gaps, and identify opportunities for linking research to decision making for policy and practice. The papers serve as a foundation for future MSRI primary research initiatives. The first Background Paper was on Pastoralism and Farming in Central Asia's Mountains (see below). The second, on Sustainable Land Management, will be published in 2013 (see page 21). Papers on Food Security and Farming Systems, Mountain Tourism and Sustainability, and Spatial Information and Decision Support Systems are forthcoming.

Pastoralism and Farming in Central Asia's Mountains: A Research Review

Mountain Societies Research Institute (MSRI) Background Paper 1. Carol Kerven, Bernd Steimann, Laurie Ashley, Chad Dear and Inam-ur-Rahim.

Presented at the International Symposium on Pastoralism in Central Asia: Status, Challenges and Opportunities in Mountain Areas, hosted by MSRI and the National Centre of Competence in Research (NCCR) North-South, this paper reviews the distinctive characteristics of mountain agro-pastoralism in Central Asia. It includes a discussion of past and present research directions and background to farming and raising livestock in the mountains. Key findings focus on biophysical, agricultural, climatic, governance and socio-economic aspects of the material, and the social and political environments within which agro-pastoralism is practiced in the region. Recommendations for future research are included. (English & Russian, 2011)



MSRI Manuals & Training Resources



Herders' Manual for Kyrgyz Pastures

Inam-ur-Rahim and Daniel Maselli. University of Central Asia (UCA) and National Centre of Competence in Research (NCCR) North-South

and

Herders' Manual for Western Pamir Pastures

Inam-ur-Rahim and Daniel Maselli. University of Central Asia (UCA) and National Centre of Competence in Research (NCCR) North-South

Drawing on the expertise of Central Asian herders, these manuals provide a combination of traditional knowledge about key pasture plants and current scientific knowledge about sustainable pasture management, livestock production, and health management in pastures. The manuals are designed for on-the-job training of livestock herders, village pasture committees and other village-level pasture management and monitoring organisations. (Kyrgyz, Tajik, Russian & English, 2011)



Tree and Land Tenure: Rapid Appraisal Tools

Karen Schoonmaker Freudenberger. Russian Translation, 2012 by University of Central Asia (UCA) and Mountain Partnership Secretariat (MPS)

This Russian-language manual offers information on Rapid Rural Appraisal methodology and a toolkit of activities for use by researchers and practitioners to engage the participation of local communities in collection and use of information to improve their livelihoods. Originally published in English by the Food and Agriculture Organisation in 1994, Mountain Societies Research Institute (MSRI) and MPS Central Asia Hub translated and printed the manual in Russian for use in the region. (Russian, 2012)

Publications by Associated Researchers

Karim-Aly Kassam

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Daniel Maselli & Inam-ur-Rahim

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Partnerships

“Partnerships are at the heart of MSRI’s best outcomes. Whether we are bringing together veterinarians with herders to combine emerging scientific knowledge with traditional remedies, or whether we are working with development organisations and communities to gather information we then present to government ministries and international agencies, we realise that it is only through strong partnerships that we can make a difference.”

Dr Horst Weyerhaeuser, MSRI Director

The following institutional partners contributed to Mountain Societies Research Institute (MSRI) programmes in 2011-2012, with many more contributing practically and intellectually to the Institute’s work. The contributions of all our partners are gratefully acknowledged.



Aga Khan Foundation

The Aga Khan Foundation (AKF) has supported MSRI and its partners through AKF units in Canada, the Kyrgyz Republic, the United Kingdom and the United States. A major joint accomplishment in 2012 for AKF and UCA was the completion of the Naryn Baseline Study. AKF Kyrgyz Republic also partnered with MSRI to support Mountain Partnership Secretariat (MPS) Central Asian Hub’s 2012 International Mountain Day celebration, as well as MSRI’s mountain agro-biodiversity project.



