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Silent Roar

UNDP AND GEF IN THE SNOW LEOPARD LANDSCAPE

ACKNOWLEDGEMENTS

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INTRODUCTION

A half century after Rachel Carson brought us *Silent Spring*, a lot of voices in the natural world are still falling silent. But in the world's high places, there remains an animal rarely seen and almost never heard. This is the story of one of the world's great cats, noteworthy for the fact that it does not roar. But its conservation story, intricately linked with the landscapes and people, needs to be heard.

Photo by Steve Winter/National Geographic Creative

In October 2013, officials from the 12 snow leopard range countries gathered in Bishkek, Kyrgyzstan for the first Global Snow Leopard Conservation Forum. Following two years of intense preparations, all 12 governments signed the historic Bishkek Declaration on the Conservation of Snow Leopards and unanimously endorsed the Global Snow Leopard and Ecosystem Protection Program (GSLEP). The core of the GSLEP are the National Snow Leopard and Ecosystem Protection Priorities (NSLEP) documents, one for each range country, as well as a series of Global Support Components (GSCs), outlining how international organizations may best assist the countries' efforts, particularly in transboundary and range-wide contexts. The United Nations Development Programme (UNDP) and the Global Environment Facility (GEF) are two such international organizations committed to contributing to the GSLEP through financial and technical support.

GEF has a long history of supporting conservation of the snow leopard (*Panthera uncia*) and its habitat, having approved 24 total projects and invested nearly USD \$100 million toward UNDP-implemented projects in all 12 range countries since 1991. This publication highlights nine current GEF-financed, UNDP-implemented projects that have emerged since the Global Forum in 2013, representing an investment of about \$45 million to support snow leopard range countries in meeting their national targets toward achieving GSLEP objectives. These nine projects alone have leveraged over \$200 million in co-financing from national and international partners. "Partner Spotlights" spread throughout this publication share examples of the innovative work done by several of these key GSLEP partners.

GSLEP countries identified 23 international landscapes as conservation priorities, each hosting an abundance of plant and animal species. A large part of these landscapes have been occupied and managed by indigenous peoples and local communities for generations, often experiencing poverty as they strive to make a living in one of the most remote and extreme environments on Earth. For UNDP, GEF and GSLEP partners, advancing the cause of snow leopard conservation represents the opportunity to protect globally significant biodiversity and work toward the improved well-being of humans—both women and men—as well as safeguarding essential ecosystem functions benefitting all life on Earth. Reviving and incorporating the traditional knowledge of the indigenous peoples, ethnic minorities and pastoralists who have lived on these lands in harmony with nature for centuries is essential to further promote conservation and sustainable development initiatives.

To achieve these overlapping and interconnected goals, our projects employ a comprehensive strategy aimed at addressing direct environmental threats as well as the underlying conditions that allow these threats to arise. Projects also target the issues at multiple levels, from local, on-the-ground interventions to regional and national government policy reform, to efforts that require international cooperation. Each project is designed with a suite of interventions aimed at achieving direct conservation results as well as creating a political and social environment that facilitates sustainable change and enables countries to accelerate achievement of the Sustainable Development Goals (SDGs). Through holistic project design and partnership with governments and other GSLEP organizations committed to conservation, the health and vitality of snow leopards and the people who rely on the high mountain ecosystems will extend long into the future.

