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

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World Wildlife Fund

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Acronyms and Foreign Terminology

AHM	Asia High Mountains Project
Aimag	Province
AKHSS	Agha Khan Higher Secondary School
AKRSP	Aga Khan Rural Support Programme
AKYSB	Aga Khan Youth and Sports Board for Pakistan
APO	Anti-Poaching Operation
ASER	Altai Sayan Ecoregion
Bag	Commune, division of a soum (district)
BLSO	Broshal Local Support Organization
BQV	Black Quarter Vaccine
BZ	Buffer Zone
BZCF	Buffer Zone Community Forest
BZMC	Buffer Zone Management Committee
BZUC	Buffer Zone User Committee
BZUG	Buffer Zone User Group
CAUC	Conservation Area User Committee
CBAPO	Community Based Anti-Poaching Operation
CBI	Central Bureau of Investigation
CBO	Community Based Organization
CBT	Community Based Tourism
CF	Community Forest
CFCC	Community Forest Coordination Committee
CFOP	Community Forest Operational Plan
CFUG	Community Forest User Group
CHARIS	Contribution to High Asia Runoff from Ice and Snow Project
CITES	Convention on International Trade in Endangered Species
CKNP	Central Karakoram National Park
CLEW	Community Livestock Extension Workers
CMS	Convention on Migratory Species
COFSUN	Community Forestry Supporters' Network
CSIDB	Cottage and Small Industries Development Board
CSLH	Climate Summit for a Living Himalaya
CSO	Civil Society Organization
DADO	District Agriculture Development Office
DFO	District Forest Officer
DFID	Department for International Development
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forests
DoFPS	Department of Forests and Park Services
DoHMS	Department of Hydro-Meteorological Services
DoL	Department of Livestock
Dzumsa	Village Council
ETV	Enterotoxemia Vaccine
FECOFUN	Federation of Community Forest Users, Nepal
FEWMD	Forest, Environment and Wildlife Management Department, Government of Sikkim
FFMS	Forest Fire Management Section
FOP	Forest Operational Plan

FRMD	Forest Resources Management Division
FY	Fiscal Year
Geog	Sub-district
GB	Gilgit-Baltistan
GBFWED	Gilgit-Baltistan Forest, Wildlife and Environment Department
GCP	Global Conservation Program
GMS	Government Middle School
GPS	Global Positioning System
GSLEP	Global Snow Leopard Ecosystem Protection Program
GSLCF	Global Snow Leopard Conservation Forum
GTI	Global Tiger Initiative
Ha	Hectare
HCDO	Hoper Conservation and Development Organization
HH	Household
HWC	Human Wildlife Conflict
ICDP	Integrated Conservation and Development Project
IEEP RAS	Institute of Ecological and Evolutionary Problems of the Russian Academy of Sciences
IGA	Income Generation Activity
INGO	International Non Government Organization
ICSD	Central Asian Interstate Commission on Sustainable Development
ISLT	International Snow Leopard Trust
IUCN	International Union for the Conservation of Nature
KCA	Kangchenjunga Conservation Area
KCAMC	Kangchenjunga Conservation Area Management Council
KCAP	Kangchenjunga Conservation Area Project
KNP	Khunjerab National Park
KP	Khyber Pakhtunkhwa
KVO	Khunjerab Villagers Organization
LFMP	Local Forest Management Plan
LIP	Livelihood Implementation Plan
LRP	Local Resource Person
LTDC	Lachen Tourism Development Committee
MAP	Medicinal and Aromatic Plants
MAPU	Mobile Anti-Poaching Unit
MEGD	Ministry of Environment and Green Development
MFSC	Ministry of Forests and Soil Conservation
MG	Mother Group
MoU	Memorandum of Understanding
NABU	Nature and Biodiversity Conservation Union (Germany)
NCAN	National Center for Animal Nutrition
NCBS	National Center for Biological Sciences
NGO	Non-Government Organization
NICE-CG	National Interagency CITES Enforcement-Coordination Group
NSLEP	National Snow Leopard Ecosystem Protection Programs
NTCA	National Tiger Conservation Authority
NTFP	Non Timber Forest Products
NTNC	National Trust for Nature Conservation
PA	Protected Area
PVSE	Poor, Vulnerable and Socially Excluded Group

RES	Renewable Energy Sources
RNR-RDC	Renewable Natural Resources-Research and Development Center
SAEPF	State Agency on Environment Protection and Forestry
SAWEN	South Asia Wildlife Enforcement Network
SCAPES	Sustainable Conservation Approaches in Priority Ecosystems
SHL	Sacred Himalayan Landscape
SLC	Snow Leopard Conservancy
SLCC	Snow Leopard Conservation Committee
SLIMS	Snow Leopard Information and Management System
SLT	Snow Leopard Trust
SMART	Specific, Measurable, Attainable, Realistic, Time-bound
SNV	Netherlands Development Organization
Soum	District, division of an Aimag (province)
TOT	Training of Trainers
UCPA	Underlying Causes of Poverty Analysis
UNDP	United Nations Development Program
US	United States
USAID	United States Agency for International Development
USD	United States Dollar
VA	Vulnerability Analysis
VCC	Village Conservation Committee
VDC	Village Development Committee
VWG	Village Wildlife Guard
WCC	Women Conservation Committee
WCCB	Wildlife Crime Control Bureau
WCP	Wangchuck Centennial Park
WWF NL	Worldwide Fund for Nature-Netherlands

Acronyms by Project Country/Organization

BHUTAN

CF	Community Forest
DoFPS	Department of Forests and Park Services
DoHMS	Department of Hydro-Meteorological Services
DoL	Department of Livestock
FFMS	Forest Fire Management Section
FRMD	Forest Resources Management Division
Geog	Sub-district
ICDP	Integrated Conservation and Development Project
LFMP	Local Forest Management Plan
LTDC	Lachen Tourism Development Committee
NCAN	National Center for Animal Nutrition
NCBS	National Center for Biological Sciences
NTFP	Non Timber Forest Products
RNR-RDC	Renewable Natural Resources-Research and Development Center
WCP	Wangchuck Centennial Park

INDIA

IUCN	World Conservation Union
NTFP	Non Timber Forest Products
APO	Anti-Poaching Operation
BZ	Buffer Zone
BZCF	Buffer Zone Community Forest
BZMC	Buffer Zone Management Committee
BZUC	Buffer Zone User Committee
BZUG	Buffer Zone User Group
CBAPO	Community Based Anti-Poaching Operation
CBO	Community Based Organization
CBT	Community Based Tourism
CSO	Civil Society Organization
CFCC	Community Forest Coordination Committee
CFOP	Community Forest Operational Plan
CFUG	Community Forest User Group
DFID	Department for International Development
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forests
Dzumsa	Village Council
FY	Fiscal Year
FEWMD	Forest, Environment and Wildlife Management Department, Government of Sikkim
GCP	Global Conservation Program
Ha	Hectare
HH	Household
IGA	Income Generation Activity
INGO	International Non Government Organization
MFSC	Ministry of Forests and Soil Conservation
NGO	Non-Government Organization
NTNC	National Trust for Nature Conservation

PA	Protected Area
SNV	Netherlands Development Organization
UNDP	United Nations Development Program
US	United States
USAID	United States Agency for International Development
USD	United States Dollar

KYRGYZSTAN

IUCN	World Conservation Union
APO	Anti-Poaching Operation
BZ	Buffer Zone
FY	Fiscal Year
GCP	Global Conservation Program
Ha	Hectare
IGA	Income Generation Activity
IEEP RAS	Institute of Ecological and Evolutionary Problems of the Academy of Sciences of Russia
ISDC	Inter-governmental Sustainable Development Commission
NABU	Nature and Biodiversity Conservation Union (Germany)
NGO	Non-Government Organization
PA	Protected Area
RES	Renewable Energy Sources
SAEPF	State Agency on Environment Protection and Forestry
SL	Snow Leopard
SLT	Snow Leopard Trust
UNDP	United Nations Development Program
US	United States
USAID	United States Agency for International Development
USD	United States Dollar

MONGOLIA

Aimag	Province
ASER	Altai Sayan Ecoregion
Bag	Commune, division of a soum (district)
CBO	Community Based Organization
MEGD	Ministry of Environment and Green Development
MAPU	Mobile Anti-Poaching Unit
MoU	Memorandum of Understanding
NGOs	Non Governmental Organizations
SLIMS	Snow Leopard Information and Management System
Soum	District, division of an Aimag (province)
USAID	United States Agency for International Development

NEPAL

AHM	Asia High Mountains Project
CAUC	Conservation Area User Committee
CBAPO	Community Based Anti-Poaching Operation
CBO	Community Based Organization
CF	Community Forest
CFUG	Community Forest User Group

COFSUN	Community Forestry Supporters' Network
CSIDB	Cottage and Small Industries Development Board
DADO	District Agriculture Development Office
DNPWC	Department of National Parks and Wildlife Conservation
FECOFUN	Federation of Community Forestry's Users, Nepal
FOP	Forest Operational Plan
FY	Fiscal Year
GPS	Global Positioning System
HH	Household
HWC	Human Wildlife Conflict
KCA	Kangchenjunga Conservation Area
KCAMC	Kangchenjunga Conservation Area Management Council
KCAP	Kangchenjunga Conservation Area Project
LIP	Livelihood Implementation Plan
LRP	Local Resource Persons
MAP	Medicinal and Aromatic Plants
MG	Mother Group
NGO	Non-Governmental Organization
NTFP	Non Timber Forest Products
PVSE	Poor, Vulnerable and Socially Excluded Group
SCAPES	Sustainable Conservation Approaches in Priority Ecosystems
SHL	Sacred Himalayan Landscape
SLCC	Snow Leopard Conservation Committee
TOT	Training of Trainers
UCPA	Underlying Causes of Poverty Analysis
USAID	United States Agency for International Development
VA	Vulnerability Analysis
VDC	Village Development Committee

PAKISTAN

AKRSP	Aga Khan Rural Support Programme
AKYSB	Aga Khan Youth and Sports Board for Pakistan
BLSO	Broshal Local Support Organization
CKNP	Central Karakoram National Park
CLEWs	Community Livestock Extension Workers
GB	Gilgit-Baltistan
GBFWED	Gilgit-Baltistan Forest, Wildlife and Environment Department
HCDO	Hoper Conservation and Development Organization
KP	Khyber Pakhtunkhwa
KNP	Khunjerab National Park
KVO	Khunjerab Villagers Organization
VWG	Village Wildlife Guard
KP	Khyber Pakhtukhwa
VCC	Village Conservation Committee
WCC	Women Conservation Committee
AKHSS	Agha Khan Higher Secondary School
GMS	Government Middle School

TRAFFIC

CBI	Central Bureau of Investigation
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
ISLT	International Snow Leopard Trust
NABU	Nature and Biodiversity Conservation Union
NTCA	National Tiger Conservation Authority
SLC	Snow Leopard Conservancy
SAWEN	South Asia Wildlife Enforcement Network
USAID	United States Agency for International Development
WCCB	Wildlife Crime Control Bureau

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 is altering river flows and seasonal availability of water, which is negatively 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 Asia High Mountains (AHM) project is working to facilitate technical and policy dialogue on management of Asia's high mountain landscapes and ecosystems in the face of climate change. 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 NTFPs, and heightened forest fire danger.

With support from USAID, the WWF Conservation and Adaptation in Asia's High Mountain Landscapes and Communities Project (hereafter the "Asia High Mountains" or "AHM" 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 Project Year 1 of the Asia High Mountains Project, highlights included:

Bhutan

- A snow leopard sign, camera trap, and prey species survey completed in the western section of Wangchuck Centennial Park (WCP).
- Indigenous climate change interventions used by local communities in WCP documented and lessons learned compiled.
- 400 ha of forest in WCP mapped for development of a demonstration local forest management plan.
- The first high altitude hydrometeorlogical station in WCP is installed and park staff trained on the maintenance of instruments and management of the data collected.

