MSRI MISSION

To undertake Research for Development among and with mountain societies in Central Asia and to disseminate strategic information and findings, with the purpose of contributing to improvements in overall quality of life and regional sustainable development for local communities, regions and countries.

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Photo credits:
On the cover: Tash-Bashat village and the Tianshan Mountains, Kyrgyzstan.
Photo: Marc Foggin
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MSRI is committed to advancing the Sustainable Mountain Development agenda together with partner agencies through transformative research, education, and dissemination of key findings for development practitioners and policy makers. MSRI is part of UCA’s Graduate School of Development.
Director’s Message

The Mountain Societies Research Institute (MSRI) has advanced its mission in several important ways in 2017 through research, publications, outreach, and capacity building. We also are delighted to have launched our operations in Khorog, Tajikistan, which will grow even further in 2018 as we move our town office onto the UCA Khorog campus grounds and increase staffing according to project needs and through joint appointments with UCA’s School of Arts & Sciences. In Bishkek, Kyrgyzstan, the MSRI team also has grown in size and has developed through the research it has undertaken and collaborative projects.

In 2017, MSRI has been conducting research on rural communities’ livelihoods and socio-economic resilience in the the face of climate change in Kyrgyzstan; on social cohesion, conflict mitigation and stability in Kyrgyz-Tajik border regions; on sustainable food systems, including studies about contributions of medicinal and aromatic plants to household economies, Tajik Pamir rangeland agroecosystems, and the use of novel remotely sensed (satellite) imagery to estimate and track the productivity of crops; and on environmental monitoring by and for local resource users (e.g. herders, pasture committees) and authorities (e.g. national parks) through use of more inclusive and participatory ‘citizen science’ approaches. Partners in all this research include local government and communities as well as development agencies, other universities, and donors including Aga Khan Foundation (AKF) Afghanistan, US Institute of Peace (USIP), UK Department for International Development (DfID), and International Centre for Integrated Mountain Development (ICIMOD).

Nearly two dozen articles and book chapters were published by MSRI staff in 2017, or anticipated in early 2018, with more expected as a result of work undertaken this past year. Additionally, six project briefs from Afghan, Tajik and Kyrgyz fellows who participated in MSRI’s Central Asia and Afghanistan Research Fellowship (CAARF) programme were published by UCA, as well as MSRI reports such as Context factors of the conflict in Batken province, Kyrgyzstan (by Asel Murzakulova), Climate vulnerability and adaptive capacity of mountain societies in Central Asia (by Sujata Manandhar, et al), and the Proceedings of the Silk Roads in the Mountains of Central Asia international workshop held in Dushanbe, Tajikistan on 3-4 October, 2017. Furthermore, one of our senior research scientists, Stefanos Xenarios, is co-editor of the Central Asian Journal of Water Research, and research fellows at MSRI have attended and/or presented at more than a dozen local and international conferences.
Capacity building also is being advanced by MSRI, alongside research, through the International Development Research Centre (IDRC) supported *Pathways to Innovation* project, which aims to build professional capacities of faculty in the agricultural and environmental science departments of Bamyan and Badakhshan universities in Afghanistan and Khorog State University in Tajikistan through joint research projects and the development and trial delivery of a certificate programme in natural resources management.

Finally, a major mountain event already being planned from late 2017 is the *World Mountain Forum 2018*, which is scheduled to take place in Bishkek on 23-26 October 2018, co-hosted by UCA and the Government of Kyrgyzstan. This high level event will be the fourth in a series of Forums since 2011, and the first to take place in Central Asia. With around 300 participants expected from civil society and mountain communities from around the world, as well as from government, the private sector, and academia, the Forum will focus on *Strengthening Partnerships and Pathways toward a Thriving Mountain Future*.

We hope you will enjoy reading this Report and that through it you may learn more about this extraordinary mountain region of the world, including our environment and societies, as well as about MSRI and its projects, purposes, and team members. And, as always, welcome to Central Asia!

Marc Foggin
Acting Director
MSRI, University of Central Asia

[Signature]
MSRI’s Vision and Mission

The Mountain Societies Research Institute, University of Central Asia, operates at the interface of academia and development. It envisages a future in which local communities, government, development practitioners, policy makers, and the private sector collaborate in the generation of interdisciplinary knowledge and its application for sustainable development in the mountains of Central Asia and beyond.

Key Objectives

Situated in UCA’s Graduate School of Development, the Mountain Societies Research Institute conducts Research for Development with the goal to improve the well-being of mountain societies in Central Asia.

MSRI has five key objectives:

- **To generate knowledge** on mountain societies through original scientific research
- **To serve as a knowledge hub** for scholars, development practitioners, and policy-makers
- **To enhance regional capacity** to conduct sound research relevant for mountain societies
- **To inform policy and practice** through engagement with key development partners
- **To disseminate knowledge** amongst the full range of mountain stakeholders

Research Themes

MSRI’s primary concern is the quality of life and wellbeing of the people and communities residing in the mountains of Central Asia, and the major drivers and factors affecting their livelihoods, economies, and environments.
Central research themes include:

- Natural resources management and sustainable food systems
- Social dynamics and transformations, including resilience
- Mountain livelihoods, alternative incomes, poverty, equity
- Mountain hazards and disaster risk management
- Ecosystem services and conservation of biodiversity

MSRI research also includes the following cross-cutting themes:

- Adaptation to climate change in mountain regions
- Local and regional disparities in socioeconomic development
- Assessing the Sustainable Development Goals in Central Asia

MSRI’s Geographic Focus

MSRI’s geographic scope includes the mountain regions and societies of Central Asia. Core regions include the mountain areas of the three countries where UCA’s campuses are located: Tajikistan, Kyrgyzstan, Kazakhstan. Large parts of Western China, Mongolia, Russia, Afghanistan and Northern Pakistan also fall within MSRI’s scope of interest. Mountain ranges of special interest include the Altay, Tian Shan, Pamir, Hindu Kush and Karakoram ranges; the convergence of the latter three are also known as the Pamir Knot.
Sustainable Mountain Development in Central Asia

The Mountain Societies Research Institute operates at the interface of science and society in Central Asia, engaging in applied, transdisciplinary research for development in mountain regions. MSRI seeks to strengthen regional capacities, to inform policy and practice, and to promote open dialogue among stakeholders about development issues, with the aim to improve the wellbeing and resilience of mountain communities in rapidly changing socioeconomic, cultural, political, and environmental contexts. Our integrated approach, with and for the benefit of mountain societies, demands simultaneous understanding of social and ecological factors operating at multiple spatial and temporal scales.

