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# *Conservation and Adaptation in Asia's High Mountain Landscapes and Communities: Annual Report*

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# Table of Contents


| | |
|---|---|
| **Acronyms and Foreign Terminology ……** | **Pg. 3** |
| | |
| **I. Summary of activity status and progress …….** | **Pg. 6** |
| **a. Introduction …….** | **Pg. 6** |
| **b. Highlights …….** | **Pg. 7** |
| **c. Challenges …….** | **Pg. 11** |
| **d. Adaptive Management in Action ……...** | **Pg. 13** |
| **e. Table of Activity Status ……...** | **Pg. 15** |
| | |
| **II. Status Updates: Areas of Progress and Successes..……** | **Pg. 29** |
| **a. Key Short and Long-term Program Objectives ……** | **Pg. 29** |
| **b. Summary of Progress for the Individual Project Sites ……** | **Pg. 30** |
| **c. Activity Descriptions ……** | **Pg. 35** |
| **Bhutan ……** | **Pg. 35** |
| **India ……...** | **Pg. 46** |
| **Kyrgyzstan ……** | **Pg. 55** |
| **Mongolia ……** | **Pg. 67** |
| **Nepal ……..** | **Pg. 74** |
| **Pakistan …….** | **Pg. 87** |
| **Regional Activities ……** | **Pg. 101** |
| | |
| **III. Measures and Adaptive Management ……...** | **Pg. 116** |
| **a. Adaptive Management Measures Taken Based on Current Context …….** | **Pg. 116** |
| **b. Lessons Learned ……..** | **Pg. 118** |
| | |
| **IV. Next Steps and Priorities …….** | **Pg. 120** |
| | |
| **V. Annexes.. …….** | **Pg. 122** |
| **Annex 1. AHM Project Year 2 Activity Timeline …….** | **Pg. 122** |
| **Annex 2: Activity 1.2.4-Bhutan Climate Adaptation Training Agenda.....** | **Pg. 142** |
| **Annex 3: Activity 2.1.8-Himalaya Snow Leopard Workshop Agenda……** | **Pg. 146** |
| **Annex 4: Activity 2.5.3-Global Snow Leopard Conservation Forum Agenda** | **Pg. 148** |
| **Annex 5: Activity 2.5.4-GSLEP National Focal Points Workshop Agenda…** | **Pg. 152** |
| **Annex 6: Bhutan Consultation Workshop on Snow Leopard Conservation..** | **Pg. 156** |
| **Annex 7: AHM Project Year 2 Media Coverage……..** | **Pg. 157** |
| **Annex 8: AHM Project Year 2 Photos……** | **Pg. 160** |

# Acronyms and Foreign Terminology

| | |
|---|---|
| AEPC | Alternate Energy Promotion Center |
| AHM | Asia High Mountains Project |
| Aimag | Province |
| ASER | Altai Sayan Ecoregion |
| AWS | Automatic Weather Station |
| BTFEC | Bhutan Trust for Environmental Conservation |
| CARE | Cooperative for Assistance and Relief Everywhere |
| CAUC | Conservation Area User Committee |
| CBAPO | Community-Based Anti-Poaching Operation |
| CBD | Convention of Biological Diversity |
| CBO | Community-Based Organization |
| CBT | Community-Based Tourism |
| CFUG | Community Forest User Group |
| CGCDCA | Chitral Gol Community Development and Conservation Association |
| CHARIS | Contribution to High Asia Runoff from Ice and Snow Project |
| CITES | Convention on International Trade in Endangered Species |
| CKNP | Central Karakoram National Park |
| CMS | Convention on Migratory Species |
| COFSUN | Community Forestry Supporters' Network |
| CSLH | Climate Summit for a Living Himalaya |
| CSO | Civil Society Organization |
| DADO | District Agriculture Development Office |
| DNA | Deoxyribonucleic acid |
| DNPWC | Department of National Parks and Wildlife Conservation |
| DoFPS | Department of Forests and Park Services |
| Dzumsa | Village Council |
| ECOSS | Ecotourism and Conservation Society of Sikkim |
| FECOFUN | Federation of Community Forest Users, Nepal |
| FEWMD | Forest, Environment and Wildlife Management Department, Government of Sikkim |
| FY | Fiscal Year |
| Geog | Sub-district |
| GB | Gilgit-Baltistan |
| GBFWED | Gilgit-Baltistan Forest, Wildlife and Environment Department |
| GEF | Global Environment Facility |
| GIS | Geographic Information System |
| GPA | Global Priority Activities |
| GSLEP | Global Snow Leopard Ecosystem Protection Program |
| GSLCF | Global Snow Leopard Conservation Forum |
| GTI | Global Tiger Initiative |
| GTN-G | Global Terrestrial Network for Glaciers |
| Ha | Hectare |
| HCDO | Hoper Conservation and Development Organization |
| HH | Household |
| Himal Rakshaks | Mountain Guardians |
| HWC | Human Wildlife Conflict |
| HYO | Hoper Youth Organization |

| | |
|---|---|
| ICIMOD | International Centre for Integrated Mountain Development |
| ICSD | Central Asian Interstate Commission on Sustainable Development |
| IRBM | Integrated River Basin Management |
| INTERPOL | International Criminal Police Organization |
| IRD | Institut de recherche pour le développement |
| ISLT | International Snow Leopard Trust |
| IUCN | International Union for the Conservation of Nature |
| JICA | Japan International Cooperation Agency |
| KBR | Khangchendzonga Biopshere Reserve (KBR) |
| KCA | Kangchenjunga Conservation Area |
| KCAMC | Kangchenjunga Conservation Area Management Council |
| KCAP | Kangchenjunga Conservation Area Project |
| KNP | Khangchendzonga National Park (India) |
| KNP | Khunjerab National Park (Pakistan) |
| KP | Khyber Pakhtunkhwa |
| KPI | Performance Indicators |
| LDF | Local Development Fund |
| LFMP | Local Forest Management Plan |
| LHNI | Living Himalayas Network Initiative |
| LIP | Livelihood Implementation Plan |
| LIS | Livestock Insurance Scheme |
| LPA | Local Protected Area |
| LRP | Local Resource Person |
| LTDC | Lachen Tourism Development Committee |
| MAP | Medicinal and Aromatic Plants |
| MAS | Mongolian Academy of Sciences |
| MEGD | Ministry of Environment and Green Development |
| METT | Management Effectiveness Tracking Tool |
| MG | Mothers Group |
| MoAF | Ministry of Agriculture and Forests |
| MoU | Memorandum of Understanding |
| MP | Minister of Parliament |
| NABU | Nature and Biodiversity Conservation Union (Germany) |
| NASA | National Aeronautics and Space Administration |
| NGO | Non-Government Organization |
| NPA | National Priority Activities |
| NRM | Natural Resource Management |
| NSDIC | National Snow and Ice Data Center |
| NSLEP | National Snow Leopard Ecosystem Protection Programs |
| NTFP | Non-Timber Forest Products |
| NTNC | National Trust for Nature Conservation |
| PA | Protected Area |
| PAPRIKA | CryosPheric responses to Anthropogenic PRessures in the HIndu Kush-Himalaya regions Project |
| PHPA | Public Hearing and Public Auditing |
| PIF | Project Identification Form |
| REAP | Central Asia Regional Environmental Plan |
| SADCWO | Shandur Area Development, Conservation, and Welfare Organization |
| SAEPF | State Agency on Environment Protection and Forestry |
| SAWEN | South Asia Wildlife Enforcement Network |

| | |
|---|---|
| SCAPES | Sustainable Conservation Approaches in Priority Ecosystems |
| SEED | Social, Economic, Environmental Development Project |
| SHL | Sacred Himalayan Landscape |
| SLC | Snow Leopard Conservancy |
| SLCC | Snow Leopard Conservation Committee |
| SLCGP | Snow Leopard Conservation Grant Program |
| SLIMS | Snow Leopard Information and Management System |
| SLN | Snow Leopard Network |
| SLSS | Snow Leopard Survival Strategy |
| SLT | Snow Leopard Trust |
| Soum | District, division of an Aimag (province) |
| TOR | Terms of Reference |
| UG | User's Group |
| UNDP | United Nations Development Program |
| UNEP | United Nations Environment Program |
| US | United States |
| USAID | United States Agency for International Development |
| USD | United States Dollar |
| UWICE | Ugyen Wangchuck Institute for Conservation and Environment |
| VA | Climate Change Vulnerability Assessment |
| VCC | Village Conservation Committee |
| VDC | Village Development Committee |
| VWG | Village Wildlife Guard |
| WCC | Women Conservation Committee |
| WCP | Wangchuck Centennial Park |
| WMD | Watershed Management Division |
| WWF | World Wildlife Fund |
| WWF-NL | Worldwide Fund for Nature-Netherlands |
| WWF-UK | Worldwide Fund for Nature-United Kingdom |

## I. SUMMARY OF ACTIVITY STATUS AND PROGRESS

### a. Introduction:

The high mountains of Central Asia, including the Himalayan, Karakorum, Hindu Kush, Pamir, Kunlun, Tian Shan, and Altai ranges, form the headwaters of river systems that provide fresh water for one-third of the world's population. These mountains are also of great ecological importance due to their extremely high biodiversity, and are the primary habitat and migration corridors for the endangered snow leopard (*Panthera uncia*). In the face of a rapidly changing climate, the melting of the region's extensive glacier fields and unpredictable rainfall are altering river flows and seasonal availability of water. This in turn is adversely affecting endemic species, local and downstream communities, and agricultural productivity. Poor water resources management, land degradation, fragmentation and loss of forests and grasslands, poaching of wildlife, and overgrazing of livestock further exacerbate pressure on high mountain ecosystems while increasing human-wildlife conflict. Consequently, high altitude communities in this region have a major stake in reducing their vulnerability to climate change and reducing the multitude of threats to Asia's high mountain ecosystems.

The WWF Conservation and Adaptation in Asia's High Mountain Landscapes and Communities Project (hereafter the "Asia High Mountains Project" or "AHM Project") is working to facilitate technical and policy dialogue on management of Asia's high mountain landscapes and ecosystems in the face of a changing climate. This will help prepare communities to address key vulnerabilities to climate change, conserve snow leopards as the flagship indicator species of Asia's high mountain landscape health, and provide practical and measurable demonstrations that advance a vision for water security and sustainable mountain development across Asia. The principal objectives of this project include: 1) promoting climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development, and 2) improving transnational collaboration on climate change adaptation and snow leopard conservation in Asia's high mountain landscapes. Project activities will focus on 6 of the 12 known snow leopard range nations, specifically Bhutan, India, Kyrgyzstan, Mongolia, Nepal, and Pakistan. All six of these nations are currently suffering from ecological threats such as overgrazing of alpine meadows, poaching and retaliatory killing of wildlife, declining availability of water resources, climate change impacts, and poorly planned infrastructure as well as other more localized issues. In addition, the montane forests in the Himalayan nations suffer from a variety of other threats, including deforestation, unsustainable harvest of non-timber forest products (NTFP), and heightened forest fire danger.

With support from USAID, the WWF Asia High Mountains Project aims to address these environmental issues in a comprehensive manner that provides benefits for both communities and ecosystems. This is the first time this has been attempted in a coordinated fashion across a vast swath of snow leopard range in high Asia, rather than just in isolated localities. Key components of this program will be to increase livelihood, food and water security for high mountain communities in the face of a rapidly changing climate; increase the resiliency of high mountain ecosystems to climate change impacts; increase community participation in biodiversity conservation; increase efforts to conserve the endangered snow leopard; and build transnational cooperation to address all of these issues.

**b. Highlights:**

In AHM Project Year 2, highlights by country included the following:

## Bhutan

- The WWF "Fundamentals of Climate Change Adaptation Workshop" was held in Thimphu, Bhutan, introducing 40 Bhutanese government and conservation workers to the fundamentals of conducting climate vulnerability assessments and developing climate change adaptation strategies.
- WWF sponsored installation of a second automatic weather station in a remote area of eastern Wangchuck Centennial Park (WCP) in Bhutan which will provide the first long term climatic data record for this region, data which will prove invaluable of future climate change research and adaptation work.
- 1 forest officer from Bhutan's Watershed Management Division was sponsored to participate in a study tour of the University of Colorado's Mountain Research Station near Boulder, where she was acquainted with modern hydrological research techniques for mountain environments suitable for use in Bhutan.
- 8 WCP staff members participated in an exchange to the Kangchenjunga Conservation Area in Nepal where they were exposed to successful community-based snow leopard conservation and ecotourism work suitable for replication at WCP.
- The third and final phase of the comprehensive 2-year snow leopard camera trap and prey species survey in Wangchuck Centennial Park was completed. The final report on this ground-breaking survey is currently being prepared.

## India

- WWF organized focus group discussions on climate impacts on agriculture in 6 villages in all four districts of Sikkim State, with insights gained to be used in development of climate adaptation strategies for agriculture in Sikkim.
- WWF organized 3 bio-briquette making demonstrations and trainings in villages in Sikkim that will reduce local dependence on woodcutting for cooking and heating.
- WWF organized focus group discussions on climate impacts on agriculture in 6 villages in all four districts of Sikkim State
- WWF organized a campaign to promote household trash separation and recycling in the important ecotourism center of Lachen Village, North Sikkim, which will improve the communities appeal and reputation amongst both foreign and domestic tourists.
- WWF co-organized a state level workshop on strengthening sustainable tourism in Sikkim with participation of all levels of tourism stakeholders in Sikkim, which will contribute to increasing support for sustainable tourism amongst all relevant state agencies.
- WWF supported two 10-day community-based wildlife monitoring and anti-poaching patrols in Khangchendzonga National Park (KNP) and Khangchendzonga Biopshere Reserve (KBR) in West Sikkim, which provided excellent practical experience for community volunteers participating in these patrols.

## Kyrgyzstan

- WWF organized the second annual Engilchek Village snow leopard festival which was attended by 77 People (40 women) and greatly raised local awareness of snow leopard conservation issues through ecological theatre, snow leopard dance, children's art, felt handicraft, and Kyrgyz ecological folklore contests.
- WWF made good progress towards completion of a climate vulnerability assessment for the project region of eastern Kyrgyzstan, which included extensive interviews with local herders and farmers.
- The AHM Project yak herd that is being used as a demonstration climate adaptation strategy for highland herders in Kyrgyzstan again experienced good growth in herd size and will begin to provide direct benefits to poor local herding families in Project Year 3, while arrangements were made for using the herd to demonstrate effective pasture rotation.
- WWF provided support for training needed to establish three local development funds in the three main project villages in Issyk Kul Kyrgyzstan, with these funds providing financing for a variety of sustainable alternative livelihood and development activities.
- WWF continued to provide needed support for the Sarychat-Ertash State Reserve to conduct snow leopard and prey species monitoring surveys as well as anti-poaching operations.

## Mongolia

- Results of 1115 human-wildlife conflict survey questionnaires were compiled into a survey report, the findings of which WWF will use to prepare an Altai Region human-wildlife conflict mitigation strategy.
- WWF initiated cooperation with the Mongolian Academy of Sciences' (MAS) Institute of Biology to jointly conduct a comprehensive climate change vulnerability assessment (VA) for AHM Project priority areas in the Altai Region of western Mongolia.
- WWF trained 26 People (15 Women) on providing various wildlife-oriented ecotourism services from hospitality to guiding, with some participants later able to gain practical experience by hosting a snow leopard-themed tour for a group of western tourists at the Jargalant Khairkhan and Turgen Mountain AHM Project sites.
- WWF completed a 9-month long snow leopard camera trap survey of Jargalant Khairkhan Mountain in Khovd Aimag with the participation of local citizen scientists trained by WWF. Preliminary data analysis revealed a higher density of snow leopards at the site than anticipated.
- Based on earlier snow leopard distribution mapping workshops, In AHM Project Year 1, WWF revised the snow leopard distribution map for western Mongolia. This revised map will serve as the preliminary basis for planning more detailed government and community-supported landscape-level snow leopard conservation activities.

## Nepal

- WWF and CARE organized extensive climate adaptation activities to diversify agricultural livelihoods and improve water security in the Kangchenjunga Conservation Area (KCA), including introduction of water storage ponds, water-efficient sprinkler irrigation, green-house gardening, bee-keeping, cardamom cultivation, and planting of disease-resistant maize.
- WWF continued to work to build resiliency to climate change impacts in alpine grassland ecosystems by working to improve pasture management and rotation in these pastures. This included construction of wooden bridges and trails to improve livestock access to remote pastures and increasing availability of clean water in pastures disused due to inaccessibility and a lack of water.
- WWF greatly increased community participation in conservation activities by mobilizing eight community-based anti-poaching operations, training local citizen scientists to conduct snow leopard camera trap and prey species surveys, and by having local citizen scientists participate in a snow leopard GPS radio collaring activity.
- WWF supported distribution of 170 improved metal cook stoves to communities in the Kangchenjunga Conservation Area that will reduce wood cutting pressure and improve household health, particular of women responsible for cooking duties.
- WWF and government partners successfully conducted the first GPS radio collaring of a snow leopard in Nepal, which has over the past year revealed a wealth of information on snow leopard travel routes in the KCA that will be used for improving landscape level conservation efforts in the region.

## Pakistan

- WWF organized a series of large conservation awareness raising events to mark World Wildlife Day; World Water Day; World Environment Day; and the Hoper Valley, Gilgit-Baltistan (GB) Cultural Revival Festival. These events targeted school children, university students, government conservation workers, and the general public with messages about climate change, water security, and snow leopard conservation in Northern Pakistan and reached over 7000 people.
- WWF conducted a preliminary climate change vulnerability assessment for the Hoper Valley, GB, which featured household interviews and focus group discussions on local climate change impacts and current coping strategies, findings of which will be used to develop a climate adaptation strategy for the valley.
- WWF carried out a successful demonstration of fodder crop planting on marginal and degraded agricultural lands that will both reduce grazing pressure on mountain pastures by providing winter fodder and reduce erosion from degraded lands during the summer rainy season.
- WWF promoted the planting of fruit and nut trees as well as fast growing multi-purpose tree species to improve food and livelihood security and to improve degraded lands.
- WWF conducted a livestock vaccination program that vaccinated nearly 13,000 head of livestock to improve livestock survival rates in the face of a changing climate that will also reduce motivation for retaliatory killing of wild predators, such as snow leopards.

- WWF supported set up of a vocational training center for women to learn sewing and craft making as one alternative livelihood strategy to reduce dependence on the local resource base and improve rural livelihood security in the face of a rapidly changing climate.
- WWF continued training local citizen scientists on snow leopard and prey species monitoring as well as involving these trainees in actual snow leopard surveys at project sites in northern Pakistan, which notably revealed Himalayan ibex populations, the main prey of the snow leopard, to currently be stable after many years of decline.

## Regional Highlights

- WWF played a key role in organizing the October 2013 Global Snow Leopard Conservation Forum in Bishkek which brought together high level representatives of all 12 snow leopard range states for the first time to work together on improving range-wide snow leopard conservation efforts.
- WWF played a key role in organizing the first training for national focal points responsible for implementing the Global Snow Leopard and Ecosystem Protection Program (GSLEP) that was unanimously adopted by all 12 snow leopard range states at the October 2013 Bishkek snow leopard forum.
- In AHM Year 2, the WWF US Climate Adaptation Team participated in the review and writing of a series of documents that included climate-smarting the Snow Leopard Survival Strategy, preparation of a climate adaptation species factsheet for Snow Leopards, and finalization of the regional vulnerability and snow leopard climate map book written in AHM Project Year 1.
- TRAFFIC completed preparation of the draft revised snow leopard trade report that is currently under review. This work included an important TRAFFIC-led market survey of three major Afghan cities that revealed the extent of a thriving trade in snow leopard and common leopard furs in Afghanistan.
- WWF, the Snow Leopard Trust (SLT), and Snow Leopard Network (SLN) started a new climate change category for the SLN Snow Leopard Conservation Grant Program (SLCGP), which awarded three small grants to researchers looking at climate change impacts on snow leopards.

**c. Challenges:**

In AHM Project Year 2, challenges by country included the following:

## Bhutan

In Bhutan in AHM Project Year 2, a continuing challenge is the discrepancy in fiscal years between government of Bhutan implementing partners at Wangchuck Centennial Park (WCP), which have a fiscal year that runs from July 1-June 30, and the AHM Project fiscal year, which runs from October 1-September 30. Thus broader government approved annual work plans for WCP need to be completed on June 30$^{th}$ each year, effectively shortening the AHM Project work year by 3 months annually at this site. Discussions on resolving this issue have been ongoing with a newly appointed AHM Project point person at WCP.

## India

In India in AHM Project Year 2, there have been several challenges that have slowed project progress. One challenge for local WWF staff has been obtaining permits for conducting project work in high altitude areas of Sikkim. However, after a long wait, these permits were issued this summer with a validity of 9 months. A second challenge was the holding of state and national elections in Sikkim in the spring of 2014, which caused many field activities to be delayed by two months. A third setback was the resignation of the WWF staff member responsible for the snow leopard survey work, which slowed progress of this aspect of field activities. A fourth problem were the heavy late summer rains which washed out roads and further delayed some field activities.

## Kyrgyzstan

In Kyrgyzstan in AHM Project Year 2, there were several challenges. The first has been the continued delay in formal establishment of Khan Tengri National Park, which has delayed ranger training and other activities planned for the new park. This delay has been due to a government and UNDP campaign to build public support for the park before its formal establishment. A second challenge has been the continued strained relations between the Kumtor Gold Mine and local communities in the Issyk Kul AHM Project region, which has stalled development of local public-private partnerships for conservation. A third challenge is the two-year province-wide ban on both trophy and subsistence hunting in Issyk Kul Province, which is expected to lead to an uptick in poaching at AHM Project sites.

## Mongolia

In Mongolia in AHM Project Year 2, one challenge continues to be mining companies holding mineral exploration licenses to areas that are proposed for designation as local protected areas for the benefit of both wildlife and herding livelihoods, which license holders continue to try to block the creation of. As always in Mongolia, other challenges continue to be the long harsh winters and the great distances involved in travelling between project sites.

## Nepal

In Nepal in AHM Project Year 2, one challenge was a delay in receiving government approval for snow leopard collaring work, which in turn delayed start of the successful

November-December 2013 snow leopard collaring expedition. A second challenge has been an uptick in human-wildlife conflict in the Kangchenjunga Conservation Area (KCA), which may erode support for continued protection of snow leopards, other wild predators, and wild animals responsible for crop damage in the KCA. Another challenge was the change in leadership of the elected Kangchenjunga Conservation Area Management Council (KCAMC), which required WWF staff to teach new KCAMC members about WWF project work in the KCA.

## Pakistan

In Pakistan in AHM Project Year 2, one major challenge has been summer flooding in Gilgit-Baltistan which washed away bridges to two project villages in Hoper Valley, causing delays in carrying out activities at these two sites. Thus activity timelines in northern Pakistan will need to be kept flexible due to unforeseen events such as this. A second challenge at Hoper Valley have been higher than realistic expectations on the part of community members concerning creation of a livestock insurance scheme, which will only pay partial compensation for livestock lost and only for livestock proven to have been killed by snow leopards or wolves.

## Regional

In AHM Project Year 2, one challenge faced by TRAFFIC was a general lack of snow leopard trade information from the Central Asian snow leopard range states, which delayed completion of the snow leopard trade report. A second challenge has been the impending end of the World Bank's Global Tiger Initiative (GTI), which has left the Global Snow Leopard Conservation Forum Secretariat with no clear long term support for secretariat administration and activities, although the AHM Project will continue to provide partial support for secretariat work. Climate Summit for a Living Himalayas (CSLH) activities continue to be on indefinite hiatus and consequently no progress has been made with respect implementing the CSLH road map to combat climate change impacts. Resignations of project personnel in the Bhutan, India, Nepal, and Pakistan resulted in short term delay in implementation of certain activities. Another challenge this reporting period was the major reorganization of WWF US office, which resulted in the need to train new AHM support staff on AHM Project operations and activities.

**d. Adaptive Management in Action:**

In AHM Project Year 2, adaptive management actions by country included the following:

## Bhutan

In Bhutan in AHM Project Year 2, adaptive management largely concerned findings of WCP exchange trips to the Kangchenjunga Conservation Area (KCA) of Nepal and ecotourism homestay programs in the Khangchendzonga Biosphere Reserve (KBR) in Sikkim. Following the WCP staff exchange to the KCA, staff members set about establishing the first snow leopard conservation committee (SLCC) in WCP, which is modeled on the successful KCA SLCC program. Following, the exchange for WCP homestay operators to Sikkim, it was resolved to include more sharing of local cultural with guests staying at WCP homestays and also to develop more ecotourism activities for these guests.

## India

In India in AHM Project Year 2, adaptive management included delaying start of activities due to flooding, elections, and a long wait for research permits. Snow leopard survey responsibilities were reassigned to another staff biologist following the resignation of the WWF Gangtok field office wildlife biologist. Another adaptive measure was taking advantage of an invitation from WCP to send Himal Rakshaks members from Sikkim on an exchange to Wangchuck Centennial Park (WCP) in Bhutan to learn about conservation successes in WCP and Bhutan.

## Kyrgyzstan

In Kyrgyzstan in AHM Project Year 2, WWF postponed field activities related to the proposed Khan Tengri National Park until such time as it is formally established, and instead redoubled efforts on improving management and local livelihoods in the Sarychat-Ertash Reserve and its buffer zone. Efforts to build a public-private partnership to conduct community field conservation activities have been on hold due to local protests against the Kumtor Gold Mine. Nevertheless WWF, Kumtor, and the Sarychat Ertash Reserve came together to organize and sponsor a summer eco-education camp for children living in the vicinity of the reserve.

## Mongolia

WWF continues to lobby relevant aimag (provincial) governments in the AHM Project region concerning the benefits of establishing local protected areas (LPA) for the protection of snow leopards, blue sheep and their grassland habitat as well as to seek solutions to eliminating mining licenses within the boundaries of proposed LPAs. WWF is also expanding the scope of its activities in the vast project region by training a network of citizen scientists to conduct scheduled wildlife monitoring when WWF staff are not present.

## Nepal

In Nepal in AHM Project Year 2, WWF completed a human-wildlife conflict mitigation strategy with a large amount of community input that will be implemented in AHM Project Year 3 with the goals of both reducing the loss of livestock and crops to wildlife as well as to

maintain local support for conservation activities in the KCA. With respect to staff departures, AHM responsibilities have been reassigned to other experienced WWF staff members knowledgeable about the KCA.

## Pakistan

In Pakistan in AHM Project Year 2, activities affected by flooding were simply delayed until access to flooded areas was restored. In Project Year 2, residents of the Hoper Valley, as led by the local Hoper Conservation Development Organization, proved to be very receptive to working with the AHM Project following the AHM Project's departure from the neighboring Hassanabad Valley in Project Year 1.

## Regional

In AHM Project Year 2, a number of adaptive management measures were taken to address regional challenges. With respect to the inactivity of the Climate Summit for a Living Himlayas process, funding earmarked for this initiative was simply redirected to funding the Global Snow Leopard Conservation Forum (GSLCF) process. A lack of data on snow leopard trade in the Central Asian nations for TRAFFIC's revised snow leopard trade report was partially resolved by a TRAFFIC staff member who volunteered to conduct a wildlife trade market survey in Afghanistan, which revealed a thriving trade in snow leopard and common leopard pelts. Due to postponement of a technical meeting to present findings of the two AHM-produced climate reports, a day of technical sessions has been added to the AHM Project learning and sharing meeting in January 2015. In addition, findings of these reports will be presented on an interactive website along with PDF files of the entire reports themselves. In order to address the termination of World Bank GTI funding support for the snow leopard conservation forum secretariat process, other funding methods are being discussed between SLT, WWF, GEF, UNDP, and other donor organizations.

## e. Table of Activity Status:

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Nepal 1.1.1 | Train members of local natural resource management groups on principles of good governance, gender and social inclusion, and support adoption of these principles in the groups' by-laws. | Events | 2 | Completed |
| Bhutan 1.1.2a | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. (Kurtoe Geog). | People Trained | 10 | Started-Ongoing |
| Bhutan 1.1.2b | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. (Gangzur Geog). | People Trained | 10 | Started-Ongoing |
| Kyrgyz 1.1.2 | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. | People Trained | 400 | Started-Ongoing |
| Kyrgyz 1.1.3 | Provide technical support for local associations and NGOs to conduct awareness raising activities regarding sustainable natural resource management and use. | Groups | 3 | Started-Ongoing |
| Mongolia 1.1.4 | Build governance capacity of local community herder groups to develop sustainable pasture and watershed management plans as well as strategies to mitigate human-wildlife conflict, such as the relocation of winter livestock sheds to low-risk areas. | Groups | 5 | Started-Ongoing |
| Pakistan 1.1.5 | Raise awareness and provide education about the role of predators, particularly snow leopards, in maintaining the ecological health of mountain pastures. | Events | 8 | Started-Ongoing |
| Kyrgyz 1.1.6 | Facilitate cooperation among stakeholders (e.g. gold mining company "Kumtor") to establish a model of local natural resource management. | Cooperation Agreements | 1 | Started but now Delayed |
| Nepal 1.1.7 | Use "Gender and Power Analysis" and "Underlying Causes of Poverty Analysis" tools to map power relations in control of natural resources, and identify target groups and appropriate strategies. | Events | 2 | Completed |
| Nepal 1.1.8 | Conduct pro-poor planning training for local youth to be local resource persons and mobilize them in the preparation of livelihood improvement plans. | Event | 2 | Completed |
| Nepal 1.1.9 | Conduct leadership skills training in traditionally excluded communities to provide skills necessary to hold positions in user groups, conservation committees, and the conservation area council. | Event | 2 | Completed |
| India 1.1.10 | Work with tribe/community-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting and extraction of wildlife resources, regulating free grazing near core snow leopard habitat, and watershed conservation. | Survey Report | 1 | Started-Ongoing |
| Pakistan 1.1.10 | Work with tribe/community-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting and extraction of wildlife resources, regulating free grazing near core snow leopard habitat, and watershed conservation. | Groups | 3 | Started-Ongoing |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Bhutan 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards. | Report | 1 | Started-Ongoing |
| Kyrgyz 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards | Report | 1 | Started-Ongoing |
| Mongolia 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow | Report | 1 | Delayed |

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| | leopards | | | |
| Nepal 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards. | Sites | 4 | Started-Ongoing |
| Pakistan 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards | Report | 1 | Started-Ongoing |
| Bhutan 1.2.2 | Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices, and enhance crop productivity and climate resilience through rainwater harvesting, small-scale storage, and drought and pest-tolerant crops | People Trained | 60 | Started-Ongoing |
| Nepal 1.2.2 | Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices and enhance crop productivity and climate resilience through rainwater harvesting, small-scale water storage, and introduction of drought and pest-tolerant crops. | Sites | 5 | Started-Ongoing |
| Bhutan 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | ha of degraded land improved | 20 | Started-Ongoing |
| Kyrgyz 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Site | 1 | Started-Ongoing |
| Mongolia 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 2 | Delayed – Postponed until Year 3 |
| Nepal 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 10 | Started-Ongoing |
| Pakistan 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 3 | Started-Ongoing |
| Bhutan 1.2.4 | Organize local campaigns and workshops to raise awareness on climate change and adaptation actions in agriculture and herding, especially among indigenous, marginalized, and poor populations | People Trained | 40 | Started-Ongoing |
| India 1.2.4 | Organize local campaigns and workshops to raise awareness on climate change and adaptation actions on agriculture, especially among indigenous, marginalized, and poor populations. | Survey Report | 1 | Started-Ongoing |
| Bhutan 1.2.5 | Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation efforts and downstream benefits for water supplies. | Various | | Started-Ongoing |
| Pakistan 1.2.5 | Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation efforts and downstream benefits for water supplies. | None | | Cancelled |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Bhutan 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 2 | Started-Ongoing |
| India 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | People Trained | 25 | Started-Ongoing |
| Mongolia 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | People Trained | 25 | Started-Ongoing |
| Nepal 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 6 | Started-Ongoing |

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| Pakistan 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 2 | Started-Ongoing |
| Bhutan 1.3.2 | Study severity of livestock depredation and develop a comprehensive snow leopard-human conflict mitigation program (e.g. livestock insurance schemes) | Report | 1 | Started-Ongoing |
| India 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey Report | 1 | Started-Ongoing |
| Nepal 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey Report | 1 | Completed |
| Pakistan 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey | 1 | Started-Ongoing |
| Mongolia 1.3.3 | Expand the "Buy Goat Program" livestock insurance scheme in proposed field sites and build on lessons and best practices learned through the program. | Sites | 1 | Completed |
| Bhutan 1.3.4 | Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers | People Trained | 8 | Started-Ongoing |
| Mongolia 1.3.4 | Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers. | Events | 3 | Delayed |
| Mongolia 1.3.5 | Work with local communities to provide knowledge and skills for adding value to livestock products, and support market linkages to increase and diversify their income. | People Trained | 20 | Delayed |
| Nepal 1.3.6 | Support government agencies and communities to develop guidelines for sustainable management and harvesting of NTFPs/MAPs. | Guideline | 1 | Started-Ongoing |
| Nepal 1.3.7 | Establish community-based processing facilities and support enterprise development, market linkages, value-added approaches, and market information systems. | Enterprise | 1 | Started-Ongoing |
| Pakistan 1.3.8 | Promote alternate livelihood activities (e.g. handicrafts, kitchen gardening, and horticulture) that are climate-smart and contribute to conservation of snow leopard habitat and wetlands. | Events | 2 | Started-Ongoing |
| Kyrgyz 1.3.9 | Develop and support community-based eco-friendly income generation training and alternatives (e.g. felt production, facilitating market linkages, production of yak/horse milk and cheese, eco-tourism). | Enterprises | 5 | Started-Ongoing |
| Bhutan 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | People Trained | 35 | Started-Ongoing |
| India 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | People Trained | 250 | Started-Ongoing |
| Nepal 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | Households Benefitting | 150 | Started-Ongoing |
| Bhutan 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | People Trained | 10 | Started-Ongoing |
| India 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | Initiatives | 3 | Started-Ongoing |
| Nepal 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | Initiatives | 3 | Started-Ongoing |
| India 1.3.12 | Work to integrate sustainable tourism principles in state policies and conduct feasibility assessment for green certification of CBT in Sikkim. | - | - | Project Year 4 |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |

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| Bhutan 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| India 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Mongolia 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Nepal 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Pakistan 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Completed |
| Pakistan 1.4.2 | Conduct a snow leopard population survey in Gilgit-Baltisan and develop GIS-based species distribution maps for snow leopard and prey species, and prepare species conservation plan in consultation with partners and with approval of district government. | Survey | 1 | Started-Ongoing |
| Mongolia 1.4.3 | Conduct snow leopard distribution survey across the Altai-Sayan Region of Mongolia using SLIMS and participation of local stakeholders. | Survey | 1 | Started-Ongoing |
| Kyrgyz 1.4.4 | Perform a snow leopard population survey by collecting and performing genetic analysis, and possibly using camera traps, in sites where snow leopards are present. | Survey | 1 | Started-Ongoing |
| Nepal 1.4.5 | Begin radio-tracking of snow leopards using GPS collars to collect information on home range size, habitat type and preferences, hunting behavior and frequency, and activity patterns. | Event | 1 | Started-Ongoing |
| Bhutan 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 24 | Started-Ongoing |
| India 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 50 | Started-Ongoing |
| Mongolia 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 10 | Started-Ongoing |
| Nepal 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 25 | Started-Ongoing |
| Pakistan 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 50 | Started-Ongoing |
| 1.4.7 | Train high mountain nomadic herders to monitor snow leopards, habitats, and threats (e.g. poaching, retaliatory killing, and habitat degradation).<br>**Note:** This project activity has been merged with Activity 1.4.6, above. | | | Merged with Activity 1.4.6 |
| Pakistan 1.4.8 | Establish a watch and ward system of Village Wildlife Guards to protect snow leopards and other species against hunting and poaching in Gilgit-Baltistan and Chitral. | People Trained | 15 | Started-Ongoing |
| Kyrgyz 1.4.9 | Support patrolling by providing anti-poaching teams with field supplies and gear, and conduct trainings to improve capacity of private game management entities. | Teams Supported | 1 | Started-Ongoing |
| Kyrgyz 1.4.10 | Involve local communities in species conservation activities through conservation education, training, and practical experience in snare | Events | 3 | Started-Ongoing |

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| | removal and fire prevention. | | | |
| Kyrgyz 1.4.11 | Pursue establishment of a system of protected areas for snow leopard conservation that considers recent and predicted changes in key habitats. | PAs established/ expanded | 2 | Started but now Delayed |
| Kyrgyz 1.4.12 | Support wildlife habitat management practices (e.g. establishing feeding fields and ensuring mosaic structure of habitat in agricultural landscapes). | Sites | 3 | Postponed |
| Mongolia 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 5 | Started-Ongoing |
| Nepal 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 3 | Started-Ongoing |
| Pakistan 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 2 | Started-Ongoing |
| Regional 1.4.14 | Engage government agencies in high altitude areas to ensure their activities do not adversely affect natural ecosystems. | | | Ongoing on a Country-by Country Basis as Needed |
| Pakistan 1.4.15 | Work with policy makers and government officials to review existing federal and provincial policies supportive of snow leopard conservation, prepare species action plan for snow leopards in Khyber Phaktunkhwa Province, and share results with stakeholders. | Groups | 2 | Started-Ongoing |
| **2** | **Objective 2: Improve transnational collaboration on climate change adaptation and snow leopard conservation in Asia's high mountain landscapes.** | | | |
| ***2.1*** | ***Sub-objective 2.1: Building cooperation through the Climate Summit for a Living Himalayas and its regional "Framework of Cooperation" for protection of Asia's high mountain landscapes and snow leopard conservation.*** | | | |
| Regional 2.1.1 | Map core areas, habitat linkages and dispersal barriers for the transboundary Kangchenjunga Nepal-India site and Wangchuk Centennial Park. | Report | 1 | Started, Ongoing |
| Regional 2.1.2 | Conduct a review of climate change vulnerability in Himalaya Region to determine shared vulnerabilities and gaps in understanding, analyze glacial melt in the region, and inform policy discussion to aid regional governments in drafting response plans to glacial melt and climate change impacts on water security.<br>**Note:** This project activity has been merged with project Activity 2.2.1. | | | Merged with Activity 2.2.1 |
| Regional 2.1.3 | Review research of regional glacial melt rates using research from University of Colorado, NASA, IRD's PAPRIKA, and ICIMOD, and analyze effects of regional black carbon emissions on glacial melt rates.<br>**Note:** This project activity has been merged with project Activity 2.2.1. | | | Merged with Activity 2.2.1 |
| Regional 2.1.4 | Identify and review current domestic and regional policy initiatives to manage impacts of glacial melt, advances in headwater ecosystem management, and snow leopard conservation in the context of climate change.<br>**Note:** This project activity has been merged with project Activity 2.2.1. | | | Merged with Activity 2.2.1 |
| Regional 2.1.5 | Disseminate adaptation technologies, water resource management best practices, and information on knowledge and institutional capacity gaps. | | | Ongoing on a Country-by-Country Basis |
| Regional 2.1.6 | Develop special issue briefs for inter-governmental review meetings on efforts to manage downstream impacts on high mountain communities. | Briefs | 1 | Ongoing on an as Needed Basis |
| Regional 2.1.7 | Conduct Climate Summit for a Living Himalayas inter-governmental body annual meetings to support implementation of framework of cooperation. | | | Postponed Indefinitely |
| Regional 2.1.8 | Convene a regional meeting of Himalayan experts on snow leopard conservation and headwaters management. | Event | 1 | Completed |
| ***2.2*** | ***Sub-objective 2.2: Facilitate discussions on climate change and snow leopard conservation among the range countries.*** | | | |
| Regional 2.2.1 | Conduct a range wide review of climate change vulnerability and the impacts of climate change on glacier melt rates, the availability of water resources, ecosystems, snow leopard habitat, and downstream | Report | 1 | Started, Ongoing |

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| | communities. Also analyze the effects of regional black carbon emissions on glacial melt rates and review current policy initiatives to manage the impacts of glacial meltoff. | | | |
| Regional 2.2.2 | Organize a technical meeting of regional experts on climate change and headwaters management to present and refine findings of range wide review, and discuss the intersection of climate change, water security, and snow leopard conservation. | Event | 1 | Delayed, This Activity will now be part of the January 2014 AHM Learning and Sharing Meeting |
| Regional 2.2.3 | Promote dialogue and collaboration between Nepal, India, China and Bhutan for transboundary cooperation on snow leopard conservation, reducing illegal wildlife poaching and trade, and management of headwaters through annual meetings of government officials and local communities. | Events | 2 | Started, Ongoing |
| Regional 2.2.4 | Engage the Central Asian Interstate Commission on Sustainable Development (ICSD) to initiate a dialogue across the Central Asia nations on snow leopard conservation in the face of climate change which feeds into revised national snow leopard conservation action plans. | Event | 1 | Started, Ongoing |
| ***2.3*** | ***Sub-objective 2.3: Update range-wide information on snow leopard trafficking and provide trafficking information to enforcement efforts at the national and regional network levels.*** | | | |
| TRAFFIC 2.3.1 | Update information on commercial hunting and trade of snow leopards. | Report | 1 | Started, Ongoing |
| TRAFFIC 2.3.2 | Develop an action-oriented set of recommendations for reducing illegal trade in snow leopard pelts and other products along the trade chain and inform government enforcement efforts. | Report | 1 | Started, Ongoing |
| TRAFFIC 2.3.3 | Incorporate recommendations into range-wide dialogues on snow leopard conservation, revision of the Snow Leopard Survival Strategy, national snow leopard conservation action plans, and regional trade initiatives. | Report Sections | 4 | Started, Ongoing |
| TRAFFIC 2.3.4 | Partner and coordinate with INTERPOL through the USAID-funded Project Predator initiative to exchange relevant information. | None | | Started, Ongoing. |
| TRAFFIC 2.3.5 | Inform actions of SAWEN to promote strengthened enforcement cooperation among countries. | None | | Started, Ongoing |
| ***2.4*** | ***Sub-objective 2.4: Building momentum through a range-wide network for snow leopard conservation.*** | | | |
| Regional 2.4.1 | Conduct a range-wide snow leopard habitat climate vulnerability and grassland degradation analysis using GIS and remote sensing and use this analysis to identify core snow leopard habitat, potential snow leopard habitat, and the impacts of grassland degradation on water supply. | Report | 1 | Started, Ongoing |
| Regional 2.4.2 | Use range-wide analysis to identify core and potential snow leopard habitat, and impacts of grassland degradation on water supply**.** **Note:** This project activity has been merged with Project Activity 2.4.1. | | | Merged with Activity 2.4.1 |
| Regional 2.4.3 | Convene a Technical Meeting of the Snow Leopard Network to discuss climate change, water security, and challenges facing snow leopard conservation. | Event | 1 | Completed |
| Regional 2.4.4 | Review national snow leopard conservation action plans and the revised Snow Leopard Survival Strategy from a climate change adaptation perspective and update these documents to be climate smart. | Reviews | 6 | Started, Ongoing |
| Regional 2.4.5 | Support a small grants program for site-based and national activities through SLN's Snow Leopard Conservation Grant to support conservation programs across the snow leopard's range. | Grants | 3 | Started, Ongoing |
| Regional 2.4.6 | Conduct a snow leopard study tour to ISLT's Tost Uul Mongolia research base to share technology, knowledge, and best practices of snow leopard monitoring and conservation with the Himalayan countries (e.g. Bhutan, India, Nepal, and Pakistan) | Events | 2 | Started, Ongoing |
| ***2.5*** | ***Sub-objective 2.5: Launch the beginnings of the Alliance on Asia's High Mountain Landscapes.*** | | | |
| Regional 2.5.1 | Conduct a meeting between the Climate Summit for a Living Himalayas inter-governmental body and the inter-governmental | | | Postponed Indefinitely |