India

- 374 km^2 of North Sikkim surveyed for snow leopard occurrence.
- Survey on climate change impacts on agriculture in Sikkim conducted in 4 districts.
- 9 community based ecotourism initiatives in Sikkim evaluated to identify successes and failures and share lessons learned.
- 7 training and awareness raising programs organized in the project region for various local stakeholders on biodiversity conservation and threats to biodiversity.

Kyrgyzstan

- With support and input from AHM Project staff, the government of Kyrgyzstan expanded the territory of Sarytchat-Ertash State Reserve from 72,080 ha to 149,117 ha and developed and approved the Kyrgyzstan National Snow Leopard Conservation Strategy for 2013-2023.
- Women from three communities in the project region trained on alternative income generating activities, such as production of felt handicrafts, ecotourism, and marketing of yak and horse milk.
- Yaks successfully bred in the project region as part of a climate adaptation demonstration on climate resilient livestock rearing for local livestock herders.
- Snow leopard camera trap, sign, and prey species surveys conducted in Sarychat-Ertash State Reserve.
- Snow leopard festival held at the town of Engilchek situated in the buffer zones of both project protected areas in Kyrgyzstan.
- The AHM Project provided support in the form of equipment donations to rangers and anti-poaching patrols in the project region.

Mongolia

- 384 people (primarily protected area staff, rangers, and volunteer rangers) participated in a series of snow leopard distribution mapping workshops conducted throughout the project region of western Mongolia.

- WWF-Mongolia conducted a snow leopard distribution survey in the western Mongolia project region in partnership with the environment officials, inspectors, rangers, and volunteer rangers.
- 1115 people from throughout the project region were surveyed for a human-snow leopard conflict survey.
- 30 camera traps were installed with the participation of local herders at Jargalant Khairkhan Mountain to assess the snow leopard population at that project site.
- 30 herding families losing livestock to snow leopard conflict were compensated through AHM supported livestock insurance schemes.
- 300 copies of simplified SLIMS manuals were developed and printed in Mongolian to standardize snow leopard monitoring protocols amongst herders and volunteer rangers.
- Community based participatory snow leopard prey species monitoring launched with theparticipation of 8 herders at Jargalant Khairkhan, Bumbat Khairkhan and Baatar Khairkhan Mountains.

Nepal

- 128 people trained on various aspects of natural resource management and resource governance.
- 138 households increased their adaptive capacity to reduce impacts of climate change on their livelihoods.
- 8 community-based anti-poaching operations teams mobilized to curb poaching and illegal trade of wildlife and forest products.
- 4 snow leopard conservation committees mobilized for monitoring of snow leopards and their prey species.
- Human-wildlife conflict assessed and a conflict mitigation strategy developed for the Kangchenjunga Conservation Area (KCA).
- Sustainable harvesting plans prepared for three species of NTFPs/MAPs.
- A community-based NTFP enterprise and a conservation cooperative established.
- Gender and power analysis conducted in two groups using underlying causes of poverty analysis.
- 16 local people trained as citizen scientists for snow leopard and prey base monitoring.
- Preparatory work for snow leopard radio-collaring work in the KCA completed.

Pakistan

- 1600 participants attended a series of conservation awareness raising programs in the project region, learning about the need and methods for snow leopard and wildlife conservation.
- A rapid assessment of the local traditional groups and institutions governing natural resource management in the Rumboor and Laspur Valleys of Chitral conducted.
- A human-wildlife conflict survey was conducted in the Hoper Valley to determine the extent and economic impact of this conflict for use in planning mitigation measures.
- 9200 multi-purpose forest plants distributed among local community members in Laspur Valley to reduce pressure on forests and diversify incomes, including species of Robinia, Alnthus, and Poplar as well as various types of fruit trees.

- 50 households participated in livelihood diversification trainings on poultry raising and vegetable gardening.
- Two livestock vaccination campaigns were organized and 7,000 head of livestock were vaccinated.
- 35 wildlife and NGO workers participated in a one day training workshop on SLIMS snow leopard monitoring methodology.
- One snow leopard sign survey using SLIMS methodology conducted in the Rumboor Valley.
- 17 people trained on improved village watch and ward systems for wildlife protection and binoculars distributed to participating village wildlife guards.

Regional Highlights

- The WWF AHM Project, working in collaboration with consultants, produced a map book of snow leopard range water provision and climate change impacts as well as a report on community and ecosystem vulnerability to climate change impacts in Asia's high mountains.
- WWF participated in the 2013 Central Asian Interstate Commission on Sustainable Development annual meeting in Dunshanbe, where the 4 participating snow leopard range nations agreed to integrate climate change adaptation strategies into national snow leopard conservation action plans.
- Several planning events in the run up to the Global Snow Leopard Conservation Forum were held in Bishkek, Bangkok, and Moscow, all supported by the WWF AHM Project.
- TRAFFIC made excellent progress on compiling a revised report on the trade in snow leopard furs and parts throughout the species range.
- At the request of WWF, INTERPOL agreed to include information on the trade in snow leopard parts in its Project Predator wildlife trade trainings for law enforcement personnel.

c. Challenges:

In Project Year 1 of the Asia High Mountains Project, challenges included:

Bhutan

- In project Year 1, a pre-existing government-approved WCP work plan for the period from July 1, 2012-June 30, 2013 did not align well with the objectives of the AHM Project nor with the AHM Year 1 implementation schedule from Oct. 1, 2012-Sept. 30, 2013. This pre-existing plan had a large emphasis on infrastructure development and equipment purchase, and project implementers were very reluctant to alter this pre-existing plan with re-designed activities to conform with USAID funding requirements in Year 1.
- A generally lack of capacity amongst AHM Project implementers at WCP with respect to designing climate adaptation activities and other work will need to be addressed by use of outside consultants and advisors.

India

- Sikkim borders China, Nepal, and Bhutan, and a large area of the state falls within highly restricted border zones. Special border zone permits are required to work in these areas, and the process for acquiring these permits is very long and drawn out, limiting the amount of time WWF staff are allowed to visit these areas. This is particularly true in North Sikkim along India's border with China's Tibet Autonomous Region, one of Sikkim's primary snow leopard range areas.

Kyrgyzstan

- Problems related to the Kumtor Gold Mine, including village protests that closed the road to both Kumtor and the Sarychat Ertash State Reserve, have temporarily cutting of access to the Sarychat-Ertash Reserve. At the same time, parliamentary discussions on nationalization of the mine, and the mine's various environmental problems have made relations with the mine, which lies in the buffer zone of the Sarychat Ertash Reserve, increasingly difficult.
- At present, there is very low interest on the part of various international organizations working in the project region with respect to cooperation and combining efforts on project activities.

Mongolia

- The harsh climate of the project region in western Mongolia, where natural disasters such as extremely cold winters, snow disasters, and droughts regularly occur, have a great potential to disrupt both local livelihoods and project activities.
- Mining companies holding low-cost/large area mineral exploration licenses generally object to the creation of local protected areas on their exploration license territories, even if these protected areas are approved by soum and provincial governments. Thus the creation of new local protected areas under this project that overlap mineral exploration licenses may face protracted legal challenges from the mining companies involved.

Nepal

- Improved wildlife protection efforts in the project region have resulted in an increase in human-wildlife conflict, including both crop damage and livestock depredation. Wild boar, barking deer and monkeys damage crops while snow leopard, common leopard, and dhole kill livestock, producing widespread complaints from local residents. Reducing human-wildlife conflict has been and will continue to be a challenge for the implementation of AHM Project activities in the coming project year.
- Due to a strictly enforced ban on grazing in neighboring Sikkim, many herders in Sikkim have illegally shifted their grazing activities to the Nepal side of the Kangchenjunga landscape, causing difficulties for implementing improved pasture management practices in some areas.
- If approved, a proposed highway from Taplejung to Wollangchungolla in the western KCA will pose a new challenge to meeting project objectives, such as through environmental damage, habitat loss, and a possible increase in the illegal trade of wildlife and NTFPs along this new road.

Pakistan

- Local hunters at the Hassanabad Valley project site voiced strong opposition to project wildlife protection activities. In response, the GB Forest, Wildlife and Parks Department intervened, establishing a check post in the valley to monitor poachers and hunters, which created an enabling environment for community-based conservation at the site.
- The Snow leopard survey planned for the first year was delayed due to opposition of some local people in the Hassanabad Valley. The survey team had to return twice from the entrance of Hassanabad Valley due to threatening attitudes of a local opposition group.
- The project has not been able to establish a robust community-mobilization component in Central Hunza, GB, primarily because local people are not very receptive to project development approaches.
- Abrupt climatic conditions such as heavy rainfall and landslides restricted staff mobility to the project sites, especially in the Hoper Valley, GB and the Rumboor Valley, Chitral District, KP, where all the roads were washed out.
- The poor law and order situation in Gilgit-Baltistan, such as the killing of 10 foreign mountain climbers at the Nanga Parbat base camp in June 2013, hampered project activities by limiting staff mobility.

Regional

- Completion of the draft report on snow leopard trade has been delayed due to a change in researchers leading the report writing process at TRAFFIC. While researching the topic, it was also found that most information on the illegal trade of snow leopards lies either in unpublished records or in gray literature. This requires TRAFFIC to conduct time-consuming one-to-one consultations with relevant experts and law enforcement officials from each snow leopard range state to obtain this information. However, the report will be completed in 2014.

- In 2013, the secretariat of the Climate Summit for a Living Himalayas unexpectedly shifted from Bhutan to India, at which time Indian officials declined all forms of support and assistance for secretariat activities from WWF and other non-member organizations. Thus, for the time being, WWF is unable to support the Climate Summit process as planned, although this situation may change in future project years.
- Several country offices reported that delayed approval of the Year 1 work plan by the donor delayed start up of their Year 1 project activities, since they lacked funds they could temporarily re-allocate for this purpose.

d. Adaptive Management in Action:

In Project Year 1 of the Asia High Mountains Project, adaptive management actions included:

Bhutan

- Infrastructure projects that the WCP project field office originally requested be funded under the AHM Project were paid for with non-AHM sources of funding. The WCP project field office reviewed the guidelines for what types of activities qualify for AHM Project funding and planned future AHM activities accordingly.
- Due to the large sums of money high altitude livestock herders in WCP can earn in the lucrative cordyceps (caterpillar fungus) trade, it is often difficult to find herders interested in participating in small-scale livelihood improvement activities or to provide paid labor needed to implement other project activities, such as planned tree-planting activities. Therefore village laborers from lower altitude have had to be hired to assist implement some project activities.

India

- In Sikkim, the Himal Rakshaks (Mountain Guardians) monitor illegal hunting, illegal harvesting of NTFPs, and other environmental infractions and report these activities to local law enforcement agencies. The Himal Rakshaks also perform wildlife and ecosystem monitoring activities, serving as citizen scientitst. However, these community volunteers were not getting the recognition due them for their role in conservation from both their communities and the Government of Sikkim. This situation is being addressed by holding community meetings to introduce local adults and children to the work of the Himal Rakshaks and to explain why their work is important for the ecological and economic well being of the community.

Kyrgyzstan

- In order to better conform with AHM Project requirements, activities in Kyrgyzstan are being shifted from earlier work that focused largely on snow leopard monitoring and anti-poaching operations to more livelihood and capacity building activities, particularly with respect to climate adaptation.
- Efforts were made to develop and strengthen cooperation with relevant national and provincial governmental bodies, local communities, NGOs and other international partners active in the project region, such UNDP and GEF.

Mongolia

- Following the June 2012 parliamentary and June 2013 presidential elections, significant changes in the staff and structure of governmental organizations occurred as new appointments were made and agencies reshuffled, which brought on board new officials with different levels of knowledge and interest in environmental and pasture management issues. This required WWF to actively establish many new government partnerships in the project region and to educate newly elected and appointed local decision makers about project objectives, such as climate-smart

grazing practices that maintain healthy pastures for both livestock and snow leopard prey species.