With a broad vision of sustainable and equitable development, MSRI purposefully embeds its vision and research projects within the strategic UN Sustainable Development Goals (SDG) framework, with special attention on mountain regions and societies. As such, considering the unique aspects of “mountain life” generally as well as the specific challenges and opportunities derived from mountain environments in Central Asia, MSRI is an active and strong proponent of the Sustainable Mountain Development (SMD) agenda. In addition to directly addressing regional concerns, partnerships on the global stage - in context of major international agreements such as the UN Convention on Biological Diversity and through partnerships with development agencies and other research institutes - also allow MSRI to participate in current dialogues, and thus to contribute Central Asian perspectives into cutting-edge debates on development and sustainability. Furthermore, inclusive and participatory approaches are adopted in research, in order to promote co-production of knowledge with mountain stakeholders and to give voice to communities, supporting their greater engagement in developing their own futures. In the end, development policy makers and practitioners in several sectors and at various levels must be fully engaged, including especially local stakeholders - indeed, mountain people and communities will always be at the heart of sustainable mountain development.
Social and Ecological Resilience to Climate Change
Pathways to Resilience in Semi-arid Economies

MSRI continues to partner with the London School of Economics and Political Science (LSE) on the Pathways to Resilience in Semi-arid Economies (PRISE) project, exploring how communities respond to climate-related shocks and stressors and identifying key socio-environmental factors that can aid and promote people’s overall wellbeing. Based on a series of seasonal household surveys and focus group discussions, innovative approaches to track resilience in fragile environments are being developed focusing on ‘subjective’ measures and perceptions. Specifically, three case study sites were selected in Batken, Bazar-Korgon and Naryn districts of Kyrgyzstan. According to the World Food Program (WFP), all of the selected districts experience high recurrence of poverty, as well as high or medium risk of natural disasters (shocks). The interviewed households were most concerned about climate-related shocks and stressors such as drought (with shortage of irrigation water), heavy precipitation (leading to landslides), and frost or snowfall in the springtime (damaging crops or fruit trees in blossom). Several socioeconomic shocks and stressors also were reported by community members, such as unemployment, problems of pest control and access to fertilizers, low prices for agricultural products, and high interest rates for bank loans.

Palaeoclimate, Environmental Change and Social Interaction in Central Asia

The Palaeoclimate, Environmental Change and Social Interaction in Central Asia (PALESCA) project builds on the work begun earlier under the Ecosystem Services for Poverty Alleviation project (see below), focusing especially on establishing long-term socioecological monitoring in the picturesque At-Bashy mountain range, as part of UCA’s Learning Landscape Initiative. In reach of the UCA Naryn Campus, and building synergies with the GIZ project Ecosystem-based adaptation to climate change in high mountainous regions of Central Asia, the At-Bashy monitoring pilot site also will contribute to promoting more participatory research and ‘citizen science’ in Central Asia.

In the frame of the PALESCA project, MSRI is preparing to implement monitoring of major climatic parameters, soil characteristics, and pasture conditions. Local schools and community members in the At-Bashy and Naryn districts will be involved in data collection (environmental monitoring). Two summer schools are planned to take place later in the project, with trainings and experiments to be organized for participants on soils, plant phenology, and water and climatic parameters. Both the project activities and the approaches adopted aim to contribute to enhanced adaptive capacities of community members to respond to the consequences of environmental and climate change.

PALESCA project website: https://bit.ly/2rgmMHs

Climate Vulnerability and Adaptive Capacity of Mountain Societies

MSRI also has continued its work toward an improved understanding of the human and biophysical dimensions of climate change, particularly as it affects people in the mountains of Kyrgyzstan and Tajikistan. This has culminated in the recent publication, Climate Vulnerability & Adaptive Capacity of Mountain Societies in Central Asia. Through comprehensive review of existing scientific literature and project and donor agency reports, as well as through a series of consultations with climate change experts and conservation and development professionals, the report assesses the
impact of climate change towards livelihoods and wellbeing in these two countries. By identifying knowledge gaps and opportunities to improve the adaptive capacity of mountain societies, this study highlights the need to enhance levels of collaboration between research institutes and local communities, government and the private sector as well as with development agencies and civil society, for development of effective climate change adaptation strategies at local, national, and regional levels in Central Asia.

MSRI Research Report #1 available online: https://www.ucentralasia.org/Research/Item/1578/EN

Social Dynamics in Mountain Societies
Social Cohesion and Conflict Mitigation along the Kyrgyz-Tajik Border

In 2017, two projects focused on local social dynamics, tensions, and disputes, surrounding natural resource management in transboundary areas of Kyrgyzstan and Tajikistan. Building on a previous study about conflicts in use of water and pasture resources, the project *Promoting Social Cohesion and Conflict Mitigation along the Kyrgyz-Tajik Border* examined the roles of local natural resource management organisations, as well as other institutional partners, aiming to better understand local social dynamics in enhancing resilience to conflict situations. The project was conducted in Batken and Leilek districts in southern Kyrgyzstan, and is funded by the United States Institute of Peace (USIP).

USIP project roundtable: https://ucentralasia.org/Research/Item/1597/EN

Photo: Altyng Kapalova
Natural Resources Management and Social Stability

Supported by the UK Conflict, Stability & Security Fund (CSSF), a second project has been comparing a range of resource management models in relation to border tensions and stability, incorporating impacts of climate change and migration patterns. The **Improving Stability and Better Natural Resources Management in Kyrgyzstan and Tajikistan** project aims in particular to reduce conflicts related to use and management of irrigation water and pastures in Kyrgyzstan and Tajikistan, as well as in the cross-border areas between both countries. Partners include the Mountain Societies Development Support Programme (MSDSP) in Kyrgyzstan and Tajikistan, the Roza Otunbaeva Initiative, Kyrgyz Public Foundation CAMP Ala-Too, University of Central Asia, and the consortium lead agency Aga Khan Foundation (AKF) Kyrgyzstan.

CSSF project research report: [https://ucentralasia.org/Research/Item/1494/EN](https://ucentralasia.org/Research/Item/1494/EN)
Sustainable Land Use and Food Systems

Pathways to Innovation in Afghanistan and Tajikistan

An ambitious capacity development project was recently launched, *Pathways to Innovation: Strengthening Mathematics, Science & Economic Policy in Afghanistan and Central Asia*, supported by the International Research Development Centre (IDRC), Canada, and the Aga Khan Foundation Canada (AKFC). Building on UCA’s successful *Central Asia and Afghanistan Research Fellowship* (CAARF) programme (2013-16), MSRI’s component in this UCA-wide project is focused on ‘Science’, specifically helping to build research and teaching capacities for faculty at Bamyan and Badakhshan universities in Afghanistan and Khorog State University in Tajikistan. The primary fields of study are in agriculture and food systems, natural resources management, and environmental conservation. Two main approaches are being employed to achieve the project’s goals: collaborative development and implementation of field-based research projects, led by local faculty and broadly embedded within a Sustainable Mountain Development framework, and the development and trial delivery of a certificate programme in natural resource management. In 2017, a process of prioritization of major research needs and opportunities was undertaken with the three partner institutions, leading to the design of 11 applied research projects that will be implemented over the coming two years.

