

## DEVELOPMENT ISSUES

# BIODIVERSITY IS ESSENTIAL FOR HUMAN DEVELOPMENT

Biodiversity encompasses the totality of life, including the diversity of species, of habitats and of ecosystems as well as the underlying genetic diversity of both wild and domesticated animals. The sustainable use of natural resources and the preservation of biodiversity are essential to ensure reliable provision of ecosystem services – such

as fresh water, productive agropastoral landscapes and enhanced stability of fragile mountain slopes.

The resilience of ecosystems in the face of global changes (including but not limited to climate change) – i.e., their ability to accommodate or ‘bounce back’ from shocks and persistent pressures – is maximized through diversity. With our future uncertain, the

We dedicate this inaugural issue of Plateau Perspectives' *Development Issues* in loving memory of **Miranda Harris** and **Chris & Susanna Naylor**, leaders in *A Rocha International*, a Christian conservation NGO widely recognized and well respected for its dynamic leadership and clear voice at the interface of science and theology. We owe them deep gratitude, together with **Peter Harris** who survives them, for their regular encouragement over the years. Website: [www.arocha.org](http://www.arocha.org)

**Mountain biodiversity** is a fundamental ingredient for socioeconomic development and well-being in mountain regions, supporting local and downstream populations. The state of the environment – and its customary custodians – should be of special concern for us all, as the biodiversity in these integrated social-ecological systems provides us with critical resources and services, and holds inherent spiritual value.

best course of action is for us to preserve and protect the most basic ingredient of our social-ecological systems, namely the diversity of life.

The fundamental ability of societies to adapt to major changes also is contingent on the traditional practices that have developed over generations, and on social norms and people's core beliefs and values that will underpin their perceptions, decisions, and behaviours.

In mountain areas such as found in Central Asia, bio-cultural diversity also is rich. Mountain communities are noteworthy for their lasting endurance in oft marginal environments, an attribute that is largely dependent on risk minimization coping strategies that recognize the benefits of flexibility and adaptability...

With biodiversity now well recognized as contributing substantially to collective development and well-being,

being, a critical question arises,

*How can biological diversity, our common natural heritage, best be preserved?*

Additionally, we also must ask an even deeper question,

*By whom - and for whom - shall we seek to conserve nature, the environment, ecology, creation?*



# BIOCULTURAL DIVERSITY

Traditional knowledge and practices strengthen sustainable food systems



All around the world, many indigenous peoples and local communities have found novel ways to survive, even thrive, in the oft harsh environments around them – drawing their sustenance both from natural resources and ‘tools’ such as livestock and from the sacred. Over time, deeply held shared values and belief systems have transformed into common experience,

broadly recognized as culture. The important roles of culture in sustainable development is relatively under-appreciated. Cultural continuity and sense of identity may be difficult to measure, yet they are crucial and directly affect people's quality of life. The values of traditional knowledge, local and customary practices and alternate ‘ways of knowing’ are finally being recognized and appreciated – with key

implications for the strengthening of regional sustainability and resilience.

Cultural diversity is especially rich in mountain areas, where rugged terrain has limited communication and interactions, often leading to development of unique solutions. Many such peoples and territories exist all around the world.

Recognizing, valuing and ensuring the survival of traditional Territories of Life enriches everyone, everywhere.

## THE MOUNTAINS OF CENTRAL ASIA

A global biodiversity hotspot

Central Asia is situated at the interface of several global bioregions and the nexus of the Tianshan, Pamirs and Hindukush ranges. Together, these biogeographic elements have conferred on the region a wealth of ecosystems, habitats, and wildlife.

The Critical Ecosystem Partnership Fund will invest around US\$ 8 million in 2020-24, aiming to strengthen conservation in this high value global hotspot. National governments, civil society, academia and other international partners will join forces, further building other mobilization efforts such as the global snow leopard programme, or GSLEP, and jointly respond to their collective challenges through this funding opportunity.



# KEY BIODIVERSITY AREAS

## Foundations for socio-ecological resilience and sustainability in Central Asian mountains

Key biodiversity areas (KBAs) have been identified across Central Asia – these are both the most biodiverse and the most sensitive regions, highly vulnerable to disturbances. Development investments therefore must consider the ecological costs of proposed interventions, and internalize them. KBAs can assist in such processes, e.g. assessing the potential impacts of China's Belt & Road Initiative (BRI) in Central Asia. KBAs also may

support regional conservation by enabling a gap analysis of protected areas with overlay of KBAs in mountain regions, thus guiding prioritizations.

Such processes also should include territories conserved by indigenous peoples and local communities, as these collectively encompass over a quarter of the world's land area and overlap many KBAs.

A further regional approach for conservation of mountain

ecosystems and KBAs that has gained high political support in Central Asia is the Global Snow Leopard & Ecosystem Protection (GSLEP) program, based in Bishkek, Kyrgyzstan.

Effective protection of KBAs will enhance long-term development opportunities and outcomes, and strengthen adaptive capacities.

# THREATS AND OPPORTUNITIES FOR SUSTAINABLE MOUNTAIN DEVELOPMENT IN HIGH ASIA

## Established, emerging, and horizon issues

With unique sociopolitical legacies as post-Soviet countries, harsh and often degrading environmental conditions, and significantly affected by climate change and other global pressures, mountainous regions of greater Central Asia find themselves at a critical juncture. High stakes hinge on the decisions now being made in regard to development.

Development threats in greater Central Asia include...

- Failure to mainstream biodiversity across all sectors
- Climate change, melting glaciers, altered water regimes
- Pressures of globalization, esp. in regard to food systems
- Large linear infrastructure, e.g. Belt & Road Initiative (BRI) with threats to migratory species and a risk of debt traps

Opportunities for conservation and sustainability include...

- Focus on Green Economy, including renewable energies
- Building partnerships and aligning goals along the SDGs
- Strengthening ICCAs – Territories of Life (success record)
- Raising awareness, emerging information technologies



# KEY RECOMMENDATIONS

## Strengthening mountain sustainability

Recommendations for governments, development donors, and other planners and decisions makers:

- **Adopt more inclusive approaches** in stakeholder assessments and development dialogues, in order to better engage with and hear mountain voices
- **Incorporate local and traditional knowledge and customary practices** in interventions pertaining to agropastoral livelihoods, including preservation of native and/or locally adapted livestock and crops
- Amend legislation to further **strengthen community conservation efforts**, including local conservancies and other forms of conservation-oriented resource management under local or indigenous oversight
- **Recognize the value of biodiversity** (including key biodiversity areas, as well as protected areas and ICCAs – Territories of Life) in policy and operations
- **Increase sustainability and reduce corruption** with requirements that all projects undergo transparent Environmental & Social Impact Assessments (ESIA)



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Plateau Perspectives supports grassroots initiatives in community-based conservation and sustainable development in the Tibetan plateau region and the mountains of Central Asia

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