Nepal

- In response to growing human-wildlife conflict in the KCA which threatens to undermine project wildlife conservation objectives, WWF has drafted a conflict mitigation strategy to explore possible solutions which will be implemented in future project years to reduce this threat to both local livelihoods and wildlife.
- Due to the need to properly research the most appropriate equipment to be used before purchase and to provide team members with additional training, the snow leopard collaring activity planned for Project Year 1 was postponed until November 2013.

Pakistan

- Due to continuing opposition to project activities amongst some community members in the Hassanabad Valley, activities planned for this site were shifted to the nearby Hoper Valley, which has similar geographic, ecological, and social characteristics. This move was made primarily to avoid further delay in project implementation, which will be greatly facilitated by the presence of a proactive community-based conservation organization WWF helped establish in 2011.
- In order to facilitate the social mobilization process in the Hassanabad Valley, WWF requested the participation of the GB Forests, Wildlife and Parks Department in this process, which enabled the department's responsible officials to understand the social dynamics of the local people. In spite of the project shift to the Hoper Valley, the department remains committed to creating an enabling environment for community-based conservation initiatives in the remarkable Hassanabad Valley at some point in the future.

Regional

- Due to the move of the Climate Summit for a Living Himalaya secretariat from India to Bhutan in 2013, and the subsequent disinterest in WWF participation and support for Climate Summit activities, the resources allocated for the Climate Summit have been shifted. This funding was instead used to support the Global Snow Leopard Conservation Forum, which will result in creation of a 12 nation alliance for the protection of snow leopards and their habitat, participants of which currently have great interest in WWF participation and support.

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.	Event	2	On track
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-Delayed but 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-Delayed but 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	250	On track
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	On track
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	On track
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	On track
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	On track
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	1	On track
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.	Events	2	On track
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-Delayed but 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	On track
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	On track
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	On track
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	Site	1	On track

	introduction of drought and pest-tolerant crops.			
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	On track
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	On track
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 2
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	3	On track
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	2	On track
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-Delayed but 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.	None		On track
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		Delayed
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	Delayed - Postponed until Project Year 2
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	On track
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.	Groups	1	On track
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	On track
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	Delayed
Nepal/ 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	On track
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	Completed
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	On track
Mongolia 1.3.4	Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers.			Year 2
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.			Year 2

Nepal 1.3.6	Support government agencies and communities to develop guidelines for sustainable management and harvesting of NTFPs/MAPs.	Guideline	1	On track
Nepal 1.3.7	Establish community-based processing facilities and support enterprise development, market linkages, value-added approaches, and market information systems.	Enterprise	1	On track
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	Completed
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	On track
Bhutan India 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.			Year 2
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.	.		Cancelled under AHM. Activity funded under a different project.
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	On Track
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	On Track
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.***			
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	On track
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	On track
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	On track
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	On track
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	On track
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	On track
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	On track
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	On track
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 but Delayed
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	People Trained	10	On track

	killing, and habitat degradation) and to conduct anti-poaching efforts through local SLCCs and other wildlife protection organizations.			
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	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	20	On track
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	15	On track
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	On track
1.4.7	Train high mountain nomadic herders to monitor snow leopards, habitats, and threats (eg. poaching, retaliatory killing, and habitat degradation). **Note:** This project activity has been combined with Activity 1.4.6, above.			N/A
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	On track
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	On track
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	On track
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	On track
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 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	5	On track
Nepal 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	3	On track
Pakistan 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	2	On track
Regional 1.4.14	Engage government agencies in high altitude areas to ensure their activities do not adversely affect natural ecosystems.			Year 2
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.			Year 2
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.			Year 2
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			N/A

	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.			
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. **Note:** This project activity has been merged with project Activity 2.2.1.			N/A
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. **Note:** This project activity has been merged with project Activity 2.2.1.			N/A
Regional 2.1.5	Disseminate adaptation technologies, water resource management best practices, and information on knowledge and institutional capacity gaps.			Year 2
Regional 2.1.6	Develop special issue briefs for inter-governmental review meetings on efforts to manage downstream impacts on high mountain communities.			Year 2
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.			Year 2
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 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.	Report	1	Completed
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.			Year 2
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.			Year 2
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	Completed
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 but Delayed
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	Delayed
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	On track
TRAFFIC 2.3.4	Partner and coordinate with INTERPOL through the USAID-funded Project Predator initiative to exchange relevant information.	None		On track
TRAFFIC 2.3.5	Inform actions of SAWEN to promote strengthened enforcement cooperation among countries, especially China.	None		On track

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	On track
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.			N/A
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-Delayed but 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.			Year 2
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)			Year 3
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 Sustainable Development Commission in Central Asia to discuss common challenges, approaches and successes in headwater management, water security, community development and snow leopard conservation.			Year 3
Regional 2.5.2	Launch the beginnings of an inter-governmental Alliance on Asia's High Mountain Landscapes.			Year 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	Year 1-2 On Track

Activity Status by Country:

Bhutan

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.***			
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-Delayed but 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-Delayed but 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	On track
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	On track
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.	None		On track
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	Delayed - Postponed until Project Year 2
Bhutan India 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.			Project Year 2
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.			Cancelled under AHM. Activity funded under a different project.
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	On track
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	30	Completed

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-Delayed but 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-Delayed but 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	On track
Nepal/ 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	On track
Bhutan India 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.			Year 2
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	On Track
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	On track
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	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	250	On track
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	On track
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 1.2.3	Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife (e.g. rotational grazing and grazing set asides).	Site	1	On track
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	On track
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	On track
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	On track
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	On track
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	On track
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	On track
1.2	***Sub-objective 1.2: Increase community resiliency to climate change impacts.***			
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 2
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.	Groups	1	On track
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	On track
Mongolia 1.3.4	Disseminate lessons and best practices for mitigating human-wildlife conflict with stakeholders and decision makers.			Year 2
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.			Year 2
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	On track
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	On track
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	On track
Mongolia 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	5	On track

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	On track
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	On track
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	1	On track
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	On track
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	On track
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.	Site	1	On track
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	3	On track
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	On track
Nepal/ 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	On track
Nepal 1.3.6	Support government agencies and communities to develop guidelines for sustainable management and harvesting of NTFPs/MAPs.	Guideline	1	On track
Nepal 1.3.7	Establish community-based processing facilities and support enterprise development, market linkages, value-added approaches, and market information systems.	Enterprise	1	On track
Bhutan India 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.			Year 2
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	On Track
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	On track
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 but Delayed
Nepal 1.4.6	Train local community members such as livestock herders to be citizen scientists conducting monitoring of snow leopard populations,	People Trained	15	On track

	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.			
Nepal 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	3	On track

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	On track
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	On track
1.2	***Sub-objective 1.2: Increase community resiliency to climate change impacts.***			
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	2	On track
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		Delayed
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	Delayed - Postponed until Project Year 2
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	Completed
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	Completed
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	On track
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	On track
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	On track
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	On track
Pakistan 1.4.13	Provide technical and financial support to forest departments and communities to protect habitat.	Groups	2	On track
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.			Year 2

II. Status Updates: Areas of Progress and Successes; Implementation Issues and Challenges

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 project progress in each of the six project countries as well as at the regional scale are given below:

Bhutan

At Wangchuck Centennial Park (WCP) in Bhutan, the single largest achievement in Project Year 1 was completion of two large-scale snow leopard sign, camera trap, and prey species surveys in the central and western ranges of WCP. These surveys clearly documented snow leopard distribution and habitat use over roughly 65 percent of potential snow leopard range areas within the park. A third survey covering the highland areas of the eastern third of WCP will be conducted in Project Year 2. This survey was designed and led by a WWF scientist with the help of local rangers trained by WWF on snow leopard monitoring techniques. Survey findings will be used to develop a snow leopard conservation strategy for WCP and elsewhere in Bhutan.

Other achievements in Year 1 included: compilation of a report on local climate change interventions in WCP that will assist in developing a methodical climate adaptation strategy for WCP, installation of a high altitude hydro-meteorological station in WCP that will be essential for future climate analysis in the park, mapping of 400 ha of forest in WCP for development of a local forest management plan, and training of 30 local residents of WCP as citizen scientists to monitor to wildlife and poaching activities. Notably, WWF signed a co-financing agreement with the World Bank-led “Sustainable Financing for Biodiversity Conservation and Natural Resources Management in Bhutan,” which is focused on Bhutan’s four northernmost protected areas, including WCP.

India

In Sikkim in Project Year 1, WWF conducted a wide variety of studies and activities. With respect to climate change, WWF conducted a survey to gather information on climate change impacts on local agricultural and to gauge farmer opinions on how these agricultural practices might best be adapted to a changing climate. Lessons learned through this survey will be used to develop a climate adaptation strategy for farmers in the project region.

With respect to local natural resource management, two citizen scientist training programs were conducted for Himal Rakshaks (Mountain Guardians) to increase the capacity of these volunteer rangers with respect to local wildlife, biodiversity monitoring, and monitoring illegal wildlife trade. In addition a survey on natural resource management in Lachen Village was conducted which identified the main gap in local resource management as being the lack of any regulation of cordyceps (caterpillar fungus) harvesting.

In terms of snow leopard conservation, a short survey on human-wildlife conflict was conducted in North Sikkim which found that while loss of livestock to snow leopards continues to be a low-level problem, the largest threat to livestock in the region is the large population of feral dogs roaming North Sikkim. In addition, preliminary snow leopard sign and prey species surveys were conducted in the Lasher Valley and Tso Lhamu areas of Sikkim in August 2013. Snow leopard hot spots identified in this survey will be revisited for more intensive sign and camera trap surveys.

In terms of ecotourism and waste management, a meeting was held at Lachen to discuss the efficacy of a local ban on water sold in plastic water bottles in reducing rubbish in the village and at a local lake visited by tourists. To augment this initiative, a local recycling center was opened at Lachen accompanied by a door to door education campaign on trash separation and a village-wide trash clean-up activity. WWF also supported holding of a learning and sharing workshop by the Zero Waste Himalayas Group, members of which include NGOs, government officials, individuals, and elected representatives, to discuss possible strategies for improving waste management in Sikkim. In Project Year 1, WWF also conducted a survey documenting various community-based ecotourism initiatives at the nine most visited village tourism sites in the Sikkim. A report on this survey is being compiled with lessons learned from these diverse initiatives to guide further ecotourism development in the project region.

Finally, in terms of building relationships and rapport with government partners, cooperation of the defense agencies is of utmost importance for the project as most potential snow leopard habitat in Sikkim lies in restricted border zones under military jurisdiction. To this end, in 2013 WWF's Sikkim office marked World Environment Day by holding an awareness-raising program for army personnel at two army camps in North Sikkim which taught army personnel about local biodiversity, importance of wetlands, solid waste management, and other high altitude environmental issues. WWF also sought the cooperation of the Sikkim Horticulture Department for moving forward with developing a climate adaptation strategy for agriculture.

Kyrgyzstan

In Project Year 1, WWF conducted a wide-ranging series of activities in the project region of Kyrgyzstan. At the national level, WWF provided high-level support to the Kyrgyz government for development of an action plan to implement the Kyrgyz Republic's National Snow Leopard Conservation Strategy for 2013-2023, as well as for preparations for the October 2013 Global Snow Leopard Conservation Forum held in Bishkek.

With respect to climate change, WWF held a series of workshops on climate change impacts, adaptation strategies, and renewable energy sources for 2 communities in the project region as well as for building the capacity of national level stakeholders, such as relevant government workers, NGOs, and scientists with respect to climate adaptation. One practical activity WWF is undertaking with respect to climate adaptation in Kyrgyzstan is raising of a small herd of yaks in the project region with initial startup support from WWF NL as a demonstration of livestock better adapted to the harsh winters of Kyrgyzstan's high mountain areas than local cattle breeds. WWF also developed plans in cooperation with the UNDP-led Khan Tengri GEF project to introduce climate-smart agricultural and grazing practices to maintain healthy pasture for both livestock and wildlife in the largely overlapping AHM and GEF Project territories, with WWF having signed a co-financing agreement with this GEF Project in 2013. WWF and UNDP have also tentatively agreed to support improved habitat management activities in the project region such establishing feeding fields for wildlife and ensuring a mosaic structure of wildlife habitat in agricultural areas.