Sustainable Walnut Forests in Kyrgyzstan

With support from the German Federal Ministry of Education and Research (BMBF), MSRI is member of a multi-institution research team implementing the project *Analysis and sustainable utilization of the nutritional potential and secondary plant compounds in underutilized plant species of walnut-fruit forests of Kyrgyzstan* (also known as the Sustainable Walnut Food project, or; SUSWALFOOD for short). Walnut tree forests in Kyrgyzstan are of global significance as a biodiversity hotspot, as these forests also are home of many further plant species – including many fruit suitable for human consumption and other non-timber forest products. However, in many instances value chains and marketing mechanisms are not sufficiently developed and the potential of these food products to benefit local communities remains underexploited. Many walnut forest products are not currently recognized as a priority for research. Adding value to such forest products can contribute to improved food security and incomes for local farmers, and thus may provide incentives and be leveraged to facilitate more sustainable forest management practices. Specifically, the project is contributing to the development of nutritious food from wild plant species (fruit trees, shrubs, herbs) of Kyrgyz walnut forest ecosystems. MSRI’s contribution to this collaborative project lies primarily in its socioeconomic analyses, both through a targeted literature review on local livelihoods, including gender dimensions, and through guidance and support given for fieldwork undertaken by students from Weihenstephan-Triesdorf University of Applied Sciences, Germany.


AKDN Multi-Input Area Development in Afghanistan

In the context of integrated food systems and food security – emerging research themes at MSRI – two research projects were recently undertaken as part of the Aga Khan Foundation, Afghanistan project, *Multi-Input Area Development Global Development Alliance* (MIAD GDA, funded by the US Agency for International Development (USAID) and the Aga Khan Development Network (AKDN)). The first of these projects is an exploration of the use of new remote sensing technologies and imagery that allow temporal analysis of critical phenological crop growing stages, known as the *Remote Sensing for Food Security* (RS4FS) project. The aim is to assess agricultural productivity of small scale mountain agriculture and to predict crop yield performance in early stages, before standard harvest statistics are available or crop failures become apparent, which could lead to food shortage and insecurity. The pilot sites are comprised of cropped farmland on the Tajik and Afghan sides of the Panj river in the Badakhshan region.

The second research project undertaken in context of the MIAD development approach is an exploratory study on value chains of *Medicinal and Aromatic Plants* (MAPs) in the Pamir mountains,
with the aim to determine whether market demands are sufficient to justify longer-term investments and domestication trials in the region. Medicinal and aromatic plants play a crucial role in the nutrition, health and culture of mountainous communities of Badakhshan. The sale and barter of MAPs are significant for poorer households. However, the value chain is underdeveloped and the local added value remains low. Some options for better market integration that warrant further investigation include geographical indications and product certification. Strong emphasis also must be given to protecting ecosystems and to good governance of natural resources to ensure sustainability and the fair sharing of potential benefits.

About AKDN’s MIAD approach: https://www.akfusa.org/ourwork/miad-integrated-development/

**Integrated Land Use and Agroforestry Systems**

Additional research on integrated land use and agroforestry systems and the potential contributions that can be made by trees to enhance people’s livelihoods and wellbeing through increased income, food security, and environmental health, is carried out by the Central Asia Office of the World Agroforestry Centre (also known as International Centre for Research in Agroforestry, ICRAF).

For more information, see Hosting Arrangements below.

ICRAF website: http://www.worldagroforestry.org/
Potato Production and Food Security in Tajikistan

Other agricultural research in Tajikistan is undertaken through the project entitled *Potato Production Support and Research to Improve Food Security in Khatlon, Tajikistan (Phase II)*. This project seeks to increase the production and consumption of nutritious vegetables, such as sweet potato (and other nutritious potatoes) rich in vitamin A, iron, and zinc. The project also is introducing appropriate and low-cost technologies to help farmers increase their income derived from small land parcels. The over-arching goal of the project is to address dietary deficiencies and to increase family-level incomes for resource-poor farmers by adding value to agricultural production in areas of West Khatlon, Tajikistan that regularly suffer from drought conditions and thus are prone to water stress. MSRI is working in partnership with the International Potato Centre (CIP) and the Institute of Botany, Plant Physiology and Genetics of the Tajik Academy of Sciences, and the project is supported financially by the US Agency for International Development (USAID).

CIP project website: [https://cipotato.org/site/so2/index86ea.html](https://cipotato.org/site/so2/index86ea.html)
Ecosystem Services and Biodiversity within Conservation

Adaptive Governance of Mountain Ecosystem Services for Poverty Alleviation

Supported by the UK Government through its Ecosystem Services for Poverty Alleviation (ESPA) programme, the long-term research project Adaptive governance of mountain ecosystem services for poverty alleviation enabled by environmental virtual observatories (or ESPA Mountain-EVO for short) came to completion in 2017. The project has led to enhanced understanding of people’s livelihoods, and the multiplicity of stakeholders’ perspectives, especially in regard to pasture management issues in the Tian Shan Mountains of Kyrgyzstan. The varied roles and relationships between local agencies such as district pasture users’ and water users’ associations and committees, and interactions between communities, committees, forestry reserves, and protected areas, have been explored – enhancing understanding of development opportunities, on one hand, and raising additional questions for further study, on the other hand. Particular attention was paid in this project to processes, especially processes of community involvement in environmental monitoring and the role of newly generated information in decision-making for natural resources use and local socio-economic development. The benefits and challenges associated with more participatory and inclusive data collection approaches for decision-making also were highlighted through this project, largely through the trial use of ‘citizen science’ methodologies, which generally resulted in a greater local awareness and appreciation of surrounding natural resources and the value of direct involvement in their monitoring and management.

ESPA Mountain-EVO project website: http://paramo.cc.ic.ac.uk/espa/

UCA’s Learning Landscapes Initiative

The ESPA Mountain-EVO project was one of the original projects framed within UCA’s Learning Landscapes Initiative, which seeks to guide and enrich much of MSRI’s transdisciplinary research. Through selected projects and activities, this Initiative aims to monitor and analyse long-term socio-ecological conditions, trends, and inter-relationships, in order to help identify innovative pathways towards a more sustainable future and to support evidence-based development planning and decision-making in mountain regions. Research undertaken within the Learning Landscapes framework may be conducted at household, district, provincial, national or international levels, but in each case the research still is broadly anchored (centred) around the UCA Naryn and Khorog campuses. This Initiative aims not only to fill important knowledge gaps, but also to inform multiple development stakeholders and to contribute to UCA’s curriculum and educational objectives.

For further information about Learning Landscapes: https://bit.ly/2jmJt9x

GSLEP Central Tianshan Management Planning

Driven by the 2013 Bishkek Declaration on conservation of snow leopards in their mountain habitats, a comprehensive Global Snow Leopard and Ecosystem Protection (GSLEP) program was launched in 2016. Under this program, the goal is to secure at least 20 landscapes by 2020 with vi-
able snow leopard populations – understood as sensitive indicators of healthy mountain ecosystems. In 2017, UCA continued its collaboration with the GSLEP Secretariat and other government and non-government partners, contributing to the development of the pasture and tourism chapters on the Central Tian Shan Snow Leopard Landscape Management Plan. MSRI also participated in the Global Snow Leopard Forum held in Bishkek in August 2017, including a photo exhibition by Marc Foggin, entitled Living with Snow Leopard: People, Livelihoods and Landscapes of the Tibetan Plateau and the Mountains of Central Asia.