Deutsche Gesellschaft für Internationale Zusammenarbeit

The University of Central Asia (UCA) Knowledge Management Unit and MSRI have worked very closely with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to incorporate materials from the Central Asia Countries Initiative for Land Management (CACILM) project into the MSRI Knowledge Hub. A Memorandum of Understanding between UCA and GIZ was signed in 2012.



Mountain Partnership Secretariat Central Asian Hub

Mountain Partnership Secretariat (MPS) Central Asian Hub has been hosted at UCA since 2010 (and at MSRI since 2011). Joint projects include a regional assessment of progress related to the 1992 Earth Summit goals specific to the sustainable development of mountain areas in preparation for the Rio+20 Conference, where MSRI was represented by MPS.



International Mountain Society

MSRI is an institutional member of International Mountain Society (IMS). In 2012, MSRI served as guest editor of a special issue of the IMS journal *Mountain Research and Development* focusing on Central Asia; the first issue of MRD to be produced in English and Russian.



National Centre of Competence in Research (NCCR) North-South

Based on an agreement between UCA and the Centre for Development and Environment (CDE) at the University of Bern, the Central Asian Regional Coordination Office of the National Centre of Competence in Research (NCCR) North-South is hosted by MSRI at UCA. Joint projects include the production of Herders’ Manuals and hosting an International Symposium on Pastoralism in Central Asia.

University Partnerships

Through university-level memoranda of understanding, MSRI is working with the **Centre for Development and Environment (CDE) at University of Bern, University of Alberta and Michigan State University** to develop collaborative research and capacity development programmes.

MSRI also acknowledges the generous support of its donors:

- Aga Khan Foundation
- Prince Sadruddin Aga Khan Fund for the Environment
- Swiss Agency for Development and Cooperation
- Swiss National Science Foundation
- Trans-European Mobility Programme for University Studies - Geoinformatics: Managing Energy, Resources, Environment (Tempus-GEM)

MSRI Team



Horst Weyerhaeuser, *Director*

Horst Weyerhaeuser leads MSRI with 25 years experience in Asia in the field of research for development. Prior to joining UCA, Horst spent five years in Laos as an advisor to the Ministry of Agriculture and Forestry, responsible for the development and implementation of large scale research programmes and developing national and regional research strategies. Horst spent eight years as a senior scientist and country representative in China for the World Agroforestry Center (ICRAF) where he developed ICRAF’s research strategy, partnership programmes, and policy support framework for China. He also established and coordinated the joint Center for Mountain Ecosystem Research (CMES) in Kunming. Horst received his PhD in Silviculture Management from Freiburg University.



Nasreen Dhanani, *UCA Director of Research*

Nasreen Dhanani oversaw the strategic development of MSRI and was involved in institutional planning to establish UCA with international standards across the three campuses. As Director of Research, she oversaw the pre-operational Research Programme; the recruitment of staff and fellows; and strategic planning for the fully operational Research Programme. Previously, Nasreen was a Social Science Researcher at Rand Corporation, University of California, Los Angeles (UCLA) and University of Southern California, where she managed major research grants and projects on public health. She taught courses on Health Care Research Methods, Policy and Program Evaluation, Policy Formulation and Implementation, Public Policy, and Data Analysis, and published in journals including *Health Services Research* and *Health Services and Outcomes Research Methodology*. Nasreen received her PhD in Health Services Research from UCLA.



Chad Dear, *Senior Research Scientist*

Chad Dear leads MSRI research teams on “Sustainable Land Management” and “Mountain Tourism and Sustainability,” among other research activities. He was involved in the establishment and then the continued strategic development of MSRI. As an academic and development professional, Chad focuses on the nexus of rural development and conservation, particularly in and around protected areas. He has led or advised programmes on natural resource management, ecotourism, resettlement, disaster risk reduction, education, agro-enterprise, recreation, and women’s empowerment in Central Asia, Afghanistan, East Timor, Southern Africa and the United States, and publishes in academic, technical and popular literature. He is an affiliate faculty member of the College of Forestry and Conservation, University of Montana and a former Fulbright Fellow. He received his PhD in Forestry and Conservation from the University of Montana.