In terms of improving community participation in conservation, two events were held at schools in the project communities targeting both school children and adults, the first being a snow leopard festival to mark the UN's International Day for Biological Diversity and the second having been a series of conservation-themed essay, song, poetry, drama, and quiz contests. These activities were supplemented with a conservation media campaign consisting of 7 radio broadcasts in the project region and Bishkek about development of the system of protected areas, 2 TV broadcasts about the snow leopard festival, and various online and print news reports.WWF also sought to increase the participation of the Canadian-owned Kumtor Gold Mine, located on the western boundary of the Sarychat-Ertash Reserve, in local conservation efforts, having reached a tentative agreement with mine management to support ecological education and enforcement of anti-poaching activities in local communities.

In terms of improving local livelihoods in project communities, WWF is providing training and marketing support for small-scale income generating activities in three remote project communities, such as felt crafts production and use of yak and horse milk for medicinal purposes, particularly for gastrointestinal disorders. This livelihood support is closely tied to a campaign to halt poaching of snow leopards and their prey species in and around project communities.

WWF's anti-poaching work in Kyrgyzstan involved providing material support to reserve rangers to undertake anti-poaching patrols as well as coordinating patrols conducted by reserve rangers with those conducted by the State Agency on Environment Protection and Forestry to avoid duplication of patrol routes. In addition, a volunteer community anti-poaching patrol was setup in Engilchek to remove snares around the community and report other poaching violations. In with respect to snow leopard monitoring, WWF reached a preliminary agreement to cooperate with SLT on conducting snow leopard sign, camera trap, and prey species surveys as well as for having DNA analysis of scat performed by the Russian Academy of Sciences. Finally, In Project Year 1, WWF continued to provide high-

level support to the Kyrgyz government on the recent expansion of the Sarychat-Ertash State Reserve and the establishment of the new Khan Tengri National Park, both actions of which will provide great benefits for the conservation of snow leopards and their prey species.

Mongolia

In AHM Project Year 1, WWF focused on a series of snow leopard conservation related activities. WWF worked in cooperation with local decision makers, community members, and scientists to prepare seven proposals to expand the Khokh Serkh Strictly Protected Area and establish one national-level and five local protected areas in the project region for the benefit of snow leopards and their prey species. The local protected areas will be entirely community managed and greatly increase community participation in conservation. Creation of these protected areas will also improve pasture management within their boundaries.WWF also partnered with SLT's Snow Leopard Enterprises program to support development of SMART business plans for five community-based organizations in the Jargalant Khairkhan Mountain region for the production and marketing of felt handicrafts. This activity will promote community participation in conservation by providing participants with direct economic incentives for preventing poaching of snow leopards and their prey.

In terms of monitoring snow leopards in the vast western Mongolia project region, WWF in cooperation with the Ministry of Environment and Green Development held a series of six mapping workshops throughout the project region where nearly 400 participating government and NGO conservation workers as well as volunteer rangers prepared snow leopard distribution maps for the regions based on their first hand knowledge. These maps have been compiled into a single data base and will be used as a primary reference for developing community-based snow leopard monitoring activities. Field monitoring of snow leopards consisted of a successful 30 day camera trap survey on Jargalant Khairkhan Mountain and snow leopard sign surveys on Jargalant Khairkhan, Bumbat Khairkhan, and Baatar Khairkhan Mountains. All four surveys were conducted with the participation of interested local herders who were trained as citizen scientists. A second camera trap survey has been started on these three mountains with the participation of the eight trained citizen scientists. In addition, 300 copies of simplified SLIMS protocol were in printed in Mongolian language for further citizen scientist training.

WWF, in cooperation with provincial-level government conservation workers, also conducted a human-wildlife conflict survey of 1115 residents of the project region, with preliminary result showing nearly a quarter of those surveyed felt rates of conflict with snow leopards in the region were high. Findings of this survey will further help pinpoint snow leopard hotspots and priority areas for snow leopard conflict mitigation work. At the same time, the "Buy Goat" compensation program continued in Project Year 1, whereby herders suffering loss of livestock to snow leopards were compensated in kind with sheep. However an activity assessment concluded that this program is not sustainable in the long term. WWF also supported development of a trial community-managed compensation fund in one village in Uvs Aimag, where participants paid insurance premiums into a fund that paid compensation for loss of livestock to snow leopards and other predators. In terms of anti-poaching work, WWF signed an MoU with the State Investigation Department (SID) and the National Police Agency (NPA) to cooperate on combating wildlife poaching and illegal timber cutting in the project provinces of Bayan-Ulgii, Uvs, and Khovd.

Nepal

In Project Year 1 in Nepal, WWF conducted extensive capacity building trainings to improve governance of and participation in community-based organizations in the remote Kangchenjunga Conservation Area (KCA). Particular emphasis was paced on building the capacity of organizations involved in natural resource management and conservation work. These trainings included two three-day trainings co-organized with CARE on good governance and gender and social inclusion, the participants of which included members of Community Forest Users Groups (CFUG), Conservation Area User Committees (CAUC), Community Based Anti-Poaching Operations (CBAPO) teams, Snow Leopard Conservation Committees (SLCC), and Mother Groups (MG). These trainings emphasized appropriate natural resource use, management, and equitable sharing of benefits. WWF and CARE also co-organized two one-day meetings on gender and power analysis using Underlying Causes of Poverty Analysis (UCPA) tools for CFUG members, which analyzed access to and control over local community forest resources. Another workshop co-organized by WWF and CARE was a three-day training of trainers workshop to train local resource persons for CFUGs. This workshop placed particular emphasis on training participants to conduct pro-poor planning and develop livelihood improvement plans. In addition, WWF and CARE also co-organized two three-day trainings on leadership skills for community CFUG and CAUC members to empower these participants to assume leadership roles in KCA natural resource management activities.

With respect to Climate Change, in Project Year 1 WWF and CARE co-organized a two-day interactive workshop in Khalikola to assess climate change impacts on agricultural production and to explore possible alternatives for improving land management practices. In particular, the workshop focused on improving irrigation techniques for maize and potato plots. WWF and CARE supported four communities in the KCA to implement adaptation actions to reduce climate change impacts on agriculture and livelihoods, including such measures as improving irrigation efficiency and protection of water sources as well as introduction of greenhouse farming for vegetable production and beekeeping as new alternative income generating activities. For the high altitude grassland areas of the KCA, climate adaptation strategies will necessarily have to focus on improving pasture management. In this regard, WWF organized three one-day participatory sustainable community pasture management trainings and conducted demonstrations activities such as improving livestock access to remote pastures with bridge renovations, promoting rotational grazing to improve pasture quality, and installing clean water pipe systems to improve water quality for herders in highland settlements.

In terms of community conservation, in Project Year 1WWF supported construction of a demonstration predator-proof corral to prevent nighttime predation on yak calves by snow leopards and other predators. In tandem with this demonstration, WWF also supported establishment of four community-managed livestock insurance schemes in the KCA to provide compensation to herders losing livestock to snow leopards and other predators, in the hope that such compensation schemes will reduce retaliatory killing of snow leopards. WWF also provided support to mobilize eight CBAPO teams to curb poaching and illegal wildlife trade in the KCA and also mobilized 4 SLCCs for monitoring of snow leopards and their prey base. In conjunction with SLCC monitoring, WWF developed a snow leopard monitoring protocol suitable KCA which utilizes a combination of snow leopard sign, camera trap, and prey species surveys as well as DNA analysis of snow leopard scat. WWF also provided support to conduct renovation KCAMC offices to improve the workspace for CBOs directly managing the KCA, such as SLCCs and CBAPO. WWF also supported a study on human-

wildlife conflict in (HWC) the KCA that will serve as the basis for developing trial mitigation measures for HWC. WWF also trained 16 local residents to be citizen scientists to monitor to monitor snow leopards and their prey species and at present these citizen scientists are involved in monitoring 13.4 km of snow leopard transects in the KCA. In preparation for radio collaring of several snow leopards in the KCA in Project Year 2, WWF has identified appropriate trapping sites based on earlier monitoring activities, obtained all necessary permits from the government of Nepal, and tested two models of satellite collars in the field. In regard to NTFP conservation, WWF supported community development of plans for sustainable harvesting of three species of NTFP/MAPs.

In terms of promoting alternative livelihoods in the KCA, in Project Year 1WWF supported establishment of a community-based incense stick making enterprise in one community and also establishment of conservation cooperative to develop markets for sale of local sustainably produced NTFP/MAP products and to help with proper management of community funds raised from production and sale of local NTFP products. WWF is also promoting ecotourism in the KCA by providing support to improve two small visitor's centers in the KCA with displays on the biodiversity and peoples of the KCA as well as by supporting improvement of trekking trails in the KCA.

Pakistan

In Project Year 1 in Pakistan, WWF's conservation awareness raising activities included conducting eight meetings for schools and community groups in the project region of northern Pakistan to teach participants about the role of wild predators, particularly snow leopards, in maintaining healthy ecosystems, especially healthy pastures. Other topics discussed at these events included climate change impacts on snow leopard habitat and rural livelihoods, snow leopard ecology, general wildlife conservation, and the importance of watershed conservation.

One major task in Project Year 1 was the assessment of traditional tribe-based natural resource management groups at the three originally planned project sites, which involved holding of seven community meetings which identified community groups and leaders responsible for community management of activities, such as livestock grazing, fodder and fuel wood collection, farming, mining, and hunting. Support for project activities was secured from many of these key stakeholders and indigenous natural resource management knowledge and techniques were documented. Building on this initial assessment, interested local natural resource groups were reorganized as village conservation committees (VCC) and women's conservation committees (WCC), which were mobilized for implementing project activities. Two VCC offices were established in project communities and a day-long workshop for training VCC and WCC members on natural resource management was held in one project community. To reduce livestock grazing pressure on high altitude pastures which form prime snow leopard habitat, a demonstration activity was conducted at one site to raise fodder crops on 5 ha of agricultural and marginal lands near human settlements.

To address forest degradation-related issues, WWF distributed nearly 8,000 multipurpose tree seedling to on community, primarily species of Robinia, Alenthus, and Poplar, which will provide benefits not only for watershed conservation but also provide fodder and timber. Similarly, WWF also distributed 1200 fruit tree seedlings, including apple, pear, walnut, cherry and apricot varieties, to community members for improving degraded lands, diversifying household incomes, and improving nutrition. In addition to fruit trees, other small-scale alternative income activities that WWF is promoting to diversify incomes and improve food security and nutrition in the project region, as well as to lessen dependence on livestock herding and grain farming and reduce threats to snow leopards, include promoting vegetable gardens, and chicken raising amongst 100 households at two project sites. In another effort aimed at improving household incomes, minimizing the economic loss resulting from predation on livestock by snow leopards, and garnering support for snow leopard conservation, 7000 head of livestock were vaccinated at two sites before these animals were moved to high altitude pastures for the summer. By doing this, individual families will have higher livestock survival rates and the rate of transmission of disease from livestock to wild ungulates preyed upon by snow leopards will be reduced. Similarly, WWF conducted a survey of livestock owners at one site to assess the economic impact of predation on livestock by snow leopard and other wild predators. The survey also included sections on livestock grazing patterns and seasonality and livestock mortality from predation and disease. Survey findings will be used to develop strategies for mitigating human-wildlife conflict.

In terms of direct snow leopard conservation work, WWF developed a snow leopard monitoring protocol appropriate for project sites in northern Pakistan that seeks to assess the abundance and distribution of snow leopards and their prey species using sign surveys, fixed-point counts, and non-invasive DNA analysis of scat samples. This protocol will be used to train wildlife department and conservation NGO workers as well as local citizen scientists at

project sites, with two such on-site trainings having already been conducted. As part of the first training, an actual snow leopard survey was conducted at the training site that involved setting up 22 survey transects. Findings will be compiled and used for developing a regional snow leopard distribution map and updated snow leopard conservation strategy. In order to improve anti-wildlife poaching efforts and prevent unauthorized woodcutting and free grazing, three village wildlife guards (VWG) were designated at two sites while other interested residents also participated in a watch and ward system training to assist these guards. Each of the three VWGs were provided with a pair of binoculars to assist in their duties. Finally, WWF supported establishment of a government-manned wildlife check post at one site known to be frequented by wildlife poachers.