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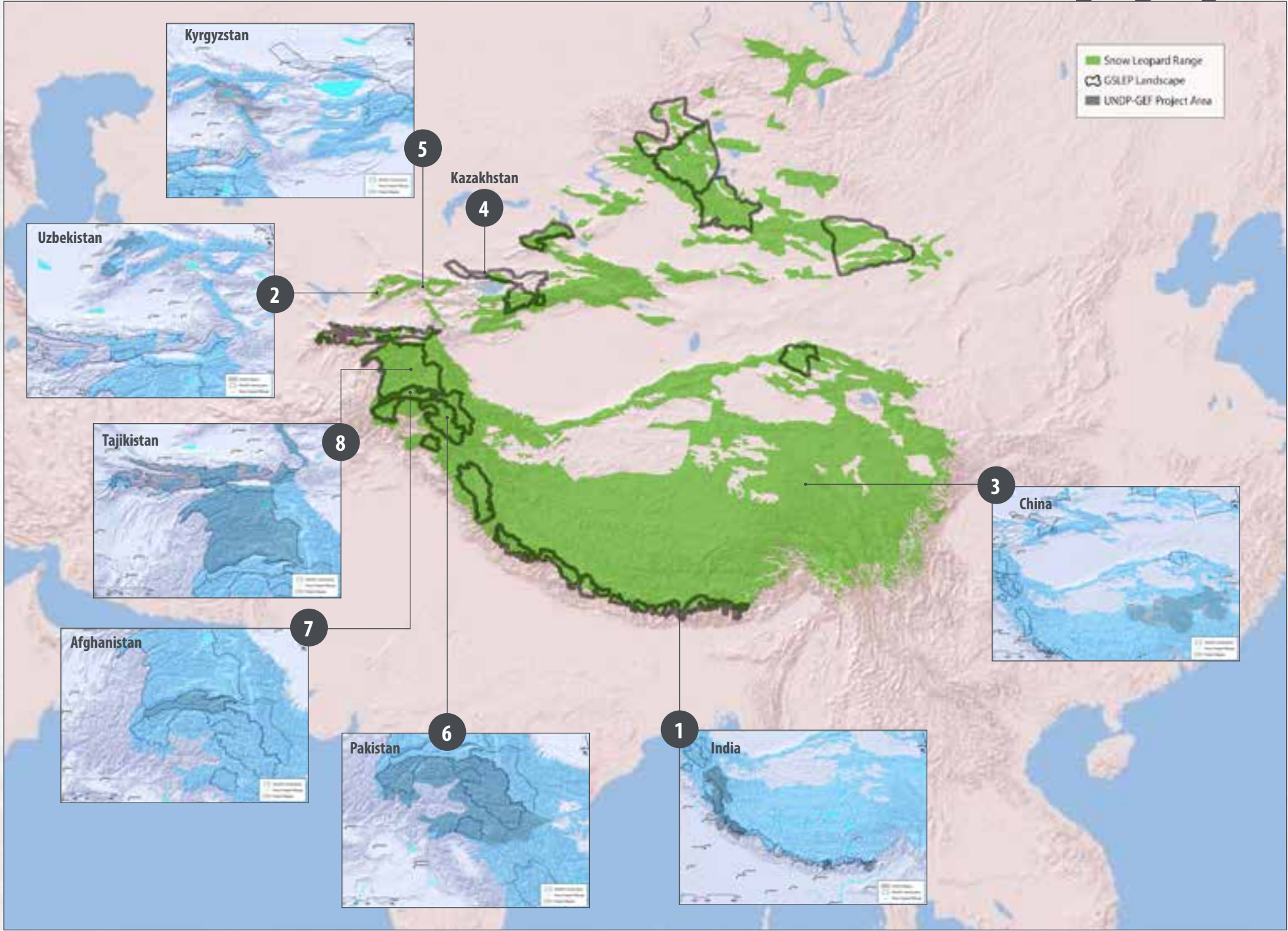
ABDYKALYK
RUSTAMOV

Snow Leopard Range



CURRENT GEF-FINANCED, UNDP-IMPLEMENTED PROJECTS IN THE SNOW LEOPARD LANDSCAPE

- 1. India**
Securing Livelihoods, Conservation, Sustainable Use and Restoration of High Range Himalayan Ecosystems (SECURE-Himalayas), USD \$11.5m
- 2. Uzbekistan**
Sustainable Natural Resource Use and Forest Management in Key Mountainous Areas Important for Globally Significant Biodiversity, \$6.2m
- 3. China**
CBPF - Strengthening the Effectiveness of the Protected Area System in Qinghai Province, China to Conserve Globally Important Biodiversity, \$5.3m
- 4. Kazakhstan**
Conservation and Sustainable Management of Key Globally Important Ecosystems for Multiple Benefits, \$8m
- 5. Kyrgyzstan**
Conservation of Globally Important Biodiversity and Associated Land and Forest Resources of Western Tian Shan Mountain Ecosystems to Support Sustainable Livelihoods, \$3.9m
- 6. Pakistan**
Pakistan Snow Leopard and Ecosystem Protection Programme, \$4.6m
- 7. Afghanistan**
Conservation of Snow Leopards and their Critical Ecosystem in Afghanistan, \$2.6m
- 8. Tajikistan**
Conservation and Sustainable Use of Pamir Alay and Tien Shan Ecosystems for Snow Leopard Protection and Sustainable Community Livelihoods, \$4.1m
- 9. Global—Focus on Central Asia**
Transboundary Cooperation for Snow Leopard and Ecosystem Conservation, \$1.4m