Bettina Wolfgramm, *Senior Research Fellow*

Bettina Wolfgramm is a Research Scientist and Member of the Natural Resources and Ecosystem Services Cluster at the Centre for Development and Environment (CDE) of the University of Bern, Switzerland. At UCA, she coordinated a 2010-12 partnership between UCA, CDE, Kyrgyz-Russian Slavic University and Tajik Agrarian University to strengthen geoprocessing capacity. She is also involved in elaborating a background paper on Sustainable Land Management (SLM) in Kyrgyzstan and Tajikistan. Bettina is doing her post-doctoral study in Tajikistan on a National Centre of Competence in Research (NCCR) North-South project on SLM systems for enhancing food security and mitigating climate change in semi-arid agricultural environments. She continues to be involved in a number of development projects, such as the Pamir-Alai Land Management (PALM) project, and the Pilot Programme for Climate Resilience (PPCR) in Tajikistan and the Integrated Watershed Management (IWSM) Initiative of the Swiss Agency for Development and Cooperation, which are being conducted in collaboration with UCA. Bettina received her PhD from the Faculty of Natural Sciences at the University of Bern.



Zhyldyz Shigaeva, *Research Fellow*

Zhyldyz Shigaeva is leading the elaboration of the MSRI background paper on Sustainable Land Management (SLM) focused in Kyrgyzstan and Tajikistan. Her research interests include SLM, livelihoods in rural areas, and sustainable mountain development. Prior to joining UCA, Zhyldyz was a Senior Researcher in the Laboratory of Sustainable Development of Mountain Regions at the Institute of Mountain Physiology of the National Academy of Sciences of the Kyrgyz Republic, and Associate Professor at the International University of Kyrgyzstan. Zhyldyz also worked with the Pamir-Alai Land Management (PALM) project funded by GEF/UNU. Zhyldyz received her PhD in Ecology from the International University of Kyrgyzstan and is pursuing her PhD within NCCR North-South.



Qobiljon Shokirov, *Researcher*

Qobiljon Shokirov has extensive experience in conservation projects including ecological restoration, habitat restoration for wildlife in mountainous ecosystems, biodiversity and key conservation projects in the Great Basin Area and the Pacific Northwest as a part of public and National Parks. He was part of a research team in the field of Sustainable Land Use Management in Tajikistan under the NCCR North-South RP11. At MSRI, he is conducting research on mountain tourism and sustainability. Qobiljon graduated from Antioch University with an MSc in Resource Management and Conservation and is a former Fulbright Fellow.



Aisulu Abdykadyrova, *Research Fellow*

Aisulu Abdykadyrova has published widely on tourism in Kyrgyzstan, including books on *Regional Aspects of Tourism Geography of Kyrgyzstan* (2003) and *Tourist and Recreational Potential of Issyk-kul Oblast* (2008), and tutorials on *Recreational Geography of Kyrgyzstan* and *Legal Basis of Socio-Cultural Service and Tourism in the Kyrgyz Republic*. Aisulu has taught courses on tourism at Bishkek Humanities University and Kyrgyz National University. Aisulu recently joined MSRI, where she is involved in researching and writing a MSRI Background Paper on Mountain Tourism and Sustainability. Aisulu received her PhD in Recreational Geography, from the National Attestation Committee of the Kyrgyz Republic. She conducted post-doctoral research on tourism at the Free University of Brussels and academic mobility at Dublin Institute of Technology (2012).