For more info about UCA’s partnership with GSLEP: https://ucentralasia.org/Publications/Item/1271/EN; for photo exhibition: http://www.marcfoggin.com/living-with-snow-leopard/

Rangelands, Livestock and Wildlife in the Tajik Pamirs

Partnering with the International Centre for Integrated Mountain Development (ICIMOD), MSRI continued its study of the rangeland conditions, their levels of utilization, and local people’s livelihoods in the Tajik Pamirs, as part of the broader, four-country Hindu Kush – Karakoram – Pamir Landscape (HKPL) Transboundary Conservation Project. Through implementation of the HKPL project, centered in the Zorkul area in the waters of the Panj River (known in antiquity as the Oxus River), UCA is also building partnerships with local stakeholders including the State Committee for Environmental Conservation of the Republic of Tajikistan, Zorkul Nature Reserve, and the non-governmental organization Panthera. Through joint effort, project partners are learning how some communities in the Pamir region have found ways to institutionalize and strengthen their pasture use, while other groups still struggle with pasture management. Resource management practices in the Zorkul Nature Reserve and surrounding areas have implications for habitat conditions and the conservation of biodiversity as well as pastoralist communities’ socioeconomic situations and sense of wellbeing.

HKPL project website: http://www.icimod.org/?q=10390
Central Asia Mountain Hub

Many mountain stakeholders in Kyrgyzstan and more widely across Central Asia have continued to benefit from MSRI’s support provided through the Central Asia Mountain Hub, a collaborative effort of UCA and Mountain Partnership (MP) supported by the Swiss Agency for Development and Cooperation (SDC) under the Sustainable Mountain Development for Global Change project. Numerous activities have been organized for mountain partners and stakeholders, providing critical information and opportunities and seeking to build personal and institutional capacities in sustainable mountain development.

In December 2017, on the occasion of the 5th global meeting of Mountain Partnership, with over 220 participants attending the international conference Mountains under pressure: climate, hunger, migration, the MP members from Central Asia – including UCA – were recognized by their peers for their level of commitment, mobilization, and achievements, and consequently were supported in the formation of a new regional Central Asia group. Even as the Central Asia Mountain Hub continues to develop and extend the scope of its partnerships – welcoming all mountain stakeholders in the region – the long-standing relationship between UCA and other MP members in Central Asia as well as with the MP Secretariat hosted by UN Food & Agriculture Organization in Rome, Italy, will always have a special place, and indeed will continue to play a key role at UCA for future strategic planning and development.

For more information, see Hosting Arrangements below.
Kyrgyz Mountains Environmental Education and Citizen Science

Mountain communities in Naryn province, Kyrgyzstan, also have engaged closely with MSRI through the Kyrgyz Mountains Environmental Education and Citizen Science (KMEECS) project, with ‘citizen science’ approaches introduced at community level. Working with 10 village schools, environmental awareness was raised and new teaching approaches and tools introduced through development of a manual and curriculum about people’s interactions with the environment. Student-centred learning activities were focused on critical observation and conducting experiments about water quality and plant phenology, aided by new smartphone applications developed to assist in environmental monitoring (see Lapis Guides). These main topics were selected by local partners due to the significant recently observed changes in water regimes and climatic conditions in the project area.

KMEECS project website: https://ocsdnet.org/projects/kmeecs/
Also see https://ucentralasia.org/Research/Item/1461/EN and https://bit.ly/2rep2Qh

EXPO 2017 in Astana, Kazakhstan

MSRI participated in the WorldExposition, EXPO 2017, in Astana, Kazakhstan, on 1 September 2017 through the “Renewable Energy for Sustainable Mountain Development” panel discussion. As a part of the Swiss pavilion, this roundtable event triggered discussions about conditions and requirements to successfully transform the sector toward sustainable energy in Central Asian mountain areas. Representatives from government, non-government organisations, the private sector, and civil society in Kyrgyzstan, Tajikistan and Kazakhstan all participated in the event. This special session was part of a larger exhibition featuring renewable energy resources in the mountains of Central Asia supported by the Swiss Agency for Development and Cooperation (SDC).
Disaster Risk Management Summer University

The University of Central Asia hosted a Summer University on Disaster Risk Management (DRM) in 2017, organized jointly with the Aga Khan Agency for Habitat (AKAH) and the University of Bern, Switzerland. Natural hazards menace human life, livelihoods and assets all over the Pamir, Hindu Kush, Tian Shan and Karakoram mountains. Intensified land use, greater social complexities and higher concentrations of wealth constitute additional new challenges for DRM specialists, emergency managers and land-use planners. Both the immediate and longer-term effects of climate change only further exacerbate such challenges. Mainstreaming the risk of disasters or natural hazards in development planning, promoting preparedness as well as capacities to respond to hazards (risk management) and designing protective measures (risk reduction) all require a clear and multi-faceted understanding of natural hazards, social and economic vulnerabilities, and the range of views that are held by different stakeholders in Central Asian mountain societies about risks and their socioeconomic impacts, and about risk reduction. These crucial insights were thoroughly discussed and studied during this first Summer University, which was embedded in a development project fostering self-sustained and resilient communities, Creating Opportunities in a Safe Environment (COSE), funded by the Swiss Agency for Development and Cooperation (SDC).
Disaster Risk Management Policy Forum

On 21 August 2017, following the successful completion of the inaugural Disaster Risk Management (DRM) Summer University held in Khorog, Tajikistan, MSRI and its partners organised a Policy Forum in Dushanbe, Tajikistan. The forum aimed to highlight and transfer lessons learned from the DRM Summer University to the policy level, highlighting the role and requirements of DRM for ‘Sustainable Mountain Development’ with special reference to the contexts of Tajikistan and Central Asia.

Glaciology Summer School

On 4-10 September 2017, MSRI contributed to the Cryospheric Climate Services for Improved Adaptation (CICADA) (or Glaciology) Summer School implemented in the Issyk Kul area of Kyrgyzstan. The larger project is aiming to measure and assess mass balances of Central Asian glaciers. Theory classes were held in Bishkek while the practical training took place at the Batysh Sook glacier (in the Inner Tian Shan mountain range). Students and experts from universities, research institutes, and Hydromet departments from Kyrgyzstan, Tajikistan and Uzbekistan participated in the summer school. The CICADA project is coordinated jointly by the University of Fribourg, Switzerland and the World Glacier Monitoring Service (WGMS) and is implemented in collaboration with Central Asian Institute for Applied Geosciences (CAIAG) and Geoforschungszentrum (GFZ), funded by the Swiss Agency for Development and Cooperation (SDC).
UCA’s Earth & Environmental Sciences (EES) Undergraduate Major

In May 2017, MSRI researchers led a week-long Connecting to your discipline program for students at University of Central Asia, with the aim to promote the Earth & Environmental Sciences (EES) major as study choice. Topics included field mapping and the use of geographic information systems, seismology, environmental monitoring, valuation of ecosystem services, and practical application of social research methodologies. Field work in Bash-Kayindy village combined these topics into a single comprehensive project that showcased each topic’s interdisciplinary dimensions. Students were able to see the applications of earth and environmental sciences to wider societal development goals and to gain a greater understanding of how studying EES could shape and contribute to their future careers.

UCA EES website: www.ucentralasia.org/Admissions/EarthAndEnvironment
MSRI Knowledge Platform

MSRI’s Knowledge Platform is an interactive site that provides important information about Central Asian environments and mountain societies. The Platform interface and underlying database were recently upgraded to improve accessibility and usability, and integrated into the K-Link network – an innovative regional platform for collaboration and knowledge exchange. The Platform aims to serve as practical interface for academics and researchers – beginning with MSRI research staff, and in the future also to support a wider range of researchers, practitioners and policy makers – enhancing access to information relevant for critical development dialogue and research.

