

## **Strengthening Mountain Societies in Central Asia in a Context of Multidimensional Change**

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# Strengthening Mountain Societies in Central Asia in a Context of Multidimensional Change



UNIVERSITY  
OF CENTRAL ASIA  
MOUNTAIN SOCIETIES RESEARCH INSTITUTE

*The Mountain Societies Research Institute (MSRI) conducts transdisciplinary research for development, with the goal of improving the livelihoods and well-being of mountain societies in Central Asia and building their resilience in a rapidly changing socioeconomic, political, and biophysical environment. MSRI is a core institute of the Graduate School of Development at the University of Central Asia (UCA), working alongside the Institute of Public Policy and Administration (IPPA). Beyond research, MSRI also engages in building Central Asian capacities to contribute to sustainable mountain development; serves as a knowledge hub for scholars, development practitioners, and policy-makers; and contributes to the development of UCA's academic programs, which will be offered in the Kyrgyz Republic, Tajikistan, and Kazakhstan.*

*The University is now ready to inaugurate its undergraduate program, with students coming from across Central Asia to its Naryn Campus in the Kyrgyz Republic in September 2016. MSRI is currently headquartered in Bishkek, Kyrgyz Republic, but, in the longer term, will be affiliated most closely with the Khorog Campus in Tajikistan, which is set to open in September 2017. MSRI will collaborate closely with UCA's Earth and Environmental Sciences Program, with contributions to teaching supported by innovative, applied research embedded in the University's Learning Landscapes initiative.*

*MSRI's development vision and research strategy are focused on addressing the multidimensional nature of current and anticipated changes in mountain areas of Central Asia and on building resilience in mountain societies.*

## **Collaborative, internationally focused research and capacity building**

UCA seeks to promote sustainable development in Central Asia, particularly for mountain societies that have often been marginalized due to limited accessibility, harsh environmental conditions, and a history of being subject to interventions by the region's big powers.

UCA was founded in 2000 by an international treaty between the governments of Kazakhstan, the Kyrgyz Republic, Tajikistan, and His Highness the Aga Khan, and registered with the United Nations. With a decentralized 3-campus model, UCA promotes the socioeconomic development and wellbeing of mountain societies in Central Asia. Achieving and maintaining international standards in higher education and research will form the primary basis for sustained improvements. UCA's 3 campuses were deliberately located in secondary towns in mountain areas to enhance educational opportunities for mountain societies and to serve as hubs for regional social and economic development. UCA is currently operational through the activities of its research institutes—the Mountain Societies Research Institute (MSRI) and the Institute of Public Policy and Administration (IPPA)—as well as through the programs offered by the School of Continuing and Professional Education (SPCE).

Teaching of UCA's undergraduate programs will be launched with the opening of the first campus in Naryn, Kyrgyzstan, in September 2016. The second campus will open in Khorog,

Tajikistan, in September 2017, and the third campus in Tekeli, Kazakhstan in 2019.

Founded in 2011, MSRI has engaged in research on a wide range of topics including pasture management, sustainable land management, social-ecological systems, transboundary resources conflicts, and mountain tourism (Dear and Weyerhaeuser 2012; MSRI 2016). Some issues have been investigated through stand-alone projects, but most research has been undertaken within larger development programs, most often with other agencies in the Aga Khan Development Network (AKDN). The geographic scope of MSRI's research and capacity-development activities includes, but is not limited to, the post-Soviet Central Asian countries. Several new projects are being developed in neighboring areas in Afghanistan, northern Pakistan, and western China. Funding for MSRI's research has come mostly from international donors, including the Department of Foreign Affairs and International Trade and the International Development Research Centre (Canada), the Department for International Development (United Kingdom), the Swiss Agency for Development and Cooperation, and the United States Agency for International Development.

MSRI will collaborate closely with UCA's Earth and Environment Sciences Program on curriculum design and teaching, as well as through research-based linkages that can enhance educational outcomes. Focused not only on UCA students and faculty but also on a wider array of development actors including communities, one of the Institute's key guiding frameworks for research

and partnerships is the innovative Learning Landscapes initiative.