Sally Daultry, *Knowledge Network Specialist*

Sally Daultry worked with partners in Central Asia to help create the knowledge network architecture to support MSRI. Previously, she developed briefing papers and proposals on environmental and energy issues for the Government of India; worked on regional knowledge networks on water issues in Himalayan Asia and Mexico with an international network of universities; worked with government agencies and industry to create a new research platform on energy security for the University of Cambridge; and was the architect of the Cambridge Directory of Environmental Research. Sally has extensively contributed to expert working groups and conferences and authored working papers and proposals for universities, research consortia and government agencies. She received her BSc (Hons) in Combined Sciences from Open University (UK).



Elnura Omurbekova, *Research Assistant*

Elnura Omurbekova began her career as a Librarian/Archivist at the OSCE Academy in Bishkek, where she also worked as a Research and Training Assistant, and an Academic Assistant. She has published an article on “Bride Kidnapping: Tradition or Crime?” with the Kyushu Silk Road Association. Elnura recently joined MSRI, where she is supporting the work and researchers at the Institute. Elnura received her Graduate Diploma in Law from Kyrgyz Russian Slavic University and her Master of Law from Kyushu University, Japan.

MSRI Hosted Partners



Elbegzaya (Zaya) Batjargal, Regional Programme Officer for Mountain Partnership Secretariat (MPS) Decentralized Hub for Central Asia

Elbegzaya (Zaya) Batjargal oversees MPS activities which provide support to Mountain Partnership members from the region on sustainable mountain development (SMD), including knowledge sharing, capacity building and forging joint initiatives aimed at integrating regional contributions to global processes on SMD. Previously, Zaya worked as a Policy Analyst and Environmental Specialist with the Energy and Environment teams of United Nations Development Programme in Mongolia and the Maldives. She also headed the Fundraising, Marketing and Communication Unit of the World Wildlife Fund Program Office, Mongolia. Zaya received her MA in International Environmental Policy from the Graduate School of International Policy Studies at the Monterey Institute of International Studies, California, USA.



Alma Uzbekova, Communication Officer for Mountain Partnership Secretariat Decentralized Hub for Central Asia

Alma Uzbekova coordinates communications and public relations activities for the MPS Decentralized Hub for Central Asia. She has worked with various national non-governmental organisations in rural development, implementing projects funded by international donors. Alma served as Projects Coordinator with the public foundation ‘CAMP Alatau’ (Central Asian Mountain Programme) where she was responsible for communications and public relations. She earned her Masters degree at the Kyrgyz Academy of Management.



Mira Arynova, Regional Coordinator, National Centre of Competence in Research (NCCR) North-South

Mira Arynova coordinates the Regional Coordination Office of NCCR North-South in Central Asia, which is based at UCA and focuses on three main research themes: water management and agriculture; pasture management and livestock; and livelihoods and institutional development. Through projects which address natural resources, people and institutions in a dynamic relationship, NCCR North-South aims to develop concrete tools to react and adapt to rapid changes in the region. Mira also coordinates joint NCCR North-South projects and events with UCA. Previously, Mira was a Scientific Collaborator at the Drip Irrigation Laboratory, Kyrgyz Research Irrigation Institute and the National Center of the United Nations Convention to Combat Desertification in Kyrgyzstan. Mira received her MSc in Land Reclamation from Kyrgyz State Agrarian Institute. She is currently working on her PhD within NCCR North-South.



Fatima Yunuza, Administrator, National Centre of Competence in Research (NCCR) North-South

Fatima Yunuza ensures the smooth functioning of the Regional Coordination Office and provides administrative support to the Regional Coordinator (RC). Fatima also assists in organising conferences, workshops, trainings, meetings, field trips and missions, including all logistics. She is responsible for accounting records, financial documentation and reporting. She assists the RC in budgeting and monitoring expenditures in preparing annual operational and financial reports, including audits. Fatima received her MSc in Finance, Credit and Banking from Kyrgyz National State University.