MSRI Knowledge Platform: http://msri-hub.ucentralasia.org/

K-Link network: https://klink.asia/

Geographic Information Systems

The Geographic Information Systems (GIS) Laboratory at MSRI provides services for core projects in several ways. It supports community resource management dialogues through cartography as well as with participatory GIS models. It also provides objective assessment of historic trends in natural resources (i.e., land cover) and land use patterns through time-series analyses of satellite imagery and other aerial remote sensing. Spatial data at various scales and covering many different thematic contexts, along with valuable topographic datasets, are collected and stored at MSRI, readily available for analysis to better understand spatial and temporal patterns pertinent to sustainable mountain development in Central Asia. The GIS Lab thus supports academic and sustainable development endeavors with strategic analytic information as well as providing important communication tools.

MSRI GIS/Geonode: http://geonode.msri.io/

Hosting Arrangements

Finally, MSRI hosts two international and regional bodies, the Central Asia Mountain Hub (CAMH) and the Central Asia Office of the World Agroforestry Centre (also known as the International Centre for Research on Agro-Forestry, ICRAF).

Central Asia Mountain Hub

Launched in the framework of the Sustainable Mountain Development for Global Change (SM-D4GC) program supported by the Swiss Agency for Development and Cooperation (SDC), the Central Asia Mountain Hub has been hosted at UCA since 2010; and at MSRI since its establishment in 2011. The Hub coordinates and supports many development activities of mountain stakeholders in Central Asia for the advancement of the global Sustainable Mountain Development (SMD) agenda.
In 2017, the Hub continued to support regional mountain stakeholders, including members of Mountain Partnership, in advancing the mountain agenda and facilitated their involvement in policy dialogue, knowledge sharing, and capacity building on key development issues.

One of the major achievements in 2017 was that, for the first time, Central Asia has gained formal recognition with a seat on the Steering Committee of the Mountain Partnership (MP). As a result of several years of effort by CAMH – together with the wider community of mountain stakeholders in Central Asia – Ms Anara Alymkulova (Director, Institute for Sustainable Development Strategy Public Fund) will now represent the Central Asian MP members on the global stage.

Another great achievement in 2017 was recognition of the “Aiyl Demi” newspaper, supported by CAMH since 2011, which won the prestigious Energy Globe Award 2017 for Sustainability.


SMD4GC project website: [https://bit.ly/2w2qGJW](https://bit.ly/2w2qGJW)

ICRAF – World Agroforestry Centre

The Central Asia Office of World Agroforestry Centre (ICRAF) was launched in 2014 in Bishkek, Kyrgyzstan, operating as a country office under the ICRAF Regional Office for East and Central Asia, in Kunming, China.

In 2017, ICRAF Central Asia Office implemented research projects on agroforestry systems in irrigated agriculture, with the aim to build ecological and social resilience against water stress and climate change. With project sites in Chui and Jalalabad provinces of Kyrgyzstan, in southern Kazakhstan, and in the Ferghana Valley in Uzbekistan, the project *Agroforestry systems in irrigated agriculture in Central Asia for building resilience against water stress and climate change* investigates levels of water consumption of irrigated agriculture, with and without tree belts (wind breaks) as agroforestry elements, as well as farm incomes, also with and without such agroforestry elements. Main activities in 2017 related to basic data collection. Although the project is set to continue in 2018, preliminary results in regard to wind breaks and crop water consumption were already published in 2017.

ICRAF Central Asia Office also is the main partner in the BMBF funded project Food security and livelihood improvement through agroforestry in Central Asia, which started its first activities (mapping of shelterbelt systems through remote sensing) in 2017. ICRAF’s contribution to the GIZ-supported *Community-based management of walnut forests and pasture in Southern Kyrgyzstan* project also continued in 2017, with trainings offered to foresters and further investigation about climatic conditions and their relationship with seed trees from which nurseries receive their seed material.

In total 20 students and interns from Central Asia as well as European universities were involved in ICRAF’s activities in the region Central Asia.


*Walnut forest and pasture* project website: [https://www.giz.de/en/worldwide/29911.html](https://www.giz.de/en/worldwide/29911.html)

As part of its strategic mission, MSRI engages with many local, regional and international partners in realizing research to promote sustainable mountain development in Central Asia. Several new partnerships were formed in 2017, and existing partnerships have been further strengthened to enhance the quality as well as the impact of research undertaken at MSRI.

See below for a list of partner institutions that have supported MSRI over the past year.

**University and research institute partners**

- Badakhshan University, Afghanistan
- Bamyan University, Afghanistan
- Birmingham University, United Kingdom
- Centre for Development and Environment (CDE), University of Bern, Switzerland
- Freie University Berlin, Germany
- GFZ German Research Centre for Geoscience
- Imperial College London, United Kingdom
- Khorog State University, Tajikistan
- Kyrgyz National Academy of Science (Institute of Forest, South Branch)
- London School of Economics and Political Science (LSE), United Kingdom
- Rhine-Waal University of Applied Sciences, Germany
- Institute of Geography, Russian Academy of Science
- Institute of Botany, Tajik Academy of Sciences, Tajikistan
- University of Alberta, Canada
- University of British Columbia, Canada
- School of Geography and Environment, University of Oxford, United Kingdom
- Wageningen University, Netherlands
- Weihenstephan-Triesdorf University of Applied Science, Germany
Other partners and project donors

- Aga Khan Foundation – in multiple countries
- Department for International Development (DFID), United Kingdom
- Federal Ministry of Education and Research (BMBF), Germany
- International Centre for Integrated Mountain Development (ICIMOD)
- International Development Research Centre (IDRC), Canada
- International Potato Center (CIP)
- Naryn Nature Reserve, Kyrgyzstan
- Panthera
- Salkyntor National Park, Kyrgyzstan
- State Agency for Environmental Protection and Forestry (SAEPF), Kyrgyzstan
- Sustainable Mountain Development for Global Change (SMD4GC) Programme
- Swiss Agency for Development and Cooperation (SDC)
- United States Agency for International Development (USAID)
- United States Institute of Peace (USIP)
- Zorkul National Park, Tajikistan

In addition, Memoranda of Understanding (MoUs) are in place with several strategic projects and partners, including the following:

Through its membership in national and international bodies, MSRI also can disseminate its research findings further afield – delivering evidence-informed recommendations for practice and policy to a wider public through these important partnerships.

Organisations, societies, and consortia in which MSRI holds membership are listed below.

Memberships
International Conferences and Special Events in 2017

International conferences


4th International Conference on Research for Development, Bern, Switzerland, 5-8 September 2017. [https://www.icrd.ch/](https://www.icrd.ch/)

8th Central Asian Leadership Programme on Environment for Sustainable Development organized by Central Asia Regional Economic Cooperation (CAREC), Almaty, Kazakhstan, 12-22 September 2017. [www.carececo.org](http://www.carececo.org)


Central Asia Regional Economic Cooperation (CAREC) conference on Water Security in Central Asia and Policy Implications, Graduate School of Public Policy, Nazarbayev University, Astana, Kazakhstan, 22 November 2017.