ESTIMATED SNOW LEOPARD POPULATION BY COUNTRY

- Afghanistan:** 100-200
Bhutan: 100-200
China: 2,000-2,500
India: 200-600
Kazakhstan: 180-200
Kyrgyzstan: 150-500
Mongolia: 500-1,000
Nepal: 300-500
Pakistan: 200-420
Russia: 150-200
Tajikistan: 180-220
Uzbekistan: 20-50

Source: The IUCN Red List of Threatened Species: *Panthera uncia* — published in 2008.

Expected Results

- Sustainable Land Management (SLM) and Sustainable Forest Management (SFM) Plans developed and implemented on over 17 million hectares
- Protected Area (PA) expansion or new PAs establishment covering at least 2.4 million ha
- 420,000 ha of degraded rangeland restored
- 957,900 ha of High Conservation Value Forests designated and managed

Supported in All Project Countries

- Sustainable livelihoods development and human-wildlife conflict prevention
- Community-based conservation and co-management
- Standardized wildlife and habitat monitoring
- Institutional capacity building and policy development
- Anti-poaching and anti-trafficking initiatives
- Fostering transboundary cooperation
- Education and awareness raising activities

Maps provided by Koustubh Sharma/GSLEP Secretariat.

A photograph of a snow leopard standing on a rocky, mountainous slope. The leopard is facing the camera, with its body angled slightly to the left. It has a thick, spotted coat with dark rosettes on a lighter background. The surrounding environment is rugged, with large, dark rocks and patches of dry, yellowish-brown grass. The background shows more of the steep, rocky terrain under a clear sky.

SECTION 1

Why Snow Leopards?

Photo by Steve Winter/National Geographic Creative

Shadow-like, snow leopards silently stalk the remote steppes and steep, rocky slopes of Central and South Asia. Rarely glimpsed, the mysterious presence of these reclusive cats casts an almost mythical aura, earning them a prominent place in local legend and contributing significantly to the cultural identity of the diverse ethnic groups and nations that call the high mountain regions their home. The snow leopards' ghostly allure extends far beyond Asia, fascinating people from around the globe.

This widespread appeal combined with the severe threats contributing to the snow leopards' status as an endangered species makes them ideal 'ambassadors' or **FLAGSHIP SPECIES** for the cause of conservation. As such, snow leopards draw attention to the issues surrounding the decline of the species' population as well as garnering support for projects and initiatives to protect the animals and their habitat.

Promoting snow leopard conservation serves a broader purpose than simply saving one endangered species. Snow leopards act as an **INDICATOR** of the health of the entire ecosystem in which they live, due to their position as the top (apex) predator in the food web. A diverse and abundant community of species—from insects and birds to mammals, reptiles and plants—must be sustained within the habitat for an apex predator to thrive. Monitoring snow leopard populations alerts conservationists to conditions that disrupt the health of the ecosystem, allowing them to take action to mitigate threats for the benefit of all species that live within it.

Furthermore, preserving snow leopards throughout their range directly enhances habitat vitality by maintaining balance in the food web. Snow leopards function as a **KEYSTONE SPECIES**—although they occur in relatively low abundance, snow leopards play a critical role in regulating the populations of other species, preventing any one species from dominating the habitat.



Photo by Marc Foggin

HIGH MOUNTAIN HABITAT

Protecting snow leopards goes hand in hand with protecting the landscape in which they live.

Snow leopards specialize in one of the harshest and most remote habitats on Planet Earth. Well-adapted to the cold, dry conditions, snow leopards roam the high mountains of Central and South Asia up to elevations of 5,000m or more. Steep slopes, rocky crags and rugged terrain provide ideal hunting grounds for the stealthy cats, on the prowl for ibex, blue sheep and other wild ungulates (hoofed mammals) grazing far and wide on the sparse mountain vegetation.