Associated Staff and Researchers



Emanuele Costa, Head, UCA Knowledge Management Unit

Emanuele Costa oversaw knowledge management and Information Technology development and services at UCA, establishing university-wide systems and archives. Emanuele was involved in the development of research tools and systems for the Naryn Baseline Study, technical aspects of UCA's work on GIS and the development of the MSRI Knowledge Hub. Prior to joining UCA, he worked in the private sector in a variety of capacities, including Senior Software Engineer for Barclays Stockbrokers, Platform Architect with Sage Software, Team Leader/Analyst with UBS Investment Bank, and Senior Analyst with Goldman Sachs, and as a Research Associate/Quant Analyst at Napier University. Emanuele received his MSc in Artificial Intelligence from Edinburgh University.



Daniel Maselli, Senior Research Fellow

Daniel Maselli served as Programme Manager 'Global Mountain Issues and Multilateral Affairs' at the Federal Department of Foreign Affairs, Swiss Agency for Development and Cooperation. At UCA, he contributed expertise on natural resource management and sustainable mountain development, and skills on developing and implementing research partnerships, impact assessment and capacity building. He served as Coordinator, Lecturer and Senior Researcher at the Centre for Development and Environment (CDE), University of Bern. He coordinated CDE Work Package 4 entitled 'Natural Resources in Sustainable Development' of the National Centre for Competence in Research (NCCR) North-South 'Research Partnerships for Mitigating the Syndromes of Global Change,' which focused on Central Asia. He back-stopped the Central Asian Mountain Partnership Program (CAMP) and served as a senior researcher for the Joint Area of Case Studies of the NCCR North-South in Central Asia. Daniel has published in journals such as *Climate Change and Energy for Sustainable Development*, and received his PhD from University of Bern.



Inam-ur-Rahim, Senior Research Fellow

Inam-ur-Rahim is a Senior Researcher with the Centre of Development and Environment, University of Bern, Switzerland and Chief Executive of the Foundation for Research and Socio-ecological Harmony (FRESH) in Islamabad, Pakistan. At UCA, Inam coordinated joint UCA-National Centre of Competence in Research (NCCR) North-South projects. These included adapting the successful 'Pastoral Information System' in Kyrgyzstan to the Tajik context as a 'Rural Information System' and developing manuals for herders to encourage more sustainable use of pastures in Kyrgyzstan and Tajikistan. He also led NCCR North-South projects on Improving Small Holders' Livestock Production in Hindukush Mountains, and the Central Asian chapter of the Transversal Package Project on Pastoral Production Systems, and the 3rd phase research on Adaptation to Climate Change in Africa and Asia. Inam received his Doctor of Veterinary Medicines from the College of Veterinary Sciences, in Lahore, and his PhD in Natural Sciences from the University of Agriculture in Faisalabad, Pakistan.



Karim Aly Kassam, Senior Research Fellow

Karim Aly Kassam is International Associate Professor of Environmental and Indigenous Studies at Cornell University. He serves as Foreign Member (Academician) of the Academy of Sciences, Republic of Tajikistan and English Language Editor of the Academy's *Journal of the Biological and Medical Sciences*. Karim-Aly works with Central Asian scholars to research the complex connectivity of human and environmental relations, and indigenous approaches to food security, sustainable livelihoods, climate change and pluralism in the Pamirs. In April 2013, Karim-Aly received the College of Agriculture and Life Sciences' Diversity Award for promoting diversity in teaching and research. With UCA as a partner, Karim-Aly and his team are developing internet-based curriculum on research topics for ten universities to link students from the Pamir region to those at universities around the world, including Cornell, Beijing University and UCA. Karim-Aly has published widely, including recent articles in the journal *Human Ecology and Ecology and Society*, and received his PhD in Natural Resource Policy and Management from Cornell University, USA.