Regional

Major regional activities conducted in Project Year 1 included the production a map book of snow leopard range water provision and climate change impacts as well as a report on community and ecosystem vulnerability to climate change impacts in Asia's high mountains which were produced under the supervision of the Conservation Science Department at WWF-US. TRAFFIC compiled range-wide data on the trade in snow leopard furs and parts. WWF Russia succeeded in convincing snow leopard range nations attending the 2013 Central Asian Interstate Commission on Sustainable Development annual meeting to integrate climate change adaptation strategies into national snow leopard conservation action plans. And WWF played a key role in funding planning preparation for the Global Snow Leopard Conservation Forum as well as reviewing range-wide documents to be finalized at the forum, such as the Bishkek Declaration and the Global Snow Leopard Ecosystem Protection Programs of the individual snow leopard range states. Another major regional was having INTERPOL agree to address the trade in snow leopard parts in its Project Predator wildlife trade trainings for law enforcement personnel. In total, these activities contributed to increasing awareness of the need for snow leopard and high altitude ecosystem conservation in each of the 12 snow leopard range states.

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 Project Year 1, particularly good progress was made on items 1, 3, and 4, while work on climate adaptation will begin in earnest in Project Years 2 and 3. Country by country detailed activity descriptions follow.

Bhutan

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.

Activity 1.1.2a: Kurtoe Geog

In Wangchuck Centennial Park (WCP), a local forest management plan (LFMP) was developed for three areas of Kurtoe Geog in Lhuntse District, where park residents will be permitted to extract natural resources. As a part of the development of the LFMP, 416 ha of forest were mapped, a detailed non-timber forest products (NTFP) inventory was carried out, and an annual sustainable timber harvest quota set. Forest soil types in the area covered by the LFMP were determined as were the general quality of forest-canopy, wildlife present, and landslides areas. The LFMP will allow for permits to be issued to 226 households in WCP in Jasibe,Wai Wai, and Tabi Villages so that residents of these villages can extract timber at subsidized rates for firewood and home construction and renovation. The Kurtoe Geog Administration has been trained in use of the LFMP and to design a detailed plan concerning where timber resources will be extracted. WCP staff in the eastern park field office will provide oversight to control unauthorized felling of timber.

Outputs/Results:

- A local forest management plan is developed for sustainable management of forest resources in Kurtoe Geog.
- 6 Local administrators (All Men) are trained in the preparation and implementation of sustainable forest management plans.

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 WCP, WWF conducted a questionnaire-based survey of 498 households to document local climate change interventions and coping strategies currently employed by local communities to address climate change impacts on their lives and livelihoods. Findings of this survey will be used to guide design of effective climate change adaptation strategies for park communities as well as to educate park residents about mitigating climate change impacts through adaptation planning.

Outputs/Results:

- Report compiled on climate change interventions and coping strategies currently being used by residents of WCP.
- Survey findings will be used as a basis for designing effective climate adapation strategies for communities in WCP.

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).

Under this activity 57 households in central WCP's Tang and Chhokhor Geogs have been selected to participate in a demonstration to improve a total of 19 ha of degraded pastureland by planting these pasture plots with a mixture of fodder species that include rye and clover. Planning for this activity commenced in Project Year 1, but actual planting will occur in Project Year 2. Experts from the National Center for Animal Nutrition (NCAN) in Bumthang will oversee this demonstration, including with respect to timing of planting, planting methods, and plot monitoring.

Outputs/Results:

- 57 households and have been selected to participate in this pasture improvement demonstration that will be carried out on 19 ha of degraded pastureland.
- If successful, methodologies developed for improving degraded pasturelands in settled areas developed under this demonstration will be replicated elsewhere in WCP.

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.

Under this activity, WWF attended a two-day meeting in Boulder with the University of Colorado CHARIS Research Group to explore areas for cooperation with respect to climate change and its impact on river flows in Asia's high mountains. Discussions focused on work in Bhutan, where a list of possible points of cooperation developed included assisting

CHARIS with establishing research contacts in Bhutan, conducting high altitude hydro-meteorological monitoring and sampling in Bhutan, and finding qualified candidates for graduate research scholarships. This meeting was followed up by a visit to Bhutan by CHARIS researchers, for which WWF arranged visas to Bhutan; travel to, from, and within Bhutan; and meetings with relevant government departments and research institutes. In addition, two staff from the DoHMS accompanied by a WCP ranger installed the first high altitude hydro-meteorological station in WCP, which is located at an elevation of 4033 m in the vicinity of Khangdang in central WCP. A second station will be installed in WCP at Tabgang in Lhuntse District in Project Year 2.

Outputs/Results:

- Tentative points of cooperation between WWF and the University of Colorado's CHARIS research group drawn up. WWF also followed up by assisting CHARIS researchers with travel to Bhutan and introductions to establish research partnerships.
- The first high altitude hydro-meteorological station in WCP is installed.
- WCP staff members from the central range are trained on equipment use and maintenance as well as data transfer and storage.
- Data gathered will be used for future climate change analysis and planning for the WCP region.

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.

This activity has been postponed until Project Year 2.

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.

This activity has been cancelled under the AHM Project and will be funded under a different project.

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.

Under this activity WWF, working with WCP rangers, completed snow leopard sign and camera trap and prey species surveys in the western section of WCP. Protocol developed in

the course of these surveys is being formalized and will be used for future snow leopard surveys elsewhere in Bhutan.

Outputs/Results:

- 1 snow leopard sign and camera trap survey and 1snow leopard prey species survey were competed in the western section of WCP.
- Reports on these surveys and formal survey protocols are being prepared.
- 3 rangers from WCP have been fully trained to conduct snow leopard sign, camera trap, and prey species surveys.

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.

Note: This activity was postponed until AHM Project Year 2.

Under this activity, 30 yak herders will be trained as citizens scientists/guards to monitor wildlife and record wildlife sightings as well as to report cross border intrusions from Tibet, which are largely undertaken by smugglers involved in illegal cross border trade in cordyceps (caterpillar fungus) and wildlife parts.

Expected Outputs/Results:

- Forms for recording wildlife sightings and cross border intrusions will be developed.
- 30 yak herders will be trained to use these forms and share this information with WCP staff.

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.

In North Sikkim, WWF worked with the Lachen Dzumsa (village council), the Lachen Tourism Development Committee (LTDC), and community members to conduct a study on natural resource management (NRM) practices at Lachen. NRM topics covered included grazing, firewood cutting and use, NTFP collection, water resources, and agricultural. On the basis of this survey, a draft report on NRM in Lachen is being prepared, which will identify gaps and needs with respect to traditional NRM practices at Lachen. The main gap identified thus far is the completely unregulated harvest of cordyceps (caterpillar fungus) at Lachen, which is currently prohibited under the Sikkim forest law. Future AHM Project NRM capacity building efforts at Lachen will address this issue.

Outputs/Results:

- A survey on natural resource use at Lachen completed which surveyed 33 households as well as 12 individuals attending a focus group discussion.
- Survey findings will be used to guide and design future AHM Project NRM activities in the Lachen area.

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.

Under this activity in Project Year 1, WWF conducted a survey on the impact of climate change and climate variability on local agricultural practices in the project area of Sikkim. Farmer opinions on how local agricultural practices might best be adapted to climatic changes as well as best practices already adopted by farmers to cope with climate change were also documented. These findings will be used to guide design and implementation of a formal climate adaptation strategy for agriculture in Sikkim. The survey involved interviewing 146 farmers (25 women) in 13 gram panchayat (local village self-government) units in all four districts of Sikkim, spanning a wide-elevation range. Notably, in tandem with the survey, focus group discussions were held with three self-help groups (SHG) comprised of women farmers in South Sikkim. These focus groups served not only to complete the survey but also to facilitate sharing on farming practices that these women were currently using as well as to build their capacity with respect to managing climate change impacts on their livelihoods. Key officials in the Sikkim's Agriculture and Horticulture Department were also interviewed for their inputs. Survey findings include details of climatic change s perceived by farmers, such as changes in rain and snowfall patterns, frequency of hailstorms,

rate of pest and disease infestations, increase in human wildlife conflict, etc. The study also highlighted traditional best practices adopted by farmers in the face of a changing climate.

Outputs/Results:

- 146 farmers (25 Women) in 13 villages surveyed con climate change impacts and local coping strategies.
- A report of survey findings has been prepared and a best practices document targeting stakeholders is also being developed in collaboration with the Department of Horticulture.
- This report will be used to guide design and implementation of climate adaptation strategies for various AHM Project sites in Sikkim.

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.

In Sikkim in Project Year 1, WWF held two training programs for Himal Rakshaks (Mountain Guardians) to build their capacity with respect to biodiversity monitoring, and build their knowledge on local biodiversity and the illegal wildlife trade. The first program also reflected on lessons learned with respect to achievements of the Himal Rakshaks in Sikkim as part of a team building exercise. The second training was specifically on snow leopard ecology and monitoring of snow leopards and their habitat in high altitude areas of Sikkim.

Outputs/Results:

- A total of 31 Himal Rakshaks members (all men) were trained on monitoring biodiversity and wildlife trade.
- A total of 20 Himal Rakshaks members (all men) were trained on monitoring snow leopards and high altitude habitat.
- Capacity of local residents of Sikkim to monitoring wildlife, biodiversity, and illegal wildlife trade has greatly increased with future conservation benefits for the region.

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).

Under this activity a human-snow leopard conflict survey was conducted in the snow leopard range areas of North Sikkim. 30 herders were interviewed for the survey which found that while snow leopards were a minor source of economic loss for the herders surveyed, by far the biggest cause of predation on livestock in the survey area was the large feral dog population in North Sikkim, with these feral dog packs also preying on local wildlife. Based on survey findings, a brief survey report is being prepared with recommendations for reducing loss of livestock to snow leopards and Tibetan wolves and for controlling the rapidly growing population of feral dogs in snow leopard areas.

Outputs/Results:

- A survey on human-snow leopard conflict conducted that interviewed 30 herders and a survey report with recommendation is now being prepared.
- Survey findings will be used to design strategies to reduce the loss of livestock to snow leopards and Tibetan wolves in North Sikkim as well as to reduce the growing feral dog population in the region.

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.

Under this activity, a stakeholder consultation and awareness raising meeting was organized at Lachen in cooperation with the LTDC. The main objective of the meeting was to discuss improving rubbish management in Lachen Village and at Gurudongmar Lake, an important tourist attraction 40 km to the northeast of Lachen. 54 people (18 women) participated in the meeting which also discussed the effectiveness of the year-long trial ban on selling water packaged in plastic bottles in reducing plastic waste at Lachen. Immediate results of the meeting were the establishment of a recycling center in Lachen and a large village cleanup campaign which 260 villagers (30 women) participated in that focused on cleaning up household rubbish dump sites in Lachen. In consultation with the Lachen dzumsa, a rubbish segregation system was designed for the village and explained to the community at a formal waste management training program, with additional information being presented on the impact of rubbish on local ecology and nearby wildlife. In addition posters on rubbish segregation were prepared and LTDC volunteers went door-to-door explaining the new rubbish disposal system.

In Project Year 1, WWF conducted a survey in partnership with the Ecotourism and Conservation Society of Sikkim (ECOSS) to document the successes and failures of various community-based ecotourism initiatives conducted at the nine most visited village tourism sites in Sikkim. These included initiatives led by communities, government, and individuals. Based on survey findings, ECOSS will prepare a best practices document for community-based tourism that will be presented at a state-level workshop in Project Year 2 and distributed to relevant stakeholders.

Finally under this activity in Project Year 1, WWF also supported held a roundtable meeting of the Zero Waste Himalayas Group, a consortium of NGOs, government officials, elected representatives, and individuals, to examine various ongoing rubbish management initiatives both within the Sikkim and beyond and outside for the purpose developing future plans, strategies, and policies for improving solid waste management in Sikkim.