### **Integrated, systems-level knowledge for development: Learning Landscapes and other initiatives**

MSRI's Learning Landscapes framework helps the Institute to maintain focus on transdisciplinary research (Hurni and Wiesmann 2014) within the multiscale, multidimensional landscapes surrounding UCA's campuses. This is accomplished through a comprehensive monitoring network to track ecological, climatic, and human development trends. Adopting such an integrated, systems-level perspective—incorporating administrative areas with regional watersheds, ecological zones, and land management units as well as social and political frameworks—allows MSRI to study complex social-ecological systems from a variety of viewpoints and with different approaches, in order to advance our understanding and our ability to inform development decisions. Much of the monitoring will be undertaken through participatory approaches with local communities. Additionally, inter- and transdisciplinary research will help build synergies that improve understanding, at a systems level, of the social and ecological functioning and underlying development decision-making processes that are at work in these mountain landscapes. Smaller demonstration areas or sites where more in-depth research can occur, and where students can participate in hands-on learning, are being established. Through its Learning Landscapes initiative, MSRI aims to conduct long-term, application-focused research and monitoring in and on the 3 regional landscapes.

The primary purpose of MSRI's research, including the Learning Landscapes initiative, is to generate knowledge that can be used to inform

and enable adaptive decision-making at multiple levels, from the household and community to senior government administrative levels. To date, MSRI's most comprehensive integrative study is being carried out within the context of the Environmental Services for Poverty Alleviation (ESPA) project on the social-ecological system in Naryn oblast in Kyrgyzstan, with a focus on the governance of common-pool resources, particularly the region's mountain pastures (Shigaeva et al 2016). This approach will soon be extended to UCA's other campus regions in Tajikistan and Kazakhstan.

Additionally, the value of long-term social and ecological monitoring in mountain regions is greatly enhanced when internationally agreed monitoring protocols are followed—allowing more comparisons to be made and better-informed development policy guidelines to be advanced in international arenas such as the World Mountain Forum. For this purpose, MSRI is actively engaged with several mountain research networks including the Mountain Forum, Mountain Partnership, Global Network of Mountain Observatories (GNOMO), Global Observation Research Initiative in Alpine Environments (GLORIA), and Mountain Research Institute (MRI), and it is an institutional member of the International Mountain Society (IMS) and the Himalayan Universities Consortium (HUC).

### **Fostering resilience to change**

With plans to move its headquarters to Khorog (Figure 1) starting in 2017, MSRI is situated both thematically and geographically at one of the major crossroads of Central Asia. MSRI's research strategy takes into account the range of socioeconomic, environmental, and political changes faced by Central Asia, including western China, which are likely to accelerate and intensify in the future. These changes will have significant

impacts on mountain societies, which will need to adapt in order to survive and, better still, to enhance their quality of life.

Adaptation to climate change is central to MSRI's agenda. Climate change already affects mountain regions of Central Asia, through rising temperatures as well as increasingly erratic rainfall patterns, with periods of drought followed by periods of excessive rain at short intervals. In the long term, the effects of climate change are expected to exacerbate the negative impacts of other changes, such as economic downturns. However, as the effects of climate change vary locally in the dissected mountainous terrain of Central Asia, adaptation strategies also need to be location-specific at a small scale. MSRI's close partnership with other Aga Khan Development Network agencies, such as the Mountain Societies Development Support Programme (MSDSP), is thus instrumental in grounding our research in participatory development programs and real-life scenarios, including community-based climate change adaptation efforts (Ashley et al 2015).

Transboundary issues affect all of the countries in Central Asia, especially those previously part of the Soviet Union. In these cases, internal boundaries became international boundaries, with negative effects on regional trade as well as on use of natural resources, especially pasture and water. With a focus on environmental governance, MSRI continues its study of natural resource management dynamics in the border communities of Kyrgyzstan and Tajikistan. Lessons learned from such studies are disseminated widely, including in peer-reviewed articles, round-table dialogues with local and national development stakeholders, and policy briefs (eg Murzukalova 2016).