Other special events

9-10 May 2017: “ESPA Mountain EVO” project closing meeting
On 9-10 May 2017 researchers from MSRI met with international colleagues in Bahir Dar and Ad-dis-Ababa, Ethiopia to exchange experiences and outcomes from their Ecosystem Services for Poverty Alleviation Project (ESPA) in Kyrgyzstan. A Policy Event on Citizen science, was also held in conjunction with the meeting in which MSRI staff contributed their perspectives towards future policy in ecosystem services management.
http://www.espa.ac.uk/

5-6 June 2017: SUSWALFOOD project launch meeting
The kick off meeting was held in the frame of the SUSWALFOOD project “Analysis and sustainable utilization of the nutritional potential and secondary plant compounds in underutilized plant species of the walnut-fruit forest of Kyrgyzstan”. 11 partners from Central Asia, Germany and Czech Republic meet together in order to familiarize with each other and discuss future activities, cooperation, possible data sharing and expected results from each of the partner.
https://toolbox.msri.io/suswalfood_intro

7-12 August 2017: WOCAT regional workshop
World Overview of Conservation Approaches and Technologies (WOCAT) - a global network on Sustainable Land Management (SLM) to together with FAO organized workshop for researchers and practitioners, which held in 7-12 August, 2017 in Tashkent and Samarkand (Uzbekistan). The aim of the workshop is to provide training on WOCAT documentation of best practices and approaches, using of global data base. The participants from Uzbekistan, Kyrgyzstan, Turkey, Russia,
Bosnia and Herzegovina also discussed experience and lessons learned about documentation and application of agricultural best practices in their home countries. 

https://www.wocat.net/en/

23-26 August 2017: Global Snow Leopard Forum
During the Global Snow Leopard Forum; held in Bishkek from 23-26 August 2017, an exhibition entitled “Living with Snow Leopard: People, Livelihoods and landscapes of the Tibetan Plateau and Mountains of Central Asia” displayed photographs taken by Marc Foggin during his almost twenty year stay in the Tibetan Plateau of China, showing the livelihood and resilience strategies of communities living there. 

http://www.globalsnowleopard.org/blog/events/global-snow-leopard-summit/

3-4 October 2017: Silk Roads in the Mountains of Central Asia
Silk Roads in the Mountains of Central Asia in Dushanbe, followed by field trip to visit UCA Khorog campus and the Pamir region. Co-sponsors: Oxford University, Freie University Berlin, Inst. of Geography of Russian Academy of Science, Int’l Centre for Integrated Mountain Development, Dushanbe, Tajikistan, 3-4 October 2017.

https://ucentralasia.org/Research/Item/1625/EN

22-23 November 2017: PALESCA inaugural meeting
The first PALESCA meeting was held in Bishkek. In this meeting the project partners from German Research Centre for Geosciences (GFZ Potsdam), Mountain Societies Research Institute (UCA), Central-Asian Institute for Applied Geosciences (CAIAG), Kyrgyz-Russian Slavonian University and State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic discussed the overall goals for the PALESCA project, upcoming activities and expected outcomes from the activities.

http://palesca.msri.io
Publications in 2017

Articles and book chapters


Shigaeva, Jyldyz. “Threats, Challenges and Opportunities for the Development of the Naryn Region.” In Zhizn’ v Gorakh. Prirodnoye I Kul’turnoye Raznoobrazie – Raznoobrazie Modeley Raz-


**Forthcoming Articles and Book Chapters**


Other Publications and Media Coverage


**Conference and Workshop Presentations**

ESPA closing meeting, Bahir-Dar, Ethiopia, 9-10 May 2017:


International Conference on Forest Landscape Restoration under Global Change. a contribution to the implementation of the Bonn Challenge, “Synthesising and sharing globally available forest-related scientific knowledge”, San Juan, Puerto Rico, 6-9 June 2017:


Third Pole Science Summit “Achieving Sustainability through community level partnerships in the Third Pole Environment (TPE)”, Kunming, China, 10-12 July 2017:


Blue Peace Central Asia: Dialogue for 2030 - Water Security and Inclusive Growth, Astana, Kazakhstan, 18-20 June 2017:


23rd Annual Conference of European Association of Environmental and Resource Economists (EAERE), Athens, Greece, 28 June- 1 July 2017:

The Sixth CESS Regional Conference, European Society for Central Asian Studies (ESCAS) and the Central Eurasian Studies Society (CESS), AUCA, Bishkek, Kyrgyzstan, 29 June – 2 July, 2017, http://www.centraleurasia.org/regional-conf:

Murzakulova, A. “Blessing or Hindrance: How is migration shaping Central Asian societies?”

Sagynbekova, L. “Blessing or Hindrance: How is migration shaping Central Asian societies?”

Thevs, N., Martinez Bolea, V., Beckmann, V., Nurtazin, s., Salmurzauly, R., Baiobagysov, A. “Ecosystem Services of the Ili River Delta, Kazakhstan and willingness to pay for their protection by inhabitants of Almaty – an interview based study”.

International Conference on Research for Development, Bern, Switzerland, 5-8 September 2017:


8th Central Asian Leadership Programme on Environment for Sustainable Development, CAREC, Almaty, Kazakhstan, 12-22 September 2017:


Tropentag: Future Agriculture: Socio-ecological transitions and bio-cultural shifts, Bonn, Germany, 20-22 September 2017:


Renewable Resources from Wet and Rewetted Peatlands IUCN RRR Conference, Greifswald, Germany, 26-28 September 2017:


Murzakulova, A. “From Kolkhoz to farmer: modern challenges of the NRM in border area”, Kapalova, A., Sagynbekova, L. “Water resources management in Kyrgyz mountain communities: informal institutions and the role of women”.

PUBLICATIONS IN 2017

International Scientific and Practical Conference on Water Resources in Central Asia’, Almaty, Kazakhstan, 2-3 November 2017:


Water Security in Central Asia and Policy Implications, 22 Nazarbayev University, Graduate School of Public Policy, Astana, Kazakhstan, November 2017:


PALESCA kick-off meeting, Bishkek, Kyrgyzstan, 22 November 2017:

Sagynbekova, L. “Empowering agro-pastoral communities and other mountain stakeholders through participatory monitoring: Experiences from the ‘ESPA project’.”

Practitioners’ Workshop “Integrated Forest-Pasture Management: why, how and what is ahead?”, Bishkek, Kyrgyzstan, 28-29 November 2017:


International Conference on Resilient Hindu Kush Himalaya (HKH): Development solutions towards a sustainable future for Asia, ICIMOD, Kathmandu, Nepal, 3-6 December 2017:

**Mountain Societies Research Institute**

**Dr Dietrich Schmidt-Vogt, Director**

Dietrich Schmidt-Vogt is a geographer with more than 30 years of research experience in mountainous areas of Asia. Before joining UCA, he held positions as Professor at the Kunming Institute of Botany, Chinese Academy of Sciences, in Kunming, China; Associate Professor at the Asian Institute of Technology, Thailand; and Senior Lecturer at the South Asia Institute of Heidelberg University, Germany. He is also Adjunct Professor at the Faculty of Environment and Natural Resources, Freiburg University, Germany; Distinguished Adjunct Professor at the Asian Institute of Technology (AIT), Thailand; and fellow of the Alexander von Humboldt-Foundation. His research interests include forest-farming interactions, multifunctional landscapes, integrated land use systems, and land use change and livelihoods in mountainous areas.