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| | Sustainable Development Commission in Central Asia to discuss common challenges, approaches and successes in headwater management, water security, community development and snow leopard conservation. | | | |
| Regional 2.5.2 | Launch the beginnings of an inter-governmental Alliance on Asia's High Mountain Landscapes. | | | Merged with Activities 2.5.3 and 2.5.4 |
| Regional 2.5.3 | Co-organize and provide support for the Global Snow Leopard Conservation Forum meeting of the 12 snow leopard range nations, to be sponsored by the Government of Kyrgyzstan in Bishkek in October 2013. | Events | 3 | Completed |
| Regional 2.5.4 | Provide support for the 12-nation Global Snow Leopard Conservation Forum Secretariat to implement the Global Snow Leopard and Ecosystem Protection Program (GSLEP) and hold periodic meetings. | Events | 5 | Started, Ongoing |

## Activity Status by Country:

# Bhutan

| Activities | | Unit | Target | Status |
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| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Bhutan 1.1.2a | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. (Kurtoe Geog). | People Trained | 10 | Started-Ongoing |
| Bhutan 1.1.2b | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. (Gangzur Geog). | People Trained | 10 | Started-Ongoing |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Bhutan 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards. | Report | 1 | Started-Ongoing |
| Bhutan 1.2.2 | Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices, and enhance crop productivity and climate resilience through rainwater harvesting, small-scale storage, and drought and pest-tolerant crops | People Trained | 60 | Started-Ongoing |
| Bhutan 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | ha of degraded land improved | 20 | Started-Ongoing |
| Bhutan 1.2.4 | Organize local campaigns and workshops to raise awareness on climate change and adaptation actions in agriculture and herding, especially among indigenous, marginalized, and poor populations | People Trained | 40 | Started-Ongoing |
| Bhutan 1.2.5 | Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation efforts and downstream benefits for water supplies. | Various | | Started-Ongoing |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Bhutan 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 2 | Started-Ongoing |
| Bhutan 1.3.2 | Study severity of livestock depredation and develop a comprehensive snow leopard-human conflict mitigation program (e.g. livestock insurance schemes) | Report | 1 | Started-Ongoing |
| Bhutan 1.3.4 | Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers | People Trained | 8 | Started-Ongoing |
| Bhutan 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | People Trained | 35 | Started-Ongoing |
| Bhutan 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | People Trained | 10 | Started-Ongoing |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| Bhutan 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Bhutan 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 24 | Started-Ongoing |

# India

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| India 1.1.10 | Work with tribe/community-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting and extraction of wildlife resources, regulating free grazing near core snow leopard habitat, and watershed conservation. | Survey Report | 1 | Started-Ongoing |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| India 1.2.4 | Organize local campaigns and workshops to raise awareness on climate change and adaptation actions on agriculture, especially among indigenous, marginalized, and poor populations. | Survey Report | 1 | Started-Ongoing |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| India 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | People Trained | 25 | Started-Ongoing |
| India 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey Report | 1 | Started-Ongoing |
| India 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | People Trained | 250 | Started-Ongoing |
| India 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | Initiatives | 3 | Started-Ongoing |
| India 1.3.12 | Work to integrate sustainable tourism principles in state policies and conduct feasibility assessment for green certification of CBT in Sikkim. | - | - | Year 4 |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| India 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| India 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 50 | Started-Ongoing |

# Kyrgyzstan

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Kyrgyz 1.1.2 | Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources. | People Trained | 400 | Started-Ongoing |
| Kyrgyz 1.1.3 | Provide technical support for local associations and NGOs to conduct awareness raising activities regarding sustainable natural resource management and use. | Groups | 3 | Started-Ongoing |
| Kyrgyz 1.1.6 | Facilitate cooperation among stakeholders (e.g. gold mining company "Kumtor") to establish a model of local natural resource management. | Cooperation Agreements | 1 | Started but now Delayed |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Kyrgyz 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards | Report | 1 | Started-Ongoing |
| Kyrgyz 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Site | 1 | Started-Ongoing |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Kyrgyz 1.3.9 | Develop and support community-based eco-friendly income generation training and alternatives (e.g. felt production, facilitating market linkages, production of yak/horse milk and cheese, eco-tourism). | Enterprises | 5 | Started-Ongoing |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| Kyrgyz 1.4.4 | Perform a snow leopard population survey by collecting and performing genetic analysis, and possibly using camera traps, in sites where snow leopards are present. | Survey | 1 | Started-Ongoing |
| Kyrgyz 1.4.9 | Support patrolling by providing anti-poaching teams with field supplies and gear, and conduct trainings to improve capacity of private game management entities. | Teams Supported | 1 | Started-Ongoing |
| Kyrgyz 1.4.10 | Involve local communities in species conservation activities through conservation education, training, and practical experience in snare removal and fire prevention. | Events | 3 | Started-Ongoing |
| Kyrgyz 1.4.11 | Pursue establishment of a system of protected areas for snow leopard conservation that considers recent and predicted changes in key habitats. | PAs established/ expanded | 2 | Started but now Delayed |
| Kyrgyz 1.4.12 | Support wildlife habitat management practices (e.g. establishing feeding fields and ensuring mosaic structure of habitat in agricultural landscapes). | Sites | 3 | Delayed |

# Mongolia

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Mongolia 1.1.4 | Build governance capacity of local community herder groups to develop sustainable pasture and watershed management plans as well as strategies to mitigate human-wildlife conflict, such as the relocation of winter livestock sheds to low-risk areas. | Groups | 5 | Started-Ongoing |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Mongolia 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards | Report | 1 | Delayed |
| Mongolia 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 2 | Delayed – Postponed until Year 3 |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Mongolia 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | People Trained | 25 | Started-Ongoing |
| Mongolia 1.3.3 | Expand the "Buy Goat Program" livestock insurance scheme in proposed field sites and build on lessons and best practices learned through the program. | Sites | 1 | Completed |
| Mongolia 1.3.4 | Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers. | Events | 3 | Delayed |
| Mongolia 1.3.5 | Work with local communities to provide knowledge and skills for adding value to livestock products, and support market linkages to increase and diversify their income. | People Trained | 20 | Delayed |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| Mongolia 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Mongolia 1.4.3 | Conduct snow leopard distribution survey across the Altai-Sayan Region of Mongolia using SLIMS and participation of local stakeholders. | Survey | 1 | Started-Ongoing |
| Mongolia 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 10 | Started-Ongoing |
| Mongolia 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 5 | Started-Ongoing |

# Nepal

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Nepal 1.1.1 | Train members of local natural resource management groups on principles of good governance, gender and social inclusion, and support adoption of these principles in the groups' by-laws. | Events | 2 | Completed |
| Nepal 1.1.7 | Use "Gender and Power Analysis" and "Underlying Causes of Poverty Analysis" tools to map power relations in control of natural resources, and identify target groups and appropriate strategies. | Events | 2 | Completed |
| Nepal 1.1.8 | Conduct pro-poor planning training for local youth to be local resource persons and mobilize them in the preparation of livelihood improvement plans. | Event | 2 | Completed |
| Nepal 1.1.9 | Conduct leadership skills training in traditionally excluded communities to provide skills necessary to hold positions in user groups, conservation committees, and the conservation area council. | Event | 2 | Completed |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Nepal 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards. | Sites | 4 | Started-Ongoing |
| Nepal 1.2.2 | Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices and enhance crop productivity and climate resilience through rainwater harvesting, small-scale water storage, and introduction of drought and pest-tolerant crops. | Sites | 5 | Started-Ongoing |
| Nepal 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 10 | Started-Ongoing |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Nepal 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 6 | Started-Ongoing |
| Nepal 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey Report | 1 | Completed |
| Nepal 1.3.6 | Support government agencies and communities to develop guidelines for sustainable management and harvesting of NTFPs/MAPs. | Guideline | 1 | Started-Ongoing |
| Nepal 1.3.7 | Establish community-based processing facilities and support enterprise development, market linkages, value-added approaches, and market information systems. | Enterprise | 1 | Started-Ongoing |
| Nepal 1.3.10 | Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests. | Households Benefitting | 150 | Started-Ongoing |
| Nepal 1.3.11 | Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators. | Initiatives | 3 | Started-Ongoing |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| Nepal 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Started-Ongoing |
| Nepal 1.4.5 | Begin radio-tracking of snow leopards using GPS collars to collect information on home range size, habitat type and preferences, hunting behavior and frequency, and activity patterns. | Event | 1 | Started-Ongoing |
| Nepal 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory | People Trained | 25 | Started-Ongoing |

| | | | | |
|---|---|---|---|---|
| | killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | | | |
| Nepal 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 3 | Started-Ongoing |

# Pakistan

| Activities | | Unit | Target | Status |
|---|---|---|---|---|
| **1** | **Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development.** | | | |
| ***1.1*** | ***Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.*** | | | |
| Pakistan 1.1.5 | Raise awareness and provide education about the role of predators, particularly snow leopards, in maintaining the ecological health of mountain pastures. | Events | 8 | Started-Ongoing |
| Pakistan 1.1.10 | Work with tribe/community-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting and extraction of wildlife resources, regulating free grazing near core snow leopard habitat, and watershed conservation. | Groups | 3 | Started-Ongoing |
| ***1.2*** | ***Sub-objective 1.2: Increase community resiliency to climate change impacts.*** | | | |
| Pakistan 1.2.1 | Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards | Report | 1 | Started-Ongoing |
| Pakistan 1.2.3 | Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides). | Sites | 3 | Started-Ongoing |
| Pakistan 1.2.5 | Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation efforts and downstream benefits for water supplies. | None | | Cancelled |
| ***1.3*** | ***Sub-objective 1.3: Enhance community engagement in conservation.*** | | | |
| Pakistan 1.3.1 | Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems. | Groups | 2 | Started-Ongoing |
| Pakistan 1.3.2 | Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes). | Survey | 1 | Started-Ongoing |
| Pakistan 1.3.8 | Promote alternate livelihood activities (e.g. handicrafts, kitchen gardening, and horticulture) that are climate-smart and contribute to conservation of snow leopard habitat and wetlands. | Events | 2 | Started-Ongoing |
| ***1.4*** | ***Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.*** | | | |
| Pakistan 1.4.1 | Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis. | Protocol | 1 | Completed |
| Pakistan 1.4.2 | Conduct a snow leopard population survey in Gilgit-Baltisan and develop GIS-based species distribution maps for snow leopard and prey species, and prepare species conservation plan in consultation with partners and with approval of district government. | Survey | 1 | Started-Ongoing |
| Pakistan 1.4.6 | Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations. | People Trained | 50 | Started-Ongoing |
| Pakistan 1.4.8 | Establish a watch and ward system of Village Wildlife Guards to protect snow leopards and other species against hunting and poaching in Gilgit-Baltistan and Chitral. | People Trained | 15 | Started-Ongoing |
| Pakistan 1.4.13 | Provide technical and financial support to forest departments and communities to protect habitat. | Groups | 2 | Started-Ongoing |
| Pakistan 1.4.15 | Work with policy makers and government officials to review existing federal and provincial policies supportive of snow leopard conservation, prepare species action plan for snow leopards in Kyhber Phaktunkhwa Province, and share results with stakeholders. | Groups | 2 | Started-Ongoing |

## II. STATUS UPDATES: AREAS OF PROGRESS AND SUCCESSES

### a. Key Short and Long-term Program Objectives

The goals of the Asia High Mountains Project are to galvanize greater understanding and action at local, national, and regional levels across the snow leopard range states to 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 sustainable development, namely local livelihoods, water and food security, and climate change adaptation.

The AHM project is directly working with six of the twelve snow leopard range states in both the northern and southern half of the species' range as well as engaging the remaining six nations in dialogue on conservation strategies and approaches for protecting this species. Short term objectives under this project include enhancing community participation in conservation, improving local natural resource management, conserving the snow leopard and its habitat in priority sites, improving enforcement of wildlife trade laws in snow leopard range areas, facilitating discussions on snow leopard conservation and climate change among the range countries, and creating a range-wide network for snow leopard conservation with the participation of both government agencies and local communities. Primary long term objectives under this project are to increase the resiliency of communities in snow leopard range areas to climate change impacts and to launch the beginnings of an alliance for protection of Asia's high mountain landscapes.

**b. Summary of Progress for the Individual Project Sites**

Summaries of AHM Project Year 2 progress in each of the six project countries as well as at the regional scale are given below:

## Bhutan

In Wangchuck Centennial Park (WCP) in Bhutan in AHM Project Year 2, field work for the snow leopard sign, camera trap, and prey species surveys of WCP was completed, and results of this groundbreaking 2-year survey are currently being compiled. Findings of this survey will be used to improve conservation planning in high altitude areas of northern Bhutan and will also be used to help design Bhutan's upcoming national snow leopard survey. In terms of community conservation, 8 WCP staff participated in an exchange to the Kangchenjunga Conservation Area (KCA) in Nepal to observe long-running community conservation programs at that AHM Project site. Upon their return, the same staff members undertook training of local herders residing in WCP as citizen scientists and started the first snow leopard conservation committee in Bhutan with these trainees.

In terms of climate change and water security, WWF sponsored a series of activities, including the first climate adaptation training in Bhutan for government and conservation workers; funding installation of a second automatic weather station (AWS) in WCP accompanied by a training on AWS operation, maintenance, and data management for WCP staff; and sponsoring a Bhutanese government worker to visit the University of Colorado Mountain Research Station to learn about high-altitude hydrological monitoring and research. Community-oriented activities included making preparations for a demonstration springshed restoration; teaching villager how to make biomass briquettes; launch of a farmers school to teach subsistence farmers techniques for adapting local agricultural practices to changing climatic conditions; and sending a group of WCP homestay operators on an exchange to Sikkim to learn about successful ecotourism enterprises as one method of increasing livelihood security in rural areas.

## India

In Sikkim in AHM Project Year 2, WWF continued with snow leopard and wildlife conservation efforts that included a survey of feral dogs in North Sikkim, planning of a snow leopard camera trap survey; sponsoring of volunteer anti-poaching patrols; and sending volunteer rangers on an exchange trip to Bhutan to learn about snow leopard conservation and other conservation successes there. Extensive community conservation awareness raising activities were conducted in Sikkim, including a three-day nature camp for school children and a World Wetlands Day celebration in Lachen, North Sikkim, which featured a trash management awareness campaign and launch of a recycling center.

In terms of climate change and water security, WWF organized a survey of farmers to refine last year's farmer climate change survey, findings of which are being used to develop climate adaptation strategies for agriculturalists in Sikkim. Several bio-briquette trainings were held to reduce fuel wood cutting pressure on local forests and preparations were made for conducting a solar hot water heater demonstration. WWF also continued to promote ecotourism as one climate smart alternative livelihood adaptation strategy, including by co-hosting a state-level sustainable tourism workshop; training homestay operators; and co-

sponsoring a re-launch of the Sikkim Himalayan Homestay website, the main source of information on Sikkim homestay programs.

## Kyrgyzstan

In Kyrgyzstan in AHM Project Year 2, WWF continued training rangers of the Sarychat-Ertash Reserve on snow leopard monitoring and conducting snow leopard population and prey species surveys in the reserve as well as sponsoring anti-poaching operations in the reserve and its buffer zone. In October 2013, WWF participated in the launch workshop of the Central Tian Shan GEF Project. However, WWF activities targeting the proposed Khan Tengri National Park have been delayed due to delays in formal establishment of the new park. In terms of conservation awareness raising, WWF sponsored a series of awareness raising events, including the second annual Engilchek Village Snow Leopard Festival, the Akshyrak Village Earth Day celebration, a children's summer eco-camp, and a travelling photo exhibit on the Sarychat-Ertash State Reserve.

In terms of climate change, WWF continued work on preparation of a climate vulnerability assessment for the project region of eastern Kyrgyzstan and held a series of climate adaptation training workshops for village residents in the buffer zone of the Sarychat-Ertash State Reserve, informing participants about climate change impacts on their communities and possible adaptation strategies to mitigate these impacts. Climate adaptation demonstrations at the Sarychat-Ertash Reserve included raising of yaks as a breed of livestock resilient to climatic changes in high altitude areas, erecting of a wind generator as a renewable energy source suitable for remote off-grid communities, supporting local handicraft trainings and handicraft marketing to diversify incomes, and starting up local development funds to provide small loans to project site residents for sustainable development and alternative livelihood projects.

## Mongolia

In Mongolia in AHM Project Year 2, WWF continued with its snow leopard research program, revising the snow leopard distribution map for western Mongolia based on earlier participatory mapping workshops; processing findings of a large human-wildlife conflict survey conducted in the AHM Project Region; and conducting a long term snow leopard camera trap survey at the Jargalant Khairkhan Mountain AHM Project site. During the course of these activities, WWF also prepared a Mongolian-language version of the Snow Leopard Information Management System (SLIMS) manual for conducting snow leopard sign surveys and printed and distributed 300 copies. In addition, WWF trained a number of local herders as citizen scientists to participate in snow leopard camera trap, sign, and prey species surveys.

In terms of climate change activities, WWF reached agreement with the Mongolian Academy of Sciences' Institute of Biology to jointly conduct a climate vulnerability assessment for the AHM Project region of western Mongolia. As a climate smart alternative livelihood strategy, WWF gave a snow leopard-focused ecotourism training for residents of AHM Project sites and then gave participants at two sites practical experience by arranging for a western tour group to visit these two sites. WWF is also planning an ecotourism circuit that will include two recently established local protected areas that are important snow leopard sites. In AHM Project Year 3, WWF will begin climate-smart pasture management improvement activities.

## Nepal

In the Kangchenjunga Conservation Area (KCA) of Nepal in AHM Project Year 2, the most high profile conservation activity was the successful satellite GPS collaring of a snow leopard that has given conservationists a wealth of invaluable information on snow leopard movements in the Kangchenjunga landscape of Nepal and Sikkim. This information will be used to improve landscape-level conservation efforts in the Kangchenjunga region. In other snow leopard and wildlife conservation activities, WWF continued to train members of local snow leopard conservation committees as citizen scientists to conduct snow leopard and prey species monitoring; sponsored a series of anti-poaching operations by local residents; completed a human-wildlife conflict report and mitigation strategy; and completed a snow leopard monitoring protocol for experts and citizens scientists alike to use in Nepal.

In terms of climate change and water security work, WWF and CARE conducted a series of climate adaptation demonstrations for farmers in the KCA that included greenhouse vegetable gardening; planting of a disease resistant maize variety; cardamom farming; beekeeping; and introduction of improved water storage, irrigation canals, and sprinkler irrigation. In terms of climate-smarting pasture management practices, WWF sought to increase pasture rotation rates to increase pasture health and resilience by building bridges, improving trails, and increasing the availability of clean drinking water at inaccessible and disused pastures. Other related activities included the distribution of improved cook stoves to reduce fuel wood cutting pressure on KCA forests, and alternative livelihood activities, such as start up of a sustainable community essential oils enterprise, and ecotourism related work, including trash cleanups, trekking trail improvement, and upgrading of a local visitors center.

Finally WWF and CARE built the capacity of local excluded groups to participate in and benefit from community natural resource management, livelihood, and conservation activities through a series of trainings on good governance and gender and social inclusion in community groups; leadership skills for traditionally excluded groups; and pro-poor planning to help poor community members develop livelihood improvement plans. Public Hearing-Public Auditing (PHPA) meetings for local community-based organizations (CBO) were also held to increase transparency of these groups.

## Pakistan

In Pakistan in AHM Project Year 2, ongoing snow leopard and wildlife conservation efforts included conducting various snow leopard and prey species monitoring surveys in Gilgit-Baltistan and Chitral Districts and also conducting a human-wildlife conflict survey in Chitral, with the results of these surveys to be used for improving landscape-level conservation efforts for the region. WWF also finalized a snow leopard monitoring protocol to be used by experts and citizen scientists in northern Pakistan; trained citizen scientists to use protocol methods in the field; and hired several additional village wildlife guards to monitor and document illegal killing of wildlife at project sites. In order to reduce and mitigate human-wildlife conflict, particularly loss of livestock to predation by snow leopards, WWF sponsored construction of a demonstration predator-proof corral and also oversaw the set up of a demonstration community-based livestock insurance scheme, both in Hoper Valley, GB. In addition, WWF conducted a series of conservation awareness raising events

concerning AHM Project activities for students and the general public to mark World Wildlife Day, World Water Day, World Environment Day, and the Hoper Valley Cultural Revival Festival. WWF also continued to support activities of various village conservation committees (VCC) active at AHM Project sites.

In terms of climate change adaptation and improving water security, WWF conducted a series of activities seeking to increase the adaptive capacity of local farmers and livestock herders at AHM Project sites in Pakistan. This included conducting a preliminary climate vulnerability assessment for the Hoper Valley and holding community focus groups to develop a sustainable pasture management plan for the Rumboor Valley, which were accompanied by a one-day training on better livestock and pasture management techniques. In terms of concrete climate adaptation actions, WWF conducted demonstration fodder crop plantings on degraded agricultural land that will reduce winter grazing pressure on mountain pastures. WWF also distributed fast-growing multipurpose tree species that were planted on marginal lands and will be used to produce timber, fuel wood, and livestock fodder, eventually reducing wood cutting pressure on remaining native forest ecosystems. In addition, WWF distributed fruit and nut tree saplings to start small household orchards that will improve local food security and nutrition as well as providing households with an additional income source. The above three activities will also contribute to improved watershed management and water security at project sites by increasing runoff infiltration on degraded lands and reducing soil erosion. With respect to livestock, WWF conducted a large livestock vaccination campaign to reduce loss of livestock to disease. The resulting increased livestock survival rate will both mitigate loss of livestock to wild predators and increase herd resilience to an increasing incidence of livestock disease, which may be a result of climatic warming. Finally, in order to diversify rural incomes threatened by a rapidly changing climate, WWF supported launch of a vocational training center in Chitral's Laspur Valley, where women are being trained on sewing and making of wool handicrafts for sale in provincial market centers.

## Regional

In terms of regional activities supported by WWF in AHM Project Year 2, the most high profile was the holding of the Global Snow Leopard Conservation Forum in Bishkek, which brought together high-level representatives of all 12 snow leopard range nations for the first time who unanimously adopted the Bishkek declaration on snow leopard conservation and the 12-nation Global Snow Leopard and Ecosystem Protection Program (GSLEP). This meeting is now being followed up by creation of a forum snow leopard secretariat. As a preliminary regional step in implementing the GSLEP, WWF supported holding of the GSLEP National Focal Points Action Planning, Leadership and Capacity Development Workshop, which resulted in the selection of over 20 priority landscapes to meet overall GSLEP goals as well as providing guidance on GSLEP implementation. In addition, WWF held the Regional Snow Leopard Workshop for the Living Himalayas-Eastern Himalayas which resulted in revision of WWF's Himalaya Region strategy for snow leopard conservation. WWF also participated in the annual meeting of the Central Asia Interstate Commission on Sustainable Development (ICSD), where discussion continued on incorporating climate change adaptation concepts into regional conservation planning and agreement was reached to revise the 2000 Central Asia Regional Environmental Action Plan (REAP) to address climate change impacts and climate adaptation planning.

In Year 2, WWF and partners also completed drafts of a series of reports. The first was a regional climate vulnerability assessment for the snow leopard range nations titled "Assessing Community and Ecosystem Vulnerability to Climate Change and Glacial Melt in Asia's High Mountains," while the second examined the importance of snow leopard habitat in regional water provision and was titled "Maps of the Snow Leopard Range, Water Provision, and Climate Change." WWF partner TRAFFIC completed the first draft of a 10-year update of its snow leopard trade report, which is now under internal TRAFFIC review. WWF also partnered with the Snow Leopard Network (SLN) on the preparation of the revised Snow Leopard Survival Strategy (SLSS), with the WWF US Climate Adaptation Team reviewing the SLSS for climate smartness and also preparing a related species fact sheet on climate change impacts on and adaptation strategies for snow leopards.

WWF also partnered with the Snow Leopard Trust (SLT) and the SLN in sponsoring the 2014 Snow Leopard Conservation Grant Program (SLCGP), which involved reviewing grant proposals and selecting winning grants for funding. The 2014 SLCGP was notable in that it was the first time grant awards were given under a new funding category on snow leopards and climate change. Finally, WWF and SLT sponsored a study tour for one Nepali wildlife technician to visit SLT's Tost Uul Mountain Snow Leopard Research Base, where he was trained on snow leopard trapping, immobilization, and GPS collaring techniques.

### c. Activity Descriptions

**Objective 1: Promote climate-smart management of high mountain landscapes and snow leopard habitat for sustainable development in specific sites.**

The approach to achieving Asia High Mountains Project Objective 1 is four-part and involves striving to 1) strengthen capacity of local natural resource management organizations, 2) increase community and ecosystem resiliency to climate change impacts, 3) enhance community engagement in conservation, and 4) conserve the snow leopard and its habitat in priority sites. In AHM Project Year 2, good progress was made in all four areas. Country by country detailed activity descriptions follow.

## Bhutan

**Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.**

**No activities under this sub-objective in AHM Project Year 2.**

**Sub-objective 1.2: Increase community resiliency to climate change impacts.**

**Activity 1.2.1: Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards.**

In AHM Project Year 2 in Bhutan, WWF supported Wangchuck Centennial Park (WCP) in planning and purchase of materials for a springshed restoration project to be conducted in Dungkar Village, Kurtoe Geog in central WCP. This has included delineating the boundaries of the springshed to be restored, design of a water storage tank to increase water supply for farmers in the event of a drought, purchase of fencing to prevent unattended livestock from grazing in the springshed recharge area, and selection of plant species to transplant on the damaged springshed recharge area. With restoration planning complete, actual restoration work on the springshed will commence in the autumn of 2014.

**Outputs/Results:**

- All preparations made to carry out a demonstration springshed restoration in a farming community in WCP that is suffering water shortages due to a combination of poor springshed management and climate change impacts.
- If successful, this activity will be replicated in other WCP communities suffering from drying up of important spring water sources.
- This demonstration activity will also serve to teach local residents about climate change impacts on their communities and possible adaptation strategies to mitigate these impacts.

**Activity 1.2.2: Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices, and enhance crop productivity and climate resilience through rainwater harvesting, small-scale storage, and drought and pest-tolerant crops.**

**Note:** The following activity was conducted at the end of AHM Project Year 1, but not reported in the AHM Year 1 Annual Report.

In Bhutan, WWF sponsored the successful launch of a “Farmers’ School” in the remote town of Dunggar in eastern Wangchuck Centennial Park (WCP) in September 2013. This collaborative effort between WWF, the Kurtoe Geog Agriculture Extension office, the local Kurtoe Geog government, and WCP sought to improve technical expertise and sustainability with respect to local small-scale agriculture. Agriculture technical expertise was provided by the geog agricultural extension agent, who presented lessons on pest infestation, increasing availability of water for agriculture, soil erosion, seed storage, fertilizers, pesticides, and climate change impacts. WCP staff members taught lessons on local conservation and environment issues. Lessons were also taught on community group governance. The local geog government provided use of land for practical sessions for the farmers. 60 farmers (35 women) participated in this first trial session of the WCP farmers’ school. Future WCP farmers’ school sessions will continue to provide a platform for learning and sharing on issues that affect farmers in the region. There are also plans to sell vegetables and tree saplings produced by farmers’ school demonstration projects. Funds raised in this manner

will be used for future farmers' school demonstration projects, such as a green house agriculture demonstration, and to make the farmers' school financially self-sustaining.

**Outputs/Results:**

- Farmers' School established in WCP to provide training on improved subsistence farming practices.
- 60 people (35 women) trained on improved small-scale agricultural techniques for subsistence farmers, as well as on conservation and environment issues and community group governance.
- Forum launched for future, self-financing, farmer trainings that is suitable for replication in other areas of Bhutan.

**Activity 1.2.4: Organize local campaigns and workshops to raise awareness on climate change and adaptation actions in agriculture and herding, especially among indigenous, marginalized, and poor populations.**

In Bhutan in AHM Project Year 2, the WWF US Climate Adaptation Team held the "Fundamentals of Climate Change Adaptation Workshop" in Thimphu, Bhutan with AHM Project co-financing provided by the WWF US Russell E. Train Education for Nature Conservation Workshop Grant Program. The goal of this three and a half day workshop was to build awareness of climate change impacts and adaptation methods amongst government and conservation workers in Bhutan. Topics covered included climate change impacts; climate vulnerability assessment; building resilience; climate trends in Bhutan; adaptation strategies for freshwater ecosystems, forest ecosystems, and species; and climate-smarting conservation planning documents. Workshop participants included staff members from WWF, various protected areas in Bhutan, and a number of government agencies, such as the Department of Forest and Park Services, Department of Hydromet Services, and the Watershed Management Division. 40 People (16 Women) received a thorough introduction to climate change impacts and the process of climate adaptation for application in their ongoing work.

**Outputs/Results:**

- 40 People (16 women), all conservation workers and government staff members, trained on climate impacts and adaptation measures suitable for Bhutan.
- Awareness of climate impacts and adaptation methods greatly increased in Bhutan.
- Conservation planning in Bhutan will now incorporate climate-smart concepts which will result in increased sustainability of conservation actions.

**Activity 1.2.5: Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation efforts and downstream benefits for water supplies.**

<u>Activity 1.2.5A</u>

In Bhutan in AHM Project Year 2, WWF and the Department of Hyrdromet Services co-sponsored a 2-day training titled Introduction to Weather Data Management**.** The purpose of the training was to teach WCP staff members on the installation and maintenance of the two

high altitude automatic weather stations (AWS) installed in WCP with AHM Project support. Participants were also trained on data retrieval from the stations, data management, and use of collected data in scientific research and conservation planning. Topics covered during the training included an introduction to meteorology, the history of Bhutan's meteorological network, types of meteorological stations, identification of sites for locating meteorological stations, an introduction to the automatic weather stations operating in WCP, installation and maintenance of these stations, data collection from these stations, and processing and archiving of this data. 13 People (1 Woman) participated in the training.

**Outputs/Results:**

- 13 People (1 Woman) trained on the installation and maintenance of WCP's AWSs and on data retrieval, archiving, and use for scientific and planning purposes.
- Capacity of WCP staff members to participate in Bhutan's national hydro-meteorological monitoring program is greatly increased.
- Data collected by WCP staff members will eventually be used to improve conservation planning and climate adaptation efforts in the park.

Activity 1.2.5B

In Bhutan in AHM Project Year 2, WWF provided support to Wangchuck Centennial Park (WCP) for installation of a second automatic weather station (AWS) in the park in the spring of 2014. This station was installed near Tapgang Village, Kurtoe Geog, in WCP's eastern range. This station will record various hydrometeorological parameters, such as air temperature, precipitation, and barometric pressure, data which will later prove invaluable for climate change impact and adaptation research and planning in WCP, where there is currently very little hydro-meteorological data available. Data will be retrieved from the station's data logger and the station inspected at scheduled 3 month intervals. Contrary to earlier AHM Year 2 plans, a transit hut for data collection and maintenance teams visiting this station was not built.

**Outputs/Results:**

- A second automatic weather station was installed in WCP's eastern range by park and Bhutan Department of Hydromet Services staff.
- Data collected by this AWS and the first WCP AWS installed in AHM Project Year 1 will prove invaluable for climate change impact and adaptation research and planning in WCP.

Activity 1.2.5C

In AHM Project Year 2, WWF and the University of Colorado CHARIS research group sponsored a forest officer from the Bhutan Department of Forest and Park Services' Watershed Management Division to participate in a one-month exchange to the University of Colorado's Mountain Research Station. The purpose of this exchange was to introduce the forest officer to systematic research methods for collecting data on snow, ice, precipitation, stream flow, groundwater, and atmospheric conditions to be used in watershed management, climate research, and other areas of hydrological research in Bhutan. The first week of the exchange included a visit to the CHARIS Research unit at the National Snow and Ice Data Center (NSIDC) in Boulder to learn about the CHARIS Project and to attend a 3-day meeting of the Global Terrestrial Network for Glaciers (GTN-G). This was followed by a 2-day

wilderness safety and first aid training in preparation for an extended stay with researchers at the University of Colorado's Mountain Research Station. The next three weeks of the exchange were spent at the university's Mountain Research Station where the forest officer accompanied station researchers to all of their various research sites to observe snow, ice, and water data collection and analysis procedures. Knowledge gained from this exchange will be put to use in formulating recommendations for establishing a similar hydrological data collection program in Bhutan for both climate research and water resources management. Important lessons were also learned with respect to safeguarding the local watershed that serves as the source for the city of Boulder's drinking water. The primary recommendation put forth by the forest officer was that future exchanges should have pre-determined objectives, work plan, and a hands-on role for exchange participants while at the Mountain Research Station.

**Outputs/Results:**

- One forest officer from the Bhutan Watershed Management Division exposed to state-of-the-art methods for collecting data on snow, ice, precipitation, stream flow, groundwater, and atmospheric condition at the University of Colorado Mountain Research Station, near Boulder, Colorado.
- The forest officer was also exposed to analysis methods for data collected to be used in research on climate change research, watershed management, and other areas of hydrological research.
- Lessons were also learned on intensive watershed management and protection for municipal drinking water
- The forest officer will present lessons learned to the Bhutan Watershed Management Division and other Bhutan government agencies involved in water resource management and research for development of improved water resource management programs in Bhutan.

**Sub-objective 1.3: Enhance community engagement in conservation.**

**Activity 1.3.1: Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems.**

In Bhutan in AHM Project Year 2, Wangchuck Centennial Park (WCP) held a 2-day snow leopard conservation awareness training was for herders residing in WCP. Topics covered by this training included an overview of the snow leopard's range, ecology, and conservation significance; causes of human-snow leopard conflict and methods for mitigating this conflict; current threats to snow leopards in WCP and current laws concerning protection of Bhutan's wildlife; the need to remove wildlife snares and report snare locations to members of the newly established snow leopard conservation committee; and the need for local participation in the systematic monitoring of snow leopards and their prey. 30 People (9 Women) participated in the training.

**Outputs/Results:**

- Awareness of 30 local herders (9 Women) is raised with respect to snow leopard conservation issues in WCP.
- Local participation in snow leopard conservation efforts is increased.
- Protection of the snow leopard in WCP is improved.

**Activity 1.3.2 Study severity of livestock depredation and develop a comprehensive snow leopard-human conflict mitigation program (e.g. livestock insurance schemes).**

During the snow leopard conservation awareness training held in Bhutan under Activity 1.3.1, above, participants agreed to establish a local snow leopard conservation committee (SLCC) in Wangchuck Centennial Park's (WCP) central range. This SLCC will conduct snare removal and anti-poaching and operations, monitor illegal wildlife trade, keep records of human-wildlife conflict incidents, and file quarterly reports on SLCC activities and findings. WWF and WCP will also eventually provide SLCC members with training to become citizen scientist training and provide alpine ecotourism services. Notably this SLCC is being modeled after the successful SLCC program launched earlier by WWF in the Kangchenjunga Conservation Area (KCA) of Nepal.

**Outputs/Results:**

- One snow leopard conservation committee established in WCP's Central Range, which will be a grassroots level effort to reduce human-snow leopard conflict and illegal wildlife trade and improve monitoring of snow leopards, their prey, and other wildlife.
- Protection of snow leopards is improved through involvement of local communities in snow leopard conservation efforts in WCP.

**Activity 1.3.4 Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers.**

In AHM Project Year 2, WWF sponsored an exchange for 8 Wangchuk Centennial Park (WCP) staff members (All Men) to travel to the Kangchenjunga Conservation Area (KCA) of Nepal. The primary purpose of this study tour was for WCP staff to meet with members of the KCA's successful Khambachen Village Snow Leopard Conservation Committee (SLCC) to learn about their community snow leopard conservation activities for future replication in WCP. These activities included human-snow leopard conflict reduction strategies, community-based anti-poaching operations, community snow leopard and prey species monitoring, community conservation education work, improved pasture management, and participation of SLCC members in the recent WWF-led snow leopard satellite collaring work. In addition, over the course of their 10-day visit to the KCA, the WCP staff members also learned about other community conservation work in the KCA, including gaining first-hand experience on trekking ecotourism and homestay operations, trash management, sustainable community livelihood enterprises, and the work of other community groups such as local mothers' groups.

**Outputs/Results:**

- WCP Staff learned about the activities and successes of the Nepal KCA SLCCs and gained first-hand experience on trekking ecotourism and community conservation work in Nepal.
- WCP staff returned to Bhutan and began initial steps in establishing an SLCC in WCP's Central Range (see Activity 1.3.2 above).
- Participating WCP staff will also share lessons learned on ecotourism and community conservation with local residents of WCP.
- Community involvement in snow leopard conservation efforts in WCP is expected to increase.

**Activity 1.3.10 Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests.**

In Bhutan in AHM Project Year 2, WWF, in cooperation with the Department of Forests and Park Services' (DoFPS) Watershed Management Division (WMD) and the Bhutan Trust for Environmental Conservation (BTFEC), held a two-day training for local nomadic herders on making bio-briquettes and the use of smokeless, fuel-efficient cook stoves designed specifically for burning these briquettes. Herders participating in the training were also educated about the ecological damage that results from excessive cutting of rhododendrons, other shrubs, and trees for fuel, and how the use of bio-briquettes can reduce this damage by reducing the need for fuel wood cutting. Modules used during the training included instruction on types of dead forest litter and agricultural refuse that are appropriate for making briquettes, production of charcoal from these materials using traditional slow-burn burial methods, grinding of the charcoal produced into powder, mixing of charcoal powder with clay to produce briquette paste, the use of briquette molds, and sun drying of briquettes. Participants also received instruction on how they may eventually be able to generate additional income by selling bio-briquettes to trekking groups visiting Wangchuck Centennial Park (WCP). In total, 35 People (7 Women) from Chhokhor Geog in central WCP were trained on the purpose, production, and use of bio-briquettes. While WWF and the WMD covered costs of the training, the BTFEC donated 35 sets of charcoal grinders, briquette molds, and briquette cook stoves to training participants at a cost of about USD 200 per set.

**Outputs/Results:**

- 35 People (7 Women) from high altitude areas of WCP trained on the purpose, production, and use of biomass briquettes as an alternative to locally cut firewood.
- Knowledge of alpine ecosystems and snow leopard habitat conservation issues is increased among participants.
- Conservation of high altitude juniper and rhododendron shrublands at the demonstration site is improved with future benefits for ecosystems, wildlife, erosion control, water provision, water quality, and climate adaptation efforts.

**Activity 1.3.11: Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators.**

In AHM Project Year 2, WWF, in cooperation with Wangchuk Centennial Park (WCP), sponsored an 8-day study tour exchange to Sikkim for 8 Bhutanese homestay operators (2 Women) residing in WCP as well as 2 WCP staff members (Both Men). The purpose of this exchange was for these relatively new WCP homestay operators to learn from the successes of the longer running and larger scale homestay system operating in and around Sikkim's Khangchendzonga Biosphere Reserve. Visits were made to two villages with well-developed homestay networks, Rey Mindu Village near Gangtok and Yuksam Village in West Sikkim. At these sites, members of the Bhutan delegation learned about homestay promotion and booking for both domestic and foreign tourists through the ECOSS Sikkim Himalayan Homestay website, the Khangchendzonga Conservation Committee NGO office in Yuksam, and local travel agencies. Individual homestays were visited where lessons were learned on proper disposal of solid waste, homestay bookkeeping, improved hygiene and sanitation, guest meal menus, local cooking and gardening methods, involvement homestay operators and other local residents in ecotourism and conservation activities, maintenance of ethnic and cultural identity in high tourism areas, general hospitality practices, ecotourism product diversification, and challenges and limitations of homestay operations in Sikkim.

**Outputs/Results:**

- 10 People (2 Women) learn about the many successes and challenges of community-based homestay operations in Sikkim.
- Homestay operators and WCP staff will strive to improve both homestay promotion and operations in WCP.
- Livelihoods options in WCP expanded beyond direct dependence on the local natural resource base, which will serve as one effective climate adaptation strategy.

**Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.**

**Activity 1.4.1: Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis.**

Activity 1.4.1A:
In Bhutan in AHM Project Year 2, WWF, in cooperation with Wangchuk Centennial Park (WCP), conducted the third and final phase of the current 2012-2014 WCP snow leopard sign, camera trap, and prey species survey. This third part of the survey took place in WCP's eastern range over a 3-week period in April 2014 and covered an area of 480 $km^2$. 42 camera traps set out in April were later retrieved during the first week of July. Findings concerning snow leopard and prey species population sizes and distribution are currently being complied while DNA analysis of 36 scat samples will be performed to better determine the number of snow leopards using the survey area as well as relationships between regional snow leopard populations. Results of this three-part survey will be compiled into a report with findings used to improve landscape-level snow leopard conservation efforts in Bhutan and the surrounding region.