Outputs/Results:

- A recycling center was established in the tourist center of Lachen and the community educated about its purpose and functioning to mitigate the remote community's solid waste disposal problem.
- A survey was conducted to assess successes and failures of earlier ecotourism initiatives in Sikkim and lessons learn will be shared with stakeholders to inform design of future ecotourism initiatives.

- WWF sponsored a roundtable meeting of the Zero Waste Himalayas Group to devise new methods for mitigating Sikkim's growing solid waste disposal problem.

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 the summer of 2013, WWF undertook a snow leopard sign and prey species survey following SLIMS protocol that covered 374 km² of the Lasher Valley and Tso Lhamu Plateau region of North Sikkim. In addition to notes on snow leopard sign, five scat samples believed to be from snow leopards were collected for DNA confirmation. Based on the findings of this preliminary survey, sites have been identified for more intensive sign surveys and camera trapping. Survey biologists also made notes on habitat condition and conducted a survey of local herders in the study area that inquired about livestock populations, depredation of livestock, and sightings of snow leopards in the region as described in Activity 1.3.2, above.

Outputs/Results:

- A snow leopard sign survey was conducted in North Sikkim to determine distribution and density of snow leopard prey species in the survey area.
- Survey findings will be used to design a camera trap survey for the region as well as measures to improve protection of snow leopards and their prey species in North Sikkim.

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.

Under this activity in Project Year 1, WWF held two one-day conservation awareness-programs for army personnel to mark World Environment Day at two army camps in North Sikkim – Chaten and Yongri. A total of 66 army personnel (all men) participated in these awareness programs, which focused on biodiversity, importance of wetlands, and solid waste management issues in high altitude areas of Sikkim. Program presentations were kept interactive and informal to facilitate maximum participation, learning, and sharing. Most participating army personnel were not from Sikkim and were eager to learn about the diverse forms of wildlife to be found in the Sikkim Himalaya, particularly snow leopards and their prey species such as argali and blue sheep. These participants were also taught about conservation issues in the region and the need to protect wildlife, particularly in restricted, military-controlled border zones in Sikkim.

Outputs/Results:

- 66 military personnel were taught about conservation issues in high altitude areas of Sikkim where they are based and measures they can take to mitigate these issues, particularly with respect to snow leopard conservation and solid waste management.
- A strong rapport was built between WWF and military border zone personnel for improving conservation efforts in the zones they patrol in North Sikkim.

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.

Under this activity in Project Year 1, WWF organized two trainings in the project region at the communities of Engilchek and Akshyrak. These trainings discussed climate change impact on the project region ecosystems, possibilities for mitigating these impacts, and alternative livelihood opportunities that will supported by the AHM Project.

In addition, with support from UNEP, WWF held a series of capacity building events in Bishkek and in Almata and Astana, Kazakhstan for national-level stakeholders on identification of climate change issues and international funding opportunities for climate change and renewable energy source (RES) related projects. The target audience for these events included were government officials, NGOs, and scientists involved in UN climate change negotiations. In total seven training sessions were held in Bishkek while four training sessions were supported in Almata and Astana with co-financing from WWF Russia.

Outputs/Results:

- 44 people familiarized with climate change impacts on the project region and possible methods for mitigating the impact of these changes on local livelihoods.
- 297 people (148 women) trained on climate change impacts on Central Asia, international funding opportunities for climate change-related projects, and UN climate negotiations.
- Project report on the Bishkek, Almata, and Astana climate change events delivered to UNEP

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

In Project Year 1, WWF selected three NGOs to support with respect to natural resource management and awareness raising activities in the project region. These were "Engilchek Nur" in Engilchek, "Akshyrak" in Akshyrak; and "Karakolka Uzdary" in Karakolka – all in Issyk Kul Province. Targeted capacity building of these three organizations is on-going and will continue in upcoming AHM Project years (e.g. see activity 1.1.2, above). Two awareness-raising events were held with these organizations under this activity in Year 1. The first was a highly successful "Snow Leopard Festival" held at Engilchek to mark the UN's International Day for Biological Diversity. Nearly the entire population of Engilchek participated, including children, parents, grand-parents, and border patrol troops, as well as provincial officials and representatives of the Issyk Kul Biosphere Reserve. The festival featured ecological theater, conservation-themed contests, speeches, and poster displays and highlights of the festival were featured on a television broadcast. The second conservation awareness-raising activity was conducted in Akshyrak and featured conservation-themed

poetry, song, quiz, and drawing contests as well as ecological skit performances. 37 schoolchildren and their teachers participated.

Outputs/Results:

- 3 NGOs are benefiting from AHM Project capacity building efforts on sustainable management of natural resources.
- 80 people: 53 adults (22 woman) and 27 children (12 girls) in Engilchek participated in the snow leopard festival and were made aware of the urgent need to protect snow leopards and their prey species and habitat in their home region.
- 37 schoolchildren (23 Girls) in participated in the snow leopard conservation day held at the Akshyrak school and were also made aware of the urgent need to protect snow leopards and their prey species and habitat in their home region.

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

Under this activity in Project Year 1, a special meeting was organized between WWF and high-level representatives of the Canadian-owned Kumtor Gold Mine, which is located on the western boundary of the Sarychat-Ertash State Reserve. Mine representatives included the mine's environment director and a public relations specialist. The outcome of the meeting was a Preliminary agreement under which Kumtor would assist with anti-poaching efforts and provide support to local communities for environmental education. However further development of cooperation with Kumtor is now in doubt due to subsequent community-led strikes against Kumtor, which block the access highway to the mine, and discussions by the Kyrgyz parliament on nationalizing the mine. Possible cooperation with other members of the business community, such as tour and trophy hunting operators, is also being explored.

Outputs/Results:

- Discussions held with the Kumtor Gold Mine on possible cooperation with the WWF Asia High Mountains Project were held and a tentative agreement on areas for cooperation reached.
- Possibilities for project cooperation with other members of the business community are being explored.

<u>Sub-objective 1.2: Increase community resiliency to climate change impacts.</u>

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

With the initial support from WWF NL, in 2011 WWF established a herd of 23 yaks in the eastern buffer zone of the Sarychat-Ertash State Reserve. This herd is managed cooperatively by reserve staff to demonstrate a climate-resilient, ecologically-friendly alternative herding practice to keeping less hardy local breeds of cows and ecologically destructive sheep and goats in project highland areas. As of 2013, this herd had increased to 50 yaks and the success of this experiment is being widely promoted amongst local communities as one

climate adaptation strategy suitable for the climatic extremes found in the project region's high altitude pastures. Offtake from the herd will eventually be used to supplement the small incomes of reserve staff or be sold to provide funding for reserve activities, such as to buy fuel for patrolling, etc. In addition, WWF is also in the process of developing plans in cooperation with UNDP Khan Tengri GEF Project on introducing other climate-smart agricultural and grazing practices to the project region with the goal of maintaining healthy pasture for both livestock and wildlife.

Outputs/Results:

- Use of yaks as one climate adaptation strategy for livestock herders on highland pasture areas in the project region is currently being demonstrated.
- Discussions are currently underway with the UNDP Khan Tengri GEF Project to jointly introduce other climate-smart agricultural and grazing practices to the project region.

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- treating stomach ulcer, gastritis; eco-tourism).

In Project Year 1, WWF worked with women in three high altitude project villages, Akshyrak, Engilchek, and Karakolka to produce and sell high quality wool crafts. This activity operates in tandem with SLT's Snow Leopard Enterprises Project, but focuses on domestic sale of crafts produced rather than on exports as with SLT. In winter, participants produce various felt handicrafts from stored wool, such as slippers, hats, pouches, seat covers, and toy animals, with special trainings held to teach participants new craft techniques. During the summer tourist season, special marketing assistance is provided to these women's groups, particularly for participation in the annual traditional handicraft fair held in Issyk Kul Province every July. These women's groups are also being provided with support in marketing horse and yak milk for treatment of gastrointestinal disorders. These activities are tied to a program of conservation education that emphasizes the need to protect snow leopards and prey species in the mountains surrounding their home communities. In addition, in order to assist Sarychat-Ertash reserve rangers, whose government salaries are only about USD 600 per year, a reserve sheep flock was started with 35 sheep, 20 purchased by the project and 15 contributed by reserve staff. Once offtake from this flock begins, all proceeds from production of meat and wool will be divided amongst the 29 rangers to supplement their minimal incomes and increase the sustainability and effectiveness of reserve management. If successful, this activity will be replicated at other reserves in highland areas of Kyrgyzstan for the benefit of reserve staff.

Outputs/Results:

- Approximately 495 people (108 women and 287 Children) in 3 settlements are benefited from development of alternative forms of income generation, such as the production and sale of felt handicraft and horse and yak milk.
- Alternative income generating activities are closely tied to conservation lessons, providing benefits for wildlife around these three remote mountain settlements.

- 29 rangers (all men) and their families (29 women and 70 children) will eventually benefit from keeping of a reserve sheep flock that will also increase sustainability of reserve management.

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.

In Project Year 1, WWF and SLT reached a preliminary agreement to cooperatively fund and conduct snow-leopard monitoring in the Sarychat-Ertash State Nature Reserve. Following this agreement, rangers trained on snow leopard and prey species monitoring conducted a reserve-wide snow leopard sign, camera trap, and prey species survey. 20 camera traps purchased with co-financing from WWF NL were used. Results showed significant growth local prey species populations, namely argali, ibex, and marmots, while scat samples collected will be sent to the Russian Academy of Sciences Institute of Ecological and Evolutionary for analysis. Based on DNA and camera trapping results, an estimate of the number of snow leopards currently inhabiting the Sarychat-Ertash Reserve will be estimated.

Outputs/Results:

- A snow leopard sign, camera trap, and prey species survey covering the entire Sarychat-Ertash Nature Reserve was conducted.
- The capacity of the 20 (all men) participating reserve rangers greatly increased with respect to snow leopard and prey species monitoring.
- A multi-faceted system for monitoring reserve wildlife has been established.
- Survey findings will be used to improve reserve management and protection of reserve wildlife.

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.

With the 2013 expansion of the Sarychat-Ertash Reserve to include two former wildlife sanctuaries designated for game management, WWF sponsored a workshop at the reserve's headquarters on developing a new protection regime for the expanded reserve which was attended by reserve staff and local NGO representatives. This included a discussion of the reserve's new zoning system and the transfer of a recently constructed field station at the former Cholponbek sanctuary from management by the State Agency on Environmental Protection and Forestry (SAEPF) to management by the Sarychat-Ertash Reserve. Under this activity, WWF also assisted in helping coordinate anti-poaching patrols conducted by Sarychat-Ertash Reserve rangers with those conducted by the (SAEPF) to avoid duplication of patrol routes and to conduct these patrols on complimentary dates for maximum effectiveness. Finally, WWF provided material support to anti-poaching teams made up of staff members from the Sarychat-Ertash Reserve with a formal transfer of equipment and

other necessities to the reserve which included five uniforms, 10 simple point-and-shoot cameras, one notebook computer, one tent, one sleeping bag, gas and spare parts for the reserve patrol vehicle, and 10 camera traps paid for with project co-financing by WWF NL.

Outputs/Results:

- A workshop was held to discuss the new zoning system and protection regime of the newly expanded Sarychat-Ertash State Reserve which was attended by 11 people (2 women), the main points of which were later discussed with the remaining reserve staff members.
- Reserve anti-poaching patrol teams were equipped and coordinated with complimentary anit-poaching patrols being conducted by the SAEPF.
- The protection regime of the Sarychat-Ertash Reserve was bolstered and 29 staff members of the reserve had their capacity built with respect to anti-poaching operations and reserve monitoring.

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

A community anti-poaching team was launched by residents of Engilchek Village that will focus on removal of wildlife snares and traps in the region around their village, their goal being to end all violation of nature and wildlife protection laws in their region. WWF is currently mentoring this group and also their community NGO, "Engilchek Nur" to prepare all necessary legal documents need for legal registration of their organization. Also under this activity, WWF has been working with local print and broadcast media to educate residents of the Issyk Kul Region and elsewhere in Kyrgyzstan about general topics in environmental protection, and in particular snow leopard conservation and climate adaptation.