Although located in the heart of Asia, Central Asia has in many ways been a peripheral region for centuries, including in relation to the

**FIGURE 1** Khorog, Tajikistan, the site of the University of Central Asia's second campus and the future location of MSRI. (Photo by Mikhail Romanyuk, courtesy of UCA)



major geopolitical spheres of influence in the 20th century. However, this situation is about to change as 3 countries—China, Russia, and United States—develop “new Silk Road” policies (Kim and Indeo 2013; Boh Ze Kai 2015; Winter 2016). Investments in the development of transport routes and economic corridors will greatly affect mountain societies, often in ways that are difficult to foresee and may not always be positive. These major developments will be followed closely through ongoing monitoring and research. A workshop on the wide-ranging impacts of China’s new Silk Road investment policy in Central Asia, examined from the perspective of mountain societies, will take place in September 2017 in Khorog, Tajikistan—supporting the further development of strategic avenues of socioeconomic research and marking

the opening of the University’s second campus. In similar fashion, the creation of the Eurasian Economic Union is already affecting trade and migration patterns in Central Asia. MSRI is undertaking research on migration as a socioeconomic response to international trade relations with the Russian Federation, and its impacts on mountain societies in the Kyrgyz Republic as mediated by financial and intellectual remittances (Sagynbekova 2016).

MSRI is actively engaged in current international development dialogues, both to contribute to these processes and to guide the development and prioritization of its own research agenda. Major elements of that engagement include the following:

- Dialogues and debates related to the United Nations Framework

Convention on Climate Change meetings, facilitated through our partnership in the Central Asia Mountain Hub of the International Mountain Partnership, which brings many grassroots voices into a global community of interest and practice;

- The development of a suite of practical indicators to monitor progress toward the UN Sustainable Development Goals, facilitated by the Mountain Research Initiative and World Mountain Forum, among others;
- Documentation of effective grassroots practices and ideas that show the positive potential impact of human activities on the environment in Asia’s highlands, termed “seeds of change” by the Mountain Futures consortium.

## Serving as a knowledge hub

As an academic institution with regional aspirations, MSRI strives to integrate its efforts with those of other development actors in the region by serving as a knowledge hub for multiple stakeholders: scientists, decision-makers, and development practitioners, as well as land users and community members.

Technically, MSRI has invested in the development of a web-based information- and document-sharing platform, the MSRI Knowledge Hub, which is open to the public (<http://msri-hub.ucentralasia.org/>). At this stage, the knowledge hub primarily serves the needs of scientists and development practitioners.

Wherever possible, MSRI seeks technological solutions that optimize systems already used by partner institutions, as well as open-source platforms and software. The Knowledge Hub is a service platform for sharing and communicating a wide range of information and knowledge materials, including but not limited to research articles, data sets, maps, synthesis products (eg policy briefs, background papers, and blogs), training manuals, images, and videos. The materials shared through the knowledge hub provide a basis for research seminars, papers, conferences, undergraduate learning materials, exhibitions, public policy forums, opinion pieces, round tables, and other mechanisms for the exchange and enrichment of research and debates about current development issues relevant for mountain societies.

## Looking ahead

MSRI will continue to conduct strategic research aiming to advance understanding and to inform interventions that help build the resilience of mountain societies in Central Asia, in a context of multiple changes occurring across a range of sectors and scales. To this end, it seeks to enhance regional professional capacities through its training programs, including the Central Asian Faculty Development Program, which is now seeing the return of fellows with first-class international education. With a strong core team of regional and international experts, and strengthened by partner institutions in China, Europe, and North America, MSRI and UCA are now poised to play an increasingly important role in regional affairs by conducting strategic research for development, building synergies and partnerships, and supporting data and knowledge sharing among development partners in Central Asia.

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