**Dr Marc Foggin, Associate (Acting) Director**

Marc Foggin is a conservation biologist and development practitioner with 20 years of experience working in the high altitude grasslands and mountains of the Tibetan Plateau and Central Asia. He has special interests in landscape level conservation, protected area management, and the human dimensions of conservation, as well as in nomadic pastoralism, development of community-based tourism, and civil society. Marc has served as consultant for UNDP, WWF and other organizations, and is both a member of IUCN’s World Commission on Protected Areas (WCPA) and an honorary member of the Indigenous and Community Conserved Areas (ICCA) Consortium. Additionally, he is Research Associate at the Institute of Asian Research, University of British Columbia, Canada.
Christian Hergarten, Senior Research Scientist

Christian Hergarten is a physical geographer with a background in spatial analysis and natural resource monitoring, using remote and proximal sensing approaches. Christian’s academic interest and work mostly focuses on integrated analysis of ecosystem services and sustainable land management, and extends also to participatory monitoring approaches and the challenges of adaptive and inclusive governance. He has worked in various research contexts and settings – exploring soil and vegetation analysis in Ethiopia, South Sudan and Mozambique, as well as natural resource modeling in Tajikistan and North Korea. He strongly believes in integrated teaching approaches, combining trans-disciplinary research with capacity development and training activities. Christian is also an affiliate research fellow at the Centre for Development and Environment, University of Bern, Switzerland.

Stefanos Xenarios, Senior Research Scientist

Stefanos Xenarios is an environmental economist by training with focus on water resources and climate change aspects. He initially acquired postdoctoral experience in India and Ethiopia as a staff member of the International Water Management Institute (IWMI). Subsequently, Stefanos conducted research on climate change and agriculture in South Asia, based at the Norwegian Institute of Bioeconomy (NIBIO), and worked as Head of the Water and Energy Security Unit at the OSCE Office in Tajikistan. Currently he is leading activities on water-energy-food and environment nexus in Central Asia.

Azamat Azarov, Research Fellow

Azamat Azarov is conducting research on food security in mountain areas, with a focus on small and medium farming system analysis in mountain areas of Kyrgyzstan. Azamat is a PhD candidate at the Czech University of Life Sciences Prague, writing his dissertation on “Classification and development challenges for smallholder farmers in mountainous regions of Kyrgyzstan” with case studies situated in Chuy and Naryn Oblasts. Previously, Azamat taught agrarian marketing at Kyrgyz National Agrarian University. He received his MBA at the University of Applied Sciences Weihenstephan-Triesdorf in Germany.

Janyl Ismailova, Research Fellow

Janyl Ismailova led MSRI’s e-Bilim Mobile Digital Library project. She also supported the implementation of the Naryn baseline study as well as subsequent surveys and monitoring activities in remote areas. Her interests include design and development of educational technologies in underdeveloped regions, ICTs, e-learning and knowledge management. She is currently involved in development and promotion of project management platform and leads the elaboration of a concept for strengthening project management capacities at MSRI. Janyl holds a BA degree in International and Comparative Politics from the American University of Central Asia.
Aziz Ali Khan, Research Fellow

Aziz Ali Khan holds Professional Master Degree in Natural Resources management from International Institute for Aero-space, Survey and Earth Science, the Netherlands, besides Master of Science degrees in Botany and Forestry from Peshawar University Pakistan. Currently Mr. Ali is pursuing his PhD degree at Philipps Universität, Marburg, Germany. Aziz Ali has 25 years of professional experiences in the areas Rural Development and strategic and participatory planning around food security and livelihoods improvement through better and sustainable management of locally available natural resources in rural Pakistan, Afghanistan and Pamir region of Tajikistan. Recently Mr. Ali has also been awarded with prestigious South Asia Fellowship 2017 of Cornell University, Ithaca, New York on “Vulnerability and Disaster Risk Assessment in the Emerging Scenario of Climate Change in North-Eastern Afghanistan”

Dr Murodbek Laldjebaev, Research Fellow

Dr. Murodbek Laldjebaev is an Assistant Professor of Earth and Environmental Sciences with UCA’s School of Arts and Sciences and a Research Fellow with the Mountain Societies Research Institute. At MSRI, he leads the IDRC “Pathways to Innovation” project that provides faculty training and curriculum development support for Badakhshan and Bamyan Universities in Afghanistan, and Khorog State University in Tajikistan. He holds a PhD in Natural Resources from Cornell University, USA and completed his Master’s degree in Public Policy from National University of Singapore. His research and scholarship focus on energy security, energy poverty, energy sovereignty, water resources management, food sovereignty, and the energy-water-food nexus.

Shodigul Mamyorkobekova, Research Fellow & Khorog Office Manager

Shodigul Mamyorkobekova joined MSRI as Research Fellow in April 2017. She holds an MSc in Environmental Science and Policy from Northern Arizona University, USA and an undergraduate degree in History and Law from Khorog State University, Tajikistan. Shodigul has almost 10 years’ experience with various national and international development organizations in Tajikistan, Switzerland and the United States. Before joining UCA MSRI, Shodigul worked within Pamir Energy Company as a Disaster Risk Reduction Coordinator.

Dr Asel Murzakulova, Research Fellow

Asel Murzakulova is primarily engaged in security and conflict-related research, with focus on resource management challenges. She is co-founder, with information agency Akipress and Polis Asia Center, of the analytical club “Montu.” Asel obtained her PhD from Kyrgyz Russian Slavic University in 2011. Her research interests cover many aspects of international politics, with a particular interest in the cross-border issues in CIS, Russian soft power, migration, identity, religion, political institutions. In 2013 she was awarded the International Medal of the Commission of National Education of Poland for her contribution to the development of civic education in the Kyrgyz Republic.
Dr Lira Sagynbekova, Research Fellow

Dr. Lira Sagynbekova is a Research Fellow at the Mountain Societies Research Institute, University of Central Asia (UCA). As a Graduate Fellow of the UCA Central Asian Faculty Development Program, Lira received her Ph.D. from the Centre for Development Studies, Free University of Berlin. She previously taught at the Kyrgyz National University, was a Research Fellow at Moscow State University and Free University of Berlin, and consultant at International Organization for Migration. She has an extensive research experience in migration issues and rural livelihoods.

Dr Jyldyz Shigaeva, Research Fellow

Jyldyz Shigaeva led 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 an 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.

Qobiljon Shokirov, Research Fellow

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

Munavar Zhumanova, Research Fellow

Munavar has fourteen years’ working experience in agrarian policy and development issues in the agricultural sector. Munavar received her MA in Agrarian Policy from the Graduate School of International Development and Cooperation, University of Hiroshima, Japan. Munavar’s areas of expertise include grazing management and ecology, decision-making support tools in agro-pastoral systems and modeling in land use and land cover changes. Her academic and professional multidisciplinary approaches address environmental and resource economics, natural resource management and conservation,
ethnobotany and traditional ecological knowledge of agro-pastoralists, and climate change issues in remote mountainous Kyrgyzstan. Munavar is currently enrolled in PhD studies in Agriculture and Grassland Sciences at the University of Rostock in Germany.