**Outputs/Results:**

- Field work for the three-part 2012-2014 WCP snow leopard survey is completed and results are currently being compiled into a report.
- The distribution of snow leopards in Bhutan's largest protected area is accurately mapped for the first time.
- Findings of the survey will be used to improve landscape-level conservation efforts for snow leopards, their prey species, and their habitat in WCP and the surrounding region.
- Findings will also be used to develop appropriate climate adaptation strategies for improving resilience of local snow leopard habitat areas to climate change impacts.

Activity 1.4.1B:
In Bhutan in AHM Project Year 2, WWF, in cooperation with Wangchuk Centennial Park (WCP), continued research on human-wildlife conflict involving Asiatic black bears and other predators in WCP. With respect to Asiatic black bears, a successful trial camera trap study was conducted in October and November of 2013 which involved setting up 14 camera traps on custom built frames that led to bears revealing identifying chest stripes while standing up in front of cameras to reach honey bait. With the protocol developed, a larger camera trap study covering a larger territory can be conducted to delineate the distribution of Asiatic black bears in WCP, establish their home range sizes, and help in the identification and control of problem bears causing economic losses to farmers in WCP.

In addition, a human-wildlife conflict survey was conducted in WCP's Central Range which found that 38 affected herders in Chhokhor Geog had lost a total of 521 head of livestock, 472 head of which were yaks. Predators involved in killing livestock were Dhole (Asiatic wild dog), Asiatic black bears, wolves, snow leopards, common leopards, and tigers. Wolves were found to be a particularly large problem on alpine summer pastures. Findings of this survey will be used to select human-wildlife conflict hotspots in range areas for human-wildlife conflict prevention activities, such as construction of demonstration predator proof corrals and wildlife conflict education campaigns.

**Outputs/Results:**

- A report was produced on the trial WCP Asiatic black bear camera trapping survey that will serve as the basis for design of larger black bear camera trapping study, the results of which will be used to develop human-black bear conflict prevention activities in WCP.
- A report was produced on the WCP human-wildlife conflict survey that will be used for site selection for future human-wildlife conflict prevention efforts in high altitude areas of WCP's central range.
- Activities developed based on these two surveys will result in reduced conflict between WCP residents and large predators in WCP, such as wild dogs, bears, wolves, and snow leopards, and therefore will reduce local resentment towards these species and improve their conservation prospects.

**Activity 1.4.6: Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.**

In Bhutan in AHM Project Year 2, WWF, in cooperation with Wangchuck Centennial Park (WCP), organized a 1.5-day snow leopard camera trap monitoring training for WCP rangers and field staff; directors and field staff from Bhutan's other three northern protected areas in snow leopard habitat, namely Jigme Dorji National Park, Bumdeling Wildlife Sanctuary, and Torsa Strict Nature Reserve; Wildlife Conservation Division staff; and staff members of the Ugyen Wangchuck Institute for Conservation and the Environment (UWICE). During this training, a WWF staff scientist taught participants the purpose of camera trap surveys; selection of optimal camera trapping sites; set up, operation, and data retrieval from camera traps; and identifying snow leopard individuals from camera trap photos. 24 People (3 Women) were trained.

**Outputs/Results:**

- 24 People (3 Women), all conservation workers and wildlife researchers, were trained on the use of camera traps for snow leopard monitoring.
- Participants are now qualified to train local community members as citizen scientists for monitoring snow leopards and other wildlife in northern Bhutan.
- Awareness of snow leopard ecology amongst key government conservation staff is increased.

**Activity 1.4.13 Provide technical and financial support to forest departments and communities to protect habitat.**

**Note:** The following activity was conducted at the end of AHM Project Year 1, but not reported in the AHM Year 1 Annual Report.

In Bhutan in AHM Project Year 1, WWF, in cooperation with the Ugyen Wangchuck Institute for Conservation and the Environment (UWICE), held a GIS training for 16 staff members (1 Woman) from Wangchuck Centennial Park. Topics covered by the training included an introduction to the use of GIS for conservation mapping and planning, GIS database design and management, and the use of Google Earth in combination with field data GIS layers. Through this training, field research and design and implementation of conservation activities in WCP will be greatly enhanced.

**Outputs/Results:**

- 16 WCP staff members (1 Woman) are given a thorough introduction to the use of GIS technologies for conservation and natural resource management activities.
- Effectiveness of conservation and natural resource management activities in WCP is greatly enhanced.
- WCP staff members are better able to independently design and conduct conservation and natural resource management activities in the park.

# India

**Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.**

**Activity 1.1.10: Work with tribe/community-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting and extraction of wildlife resources, regulating free grazing near core snow leopard habitat, and watershed conservation.**

Activity 1.1.10A:
In India in AHM Project Year 2, WWF conducted a survey to assess the traditional natural resource use and management practices at one of India's two primary AHM Project sites, Lachung Village, North Sikkim. This survey was a companion to the July 2013 natural resource use survey conducted at WWF's other primary project site, Lachen Village, North Sikkim. The purpose of these surveys was to develop a better understanding of natural resource use practices, both traditional and modern, by these two high altitude communities so that project activities can be designed to improve sustainability of these practices. In total 84 villagers (34 Women) were interviewed for the Lachung survey, which found a heavy reliance on local natural resources, particularly wood harvested from local forests for fuel. While in recent years alternatives to fuel wood have became available, such as propane gas, electric cookers, and electric heaters, wood is still the primary home heating fuel in winter. Other natural resources that residents are reliant on include local grazing lands, wild edible plants, and wild medicinal plants, including commercial collection of caterpillar fungus (*Cordyceps sinensis*), which nearly 60 percent of survey respondents harvest on local alpine pastures each spring.

Also in AHM Project Year 2, informal discussions between WWF staff and the the Lachen Dzumsa (village council) and Lachen Tourism Development Committee (LTDC) resulted in a change in village regulations concerning the annual spring caterpillar fungus harvest. Under this change in Lachen village, only 2 members per household will be permitted to harvest during any given season, which will reduce the human impact on remote alpine pastures and contribute to ensuring a stable village life.

**Outputs/Results:**

- A survey on natural resource use and management conducted at Lachung Village.
- Survey findings will be used to design activities to increase the sustainability of traditional and non-traditional natural resource use and management activities, particularly with respect to woodcutting.
- Lachen Dzumsa institutes a new regulation limiting caterpillar fungus harvesting to two harvesters per household to reduce human impacts on local alpine pastures and also ensure a stable village life.

**Sub-objective 1.2: Increase community resiliency to climate change impacts.**

### 1.2.4 Organize local campaigns and workshops to raise awareness on climate change and adaptation actions on agriculture, especially among indigenous, marginalized, and poor populations.

In India in AHM Project Year 2, WWF organized focus group discussions on climate impacts on agriculture in 6 villages in all four districts of Sikkim State. These discussions were a continuation of an earlier series of village focus group discussions on the same topic conducted in AHM Project Year 1. The purpose of these discussions was to gain further insight on climate change impacts on agriculture in Sikkim, and to compile traditional farming practices and current best practices being used by farmers to cope with climate impacts. At the same time, WWF staff members presented information to farmers to raise their awareness of climate change issues and impacts. The WWF Sikkim field office was assisted in this task by the climate adaptation team from the WWF Sunderbans field office in West Bengal, who shared lessons learned with respect to climate adaptation work in the Sunderbans. A total of 81 farmers (36 Women) participated in these meetings and a "best practices" document for adapting agriculture to climate change impacts in Sikkim is currently being prepared.

**Outputs/Results:**

- 81 People (36 Women) in 6 villages in Sikkim have their awareness raised on climate change issues and impacts on local agriculture as well as possible actions for adapting to these impacts.
- A best practices document for adapting traditional agricultural practices in Sikkim to a changing climate is produced.
- Discussion group findings will be used for developing a broader climate adaptation strategy for AHM project sites in and around the Khangchendzonga Biosphere Reserve.

**Sub-objective 1.3: Enhance community engagement in conservation.**

**1.3.1 Strengthen participation of local communities (e.g. *Himal Rakshaks*, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems.**

Activity 1.3.1A
In India in AHM Project Year 2, WWF held an annual project planning meeting with the with the Lachen Dzumsa (village council) and the Lachen Tourism Development Committee (LTDC) to develop a project work plan for AHM Project Year 2 and to discuss monitoring of ongoing activities. These meetings were attended by 33 People (All Men) including the Lachen pipon (village leader).

Activity 1.3.1B
In India in AHM Project Year 2, WWF organized a 3-day nature camp for students in North Sikkim to mark World Environment Day. The purpose of this nature camp was to raise student awareness of Sikkim's flora and fauna as well as local environment and conservation issues through a series of activities, games, and field trips. In particular, children were provided with information on snow leopard ecology and threats to snow leopards. The importance of trash management and proper methods for disposing of trash were also discussed, with students from Lachen School performing a play for both students and local villagers to illustrate proper trash management. In total, 51 students (21 female students) from 3 schools from Lachen and Chungthang Villages participated in the camp.

**Outputs/Results:**

- 33 People (All Men) attended a participatory planning meeting to develop the AHM Year 2 project work plan for the Lachen Village area.
- 51 students from 3 schools had their awareness raised concerning Sikkim's flora and fauna as well as local environment, conservation, and trash disposal issues.
- Broader support for WWF conservation efforts in Sikkim is secured.

**Activity 1.3.2: Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes).**

In India in AHM Project Year 2, as a follow up to the AHM Year 1 human-wildlife conflict survey that found feral dogs to be a larger threat to livestock and wildlife in Sikkim than snow leopards, WWF conducted a preliminary count of feral dogs along a single transect in North Sikkim. This count was conducted with the assistance of Lachen Tourism Development Committee (LTDC) members over an approximately 30 km long transect. Most dogs were found around camps and the team counted over 20 feral dogs during the 2-day survey. Further feral dog counts will conducted in conjunction with upcoming snow leopard field surveys. In order to resolve the issue of feral dogs in the high altitude areas of North Sikkim, the LTDC submitted a petition to the Sikkim State Government along with WWF survey findings requesting that this issue be addressed by the state government.

**Outputs/Results:**

- Conducted the first preliminary survey of problematic feral dogs in Sikkim.
- The very large feral dog problem was brought to notice of the Sikkim State Government for action.
- Mitigation of the feral dog problem will provide benefits for the conservation of snow leopards and their prey species as well as for local livestock herders.

**Activity 1.3.10: Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests.**

Activity 1.3.10A

In India in AHM Project Year 2, WWF organized a bio-briquette making demonstration at the Lachen Village World Wetlands Day Festival to demonstrate to local residents one low-cost, carbon-neutral alternative to fuel wood cutting. The demonstration was similar to the training held in Bhutan (above), with bricks being made from agricultural waste converted to charcoal using briquette molds donated to WWF's partner NGO at Lachen, the Lachen Tourism Development Committee (LTDC). These briquette molds will be shared on a rotational basis amongst trained villagers interested in making bio-briquettes. Smokeless stoves specially designed for burning the briquettes, particularly for heating water or home heating, will either be locally made or purchased in bulk nearby in West Bengal and sold to villagers. About 200 residents (~85 women) participated in the festival and 82 persons (8 women) directly participated in the bio-briquette making demonstration.

Activity 1.3.10B

The Lachen Village bio-briquette making demonstration in Activity 1.3.10A, above, was followed by a 1-day discussion and training on natural resource management at Lachen Village which included a second bio-briquette making training. 25 residents (9 Women) of Lachen Village participated in the discussion and training, which provided insight into the community's perception of their local natural resource base. When asked, villagers listed water as their most important natural resource followed by firewood. Medicinal plants, primarily caterpillar fungus, were also cited as an important resource that the community depended on. A discussion of relative past and present dependence on local resources revealed that there has been no perceptible change in water availability and quality over the years, use of firewood has declined with the introduction of alternatives such as propane and kerosene, while collection of caterpillar fungus has increased. The importance of sustainably managing the local natural resource base was also discussed. Following this discussion, a hands-on bio-briquette making training was conducted by an experienced local resource persons from the Phoobsering Tea Estate in the Darjeeling Hills, West Bengal. The trainers explained how use of bio-briquettes had helped reduce firewood consumption in their village and provided a source of income for some local villagers as well. The participants then tried their hands at making bio-briquettes and were presented with the equipment needed to continue making bio-briquettes at home.

Activity 1.3.10C

In India in AHM Project Year 2, a third bio-briquette making training was conducted Yuksam Village, West Sikkim, located in the buffer zone of the Kangchendzongka Biosphere Reserve. The training was led by the same trainers from the Darjeeling Hills that conducted the training in Activty 1.3.10B, above. This training also included a discussion of how bio-briquettes helped reduce firewood consumption in their home village over the last 5 years and

provided a source of income for some local villagers as well. 17 participants (11 Women) took part in this training.

Activity 1.3.10D

In India in AHM Project Year 2, a short study on fuel wood consumption was conducted in Sangkhola Village, West Sikkim, located in the buffer zone of the Kangchendzonga Biosphere Reserve, to establish a baseline on fuel wood consumption in the village. This was followed by a creation of a plan to have 9 households in Sangkhola and Yuksam Villages demonstrate use of solar hot water heating units. These households were selected by WWF's local partners in these villages, the Sindrabong Khangchendzonga Ecofriendly Society in Sangkhola and the Khangchendzonga Conservation Committee in Yuksam. Nine 200-liter capacity solar hot water heaters were supplied by the Sikkim State Renewable Energy Department, the cost of which was divided 50-50 between WWF and recipient households. However, due to heavy monsoon rains and bad road conditions, these solar hot water heaters will not be delivered and installed until the autumn of 2014.

**Outputs/ Results**:

- 124 People (28 Women) trained on the production and use of bio-briquettes as an alternative fuel source to firewood.
- 9 households in the KBR buffer zone selected for a fuel wood-saving solar hot water heater demonstration showing the effectiveness of renewable energy technologies.
- Fuel-wood consumption reduced amongst participating households.
- Further insight gained on local nature resource use and management that will be used to design future AHM Project natural resource management activities in Sikkim.

**Activity 1.3.11: Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators.**

Activity 1.3.11A

In India in AHM Project Year 2, a campaign to promote household trash separation and recycling was launched by WWF in the tourism center of Lachen Village, North Sikkim, in cooperation with the Zero Waste Himalayas Group, other local NGOs, and a team of student volunteers. Posters explaining the how and why of trash separation were distributed in the village and volunteers visited nearly all households in Lachen Village to directly explain to people about the environmental problems of improper trash disposal and how they could easily separate and recycle plastics, glass, Tetra Pak cartons, and metal. Volunteers also distributed sturdy sacks to households specifically for separating and storing their recyclables. In addition, renovation of a disused building to house the Lachen Village recycling center was completed and inaugurated during the Lachen Village World Wetland Day celebration, which was attended by Sikkim's MP. During this celebration, an exhibit on trash management and the new recycling center was set up for villagers. The gathering of the entire village of Lachen was also used as an opportunity to spread awareness on biodiversity conservation efforts in the region and to talk about the importance of high altitude ecosystems. In addition, in support of the ongoing ban on water sold in plastic bottles at Lachen and Thangu Villages in North Sikkim, water quality analyses were conducted at these

villages which showed that water from both villages fell within desired parameters for potability. However, in spite of these efforts, household trash disposal remains a challenge at Lachen and more effort will be required to make trash separation and recycling routine on a village-wide basis. To promote recycling at Lachen, the Lachen Dzumsa (village council) recently announced a village-wide household fee for trash management that will go towards trash cleanup and recycling activities.

Activity 1.3.11B

In India in AHM Project Year 2, in cooperation with the Ecotourism and Conservation Society of Sikkim (ECOSS), WWF organized a two-day advanced training needs assessment for homestay operators and guides in Uttarey Village, West Sikkim. Findings of this assessment were that local ecotourism training needs included guide training, organizational development, development of a code of conduct, and awareness raising on the purpose of ecotourism and solid waste management.WWF staff also surveyed all the operational home stays of Uttarey to identify the gaps in home stay management capacity. Information for generating homestay owners' profile was also gathered at the same time. As a follow-up this effort, 10 People (1 Woman), all homestay owners, participated in a 15-day homestay operators training in Gangtok offered by the Sikkim Tourism Department's Homestay Owners' Training Programme. At this training, participants were introduced to all facets of homestay management, from promotion to sanitation and food preparation of meals to activities for tourists. Finally, after the Tourism Department training, WWF sponsored a 4-day exchange for 10 homestay operators (All Men) from Uttarey to visit the successful community-based homestay system at Dzongu Village in North Sikkim to learn from the successes of the Dzongu program. Villages in the Dzongu area have operated a homestay program for the past 6 years and shared their experiences in promotion, marketing, management, and hospitality. Participants stayed at two homestays in Hee Gyathang and Passingdong Villages, where in addition to homestay operation they also learned how to showcase local cultural traditions in a genuine manner.

Activity 1.3.11C

In India in AHM Project Year 2, to expand the discussion of the need for improved trash management in Sikkim, WWF partnered with the Sikkim Zero Waste Himalaya Group to organize a one-day awareness raising campaign on improved trash management in Gangtok. This event was an open air event held on MG Marg in Gangtok, Sikkim's busiest shopping district, and featured an exhibition with informative and interactive poster displays, a crafts corner, and other activities for visitors. This event marked Zero Waste Himalaya Day and more than 300 people participated.

Activity 1.3.11D

In India in AHM Project Year 2, WWF, in cooperation with the Ecotourism and Conservation Society of Sikkim (ECOSS), co-organized a state-level workshop titled Strengthening Sustainable Tourism in Sikkim in Gangtok, which was attended by representatives of all tourism stakeholders in Sikkim. 47 People (11 Women) participated, including travel agents, tour operators, homestay operators, guides, Sikkim State Tourism and Forest Department officials, and NGO staff. The workshop also features opening remarks by Sikkim's Minister for Tourism, and also Sikkim's MP elected to India's national parliament. The objectives of the workshop were to bring together tourism stakeholders to generate better understanding of state tourism policies and initiatives, share best practices concerning tourism, and discuss the way forward with respect to tourism-related issues and challenges. With Sikkim having been declared a top region to visit by Lonely Planet, stakeholders discussed strategies for

maintaining tourism and certification standards and policy needs to address challenges that will arise with Sikkim's recently heightened profile amongst tourists. Key outcomes of the workshop were the formation of a committee to review Sikkim state tourism policy, review and dissemination of the state's homestay guidelines, and generating more support for sustainable tourism amongst other relevant state agencies.

Activity 1.3.11E
In India in AHM Project Year 2, WWF and ECOSS, sponsored start of work to re-launch the Sikkim Himalayan Homestay website (http://www.sikkimhomestay.com/index.htm). This website is the primary forum for dissemination of information on Sikkim's homestays and local ecotourism activities in participating communities. Currently, a short-term consultant has been hired to re-write village, activity, and homestay descriptions for the website, who will also take new on-site photographs for the website. So far the consultant has visited 4 participating villages – Yuksam, Uttarey, Rey Mindu and Dzongu – and re-writing and re-organization of the website is currently underway.

**Outputs/Results:**

- Lachen village trash management system, recycling center, village trash management fee launched.
- Ecotourism training needs assessment conducted in the Uttarey village, 10 People (All Men) operating homestays in Uttarey Village participate in the Sikkim State Homestay Owners' Training Program and 10 People (1 woman) participated in a study tour to the successful community-based homestay system at Dzongu Village.
- ~300 People (~150 Women) participate in the WWF Zero Waste Himalaya Day exhibition and program in Gangtok.
- 47 People (11 Women) attend the state-level Strengthening Sustainable Tourism in Sikkim Workshop in Gangtok to discuss ecotourism issues resulting in the establishment of the working committee on tourism policy in Sikkim.
- Work started on the re-launch of the Sikkim Himalayan Homestay website, which is the primary source of information on homestays and ecotourism activities in Sikkim.

## Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites

### Activity 1.4.1: Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis.

In India in AHM Project Year 2, WWF conducted a 3-day field trip to North Sikkim for the purpose of camera trap survey site selection. Following this preliminary field trip, survey grids were selected and the design of the camera trap survey was finalized. The actual camera tap survey will be conducted in the Autumn of 2014 with the assistance of local Himal Rakshaks (volunteer "Mountain Guardians") members from Lachen and Thangu Villages.

**Outputs/Results:**

- Snow Leopard camera trap survey site selection and survey design finalized.
- Actual camera trap survey will be conducted in the autumn of 2014.

**Activity 1.4.6: Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.**

Activity 1.4.6A
In India in AHM Project Year 2, WWF led a 6-day wildlife and habitat field survey techniques training at the Barsey Rhododendron Sanctuary in West Sikkim. 45 participants (6 Women) were trained, including Himal Rakshaks (mountain guardians), community Eco-Development Committee members, and State Forest Department field personnel as well as several Indian researchers working in the sanctuary with funding from JICA. Topics covered by practical sessions included field collection of animal sign, such as scat and fur, for diet analysis and DNA testing; recording habitat information at sign collection sites; site selection for setting up camera traps; camera trap set up; and analysis of camera trap data. Participants also learned about how these field techniques were being used for broader ongoing snow leopard and red panda studies at Barsey and elsewhere in Sikkim, and will use these techniques to begin community-based wildlife monitoring in their home regions of Sikkim.

Activity 1.4.6B
In India in AHM Project Year 2, WWF supported two 10-day community wildlife monitoring and anti-poaching patrols in Khangchendzonga National Park (KNP) and Khangchendzonga Biopshere Reserve (KBR) in West Sikkim. 9 People (All Men) from the Yuksam and Yambong Village Himal Rakshaks (mountain guardians) volunteer ranger groups participated who were supported by WWF staff members. Sites covered included the Nayapatal, Saili Chowk, Ratopani and Bagar Chowk areas along the Chowri–Yambong trekking trail. During the field surveys the team surveyed red panda sign and sighted a female red panda with two juveniles. In addition, the team made an initial assessment of the medicinal plants abundance in the survey area and found and dismantled 5 snares. Co-financing for this activity was provided by the USAID-funded WWF sacred Himalaya Landscape SCAPES Project.

Activity 1.4.6C
In AHM Project Year 2, WWF supported a study tour to Bhutan for a team of 9 Himal Rakshaks (mountain guardians) and community Eco-development Committee members (All Men) from AHM project sites in Sikkim. The purpose of this exchange was to give participants insight into various community-based conservation initiatives in Bhutan, including protected area management; wildlife monitoring practices, especially snow leopard monitoring; management of medicinal plant collection; ecotourism development; and alternative livelihood projects. During the exchange, the Sikkim group visited the headquarters of Wangchuck Centennial Park (WCP) where they met with park staff to discuss recent park management initiatives, such as citizen scientist monitoring of wildlife and illegal wildlife trade activities, management of the annual spring caterpillar fungus harvest, WCP-led snow leopard and Asiatic black bear research, human-wildlife conflict mitigation efforts, and development of ecotourism and the park homestay system. The Sikkim group also discussed local homestay management practices with homestay operators in WCP. The group also visited a local weaving center set up to provide alternative livelihoods to farming and herding for a group of local women residing in WCP as well as visiting and spending a night at a local homestay village, where participants shared their experiences with homestay management in Sikkim. In addition, en route to and from WCP, exchange

participants visited the WWF office in Thimphu to learn about conservation in Bhutan and to share the findings of their visit. Co-financing for this activity was provided by the USAID-funded WWF Sacred Himalaya Landscape SCAPES Project.

**Outputs/Results:**

- 45 People (6 Women) trained on conducting wildlife sign and camera trap field surveys.
- 2 citizen scientist wildlife monitoring surveys and anti-poaching patrols conducted by Himal Rakshaks in the KNP and KBR.
- A 5-day protected area and ecotourism study tour to Bhutan conducted for 9 Himal Rakshaks and community Eco-development Committee members from Sikkim (All Men).
- Participation of community members in conservation activities at AHM Project sites in Sikkim is increased.

# Kyrgyzstan

**Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.**

**Activity 1.1.2: Train local associations and NGOs to improve institutional governance and their capacity on sustainable management of natural resources.**

In Kyrgyzstan in AHM Project Year 2, WWF organized two workshops titled "Climate Change Challenges and Livelihood Adaptation" for community groups to build local capacity with respect to improving sustainability of natural resource use in the context of a rapidly changing climate. Topics discussed at these workshops included global and local climate change issues; potential local climate change impacts, such a possible increase in bubonic plague outbreaks; possible local adaptation actions; and resources needed to implement adaptation actions. Possible AHM Project adaptation activities were also discussed as well as opportunities for local community participation. The first workshop was held in Engilchek and was attended by 25 people (11 women). The second workshop was held in Akshyrak and was attended by 18 persons (5 women). Co-financing for these workshops was provided by WWF Netherlands.

**Outputs/Results:**

- 43 People (16 Women) given preliminary training on climate change impacts and possible adaptation actions suitable for local communities in eastern Kyrgyzstan.
- Foundation laid for involving local communities in development of a climate adaptation strategy based on findings of a forthcoming WWF-led climate vulnerability assessment for eastern Kyrgyzstan.

**Activity 1.1.3: Provide technical support for local associations and NGOs to conduct awareness raising activities regarding sustainable natural resource management and use.**

Activity 1.1.3A

In Kyrgyzstan in AHM Project Year 2, a 3-week-long photo exhibition titled "The Land of the Snow Leopard" was held with AHM Project support at the Karakol Artists Union in Karakol, Issyk-Kul Province, Kyrgyzstan. The exhibition featured photos of wildlife and landscapes from the Sarychat-Ertash State Reserve AHM project site taken by reserve biologist Alexander Vereshchagin. The exhibition was successful in educating residents of Issyk Kul Province about the natural wonders of the reserve and was a featured in the local print, broadcast, and online media, with a story devoted to the exhibition and AHM project activities appearing in the provincial newspaper Karakolka, on provincial Oblast TV on both November 28 and 29, and also on the AKIpress news website. 30 People (~15 Women) attended the exhibition opening.

Activity 1.1.3B

In Kyrgyzstan in AHM Project Year 2, WWF, in cooperation with the Sarychat-Ertash State Reserve, organized the sixth annual Earth Day Celebration at Akshyrak Village in the buffer zone of the Sarychat-Ertash Reserve. Participants included residents of Akshyrak and surrounding settlements. The celebration featured a snow leopard dance contest, a children's painting contest on the theme of "Let's save living treasures of the Earth," an ecological

theatre contest with performances devoted to educating the audience about the importance of conservation of flora and fauna for preservation of the Earth, and a felt handicraft exhibition and contest featuring products made by participants of the local Snow Leopard Enterprises Program. 87 People (35 Women) participated.

Activity 1.1.3C

In Kyrgyzstan in AHM Project Year 2, WWF supported holding of the second annual Engilchek Village snow leopard festival. The goal of this festival is to raise the awareness of residents of Issyk Kul Province, and Kyrgyz citizens in general, about national snow leopard conservation issues. The festival also promotes historical Kyrgyz traditions of careful stewardship and protection of local natural resources and wildlife as well as promoting eco-tourism in the remote, little visited regions of southern Issyk Kul Province. Similar to Activity 1.1.3B, above, the snow leopard festival featured ecological theatre, snow leopard dance, children's art, felt handicraft, and Kyrgyz ecological folklore contests. The festival was attended by 77 People (40 Women) from Engilchek and surrounding villages. Notably, there was extensive media coverage of the festival, including a one-hour provincial TV broadcast and 5 stories an national news websites.

Activity 1.1.3D

In Kyrgyzstan in AHM Project Year 2, WWF, in cooperation with the Kumtor Gold Mine, the Sarychat-Ertash State Reserve, and the local Sarychat NGO, organized a children's summer eco-camp at Lake Issyk Kul. 35 children (21 Girls) and 5 teachers (all Women) attended the 10-day camp. Notably, one teacher and 4 children from the Engilchek Village, and 5 children from the Akshyrak Village AHM Project sites, who had all won earlier eco-contests, were selected to attend the eco-camp. These 9 children from high mountain settlements formed the "Friends of the Snow leopard Team" and shared their experiences from their hometown Earth Day celebration, Snow Leopard Festival, and school eco-activities with the other children. Eco-camp activities included staff from the Sarychat-Ertash State Reserve showing children camera trap photos of snow leopards and other wildlife in the reserve and discussing their work, short ecological field trips, lessons on environmental issues in the Tian Shan presented by the WWF team, and recreational activities. The WWF team also led a series of eco-themed contests for the children, including painting, poem, song, dance, and other contest performances such as wild animal voice and movement imitations and a "forest-lungs of nature" drama.

**Outputs/Results:**

- A three-week-long photo exhibit on the wildlife and landscapes of the Sarychat-Ertash State Reserve held in the Issyk Kul provincial capital, Karakol, greatly increased local awareness of the hidden wonders of this remote and little visited nature reserve.
- 164 People (75 Women) participated in local Earth Day and Snow Leopard Festivals in communities in the buffer zone of the Sarychat-Ertash State Reserve, increasing awareness of local conservation issues amongst adults and children residing in snow leopard habitat as well as increasing support for AHM Project activities.
- 40 People (26 Women), including 9 children and 1 teacher from the AHM Sarychat-Ertash buffer zone project sites attend a 10-day children's summer eco-camp, greatly raising awareness of local conservation issues amongst participants and providing the first immersion in conservation work for children who may one day become local leaders.

- Messages from these events reached a wider audience via extensive TV, internet news, and print media coverage of these events.

**Activity 1.1.6: Facilitate cooperation among stakeholders (e.g. gold mining company "Kumtor") to establish a model of local natural resource management**

In Kyrgyzstan in AHM Project Year 2, after a promising start Year 1, further development of AHM Project cooperation with the Kumtor gold mine to build a public-private partnership for improving local natural resource management is now looking very unlikely. This is due to recurring regional strikes again the Kumtor mine in Issyk-Kul Province, including blocking of the mine road by protesters and a parliamentary discussion in Bishkek on nationalizing the mine. However, cooperation with other businesses, such as tourism companies and trophy hunt operators continues to be explored. Nevertheless, it should be noted that WWF did cooperate with Kumtor to successfully organize the children's summer eco-camp discussed under Activity 1.1.3D, above.

**Outputs/Results:**

- WWF, Sarychat NGO, Sarychat-Ertash State Reserve, and the Kumtor Gold Mine successfully cooperated on the organization and holding of an annual children's summer eco-camp (see Activity 1.1.3D, above).

**Sub-objective 1.2: Increase community resiliency to climate change impacts.**

**Activity 1.2.1: Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards.**

In Kyrgyzstan in AHM Project Year 2, WWF continued work on preparation of a climate vulnerability assessment for the AHM Project region of Issyk Kul Province. This work included reviewing relevant available scientific literature on the region, reviewing available hydro-meteorological data, conducting interviews with herders and farmers groups, evaluating climate impacts on these groups, evaluating other threats to livelihoods of these groups, compiling community recommendations on climate adaptation gathered at various climate workshops held under AHM Sub-objective 1.2, evaluating these recommendations with respect to current conditions on the ground in project communities, and further field investigations. The final AHM climate VA for eastern Kyrgyzstan is expected to be finished in early 2015.

**Outputs/Results:**

- Excellent progress has been made towards completion of an in-depth climate vulnerability assessment focusing on ecosystems and livelihoods in the AHM Project Region of eastern Kyrgyzstan.
- This vulnerability assessment will guide design and implementation of a climate adaptation strategy for project sites in Project Years 3, 4, and 5.

**Activity 1.2.3: Promote climate-smart agricultural and grazing practices that maintain healthy pasture for livelihoods and wildlife (e.g. rotational grazing and controlled pastureland burning)**

Activity 1.2.3A

In Kyrgyzstan in AHM Project Year 2, WWF and the Sarychat-Ertash State Reserve continued to keep a demonstration yak herd in the buffer zone of the reserve. This herd serves to illustrate one effective climate adaptation strategy for livestock herders residing in highland areas of Kyrgyzstan since yaks are more resilient to shifting climatic conditions in the Tian Shan, particularly extreme snowfalls, than local sheep, goats, and cows. Following good growth of the herd in 2013 and 2014, in 2015 WWF will make a complete tally of total yak numbers, total number by sex, and total number by age, after which the herd will be distributed on an annual rotation basis amongst poor families in the project area who will receive surviving calves born under their stewardship with which to start their own yak herds, as well as all yak milk products produced during their stewardship of allotted yaks. Also in 2015, it is planned to sell off excess adult male yaks from the herd and use the funds generated to cover some operational expenses of the reserve, such as patrolling costs.

**Outputs/Results:**

- Use of yaks as one climate adaptation strategy for livestock herders on highland pasture areas in the Tian Shan is currently being demonstrated.
- Due to good growth in size of the demonstration herd in 2013 and 2014, in 2015 both the Sarychat-Ertash State Reserve and poor local families in the project area will begin reaping direct economic benefits from this herd.

Activity 1.2.3B

In Kyrgyzstan in AHM Project Year 2, in order to demonstrate a pilot model of sustainable pasture use for the demonstration yak herd discussed under Activity 1.2.3A, above, a series of agreements was reached to seasonally lease additional pastures for the purpose of increasing the rate of pasture rotation for the yak herd. Under this plan, the AHM Project reached agreement with the Sarychat-Ertash State Reserve and the community of Akshyrak to lease various winter, spring, summer, and autumn pastures in the buffer zone of the reserve for pasturing the growing yak herd. Duration and timing of the use of these respective pastures will be determined by taking into consideration the needs of wild species of flora and fauna present at each site, such as avoiding the lambing grounds of argali and ibex during birthing season. Through this trial rotation process it is anticipated that the impacts of grazing the domestic yak herd on both alpine grassland ecosystems and local fauna will be reduced.

**Outputs/Results:**

- Agreement reached to lease pastures for use in a pasture rotation experiment to demonstrate methods for increasing sustainability of pasture use.
- It is anticipated that this demonstration will have benefits for both alpine grassland ecosystems and local wildlife, such as increasing the resilience of these ecosystems to climate change impacts.
- If successful, the demonstration should also increase the livelihood security of local herders adopting demonstration grazing practices.

**Sub-objective 1.3: Enhance community engagement in conservation.**

**Activity 1.3.9: Develop and support community-based eco-friendly income generation training and alternatives (e.g. felt production, facilitating market linkages, use of yak/horse milk for medicinal purposes such as treating stomach ulcer, gastritis; eco-tourism).**

Activity 1.3.9A
In Kyrgyzstan in AHM Project Year 2, a small exhibition and sale of felt handicrafts produced by women in the WWF AHM Project communities of Akshyrak and Karakolka was held on the sidelines of the Global Snow Leopard Conservation Forum in Bishkek on October 23, 2013. This activity served to promote both AHM Project alternative livelihood activities as well as the AHM Project itself.

Activity 1.3.9B
In Kyrgyzstan in AHM Project Year 2, a 3-day alternative livelihood training on the production and diversification of felt craft products was held for 12 women from Akshyrak and Karakolka Villages. All participants are actively engaged in AHM Project snow leopard conservation activities and were members of the local AHM-supported Akshyrak and Karakolka Uzdary NGOs. During the training, participants studied the following felt handicraft topics and techniques: dry felt work, wet felt work for shaped objects such as slippers, “tissue” felt work for scarfs and shawls, felt dyeing using natural pigments, and felt product design. Group practice work involved the production of a felt snow leopard image using techniques learned. At the end of the training, participants received felt handicraft tool kits to continue their felt craft work at home. Four months later, support was provided for the two participants selected as the training group’s best craftswomen to participate in the annual Oimo Central Asia Crafts Festival at Lake Issyk Kul.

Activity 1.3.9C
In Kyrgyzstan in AHM Project Year 2, WWF-Netherlands agreed to provide seed funding for local development funds to be set up in at the Akshyrak and Engilchek Village AHM Project sites in the buffer zone of the Sarychat-Ertash State Reserve. These funds will support community-directed socio-economic development projects in these villages. In support of these community development initiatives, the AHM Project sponsored two 1-day trainings for 48 People (27 Women) on local development fund establishment and management at Akshyrak and Engilchek Villages. Topics discussed at these meetings included AHM Project themes of local climate change issues; possible adaptation strategies, including possible alternative income activities; upcoming AHM Project activities; and how AHM Project and local development fund activities could be coordinated.

Activity 1.3.9D
In Kyrgyzstan in AHM Project Year 2, WWF continued to support efforts to establish local development funds at the Akshyrak and Engilchek Village AHM Project sites by sending representatives of these communities on a 3-day study tour to learn about the successful local development fund set up by Toguz Bulak Village on Lake Issyk Kul. During this exchange, participants met with the village development fund council to discuss fund financing and management and were also shown the results of various successful craft and agriculture livelihood projects sponsored by the Toguz Bulak fund. 15 People (13 Women) participated in the study tour which was covered by the local provincial TV station and local NGO websites.

Activity 1.3.9E

In Kyrgyzstan in AHM Project Year 2, WWF organized two 2-day meetings in Akshyrak and Engilchek Villages for the purpose of formally establishing local development funds (LDF) in each of these villages using seed money provided by WWF-Netherlands and participant contributions of cash and goats. At Akshyrak 20 People (11 Women) participated in the meeting which saw the election of a 5-member LDF governing board and adoption of LDF regulations while sustainable development and use of LDF funds was also discussed. In addition, 5 semi-autonomous LDF units were established by participants, each with their own development interests and goals. Initial membership and local contribution to the LDF by these units are summarized in Table 1, below. LDF unit business plans and loan applications were reviewed and revised based on comments and feedback provided by AHM Project staff. This entire process was repeated in Engilchek Village, where 26 People (12 Women) participated in the meeting, establishing 3 LDF units as summarized in Table 1. Next steps in the LDF process in AHM Project Year 3 will be to conduct follow up meetings to finalize LDF business plans and loan applications.

**Table 1.** Summary of Local Development Fund subunits and contributions in Akshyrak and Engilchek Villages in the Sarychat-Ertash Reserve buffer zone.

| **Village** | **LDF Unit Name** | **Membership** | **Initial Member LDF Contribution** |
|---|---|---|---|
| Akshyrak | Umut | 5 People (3 Women) | 5 Goats |
| Akshyrak | Ak Jol | 5 People (3 Women) | 5 Goats |
| Akshyrak | Araket | 16 People (8 Women) | 16 Goats |
| Akshyrak | Jashtyk | 10 People (5 Women) | KGS 2500 |
| Akshyrak | BEGAD | 9 People (4 Women) | KGS 9000 |
| Engilchek | Kelechek | 14 People (7 Women) | KGS 7000 |
| Engilchek | Ardager | 10 People (7 Women) | KGS 10,000 |
| Engilchek | Saryjaz | 13 People (4 Women) | KGS 8000 |

**Outputs/Results:**

- 178 People (40 Women), including 20 Journalists, exposed to the AHM Sarychat-Ertash felt handicrafts project through the small exhibition held at the Global Snow Leopard Conservation Forum.
- 12 women from AHM Project villages are trained on advanced handicraft design and production, with the two most accomplished craftswomen receiving support to participate in the annual Oimo Crafts Festival.
- Trainings and study tour held to teach 46 residents (23 Women) from the Akshyrak and Engilchek AHM Project sites on financing, management, and project design for community-managed local development funds planned for these two communities.
- Diversification of rural incomes tied to snow leopard conservation will improve both livelihood security of rural communities as well as protection of snow leopards and their prey.
- 2 local development funds established in Akshyrak and Engilchek Villages that will provide a sustainable source of funding to participating fund members for local development and livelihood improvement activities.

**Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.**

**Activity 1.4.4: Perform snow leopard population survey by collecting and performing genetic analysis, and potentially using camera traps in sites where snow leopards are present.**

Activity 1.4.4A
In Kyrgyzstan in AHM Project Year 2, WWF funded extensive snow leopard and prey species survey work conducted by staff members of the Sarychat-Ertash State Reserve. As a preliminary step for the 2014 surveys, a 1-day training was held on operation, maintenance, site selection, and installation of camera traps that was attended by 11 Rangers (All Men). Following the training, 10 new camera traps purchased with project co-financing from WWF Netherlands were installed at new study sites in the Sarychat-Ertash Reserve.

Activity 1.4.4B
In the spring and summer of 2014, the AHM Project supported the staff of the Sarychat-Ertash State Reserve in designing and carrying out wildlife monitoring surveys in the reserve and areas of interest in the surrounding region. Sites for camera trap set up and prey species monitoring were selected and in May a complete inventory of all camera traps set up in the reserve was conducted, which involved checking batteries, memory sticks, and general proper functioning of the cameras. 20 camera traps were then placed and checked again in July, at which time data from all cameras was collected and camera functioning checked again. Cameras were next checked in September. During the course of the summer, argali and ibex, the main prey species of snow leopards in Sarychat-Ertash, were counted, with 2600 argali and 1200 ibex having been sighted. In addition, staff from the Sarychat-Ertash Reserve began preparations for conducting a camera trap survey in the neighboring Chong Kyzyl Suu Valley to the northwest, which was formerly an important snow leopard site but which has been little studied since the collapse of the Soviet Union.

**Outputs/Results:**

- 11 People (All Men) trained on operation, maintenance, site selection, and installation of camera traps as well as on general camera trap survey design and data management.
- Annual summer snow leopard camera trap and prey species count surveys conducted at the Sarychat-Ertash State Reserve.
- Preliminary preparations made for conducting a snow leopard survey of the Chong Kyzyl Suu Valley.
- Findings of surveys will be used to improve design of landscape-level snow leopard conservation work at Sarychat-Ertash and the surrounding region.