Outputs/Results:

- 5 persons (all men) trained as volunteer as conservation inspectors with a particular emphasis on anti-poaching work and a village ecological committee is established at Engilchek.
- Awareness raised among 90 persons (30 households) at Engilchek on how to avoid harm to endangered snow leopards while protecting their livestock against predator threats, such as wolves and foxes.
- Community awareness of threats to snow leopards and their prey species is increased and threats to these species are reduced.
- In AHM Project Year 1 a conservation education media campaign with an emphasis on snow leopard protection and climate adaptation is launched which results in 2 TV broadcasts, 7 radio broadcasts, and 19 internet news stories.

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.

WWF support for development of the national protected area system in the project region of eastern Kyrgyzstan contributed to three high-level achievements in AHM Project Year 1. The first was expansion of the Sarytchat-Ertash State Nature Reserve from an area for 72,080 ha

to 149,117 ha. The second was establishment of the 187,000 ha Khan Tengri National Park. The third was inclusion of designation of formal ecological corridors connecting these two protected areas into the UNDP Khan Tengri GEF Project planning process. These successes build upon an earlier WWF achievement of integrating Econet (an ecological network of protected areas and territories under sustainable natural resource use in the former Soviet Central Asian States that was developed by WWF Russia) concepts into Kyrgyzstan's national development program until at least 2017.

Outputs/Results:

- WWF campaigning and policy advising contributed to a 264,000 ha expansion of Kyrgyzstan's national network of strictly protected areas, providing great benefits for snow leopard and broader biodiversity conservation efforts in Kyrgyzstan.

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

During AHM Project Year 1, plans were developed in cooperation with the UNDP Khan Tengri GEF Project to promote sound wildlife habitat management practices such as establishing feeding fields for wild ungulates and ensuring mosaic structure of wildlife habitat in within predominantly agricultural landscapes. With launch of GEF project field work in 2014, implementation of these wildlife habitat management plans will commence.

Mongolia

<u>Sub-objective 1.1:</u> 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 Project Year 1, WWF, in cooperation with MEGD offices and protected area administrations in the six western provinces, conducted a comprehensive human-wildlife conflict social survey in known snow leopard range areas of Mongolia's Altai-Sayan Ecoregion (ASER). This survey examined the scale, timing, locations, and causes of human-wildlife conflict, particularly conflict with snow leopards, and revealed that roughly one quarter of the 1115 respondents surveyed felt that there is a high rate of conflict between herders and snow leopards in the survey region. Findings of this survey will be used to develop future strategies to mitigate human-snow leopard conflict in the ASER.

WWF, working in cooperation with SLT's Snow Leopard Enterprises, supported development of SMART business plans for 5 community-based organizations (CBO) in the Jargalant Khairkhan Mountain region of Kovd Aimag. WWF and Snow Leopard Enterprises will also cooperate on helping these CBOs implement their business plans.

WWF, working in cooperation with local decision makers, residents, and scientists, led preparation of seven proposals to establish 5 new local protected areas, 1 new national-level protected area, and to expand the Khokh Serkh Strictly Protected Area, covering in total 628,986 ha of important snow leopard and prey species habitat. To date, one local protected area, Khajingiin Nuruu with an area of 22,124 ha, has been approved, which will improve pasture and watershed management as well as wildlife protection at that site.

Outputs/Results:

- 1115 people (65 women) participated in a human-wildlife conflict social survey focusing on snow leopards, the findings of which will be used to develop future human-snow leopard conflict mitigation strategies.
- 5 CBOs in Khovd developed business plans that will guide development of alternative income generating activities in their communities, such as marketing of ecotourism and locally made handicrafts.
- One new local protected area established for protection of snow leopards and ibex, while 6 further proposals for new protected areas are currently under review. These protected areas will also provide benefits for pasture and watershed management.

<u>Sub-objective 1.2: Increase community resiliency to climate change impacts.</u>

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).

This activity has been shifted to Project Year 2. Based on the findings of the human-wildlife conflict survey conducted in Activity 1.1.4, above, WWF will select one herding community suffering severe human-snow leopard conflict at either Jargalant Khairkhan or Bumbat Khairkhan Mountains for implemention of a demonstration pasture improvement program that will include creation of a grazing set aside for the benefit of wildlife.

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.

Under this activity in Project Year 1, 18 herders (9 Women) from 9 households at Bumbat Khairhan received information information on how to prevent loss of livestock to snow leopards in the future as well as on the importance of protecting snow leopards. These lessons were disseminated as part of the "Buy Goat" Program discussed under Activity 1.3.3, below.

Outputs/Results:

- Snow leopard conservation and human-snow leopard conflict prevention lessons reached 18 local herders participating in the "Buy Goat" snow leopard conflict compensation program at Bumbat Khairkhan Mountain in Khovd Aimag.
- Motivation to protect snow leopards greatly increased amongst these compensation recipients.

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.

Under this activity, WWF, building upon seven years of prior experience, extended the "Buy Goat" snow leopard conflict compensation program to one site in the vicinity of Bumbat Khairkhan Mountain in Khovd Aimag. In total 21 livestock kills by snow leopards were confirmed by the local verification committee in Project Year 1, and the nine families suffering losses received 21 sheep in compensation together with information on how to prevent loss of livestock to snow leopards in the future as well as on the importance of protecting snow leopards. However, although popular with herders, a recent assessment of the compensation scheme concluded that this program was not the best method for providing compensation with respect to long term sustainability, and the assessment recommended that a premium-based livestock insurance scheme be set up to replace the Buy Goat Program. At present, WWF is conducting a review of livestock insurance schemes with the goal of selecting an appropriate model for trial at Bumbat Khairkhan.

Also under this activity, WWF supported launch of a trial community-funded and managed livestock insurance scheme at Khoid Otor (adjacent to Turgen Mountain SPA) in Uvs Aimag. Under this scheme, nine households at the trial site developed regulations for an insurance system and made proportional contributions to a compensation fund to insure their nearly 2000 head of livestock against loss to predation by snow leopards and other wild carnivores. This scheme was accompanied by lessons on how to prevent human-wildlife conflict in the

first place. In Project Year 1, eight head of livestock insured under this scheme were killed by wild predators, including 3 animals that were killed by snow leopards. In accordance with community developed scheme regulations, all eight cases of predation received compensation.

Outputs/Results:

- Under the Buy Goat Program, nine families received compensation for the loss of 21 head of livestock at Bumbat Mountain. These families also received lessons preventing loss of livestock to snow leopards.
- In Uvs, a community designed, managed, and funded trial livestock insurance scheme was set up by nine households that provided compensation for the loss of 8 head of livestock to wild predators in Project Year 1.
- These compensation schemes provide a forum for educating livestock herders about the importance of protecting snow leopards and contribute to a reduction in the retaliatory killing of snow leopards.

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

Note: This project activity is planned for Project Year 2.

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 project activity is planned for Project Year 2.

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.

Under this activity, a simplified SLIMS snow leopard and prey species monitoring protocol was prepared and translated into Mongolian for distribution to protected area rangers and citizen scientists. In upcoming project years, this monitoring methodology will be taught to rangers, volunteer rangers, and local herders interested in participating in snow leopard monitoring activities. Through this process, it is expected that local attitudes towards snow leopard conservation will improve as will cooperation between local communities protected area administrations with respect to wildlife and habitat protection. In addition, in 2008, WWF launched a simplified biodiversity monitoring program for improving protected area management in Mongolia called Bio-San, which is utilizes a network of scientists, governments agencies, protected areas, and conservation groups working on a collaborative approach to biodiversity monitoring. The Bio-San monitoring program has been already been implemented in 16 Mongolian protected areas and features database software designed by the Mongolian Academy of Sciences Institute of Biology for compiling primary ecological data

on wild ungulates, snow leopards, marmots, and water bird species. This system will play a central feature in compiling results of future citizen scientist snow leopard and prey species monitoring activities.

Outputs/Results:

- 300 copies of a Mongolian language simplified SLIMs monitoring protocol manual were prepared for training protected area rangers and citizen scientists on snow leopard monitoring.

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

Under this activity, WWF held a project inception workshop for Mongolian government partners attended by 15 participants (2 Women) which included national and provincial MEGD officials, protected area administrators, and WWF staff members, who discussed the AHM Project's objectives, activities, project sites, and the project's community-based implementation approach. Following the inception workshop, provincial MEGD departments in the six western aimags (Bayan-Oligii, Gobi-Altai, Khovd, Khovsgol Uvs, and Zavkhan Aimags) helped co-organize six snow leopard distribution mapping workshops with WWF. The goal of these mapping workshops was to develop a preliminary baseline on snow leopard distribution in the ASER region of Mongolia to serve as a basis for planning more detailed community-supported snow leopard conservation work. In total 384 (63 Women) environmental specialists, state rangers, protected area rangers, volunteer rangers, and soum environmental inspectors are participated in these mapping workshops using 1:200,000 scale topographic maps ass base maps. Results have since been compiled in WWF's GIS database system.

Outputs/Results:

- 15 participants (2 Women) attended the AHM Project inception workshop which secured the support of both national and provincial MEGD staff members for implementation of project activities.
- 384 (63 Women) primarily government environment workers participated in six provincial-level snow leopard distribution mapping workshops producing an up-to-date snow leopard distribution map for western Mongolia that will serve as the basis for planning future snow leopard conservation work in the 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 November 2012, a preliminary snow leopard camera trapping survey was conducted at Jargalant Khairkhan Mountain. 12 still and video camera traps were installed for 30 days in with the participation of five local herders (1 one woman). In total, 6 camera traps recorded snow leopard images as well as images of ibex, wolverine, and Pallas's cat (manul). Results

exceeded expectations and participating herders expressed great enthusiasm for snow leopard wildlife conservation after viewing photos and video of these mysterious cats.

In September 2013, in cooperation with the Russian Academy of Sciences, WWF Mongolia conducted SLIMS methodology snow leopard surveys at Jargalant Khairkhan, Bumbat Khairkhan, and Baatar Khairkhan Mountains to estimate snow leopard population densities in these areas. In addition, as a follow up to the 2012 camera trap survey, additional camera trap sites at Jargalant Khairkhan Mountain were selected and 40 camera traps purchased with project co-financing from WWF NL were set up at Jaragalant Mountain. As part of this survey, WWF trained 8 local herders on SLIMS methodology, camera trapping, data recording and use of GPS units and compasses. Scat samples collected by the survey team have been sent to Moscow for DNA analysis.

Finally, under this activity, WWF signed an MoU with the State Investigation Department's (SID) Ecological Crime Division and the National Police Agency's (NPA) Environmental Crime Division. Under this MoU, WWF will cooperate with these two agencies on investigation of crimes involving wildlife poaching, illegal wildlife trade, and illegal logging. This cooperation will include four provinces in the AHM Project ASER region, Bayan-Olgii, Uvs, and Khovd Aimags.

- In November 2012, a successful preliminary snow leopard camera trap survey was conducted Jargalant Khairkhan Mountain with the participation of 5 local herders (1 Woman).
- In September 2013, a total of 8 herders (3 new trainees and 5 repeat participants from the November 2012 camera trap survey) at Jargalant Khairkhan, Bumbat Khairkhan (2 repeat trainees, 1 Man, 1 Woman) and Baatar Khairkhan Mountains (2 repeat trainees, 1 Man, 1 Woman) were trained on conducting SLIMS and camera trapping surveys for monitoring snow leopards and their prey species.
- Findings of these surveys will be used to further improve planning for snow leopard conservation and pasture management activities at these sites.
- MoU signed between WWF and two national-level government agencies to jointly work on investigating and combating wildlife poaching, illegal wildlife trade, and illegal logging.
- These monitoring activities are well complemented by the satellite GPS collaring of a single snow leopard by WWF at Jargalant Khairkhan Mountain in May 2013 with project co-financing from WWF NL.