Ainura Nazarkulova, Associated Researcher

Ainura Nazarkulova is docent of the Geodesy and GeoInformatics Department at Kyrgyz State University of Construction, Transport and Architecture and Deputy Director of the Austrian Central Asian Centre for GIScience. Her expertise includes GIS, Spatial Data Infrastructures, Computer Cartography and Remote Sensing and Image Processing. At UCA, Ainura conducts research, and develops spatial databases for projects, GIS capacity and training materials. Previously, she was a GIS Consultant for the Rural Development Fund and the Tien Shan Ecosystem Development Project; Head of the GIS group of the Bishkek Central Architecture Board and Consultant/GIS Administrator to the GEF/World Bank Transboundary project on biodiversity conservation of West Tien-Shan. Ainura received her PhD in Geoinformatics from the University of Salzburg, Austria.



David Gullette, Programme Manager, UCA Research Programme

David Gullette is leading and supporting survey research initiatives at UCA, including the Naryn Baseline Study and a survey of businesses in Osh, Kyrgyz Republic. David has conducted research and worked in Kyrgyz Republic for over a decade, and has worked for various international organisations, including the United Nations. His research on conceptions of genealogy in Kyrgyz Republic and social and political instability in the Kyrgyz Republic culminated in the book, *The Genealogical Construction of the Kyrgyz Republic: Kinship, State and 'Tribalism'*. David's recent research focuses on conflict sensitivity and perceptions of energy in the Kyrgyz Republic. David received his PhD in Social Anthropology from the University of Cambridge.



Ailey Hughes, Visiting Research Fellow/Fulbright Fellow

Ailey Hughes worked with MSRI to conduct independent research on women's land and natural resource rights in rural Kyrgyzstan. She presented her research findings at the Central Asian Mountain Partnerships (CAMP) Forum in Dushanbe, Tajikistan, and the UCA Public Lecture Series in Bishkek, Kyrgyzstan. Supported by UCA, she developed and led a one-day training on using Rapid Rural Appraisal methodology for research on land and tree tenure. Previously, Ailey conducted research on customary land and natural resource tenure in Liberia; contributed to the development of briefs on Islamic Land Tenure in Central Asia and Africa; and drafted and edited profiles highlighting land and natural resource tenure issues in 56 countries. She received her Master of Public Administration, with a focus on International Development Management from the University of Washington.

2013 and Beyond

In 2013, the Mountain Societies Research Institute (MSRI) will build on the achievements and partnerships of its first two years of operation, initiating three major research projects, publishing several Background Papers, and expanding the MSRI Knowledge Hub.

With support from the Canadian International Development Research Centre (IDRC), MSRI will develop a formal network of Central Asian and Afghan researchers and support research of selected members of the network. With Canadian International Development Agency (CIDA) funding, MSRI will establish a cooperative research programme with the University of Alberta and the University of British Columbia. In partnership with Imperial College London, other European universities and partners in South America, East Africa and South Asia, MSRI will start a three-year research project on Ecosystem Services for Poverty Alleviation funded by the UK Department for International Development (DFID). MSRI also has numerous pending proposals in collaboration with university partners in Europe and North America to support primary research and further develop the MSRI Knowledge Hub.

In Spring 2013, MSRI will publish its second Background Paper on Sustainable Land Management (SLM). Other forthcoming reviews and background papers will address food security and farming systems, mountain tourism and sustainability, and spatial information and decision support systems. These papers will serve as the foundation of future MSRI primary research initiatives.

MSRI will continue its collaboration with the Centre for Development and Environment (CDE), University of Bern and the Swiss Agency for Development and Cooperation (SDC) to expand the MSRI Knowledge Hub to include new partners, such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and more tools, including geo-referenced information and an interactive geographical information and decision support system.

MSRI will explore opportunities to collaborate with the International Centre for Integrated Mountain Development (ICIMOD) in 2013. Possible areas of collaboration are SLM and pasture and forest management, climate change and spatial information/decision support systems.

Finally, MSRI will work closely with other units within the University of Central Asia (UCA) and with other partners to progress the broader objectives of the University.