The vastness of the landscape deceives the eye, appearing to harbor few animals and even fewer people. To an outsider accustomed to life in the bustling cities or green, fertile valleys of lower elevations, the high mountains may resemble an inhospitable wasteland. But this difficult terrain conceals indispensable resources, not only for snow leopards and their prey, but for humanity.

UNIQUE BIODIVERSITY

In addition to the snow leopard, high mountain landscapes support hundreds of species of plants and animals, many of which live nowhere else on the planet. Aside from the intrinsic value of this globally significant biodiversity, these unique species provide opportunities for scientific and educational advancement, medicinal breakthroughs and agricultural improvements. Additionally, the accumulation of vegetation across the immense landscape serves as a substantial carbon sink, essential for slowing global climate change.

WHY PROTECT THE HIGH MOUNTAIN LANDSCAPES?



Background photo: Pakistan/Snow Leopard Trust. Species photos by John MacKinnon, Midori Paxton, and Everest Snow Leopard Conservation Center.



Photo by Marc Foggin

ASIA'S WATER TOWER

The glaciers and plateaus of Asia's high mountain landscapes serve as the birthplace for 13 major rivers, supplying fresh water to nearly 60% of the human population. The availability of clean, abundant water is foundational for all aspects of human life and activity from the high mountains down to the sea, from raising livestock and growing crops to generating hydro-electricity, maintaining industrial operations, and, of course, supporting life itself. Additionally, these landscapes serve a climate regulating function, as low pressure builds up on the plateaus during summer, drawing winds from the distant oceans that carry monsoon rains to the agricultural lands of Asia. Climate change is already disrupting this reliable annual cycle as rapidly increasing temperatures on the plateaus spark an increase in the frequency and intensity of cyclones, droughts and floods across the region.

CULTURAL HERITAGE

Although sparsely populated, the high mountain landscapes are rich in cultural diversity. The indigenous peoples and ethnic minorities in these remote landscapes each boast a unique way of life, with distinctive skills, languages, knowledge systems and art forms that have been handed down through generations. Predominantly pastoralists, many families still follow nomadic traditions, moving with their herds of yaks, goats and sheep as the seasons change. Maintaining the productivity of this rangeland is fundamental for sustainable development to take place in these societies, improving household well-being and preserving their way of life. The mountains themselves hold deep spiritual significance not only for the local inhabitants, but for pilgrims from all religions that journey to the sacred sites that abound throughout the region.

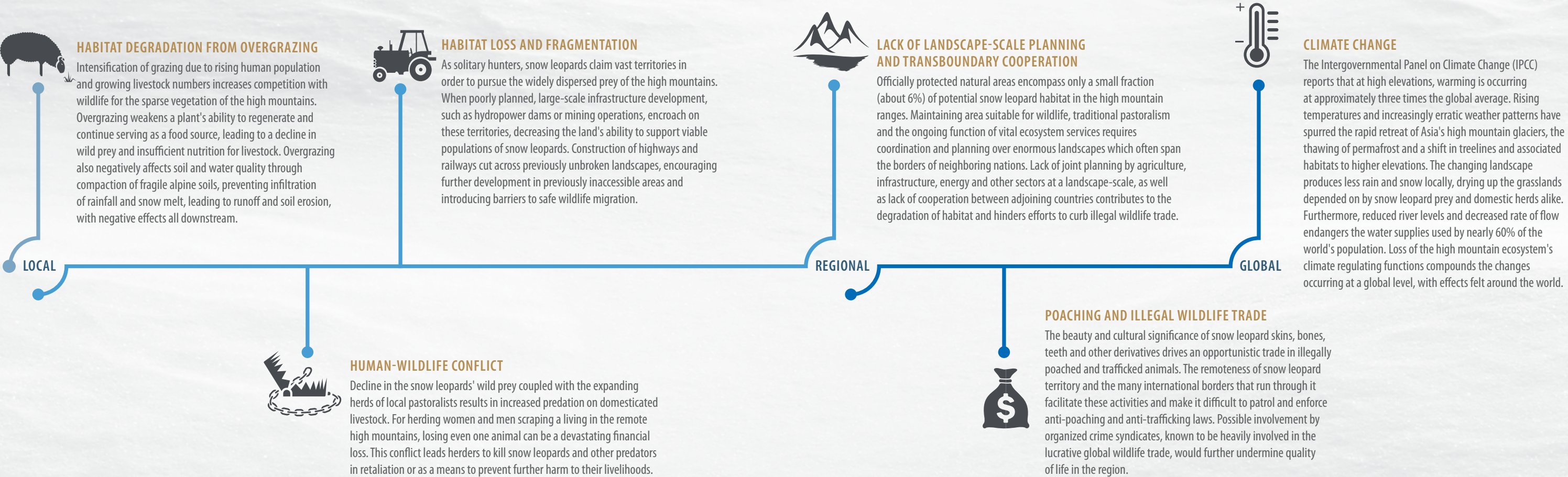
Safeguarding a healthy, functioning snow leopard habitat helps to secure the essential resources provided by Asia's high mountain regions, from food, clean water, and medicines, to regulation of climate conditions, and educational, cultural and spiritual value. These ecosystem services yield benefits experienced by people locally, regionally and around the world.

