



Conservation and Adaptation in Asia's High Mountain Landscapes and Communities

Adapting to a changing world

In the face of a changing climate, rapid glacier retreat in alpine regions is altering river flows and seasonal availability of water, and is affecting species, people, economies and regional stability.

Poor water resources management, land degradation, fragmentation and loss of forests and grasslands, poaching, and overgrazing of livestock is further exacerbating pressure on high mountain ecosystems while increasing human-wildlife conflict with species like the endangered snow leopard.

These elusive mountain cats are a flagship species that are indicators of the health and vitality of entire ecosystems across their range. Snow leopard habitat supports a rich array of other biodiversity.

It also overlaps with the headwaters of some of the world's most important rivers that originate in the high mountains of central Asia. One-third of the world's population rely on these mountain systems for freshwater.

Through the lens of snow leopard conservation, this program will address the linked issues and challenges of climate change adaptation and high mountain landscape management.

Program Goal

To galvanize greater understanding and action at local, national and regional levels across the snow leopard range countries to help conserve this iconic and endangered species, and to connect snow leopard conservation to a broader set of environmental, economic, and social issues with consequences for Asia's future sustainability, namely local livelihoods, water and food security, and climate change adaptation.



Program Objective 1:

Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.

With warmer temperatures and wetter conditions projected in the Himalayas, forests will ascend to higher elevations in alpine regions posing significant challenges for snow leopards and pastoralists as higher tree lines will put them in greater competition for resources.

Our program will take stock of climate vulnerabilities across the high mountain landscapes of Asia to identify regional threats and opportunities for addressing climate adaptation and water resource needs.

Priority landscapes across six countries will integrate snow leopard conservation with climate-smart sustainable development, local governance and citizen science capacity, and incentives for adaptation to climate change. A strong emphasis will be placed on sharing lessons with small-grants investments in other range countries.

Project activities at the site-level will help improve livelihoods and motivate local communities to engage in both conservation of snow leopards and prey species as well as sustainable management of high mountain landscapes. This will strengthen community institutions and mechanisms related to management, equitable benefit sharing and access to natural resources. Empowering indigenous, poor, marginalized and vulnerable communities, especially women, will be an important aspect of our work. The program will support alternative livelihoods to reduce dependence on natural resources, which will include ecotourism development.

Representation of activities based on existing snow leopard strategies:

Bhutan: implementing adaptation actions identified by climate change vulnerability assessments in Bhutan's Wangchuk Centennial Park and Nepal's Kangchenjunga Conservation Area; promoting better agricultural and grazing practices that are climate-smart and maintain healthy pasture for local livelihoods and wildlife.



India: Conducting a study on the severity of livestock depredation to develop and implement a comprehensive snow leopard-human conflict mitigation program including livestock insurance schemes when feasible.





Kyrgyzstan: snow leopard population survey to protected area system for snow leopard conservation considering recent and predicted changes in key habitats; supporting anti-poaching teams; engaging local communities in species conservation activities through conservation education and training.



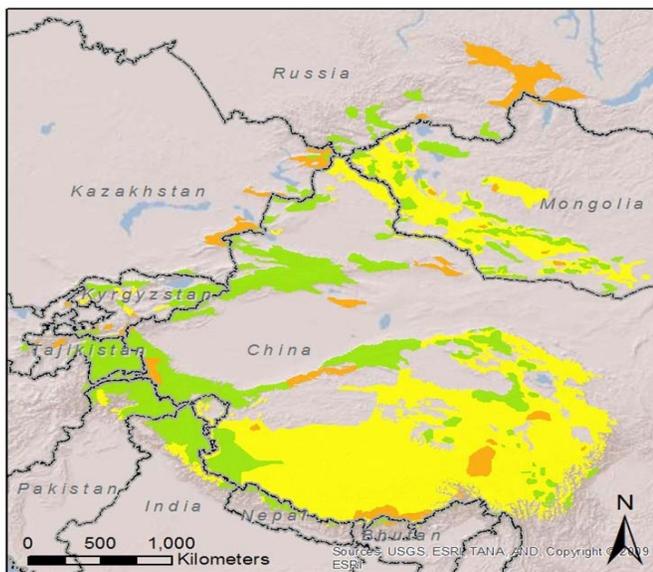
Mongolia: Snow leopard distribution survey; satellite GPS telemetry to better understand snow leopard ecology; building on lessons and best practices from successful livestock insurance scheme and sharing with stakeholders and decision makers.



Nepal: Developing a monitoring protocol for the selected field sites to assess abundance and distribution of snow leopards and their prey base; training local communities in monitoring, surveys, and anti-poaching efforts; provide technical and financial support to forest departments and communities for tangible measures to protect habitat.



Pakistan: Snow leopard population survey and GIS-based species distribution maps; conservation plan with partners including the district government; establishing a “watch and ward” system against hunting and poaching and expanding on existing tribe-based traditional resource management groups.



Legend
Snow Leopard Range
 ■ Extant
 ■ Probably Extant
 ■ Possibly Extant





Program Objective 2

Improve transnational collaboration on climate change adaptation and snow leopard conservation in Asia’s high mountain landscapes.

Fostering the formation of inter-governmental alliances for the sustainable management of Asia’s high mountain landscapes is a key objective for this program. International support for sustainable headwater management, climate change adaptation and Asian water security will be galvanized by leveraging our partnership strengths through the charismatic snow leopard.

Dialogue will be started and sustained across a wide array of fora like the Snow Leopard Network, Climate Summit for a Living Himalayas Inter-governmental Body, the Inter-Governmental Sustainable Development Commission of Central Asia, and a regional Alliance on Asia’s High Mountain Landscapes.

- Leading research and educational institutions will be tapped to establish a system to test the correlation between our headwater ecosystem conservation efforts and downstream benefits for water supplies. For example, we will coordinate with the USAID-funded University of Colorado project that assesses the role of glaciers and seasonal snow in the water resources of High Asia.
- Innovative partnerships garnered through WWF’s Freedom to Roam initiative to engage international outdoor retailers and their customers will elevate awareness and support for high mountain conservation strategies.
- Illegal trade in snow leopards will receive sharpened attention by engaging directly with the South Asian Wildlife Enforcement Network and coordinating with INTERPOL through the USAID-funded Project PREDATOR.
- The global network of snow leopard biologists and conservation practitioners that are part of the Snow Leopard Network will be tapped to build momentum for snow leopard conservation.

Snow leopard conservation will be an important starting point for much broader, richer regional dialogue to foster agreement among all the snow leopard range countries to form an Alliance on Asia’s High Mountain Landscapes.

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