**Activity 1.4.9: Support patrolling by providing anti-poaching teams with field supplies and gear, and conduct trainings to improve capacity of private game management entities.**

Activity 1.4.9A
In Kyrgyzstan in AHM Project Year 2, WWF provided direct support to rangers conducting anti-poaching patrols at the Sarychat-Ertash State Reserve in the form of a donation of 8 pairs of binoculars, 20 complete camouflage uniforms with winter jacket liners, as well as 20 pairs

of durable boots. In order to improve living conditions for rangers posted at the reserve's remote Koenduu ranger station, located at the main access point to the core zone of the reserve, WWF Netherlands purchased a 2 kilowatt wind generator for the station which was installed with support from the AHM Project. This generator is currently a renewable energy source for lighting the 2 buildings at the Koenduu station, which is the jumping off point for most expeditions into the reserve. Notably, due to the two-year ban on all forms of hunting imposed throughout all of Issyk Kul Province in August 2014 in the wake of various trophy hunting company scandals, ramping up of anti-poaching patrols will be critical to the success of this ban. To this end, the management of the province-wide Issyk Kul Biosphere Reserve recently requested WWF's assistance in establishing joint mobile anti-poaching patrols with Sarychat-Ertash Reserve staff.

1.4.9B

In addition, in the course of other field work at project sites in Issyk Kul Province in AHM Project Year 2, WWF held meetings and informal discussions with local officials and residents concerning recent legislative changes on illegal hunting, which greatly raised fines for hunting rare and endangered wildlife such as snow leopards, argali, and ibex. 37 People (~15 women) participated in these discussions.

**Outputs/Results:**

- 20 rangers equipped to withstand the harsh weather conditions experienced while conducting anti-poaching patrols at the remote Sarychat-Ertash State Reserve.
- Introduction of a wind generator at the reserve's main ranger station improves living conditions for these rangers and allows them to recharge equipment batteries as well as illustrating the benefits of renewable energy for other local residents of the area.
- Preliminary agreement reached with the Issyk Kul Biosphere Reserve administration to enforce a two-year provincial hunting ban by conducting joint patrols with Sarychat-Ertash Reserve staff.
- 37 People informed about recent legislative changes increasing penalties for illegal hunting of rare and endangered species.

**Activity: 1.4.10: Involve local communities in species conservation activities through conservation education, training, and practical experience in snare removal and fire prevention.**

In Kyrgyzstan in AHM Project Year 2, WWF supported the community of Engilchek in establishing a community-based anti-poaching team comprised of the 5 village men with the most experience working in the remote areas surrounding their community. This team will operate under local community supervision with the goal of ensuring proper natural resources use and enforcement of relevant wildlife and environmental legislation around Engilchek Village. This activity is being directed by the Engilchek Nur NGO in consultation with WWF, which will oversee development of anti-poaching team guidelines and regulations and ensure that the team meets all legal requirements for operations.

**Outputs/Results:**

- One community anti-poaching team established at a key project village located in the buffer zones of both the Sarychat-Ertash State Reserve and the proposed Khan Tengri National Park.
- This team will contribute to the improved protection of wildlife in the ecological corridor connecting the two largest and most important protected areas in Kyrgyzstan.

**Activity 1.4.11: Pursue establishment of a system of protected areas for snow leopard conservation that considers recent and predicted changes in key habitats.**

Activity 1.4.11A

In Kyrgyzstan in AHM Project Year 2, the WWF AHM Project Kyrgyzstan team participated in the launch workshop for the UNDP-led "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains" GEF Project. A presentation was given on WWF's USAID-funded AHM project activities in Kyrgyzstan and possible areas of cooperation with the new GEF project were discussed. It was agreed to test a new method for improving effectiveness of nature conservation efforts in protected areas developed by WWF Russia in conjunction with the already widely-used Management Effectiveness Tracking Tool (METT) system (See Activity 1.4.11C, below). 42 People (10 Women) were in attendance at this launch workshop. Following integration of WWF's proposals and initial documentation for creation of additional protected areas in the central Tian Shan into the GEF project, further work on establishment of the proposed PAs has been handed over to GEF project itself, although WWF experts will continue to serve as expert advisers to this project, as requested.

Activity 1.4.11B

In Kyrgyzstan in AHM Project Year 2, the WWF AHM Project Kyrgyzstan team participated in UNDP-sponsored 1-day workshop on the imminent establishment of the new Khan Tengri National Park in eastern Issyk Kul Province. UNDP, WWF, and the State Agency on Environment Protection and Forestry developed and agreed upon a set of jointly-led activities to be conducted to finalize establishment of the new national park and to create migration corridors connecting Khan Tengri National Park with the neighboring Sarychat-Ertash State Reserve and other sites of high biodiversity value. WWF gave a presentation on project work in eastern Krygyzstan, and the three organizations also agreed to coordinate further work on biodiversity conservation elsewhere in the Central Tian Shan region. 35 People (10 Women) participated in the workshop.

Activity 1.4.11C

In Kyrgyzstan in AHM Project Year 2, under the "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains" GEF Project, UNDP and WWF jointly organized a workshop on introduction and testing of a methodology for estimating effectiveness of protected area biodiversity conservation activities. This workshop was attended by representatives of all national parks and nature reserves in Kyrgyzstan and presented Management Effectiveness Tracking Tool (METT) methodology. This methodology gauges conservation effectiveness based on funding, staff capacity and management activities as well as on additional factors. During the workshop, preliminary management effectiveness ratings were determined for all national-level protected areas in Kyrgyzstan by protected area representatives themselves with the assistance from WWF experts. At the conclusion of the workshop, it was agreed that WWF would refine and

finalize management effectiveness estimates based on local factors in Kyrgyzstan, such as legislation, protected area management practices, and current ecological conditions. In total, 31 People (5 Women) were trained.

Activity 1.4.11D
UNDP and WWF cooperated of on a detailed analysis of current land management regulations in Kyrgyzstan concerning protected areas, protected area buffer zones, ecological corridors, and Red List species. Findings of this analysis will be used to guide and justify the legal basis for final establishment of the new Khan Tengri National Park.

**Outputs/Results:**

- WWF participated in the launch workshop for the "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains" GEF Project, where WWF agreed to cooperate on activity implementation under this project and informed 42 People (10 Women) about AHM Project objectives and activities in Kyrgyzstan.
- WWF participated in a UNDP-led workshop that resulted in a road map for completing the process of establishing the Khan Tengri National Park and adjacent migration corridors. 35 People (10 Women) participated in the workshop.
- Under the "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains" GEF Project, UNDP and WWF co-organized a workshop on estimating protected area management effectiveness using Management Effectiveness Tracking Tool (METT) methodology. 31 People (5 Women) representing all national parks and nature reserves in Krgyzstan were trained.
- WWF assisted UNDP in conducting a legal review of land management regulations relevant to establishment of Khan Tengri National Park that will be used bolster the legal justification for establishment of the new park.
- Close cooperation was established between WWF and the UNDP-led GEF Project which will result in expansion and improved management of Kyrgzstan's protected area system.

**Activity 1.4.12: Support habitat management practices (e.g. establishing feeding fields and ensuring mosaic structure of habitat in agricultural landscapes).**

In Kyrgyzstan in AHM Project Year 1, WWF in cooperation with the UNDP Central Tian Shan GEF Project, made plans to promote sound wildlife habitat management practices in the AHM Project region, such as establishing feeding fields for wild ungulates and ensuring mosaic structure of wildlife habitat within predominantly agricultural landscapes. Although it was planned to implement these activities in AHM Project Year 2, unfortunately due to long delays in establishment of the Khan Tengri National Park and the start of actual implementation of UNDP-led GEF field activities as well as changes of planned activities themselves, planned habitat management activities were not conducted. However, these activities will begin after formal establishment of the Khan Tengri Park.

**Outputs/Results:**

- Implementation of joint WWF-UNDP habitat management activities under the UNDP-led Khan Tengri GEF Project postponed until official establishment of the new Khan Tengri National Park is announced by the Kyrgyz parliament.

# Mongolia

## Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.

### Activity 1.1.4: Build governance capacity of local community herder groups to develop sustainable pasture and watershed management plans as well as strategies to mitigate human-wildlife conflict, such as the relocation of winter livestock sheds to low-risk areas.

In Mongolia in AHM Project Year 2, WWF compiled the findings of the 1115 interviews conducted for the comprehensive human-wildlife conflict social survey in known snow leopard range areas of Mongolia's Altai-Sayan Ecoregion (ASER) that was conducted in Project Year 1. This survey examined the scale, timing, locations, and causes of human-wildlife conflict, particularly conflict with snow leopards, and revealed that there is a high rate of loss of livestock to predators such as snow leopards, wolves, and eagles. In total, 23 percent of the 1115 respondents surveyed stated that there is a high rate of conflict between herders and snow leopards in the survey region. Based on the survey results, WWF is developing a strategy for mitigating human-snow leopard conflict in AHM Project priority areas in the ASER which WWF will begin implementing in AHM Project Year 3.

**Outputs/Results:**

- Human-wildlife conflict survey results compiled into a report.
- A human-snow leopard conflict mitigation strategy is being developed based on survey findings.
- WWF will begin to implement this strategy in Project Year 3.

## Sub-objective 1.2: Increase community resiliency to climate change impacts.

### Activity 1.2.1: Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards. (Countries: B, K, M, P)

In Mongolia in AHM Project Year 2, WWF initiated cooperation with Mongolian Academy of Sciences' (MAS) Institute of Biology to jointly conduct a comprehensive climate change vulnerability assessment (VA) for the AHM Project priority areas in the Altai Region of western Mongolia. At present, terms of reference (TOR) have been prepared and in depth work on the vulnerability assessment will commence in AHM Project year 3. An earlier WWF climate vulnerability assessment for the neighboring Altai Region of Russia will serve as a primary reference for development of the VA for the Mongolian Altai.

**Outputs/Results:**

- TOR prepared between WWF and the MAS Institute of Biology to cooperate on jointly conducting a climate vulnerability assessment for the Altai-Sayan Eco-region of western Mongolia.

**Activity 1.2.3: Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides).**

**Note:** This activity has been postponed until AHM Project Year 3, and will involve implementing an improved pasture management plan at a selected demonstration site.

**Sub-objective 1.3: Enhance community engagement in conservation.**

**Activity 1.3.1: Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems.**

In Mongolia in AHM Project Year 2, WWF gave a 2-day training at Jargalant Khairkhan Mountain for 26 People (15 Women) from local community groups from AHM Project priority areas in western Mongolia on providing wildlife-oriented ecotourism services. Participants learned about running yurt camps for tourists; selling handicrafts to tourists; activities for tourists, such as horseback riding and wildlife viewing; and protection of local wildlife and protected areas. As a practical follow-up to this training, WWF provided support to community groups at the Jargalant Khairkhan and Turgen Mountain project priority sites to start up demonstration ecotourism operations, which then hosted a snow leopard-themed tour for a group of western tourists.

**Outputs/Results:**

- 26 People (15 Women) from 4 local community groups are trained on wildlife-oriented ecotourism operations.
- 6 families receive direct support for starting up ecotourism operations.
- Participants at the Jargalant Khairkhan and Turgen Mountain AHM Project priority sites gain practical ecotourism experience by hosting a group of western tourists.
- Motivation of training participants to protect snow leopards and the local environment is increased.

**Activity 1.3.3: Expand the "Buy Goat Program" livestock insurance scheme in proposed field sites and build on lessons and best practices learned through the program.**

In Mongolia in AHM Project Year 2, WWF discontinued the "Buy Goat Program," which consisted of providing herders at the program pilot sites with full direct compensation for livestock lost to snow leopard predation. While a popular program that served as an effective forum for educating herders about methods for reducing loss of livestock to wild predators, the program lacked a sustainable funding mechanism. Therefore, WWF is currently in the process of developing a community-managed, sustainably-financed, human-wildlife conflict compensation scheme. At present, the successes and failures of such livestock insurance programs in snow leopard range areas are being evaluated and a new scheme will be proposed in AHM Project Year 3.

**Outputs/Results:**

- The popular Buy Goat Program for human-snow leopard conflict compensation program is discontinued due to a lack of a sustainable financing mechanism.
- Currently, plans for a replacement, community-managed, sustainably-financed, human-wildlife conflict compensation scheme are being developed.

**Activity 1.3.4: Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers.**

**Note:** This activity has been postponed until AHM Project Year 3, and will involve a campaign to educate residents of AHM Project sites about finding of the AHM Year 1 human-wildlife conflict survey conducted under Activity 1.1.4, above.

**Activity 1.3.5: Work with local communities to provide knowledge and skills for adding value to livestock products, and support market linkages to increase and diversify their income.**

**Note:** This activity has been postponed until AHM Project Year 3.

**Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites.**

**Activity 1.4.1: Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis.**

In Mongolia in AHM Project Year 2, WWF completed a 9-month long snow leopard camera trap survey of Jargalant Khairkhan Mountain in Khovd Aimag. This survey was conducted with the participation of local citizen scientists trained by WWF who are ultimately responsible for protecting snow leopards and their prey species at the site. Preliminary analysis of camera trap data has revealed a higher density of snow leopards at the site than anticipated. The survey also captured a large number of other wildlife species inhabiting Jargalant Khairkhan Mountain, including Siberian ibex, red fox, Pallas's cat, and beech marten. A standardized camera trapping monitoring protocol for western Mongolia will be developed based on this survey.

In addition, WWF distributed 300 copies of a Mongolian language simplified SLIMS monitoring protocol manual. This manual was prepared in AHM Project Year 1 and was distributed to provincial-level conservation workers as well as to local herders and volunteer rangers at project sites where snow leopard sign surveys are now planned.

**Outputs/Results:**

- A 9-month snow leopard camera trap survey of Jargalant Khairkhan Mountain was completed.
- 5 People (1 Woman), all resident livestock herders at Jargalant Khairkhan Mountain, were trained to conduct camera trap surveys.
- Local support for snow leopard activities at Jargalant Khairkhan Mountain was greatly increased as a result of the large number of snow leopard photos produced by this survey which were shown to local residents.
- Snow leopard hot spots at Jargalant Kharikhan have been identified which will improve design and planning od conservation activities at the site.
- 300 copies of a Mongolian language SLIMS snow leopard sign survey monitoring protocol distributed.

**Activity 1.4.3: Conduct snow leopard distribution survey across the Altai-Sayan Region of Mongolia using SLIMS and participation of local stakeholders.**

In Mongolia in AHM Project Year 2, WWF compiled the findings of the Year 1 Altai-Sayan Ecoregion (ASER) snow leopard distribution mapping workshops and snow leopard monitoring field surveys into a single, comprehensive snow leopard distribution map and database for the Mongolian ASER region. This comprehensive snow leopard distribution map for western Mongolia will serve as a preliminary baseline for planning more detailed government and community-supported snow leopard conservation activities in the ASER. In particular, this distribution map highlights snow leopard hot spots and their connecting corridors in the ASER region that are in need of more intensive snow leopard conservation efforts in coming project years. The map will illustrate for local communities and governments the case for conducting this work.

**Outputs/Results:**

- An updated snow leopard distribution map was produced for the entire Altai-Sayan Ecoregion of Mongolia
- This map analyzed current snow leopard distribution knowledge in the regions and new high priority areas were identified for snow leopard and its prey species conservation work, particularly in Gobi-Altai Aimag (province).
- In preparation for training of citizen scientists to conduct SLIMS protocol snow leopard sign surveys, 300 copies of the simplified Mongolian language SLIMS survey manual were distributed to prospective participants at snow leopard priority sites (see Activity 1.4.1).
- Community participation in snow leopard conservation work is expected to directly increase as result of these activities.

**Activity 1.4.6: Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.**

In Mongolia in AHM Project Year 2, WWF provided practical training to a total of 18 People (1 Woman) on conducting snow leopard camera trap, sign, and prey species surveys at Baatar Khairkhan, Jargalant Khairkhan, Khukh Serkh, and Bumbat Khairkhan Mountains. All trainees were local residents, including livestock herders, county rangers, volunteer rangers, and protected area administration specialists. Findings of the four surveys conducted are being used to determine snow leopard distribution and population size at these four important project sites and ultimately to improve snow leopard conservation efforts at these sites.

**Outputs/Results:**

- 18 People (1 Woman), all local residents, trained as citizen scientists to conduct snow leopard camera trap, sign, and prey species surveys.
- Knowledge of snow leopard distribution and population size at the four survey sites is refined.
- Design and implementation of snow leopard conservation efforts at the four survey sites is improved.
- Local interest in and support for snow leopard conservation efforts at these four sites is greatly increased.

**Activity 1.4.7: Train high mountain nomadic herders to monitor snow leopards, habitats, and threats (e.g. poaching, retaliatory killing, and habitat degradation).**

**Note:** This project activity has been combined with Activity 1.4.6, above.

**Activity 1.4.13: Provide technical and financial support to forest departments and communities to protect habitat.**

In Mongolia in AHM Project Year 2, WWF held an official meeting with the Citizen's Representative Khural of Tolbo Soum (elected government of Tolbo County), Bayan Ulgii Aimag (province) and Sair Tour Orgil (a local NGO) where agreement was reached to cooperate on protecting snow leopards, their prey species, and habitat in Tolbo Soum. Agreement was also reached between the three parties to develop and promote ecotourism at Tolboo Soum. Finally, in support of this effort, WWF conducted preliminary socio-economic surveys of the Sair Khairkhan (Tolbo Soum, Bayan Ulgii Aimag) and Khajingiin Nuruu (Tsetseg Soum, Khovd Aimag) Local Protected Areas that will be featured parts of future ecotourism development in the region.

**Output/Results:**

- Agreement reached between WWF, the Tolbo Soum Citizen's Representative Khural, and Sair Tour Orgil local NGO to improve snow leopard conservation and develop ecotourism in the Tolbo Soum region.
- Preliminary socio-economic surveys conducted at the nearby Sair Khairkhan and Khajingiin Nuruu Local Protected Areas in preparation of planned snow leopard conservation and ecotourism development activities.
- Protection of local wildlife and habitat is expected to improve while some residents will increase their livelihood security through start up of ecotourism activities at Sair Khairkhan and Khajingiin Nuruu.

# Nepal

**Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.**

**Activity 1.1.1: Train members of local natural resource management groups on principles of good governance, gender and social inclusion, and support adoption of these principles in the groups' by-laws.**

Activity 1.1.1A
In Nepal in AHM Project Year 2, WWF, CARE, and the Kangchenjunga Conservation Area Management Council (KCAMC), co-organized two 3-day good governance and gender and social inclusion trainings for natural resource management (NRM) groups, specifically community forests user groups (CFUG), in Yamphudin Willage Development Committee (VDC). Topics taught at these trainings included principles of good governance, governance of community-based organizations, governance indicators (transparency, accountability, and participation), inclusion in decision-making processes, and equitable benefit sharing. 41 People (28 Women), all CFUG members, were trained.

**Output/Results:**

- 41 People (28 Women), all CFUG members, trained on good governance and gender and social inclusion for natural resource management (NRM) groups.
- Management of community forests user groups is expected to improve as is social inclusion and benefit sharing amongst group members.

Activity 1.1.1B
In AHM Project Year 2, WWF, CARE, and the KCAMC also supported community-based organizations (CBO) to conduct public hearing and public auditing (PHPA) meetings to ensure good governance in natural resource management. Six 2-day PHPA meetings were held in Lelep and Tapethok VDCs in the KCA in which 7 community-based organizations participated, including conservation area users committees (CAUCs) and CFUGs. During these two-day events, communities were introduced to the PHPA process, taught about the importance of equitable benefit sharing from local natural resource harvesting activities, particularly forest resources, and about accounting methods for natural resource management groups. These meetings also provided a forum to discuss CBO activity progress and update members on CBO finances, particularly income and expenditures. In total, 153 People (90 Women) participated in these PHPA meetings, which will continue to inform KCA communities about progress made by their local CBOs on an annual basis.

**Output/Results:**

- 153 People (90 women) from 6 communities participate in public hearing and public auditing meetings for local KCA CAUCs and CFUGs.
- Governance, transparency, benefit sharing, and accounting of local KCA CAUCs and CFUGs improves as a result.

**Activity 1.1.8: Conduct pro-poor planning training for local youth to be local resource persons and mobilize them in the preparation of livelihood improvement plans.**

In Nepal in AHM Project Year 2, WWF and CARE, in partnership with Kangchenjunga Conservation Area Management Council (KCAMC) and the Community Based Forestry Supporter's Network (COFSUN), organized two 3-day pro-poor planning trainings at Yamphudin and Olangchung Gola VDCs in the KCA. A total of 45 People (21 Women) from these communities participated in these trainings, including KCAMC, Conservation Area User Committee (CAUC), User Group (UG), and Mothers Group (MG) members. These trainings highlighted the importance of pro-poor and inclusive planning in local natural resource management and other development initiatives to ensure the sustainability of these activities, such as by ensuring that poor and marginalized groups adequately benefit from natural resource and/or development interventions provided by government agencies and other organizations. Following these trainings, particpants prepared two community Livelihood Improvement Plans (LIP) for Yamphudin and Olangchungolla VDCs. These LIPs will be used to idenfity pro-poor livelihood interventions for various service providers and organizations including local Village Development Committees (VDC), and local government line agencies.

**Output/Results:**

- 45 People (21 Women) from local community groups in 2 KCA VDCs trained on pro-poor planning for natural resource management and development activities.
- Two community Livelihood Improvement Plans targeting pro-poor livelihood interventions developed.
- Effectiveness and sustainability of local natural resource management and development activities increases as a result of inclusion of poor and excluded groups in these activities.

**Activity 1.1.9: Conduct leadership skills training in traditionally excluded communities to provide skills necessary to hold positions in user groups, conservation committees, and the conservation area council.**

In Nepal in AHM Project Year 2, WWF, CARE, and the Kangchenjunga Conservation Area Management Council (KCAMC) organized three 3-day trainings on leadership skills development focusing on traditionally excluded communities, such as women and poor community members. Topics covered during these trainings included developing leadership capacity, gender and social inclusion in community sustainable natural resource management activities, equitable benefit sharing, and inclusion in development projects. Through this training, participants were empowered with their rights to hold positions in local community based organizations in the KCA, such as KCAMC, community forest users groups (CFUG), conservation area users committees (CAUC), and mother’s groups (MG). In total, 70 People (44 Women) participated in these three trainings.

**Output/Results:**

- 70 People (44 Women) trained on leadership skills, gender and social inclusion in community natural resource management groups, equitable benefit sharing, and inclusion in development projects.
- Traditionally excluded community members are empowered to hold positions in local natural resource management groups in the KCA, such as the KCAMC, CFUGs, CAUCs, and mother’s groups (MG).

**Sub-objective 1.2: Increase community resilience to climate change impacts.**

**Activity 1.2.2: Work with local institutions (e.g. agricultural extension offices, local resource user groups, and herder groups) to promote best land management practices and enhance crop productivity and climate resilience through rainwater harvesting, small-scale water storage, and introduction of drought and pest-tolerant crops.**

In Nepal in AHM Project Year 2, WWF and CARE assisted KCA communities to increase their adaptive capacity by helping them implement community-based local climate adaptation plans at 10 KCA Project sites, namely Bhotegaou-2, Kalikhola, Lelep, Lelep-3, Olanchung Gola, Takmawa-7, Tapethok, Tapethok-2, Thungim, and Yamphudin Villages. WWF's 2012 climate vulnerability assessment for the KCA's Tamur River Basin, which was developed under the Sacred Himalaya SCAPES Project, served as a basis for this activity, which included preparation of 10 community climate adaptation plans. Adaptation activities implemented in Project Year 2 focused on improving water security and food security by promoting improved water-use efficiency and storage, introducing best land management practices, and enhancing crop productivity by using drought and pest tolerant crops.

Specific climate adaptation demonstration activities carried out in AHM Project Year 2 included introduction of small-scale water storage ponds, adaptive irrigation techniques such as water-efficient sprinkler irrigation, green-house gardening, bee-keeping, and cardamom cultivation. An improved, disease-resistant maize variety, *Manakamana-2*, was cultivated on a demonstration basis by 26 households in KCA communities in close consultation with experts from the District Agriculture Development Office (DADO) and the Federation of Community Forestry Users, Nepal (FECOFUN). Results of this maize adaptation demonstration experiment will be forthcoming. Another demonstration involved planting of 2000 citrus fruit tree seedlings to promote horticulture for best land management practices. A total of 1412 people (722 Women) from 251 households increased their adaptive capacity to climate change impacts as a result of these activities which are summarized in Table 2, below.

**Output/Results:**

- 1412 people (722 Women) from 251 households directly benefit from trial climate adaptation activities for farmers.
- Sustainability of agricultural practices improves in the face of a changing climate.
- Food, water, and livelihood security of demonstration households improves.
- Following evaluation, successful climate change activities will be replicated elsewhere in the KCA.

**Table 2.** Summary AHM Year 2 Activity 1.2.2 climate adaptation actions and beneficiaries in the KCA, Nepal.

| No. | Activity | Village | Activity Start Dates | Beneficiary Households | Beneficiaries | | |
|---|---|---|---|---|---|---|---|
| | | | | | Men | Women | Total |
| 1 | Maize crops | Kalikhola VDC | July 2014 | 26 | 80 | 85 | 165 |
| 2 | Horticulture | Lelep VDC | June 2014 | 21 | 62 | 64 | 126 |
| 3 | Greenhouse vegetable gardening | Lelep, Olanchung Gola, Tapethok, and Yamphudin VDCs | June 2014 | 62 | 167 | 174 | 341 |
| 4 | Cardamom farming | Lelep VDC-Village 3 | June 2014 | 25 | 67 | 70 | 137 |
| 5 | Water source conservation and irrigation channel | Tapethok VDC-Village 7 (Takmawa Village) | June 2014 | 12 | 32 | 34 | 66 |
| 6 | Adaptive irrigation | Tapethok VDC-Village 2 | Spring 2014, Ongoing | 27 | 73 | 76 | 149 |
| 7 | Bee keeping | Yamphudin VDC-Village 2 (Bhotegaon Village) | June 2014 | 12 | 32 | 34 | 66 |
| 8 | Adaptive irrigation | Yamphudin VDC-Village 2 (Bhotegaon Village) | Spring 2014, Ongoing | 54 | 145 | 151 | 296 |
| 9 | Bee keeping | Yamphudin VDC- Thungim Village | June 2014 | 12 | 32 | 34 | 66 |
| | | **Total** | | **251** | **690** | **722** | **1412** |

### Activity 1.2.3: Promote climate-smart agricultural and grazing practices that maintain

In Nepal in AHM Project Year 2, WWF continued work to improve high altitude pasture management in the KCA by increasing sustainability of livestock grazing practices. This work primarily focused on improving access to and clean water availability at little or dis-used pasture sites in order to increase use of disused pastures and increase rates of pasture rotation. The goal of this effort is to halt pasture degradation on over-used pastures and increase resiliency of pasture ecosystems to climate change impacts. Wooden bridges were installed over rivers at three KCA sites while 1.2 km of trail improvements were implemented at one site, allowing livestock herds of yaks, dzo (yak-cow hybrids), and cows to safely access previously inaccessible pastures. In addition, WWF installed simple clean water systems at 8 pastures that were previously avoided by herders due to a lack of water for both people and livestock. These systems included running durable hoses from distant springs to pasture camps as well as installation of large plastic water storage tanks to store hose-delivered spring water in case of drought. In total 576 People (294 Women) from 105 KCA households directly benefited from these actions, which improved pasture rotation rates for over 1000 ha of KCA pastures. Improving quality of pastures will also benefit the blue sheep, the primary wild prey species of the snow leopard, that inhabit high pastures in the KCA. Table 3, below, provides a summary of pasture improvement activity sites and beneficiaries.

**Table 3.** Summary AHM Year 2 Activity 1.2.3 pasture management actions and beneficiaries in the KCA, Nepal.

| No. | Activity | Pastureland Site | Activity Start Dates | Beneficiary Households | Beneficiaries Population | | |
|---|---|---|---|---|---|---|---|
| | | | | | Men | Women | Total |
| 1 | Wooden bridge on access trail | Lelep VDC- Lungbasangba Village | Sept. 30, 2013 | 5 | 13 | 14 | 27 |
| 2 | Wooden bridge on access trail | Lelep VDC- Lapuk Village | Sept. 30, 2013 | 19 | 51 | 53 | 104 |
| 3 | Wooden bridge on access trail | Olangchung Gola VDC- Nup Village | Sept. 30, 2013 | 11 | 30 | 31 | 61 |
| 4 | Water source management | Lelep VDC-Murimla Village | Dec. 30, 2013 | 4 | 11 | 11 | 22 |
| 5 | Water source management | Lelep VDC- Chumgo | Dec. 30, 2013 | 1 | 3 | 3 | 6 |
| 6 | Water source management | Kalikhola VDC-Lokumba Deurali Village | Dec. 30, 2013 | 4 | 11 | 11 | 22 |
| 7 | Water source management | Olangchung Gola VDC-Magwa Sukepani Village | Dec. 30, 2013 | 2 | 5 | 6 | 11 |
| 8 | Water source management | Yamphudin VDC-Tseram Village | Dec. 30, 2013 | 3 | 8 | 8 | 16 |
| 9 | Water source management | Olangchung Gola VDC-Thomadesa Village | March 30, 2014 | 9 | 24 | 25 | 49 |
| 10 | Water source management | Yamphudin VDC-Ramjer Village | March 30, 2014 | 2 | 5 | 6 | 11 |
| 11 | Water source management | Tapethok VDC-Yangmun, Mulchok Village | March 30, 2014 | 4 | 11 | 11 | 22 |
| 12 | Trail improvement | Yamhudin VDC-Dadachok Village | March 30, 2014 | 41 | 110 | 115 | 225 |
| | | **Total** | | **105** | **282** | **294** | **576** |

## Outputs/Results:

- Management of 1000 ha of pasturelands improved through increased rates of pasture rotation, which will result in increased grassland ecosystem resilience to climate change impacts.
- Adaptive capacity of 576 People (294 Women) from 105 KCA households increased with respect to climate change impacts on pastures and water availability at herding camps.
- Management of habitat for snow leopard prey species such as blue sheep improves.

## Sub-objective 1.3: Enhance community engagement in conservation

### Activity 1.3.1: Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems.

In Nepal in AHM Project Year 2, WWF again mobilized 8 community-based anti-poaching operations (CBAPO) teams in the KCA, which were primarily manned by local youth (Table 4). These CBAPO teams conducted anti-poaching operations in the in areas of the KCA known to be favored by wildlife poachers in the Lelep, Tapethok, Yamphudin, and Olangchung Gola VDCs. In AHM Project Year 2, these teams confiscated and destroyed a number of snares, traps, and trail barriers targeting musk deer, snow cock and cheer pheasant, although these traps will capture any species that wander into them. These teams worked to combat not only poaching, but also illegal trade in wildlife and non-timber forest products (NTFP). WWF support for CBAPOs included donation of field gear, such as sleeping bags, tents, and down jackets, to the KCAMC that then loans these items to CBAPO teams for the duration of their patrols. Upon completion of these 3 to 7-day anti-poaching patrols, field gear is then returned to the KCAMC.

**Table 4.** Summary of AHM Year 2 Activity 1.3.1 community-based anti-poaching operations in the KCA, Nepal.

| No. | CBAPO team | Address | No of Members (All Men) | Patrol Start Dates |
|---|---|---|---|---|
| 1 | Sekathum-Amjilesa CBAPO Team | Lelep VDC-Villages 7, 8 | 13 | Oct 1, 2013 and June 15, 2014 |
| 2 | Gyabla-Ghunsa CBAPO Team | Lelep VDC-Villages 8, 9 | 9 | Oct 1, 2013 and June 15, 2014 |
| 3 | Laligurans CBAPO Team | Lelep VDC-Villages 1-6 | 13 | Oct 1, 2013 and June 15, 2014 |
| 4 | Simbuwa Khola CBAPO Team | Tapethok VDC-Village 6-9 | 9 | Oct 1, 2013 and June 15, 2014 |
| 5 | Bihani CBAPO Team | Tapethok VDC-Villages1-5 | 11 | Oct 1, 2013 and June 15, 2014 |
| 6 | Ghanglung CBAPO Team | Olangchung Gola VDC-Villages 1-8 | 7 | Oct 1, 2013 and June 15, 2014 |
| 7 | Pathivara CBAPO Team | Yamphudin VDC- Villages 6-9 | 15 | Oct 1, 2013 and June 15, 2014 |
| 8 | Kanchanjunga CBAPO Team | Yamphudin VDC-Villages 1-5 | 15 | Oct 1, 2013 and June 15, 2014 |

**Outputs/Results:**

- 92 People (All Men) voluntarily mobilized into 8 teams to conduct anti-poaching work in their home VDCs of the KCA.
- A number of snares, traps, and trail barriers used to poach wildlife discovered and removed.
- Awareness of conservation threats and issues raised among patrol team members who were mostly local youth.

### Activity 1.3.2: Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes).

In Nepal in AHM Project Year 2, WWF completed a human-wildlife conflict (HWC) report and a human-wildlife conflict mitigation strategy for the KCA that was based on a human-wildlife conflict survey conducted in the KCA in Project Year 1. This report summarizes the

current status of both human-wildlife conflict and mitigation efforts in the KCA. The draft strategy produced was reviewed by various stakeholders in Project Year 2 with changes having been made based on their feedback. The report recommends a seven-prong strategy for mitigating HWC in KCA, including implementing livestock insurance schemes, construction of predator-proof corrals, building capacity building of local snow leopard conservation committees (SLCC), providing compensation for crops damaged by wildlife, increasing awareness of HWC and conservation issues, starting more sustainable forest product enterprises, and expanding ecotourism in the KCA to lessen economic dependence on livestock and crop farming. The study also recommended increasing compensation for claims covered under a local livestock insurance scheme (LIS), which has been operating in the KCA since 2005, in which 119 herding households participate. Since launch of the LIS, there have been no reports of retaliatory killing of snow leopards or other wild predators in the KCA. The final HWC report and strategy are currently under review by the KCAMC for endorsement.

**Outputs/Results:**

- A final HWC report and mitigation strategy for the KCA prepared with stakeholder input.
- Report submitted to the KCAMC for endorsement.
- Based on the report, improvements will be made to current HWC activities.
- KCA Community participation in wildlife conservation is expected to increase as a result of implementation of improved HWC mitigation activities with benefits for local wildlife, in particular reduced poaching of snow leopards.

**Activity 1.3.6: Support government agencies and communities to develop guidelines for sustainable management and harvesting of NTFPs/MAPs.**

In Nepal in AHM Project Year 2, WWF continued to support KCA communities in preparing sustainable harvest plans for important non-timber forest products (NTFP) and medicinal and aromatic plants (MAP). In AHM Project Year 2, WWF supported preparation of a sustainable harvest plan for dhupi *(Juniperus indica*) in the Yamphudin VDC area of the KCA. To this end, a resource inventory of this juniper species was completed and analyzed. Currently, the sustainable harvesting plan is being written and based on the resource inventory, the plan will prescribe the quantity dhupi that can be harvested annually at sustainable levels. Harvested dhupi will be used for local community-based production of essential oils as detailed in Activity 1.3.7, below.

**Outputs/Results:**

- Sustainable harvesting plan prepared for one NTFP/MAP species found in the KCA, *Juniperus indica*, to safeguard the continued availability of this economically important species.
- Sustainably harvested *Juniperus indica* will serve as the basis for community-based local enterprise, thus diversifying local community income.
- Proceeds of this enterprise will be used for community development and conservation projects.

**Activity 1.3.7: Establish community-based processing facilities and support enterprise development, market linkages, value-added approaches, and market information systems.**

In Nepal in AHM Project Year 2, WWF provided support to establish a community-managed essential oil processing enterprise in Yamphudin, KCA. In Project Year 2, processing equipment was purchased and transported to Yamphudin. The essential oil facility is currently being set up and will be managed by the local Pathivara Conservation Area Users Committee (CAUC). Currently, this CAUC is in the process of registering the enterprise with the Cottage and Small Industry Development Board, in nearby Taplejung. Proceeds of this enterprise will be shared amongst two local conservation cooperatives that are currently being registered with the KCAMC, which will use enterprise profits for conducting local conservation and development projects. In total, 275 people (140 Women) from 50 KCA households will be benefit from this enterprise.

**Outputs/Results:**

- One community-based NTFP enterprise established in Yamphudin Village which will provide economic benefits for 275 people (140 Women) from 50 KCA households.
- 2 community conservation cooperatives established in Yamphudin that will be funded by this enterprise, manage community conservation funds, and help establish markets for local NTFP/MAP products.

**Activity 1.3.10: Provide alternatives to fuel wood including clean energy sources and more efficient fuel wood cook stoves to reduce adverse effects on forests.**

In Nepal in AHM Project Year 2, WWF supported distribution of improved metal cook stoves (ICS) to 5 communities in the KCA (Table 5). Since firewood is currently the only type of fuel available for cooking and heating in the remote KCA, WWF has promoted improved cook stoves as an energy efficient technology to reduce firewood consumption and wood cutting pressure of forests. Given the style of open hearths with chimney-less ceiling smoke holes currently used in many high altitude KCA households, the introduction of improved cook stoves with chimney pipes will also provide health benefits for local residents, particularly women in charge of family cooking duties, as well as reducing the family workload involved in gathering firewood. In total, improved metal cook stoves were distributed to 170 households in the KCA that are benefitting 934 People (476 women). Under this scheme, the KCAMC surveyed KCA communities to determine interest in participation in the improved cook stove demonstration. Following this survey, WWF subsidized 33 percent of the USD 100 cost of each metal improved cook stove. This grant was made directly to the KCAMC which purchased the stoves from manufacturers registered with and approved by the government of Nepal's Alternate Energy Promotion Center (AEPC). As per the WWF's MOU with the AEPC, WWF regularly reports all of WWF's improved cook stove and biogas activity work to the AEPC and will also work with the AEPC to inform the Global Alliance for Clean Cook Stoves about cook stove work in the KCA.

**Table 5.** Summary of AHM Year 2 Activity 1.3.10 improved cook stove distribution and beneficiaries in the KCA, Nepal.

| No. | Conservation Area Users Committee | Number of Improved Cook Stoves | Number of Beneficiaries | | | |
|---|---|---|---|---|---|---|
| | | | Households | Men | Women | Total |
| 1 | Ghunsa VDC-Sekathum Ghunsa CAUC | 55 | 55 | 148 | 154 | 302 |
| 2 | Yamphudin VDC-Pathivara CAUC | 30 | 30 | 81 | 84 | 165 |
| 3 | Yamphudin VDC-Kangchenjunga CAUC | 30 | 30 | 81 | 84 | 165 |
| 4 | Olangchung Gola VDC-Ghanglung CAUC | 10 | 10 | 27 | 28 | 55 |
| 5 | Tapethok VDC- Bihani CAUC | 45 | 45 | 121 | 126 | 247 |
| **Total** | | **170** | **170** | **458** | **476** | **934** |

**Outputs/Results:**

- Improved metal cook stoves were distributed to 170 KCA households benefitting 934 People (476 women).
- Firewood consumption and wood cutting pressure in the 5 participating communities is expected to be reduced.
- Reduced firewood consumption will have benefits for local forest ecosystems and watersheds including building ecosystem resilience to climate change and increasing runoff infiltration.

**Activity 1.3.11: Promote sustainable Community Based Tourism (CBT) by strengthening existing initiatives of home stays and sustainable tourism practices, and engaging private sector, investors, and operators.**

In Nepal in AHM Project Year 2, WWF continued to support several ecotourism related initiatives in the KCA. The first was providing continued support to the KCAMC to repair the main trekking trail used by both tourists and local residents in the upper KCA, several sections of which have been badly damaged by landslides. In total, approximately 1000 m of the most heavily traveled trail in the upper KCA was improved between Ghunsa and Khambachen. The second initiative involved organizing two 1-day clean-up campaigns in Chhiruwa and Tapethok Villages at the start of the Kangchengjunga Trek, which also served to increase local awareness of the need for improved sanitation and solid waste management in these two gateway villages to the KCA. In total, 15 People (6 Women) – all owners of local lodges, tea houses, and shops catering to trekkers – participated in the clean-up campaign. Finally, WWF provided matching support to upgrade the Yamphudin Village KCA Visitors Center, including improving the display room and visitor's information counter.

**Outputs/Results:**

- Support was provided to repair and improve approximately 1000 m of the main heavily-travelled northern trekking trail leading to Kangchenjunga Base Camp in the northern KCA.
- Two 1-day cleanup campaigns conducted in gateway villages which educated local business people about the importance of proper sanitation and solid waste management in high-tourism areas.

- One KCA visitors information center upgraded.
- Community awareness raised with respect to the importance of keeping the KCA tourist-friendly as one important step in building up and maintaining the local ecotourism industry.

## Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites

### Activity 1.4.1: Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis.

In Nepal in AHM Project Year 2, WWF circulated the draft snow leopard monitoring protocol developed in AHM Project Year 1 for ongoing expert peer review. Returned comments will be incorporated into the draft and the protocol is expected to be finalized in December 2014. This monitoring protocol covers methodology for snow leopard sign and camera trap surveys, fecal DNA analysis, and prey base surveys to assess population size and distribution of snow leopards and their prey. After the completion of the expert review in Project Year 3, the protocol will be finalized and distributed for use to interested researchers, conservationists, students, citizen scientists, and local communities.

**Outputs/Results:**

- A draft protocol for conducting snow leopard sign and camera trap surveys, fecal DNA analysis, and prey base surveys for determining snow leopard population sizes and distribution in Nepal has been prepared and is currently under expert review.
- This protocol will be a valuable tool for standardizing snow leopard monitoring research methods amongst researchers, conservationists, students, citizen scientists, and local communities.

### Activity 1.4.5: Begin radio-tracking of snow leopards using GPS collars to collect information on home range size, habitat type and preferences, hunting behavior and frequency, and activity patterns.

In Nepal in November 2014, WWF, in cooperation with the Nepal Department of National Parks and Wildlife Conservation (DNPWC), the National Trust for Nature Conservation (NTNC), the Kangchenjunga Conservation Area Management Council (KCAMC), and the Ghunsa Village Snow Leopard Conservation Committee (SLCC), conducted a successful expedition to collar a snow leopard with a satellite GPS tracking collar in the KCA. This was the first time a snow leopard was GPS collared in Nepal, and in the first year this collared cat revealed a wealth of information on its use of the three-nation Kangchenjunga landscape, including making two journeys into Sikkim before returning to the area of the original collaring site in the northern KCA. Trapping site selection was based on earlier WWF-led snow leopard sign, camera trap, and fecal DNA surveys in the KCA. This event also marked the first time that NGOs, government agencies, and local community groups came together to conduct high level snow leopard research, and this activity is greatly reinforcing AHM Project messages concerning the importance of both snow leopard conservation work and the direct participation of local communities in this work. Regrettably, a second collaring expedition carried out in the KCA from April to May of 2014 did not succeed in capturing a second snow leopard individual. Unexpectedly, however, the first snow leopard collared by the team in November was recaptured and the decision was made to re-collar this individual with a new collar while the opportunity presented itself. Information collected from this animal is already proving invaluable in planning landscape-level conservation action for the three-nation Kangchenjunga landscape, and has already led to a preliminary agreement

between the governments of Nepal and India to cooperate on transboundary snow leopard conservation work in the Kangchenjunga Region.