Photo by Marc Foggin

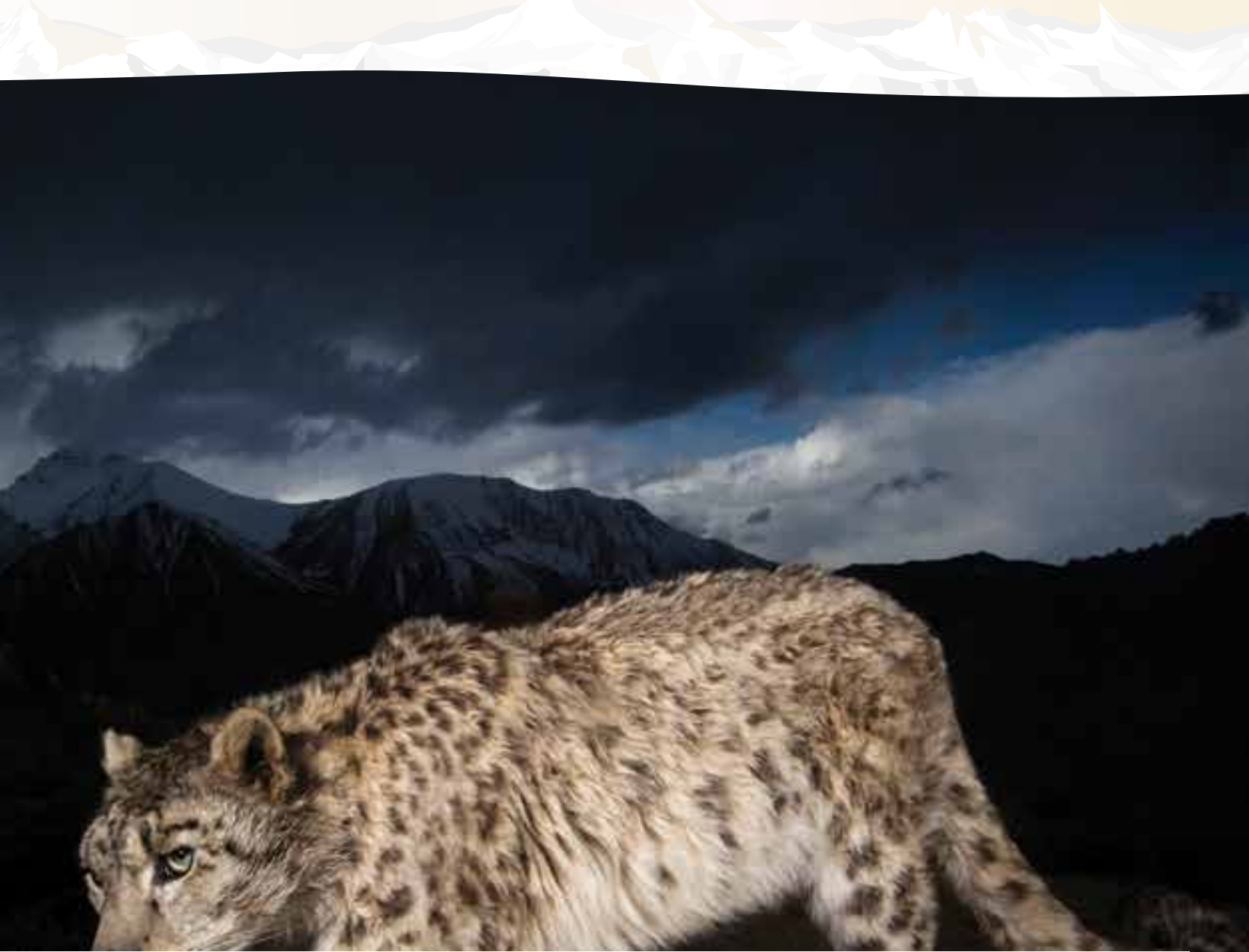


Why are snow leopards and the people of the mountain regions at risk?

Snow leopard populations have declined by 20% in the past two decades, leaving only an estimated 4,000-6,500 individuals in the wild, with an effective breeding population of approximately 2,500. Numerous threats face this irreplaceable cat, ranging from local to global in scale. Significantly, these same threats negatively impact humans, imperiling the health, quality of life, and even survival of those who share the snow leopards' remote high mountains habitat, the billions in downstream regions and those suffering the compounding effects of climate variation around the globe.



Underlying problems, such as poverty, weak natural resource governance and policies, insufficient scientific knowledge and an eroded affinity for nature, create conditions where these threats can arise. Poverty drives overuse of natural resources as families rely on the resources at hand in the struggle to survive day to day. Weak governance and policies facilitate unsustainable land and resource use, low institutional capacity, corruption and illegal trade in wildlife, as well as contributing to the ongoing poverty and marginalization of remote mountain inhabitants. Rapid urbanization detaches the human population from nature, leading to a loss of traditional knowledge and cultural diversity, as well as a lack of collective will to support biodiversity and conservation in the marketplace and policy arenas. Finally, inadequate scientific study and knowledge of snow leopards and their ecosystems due to low government priority and funding prevents the most effective use of scarce resources for conservation.



To effectively conserve the high mountain ecosystems for the benefit of snow leopards and humans, our projects employ a comprehensive strategy to address threats across the spectrum, from local to international. Each project is designed with a suite of interventions aimed at achieving direct conservation results as well as creating a political and social environment that facilitates sustainable change and enables countries to accelerate achievement