Elnura Omurbekova, Senior Research Officer & Bishkek Office Manager

Elnura Omurbekova supports the work of researchers at MSRI, serving as administrative coordinator and focal point for other UCA departments and external partners. Previously, she worked at the OSCE Academy in Bishkek as a Research and Training Assistant and an Academic Assistant. Elnura received her Graduate Diploma in Law from Kyrgyz Russian Slavic University and her Master of Law from Kyushu University, Japan.

Evgenii Shibkov, GIS Research Associate

Evgenii Shibkov is currently working as GIS expert, with a strong background in digital cartography. Prior to joining UCA he worked for 6 years as engineer at the Kyrgyz State Service of Geodesy and Cartography. Evgenii has a MSc in Geoinformatics: Managing Energy, Resources and Environment (GEM) from Kyrgyz State University of Construction, Transport and Architecture. He also took part in various international trainings in data modeling, project management, and remote sensing.

Muslim Bandishoev, Remote Sensing & GIS Expert

Muslim Bandishoev graduated from the International Institute for Geo-information Science and Earth Observation (ITC), Netherlands and is specialized in application of remote sensing and GIS in mountain agriculture and glaciology (climate change). He worked as intern with Environmental Systems Research Institute (ESRI) on a study of deforestation of Amazon rainforest in Guyana. Muslim also has worked with and supported several NGOs in building local Spatial Data Infrastructure and in the application of GIS to risk reduction programmes.

Evgeniy Novikov, Software Developer & Knowledge Management systems manager

Evgeniy Novikov is a software developer specialised in PHP and MySQL. He has a Masters in Software Development and Technology from the International University of Kyrgyzstan. At MSRI, Evgeniy’s core responsibilities include software development using open source technologies (Linux, Apache, MySQL, PHP), administration of virtual information technology infrastructure, development of knowledge management systems and procedures, development of web portals, and development, optimisation and maintenance of a range of SQL-based databases of various levels of complexity.
Altyn Kapalova, Project Manager

Altyn Kapalova manages MSRI’s Central Asia and Afghanistan Research Fellowship (CAARF) which funds and support researchers from the Kyrgyz Republic, Tajikistan and Afghanistan to conduct applied research relevant to the development of the region’s mountain communities. Altyn’s research interests include informal institutions, gender studies, and rural development. She was awarded the Fellowship of the Central Asia and Caucasus Research and Training Initiative (CARTI), and she interned at the Department of Anthropology at Texas A&M University, USA, in the Spring of 2012.

Aline Rosset, Project Manager

Aline Rosset manages MSRI’s eBilim mobile digital library project, funded by GIZ, as well as the Kyrgyz Mountains Environmental Education & Citizen Science (KMEECS) project together with CAMP Alatoo. Her main interests and experience lie in sustainable development of mountain regions, environmental education, natural resources management, geographic information and knowledge management, as well as participatory and interdisciplinary research. Aline has previously worked on the establishment of Joint Forestry Management schemes on degraded riparian forest in the valleys of GBAO, Tajikistan in partnership with the State Forestry Agency. Prior to that, she has worked in Europe, West Africa, and Central and South America. Aline has a MSc in Geography from University of Zurich, where she was also employed as teaching and research assistant for the chair of Human Geography, and as a management assistant at the National Centre of Competence in Research (NCCR) North-South hub in Zurich.

Samat Kalmuratov, Research Assistant

Samat Kalmuratov is supporting the ESPA research team by conducting baseline surveys in remote Naryn villages. He is also contributing in the installation and maintenance of weather stations in remote mountain areas. Samat received his MBA at the University of Applied Sciences, Weihenstephan Triesdorf in Germany.

Gulbara Omorova, Research Assistant

Gulbara works as a Field Assistant for the Mountain Societies Research Institute (UCA) in the project “Contextual Factors of the Conflict in Batken Province Kyrgyzstan. Previously she worked as a data collection and monitoring specialist at international organizations possessing sufficient skills in performing of field works in regions of Kyrgyzstan with experience in multicultural environment. She graduated from the Academy of Management under the President of the Kyrgyz Republic Master Degree under specialty of Management with specialization at Public and Local Administration.
Vincent Lalieu, Knowledge Management Systems consultant

Vincent Lalieu is a specialist in environmental knowledge management. Based in Central Asia for 9 years, he is technical leader for the Geo-Informatics Knowledge Management Platform to support multi-stakeholders projects at MSRI. In addition, he is regional coordinator for the Caspian Environmental Information Centre on behalf of GRID-Arendal. In the past, he has developed solutions for professionals in the domain of Science (CERN), Disasters Response (ICVA, OCHA, UNDP) and Climate Change (UNEP, UNFCCC). His background is biology and computer sciences and his hobby is wind cycling across the steppes.

Mountain Partnership / Central Asia Mountain Hub

Elbegzaya (Zaya) Batjargal, Regional Program Officer, Central Asia Office

Elbegzaya Batjargal oversees Mountain Partnership (MP) activities to support MP members in Central Asia working 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 Policy Analyst and Environmental Specialist with the Energy and Environment teams of United Nations Development Programme in Mongolia and in 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, Central Asia Office

Alma Uzbekova coordinates communications and public relations activities for the Mountain Partnership Central Asia Office. 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 Alatoo’ (Central Asian Mountain Programme) where she was responsible for communications and public relations. She earned her Master’s degree at the Kyrgyz Academy of Management.
Dr Niels Thevs, ICRAF Central Asia Programme Coordinator

Niels Thevs started to work for ICRAF at the end of 2014, developing a research program for ICRAF in Central Asia. Before that, he worked as researcher at University of Greifswald, Germany, where he was responsible to develop and carry out research projects in the fields of sustainable land use in riparian oases and drylands of Central Asia. He established partnerships with research institutions from China, Kazakhstan, Uzbekistan, and Turkmenistan. In addition to research, Niels was involved in teaching (GIS, remote sensing, soil science) in the international Masters Course in Landscape Ecology and Nature Conservation at University of Greifswald. He also has developed projects in the field of environmental education with various organizations from China. Niels obtained his PhD in Landscape Ecology at University of Greifswald.

Kumar Aliev, ICRAF Research Assistant

Kumar Aliev is supporting the development of a research strategy for ICRAF’s Central Asia Office. He is responsible to support and carry out research projects, including literature reviews, translations and other related tasks on selected topics. Kumar contributes to field studies, household interviews, office organization, and coordinates with UCA departments. Previously, Kumar worked as researcher at the P. A. Ghan Forest Institute under the National Academy of Sciences. He obtained his MSc in forestry at Kyungpook National University, South Korea.

Arzygul Almazbekova, ICRAF Assistant

Arzygul Almazbekova started to work with the ICRAF Office in June 2017. She mainly worked as translator for scientific literature and as interpreter during farm interviews and workshops. She graduated with a Bachelor Degree from the German Language Department at Kyrgyz National University.