**Outputs/Results:**

- The first successful satellite GPS tracking collaring of a snow leopard in Nepal was achieved.
- This event marked the first time that NGOs, government agencies, and local community groups came together to conduct high-level snow leopard research.
- Community participation in this activity greatly reinforced AHM Project messages about the importance of both snow leopard conservation work and community participation in this work.
- This research success has led to a preliminary agreement between the governments of Nepal and India to cooperate on transboundary snow leopard conservation work in the Kangchenjunga Region.
- Snow leopard location data obtained from the collar is proving invaluable for the design of landscape-level conservation action in the Kangchenjunga region.

**Activity 1.4.6: Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.**

In Nepal in AHM Project Year 2, WWF continued to train and use local snow leopard conservation committee (SLCC) members in the KCA as citizen scientists to conduct snow leopard and prey species monitoring activities. Citizen scientists from all 4 KCA SLCCs participated in training and monitoring activities, with each SLCC conducting monitoring activities in both the autumn of 2013 and the spring of 2014 in their respective home areas of the KCA. The main focus of these activities were camera trap and snow leopard prey species surveys that were co-financed by WWF-UK and provided partial coverage of all snow leopard areas in the KCA. A total of 27 People (All Men) received citizen scientist training on snow leopard monitoring and participated in the surveys as listed in Table 6, below.

**Table 6.** Summary of AHM Year 2 Activity 1.4.6 citizen scientist snow leopard monitoring in the KCA, Nepal.

| No. | Name of SLCC | Location | No. of Participants (All Men) | Survey Dates |
|---|---|---|---|---|
| 1 | Olangchung Gola SLCC | Olangchung Gola VDC | 7 | May 7-June 3, 2014 |
| 2 | Yangma SLCC | Yangma VDC | 8 | June 10-11, 2014 |
| 3 | Ghunsa SLCC | Ghunsa VDC | 7 | May 6-8, 2014 |
| 4 | Yamphudin SLCC | Yamphudin VDC | 5 | August 15-November 15, 2013 and June 9-10, 2014 |

**Outputs/Results:**

- 27 People (All Men) trained as citizen scientists and mobilized to conduct snow leopard and prey species monitoring in all 4 areas of the KCA where snow leopards are present.

- Direct participation of local community members in snow leopard conservation work is greatly increased.
- Overall local awareness and protection of snow leopards is improved.

**Activity 1.4.13: Provide technical and financial support to forest departments and communities to protect habitat.**

In Nepal in AHM Project Year 2, WWF continued to provide support to the Kangchenjunga Conservation Area Management Council (KCAMC) to coordinate conservation activities with the Department of National Parks and Wildlife Conservation (DNPWC), district line agencies, and local stakeholders for the effective management of KCA. This included providing support to the KCAMC chairperson and council members to hold coordination meetings with district level stakeholders and the DNPWC on various conservation and management issues in the KCA. WWF also directly supported organization of technical field monitoring in the KCA by the DNPWC and other government agencies working in the KCA. WWF has been continuously providing the KCAMC with similar technical and financial support for conservation and natural resource management since inception of the Kangchenjunga Conservation Area Project (KCAP) on March 22, 1998.

**Outputs/Results:**

- WWF continued to provide needed technical and financial support to the KCAMC, which is composed of local community leaders in the KCA, particularly with respect to coordinating management activities with other government and non-government stakeholders.
- Increased coordination between the KCAMC and government agencies operating in the KCA under a wide variety of mandates builds synergies amongst various development and conservation initiatives, increasing the effectiveness of natural resource management interventions in the KCA.

## Pakistan

**Sub-objective 1.1: Strengthen local natural resource institution's governance and capacity.**

**Activity 1.1.5: Raise awareness and provide education about the role of predators (e.g. Snow leopards) in maintaining ecological health of pastures.**

Activity 1.1.5A
In Pakistan in AHM Project Year 2, WWF conducted four targeted conservation awareness raising events. The first event was co-organized by WWF and the Chitral Wildlife Division to mark World Wildlife Day in Chitral Town. The purpose of this event was to instill a positive attitude towards wildlife and create awareness amongst university students of their role in natural resources conservation in Chitral. This event featured a series of lectures on the history of World Wildlife Day, the snow leopard and its conservation issues, the wildlife of Khyber-Pakhtunkhwa Province, and the impacts of climate change on wildlife and wildlife habitat. 27 People (13 Women) participated in this event including students and instructors from Shaheed Benazir Bhutto University and KP Wildlife and Forest Department staff members.

Activity 1.1.5B
The second event was co-organized by WWF, the Hoper Conservation and Development Organization (HCDO), and the Hunza-Nagar District Education Department to mark World Water Day in Gilgit-Baltistan's Hoper Valley. The purpose of this program was to educate school students and other community members about: 1) the importance of water for life and livelihood; 2) the impact of climate change on water resources in Hoper; and 3) the role of predators such as snow leopards, brown bears, and wolves in maintaining the ecological health of mountain pastures and watersheds, e.g. by controlling populations of both wild ungulates and burrowing rodents and pikas. This event featured poster and speech competitions and was attended by 70 men and boys and 90 women and girls.

Activity 1.1.5C
The third event was co-organized by WWF, ICIMOD, and the Italian-funded Social, Economic, Environmental Development (SEED) Project to mark World Environment Day in Naltar Valley, located 35 km north of Gilgit, which is one of GB's most important snow leopard and tourism spots. The purpose of this event was to educate school students and teachers about the impacts of climate change on local biodiversity in general and on snow leopards in particular. In total 150 People (~50 Women) participated in this event.

Activity 1.1.5D
The fourth event was co-organized by WWF, the Hoper Conservation and Development Organization (HCDO), and the Hoper Youth Organization (HYO). This event consisted of a campaign to raise conservation awareness and awareness of AHM Project activities in the Hoper Valley that was conducted as part of the Hoper Valley Cultural Revival Festival. As part of this campaign, the AHM Project team distributed conservation posters and other conservation education materials to local residents.

Activity 1.1.5E

The last conservation awareness raising action under this activity involved publishing a cover story on snow leopards, other large mammal species, and their ecosystems in Gilgit-Baltistan in the Pakistan Broadcasting Corporation's Urdu language magazine "Ahang."

**Outputs/Results:**

- Approximately 7340 People (2150 Women) reached with conservation awareness raising messages during the course of 4 awareness raising events.
- Awareness raised about the interconnectedness of wildlife, healthy pastures, and healthy watersheds in the project area as well as about the importance of natural resource management and climate change impacts on the local environment.
- Support for and ownership of project activities increased among the key stakeholders, including increased support for conservation of snow leopards, their prey species, their habitat, and watersheds in general.
- Participants were educated about the importance of water for life and livelihood, and the impact of climate change on water resources.
- Cooperation between WWF and other conservation groups was enhanced through joint organization of these events.
- WWF cover story on snow leopards, other large mammal species in Gilgit-Baltistan published in the Pakistan Broadcasting Corporation's popular print magazine "Ahang."

**Activity 1.1.10: Work with tribe-based traditional resource management groups to build capacity for better resource management, including curtailing illegal hunting, restricting free grazing near core habitat, and watershed conservation.**

Activity 1.1.10A

In Pakistan in AHM Project Year 2, WWF, in cooperation with the SEED Project, held a community management skills training for members of the Hoper Conservation and Development Organization (HCDO) and other participants from villages neighboring Hoper. The purpose of this training was to continue to formalize functioning of the valley's primary tribe-based natural resource users group, the HCDO, as well as to train conservation leaders from neighboring villages by building the capacity of participants with respect to governance, management, and leadership of community based conservation organizations. In total, 19 People (All Men) attended the training held in Gilgit.

Activity 1.1.10B

In Pakistan in AHM Project Year 2, WWF also supported two HCDO "progress and review" meetings at Hoper in November 2013 and March 2014 which were attended by 35 men and 47 men, respectively. At these meetings HCDO members and village elders discussed project related matters, including such topics as ways to strengthen the local wildlife watch and ward system in the valley. Agreements were signed by HCDO representatives to launch a series of spring project activities that include planting of fodder crops to mitigate overgrazing, establishing a livestock insurance scheme to mitigate human-wildlife conflict losses, and demonstrating improved cattle sheds to improve livestock survival rates. Project progress and the responsibilities of both WWF and the HCDO were reviewed and discussed.

Activity 1.1.10C

In the Laspur Valley, Chitral District, KP, WWF provided support to the Shandur Area Development, Conservation, and Welfare Organization (SADCWO) to establish a formal working office for this village conservation committee (VCC). By agreement between WWF and the SADCWO, the VCC provided the work space for the committee while WWF provided needed stationery and furniture for formal office setup. This office was opened on December 5, 2013.

**Outputs/Results:**

- 19 People (All Men) trained on community management skills, building their capacity with respect to governance, management, and leadership of community-based conservation organizations.
- The HCDO held 2 regular "progress and review" meetings where current activities were reviewed and new activities planned, in the process formalizing the function of the HCDO as the leading community conservation organization in the valley.
- One village conservation committee (VCC) office was established in the Laspur Valley, that will formalize community conservation work at that site.
- Capacity and function of local VCCs in the project region is enhanced.

**Sub-objective 1.2: Increase community resilience to climate change impacts.**

**Activity 1.2.1: Work with local communities to implement adaptation actions identified in climate change vulnerability assessments that reduce vulnerabilities of communities, high mountain ecosystems, and snow leopards.**

In Pakistan in AHM Project Year 2, WWF conducted a climate change vulnerability assessment of the Hoper Valley, GB AHM Project site, which featured household interviews and focus group discussion groups on local climate change impacts and current coping strategies. A short preliminary report on the vulnerability assessment social survey was prepared which will be used as the basis for developing and implementing a climate adaptation strategy for Hoper Valley in AHM Project Year 3.

**Outputs/Results:**

- A preliminary climate vulnerability assessment report on findings of the Hoper Valley climate change social survey has been prepared.
- Findings of the vulnerability assessment will be used to develop a climate adaptation strategy for the Hoper Valley.

**Activity 1.2.3: Promote climate-smart agricultural and grazing practices that maintain healthy pasture for livelihoods and wildlife (e.g. rotational grazing and controlled pastureland burning).**

Activity 1.2.3A

In Pakistan in AHM Project Year 2, WWF worked with residents of the Rumboor Valley, Chitral District, KP to increase sustainability of pasture management. The pastures of the project region are grazed by both livestock and wild ungulates. However, the total area of usable pasturelands is in decline due to population growth and consequent overgrazing, creating a large problem for livestock-dependent communities. Under this activity, WWF has been working with communities in Chitral's Rumboor Valley to improve traditional grazing practices by taking into account growing human populations and the impacts of climate change on the valley. To this end, an improved sustainable pasture management plan for Rumboor was prepared through a participatory process. The first part of this process included focus group discussions with VCC and Women's Conservation Committee (WCC) members and individual interviews with local herders. A total of 36 herders (13 women) participated in these discussions. This participatory process yielded information on livestock types, pasture rotation timing and procedures, as well as problems associated with livestock grazing and possible solutions.

**Outputs/Results:**

- A draft climate-smart sustainable pasture management plan developed for Rumboor Valley through a participatory process.
- Local VCC and WCC members educated about possible climate change impacts on local pastures.
- Local participation in development and implementation of the plan will increase its chances of success in reversing overgrazing damage.

Activity 1.2.3B

The second part of this process consisted of a one-day training workshop for local stakeholders on improved livestock and pasture management techniques. 24 People (6 Women) participated, including representatives of VCCs, WCCs, the KP Wildlife and Forest Department, the Snow Leopard Foundation, and Joint Forest Management Committees. Primary topics discussed were indigenous vs. modern pasture management practices; improved pasture management techniques; improved livestock management techniques; the findings of pasture management focus group discussions; and the draft pasture management plan that resulted. One outcome of a workshop follow-up meeting held in Rumboor was an agreement to defer grazing on Rumboor's important 1200 ha Ossu Nullah pasture, formerly grazed in late winter and early spring, until after May. This is expected to increase fodder productivity of sprouting grass at Ossu Nullah. Further implementation of improved pasture management practices is ongoing.

**Outputs/Results:**

- 24 People (6 Women) trained on improved pasture and livestock management techniques based on recommendations of the draft sustainable pasture management plan prepared under Activity 1.2.3A, above.
- Agreement reached to defer grazing on Rumboor's 1200 ha Ossu Nullah pasture, formerly grazed in late winter and early spring, until after May to increase fodder production.

Activity 1.2.3C

In Pakistan in AHM Project Year 2, WWF undertook a demonstration to reduce grazing pressure on pastures at the Hoper, Laspur, and Rumboor Valley AHM Project sites by delivering 135 kg of alfalfa seed for planting on degraded agricultural and marginal lands at these three sites. Hoper Valley GB received 75 kg of alfalfa seed that will be planted on 7.5 ha of degraded land in the spring of 2015. A total of 60 kg of alfalfa seed was given to the Laspur and Rumboor Valley AHM Project sites that was planted on 4 ha and 3 ha of land, respectively. Alfalfa harvested will be fed to livestock in winter, thus reducing winter grazing pastures on local grasslands. Activity follow up monitoring visits revealed that 21 of 34 of participating households (62 percent) in Laspur were satisfied with their alfalfa fodder production while 5 of 6 participating households (83 percent) in Rumboor were satisfied with their alfalfa fodder production. In total, 33 of 40 participating households (83 percent) in the two activity communities were in favor of continuing this demonstration.

**Outputs/Results:**

- 7 ha of degraded agricultural and marginal lands in the Laspur, and Rumboor Valley AHM Project sites planted with alfalfa seeds to raise livestock fodder, while 7.5 ha of degraded lands in Hoper GB will be planted with alfalfa seed in the spring of 2015.
- Alfalfa produced will be fed to local livestock in winter, reducing grazing pressure on pastures surrounding these three mountain communities.
- Planting of alfalfa on degraded agricultural and marginal lands also reduces erosion these lands during the summer monsoon season.

Activity 1.2.3D

In Pakistan in AHM Project Year 2, WWF worked to halt the loss of forest cover and land degradation and to help diversify and adapt livelihoods to a changing climate by promoting

planting of multipurpose tree species for timber, fuel wood, and fodder production as well as for controlling land degradation. To this end, in March 2014 WWF distributed nearly 7000 multipurpose tree seedlings to residents of Laspur Valley, Chitral, KP including species of the genuses *Robinia*, *Ailanthus*, and *Populus*, 2000 of which were provided by Chitral Forest Department. These trees were planted on 11.3 hectares of degraded land. This activity was repeated in the Hoper Valley, GB, where 10,000 multipurpose tree seedlings were planted on 5 ha of land.

**Outputs/Results:**

- A total of 16.3 ha of degraded land planted with fast growing, multipurpose tree species.
- Timber, fuel wood, and fodder resources at the two project sites diversified.
- Cutting of native timber will be reduced while resilience of local forest and pasture ecosystems to climate change impacts will be increased.

Activity 1.2.3E

Chitral District's arable land is limited by steep mountain slopes while poor road infrastructure limits market access for famers. Consequently, subsistence farmers in Rumboor and Laspur have limited land and are reliant on raising staple crops such as maize, wheat, rice, and potatoes as well as livestock fodder crops. A few commercial orchards exist, but most fruit is grown at home for family consumption, including apples, pears, apricots, walnuts, mulberries, pomegranates and persimmons. However, orchard produce has a high market value in down-country markets. Thus, in order to promote a climate-smart alternative agricultural livelihood option, residents of the Rumboor and Laspur Valley AHM Project sites were provided with apricot, walnut, almond, pear, persimmon, and peach tree seedlings to plant near their homes. In total, 32 family fruit and nut orchards were established covering a total of 2 ha.

**Outputs/Results:**

- 32 family fruit and nut orchards planted covering a total of 2 ha as one climate adaptation action.
- Livelihood and food security of participants will eventually be increased.
- Family orchards will also make a contribution to halting local land degradation.

Activity 1.2.3F

In northern Pakistan, human-wildlife conflict regularly results in the loss of livestock and thus poses a threat to the livelihoods of poor subsistence herders. Without alternatives for redress, these herders often kill the predator believed responsible in retaliation for their losses. However it has been shown that comparable numbers of livestock are lost annually to disease, transmission of which may be increasing as a result of climate change. Thus in order to increase the survival rate of livestock and build support for protection of large wild predators such as snow leopards, WWF helped organize a vaccination campaign against the peste des petits ruminants (goat plague) virus, goat pox, and cow pox as one climate adaptation and wildlife protection action. In total, 2000 head of livestock were vaccinated in the Laspur Valley, KP while 10,900 head were vaccinated and treated for mange in Hoper Valley, GB. This campaign was also accompanied by instruction on the need to protect snow leopards and methods for reducing loss of livestock to these cats.

**Outputs/Results:**

- 6000 head of livestock in the Laspur and Hoper Valleys vaccinated against livestock disease to increase their survival rate as one climate adaptation and human-wildlife conflict mitigation strategy.
- Participating herders educated about methods for reducing loss of livestock to snow leopards and other large predators.
- Survival rate of livestock and herder support for AHM Project snow leopard protection work increases, with retaliatory killing of snow leopards and other large predators expected to decrease.

**Sub-objective 1.3: Enhance community engagement in conservation.**

**1.3.1: Strengthen participation of local communities, (e.g. *Himal Rakshaks* – mountain guardians, herder groups, and SLCCs) in conservation of snow leopards and climate change adaptation activities in headwater ecosystems.**

In Pakistan in AHM Project Year 2, WWF organized a meeting for representatives of the Rumboor community and the Chitral Gol Community Development and Conservation Association (CGCDCA) at the WWF Chitral field office on October 26, 2013. At this meeting, WWF-Pakistan encouraged the CGCDCA to initiate a community-based watch and ward system in the Rumboor Valley and involve community representatives in conservation related activities. As a result this meeting, three community wildlife watchers were hired on November 1, 2013 with all support for these wildlife watchers being provided under the national Protected Areas Management Fund through CGCDCA. In addition, WWF also promoted community participation in conservation at Laspur by guiding the community through the process of preparing a draft feasibility report on establishing a community game reserve in the Bashqar Gol area of Laspur. This draft feasibility report has since been shared with relevant district and provincial wildlife department officials for comments.

**Outputs/Results:**

- Meeting organized by WWF which resulted in hiring of 3 village wildlife watchers for the Rumboor Valley who will be entirely supported by non-WWF funding.
- Feasibility report prepared concerning establishment of a community game reserve in the Bashqar Gol area of Laspur.
- Community participation in conservation will increase in both these communities as a result of these WWF-led efforts.

**Activity 1.3.2: Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program (e.g. livestock insurance schemes)**

Activity 1.3.2A

In Pakistan in AHM Project Year 2, WWF conducted a human-wildlife conflict survey in the Laspur and Rumboor Valleys, KP, which focused on predation of livestock by wild predators. Major objectives of the survey were to understand livestock depredation patterns and to recommend mitigation strategies to reduce human-wildlife conflict. The study revealed that disease and accidents were larger causes of livestock deaths than loss of livestock to snow leopards and other local predators. Report findings will be used to develop human-wildlife conflict mitigation strategies for these two valleys.

**Outputs/Results:**

- A human wildlife conflict survey was conducted in the Laspur and Rumboor Valleys, Chitral, KP, and a report produced.
- The survey revealed that disease and accidents were a larger cause of livestock mortality than snow leopards and other wild predators.
- Human-wildlife conflict mitigation strategies will be developed for these two valleys based on survey findings.

Activity 1.3.2B

Based on the human-wildlife conflict survey conducted in the Hoper Valley, GB in AHM Project Year1, a human-wildlife conflict mitigation strategy was developed. As one step in implementing this strategy, in AHM Project Year 2, WWF initiated a community livestock insurance scheme at Hoper based on contributions from WWF, the Hoper Conservation and Development Organization (HCDO), herder insurance registration fees, annual insurance premiums paid by herder that were deposited in the Karakoram Cooperative Bank. Partial compensation payments of USD 50 for yaks and cows and USD 25 for sheep and goats will be made for livestock lost to snow leopards and wolves only, with these payments coming from income earned on funds deposited. Notably, registration for this scheme is still ongoing and no claims have been made for compensation under this scheme so far in 2014. By agreement between WWF and representatives of the Hoper Valley community, this livestock insurance scheme is being launched on the condition that all hunting, retaliatory killing, and direct disturbance of snow leopards and wolves cease in the valley. At present 33 Herders (All Men) from Broshal, Ratal, and Hakalshal Villages have insured 60 yaks and cows as well as 12 goats.

**Outputs/Results:**

- A livestock insurance scheme is launched in the Hoper Valley, GB that is currently insuring 33 small livestock holders (All Men) and their families from 3 villages against loss of livestock to predation by snow leopards and wolves.
- Participating communities have agreed to refrain from hunting, retaliatory killing, and causing other direct disturbance to snow leopards and wolves.
- Awareness of snow leopard and other wildlife conservation issues raised in participating communities of Hoper Valley.

<u>Activity 1.3.2C</u>

A second activity conducted to support implementation of the human-wildlife conflict mitigation strategy was construction of a demonstration predator proof corral at a human-snow leopard conflict hot spot in the Meir Pasture area of the Hoper Valley. This corral featured sturdy stone walls with a roof and secure door to prevent snow leopards and other predators from entering and killing livestock and can house over 200 sheep and goats. This corral was constructed by agreement between WWF and the HCDO with WWF providing a design and funding for purchase of materials while labor was donated. Users of this corral have also been educated about its purpose and the need to improve protection of snow leopards and other wild predators.

**Outputs/Results:**

- One predator-proof corral built at a high human-snow leopard conflict site in the Hoper Valley which is demonstrating an effective method for reducing and preventing nighttime predation on livestock by snow leopards and other predators.
- Users of the corral and other community members educated about methods for reducing human-wildlife conflict and the importance of improving protection of snow leopards and other local wildlife.

**Activity 1.3.8: Promote livelihood activities (e.g. agribusiness, vegetable gardening, livestock rearing, and horticulture) that are climate-smart and contribute to conservation of snow leopard habitat and wetlands.**

In Pakistan in AHM Project Year 2, WWF supported establishment of a vocational training center for women residing in the Laspur Valley, Chitral, KP. Livelihood opportunities in Laspur are largely limited to subsistence farming and livestock herding. In winter, many men leave Laspur to work as laborers while women remain at home making wool products, such as socks, sweaters, gloves, and wool matts, by hand from local wool using outdated tools and methods. These products are then sold to pay household expenses, such as at the popular local Shandur Festival that is held each year. In order to improve the quality, diversity, and hence marketability of Laspur woolen products, in May 2014 WWF launched a vocational training center in Laspur's Raman village. WWF provided hand-operated sewing machines and other materials while Raman Village provided a building to house the center, which will be managed by the Raman Village women's conservation committee (WCC). The inaugural event for this center was a 15-day training for 25 local WCC members on clothing design and fabric cutting, basic sewing and stitching using donated sewing machines, embroidery, and improved techniques and design for woolen products, particularly gloves and socks.

**Outputs/Results:**

- A vocational training center with an emphasis on sewing and wool handicraft production was established at Raman Village, Laspur Valley, Chitral, KP.
  25 People (All Women) trained on sewing and improved wool product design and production.
- Livelihood security and incomes of participating women are improved.
- Awareness and participation of local women in other AHM conservation activities is increased.

**Sub-objective 1.4: Conserve snow leopard and its habitat in priority sites.**

**Activity 1.4.1: Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis.**

In Pakistan during the winter of 2014, WWF drafted a snow leopard monitoring protocol for project sites to assess the abundance and distribution of snow leopards and their prey species using sign surveys, DNA testing of scat, and fixed-point prey species counts. In addition, analysis of other factors, such as predator and prey migration corridors and dietary preferences, have been incorporated into the protocol. The draft monitoring protocol was shared with other relevant government wildlife departments and snow leopard experts and their comments and feedback were incorporated and the protocol finalized and distributed. WWF organized a training on the use of this protocol under Activity 1.4.6, below.

**Outputs/Results:**

- Draft snow leopard monitoring protocol prepared for assessing the abundance and distribution of snow leopards and their prey species in northern Pakistan was prepared, finalized and distributed.
- Community participation in snow leopard and prey species monitoring is expected to increase as a result of protocol distribution and follow-up trainings.

**Activity 1.4.2: Conduct population survey in Gilgit-Baltisan and develop GIS-based species distribution maps for snow leopard and prey species, and prepare species conservation plan in consultation with partners and with approval of district government.**

In Pakistan in AHM Project Year 2, WWF conducted 6 snow leopard and prey species monitoring surveys in Gilgit-Baltistan and Chitral using the draft monitoring protocol prepared under Activity 1.4.1, above. In Gilgit-Baltistan between November 2013 and May 2014, WWF conducted 5 snow leopard surveys using the new protocol at various priority wildlife sites in the Hoper Valley. These sites were the Barpu, Meir, Shaltar, Bualtar, and Rash Fari Pastures, which cover a total area of approximately 250 $km^2$. During these surveys 35 transects were conducted that ranged from 600 m to 1500 m in length along key snow leopard travel routes. 16 men trained earlier by WWF on snow leopard monitoring methods participated in the Gilgit-Baltistan surveys, including 6 GB Wildlife and Parks Department field staff, 2 village wildlife guards, and 8 local community members who were livestock herders and former hunters. Predator scat was collected for DNA and diet analysis in AHM Project Year 3. In Chitral, WWF conducted a single snow leopard monitoring survey using the new survey protocol during June 2014 in the important Chumarkun Gol Valley, located adjacent to Laspur Valley in eastern Chitral District, which has an area of about 120 $km^2$. During this survey, 29 transects were conducted that ranged from 350 to 1000 m in length along key snow leopard travel routes. Findings of the GB and Chitral surveys are still being processed. However, preliminary results indicate that populations of Himalayan ibex, the snow leopard's primary prey species in the Himalaya, are stable, which indicates that participating project communities are working effectively to halt illegal poaching of wildlife. On the basis of the survey results, WWF-Pakistan will prepare snow leopard distribution maps and snow leopard conservation action plans for AHM project sites.

**Outputs/Results:**

- 6 snow leopard and prey species surveys conducted at AHM project sites in northern Pakistan, with preliminary findings indicating that Himalayan ibex populations at these sites are stable.
- Findings of these surveys will be presented in a survey report and revised snow leopard distribution map, and these findings will be used to improve snow leopard conservation efforts in northern Pakistan.
- Government conservation workers and local community members were given an opportunity to put their earlier WWF-led training on snow leopard monitoring to practical use, increasing their interest in snow leopard conservation.

**Activity 1.4.6: Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations, prey species, and threats to snow leopards (e.g. poaching, retaliatory killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.**

In Pakistan in AHM Project Year 2, WWF organized a day-long workshop in Hoper Valley, GB, to train local livestock herders; game watchers from the GB Forest, Wildlife and Environment Department; and game watchers from Central Karakorum National Park (CKNP); on snow leopard and prey species monitoring and snow leopard habitat assessment. 36 participants (all men) attended including 25 residents of Hoper Valley; 2 Hoper Valley Village Wildlife Guards; 8 GB Forest, Wildlife and Environment Department field staff; and 1 CKNP game watcher. Topics covered by the training included snow leopard ecology and behavior; threats to snow leopards; snow leopard conservation measures and survey methods; and techniques for reducing human-snow leopard conflict. With respect to snow leopard prey species, participants learned about the ecology and behavior of ibex and other local prey species; threats to these prey species; and conservation measures and survey methods for prey species. Participants agreed to be actively involved in snow leopard monitoring and will collect and contribute valuable information on snow leopard and prey species distributions that will be used to update snow leopard distribution maps and improve conservation efforts in the project region. Notably, survey methodologies taught followed the monitoring protocol developed in Activity 1.4.1, above.

**Outputs/Results:**

- 36 People (All Men) trained on snow leopard and prey species monitoring techniques, as well as on behavior, ecology, and conservation of snow leopards and their prey. species.
- Local capacity for and participation in monitoring and conservation of snow leopards and their prey in Gilgit-Baltistan is greatly increased.

**Activity 1.4.8: Establish a watch and ward system of Village Wildlife Guards to protect snow leopards and other species against hunting and poaching in Gilgit-Baltistan and Chitral.**

In Pakistan in AHM Project Year 2, WWF continued to provide support for 2 village wildlife guards (VWG) in Hoper Valley, GB, that were hired during the project year. These VWGs continued to work in close cooperation with the Hoper Conservation and Development Organization (HCDO) to document and stop illegal activities like wildlife poaching, unregulated free grazing, and illegal logging in the Hoper Valley. In addition, these VWGs also monitored local wildlife population at Hoper, particularly snow leopards and Himalayan ibex, and documented human-wildlife conflict incidents involving large predators. In Chitral, WWF supported hiring of a second VWG in the Laspur Valley to strengthen the local watch and ward system there, who will be responsible for controlling poaching in the vicinity of Shandur Village.

**Outputs/Results:**

- 4 village wildlife guards (All Men) in the Hoper and Laspur Valleys received support to monitor wildlife and illegal wildlife activities who submitted monthly reports to their respective village conservation committees.
- Capacity of communities in Hoper and Laspur strengthened with respect to wildlife protection, monitoring, and wildlife crime prevention.

**Activity 1.4.13: Provide technical and financial support to forest departments and communities to protect habitat.**

In Pakistan in AHM Project Year 2, WWF continued to build the capacity of conservation workers in Gilgit-Baltistan and Chitral District with respect to conducting wildlife monitoring surveys. In Hoper Valley, GB, WWF organized a 6-day practical training on wildlife survey and habitat assessment techniques that included 5-days of field practice. 16 People (All Men) were trained, of whom 7 were field staff members of the GB Wildlife, Forest and Parks Department; 2 were village wildlife guards; and the rest were community members, including former hunters. In Chitral, WWF organized a 2-day training on wildlife and habitat monitoring for 15 People (All Men) from the Chitral District Wildlife and Parks Department, the Chitral District Forest Department, and community wildlife watchers. Topics covered during this training included wildlife of Chitral, wildlife ecology, habitat assessment and management, and wildlife survey methods for predators, prey species, and birds. Training workshop certificates were distributed to participants of both workshops

**Outputs/Results:**

- 31 People (All Men) including government and NGO conservation workers as well as local herders were trained on methods for wildlife and habitat monitoring with a particular emphasis on snow leopards and their prey species, greatly increasing local capacity to monitor wildlife in snow leopard range areas of northern Pakistan.
- Information gathered from subsequent surveys conducted by these trainees will be used to develop GIS-based maps of snow leopard distribution in northern Pakistan as well as to develop a regional snow leopard conservation action plan.
- Local support for and participation in AHM Project conservation activities increases.

**Activity 1.4.15: Work with policy makers and government officials to review existing federal and provincial policies supportive of snow leopard conservation, prepare a species action plan for snow leopards in Kyhber Phaktunkhwa Province, and share results with stakeholders. (Countries: P)**

In AHM Project Year 2, based on the draft National Snow Leopard Conservation Strategy for Pakistan, WWF, UNDP and the GB and KP Wildlife Departments have begun jointly developing a GEF proposal titled "Integrated Snow Leopard Conservation in Gilgit-Baltistan and Khyber Pakhtunkhwa." Thus far, the preliminary GEF project identification form (PIF) has been approved by Pakistan's National GEF Committee and the full proposal is now being developed. The main objective of this proposal will be to conserve a viable population of snow leopards in northern Pakistan through a combination of integrated species protection, habitat management, and climate adaptation initiatives.

**Outputs/Results:**

- WWF, UNDP and the GB and KP Wildlife Departments are jointly developing a proposal titled "Integrated Snow Leopard Conservation in Gilgit-Baltistan and Khyber Pakhtunkwa" for GEF Funding.
- This proposal will seek to improve conservation of snow leopard through a combination of species protection, habitat management, and climate adaptation initiatives.
- Through this effort, cooperation between WWF, UNDP, and the GB and KP Wildlife Departments is being enhanced.

**Objective 2: Improve transnational collaboration on climate change adaptation and snow leopard conservation in Asia's high mountain landscapes.**

The approach to achieving the Asia High Mountains Project's regionally-focused Objective 2 is five part and involves striving to 1) build international cooperation for protection of Asia's high mountain landscapes and snow leopard conservation through the Global Snow Leopard Conservation Forum (GSLCF) and its soon-to-be-established international secretariat, 2) facilitate discussions on climate change and snow leopard conservation between individual range countries and at a regional scale, 3) update range-wide information on snow leopard trafficking and provide this information to national and regional wildlife law enforcement networks, 4) work to build momentum for a range-wide network for snow leopard conservation, and 5) eventually launch the beginnings of an "Alliance on Asia's High Mountain Landscapes" that will address critical issues beyond snow leopard conservation, such as climate change and water security. In Project Year 2, with all Climate Summit for a Living Himalaya (CSLH) activities still on indefinite hiatus since the move of the CSLH Secretariat from Bhutan to India during AHM Project Year 1, the AHM Project shifted resources originally intended for the CSLH to the GSLCF, which was held in Bishkek in October 2013. At this meeting the Bishkek declaration on snow leopard protection and the 12-nation Global Snow Leopard and Ecosystem Protection Program were both unanimously adopted laying the foundation for the first coordinated, range-wide effort on protection of snow leopards and their habitat. In AHM Project Year 2, good progress was also made in preparing the updated snow leopard trade report and in involving INTERPOL's Project Predator in snow leopard conservation efforts, particularly through inclusion of a snow leopard trade module in their wildlife trade law enforcement trainings. Furthermore, with respect to climate change and water resource issues in the snow leopard range areas of Asia, the WWF Climate Adaptation Team is currently overseeing creation of an interactive website to present key findings of earlier AHM Project reports on climate vulnerability and water provision in snow leopard range areas. Detailed descriptions of regional activities carried out under AHM Objective 2 in Project Year 2 follow.

## Regional Activities

**Sub-objective 2.1: Building cooperation through the Climate Summit for a Living Himalayas and its regional "Framework of Cooperation" for protection of Asia's high mountain landscapes and snow leopard conservation.**

**Activity 2.1.2: Conduct a review of climate change vulnerability in Himalaya Region to determine shared vulnerabilities and gaps in understanding, analyze glacial melt in the region, and inform policy discussion to aid regional governments in drafting response plans to glacial melt and climate change impacts on water security.**

**Note:** This project activity has been merged with project Activity 2.2.1 under project Sub-objective 2.2.

**Activity 2.1.3: Review research of regional glacial melt rates using research from University of Colorado, NASA, IRD's PAPRIKA, and ICIMOD, and analyze effects of regional black carbon emissions on glacial melt rates.**

**Note:** This project activity has been merged with project Activity 2.2.1 under project Sub-objective 2.2.

**Activity 2.1.4: Identify and review current domestic and regional policy initiatives to manage impacts of glacial melt, advances in headwater ecosystem management, and snow leopard conservation in the context of climate change.**

**Note:** This project activity has been merged with project Activity 2.2.1 under project Sub-objective 2.2.

**Activity 2.1.6: Develop special issue briefs for inter-governmental review meetings on efforts to manage downstream impacts on high mountain communities.**

In AHM Project Year 2, the WWF US Climate Adaptation Team, in consultation with leading snow leopard experts, prepared a peer-reviewed fact sheet titled "Climate change and the Snow Leopard – Vulnerabilities and adaptation strategies" that will be available online and distributed to Snow Leopard Network Members as well as to governmental and non-governmental participants of Global Snow Leopard Conservation Forum activities. The fact sheet features a concise look at possible impacts of climate change on snow leopards, their prey, and habitat and puts forth suggested climate adaptation-related actions to increase the resilience of snow leopards to climate change impacts.

Notably, with all activities of the Climate Summit for a Living Himalayas (CSLH) on indefinite hiatus since move of the CSLH secretariat from Bhutan to India in the summer of 2013, WWF is presently unable to directly support implementation of the CSLH road map that was adopted at the 2011 summit. While a re-organizational meeting of the summit countries (Bangladesh, Bhutan, India, and Nepal) was held at the time of the move in 2013, all offers of outside support for summit activities made by non-summit members were declined at this time. Therefore, preparation of special issue climate briefs for CSLH meetings has been postponed until such time as CSLH activities are resumed.

**Outputs/Results:**

- A fact sheet on climate change impacts on and climate adaptation strategies for snow leopards, their prey, and habitat is prepared.
- This fact sheet will increase awareness of pioneering WWF AHM Project efforts to mainstream climate adaptation concepts into snow leopard conservation activities amongst snow leopard conservation practitioners and other interested parties.

**Activity 2.1.7: Conduct Climate Summit for a Living Himalayas inter-governmental body annual meetings to support implementation of framework of cooperation.**

**Note:** With all Climate Summit for a Living Himalayas activities on indefinite hiatus, this activity has been indefinitely postponed until such time as CSLH activities are resumed under the newly relocated secretariat in New Delhi.

**Activity 2.1.8: Convene a regional meeting of Himalayan experts on snow leopard conservation and headwaters management.**

In AHM Project Year 2, the WWF AHM Project supported the WWF Living Himalaya Network Initiative in organizing a 2-day workshop titled "Regional Snow Leopard Workshop for the Living Himalayas-Eastern Himalayas." This workshop brought together WWF Staff, government partners, and other snow leopard experts from Bhutan, India, Nepal, and Pakistan to discuss the status of the snow leopard along the southern slopes of the Himalaya; current threats to the snow leopard, including habitat degradation and climate change; country snow leopard conservation strategies; and coordination between countries on these efforts. Workshop discussions led to writing of a revised WWF conservation strategy for Himalayan snow leopards titled "Priority Actions for Conservation of Snow Leopards in the Himalayan Region." This strategy sets forth priority landscapes and conservation interventions as well as identifying information gaps for snow leopard conservation along the southern Himalaya. 27 People (3 Women) participated in this workshop.

**Outputs/Results:**

- 27 People (3 Women) participated in this workshop which resulted in writing a revised region strategy for conservation of snow leopards along the south slope of the Himalaya from Pakistan to Northeast India.
- Increased coordination and awareness of regional snow leopard conservation work amongst conservation field workers was achieved.

**Sub-objective 2.2: Facilitate discussions on climate change and snow leopard conservation among the range countries.**

**Activity 2.2.1: Conduct a range wide review of climate change vulnerability, and the impact of climate change on glacier melt rates, the availability of water resources, ecosystems, snow leopard habitat, and downstream communities. Also analyze the effects of regional black carbon emissions on glacial melt rates and review current policy initiatives to manage the impacts of glacial meltoff.**

In AHM Project Year 2, the WWF US Climate Adaptation team collected peer review comments for the two regional climate reports started in AHM Project Year 1, namely *Assessing Community and Ecosystem Vulnerability to Climate Change and Glacial Melt in Asia's High Mountains* (produced under this activity) and *Maps of the Snow Leopard Range, Water Provision, and Climate Change* (produced under Activity 2.4.1, below). These comments were incorporated into both reports and these reports are currently being copy edited for a limited print run and for posting online in their entirety as downloadable pdf files. In addition, key findings of these reports will be further disseminated by means of an interactive website that is currently being developed together with relevant mapping information produced under Activity 2.4.1, below.

**Outputs/Results:**

- A report reviewing climate change impacts and vulnerability across the major mountain systems of the snow leopard's range has been finalized, and is now in the process of design and copy-editing for publishing online in pdf format in the autumn of 2014.
- Initial designs for an interactive mapping website disseminating the results of the report are being developed.

**Activity 2.2.2 Organize a technical meeting of regional experts on climate change and headwaters management to present and refine findings of range wide review, and discuss the intersection of climate change, water security, and snow leopard conservation.**

Although this meeting was originally planned for AHM Project Year 2 in Bhutan, to have been conducted in conjunction with a WWF US-led climate adaptation training in Thimphu, the regional aspect of this meeting had to be cancelled due to logistical problems. Instead, findings of the two AHM regional climate reports produced under activities 2.2.1 and 2.4.1 will be disseminated online and at a day of technical presentations to be given at the AHM Project-wide learning and sharing meeting for WWF Staff and government partners to be held in Project Year 3. Nevertheless, the WWF US Climate Adaptation team did lead a successful 3.5-day climate adaptation training for Bhutanese government and conservation workers in Thimphu, as discussed under AHM Bhutan Activity 1.2.4 above, which also served as a forum in Bhutan for disseminating major findings of the reports prepared under Activities 2.2.1 and 2.4.1.

**Activity 2.2.3: Promote dialogue and collaboration between Nepal, India, China and Bhutan for transboundary cooperation on snow leopard conservation, reducing illegal wildlife poaching and trade, and management of headwaters through annual meetings of government officials and local communities.**

In AHM Project Year 2, WWF participated in the "2nd Regional Consultation Workshop on Kangchenjunga Landscape Conservation and Development Initiative" held in Thimphu, Bhutan. This initiative seeks to build cooperation and coordination with respect to conservation and development of the southern Kangchenjunga Landscape, which covers eastern Nepal, Sikkim, and western Bhutan. Participants of this meeting were fairly high level representatives of the Governments of Bhutan, India, and Nepal as well as representatives of other conservation and development organizations, including ICIMOD, which was the principal organizer of the meeting and initiative. In his inaugural remark, Mr Krishna Prasad Acharya, Joint Secretary, Ministry of Forest and Soil Conservation, Government of Nepal, noted Nepal's long experience in implementing landscape-level conservation programs in three landscapes, namely the Kangchenjunga Conservation Area (KCA), Sacred Himalayan Landscape, and Kailash Sacred Landscape, the first two of which have been conducted in cooperation with WWF. He also shared the results of the WWF and government of Nepal's joint snow leopard collaring research conducted in the KCA, which has confirmed that snow leopards move across political boundaries between Nepal and Sikkim-India (Nepal AHM Activity 1.4.5). He added that these findings confirm that a landscape approach to conservation and development is not a choice but a necessity. This led to a later discussion on improving bilateral cooperation between Nepal and India on snow leopard conservation as informed by the incoming results of the snow leopard collaring project. 50 People (5 Women) participated in this 3-day meeting.