of the Sustainable Development Goals (SDGs). This includes a range of social, economic and environmental benefits for local women, men and the society at large for both the short- and longer-term. The following stories highlight one aspect of each multi-faceted project as an example of how these strategies may be operationalized. Additional "Partner Spotlights" show a sample of complementary activities by other GSLEP partners as we work in tandem toward achieving the GSLEP countries' goals.

GLOBAL SNOW LEOPARD AND ECOSYSTEM PROTECTION PROGRAM (GSLEP) FRAMEWORK

As signatories of the Bishkek Declaration and parties to GSLEP, the 12 snow leopard range countries have agreed to work together toward an overarching goal of securing 25% of the global snow leopard range in 23 distinct landscapes by 2020, covering critical habitat areas in all 12 countries. All but one cross or adjoin international borders. The GSLEP framework integrates snow leopard conservation with the local and global economy, ensures landscape-level transboundary conservation, and builds capacity for a cross-sectoral response to threats and barriers. Management plans developed by the range countries will direct conservation efforts within each landscape, based on a number of key objectives. First among them is engaging local communities in the conservation process. A second priority is effective management of both snow leopard habitat and prey species. Other key objectives include combatting poaching and illegal trade, transboundary management and enforcement, engaging industry, institutional capacity building and policy enhancement, scientific research, and building awareness about the importance of, and threats to, snow leopards and the high mountain ecosystems. Efforts to achieve GSLEP objectives are being led by range country governments with both technical and financial support from a host of international and national organizations.

EACH COUNTRY-SPECIFIC SNOW LEOPARD PROJECT IN THE UNDP-GEF PORTFOLIO HAS BEEN FORMULATED WITH COMPONENTS TO ALIGN WITH ALL EIGHT KEY OBJECTIVES OF THE GSLEP FRAMEWORK.

MAJOR INTERNATIONAL GSLEP PARTNERS



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