**Outputs/Results:**

- Results of the KCA snow leopard collaring activity (Nepal AHM Activity 1.4.5) have sparked dialogue between the governments of Nepal and India with respect to increasing transboundary cooperation on snow leopard conservation activities in the Kangchenjunga Landscape.

**Activity 2.2.4: Engage the Central Asian Interstate Commission on Sustainable Development to initiate a dialogue across the central Asian countries on snow leopard conservation in the face of climate change, and which feeds into revised national snow leopard conservation action plans.**

In AHM Project Year 2, a WWF representative participated in the annual ministerial level meeting of the Central Asia Interstate Commission on Sustainable Development (ICSD) held in Dunshanbe, Tajikistan. One topic of discussion was integration of climate change mitigation and adaptation activities into regional strategic development plans, species conservation action plans, and ecosystem restoration plans for the 5 Central Asia states, proposals which were later agreed upon by meeting participants. Another important decision made at the meeting was to support the initiative of UNEP and WWF on looking for funding for much needed revisions to the Regional Environmental Action Plan (REAP) for Central

Asia, the process of preparing which was first began in 2000. These revisions will seek to bring the REAP into alignment with other ongoing international environmental initiatives, such as the 2010 Convention of Biological Diversity (CBD) Aichi Targets and 2012 Rio+20 principles of sustainable development, with special attention being paid to climate change impact mitigation and adaptation. Revision of the REAP will also include integration of latest Green Development concepts into the plan and will propose new approaches for strengthening regional cooperation on REAP implementation. At this meeting, WWF also reiterated the need to incorporate climate change adaptation concepts into Central Asia Region snow leopard conservation activities.

**Outputs/Results:**

- Discussion continued on the need to incorporate climate change adaptation concepts into Central Asian development and conservation planning, particularly with respect to snow leopards.
- The ICSD agreed to support a UNEP-WWF initiative to revise the Central Asia REAP with respect to climate change impacts and international obligations under CBD, Rio+20, and other international agreements.

**Sub-Objective 2.3: Update range-wide information on snow leopard trafficking and provide trafficking information to enforcement efforts at the national and regional network levels.**

**Activity 2.3.1: Update information on commercial hunting and trade of snow leopards.**

In AHM Project Year 2, TRAFFIC continued to compile data for updating TRAFFIC's 2003 range-wide report on the trade in snow leopard skins and parts, titled "Fading Footprints." These efforts included distributing a snow leopard trade questionnaires and extensive networking at the October 2013 Global Snow Leopard Conservation Forum held in Bishkek; distribution of the snow leopard trade questionnaire to the entire global membership of the Snow Leopard Network, some 500 people involved in snow leopard research and conservation; and targeted requests to wildlife trade enforcement officials in the snow leopard range nations. Thus far, for over 300 records of snow leopard trade incidents have been compiled since the original publication of "Fading Footprints" in 2003. Preliminary results of TRAFFIC's snow leopard trade research were presented at two major events in AHM Project Year 2, namely at the Global Snow Leopard Conservation Forum in Bishkek in October 2013 and at the Global Snow Leopard and Ecosystem Protection Programme (GSLEP) training meeting held at Lake Issyk Kul in June 2014. Finally, due to only anecdotal information being available from Afghanistan, in September 2014 TRAFFIC conducted a rapid 5-day wildlife trade market survey in the Afghan cities of Kabul, Herat, and Mazar-e-Sharif, which revealed a thriving trade in snow leopard and common leopard skins in Afghanistan.

- Good progress was made on preparation of the second edition of TRAFFIC's snow leopard trade report, the first draft of which is now under internal review. The completed report is expected to be released in late autumn of 2014.
- A wildlife trade survey of three major cities in Afghanistan revealed a thriving trade in snow leopard and common leopard skins that will be detailed in the forthcoming TRAFFIC report.

**Activity 2.3.2: Develop an action-oriented set of recommendations for reducing illegal trade in snow leopard pelts and other products along the trade chain and inform government enforcement efforts.**

Although draft recommendations based on preliminary findings of the report discussed in Activity 2.3.1, above, are being compiled, these recommendations will only be released upon completion of the final report in autumn 2014. At present recommendations on addressing wildlife trade policy gaps, trade-related threats, and possible national and international law enforcement agency interventions are being developed in consultation with various partners and experts on wildlife trade in the snow leopard range nations. These recommendations will ultimately enhance the discussion on improving current efforts at landscape-level protection of snow leopards, anti-trafficking campaigns, and reducing demand for wildlife products in the snow leopard range nations and beyond. As discussed under Activity 2.3.1, presentation of preliminary findings of the snow leopard trade survey were presented at two major meetings of the snow leopard range states.

**Outputs/Results:**

- Progress has been made towards completion of a set of wildlife trade recommendations aimed at halting the illegal trade in snow leopards, which will be issued in autumn 2014 as part of the updated TRAFFIC snow leopard trade report.

**Activity 2.3.3: Incorporate recommendations into range-wide dialogues on snow leopard conservation, revision of the Snow Leopard Survival Strategy, national snow leopard conservation action plans, and regional trade initiatives.**

TRAFFIC has been working to incorporate recommendations on halting the illegal trade in snow leopards into the range-wide dialogue on this issue by participating in the Global Snow Leopard Conservation Forum process; by reviewing the new trade sections in the soon-to-be released revised Snow Leopard Survival Strategy (SLSS); and by presenting a snow leopard trade module in its wildlife law enforcement trainings in relevant snow leopard range states.

**Outputs/Results:**

- TRAFFIC is making currently make ongoing progress in engaging law enforcement officials and governments on halting the illegal trade in snow leopards, and will continue to participate in the Global Snow Leopard Conservation Forum process in this capacity.

**Activity 2.3.4: Partner and coordinate with INTERPOL through the USAID-funded Project Predator initiative to exchange relevant information.**

In AHM Project Year 2, TRAFFIC continued to coordinate with INTERPOL's Project Predator on snow leopard trade issues. This coordination included a thorough email discussion on planning the "Supporting National Actions against Illegal Trade" session held at the Issyk Kul GSLEP national focal points training workshop in Kyrgyzstan. This session was organized by INTERPOL with assistance from TRAFFIC. Although TRAFFIC requested data from INTERPOL on national snow leopard trade data, due to confidentiality protocols, INTERPOL was not able to provide this data to TRAFFIC. However, TRAFFIC does plan to continue cooperation with INTERPOL on a variety of activities, such as wildlife law enforcement trainings in the snow leopard range states to build momentum to curb illegal trade in snow leopards and their parts in these states.

**Outputs/Results:**

- In AHM Project Year 2, TRAFFIC continued coordination with INTERPOL on snow leopard trade issues, such as by assisting INTERPOL in arranging a session on improving wildlife trade enforcement at a meeting on GSLEP implementation for national focal points from the snow leopard range states.
- TRAFFIC will continue this dialogue in AHM Project Year 3, particularly concerning dissemination of findings of the snow leopard trade report being prepared under Activity 2.3.1, above.

**Activity 2.3.5: Inform actions of SAWEN to promote strengthened enforcement cooperation among SAWEN-member and neighboring countries.**

In AHM Project Year 2, TRAFFIC continued dialogue with SAWEN representatives on a wide variety of South Asia wildlife trade issues, particularly tigers, but every effort was made to include snow leopards in this dialogue as appropriate. After internal discussions at TRAFFIC-India, it was decided that engagement with China for combating the illegal trade in snow leopard parts will necessarily have to be conducted directly through SAWEN and/or TRAFFIC-China.

**Outputs/Results:**

- TRAFFIC continued its dialogue with SAWEN on a variety on South Asia-related wildlife trade issues, including snow leopards. However, TRAFFIC-India is presently deferring to SAWEN and TRAFFIC-China in taking the lead on developing bilateral cooperation between SAWEN and China with respect to combating the illegal trade in snow leopard parts.

**Sub-objective 2.4: Building momentum through a range-wide network for snow leopard conservation.**

**Activity 2.4.1: Conduct a range-wide snow leopard habitat climate vulnerability and grassland degradation analysis using GIS and remote sensing, and use this analysis to identify core snow leopard habitat, potential snow leopard habitat, and the impacts of grassland degradation on water supply.**

As discussed under Activity 2.2.1, above, in AHM Project Year 2 the report produced under this activity, *Maps of the Snow Leopard Range, Water Provision, and Climate Change*, was peer-reviewed, finalized, and is currently being copy-edited for printing and release. And, as also mentioned above, an interactive website to highlight key findings of the report, host a pdf download of the complete report, and present mapping data found in the report is currently being built. The finalized report is expected to be released in December 2014.

**Outputs/Results:**

- The map book prepared under this activity is currently being finalized for print and electronic release in December 2014.
- Key findings of the report and report map data will also be presented on an interactive website that is currently being built.

**Activity 2.4.2: Use range-wide analysis to identify core and potential snow leopard habitat, and impacts of grassland degradation on water supply.**

**Note:** This project activity was been merged with Activity 2.4.1, above.

**Activity 2.4.4: Review national snow leopard conservation action plans and the revised Snow Leopard Survival Strategy from a climate change adaptation perspective and update these documents to be climate smart.**

In AHM Project Year 2, the WWF-US Climate Adaptation Team reviewed the first draft of the revised Snow Leopard Survival Strategy (SLSS) to ensure that it is "climate-smart." This process involved highlighting the major impacts of climate change on the snow leopard range areas and the vulnerability of snow leopard to these impacts. Recommended actions to mitigate and adapt to these actions were also noted as were measures to monitor and study these impacts. The annotated draft was returned to the SLSS drafting committee with other comments for finalization.

**Outputs/Results:**

- The first draft of the revised SLSS was reviewed by the WWF US Climate Change Adaptation team and returned to the SLSS drafting committee with comments.
- The second draft of the SLSS was circulated for comments in September 2014 and the SLSS is expected to be finalized by the Snow Leopard Network drafting committee in December 2014.

**Activity 2.4.5: Support a small grants program for site-based and national activities through SLN's Snow Leopard Conservation Grant to support conservation programs across the snow leopard's range.**

In AHM Project Year 2, WWF and other donors provided support for the SLT-managed SLN Snow Leopard Conservation Grant Program (SLCGP). In January of 2014 the SLCGP awarded 7 small grants for snow leopard research totaling USD 55,215. The winning proposals were selected from a very competitive field of 21 applications. This year, the WWF AHM Project directly supported three awards totaling USD 33,000 in a newly established grant category for snow leopard research and conservation work that addresses climate change-related issues. These three winning proposals will investigate the impact of emerging diseases on snow leopards, wild prey, and livestock in southern Mongolia; model the response of snow leopard populations to threats from climate change in Kazakhstan; and examine the reoccupation by snow leopards and prey species of habitat recently exposed by glacial retreat and receding permanent snow lines in Nepal. USD 7000 that SLT originally budgeted for climate change category proposals in 2014 was unused and will be carried over to the 2015 small grant program. It is believed that, following promotion of this new grant category this year, there will be even more climate change related proposals next year. Work on all 7 grants is already underway and reporting on each grant project is due at the end of January, 2015. A complete list of 2014 SLCGP grant recipients is available here: http://www.snowleopardnetwork.org/sln/GrantReports.php

**Outputs/Results:**

- Three research small grants awarded in the new category of snow leopards and climate change.
- Research conducted under these grants will be some of the first research undertaken to directly assess various impacts climate change is having on snow leopards, their prey species, and habitat.
- It is anticipated that these early efforts will lead to further on-the-ground research on climate change impacts on biodiversity of the snow leopard range areas.

**Activity 2.4.6 Conduct a snow leopard study tour to SLT's Tost Uul Mongolia research base to share technology, knowledge, and best practices of snow leopard monitoring and conservation with the Himalayan countries (e.g. Bhutan, India, Nepal, and Pakistan)**

In AHM Project Year 2, WWF supported a wildlife field technician from Nepal's National Trust for Nature Conservation to visit the Snow Leopard Trust's Tost Uul Mountain Snow Leopard Research Base in southern Mongolia. During this exchange, the technician learned snow leopard capture techniques for the purpose of collaring snow leopards with satellite GPS tracking transmitters. Specific topics covered during this practical training included snare setting, use of snare alarm transmitter systems, immobilization of captured snow leopards, handling of immobilized snow leopards, standard data collection on immobilized snow leopards, and fitting of snow leopards with satellite GPS collars. Immediately after returning from Mongolia, the trained technician played a key role in the successful AHM Project snow leopard collaring activity in the Kangchenjunga Conservation Area (KCA) of Nepal, described under Activity 1.4.5 above, where he was responsible for immobilizing the captured snow leopard.

**Outputs/Results:**

- One Nepali wildlife technician trained on methods for capturing and GPS collaring snow leopards.
- The technician involved played a key role in the GPS collaring of a snow leopard in the Kangchenjunga Conservation area of Nepal, as described under Activity 1.4.5, above.

**<u>Sub-objective 2.5:</u> Launch the beginnings of the Alliance on Asia's High Mountain Landscapes.**

**Activity 2.5.1: Conduct a meeting between the Climate Summit for a Living Himalayas inter-governmental body and the inter-governmental Sustainable Development Commission in Central Asia to discuss common challenges, approaches and successes in headwater management, water security, community development and snow leopard conservation.**

**Note:** Although this activity was planned for Project Year 3, with all Climate Summit for a Living Himalayas (CSLH) activities now on indefinite hiatus, it now appears highly unlikely that this activity will take place. Should CSLH activities resume, the feasibility of conducting this activity will be reassessed.

**Activity 2.5.2: Launch the beginnings of an inter-governmental Alliance on Asia's High Mountain Landscapes.**

**Note:** This project activity is planned for Project Year 4, although it is already largely being filled by the Global Snow Leopard Conservation Forum (GSLCF) process, discussed under Activities 2.5.3 and 2.5.4, below.

**Activity 2.5.3: Provide support to the Global Snow Leopard Conservation Forum and its secretariat to develop a range-wide program for the conservation of snow leopards and their habitat.**

In AHM Project Year 2, WWF provided both travel and on-site support for holding of the Global Snow Leopard Conservation Forum in Bishkek, Kyrgyzstan. This support included organizing a three-day media tour from October 18-20, 2013 for journalists from 5 international and 15 national news outlets to visit the Sarychat-Ertash State Reserve, Kyrgyzstan's premier snow leopard reserve and an AHM Project site. WWF directly supported the forum by: 1) providing travel support for 4 Bhutanese and 2 Pakistani government delegates to attend as well as for 4 WWF delegates from the Nepal, Russia, and US offices; 2) paying for forum sign boards; 3) paying for forum stationary and supplies, and 4) paying for forum ground transportation. At the Global Snow Leopard Conservation Forum itself, WWF also organized the "The Land of the Snow Leopard" photo exhibition in the exhibition area of the main conference hall, afterwards moving the entire exhibition to Karakol (see Activity 1.1.3). WWF also organized a Kyrgyz felt handicrafts exhibit in the lobby of the conference hall (see Activity 1.3.9). The forum was held from October 21-23, 2013 and resulted in the unanimous adoption of the Bishkek Declaration on snow leopard conservation and also the Global Snow Leopard Ecosystem and Protection Plan (GSLEP) by the 12 snow leopard range states. Media Coverage of WWF snow leopard activities and staff members in the run-up to and during the Global Snow Leopard Conservation Forum from October 18-23, 2013 was extensive. As a follow up to the forum, WWF is currently working with GTI, SLT, GEF, UNDP, and other forum partners to support the creation of a post-forum secretariat for implementation of the GSLEP. In Project Year 2, this has involved working within the secretariat steering committee to design the secretariat structure and also

supporting the first-post forum meeting of the secretariat, which was a training on GSLEP implementation for national focal points from the 12 snow leopard range states (see Activity 2.5.4, below). In total, 178 People (40 Women), attended the Global Snow Leopard Conservation Forum in Bishkek.

**Outputs/Results:**

- WWF provided travel and on-site support for successful holding of the Global Snow Leopard Conservation Forum in Bishkek in October 2013, which was attended by high-level representatives of all 12 snow leopard range states as well as numerous other delegates. In total 178 People (40 Women) attended the forum.
- At the forum both the Bishkek Declaration on snow leopard conservation and the Global Snow Leopard and Ecosystem Protection Program (GSLEP) were unanimously adopted by all 12 snow leopard range states.
- The foundation was laid for creation of a Global Snow Leopard Conservation Forum secretariat to support countries in implementing the GSLEP.
- Given the participation of Kyrgyz President Almazbek Atambayev as host of the forum and the extensive media coverage of the forum, the profile of snow leopard and habitat conservation was raised throughout the species range and beyond.
- This event marked the first time the governments of all 12 snow leopard range nations came together in agreement on a unified range-wide plan for snow leopard conservation, which will also serve as a basis for establishing an alliance on the conservation of Asia's high mountain landscapes.

**Activity 2.5.4: Provide support for the 12-nation Global Snow Leopard Conservation Forum Secretariat to implement the Global Snow Leopard and Ecosystem Protection Program (GSLEP) and hold periodic meetings.**

In AHM Project Year 2, WWF provided both travel and on-site support for holding of the Global Snow Leopard and Ecosystem Protection Program (GSLEP): National Focal Points Action Planning, Leadership and Capacity Development Workshop at Lake Issyk Kul, Kyrgyzstan, the first Global Snow Leopard Conservation Forum (GSLCF) follow-up meeting. The purpose of this meeting was to train snow leopard range country national focal points and other interested snow leopard conservationists on developing institutional arrangements for GSLEP implementation; identifying 20 range-wide snow leopard landscapes for achieving the GSLEP's "Secure 20 by 2020" goal; and defining National Priority Activities (NPA), Global Priority Activities (GPA), and Key Performance Indicators (KPI) for GSLEP implementation. Topics covered during the workshop included priority snow leopard landscape selection, adaptive leadership, stakeholder mapping, illegal wildlife trade, snow leopard research and monitoring, strategic communications, transboundary cooperation, impact of large-scale infrastructure development on snow leopard habitat, and funding and organization of the GSLCF secretariat. Notably all snow leopard range states sent representatives to the workshop with the exception of China, which nevertheless sent its priority landscapes to the GSLCF advisory committee at a later date. In total, 59 People (18 Women) attended the workshop of which 45 People (12 Women) were trainees.

**Outputs/Results:**

- 45 People (12 Women) trained on snow leopard conservation issues and methods for implementation of GSLEP snow leopard conservation activities in their home countries.
- Over 20 priority snow leopard landscapes selected by the 12 snow leopard range states that will be focus areas for GSLEP implementation and serve as national models for snow leopard conservation.
- Discussions were held by the advisory committee of the GSLCF Secretariat on hiring secretariat staff and funding secretariat activities.

## III. MEASURES AND ADAPTIVE MANGEMENT

### a. Adaptive Management Measures Taken Based on Current Context

## Bhutan

In AHM Project Year 2 in Bhutan, AHM-sponsored large-scale snow leopard survey research work was largely completed in Wangchuck Centennial Park (WCP). Therefore in upcoming AHM Project Years, WWF's next large initiative in WCP will be to promote cooperation between WCP, the Ugyen Wangchuck Institute of Conservation and the Environment (UWICE), and the government of Bhutan's Watershed Management Division and Hydromet Services to embark on a systematic program of improved watershed management and hydrological monitoring in WCP, including development and implementation of a model integrated river basin management (IRBM) plan.

## India

In India in upcoming AHM Project Years, in combination with identification of key sites for intensive snow leopard conservation efforts, India will also prepare a comprehensive climate vulnerability assessment for the AHM Project focus area in Sikkim that will guide design of a climate adaptation strategy for the project region.

## Kyrgyzstan

The government of Kyrgyzstan has postponed the establishment of the new Khan Tengri National Park while it undertakes an intensive effort to build public support for the park's creation. This has caused a delay in conducting AHM activities to support set up of the park, including training of park rangers. Instead, WWF will continue to focus on conservation and community work in the Sarychat-Ertash State Reserve while also starting development of an integrated river basin management (IRBM) plan in the Chon Kyzyl Suu River basin. Another option under consideration is increasing cooperation with other protected areas neighboring the Sarychat-Ertash Reserve, which also have significant snow leopard and prey species populations.

## Mongolia

In Mongolia in upcoming AHM Project Years, WWF will shift from earlier snow leopard survey-focused work to conducting a climate vulnerability assessment, developing a climate adaptation strategy for western Mongolia, and implementing improved pasture management plans to increase resilience of grassland ecosystems to climate impacts and improve watershed management.

## Nepal

In the Kangchenjunga Conservation Area (KCA) of Nepal in upcoming AHM Project Years, WWF will continue to implement demonstration climate adaptation activities for both farmers and herders as guided by the 2012 WWF Tamoor River basin climate vulnerability assessment. WWF will also undertake preparation of an integrated river basin management (IRBM) plan in the KCA that will seek to improve water security, livelihood security of herders and farmers, and improve climate adaptation activities in the basin.

## Pakistan

In Pakistan in upcoming AHM Project Years, WWF will shift from a focus on community wildlife conservation work to developing climate vulnerability assessments and implementing demonstration climate adaptation actions in the project region. WWF will also work to develop a demonstration integrated river basin management (IRBM) plan for the region with a specific focus on improving water and livelihood security as well as mitigating impacts of climate change and the frequent natural disasters that occur in the project region.

## Regional

With the 4-nation Climate Summit for a Living Himlayas process now on indefinite hiatus as of the summer of 2013, WWF's single largest regional initiative in upcoming AHM Project Years will be providing support for the Global Snow Leopard Conservation Forum Secretariat. This work will focus on supporting the secretariat in its efforts to implement the Global Snow Leopard and Ecosystem Protection Program (GSLEP) that was unanimously adopted by all 12 snow leopard range states in 2013. While earlier, the World Bank Global Tiger Initiative (GTI) had taken the lead on organization and funding of snow leopard forum-related activities, this role will now devolve upon other partner organizations such as WWF, UNDP, GEF, the Snow Leopard Trust, and Snow Leopard Conservancy, among others. The roles of partner organizations are not currently defined, but will include following up on hiring of interim secretariat staff and holding of a snow leopard forum steering committee meeting to vote on final location and structure of the permanent secretariat. Once these two tasks are completed, partner roles in funding secretariat operations and events as well as actual on-the-ground snow leopard conservation activities in the 12 snow leopard range countries will be decided upon.

**b. Lessons Learned**

## Bhutan

- Improved planning is still be needed to reconcile differences between the annual government fiscal year deadline of June 30th for delivery of WCP project activities and the actual longer term AHM project implementation schedules.

## India

- In spite of extensive promotion and educational outreach concerning establishment of village recycling centers to better manage waste at ecotourism destinations, further work still needs to be done to change local behavior regarding trash disposal.
- Resignation of a staff member setback project conservation efforts in remote areas, so in the future it will be important for WWF to have more than one point of contact for research permits.

## Kyrgyzstan

- Due to delays in government establishment of the Khan Tengri National Park, it was learned that it is important to have alternative project sites and activities ready as backup options.
- Due to recent protests and government discussion on increasing the tax rate on or even nationalizing the Kumtor Gold Mine, large scale cooperation with Kumtor on conservation activities is not possible at this time, although cooperation on smaller activities still remains possible.

## Mongolia

- Recently established local protected areas in the AHM Project region of western Mongolia will require continued support to ensure their success, particularly with respect including these sites on ecotourism driving routes of the region so that some local residents receive tangible economic benefits from their creation.
- Locals trained as citizen scientists are continuing to play a vital role in both snow leopard research and conservation in the project region, and therefore there is a continued need to train herders at other project sites as citizen scientists.

## Nepal

- Training and mobilization of local youth to conduct scientific research and anti-poaching patrols is not only cost effective, but it also increases their sense of ownership and responsibility, thus contributing to sustained conservation efforts. Currently, citizen scientists in the Kangchenjunga Conservation Area (KCA) are independently conducting snow leopard camera trap and prey species surveys and providing their findings to WWF and the Department of National Parks and Wildlife Conservation. Snow leopard conservation committee members in the KCA also played a key role in the successful GPS snow leopard collaring activity in the KCA by doing advance monitoring of snow leopard activity in the KCA and selecting trapping sites.

## Pakistan

- Frequent monitoring visits and facilitation by the WWF project team members has enabled local communities to better understand the benefits of and increase their ownership in AHM Project conservation initiatives.
- From present and past experience, it has been learned that community conservation project work can only achieve true sustainability when local communities have their own financial resources for holding necessary meetings and activity implementation, such as provided to Rumboor Valley, KP under the Pakistan government's Protected Areas Fund, where an effective community-based wildlife protection system has been implemented.

## Regional

- The Global Snow Leopard Conservation Forum and secretariat are proving to be an effective forum for developing international cooperation on conservation of Asia's high mountain landscapes.
- There is still need to build the capacity of AHM project implementing staff and partners with respect to climate adaptation and this need will be addressed during a three-day climate adaptation training as part of an expanded AHM Project learning and sharing meeting to be held in January 2015.

## IV. Next Steps and Priorities

### Bhutan

In Bhutan in AHM Project Year 3, top priorities for WWF in WCP will be to start implementing delayed climate adaptation activities as well as to start integrated river basin management (IRBM) work on WCP's upper Kuri Chu and Nikka Chu Rivers as well as beginning support for UWICE's water resources program. In addition, WWF will continue analysis of earlier snow leopard survey work and present the government of Bhutan with suggestions for improving national-level snow leopard conservation efforts in Bhutan.

### India

In India in AHM Project Year 3, top priorities will be to complete a snow leopard camera trap survey that was delayed due to permitting problems and to conduct a climate vulnerability assessment for communities at project sites in the Khangchendzonga Biosphere Reserve and its buffer zone. Results of the camera trap survey will be used to develop a landscape-level snow leopard conservation plan for Sikkim while results of the vulnerability assessment will in turn be used to start development of climate adaptation strategies for key project communities.

### Kyrgyzstan

In Kyrgyzstan in AHM Project Year 3, top priorities will be completion of the project region climate vulnerability assessment started in Project Year 2 and starting development of an integrated river basin management plan for the Chong Kyzyl Suu River basin in Issyk Kul Province. A third priority will be launch of a demonstration pasture rotation system as one method for improving resilience of alpine grassland ecosystems to climate change.

### Mongolia

In Mongolia in AHM Project Year 3, top priorities will be to conduct a climate change vulnerability assessment for the project region that will guide development of climate adaptation strategies for AHM project sites. WWF will also proceed with a planned pasture rotation demonstration that will feature a trial return to collective herding amongst small family groups with adjoining pasture lands. In addition, another high priority will be providing much needed support to recently established local protected areas with respect to developing management plans and ecotourism activities. Notably, these local protected areas will serve as one effective means of building the resilience of grassland ecosystems to climate change impacts.

### Nepal

In Nepal in AHM Project Year 3, one top priority will be to develop an integrated river basin management plan for the Kangchenjunga Conservation Area (KCA) that promotes water and livelihood security as well as incorporating climate adaptation concepts. Other priority activities will include continuing with pasture management improvement work and continuing to promote direct participation of KCA residents in wildlife and other conservation activities.

## Pakistan

In Pakistan in AHM Project Year 3, top priorities will be to complete climate vulnerability assessments for projects sites and develop and start implementation of demonstration climate adaptation strategies and integrated river basin management (IRBM) plans for at least one site with community participation. An additional priority will be to continue to involve local residents in wildlife protection efforts, particularly as related to snow leopards and their prey species.

## Regional

Regional priorities in AHM Project Year 3 will be to support set up and launch of the Global Snow Leopard Conservation Forum working secretariat in Bishkek and launch of an interactive website for presentation of findings on the regional snow leopard range area climate vulnerability assessment and map book. Another regional priority will be having the WWF US Climate Adaptation Team provide support for improving all AHM project country climate vulnerability assessments and climate adaptation strategies.

# V. ANNEXES

## **Annex 1:** AHM Project Year 2 Activity Timeline

**Table A1.1.** Bhutan

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| Activity 1.2.1 | 2014 | Kurtoe Geog, WCP | Demonstration springshed restoration climate adaptation activity. | All preparations made to carry out springshed restoration work in autumn 2014. |
| Activity 1.2.2<br><br>**Note this Activity was conducted at the end of AHM Project Year 1, but not reported until Project Year 2.** | September 27-28, 2013 | Kurtoe Geog, WCP | Farmer's School for local small farmers in WCP. | 60 People (35 Women) Trained |
| Activity 1.2.4 | May 19-22, 2014 (3.5 days) | Thimphu | WWF US-led Climate Change Adaptation Workshop for Government and NGO workers. | 40 People (16 women) Trained |
| Activity 1.2.5A | November 7-8, 2013 | Bumthang | Introduction to Weather Data Management Workshop for WCP Staff. | 13 People (1 Woman) Trained |
| Activity 1.2.5B | June 7-20, 2014 | Tapgang Village, Kutoe Geog, Eastern Range, WCP | Installation of a second Automatic Weather Station (AWS) in WCP | 1 AWS installed in eastern WCP |
| Activity 1.2.5C | June 6-July 5, 2014 | Boulder, Colorado | Exchange visit by a Bhutan Watershed Management Division Forest Officer to the University of Colorado Mountain Research Station near Boulder | Forest officer was exposed to high level methods of water resources monitoring, research, and management and will promote upgrading of these practices in Bhutan. |
| Activity 1.3.1 | June 28-29, 2014 | Nasiphel, WCP | Snow leopard conservation awareness training for herders residing in WCP. | 30 People (9 Women) Trained |
| Activity 1.3.2 | Jun 29, 2014 | Nasiphel, WCP | Snow Leopard Conservation Committee (SLCC) established to reduce human-wildlife conflict, conduct anti- | 1 SLCC established in WCP. |

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| | | | poaching work, and monitor snow leopards and their prey. | |
| Activity 1.3.4 | March 17-26, 2014 | KCA Nepal | 10-day Exchange for rangers from WCP, Bhutan to the Nepal KCA to meet with KCA Snow Leopard Conservation Committee Members (SLCC). | 8 People (All Men) trained on SLCC activities and benefits as well as on trekking ecotourism. |
| Activity 1.3.10 | February 3-4, 2014 | Chhokhor Geog, WCP | Production, use, and purpose of biomass briquettes as an alternative fuel to wood cutting. | 35 People (7 Women) Trained |
| Activity 1.3.11 | April 23-30, 2014 | Sikkim | Ecotourism study tour exchange for WCP homestay operators and park staff to learn from the successful homestay program in Sikkim's Khangchendzonga Biosphere reserve. | 10 People (2 Women) Trained (Note: 2 Men were WCP staff members, the remaining 8 participants were homestay operators in WCP) |
| Activity 1.4.1A | April 8-21, 2014<br>July 2014 | EasternWCP | Third and final part of the 2012-2014 WCP snow leopard sign, camera trap and prey species survey conducted. | 1 report produced |
| Activity 1.4.1B | 1. August 24-November 14, 2014<br><br>2. March 2014 | Central WCP | 1. Asiatic black bear camera trap survey conducted.<br><br>2. Human-wildlife conflict survey conducted. | 2 reports produced |
| Activity 1.4.6 | May 5-6, 2014 | WCP, Bumthang | Snow Leopard Camera Trap Monitoring Training | 24 People (3 Women) Trained<br><br>11 Hours Total<br>24 x 8.5 hours<br>20 x 2.5 hours |
| Activity 1.4.13<br><br>**Note this Activity was conducted at the end of AHM Project Year 1, but not reported until Project Year 2.** | September 9-17, 2013 | UWICE, Bumthang | GIS training for WCP staff members. | 16 People (1 Woman) Trained |

**Table A1.2.** India

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| 1.1.10 | July 22-27, 2014 | Lachung Village, North Sikkim | Traditional natural resource use survey | 84 People (34 Women) Participated |
| 1.2.4 | August 19-24, 2014 | Lachung and Hee Gyathang Villages, North Sikkim; Jaubari and Phong Villages, South Sikkim; Sajong Village, East Sikkim; Hee Gaon Village, West Sikkim. | Farmer climate impact focus group and adaptation awareness raising discussions | 81 People (36 Women) Participated |
| 1.3.1A | December 19, 2013 | Lachen Village, North Sikkim | WWF-Lachen Village Council annual AHM participatory project work plan meeting | 33 People (All Men) Participated |
| 1.3.1B | June 5-8, 2014 | Lachen Village, North Sikkim | 3-Day nature camp to mark World Environment Day | 51 Children (21 Girls) Participated. |
| 1.3.2 | May 2014 | Lachen area | Feral dog count | 1 2-Day survey conducted |
| 1.3.10A | February 1-2, 2014 | Lachen Village, North Sikkim | 1. Lachen Village World Wetlands Day Festival<br><br>2. Bio-briquette making demonstration | 1. 200 People (~85 Women) Participated.<br><br>2. 82 People (8 women) Trained. |
| 1.3.10B | June 5, 2014 | Lachen Village, North Sikkim | Natural resource management group discussion and | 25 People (9 Women) Trained. |
| 1.3.10C | June 10-11, 2014 | Yuksam Villages, West Sikkim | Bio-briquette making training. | 17 People (11 Women) Trained. |
| 1.3.10D | Summer 2014 | Sangkhola and Yuksam Villages, West Sikkim | Demonstration solar hot water heater distribution. | 9 demonstration households selected |
| 1.3.11A | 1. November 12-13, 2014,<br><br>2. February 2, 2014 | Lachen Village, North Sikkim | 1. Trash recycling awareness campaign<br><br>2. Recycling center launch | 1 village recycling center established |
| 1.3.11B | 1. June 27-28, 2014<br><br>2. September 1 – 15, 2014<br><br>3. September 8-11, 2014. | 1. Uttarey Village, West Sikkim<br><br>2. Gangtok, East Sikkim<br><br>3. Dzongu Village, North Sikkim | 1. Uttarey Homestay Survey<br><br>2. Homestay Owners' Training Programme<br><br>3. Exchange Program for Uttary homestay operators | 1. 1 survey report completed.<br><br>2. 11 People (1 Women) Trained.<br><br>3. 10 People (All Men) |

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| | | | to Dzongu Village | |
| 1.3.11C | August 8, 2014 | Gangtok, East Sikkim | Zero Waste Himalaya Day Trash management exhibition | ~300 People (~125 Women) Participated |
| 1.3.11D | August 30, 2014 | Gangtok, East Sikkim | Workshop Strengthening Sustainable Tourism in Sikkim | 47 People (11 Women) |
| 1.3.11E | August-September, 2014 | Yuksam, Uttarey, Rey Mindu, and Dzongu Villages, Sikkim | Re-launch of the Sikkim Himalayan Homestay website | Initial information and photos gathered from 4 villages with which to redo the website. |
| 1.4.1 | June 9-11, 2014 | North Sikkim | Designed and made site selections for a snow leopard camera trap survey planned for Autumn 2014. | 4 People (All Men) Participated |
| 1.4.6A | January 20-25, 2014 | Barsey Rhododendron Sanctuary in West Sikkim | Wildlife and habitat field survey techniques training. | 45 People (6 Women) Trained. |
| 1.4.6B | March 3-12, 2014 and April 4-13, 2014 | Khangchendzonga National Park and Khangchendzonga Biopshere Reserve, Sikkim | Community wildlife monitoring and anti-poaching patrols | 9 Participants (All Men) Trained. |
| 1.4.6C | July 9-13, 2014 | Thimphu and Bumtang, Bhutan | Protected area study tour to Bhutan for Sikkim Himal Rakshaks and Eco-Dvelopment Committee members | 9 Participants (All Men) Trained. |

**Table A1.3.** Kyrgyzstan

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| Activity 1.1.2 | 1. February 8, 2014<br><br>2. February 14, 2014 | 1. Engilchek<br><br>2. Akshyrak | Climate Change Challenges and Livelihood Adaptation Workshop | 1. 25 People (11 Women) Trained.<br><br>2. 18 People (5 Women) Trained. |
| 1.1.3A | November 28-December 18, 2013 | Karakol, Issyk Kul | Sarychat-Ertash State Reserve photo exhibition | 30 People (~15 Women) attended the exhibition opening. |
| 1.1.3B | April 22, 2014 | Akshyrak | Village and Sarychat-Ertash State Reserve Earth Day Celebration | 87 People (35 Women) Participated. |
| 1.1.3C | May 22, 2014 | Engilchek Village | Engilchek Village Snow Leopard Festival | 77 People (40 Women) Participated. |
| 1.1.3D | July 15-25, 2014 | Lake Issyk Kul | Children's Summer Eco-camp | 40 People (26 Women) Participated |
| 1.1.6 | July 2014 | Issyk Kul Province | Cooperation with Kumtor Gold Mine | WWF worked with Kumtor, the Sarychat-Ertash Reserve, and the Sarychat NGO to successfully sponsor the Children's Summer Eco-Camp in Activity 1.1.3D, above. |
| 1.2.1 | Feb. 2014-Present | Bishkek, Issyk Kul Province, WWF Moscow | Climate Vulnerability Assessment | Good progress made on preparing a Climate VA for the Project Area of eastern Kyrgyzstan. |
| 1.2.3A | October 2014 | Sarychat Ertash State Reserve | Yak-raising Climate Adaptation Activity | Yak herd continues to grow in size and will be put under care of local herders in Project Year 3. |
| 1.2.3B | Summer 2014 | Sarychat-Ertash State Reserve | Demonstration yak herd pasture rotation plan and pasture leasing | Pasture rotation plan developed and pastures leased. |
| 1.3.9A | October 22-23, 2014 | Bishkek | Global Snow Leopard Conservation Forum Felt Crafts Exhibition | Awareness raised among 178 People (40 Women), who attended the Global Snow Leopard Forum, about the WWF-SLT crafts program. |

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| 1.3.9B | 1. March 29-31, 2014<br><br>2. July 18-August 3, 2014 | 1. Barskoon, Issyk Kul<br><br>2. Cholpon-Ata, Issyk Kul | 1. Felt Crafts Product Training<br><br>2. Support for Participation in the annual Oimo Central Asia Crafts Festival | 1. 12 People Trained (All Women)<br><br>2. 2 People (Both Women) supported to attend the Oimo Festival |
| 1.3.9C | 1. June 12, 2014<br><br>2. June 15, 2014 | 1. Akshyrak Village<br><br>2. Engilchek Village | Local Development Fund Planning Meetings | 1. 28 People (16 Women)<br>2. 20 People (11 Women)<br>Participated |
| 1.3.9D | August 3-5, 2014 | Toguz Bulak Village, Tyup Region, Issyk Kul | Local Development Fund Study Tour | 15 People (13 Women) Trained. |
| 1.3.9E | 1. September 26-27, 2014<br><br>2. September 28-29, 2014 | 1. Akshyrak Village<br><br>2. Engilchek Village | Local Development Fund establishment meetings. | 1. 20 People (11 Women) Participated<br><br>2. 26 People (12 Women) Participated. |
| 1.4.4A | February 13, 2014 | Akshyrak Village | Camera Trap Training | 11 People (All Men) Trained |
| 1.4.4B | Spring/Summer 2014 | Sarychat-Ertash State Reserve | Snow leopard camera trap and prey species surveys. | 2 surveys completed |
| 1.4.9A | 1. Spring 2014<br><br>2. June 18, 2014 | Koenduu Ranger Station, Sarychat-Ertash State Reserve | 1. Ranger uniform and binocular donations<br><br>2. Installation of a ranger station wind generator | 22 People (2 Women) benefit from uniform and wind generator donations. |
| 1.4.9B | Spring/Summer 2014 | Issyk Kul Province | Meetings and discussions on recent legislative changes increasing penalties for illegal hunting | 37 People (~15 women) Trained |
| 1.4.10 | November 2013 | Engilchek Village, Issyk Kul | Community-based anti-poaching team established | 5 People (All Men) Trained. |
| 1.4.11A | October 24, 2013 | Bishkek, Kyrgyzstan | "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains" GEF Project launch workshop | 42 People (10 Women) Participated |
| 1.4.11B | March 3, 2014 | Bishkek | UNDP Khan Tengri National Park workshop | 35 People (10 Women) Participated |

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| 1.4.11C | June 2-4, 2014 | Cholpon-Ata, Issyk Kul | Management Effectiveness tracking tool METT Training | 31 People (5 Women) Trained |
| 1.4.11D | Winter-Spring 2014 | Bishkek and Issyk Kul | Legal analysis of land management regulations relevant to establishment of the new Khan Tengri National Park | 1 Draft Report on findings produced |
| 1.4.12 | | | WWF-UNDP Habitat Management Activities | POSTPONED until after establishment of Khan Tengri National Park |

**Table A1.4.** Mongolia

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| 1.1.4 | Ongoing during 2014 | WWF Ulaanbaatar | Data analysis and report writing for the AHM Year 1 human-wildlife conflict social survey and preparation of a human-wildlife conflict mitigation strategy based on survey findings. | Survey report and mitigation strategy |
| 1.2.1 | Summer 2014, Ongoing | Ulaanbaatar and western Mongolia | Climate Vulnerability Assessment for ASER AHM Project sites | TOR signed between WWF and the MAS Institute of Biology on jointly conducting a climate vulnerability assessment for the Mongolian Altai Region |
| 1.2.3 | Postponed until AHM Project Year 3. | Ulaanbaatar and western Mongolia | Implementation of group herding-based pasture management plan | Pasture management plan and implementation at demonstration sites |
| 1.3.1 | July 16-17, 2014 | Jargalant Khairkhan | Snow leopard-based ecotourism training for residents of AHM Project sites | 26 People (15 Women) Trained |
| 1.3.3 | Ongoing | Ulaanbaatar; Turgen Soum, Uvs Aimag, | Replacement of the Buy Goat Program with a sustainably funded community human-wildlife conflict compensation scheme. | Buy Goat program discontinued and review of successful sustainably-funded human-snow leopard conflict compensation schemes is ongoing. |
| 1.3.4 | Postponed until AHM Project Year 3. | AHM ASER project sites | Campaign to raise awareness of sustainable pasture management, human-wildlife conflict mitigation, and participatory snow leopard conservation | 1 Campaign |
| 1.3.5 | Postponed until AHM Project Year 3. | AHM ASER project sites | Value-added livestock products training | 1 Training |
| 1.4.1 | Sept. 2013-June 2014 | Jargalant Khairkhan Mountain | Snow leopard camera trap survey and SLIMS manual distribution | 1. 1 Camera Trap Survey Report Prepared<br><br>2. 5 People (1 Woman) Trained to conduct camera trap |

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| | | | | surveys.<br><br>3. 300 Mongolian language SLIMS manuals distributed |
| 1.4.3 | Winter 2014 | Ulaanbaatar and ASER | Preparation of a revised snow leopard distribution map for western Mongolia | 1 snow leopard distribution map produced |
| Activity 1.4.6 | 1. January 20-22 and March 12, 2014<br><br>2. November 28, 2013 and April 11-24, 2014<br><br>3. July 30, 2014<br><br>4) July 1-7 and - August 8-12, 2014 | 1. Baatar Khairkhan Mountain<br><br>2. Jargalant Khairkhan Mountain<br><br>3. Khukh Serkh Mountain<br><br>4. Bumbat Khairkhan Mountain | Snow Leopard camera trap, sign, and prey species surveys and citizen scientist trainings. | 1. 9 People (1 Woman) Trained<br><br>2. 11 People (1 Woman) Trained (Repeat Trainees: 5 Men, 1 Woman)<br><br>3) 4 People (All Men) Trained (2 Repeat Trainees)<br><br>4) 4 People (All Men) Trained (2 Repeat Trainees)<br><br>Total: 18 People (1 Woman) Trained |
| Activity 1.4.13 | 1. June 30-July 2, 2014<br><br>2. June 30-July 2 2014<br><br>3. Sept. 19-20, 2014<br><br>4. September 10, 2014 | 1. Tolbo Soum, Bayan Ulgii Aimag<br><br>2. Sair Khairkhan Local Protected Area, Tolbo Soum, Bayan Ulgii Aimag<br><br>3. Khajingiin Nuruu Local Protected Area, Tsetseg Soum, Khovd Aimag<br><br>4. Sair Khairkhan and Khajingiin Nuruu Local Protected Areas | 1. Meeting to improve snow leopard conservation and ecotourism development in Tolboo Soum.<br><br>2. Preliminary socio-economic survey of Sair Khairkhan Local Protected Area<br><br>3. Preliminary socio-economic survey of Khajingiin Nuruu Local Protected Area<br><br>4. MoUs signed to assist set up of local protected areas | 1. Meeting Guidelines<br><br>2. Draft socio-economic survey report<br><br>3. Draft socio-economic survey report<br><br>4. Two MoUs signed between WWF and Tolboo Soum and Tsetseg Soum to cooperate on conservation and ecotourism activities at Sair Khairkhan and Khajingiin Nuruu Local Protected Areas. |

## Table A1.5. Nepal

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| 1.1.1A | 1. September 3-5, 2014<br>2. September 6-8, 2014 | 1. Yamphudin VDC<br>2. Yamphudin VDC | Good governance and gender and social inclusion trainings for CFUG members. | 1. 26 People (22 Women) Trained.<br>2. 15 People (6 Women) Trained |
| 1.1.1B | 1. August 29-30, 2014<br>2. September 3-4, 2014<br>3. September 3-4, 2014<br>4. September 8-9, 2014<br>5. September 8-9, 2014<br>6. September 10-11, 2014 | 1. Lelep VDC-Village 3<br>2. LelepVDC-Village 6<br>3. Lelep VDC-Village 5<br>4. Tapethok VDC-Village 8 (Helok Village)<br>5. Lelep VDC-Village 2 (Phembu Gaun Village)<br>6. Tapethok VDC-Village 2 | Public Hearing and Public Auditing (PHPA) meetings for local community-based organizations (CBO). | 1. 21 People (9 Women) Participated.<br>2. 23 People (14 Women) Participated.<br>3. 21 People (13 Women) Participated.<br>4. 23 People (16 Women) Participated.<br>5. 22 People (13 Women) Participated.<br>6. 43 People (25 Women) Participated. |
| 1.1.8 | 1. Feb. 24-26, 2014<br>2. Feb. 26-28, 2014 | 1. Yamphudin VDC, KCA<br>2. Olangchung Gola, VDC, KCA | Conduct pro-poor planning training for local community group members and mobilize them to prepare livelihood improvement plans | 1. 21 People (12 Women) Trained.<br>2. 24 People (9 Women) Trained. |
| 1.1.9 | 1. Aug. 31-Sept. 2, 2014<br>2. Sept. 5-7, 2014<br>3. Sept. 5-7, 2014 | 1. Lelep VDC-Lungthung Village<br>2. Lelep VDC-Phembu Gaun Village<br>3. Tapethok VDC-Helok Village | Leadership skills training for traditionally excluded community members | 1. 25 People (15 Women) Trained.<br>2. 23 People (13 Women) Trained.<br>3. 22 People (16 Women) Trained. |
| 1.2.2 | Activity Start Dates:<br>1. July 2014<br>2. June 2014<br>3. June 2014 | <br>1. Kalikhola VDC<br>2. Lelep VDC<br>3. Lelep, Olanchung Gola, Tapethok, and Yamphudin | Climate adaptation activities for agriculture:<br>1. Maize crops<br>2. Horticulture<br>3. Greenhouse vegetable gardening | Activity Beneficiary Counts<br>1.165 People (85Women)<br>2. 126 People (64 Women)<br>3. 341 People (174 Women) |

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| | 4. June 2014 | 4. Lelep VDC-Village | 4. Cardamom farming | 4. 137 People (70Women) |
| | 5. June 2014 | 5. Tapethok VDC-Village 7 (Takmawa Village) | 5. Water source conservation and irrigation canal | 5. 66 People (34 Women) |
| | 6. Spring 2014, Ongoing | 6. Tapethok VDC-Village 2 | 6. Adaptive irrigation | 6. 149 People (76 Women) |
| | 7. June 2014 | 7. Yamphudin VDC-Village 2 (Bhotegaon Village) | 7. Bee keeping | 7. 66 People (34 Women) |
| | 8. Spring 2014, Ongoing | 8. Yamphudin VDC-Village 2 (Bhotegaon Village) | 8. Adaptive irrigation | 8. 296 People (151 Women) |
| | 9. June 2014 | 9. Yamphudin VDC-Thungim Village | 9. Bee keeping | 9. 66 People (34 Women) |
| 1.2.3 | | | Improved pasture management activities: | Activity Beneficiary Counts |
| | 1. October 2013 | 1. Lelep VDC-Lungbasangba Village | 1. Wooden bridge on access trail | 1. 27 People (14 Women) |
| | 2. October 2013 | 2. Lelep VDC-Lapuk Village | 2. Wooden bridge on access trail | 2. 104 People (53 Women) |
| | 3. October 2013 | 3. Olangchung Gola VDC-Nup Village | 3. Wooden bridge on access trail | 3. 61 People (31 Women) |
| | 4. December 2013-January 2014 | 4. Lelep VDC-Murimla Village | 4. Water source management | 4. 22 People (11 Women) |
| | 5. December 2013-January 2014 | 5. Lelep VDC-Chumgo | 5. Water source management | 5. 6 People (3 Women) |
| | 6. December 2013-January 2014 | 6. Kalikhola VDC-Lokumba Deurali Village | 6. Water source management | 6. 22 People (11 Women) |
| | 7. December 2013-January 2014 | 7. Olangchung Gola VDC-Magwa Sukepani Village | 7. Water source management | 7. 11 People (6 Women) |
| | 8. December 2013-January 2014 | 8. Yamphudin VDC-Tseram Village | 8. Water source management | 8. 16 People (8 Women) |
| | 9. March-April 2014 | 9. Olangchung Gola VDC-Thomadesa Village | 9. Water source management | 9. 49 People (25 Women) |
| | 10. March-April 2014 | 10. Yamphudin VDC-Ramjer Village | 10. Water source management | 10. 11 People (6 Women) |

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| | 11. March-April 2014<br><br>12. March-April 2014 | 11. Tapethok VDC-Yangmun, Mulchok Village<br><br>12. Yamhudin VDC-Dadachok Village | 11. Water source management<br><br>12. Trail improvement | 11. 22 People (11 Women)<br><br>12. 225 People (115 Women) |
| 1.3.1 | 1. October 2013 and June 2014<br><br>2. October 2013 and June 2014<br><br>3. October 2013 and June 2014<br><br>4. October 2013 and June 2014<br><br>5. October 2013 and June 2014<br><br>6. October 2013 and June 2014<br><br>7. October 2013 and June 2014<br><br>8. October 2013 and June 2014 | 1. Lelep VDC-Villages 7, 8<br><br>2. Lelep VDC-Villages 8, 9<br><br>3. Lelep VDC-Villages 1-6<br><br>4. Tapethok VDC-Village 6-9<br><br>5. Tapethok VDC-Villages1-5<br><br>6. Olangchung Gola VDC-Villages 1-8<br><br>7. Yamphudin VDC-Villages 6-9<br><br>8. Yamphudin VDC-Villages 1-5 | KCA community-based anti-poaching operations (CBAPO) to control poaching and illegal trade in wildlife and non-timber forest products (NTFP) | Team participant counts<br><br>1. 13 (All Men)<br><br>2. 9 (All Men)<br><br>3. 13 (All Men)<br><br>4. 9 (All Men)<br><br>5. 11 (All Men)<br><br>6. 7 (All Men)<br><br>7. 15 (All Men)<br><br>8. 15 (All Men) |
| 1.3.2 | 2014 | KCA and Kathmandu | Human-wildlife conflict report and mitigation strategy | 1 HWC report produced<br><br>1 HWC conflict mitigation strategy produced |
| 1.3.6 | 2014, Ongoing | Yamphudin VDC | Sustainable NTFP Harvest Plan | 1 draft sustainable NTFP harvest plan prepared, review ongoing |
| 1.3.7 | August 2014 | Yamphudin VDC | NTFP enterprise and conservation cooperatives | 1 NTFP enterprise currently being established |
| 1.3.10 | 1. April-June, 2014<br><br>2. April-June, 2014<br><br>3. April-June, 2014 | 1. Ghunsa VDC-Sekathum Ghunsa CAUC<br><br>2. Yamphudin VDC-Pathivara CAUC<br><br>3. Yamphudin VDC- | Improved cook stove distribution | Activity Beneficiary Counts<br><br>1. 302 People (154 Women) from 55 Households<br><br>2. 165 People (84 Women) from 30 Households<br><br>3. 165 People (84 |

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| | | Kangchenjunga CAUC | | Women) from 30 Households |
| | 4. April-June, 2014 | 4. Olangchung Gola VDC-Ghanglung CAUC | | 4. 55 People (28 Women) from 10 Households |
| | 5. April-June, 2014 | 5. Tapethok VDC-Bihani CAUC | | 5. 247 People (126 Women) from 45 Households |
| 1.3.11 | | | Community-based Ecotourism Activities | |
| | 1. January-March, 2014 | 1. Ghunsa VDC | 1. Trekking trail improvements | 1. 124 households in the KCA villages of Ghunsa, Phale and Gyabla Villages are benefiting as are tourists visiting the KCA |
| | 2A. Nov. 4, 2013<br>2B. Nov. 5, 2014 | 2A. Chhiruwa Village<br>2B. Tapethok Village | 2. Trash Cleanup | 2. 15 People (6 Women) Participated. |
| | 3. January-March 2014 | 3. Yamphudin VDC | 3. Information Center Upgrade | 3.1 KCA village information center improved. |
| 1.4.1 | 2014 | KCA and Kathmandu | Snow Leopard Monitoring Protocol | 1 draft snow leopard monitoring protocol prepared |
| 1.4.5 | 1. November 7, 2013 – Dec. 12, 2013<br>2. April 12 – May 17, 2014 | Ghunsa VDC | Snow leopard collaring expeditions | 1 snow leopard collared |
| 1.4.6 | 1. May 7-June 3, 2014 | 1. Olangchung Gola VDC | Citizen scientist training and snow leopard monitoring surveys. | 1. 7 People (All Men) Trained. |
| | 2. June 10-11, 2014 | 2. Yangma VDC | | 2. 8 People (All Men) Trained. |
| | 3. May 6-8, 2014 | 3. Ghunsa VDC | | 3. 7 People (All Men) Trained. |
| | 4. August 15-November 15, 2013 and June 9-10, 2014 | 4. Yamphudin VDC | | 4. 5 People (All Men) Trained. |
| 1.4.13 | 2014 | Taplejung/Kathmandu | Technical and financial support for the KCAMC | All 1257 Households in the entire KCA are considered to be beneficiaries. |

**Table A1.6.** Pakistan

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| 1.1.5A | March 3, 2014 | Chitral Town, KP | World Wildlife Day wildlife and conservation awareness-raising lecture event for university students, university instructors, and government conservation workers | 27 People (13 Women) Participated |
| 1.1.5B | March 22, 2014 | Hoper Valley, GB | World Water Day conservation water, climate change, and wildlife awareness raising event for school students. | 160 People (90 women) Participated |
| 1.1.5C | June 5, 2014 | Naltar Valley, GB | World Environment Day awareness raising event about climate change impacts on biodiversity and wildlife for school students and teachers. | 150 People (~50 Women) Participated |
| 1.1.5D | August 16-21, 2014 | Hoper Valley, GB | Hoper Valley Cultural Revival Festival Conservation Awareness Campaign | 7000 People (~2000 Women) Participated |
| 1.1.5E | September 2014 | Islamabad, Pakistan | Article on WWF snow leopard and large mountain mammal conservation work in GB appears in Pakistan Broadcasting Corporation's Ahang magazine | 1 article on AHM snow leopard and large mammal conservation work appears in Ahang magazine |
| 1.1.10A | February 25-27, 2014 | Gilgit Town, GB | Community management skills training for participants from the HCDO and neighboring villages | 19 People (All Men) Trained |
| 1.1.10B | 1. November 18, 2013<br><br>2. March 14, 2014 | Hoper Valley, GB | HCDO quarterly "progress and review" meetings | 1. 35 People (All Men) Participated<br><br>2. 47 People (All Men) Participated |
| 1.1.10C | December 5, 2013 | Laspur Valley, | Shandur Area | 1 VCC office |

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| | | Chitral District, KP | Development, Conservation, and Welfare Organization (SADCWO) office opened | formally opened |
| 1.2.1 | July-September 2014 | Hoper Valley, GB | Hoper Valley Climate Vulnerability Assessment | 1 preliminary climate vulnerability assessment report prepared. |
| 1.2.3A | 1. October 24, 2013 (Focus Group Discussion)<br><br>2. October 31, 2013 (Household Meetings) | Rumboor Valley, Chitral, KP | Rumboor Valley Participatory Sustainable Pasture Management Plan Development | 1. 22 People (9 Women) Participated<br><br>2. 14 People (4 Women) Participated |
| 1.2.3B | December 27, 2013 | Chitral Town, KP | One day training on better livestock and pasture management techniques | 24 People (6 Women) Trained |
| 1.2.3C | May 2014 | Hoper Valley, GB; Laspur Valley, KP; Rumboor Valley, KP | Distribution of alfalfa seed to raise fodder crops to reduce livestock grazing pressure in winter | 3 ha of marginal and degraded agricultural land in Rumboor and 4 ha in Laspur planted with alfalfa |
| 1.2.3D | 1. March 2014<br><br>2. April-May 2014 | 1. Laspur Valley, KP<br><br>2. Hoper Valley, GB | Planting of multipurpose trees to halt land degradation and as a climate adaptation strategy | 1. 11.3 ha of land planted with 7000 multipurpose tree species<br><br>2. 5 ha of land planted with 10,000 multipurpose tree species |
| 1.2.3E | Feb. 27 to March 27, 2014 | 1. Rumboor Valley, KP<br><br>2. Laspur Valley, KP | Planting of family fruit tree orchards to diversify local incomes as one climate adaptation strategy | 1. 18 family orchards planted covering an area of 0.8 ha<br><br>2. 14 family orchards planted covering an area of 1.2 ha |
| 1.2.3F | 1. February 11-12, 2014<br><br>2. March 2014 | 1. Laspur Valley, KP<br><br>2. Hoper, GB | Livestock vaccination campaign conducted as one climate adaptation strategy to increase livestock survival rates and to decrease retaliatory killing of wild predators | 1. 2000 head of livestock vaccinated<br><br>2. 10,900 head of livestock vaccinated and treated for mange. |
| 1.3.1 | 1a. October 26, | 1. Chitral Town, KP | 1a. Meeting held | 1. Meeting resulted |

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| | 2013<br><br>1b. November 1, 2013<br><br>2. Summer 2014 | <br><br><br><br>2. Chitral Town, Laspur, KP | concerning establishment of a watch and ward village wildlife watch system<br><br>1b. 3 village wildlife watchers hired at Rumboor.<br><br>2. Feasibility report on establishment of a community game reserve in Laspur prepared | in hiring of 3 village wildlife watchers at Rumboor.<br><br>2. Feasibility report completed and circulated to relevant wildlife department officials |
| 1.3.2A | June 10-20, 2014 | Rumboor and Laspur Valleys, Chitral | Human-wildlife conflict survey conducted | 1 human-wildlife conflict report produced |
| 1.3.2B | Summer 2014 | Hoper Valley, GB | Human wildlife conflict mitigation: livestock insurance scheme launched | 1 livestock insurance scheme launched benefitting 33 households |
| 1.3.2C | June 2014 | Hoper Valley, GB | Demonstration predator-proof corral | 1 demonstration predator-proof corral constructed |
| 1.3.8 | May 6-20, 2014 | Raman Village, Laspur Valley, Chitral, KP | Launch and first training at the Laspur women's vocational training center for sewing and wool handicrafts. | 1 vocational training center established<br><br>25 People (All Women) Trained |
| 1.4.1 | January-March, 2014 | WWF Chitral and Gilgit Field Offices | Draft snow leopard monitoring protocol prepared, peer-reviewed, finalized, and distributed. | Finalized snow leopard monitoring protocol for northern Pakistan produced |
| 1.4.2 | 1. November, December, March and May 2014<br><br>2. June 22-28, 2014 | 1. Hoper Valley, GB<br><br>2. Chitral District, KP | Snow leopard and prey species monitoring surveys | Snow leopard and prey species surveys conducted at 6 sites in northern Pakistan with participation of local citizens scientists trained by WWF |
| 1.4.6 | November 26, 2014 | 1. Hoper Valley, GB | Snow leopard and prey species monitoring survey training | 36 People (All Men) Trained. |
| 1.4.8 | 1. 2014<br><br>2. March 10, 2014 | 1. Hoper Valley, GB<br><br>2. Laspur Valley, KP | 1. Continued support for village wildlife guards<br><br>2. Hire of a second village wildlife guard | Support provided for 4 village wildlife guards (All Men) |

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| 1.4.13 | 1. March 8-13, 2014<br><br>2. May 20-21, 2014 | 1. Hoper Valley, GB<br><br>2. Chitral, KP | Wildlife monitoring survey trainings | 1. 16 People (All Men) Trained.<br><br>2. 15 People (All Men) Trained. |
| 1.4.15 | 2014, ongoing | Islamabad, Chitral, Gilgit. | Preparation of a GEF grant proposal titled "Integrated Snow Leopard Conservation in Gilgit-Baltistan and Khyber Pakhtunkhwa" | WWF, UNDP, and the GB and KP Wildlife Departments, are currently cooperatively preparing a GEF-funded snow leopard conservation proposal |

**Table A1.7**. Regional Activities

| Activity Number | Date | Location | Activity Description | Activity Indicators |
|---|---|---|---|---|
| 2.1.6 | Summer/Autumn 2014 | WWF US | Preparation of a fact sheet on climate change impacts on and adaptation strategies for snow leopards, their prey, and habitat. | 1 fact sheet prepared |
| 2.1.7 | Indefinitely Postponed | Bangladesh, Bhutan, India, and Nepal | Provide support for Climate Summit for a Living Himalayas (CSLH) annual meetings | All CSLH activities are currently on indefinite hiatus. |
| 2.1.8 | October 1-2, 2013 | Kathmandu, Nepal | Regional Snow Leopard Workshop for the Living Himalayas-Eastern Himalayas | 27 People (3 Women) Participated<br><br>1 regional snow leopard conservation strategy produced for the Himalayan region. |
| 2.2.1 | 2014 | WWF US | 1. Peer review of WWF Regional climate change reports completed.<br><br>2. Final editing of reports and preparation of an interactive website on report findings underway. | Final peer review comments collected for both reports, final editing of reports underway, mock-up report website prepared for review. |
| 2.2.2 | Postponed | Thimphu, Bhutan | Technical meeting of regional experts on climate change and headwaters management to present and refine findings of range wide reviews of climate change impacts. | Regional technical meeting planned for Thimphu was cancelled due to logistical problems. Findings of the reports will now be presented at the Year 3 AHM Learning and Sharing meeting and through the website being developed under Activity 2.2.1. |
| 2.2.3 | April 16-18, 2014 | Thimphu, Bhutan | 2nd Regional Consultation Workshop on Kangchenjunga Landscape Conservation and Development Initiative (Organized by ICIMOD) | 50 People (5 Women) Participated |

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| 2.2.4 | April 1-3, 2014 | Dushanbe, Tajikistan | Central Asia ICSD Annual Meeting | WWF Representative Participated |
| 2.3.1 | 1. 2014<br><br>2. Sept. 16-21, 2014 | 1. TRAFFIC-India, New Delhi<br><br>2. Kabul, Herat, and Mazar e Sharif, Afghanistan | 1. Updating of TRAFFIC's 2003 snow leopard trade report<br><br>2. Afghanistan Snow Leopard Trade market Survey | 1. Draft report completed, currently under internal TRAFFIC review.<br><br>2. A thriving trade in snow leopard and common leopard skins documented. Report forthcoming. |
| 2.3.2 | 2014, Ongoing | TRAFFIC-India, New Delhi | Draft recommendations on combating the illegal trade in snow leopard parts | Recommendations are currently being prepared and will be finalized and released with the snow leopard trade report in Activity 2.3.1, above. |
| 2.3.3 | 2014, Ongoing | TRAFFIC-India, New Delhi | Incorporate snow leopard trade recommendations into the range-wide dialogue on snow leopard conservation. | Trade section of the SLSS reviewed, presentations of preliminary snow leopard trade survey presented at two major meetings of the snow leopard range states. |
| 2.3.4 | June 8, 2014 | Lake Issyk Kul, Kyrgyzstan | TRAFFIC-INTERPOL Coordination on combating the illegal trade in snow leopard parts. | Assisted Interpol in organizing the "Supporting National Actions against Illegal Trade" session on Day 3 of the Lake Issyk GSLEP training workshop (see Activity 2.5.4) |
| 2.3.5 | 2014, Ongoing | TRAFFIC-India, New Delhi | Promote strengthened wildlife trade law enforcement cooperation amongst SAWEN members and neighboring countries. | TRAFFIC continued its dialogue with SAWEN on a variety on South Asia-related wildlife trade issues, including snow leopards. |
| 2.4.1 | 2014, Ongoing | WWF US | Peer review, finalizing, and web-based presentation of the "Maps of the Snow Leopard Range, Water Provision, and Climate Change" report. | Report peer reviewed, comments and corrections addressed. Report presently being copy-edited for presentation online (also see Activity 2.2.1). |
| 2.4.4 | January 2014 | WWF US | "Climate smarting" of the revised Snow | Climate focused review of the draft |

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| | | | Leopard Survival Strategy | SLSS prepared and submitted to the SLSS drafting committee. |
| 2.4.5 | December-January 2014 | SLT, Seattle | 2014 Snow Leopard Conservation Grant Program | WWF AHM contributed USD 33,000 for 3 small grants to support research on climate change impacts on snow leopards |
| 2.4.6 | October 26-November 7, 2013 | Tost Uul Mountain, Mongolia | Study tour for one Nepali wildlife technician to SLT's Tost Uul Mountain Snow Leopard Research Base. | Technician trained on procedures for trapping and GPS collaring snow leopards, skills which were later applied to collaring a snow leopard in the Nepal KCA (see Activity 1.4.5) |
| 2.5.3 | October 21-23, 2013 | Bishkek, Kyrgyzstan | Global Snow Leopard Conservation Forum | Provision of travel and organizational support for holding the GSLCF. 178 People (40 Women) attended the forum. |
| 2.5.4 | June 5-11, 2014 | Lake Issyk Kul, Kyrgyzstan | Issyk Kul GSLEP National Focal Points Action Planning, Leadership and Capacity Development Workshop | 59 People (18 Women) Participated in the Training of whom 45 were trainees. |

**Annex 2:** Activity 1.2.4 ─ Agenda for the Bhutan Climate Adaptation Training

# Fundamentals of Climate Change Adaptation

## a workshop for WWF staff and partners

19-22 May, 2014
Thimphu

There is no future without climate change. The effects of climate change are evident on every continent. Preparing the planet for the changes that are already occurring and the ones yet to be seen is imperative. It is necessary that conservation and development professionals begin thinking about what a rapidly changing climate affects how they will achieve organization missions both now and in the future. The first part of this workshop helps prepare WWF staff and partners to begin asking the right questions and discover why we need to re-examine the way we help save biodiversity and improve livelihoods in the places we work. Through a combination of presentations, case studies, games, and interactive exercises, participants in this course learn much of what they need to know to get started working on climate change adaptation. The course is aimed at those who are relatively new to adaptation, but even seasoned professionals can gain new perspectives from the workshop discussions and can contribute to the learning by sharing their own experiences.

In the second part of the workshop, participants will learn how we can make our current conservation and development strategies "climate-smart." Through group exercises, participants will learn and practice simple techniques to use climate-smart thinking and language in their plans, discover which conservation and development activities need to consider climate change and which do not, and identify new activities we must undertake to inform our strategies in the future. By the end of the workshop, participants will a climate-smart strategy for their own work.

*Learning Objectives*

1. Understand how a changing climate affects conservation and development goals now and in the future.
2. Understand the concepts of climate variability, vulnerability, impacts, and adaptation and how adaptation differs from current work and what it has in common.
3. Understand the importance of integrating people, species, and ecosystems into our work.
4. Be familiar with vulnerability assessment in climate adaptation work at appropriate scales and timeframes.
5. Understand the unique challenges to communicating adaptation to various audiences.
6. Understand how conservation and development plans, policies and projects can become "climate-smart."

## Monday, 19 May

| | |
|---|---|
| 8:30 | Registration |
| 9:00 | Welcome and overview of the workshop |
| 9:30 | Group icebreaker: Answer with your feet! |
| 10:00 | Group Activity: Understanding your climate |
| 10:30 | Presentation: What everyone needs to know about climate change for adaptation |
| 11:00 | Break |
| 11:30 | Presentation: Key concepts in climate change adaptation |
| 12:15 | Presentation and exercise: Adaptation options, examples of adaptation work from around the world |
| 13:00 | Lunch |
| 14:00 | Group activity: Before the Storm |
| 14:30 | Presentation: Understanding impacts |
| 15:15 | Break |
| 15:45 | Presentation and activity: Understanding vulnerability and resilience |
| 16:45 | Wrap up for the day |
| 17:00 | adjourn |

## Tuesday, 20 May

| | |
|---|---|
| 9:00 | Presentation: observed and projected climate trends and impacts for Bhutan and Asia's High Mountains |
| 9:45 | Presentation: Adaptation for freshwater ecosystems |
| 10:30 | Presentation: Adaptation for forest ecosystems |
| 11:15 | Break |
| 11:45 | Group activity: Happy Village |
| 1:00 | lunch |
| 14:00 | Presentation and activity: Adaptation for species |
| 15:15 | Break |
| 15:45 | Presentation and activity: Communicating climate change and adaptation |
| 16:45 | Wrap up for the day |
| 17:00 | adjourn |

## Wednesday, 21 May

| | |
|---|---|
| 9:00 | Presentation: Where is Bhutan and Asia's high mountains on the climate change map? |
| 9:45 | Presentation: What is climate-smarting? |
| 10:00 | Activity: Reviewing strategies for climate-smart language (note participants will need to bring their own conservation strategies, conceptual models, etc) |
| 11:00 | Break |
| 11:30 | Activity: Identifying entry points for climate-smart thinking and adaptation |
| 1:00 | Lunch |
| 14:00 | Activity: Is it business as usual or climate-smart conservation? |
| 14:45 | Activity: Considering effects of climate change on current strategies |
| 15:15 | Break |
| 15:45 | Activity: What information do we need for climate-smarting our strategies? |
| 16:30 | adjourn |

## Thursday, 22 May

| | |
|---|---|
| 9:00 | Review of climate-smarting process |
| 9:30 | Activity: What we can do to climate-smart our strategies? |
| 10:30 | break |
| 11:00 | Activity (continued): What we can do to climate-smart our strategies? |
| 12:00 | Discussion: What we will continue to do, what we will do differently and what new things we will begin to do |
| 1:00 | Adjourn and lunch |

## Descriptions of some workshop presentations

### What everyone needs to know about climate change for adaptation

Many of us understand the basics of climate change but may not understand several key concepts that have important implications for climate change adaptation. For example, what is climate variability and how is it different from climate change? How can events like El Niño be used as a proxy for understanding the impacts of climate change? What are our chances of limiting global warming to 2ºC? How useful are models and what should their role be in designing adaptation efforts? At what point does adaptation cease to be a viable option for conserving biodiversity?

### Key Concepts in Climate Change Adaptation

One of the common challenges practitioners face in adaptation work is the lack of a common understanding of exactly what adaptation is. Standard definitions developed by the IPCC and others are complex and hard to apply to real life situations. Exactly what, then, is adaptation and what is the easiest way to convey this concept? What is the difference between coping, building resilience, and adaptation? Are droughts impacts of climate change? What does ecosystem-base adaptation really mean? How does adaptation differ from traditional conservation and development work? Even for those who understand these concepts already, this presentation provides simple, easy to understand ways of communicating sometimes confusing and complex concepts to others.

### Adaptation Options

For those new to the topic, it can be difficult to envision what adaptation "looks and feels" like. What strategies are used in developing adaption solutions? Does adaptation always mean something new and innovative? How much does it cost? What are some of the solutions being tested to help reduce vulnerability to climate? This presentation provides a series of examples of adaptation options developed from around the world that are responding to various climate impacts and employing multiple strategies.

### Understanding vulnerability and resilience

Understanding vulnerability and resilience is the first step in adapting to a rapidly changing climate. This presentation digs deeper into the concept of vulnerability and how we measure it looking at exposure, sensitivity and adaptive capacity. The presentation also explores the concept of resilience.

### Communicating Climate Change and Adaptation

Very little research has been conducted on communicating climate change impacts and adaptation, but what exists clearly shows that this topic poses unique challenges: dealing with

skepticism, uncertainty of the science, and probabilistic information to name a few. What are some of the commonly held misguided beliefs about communicating climate change impacts, vulnerability, and adaptation? Do you need to talk about climate change when you discuss adaptation? How much should one emphasize science in communications? How do we empower audiences to take the future into their hands?

### Adaptation for freshwater ecosystems, forest ecosystems and species

In these presentations, participants will learn about the observed and anticipated effects of the changing on freshwater and forest ecosystems as well as on individual species and what we can to reduce their vulnerability and increase resilience to these effects. A simple group exercise helps participants identify sources of vulnerability and resilience for their conservation targets.

**Annex 3:** Activity 2.1.8 — Agenda for the Regional Snow Leopard Workshop for the Living Himalayas-Eastern Himalayas

| Time | Topic | Notes |
|---|---|---|
| **08.00–09.00** | **Breakfast** | |
| **9.00 – 9.30** | **Registration** | |
| 9.30-09.35 | Welcome remarks | |
| 09.35 -09.45 | Workshop background, objectives, outcomes & agenda | |
| 09.45-9.50 | Brief introduction of participants | |
| 09.50-10.00 | Overview of WWF regional SL strategy 2011 | |
| 10.00-10.20 | ***Country presentations linked to the SL Strategy***<br>India presentation by NCF and WWF India team | |
| 10.20-10.40 | Nepal presentation by WWF Nepal | |
| **10.40-11.00** | **Tea Break** | |
| 11.00-11.20 | Bhutan presentation by Bhutan Department of Forests and Park Services and WWF Bhutan. | |
| 11.20-11.40 | Pakistan presentation by WWF Pakistan and Pakistan Wildlife Department | |
| 11.40-12.00 | Regional SL monitoring framework | |
| 12.00-12.20 | Regional Snow leopard mapping | |
| 12-20-12.30 | Monitoring Snow Leopard Trade | |
| 12.30-1250 | Update on AHMP and SLEPP | |
| **13.00-14.00** | **Lunch Break** | |
| 14.00 to 15.00 | **Q&A Discussion** | |
| **15.30-15.45** | **Tea Break** | |
| 15.45-17.30 | **Identifying Gaps and Priorities**<br>Group work to identify gaps and priorities (short term and long term) in EH for SL conservation – national, regional, global<br>Break in four groups (country wise) and WWF network team to join in each group | To update 2011 Strategy – threats/issues, gaps and priorities – also refer to Session I presentations. |
| **17.30** | **End of Day 1** | |
| **19.30** | **Dinner** | |

| Time | Topic |
|---|---|
| **7.30-8.30** | **Breakfast** |
| 09.00-09.10<br>09.10-11.00 | Recap of Day 1 and agenda for Day 2<br>**Developing Strategic Actions**<br>Group work to identify Strategic Actions for short term and long term SL conservation in EH, identify stakeholders and partners, capacities and resources (human and financial) -Country wise and regional/global actions.<br>• Same four groups to continue |
| **11.00-11.20** | **Tea Break** |
| 11.20-13.00 | Plenary - Group presentations on Gaps & Priorities and Strategic Actions for SL conservation in EH – national, regional and global – finalize group outputs based on plenary discussion |
| **13.00-14.00** | **Lunch** |
| 14.00-15.30 | Communications and funding opportunities to implement the revised regional SL Strategy for EH<br>Discussion and group work on issues identified under Session II – Day 2 |
| **15.30-15.45** | **Tea Break** |
| 15.45 – 16.30 | Next steps: responsibility/follow up |
| 16.30-17.00 | Wrap up, feedback and closing remarks |
| **19.30** | **Dinner** |

**Annex 4:** Activity 2.5.3─Agenda for the Global Snow Leopard Conservation Forum

## PROGRAM OF THE GLOBAL SNOW LEOPARD CONSERVATION FORUM

Bishkek, Kyrgyz Republic, October 21-23, 2013

| **DAY 0: MONDAY, OCTOBER 21 (Hotel Ak-Keme)** | |
|---|---|
| **Morning** | Arrival and registration of participants |
| **10:00 - 13:00** | **Thematic working meetings**:<br>- Discussion of national components – breakfast hall, right wing, level "B"<br>- Discussion of global components – breakfast hall, left wing, level "B"<br>- Discussion of the Draft Twelve-Month Action Plan – Red Hall, level "B" |
| **13:00 - 14:00** | Lunch for sponsored participants – restaurant of the Ak-Keme hotel, level "L" |
| **14:00 - 15:30** | **Senior Officials Meeting** (Range Country delegations, co-organizers, and Secretariat) – Large Conference Hall, level "L"<br><br>**Bilateral and thematic working meetings** (cont'd) – breakfast hall (right and left wings), Red Hall, level "B" |
| **15:30 – 15:45** | Coffee break – Lobby Bar, level "L" |
| **15:45 - 17:30** | **Senior Officials Meeting** (cont'd) – Large Conference Hall, level "L"<br><br>**Bilateral and thematic working meetings** (cont'd) – breakfast hall (right and left wings), Red Hall, level "B" |
| **18:00 - 18:30** | Transfer by buses from "Ak-Keme" to NABU Office for Reception |
| **18:30 - 20:30** | **Reception for Forum participants hosted by NABU at the NABU Office in Bishkek** |
| **20:30 – 21:00** | Transfer by buses from NABU Office to "Ak-Keme" hotel |

| **DAY 1: TUESDAY, OCTOBER 22 (Congress Hall, State Residence Ala-Archa)** | |
|---|---|
| **08:00 - 09:00** | Transfer by buses from "Ak-Keme" hotel to the Congress Hall |
| 08:30 - 10:00<br><br>09:30 – 09:50 | Registration, snow leopard and cultural exhibition, coffee – Lobby of the Congress Hall<br><br>Completion of the Senior Officials Meeting – Hall of the Press Center of the Congress Hall |
| **10:00 - 10:30** | **FORUM OPENING** – Hall of the press center of the Congress Hall<br>Snow Leopard Documentary<br>*Vice Prime Minister of the Kyrgyz Republic, Chairman of the Forum Organizing Committee*<br>*Brief remarks by the Forum co-organizers (3 minutes each): NABU, SLT, UNDP, USAID, World Bank, GTI, WWF* |
| **10:30 - 11:00** | Group Photo, Coffee Break |

| | |
|---|---|
| **11:00 - 14:00** | **PLENARY SESSION 1: Joining Efforts for Saving Snow Leopard – Final Review of the Forum's Documents** – hall of the press center of the Congress Hall<br>*Chair:* Director, State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic<br>*Co-Chair:* Additional Director General of Forests, Ministry of Environment and Forests, Government of India<br>Statements by Heads of Delegations of the snow leopard range countries (10 minutes each)<br><br>*Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Russian Federation, Tajikistan, Uzbekistan*<br><br>Final review of the Bishkek Declaration on Snow Leopard Conservation and the Global Snow Leopard Ecosystem Protection Program (GSLEP) |
| **14:00 - 15:00** | Media Briefing – hall of the press center of the Congress Hall<br>Lunch – restaurant of the Congress Hall |
| **15:00 - 16:30** | **PLENARY SESSION 2: Operationalizing the Global Snow Leopard Ecosystem Protection Program (GSLEP)** – Hall of the Press Center of the Congress Hall<br>*Chair:* Deputy Head, Federal Service for Environmental Oversight of the Russian Federation *(to be confirmed)*<br>*Co-Chair:* Program Manager, Global Environment Facility<br>*Session A. GSLEP operationalization tasks and coordination mechanism*<br>- presentation of outcomes of Senior Officials Meeting by representative of the Forum Organizing Committee<br>- statements by delegations of the snow leopard range countries<br>- statements by representatives of partner organizations<br>- summary of the discussion |
| **16:30 - 16:50** | Coffee Break – restaurant of the Congress Hall |
| **16:50 - 17:50** | **PLENARY SESSION 2 (cont'd)** – Hall of the Press Center of the Congress Hall<br>*Session B. Mobilization of resources for the launch and implementation of GSLEP.*<br>- statements by delegations of the snow leopard range countries<br>- statements by representatives of the GSLEP partner organizations<br>- summary of the discussion |
| **18:00 - 21:00** | Dinner Reception on behalf of the Government of the Kyrgyz Republic – Restaurant of the Congress Hall |
| **21:00 - 21:30** | Transfer by buses from Congress Hall to "Ak-Keme" hotel |

| **DAY 2: WEDNESDAY, OCTOBER 23 (Congress Hall, State Residence Ala-Archa)** | |
|---|---|
| **08:00 - 08:30** | Transfer by buses from Ak-Keme Hotel to the Congress Hall |
| **09:00 - 10:00** | **SPECIAL SESSION: From the Global Program to Projects on the Ground** – Main Room of the Congress Hall<br>*Chair:* Director, State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic<br>*Co-Chair:* Vice President, NABU<br>**1. Results of the Regional Conference on the Project "Transboundary Cooperation for Biodiversity Conservation in the Northern Tian Shan Mountains"**<br>Remarks by representative of NABU<br>**2. Project Launch: "Improving the Coverage and Management Effectiveness of Protected Areas in the Central Tian Shan Mountains"**<br>Remarks by the Program Manager of the GEF, and the Resident Representative of the UNDP and the UN System in the Kyrgyz Republic |
| **10.00 - 10.05** | **Opening of the High Level Segment** – Main Room of the Congress Hall<br>**Vice Prime Minister of the Kyrgyz Republic, Chairman of the Forum Organizing Committee** |
| **10.05 - 10.15** | **Opening Remarks - Honorable President, Kyrgyz Republic** |
| **10.15 - 11.30** | **Statements by the Heads of Range Countries' Delegations on National Follow-Up Actions**<br>Afghanistan, Bhutan, China, India, Kazakhstan, Mongolia, Nepal, Pakistan, Russian Federation, Tajikistan, Uzbekistan<br>(5 minutes per country) |
| **11.30 - 12.15** | **Statements by representatives of International Organizations, program partners**<br>*CITES, CMS, GEF, INTERPOL, NABU, SLC, SLT, TRAFFIC, UNDP, USAID, World Bank, GTI, WWF*<br>(3 minutes per organization) |
| **12.15 - 12.25** | **Adoption of the Bishkek Declaration on Snow Leopard Conservation and the Global Snow Leopard Ecosystem Protection Program**<br>**Group Photo** of Delegation Heads – Main Room of the Congress Hall |
| **12.30 - 13.00** | **Press Conference** of Delegation Heads – Hall of the Press Center of the Congress Hall |
| **13.00 - 14.00** | **State reception on behalf of the President of the Kyrgyz Republic** – Restaurant of the Congress Hall |
| **14:00 - 15:00** | **PLENARY SESSION 3: Role of Business and Industry in Conservation of Snow Leopard and Community Engagement –** Hall of the Press Center of the Congress Hall<br>*Chair:* Deputy Director, State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic<br>*Co-Chair:* Programme Director, WWF International<br>Representatives of the business community, countries, international organizations, experts. |

| | |
|---|---|
| **15:00 - 16:00** | **PLENARY SESSION 4: Operationalizing the Program – Transboundary Cooperation in Conservation, Management and Enforcement –** Hall of the Press Center of the Congress Hall<br>*Chair:* Minister of Environmental Protection of the Republic of Kazakhstan<br>*Co-Chair:* Unit Manager, Environmental Crime Programme, INTERPOL<br>Countries' and international experts' presentations |
| **16:00 - 16:30** | Coffee Break |
| **16:30 - 17:30** | **PLENARY SESSION 5: Operationalizing the Program – Developing Better Livelihoods and Engaging Local Communities –** Hall of the Press Center of the Congress Hall<br>*Chair:* Minister of Forests and Soil Conservation of Nepal<br>*Co-Chair:* Officer in Charge and Deputy Executive Coordinator, United Nations Development Programme<br>Countries' and international experts' presentations |
| **17:30 - 18:30** | **PLENARY SESSION 6: Operationalizing the Program – Role of Leaders and Leadership in Wildlife Conservation –** Hall of the Press Center of the Congress Hall<br>*Chair:* Minister of Agriculture and Forests of Bhutan<br>*Co-Chair:* Executive Director, Snow Leopard Trust<br>Countries' and international experts' presentations |
| **18:30 - 18:45** | **FORUM CLOSING: Summary of Next Steps –** Hall of the Press Center of the Congress Hall<br>*Chair:* Deputy Director, State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic<br>*Co-Chair:* Program Manager, Global Tiger Initiative, The World Bank |
| **19:00 - 21:00** | Dinner – Restaurant of the Congress Hall |
| **21:00** | Transfer by buses from the Congress hall to Ak-Keme Hotel |

**Annex 5:** Activity 2.5.4—Agenda for the GSLEP National Focal Points Action Planning, Leadership and Capacity Development Workshop

**Global Snow Leopard and Ecosystem Protection Program (GSLEP):**
**National Focal Points Action Planning,Leadership and Capacity Development Workshop**

Raduga Resort Center,Sary-Oy(tbc),IssykKul Region, Kyrgyz Republic
June [5-11], 2014

Hosted by the State Agency of Environmental Protection and Forestry
of the Government of the Kyrgyz Republic
Co-organized and cosponsored (tbc) by the GSLEP Working Secretariat,
Global Environment Facility, Global Tiger Initiative, INTERPOL, NABU,
Snow Leopard Conservancy, Snow Leopard Trust, UNDP, USAID, World Bank, and WWF

**Workshop Objectives and Program**

Following adoption of the Declaration on Snow Leopard and the Global Snow Leopard and Ecosystem Protection Program (GSLEP) at the Forum in Bishkek under the leadership of H.E. President Atambaevin October 2013 and organizing the Working Secretariat for GSLEP implementation, the snow leopard range countries are working toward the implementation of GSLEP at national and global levels.

i Enhance capacity of the National Focal Points andWorking Secretariat staff, develop effective leadership teams to support national institutional arrangements for GSLEP implementation;
Identify 20 Snow Leopard Landscapes in which to achieve the GSLEP's "Secure 20 by 2020" goal;
iii Define National Priority Activities (NPAs) and Global Priority Activities (GPAs) for the first two-year Implementation Plan, develop Key Performance Indicators (KPIs) to measure progress toward the goal, and advance preparation of specific project proposals for the relevant funding partners.

1 20 Snow Leopard Landscapes nominated;
2 12 sets of NPAs and 5 sets of GPAs defined;
3 Draft KPIs agreed;
4 National Focal Points and Working Secretariat staff well prepared to advance GSLEP implementation.

Working Languages

English and Russian (with simultaneous interpretation)

**DRAFT of 15 April2014 – Subject to Change**

Proposed P ram Outline

**Day Zero: [Thursday, June 5] – Arrival and Transfer to Venue**

Arrival in Bishkek, departure by buses at 14:00 from Ak-Keme Hotel, arrival and check-in at the workshop venue on Lake Issyk-Kul

Welcome Reception at 19:00

**Day One: [Friday, June 6] – Opening, KPIs, and Twenty Landscapes**

Morning – Opening

Session 1 Workshop Objectives and Process
- Review Overarching Goal, GSLEP Themes, and Expected Outcomes *(ref. GSLEP Document pages xiii-xiv, 15)*
- Discuss and agree on possible KPIs

Session 2 Landscapes
- Review status of current and proposed transboundary landscape projects
- Good practices in sustainable land and landscape management

Lunch

Afternoon Cont'd:Landscapes
- Landscape identification criteria and other tools;
- List of a minimum of 20 SL Landscapes for "Secure 20 by 2020"

Summary of Day 1

Morning - Objectives for the Day
- Several breakout sessions to present, brainstorm,and refine existing GSLEP-relatedproject proposals and project development processes in the range countries and test new project ideas with funding and implementation partners with a focus on scaling up good practices in community engagement
- Breakout sessions to peer review and refine NPAs

Lunch

Afternoon Leadership Modules 1 & 2:
- **What is Adaptive Leadership?** Understand the difference between technical challenges and adaptive challenges that require changes in value, mindset and behavior. Define leadership as the process of mobilizing people, ideas and resources to achieve specific results.
- **What are the Constraints to Collective Action?** Recognize and understand barriers to collective action. Identify strategies that address these challenges and that can move people into action and solve problems.

Summary of the Day 2

**DRAFT of 15 April2014 – Subject to Change**

**Day Three: [Sunday, June 8]– Linking Global Support to National Actions**

Morning - Objectives for the Day
- Supporting National Research and Monitoring (linking Global Support Component D to national actions)
- Supporting National Actions against Illegal Trade (linking Global Support Component A to national actions)

Lunch

Afternoon Leadership Modules 3 & 4:
- **Net Map, or How do Stakeholders support or undermine the Initiative?** Identify on a map all stakeholders, their positions, and their levels of influence vis-à-vis the reform results. Understand the formal and informal networks between stakeholders. Identify which stakeholders can be influenced and how.
- **Strategic Communications, or How do we engage with Stakeholders and form Coalitions?** Understand different types of communication interventions to effectively engage key actors. Develop strategies to mobilize stakeholders through opinion, attitude and behavior change

Summary of the Day 3

Evening Boat trip and buffet dinner on Lake IssykKul (tbc)

**Day Four: [Monday, June 9] – Linking Global Support to National Actions (cont'd)**

Morning - Objectives for the Day
- Supporting Transboundary Cooperation (linking Global Support Component C to national actions)
- Supporting Awareness and Coalition Building in Large Scale Infrastructure (linking Global Support Component E to national actions)

Lunch

Afternoon Leadership Modules 5 & 6:
- **Rapid Results Approach, or How do we get the Implementation Team to commit to Results?** Introduce a step by step approach to solve implementation challenges. Identify results within 100 days that align with the desired changes in behaviors and can sustain reform improvements
- Building Collaborative Teams (linking respective Global Support Components to national priority actions, etc.); team presentationsof project ideas

Summary of the Day 4

Morning - Objectives for the Day
- Announcing Two-Year NPAs: Setting National Priority Activities 2014-15 - by range countries, 12-15 min each country
- Global Priority Activities 2014-15 - by lead global partners

**DRAFT of 15 April2014 – Subject to Change**

Lunch

Afternoon Discussion of a roadmap toward GSLEP implementation (including steps toward establishment of the full Program Secretariat) and the International Year of Snow Leopard in 2015

Closing: Workshop Results and Next Steps

Transfer to Bishkek and airport

Note: Arrangements for an optional 2-3-day field visit to one of the snow leopard habitats in the Issyk-Kul Region might be considered by the organizers based on the level of interest from the delegates.

**Annex 6:** Agenda for the Bhutan NSLEP Meeting

**Consultation Workshop on National Snow Leopard Conservation**
**18 August 2014**

**Day 1**
***Chair: WCD, Senior Specialist***

| | |
|---|---|
| 9:00 am- 9:30 am | Registration of participants |
| 9:30 am – 9:40 am | Welcome address/remarks, Chief (WCD) |
| 9:40am - 9:50am | Remarks by Country Representative, WWF Bhutan Program |
| 9:50 am – 10:00 am | Workshop objectives and expected outcomes (CFO, JDNP) |
| 10:00am- 10:10am | Conservation Significance of Snow leopard (CFO, JDNP) |
| 10:10-am-10:30 am | National Snow Leopard Ecosystem & Protection Program, Two years implementation plan and end outcomes (Sr.BO, WCD) |
| 10:30am -10:50 am | WWF Snow Leopard Initiative and Asia High Mountain (WWF) |
| 10:50 am – 11:30 am | ***Photo session followed by tea*** |
| 11:30 am – 11:50 am | Experience sharing of Snow leopard works from JDNP & discussions (RDC Yusipang) |
| 11:50 am – 12:10 pm | Experience sharing of Snow Leopard works from WCP & discussions (WCP) |
| 12:10 pm -12:30pm | Experience from the on-going nationwide tiger survey (WCD) |
| *12:30 noon – 1:30 pm* | ***Lunch*** |
| 1:30 noon – 2:00 pm | Snow Leopard survey: design and planning (CFO, TSNR) |
| 2:00pm -2:30pm | Prey survey: design and planning (CNR) |
| 2:30 pm - 3:00 pm | ***Tea break*** |
| 3:00 pm – 5:00 pm | Group work: resource requirement and budget |

**19th August 2014**
**Day 2**
***Chair: WCD Senior Specialist***

| | |
|---|---|
| 9:00 am – 10:30am | Continue Group Work |
| 10:30 am – 11:00 am | *Tea break* |
| 11:00 am – 1:00 pm | Group work presentation |
| 1:00 pm -2:00pm | *Lunch break* |
| 2:00 pm – 3:00 pm | Snow Leopard Survey Work plan |
| 3:00 pm – 3:30 pm | Tea break |
| 3:30 pm – 4:30 pm | Wrap up by chair |

**Annex 7:** AHM Project Year 2 Media Coverage

## 1. Bhutan

Bhutan Activity 1.2.2: Farmers' School
http://www.dofps.gov.bt/sites/default/files/WCP%20launches%20Farmers.pdf

Bhutan Activity 1.2.4: Climate Adaptation Training
Bhutan Times print news story

Bhutan Activity 1.2.5: Weather Data Management Training
http://eforestry.dofps.gov.bt/node/527

Bhutan Activity 1.3.10: Bio-briquette Production
http://www.moaf.gov.bt/wcp-promotes-alternative-fuel-for-nomads/

Bhutan Activity 2.5.3: Global Snow Leopard Conservation Forum, Bishkek
http://www.moaf.gov.bt/global-snow-leopard-forum/

## 2. Kyrgyzstan

Kyrgyzstan Activity 1.1.3A: Photo Exhibit
1. Broadcast on the launch of the exhibition – Oblast TV November 28 and 29, 2013
2. Regional Newspaper "Karakolka" January 6, 2014 – and article devoted to the exhibition, and project activities.
3. http://kg.akipress.org/news:587942

Kyrgyzstan Activity 1.1.3C: Engilchek Snow Leopard Festival
1. June 7, 2014 – Special one hour TV broadcast devoted to the Festival "The land of the snow leopard" and to the project activities – oblast TV canal – "Issyk-Kul";
2. June 08, 2014 - second full broadcast devoted to the Festival "The land of the snow leopard" and to the project activities – oblast TV canal – "Issyk-Kul";
3. http://www.24kg.org/community/179786-v-issyk-kulskoj-oblasti-proshel-ezhegodnyj.html
4. http://news.mir.kg/society/v-issyk-kulskoj-oblasti-proshel-ezhegodnyj-id38504.html
5. http://www.knews.kg/society/50186_na_issyik-kule_vozrojdayut_drevniy_ekologicheskiy_folklor/
6. http://www.paruskg.info/2014/05/24/100012
7. http://ekois.net/festival-zemlya-snezhnogo-barsa-proshel-v-sele-enilchek-ak-suujskom-rajone-ysyk-kulskoj-oblasti/

Kyrgyzstan Activity 1.1.3D: Issyk Kul Summer Eco-camp
1. News of the regional/ oblast TV canal – "Issyk-Kul" July 28, 2014 , repeated July 29, 2014.
2. Special broadcast on the national "Fifth canal" July 28, 2014 repeated July 29, 2014.
3. Article if "De-Facto" newspaper «Жети-Огуздогу экологдордун жаны мууну» - p.19 – August 1, 2014.
4. News - national TV canal - Kyrgyz TV – August 2, 2014 - repeated August 3, 2014.
5. http://www.kumtor.kg/en/environmental-camp-took-place-in-issyk-kul/

Kyrgyzstan Activity 1.3.9B: Felt Crafts Training
1. http://www.caresd.net/site.html?en=0&id=26338
2. http://ekois.net/zhenshhiny-vyskogornyh-soobshhestv-obuchilis-novym-metodam-raboty-s-vojlokom/?src=letter

Kyrgyzstan Activity 1.3.9D: Local Development Fund Study Tour
1. News of the regional/ oblast TV canal – "Issyk-Kul" August 5, 2014.
2. Special full-time broadcast - regional/ oblast TV canal – "Issyk-Kul" – August 7, 2014.
3. http://ekois.net/obuchayushhij-tur-dlya-sozdaniya-mestnyh-fondov-razvitiya-mfr-v-vysokogornyh-selah/#more-15363
4. http://www.caresd.net/site.html?en=0&id=26403

KyrgyzstanActivity 1.4.4B: Snow Leopard Camera Trap Survey
http://www.wwf.ru/resources/news/article/12126

Kyrgyzstan Activity 1.4.9: Sarychat-Ertash Reserve Wind Generator
1. http://www.knews.kg/society/51541_v_saryichat-ertashskom_goszapovednike_ustanovili_vetrogenerator/
2. http://ekois.net/ustanovlen-vetrogenerator-na-kordone-koendu/
3. http://www.wwf.ru/resources/news/article/12550

Kyrgyzstan Activity 1.4.11C: Management Effectiveness tracking tool (METT) Training
1. News - regional/ oblast TV canal – "Issyk-Kul" - twice ;
2. News of the national TV canal "RTR" – twice;
3. http://www.caresd.net/site.html?en=0&id=26380
4. http://www.wwf.ru/resources/news/article/12514

Activity 2.5.3: Kyrgyz Media Coverage of the Global Snow Leopard Conservation Forum
1. October 18, 2013: A television news interview with WWF's Kyrgyz project consultant on Kyrgyz TV Channel 1.
2. October 22, 2013: A brief press conference with WWF Russia.
3. October 22, 2013: A television interview with WWF Russia staff on Kyrgyz TV Channel
5. October 22, 2013: A radio interview with WWF Russia on Kyrgyz Radio 1's "Theme of the Day" show, repeated on October 23, 2013.
5. Three showings of a film on WWF's snow leopard conservation work in Kyrgyzstan on various Kyrgyz television stations from October 21-23, 2013.
6. October 12, 2013 – Interview, State Canal "1-Radio"
7. October 18, 2013 - Canal 1 - Kyrgyz TV The news program
8. October 22, 2013 - interview Canal 5 - Kyrgyz TV broadcasted the same day.
9. October 22, 2013 - interview Kyrgyz "1-Radio" - "Theme of day" 15.00.PM in Russian.
10. October 23, 2013 - interview Kyrgyz "1-Radio" - "Theme of day"09.00.AM in Kyrgyz and 3 time film on WWF project in Kyrgyzstan was shown on various canals of Kg TV during the first, second and third days.
11. http://ria.ru/science/20131022/971674461.html
12. http://www.ekois.net/wp/?p=13235
13.http://www.kgembassy.org/index.php?option=com_content&view=article&id=370%3A2013-10-30-20-07-20&catid=44%3Alatest-news&Itemid=236&lang=en

14. http://www.caresd.net/site.html?en=0&id=26218
15. http://www.wwf.ru/resources/news/article/11686
16. http://www.mnr.gov.ru/news/detail.php?ID=131583
17. http://www.nat-geo.ru/article/4440-12-stran-mira-obedinyat-usiliya-po-zaschite-snezhnogo-barsa/
18. http://centralasiaonline.com/ru/articles/caii/features/main/2013/11/21/feature-01

Pakistan

Snow leopard and mountain natural resources conservation message disseminated in Pakistan Broadcasting Corporation's "AAHANG" magazine.

**Annex 8:** AHM Project Year 2 Photos

# Bhutan

**Activity 1.2.4.** Participants of the Fundamentals of Climate Change Adaptation Workshop held in Thimphu, Bhutan, May 2014.

**Bhutan Activity 1.2.5B**: Installation of a second automatic weather station (AWS) in Wangchuck Centennial Park (WCP) at Tapgang Village, Kurtoe Geog, in WCP's eastern range, Bhutan, June 2014.

**Bhutan Activity 1.3.1 and 1.3.2.** Snow Leopard conservation awareness and citizen scientist training for herders and snow leopard conservation committee (SLCC) establishment meeting, Nasiphel, WCP, Bhutan, June 2014

**Bhutan Activity 1.3.4.** WCP study tour participants meeting with their counterparts from the Kangchenjunga Conservation Area Management Committee, Lelep Village, KCA, Nepal, March 2014.

**Bhutan Activity 1.4.1.** WWF snow leopard survey expedition trekking to the survey site in the eastern range of Wangchuck Centennial Park, Bhutan, April 2014.

**Bhutan Activity 1.4.13.** Participants of a GIS Training for WCP staff members, Bumthang, Bhutan, September 2013.

# India

**India Activity 1.3.1B.** Children's nature camp marking World Environment Day, Lachen, North Sikkim, India, June 2014.

**India Activity 1.3.10B.** Bio-briquette making training, Lachen, North Sikkim, India, June 2014.

**India Activity 1.3.11C.** Zero Waste Himalaya street exhibition on proper trash management practices, Gangtok, East Sikkim, India, August 2014.

**India Activity 1.3.11B.** Participants of a WWF-Ecotourism and Conservation Society of Sikkim (ECOSS) homestay needs assessment, Uttarey Village, West Sikkim, India, June 2014.

**India Activity 1.3.11B.** Study tour to DzonguVillage, North Sikkim for Homestay owners from Uttarey village, West Sikkim, India, September 2014.

**India Activity 1.4.6A.** Himal Rakshaks participating in a wildlife and habitat field survey techniques training, Barsey Rhododendron Sanctuary, West Sikkim, India, January 2014.

**India Activity 1.4.6C.** Participants of the Sikkim Himal Rakshaks study tour to Bhutan meeting with the staff of Wangchuck Centennial Park at park headquarters in Nasiphel, Bumthang, Bhutan, July 2014.

# Kyrgyzstan

**Kyrgyzstan Activity 1.1.3**B. Snow leopard dancers and other performers, Akshyrak Village Earth Day Celebration, Issyk Kul Province, Kyrgyzstan, April 2014.

**Kyrgyzstan Activity 1.1.3C.** Engilchek Village Snow Leopard Festival, Issyk Kul Province, Kyrgyzstan, May 2014.

**Kyrgyzstan Activity 1.1.3D.** Children's summer eco-camp, Lake Issyk Kul, Issyk Kul Province, Kyrgyzstan, July 2014.

**Kyrgyzstan Activity 1.3.9B.** Felt handicraft making training, Barskoon Village, Lake Issyk Kul, Issyk Kul Province, Kyrgyzstan, March 2014.

**Kyrgyzstan Activity 1.3.9B.** AHM Project –sponsored felt handicrafts booth, Oimo Crafts Fair, Cholpon Ata Village, Lake Issyk Kul, Issyk Kul Province, Kyrgyzstan, July-August 2014.

**Kyrgyzstan Activity 1.4.4B.** Snow leopard camera trap survey, Sarychat-Ertash State Reserve, Issyk Kul Province, Kyrgyzstan, June 2014.

**Kyrgyzstan Activity 1.4.9A.** Recently installed wind generator, Koenduu Ranger Station, Sarychat-Ertash State Reserve, Issyk Kul Province, Kyrgyzstan, September 2014.

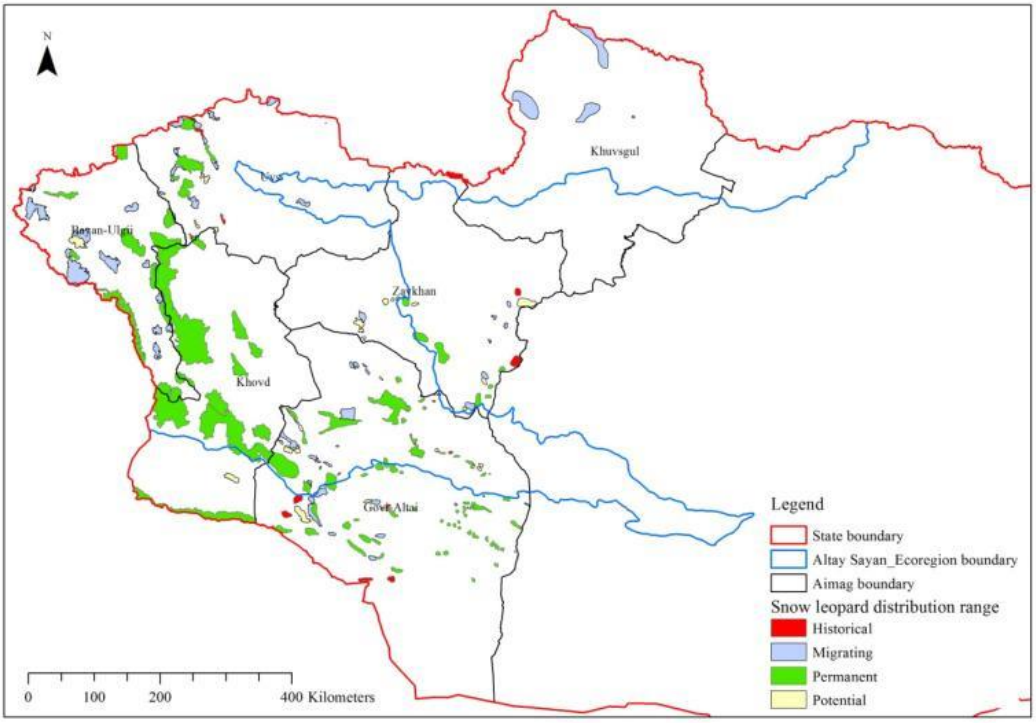
**Kyrgyzstan Activity 1.4.11C.** Participants of the Management Effectiveness tracking tool (METT) Training Workshop, Cholpon Ata Village, Lake Issyk Kul, Issyk Kul Province, Kyrgyzstan, June 2014.

# Mongolia

**Mongolia Activity 1.3.1.** Local residents particpating in an ecotourism training at Jargalant Khairkhan Mountain, Khovd Aimag, Mongolia, July 2014.

**Mongolia Activity 1.3.1.** Western ecotourists visiting an ecotourism camp run by local residents trained by the AHM Project , Jargalant Khairkhan Mountain, Mongolia, August 2014.

**Mongolia Activity 1.3.1.** Western ecotourists buying locally made handicrafts at an ecotourism camp run by local residents trained by the AHM Project , Jargalant Khairkhan Mountain, Khovd Aimag, Mongolia, August 2014.




**Mongolia Activity 1.4.3.** Updated WWF snow leopard distribution map for the Mongolian Altai-Sayan Ecoregion, Winter 2014.

**Mongolia Activity 1.4.6.** Citizen scientist participating in a WWF snow leopard camera trapping survey, Bumbat Khairkhan Mountain, Khovd Aimag, Mongolia, July 2014.

**Mongolia Activity 1.4.6.** Citizen scientists participating in a WWF snow leopard camera trapping survey, Bumbat Khairkhan Mountain, Khovd Aimag, Mongolia, July 2014.

**Mongolia Activity 1.4.13.** Conducting a preliminary socio-economic survey of residents of the Sair Khairkhan Local Protected, Bayan Ulgii Aimag, Mongolia, June 2014.

# Nepal

**Nepal Activity 1.2.2.** Irrigation Training, Kangchenjunga Conservation Area, Nepal August 2014.

**Nepal Activity 1.2.2.** Greenhouse vegetable gardening, Kangchenjunga Conservation Area, Nepal, August 2014

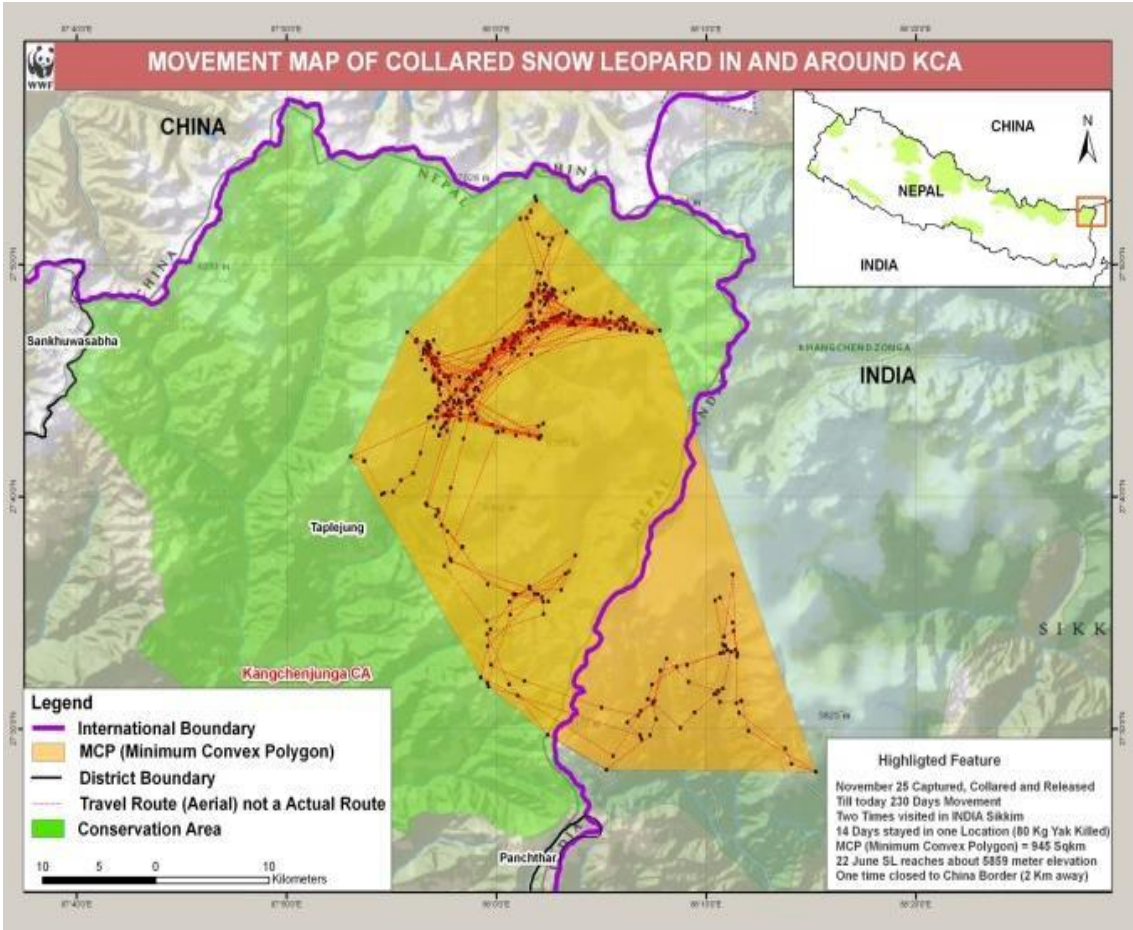
**Nepal Activity 1.2.3.** Wooden bridge to improve pasture accessibility and increase rate of pasture rotation, Kangchenjunga Conservation Area, Nepal, October 2013.

**Nepal Activity 1.3.1.** Community-based anti-poaching operation team members removing wildlife snares, Kangchenjunga Conservation Area, Nepal, June 2014.

**Nepal Activity 1.3.1.** Snared goral found by community-based anti-poaching operation team members, Kangchenjunga Conservation Area, Nepal, June 2014.

**Nepal Activity 1.3.10.** Improved cook stove distribution, Kangchenjunga Conservation Area, Nepal, Spring 2014.

**Nepal Activity 1.4.5.** First GPS collaring of a snow leopard in Nepal, near Khambachen Village, Knagchenjunga Conservation Area, Nepal, November 2014.

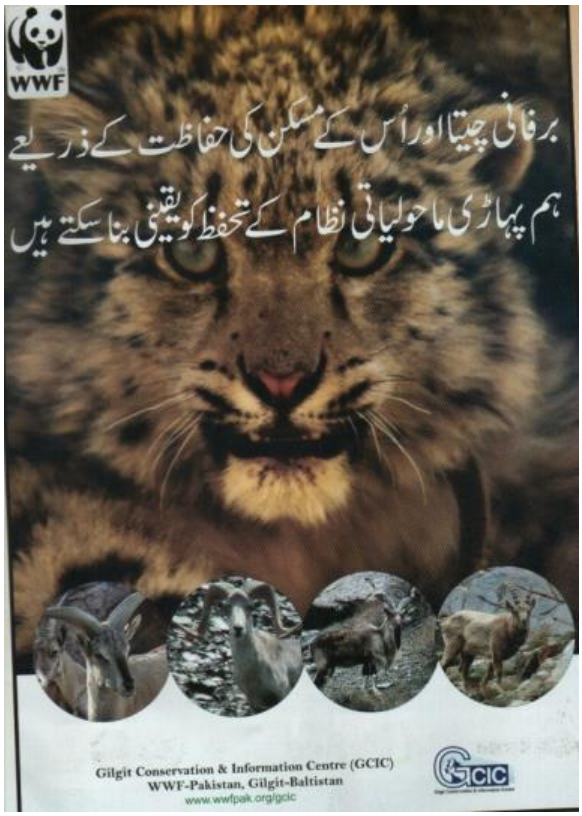



**Nepal Activity 1.4.5.** Map of movements between Nepal and India of a snow leopard wearing a WWF AHM-funded satellite GPS tracking collar, Kangchenjunga Landscape, eastern Nepal and Sikkim, November 2013-July 2014.

**Nepal Activity 1.4.6.** Local snow leopard conservation committee citizen scientists conducting a snow leopard prey species survey, Kangchenjunga Conservation Area, Nepal, Spring 2014.

# Pakistan

**Pakistan Activity 1.1.5B.** Participants of the Hoper Valley, GB, Pakistan World Water Day celebration and conservation awareness raising event, March 2014.




**Pakistan Activity 1.1.5E.** Pakistan Broadcasting Corporation Magazine "AHANG" September 2014 cover story on snow leopards and large mammals in Gilgit-Baltistan.

**Pakistan Activity 1.2.3A.** Women's Conservation Committee pasture management focus group discussion, Rumboor Valley, Chitral, Pakistan, October 2013.

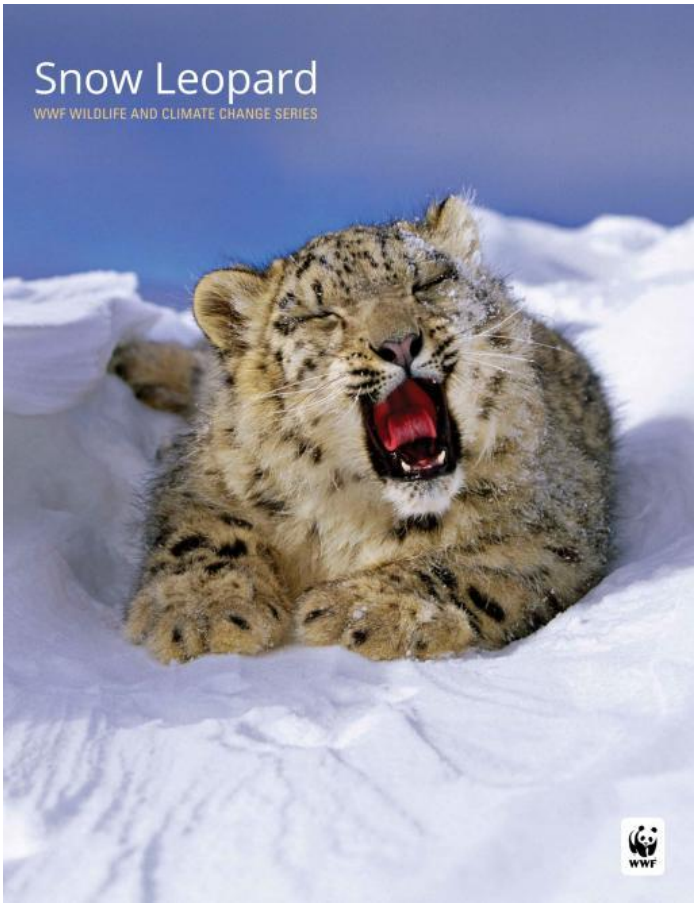
**Pakistan Activity 1.2.3C.** Demonstration fodder crop planting on degraded land, Rumboor Valley, Chitral, Pakistan, Summer 2014.

**Pakistan Activity 1.2.3D.** Planted multipurpose tree seedlings distributed by WWF and the Chitral Forest Department, Hoper Valley, GB, Pakistan, April 2014.

**Pakistan Activity 1.3.2C.** Demonstration predator-proof corral under construction in Hoper Valley, GB, Pakistan, June 2014.

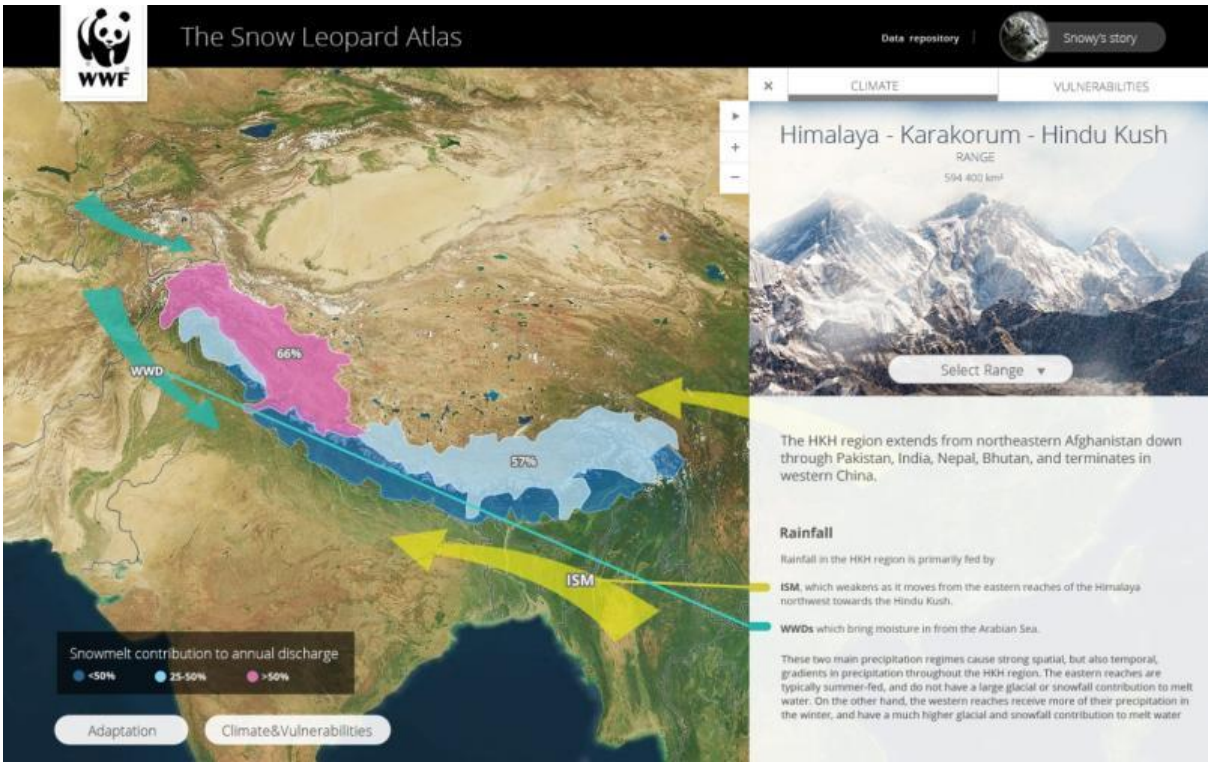
**Pakistan Activity 1.4.6.** Snow leopard and prey species monitoring survey training, Hoper Valley, GB, Pakistan, November 2014

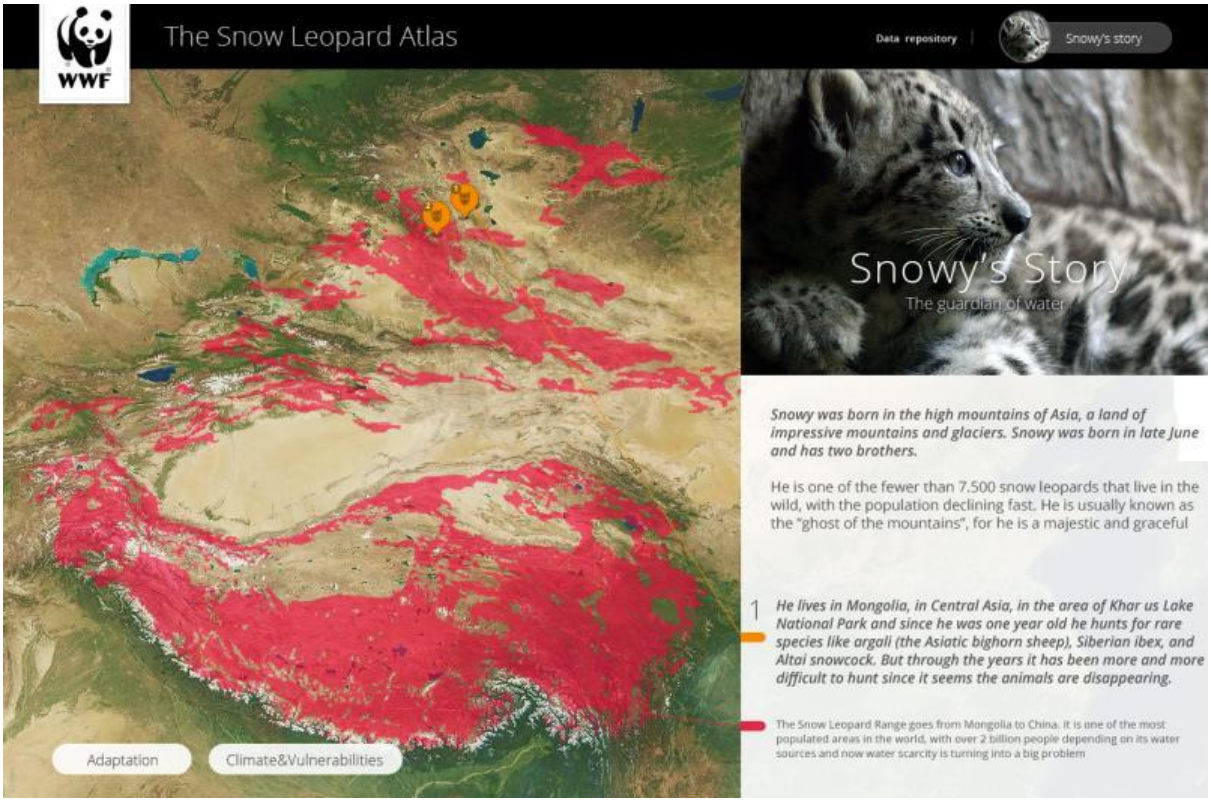
# Regional Activities




**Regional Activity 2.1.6.** Cover of the snow leopard and climate change fact sheet prepared by the WWF US Climate Adaptation Team, September 2014.

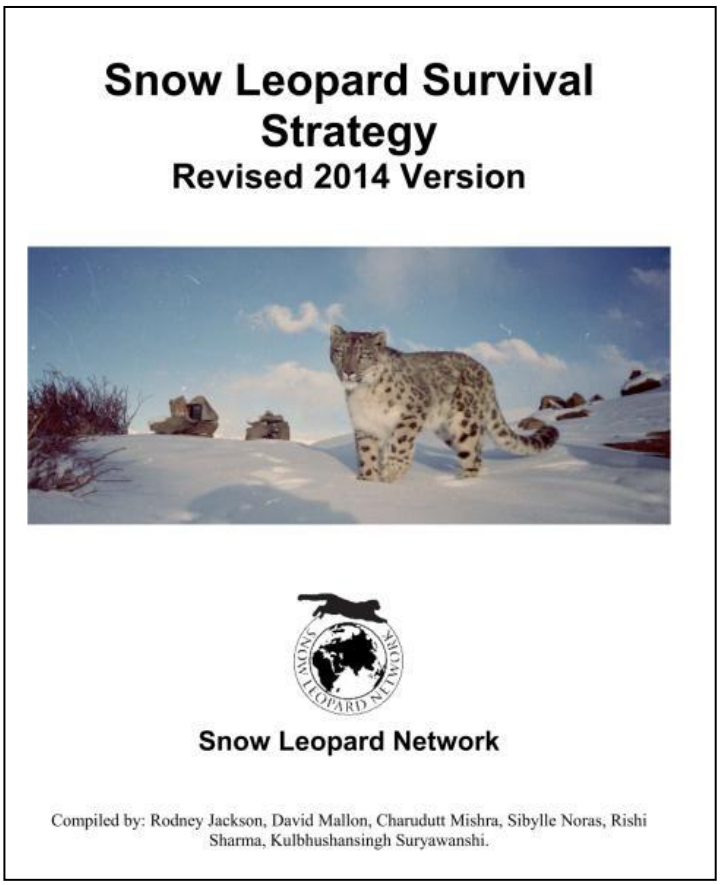
**Regional Activity 2.1.8.** Participants at the Regional Snow Leopard Workshop for the Living Himalayas-Eastern Himalayas, Kathmandu, Nepal, October 2013.




**Regional Activity 2.2.1/2.4.1.** Planned interactive website for presenting the WWF "Assessing Community and Ecosystem Vulnerability to Climate Change and Glacial Melt in Asia's High Mountains" and "Maps of the Snow Leopard Range, Water Provision, and Climate Change" reports, September 2014.

**Regional Activity 2.3.1** TRAFFIC wildlife trade market survey: Snow leopard skin for sale, Chicken Street Market, Kabul, Afghanistan, September 2014.



Snow Leopard Survival Strategy
Revised 2014 Version

Snow Leopard Network

Compiled by: Rodney Jackson, David Mallon, Charudutt Mishra, Sibylle Noras, Rishi Sharma, Kulbhushansingh Suryawanshi.

**Regional Activity 2.4.4.** Revised Snow Leopard Survival Strategy, Draft September 2014

**Regional Activity 2.5.3.** Kyrgyz President Almazbek Atambayev (center right) attending the Global Snow Leopard Conservation Forum (GSLCF), Bishkek, Kyrgyzstan, October 2013.

**Regional Activity 2.5.4.** Particpants of the GSLEP National Focal Points Action Planning, Leadership and Capacity Development Workshop, Lake Issyk Kul, Issyk Kul Province, Kyrgyzstan, June 2014.