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

Under this activity in AHM Project Year 1, WWF donated 9 GPS unit, 32 rechargeable lithium batteries, 9 compasses, and 9 stainless steel meter sticks to herder community conservation groups for the purpose of monitoring snow leopards and their prey base.

Output/Results:

- Equipment donated to citizen scientists for conducting snow leopard and prey species monitoring as well as for documenting other wildlife sightings and human-wildlife conflict incidents.

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.

CARE and WWF organized two three-day trainings on good governance, gender and social inclusion. The trainings were organized in Yamphudin Village Development Committee (VDC) and Tapethok VDC. A total of 46 community members (20 women) representing Community Forest User Groups (CFUG), Conservation Area User Committees (CAUC), Community Based Anti-Poaching Operations (CBAPO) teams, Snow Leopard Conservation Committees (SLCC), and Mother Groups (MG) participated in the trainings. These trainings taught principles of good governance; best use of natural resources; optimum community group composition; group dynamics; group gender and social inclusion, including poor, vulnerable, and socially excluded (PVSE) groups; natural resource governance; and equity and justice with respect to sharing community natural resource benefits. CFUG members committed to implementing these principles as stated their constitutions and Forest Operational Plans (FOP).

Output/Results:

- 46 community members trained on good community-based organization (CBO) governance, and gender and social inclusion for natural resource management.

Activity 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.

CARE and WWF organized two one-day workshops on gender and power analysis using Underlying Causes of Poverty Analysis (UCPA) tools. The meetings were conducted with the Timbungpokhari and Deurali CFUGs in Yamphudin VDC. A total of 48 CFUG members (23 women) participated in the two meetings. These workshops explored the existing status of resource distribution within these communities, including situational analysis of natural, economic, social, physical, and human resources. These workshops also analyzed access to and control over local natural resources as exerted by political parties, CBOs and local natural resources committees. Poor areas and target groups within the communities in need of better access to community forests and other resources were identified through the UCPA process.

Output/Results:

- 48 CFUG members (23 women) in two communities participate in gender and power analysis workshops using UCPA tools, learning about inequality in their communities, particularly with respect to accessing community resources, through this process.

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.

CARE and WWF organized a three-day Training of Trainers (TOT) on pro-poor planning for local resource person (LRP) trainees. The TOT was held in Phungling VDC in partnership with the Community Forestry Supporters Network (COFSUN). A total of 15 local youths (6 Women) participated in the training, learning how to conduct pro-poor planning processes and how to prepare Livelihood Improvement Plans (LIP) for their communities. The LRPs trained at this TOT have since facilitated preparation of 16 pro-poor plans and a number of LIPs within the CFUGs that they work with. Future support of target groups within these CFUGs will be based on these LIPs, particularly with respect to creating new income generation activities.

Output/Results:

- 15 LRPs (6 Women) trained on pro-poor planning processes and preparing LIPs, particularly for CFUG plan preparation.

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.

CARE and WWF organized two three-days training on leadership skills for community members in Yamphudin and Lelep Villages. A total of 48 community members (23 women) representing CFUGs and CAUCs participated in the training, the goal of which was to empower members of excluded groups to increase their leadership capacity for participation in local natural resource management groups and activities.

Output/Results:

- 48 community members (23 women) receive leadership development training for natural resource management.

<u>Sub-objective 1.2: Increase community resilience to climate change impacts.</u>

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.

CARE and WWF provided support to Yamphudin, Lelep, Tapethok and Ghunsa Villages to implement community-based climate adaptation plans to reduce the impact of climate change on local agriculture and livelihoods. These community-based climate adaptation plans were prepared earlier following completion of a climate vulnerability assessment conducted with USAID support under the Sacred Himalayan Landscape SCAPES Project. Adaptation actions developed to increase community resilience to climate change under these plans include

adaptive agriculture, increasing water use efficiency, and protection of water sources. Specific adaptation actions selected by communities included adopting greenhouse vegetable farming, beekeeping, use of irrigation canals and sprinkler irrigation to maximize water use efficiency for agriculture, construction of ponds to store irrigation water, and collection of wastewater for reuse. In Project Year 1, WWF supported implementation of these demonstration climate adaptation actions by providing needed materials, such as plastic for building green houses, water pipes, irrigation sprinklers, and improved beehives. A total of 499 people (259 Women and Girls) from 104 households have been benefited from this support.

Output/Results:

- 499 people (259 Women and Girls) from 104 HHs implemented adaptive agriculture practice

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.

CARE and WWF organized a two-day interactive workshop in Kalikhola VDC to assess the impacts of climate change on local agriculture production and to explore possible adaptation strategies to mitigate these impacts and improve local land management practices. A total of 34 farmers (16 women) participated in the workshop, as did representatives of the Taplejung District Agriculture Development Office (DADO), Kalikhola VDC, and the Federation of Community Forestry Users Nepal (FECOFUN). The focus of the workshop was on the decline in local maize and potato production due to changes in rainfall patterns, increasing frequency of drought, and increasing incidence of disease and pest outbreaks. The workshop recommended conducting demonstration adaptation actions on improved potato and maize cultivation and better land management practices in Kalikhola, such as using water from nearby spring sources for irrigation, rain water harvesting, and creation of water storage facilities.

Output/Results:

- 34 farmers (16 women) increased their adaptive capacity to reduce the impacts of climate change on their livelihoods.

Activity 1.2.3: Promote climate-smart agricultural and grazing practices that maintain healthy pasture for livelihoods and wildlife.

Under this activity in Project Year 1, WWF conducted an assessment of pastureland management practices in the highland villages of Ghunsa, Phale, Gyabla, and Yangma, where livestock herding is a primary occupation. This assessment worked with local communities to review the status of pasturelands currently being grazed, pastures not being grazed and the reasons for their disuse, seasonal grazing patterns, and possible areas of grazing competition between livestock and wild ungulates, such as blue sheep. A total of 21 pasture areas in Ghunsa and Phale and 22 pasture areas in Gyabla areas were found to be currently in use.

Findings of this assessment will be used to design pasture management improvement activities for the benefit of both herders and wildlife.

WWF organized three one-day trainings on sustainable grazing and pastureland management for herders residing in Lelep, Tapethok, and Yangma Villages, which were attended by a total of 55 herders (All Men). Pastureland management issues at these sites were discussed together with possible solutions and strategies for building ecosystem resilience to climate change. The major problems identified were water shortage, difficult access to some pasturelands, and decreasing quality of grass due to the proliferation of unpalatable pasture species. Recommended actions produced by these workshops included development of clean water storage systems for the benefit of herders, improved trail maintenance and renovation of wooden bridges to improve access to remote pastures, and promotion of rotational grazing to improve pasture quality. In order to address issues and recommendations produced by these trainings, WWF has since provided support for improved pastureland management activities in seven villages in the KCA, namely Lelep, Tapethok, Yangma, Ramche, Ghunsa, Hellok, and Yamphudin Villages. This support has included improving drinking water facilities in pasturelands through setting up of canal and pipe systems that deliver water directly from spring sources, renovation of wooden bridges that can be used by both people and livestock to access remote pastures, and a small subsidy for improvement of access trails. In total, over 2000 ha of pasturelands in the KCA are now under regulated rotational grazing and improved pastureland management systems as a result of this activity.

In addition, in order to demonstrate a simple method for reducing loss of livestock to snow leopards and other predators, WWF supported construction of a demonstration predator-proof corral in Khambachen Village that now houses 20-25 yak calves. No loss of yak calves hads been reported at Khambachen since constructiong of this predator-proof corral in October 2012.

Output/Results:

- A pastureland management assessment was conducted in four highland herding villages and a strategy developed for improving pasture management practices in the KCA.
- 55 herders in three KCA villages trained on sustainable grazing and pastureland management and recommendations put forth on improving pasture management in the KCA.
- Management of 2000 ha of KCA pasturelands improved through a combination of providing clean water for herders in remote pastures, improving bridges and rails to access these pastures, and instituting a system of rotational grazing in these pasturelands.
- Use of a demonstration predator-proof corral for reducing loss of livestock to snow leopards and other predators effectively demonstrated at one site in the KCA.

<u>Sub-objective 1.3: Enhance community engagement in conservation</u>

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 Project Year 1, WWF supported the Kangchenjunga Conservation Area Management Council (KCAMC) in mobilizing eight community-based anti-poaching operations (CBAPO) to curb poaching and illegal wildlife trade. CBAPO teams conducted these eight operations in risk-prone areas of Lelep, Olangchung Gola, Yamphudin, and Tapethok VDCs, in particular in high risk areas along the Chinese border. No poaching or retaliatory killing of snow leopards was observed in 2013. However, the anti-poaching operations did result in the confiscation of two musk deer skins, one dead blue sheep, and 40 snares and traps targeting musk deer near the Chinese border in Olangchung Gola. Under this activity, WWF also mobilized four community-based snow leopard conservation committees (SLCC) to monitor snow leopards and their prey base, which were trained under Activity 1.4.6, below. In addition, WWF also provided support for institutional strengthening of the KCAMC by funding renovation of KCAMC field office in Lelep, Olangchung Gola, and Iladanda to provide better workspaces for communities to work on conservation initiatives, such as controlling poaching and illegal wildlife trade.

Output/Results:

- 8 CBAPO teams with 92 team members (All Men) mobilized to curb poaching and illegal trade in wildlife and forest products.
- 4 SLCCs with 31 committee members (All Men) mobilized for conservation and monitoring of snow leopards and their prey species.
- 3 KCAMC field offices strengthened through office renovations to improve work spaces.

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).

Under this AHM activity, WWF conducted a human-wildlife conflict (HWC) survey to assess the current state of conflict between livestock herders and wild predators and also the effectiveness of current HWC mitigation measures in the KCA. A report on survey findings and a draft strategy on mitigating HWC in the KCA have been prepared. This draft strategy recommends construction of predator-proof corrals, organizing HWC awareness campaigns, and improving guarding of livestock measures to prevent HWC. The report and strategy also recommend continuing community-managed livestock insurance schemes covering livestock kills by snow leopards and other large predators. These include 4 community-managed livestock insurance schemes established with WWF support under earlier projects in Ghunsa, Olangchung Gola, Yangma and Yamphudin Villages, in which 119 households already participate. The current KCA HWC strategy will be finalized after a thorough review by experts and stakeholders.

Output/Results:

- A study was conducted to assess the current state of conflict between livestock herders and wild predators in the KCA and a HWC mitigation strategy for the region is currently being finalized.

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

WWF provided support to the KCAMC and relevant communities to prepare sustainable harvesting plans for economically important non-timber forest products (NTFP) and medicinal and aomatic plants (MAP). In Project Year 1, sustainable harvesting plans were prepared for three NTFPs/MAPs found in the KCA, namely Satuwa (*Paris polyphylla),* Lauth Salla *(Taxus wallichiana),* and Dhupi *(Juniperus indica*). Based on resource assessments for these three plant species, harvest plans detail the quantity of each that can sustainably harvest each year to ensure a continuous future supply.

Output/Results:

- Sustainable harvesting plans prepared for three NTFP/MAP species found in the KCA to safeguard the continued availability of these three economically important species.

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

Under this activity in Project Year 1, WWF provided co-financing support to establish a community-based incense stick enterprise in Ghunsa Village in the KCA. The enterprise has been registered with Taplejung District's Cottage and Small Industry Development Board. This community-based enterprise produces incense sticks using *Juniperus indica* harvested according to the sustainable harvesting plan developed in Activity 1.3.6, above. A total of 163 people (78 Men and Boys, 85 Women and Girls) from 34 households have benefited from this enterprise. In addition, WWF also provided support to the KCAMC for establishing a "conservation cooperative" in Lelep Village which will help the community manage conservation funds and funds generated by establishing markets for locally produced NTFP/MAP products.

Output/Results:

- One community-based NTFP enterprise established in Ghunsa Village which will provide economic benefits for 163 people (85 Women and Girls) in 34 households.
- A conservation cooperative was established in Lelep Village that will manage community conservation funds and help establish markets for local NTFP/MAP products, benefitting 120 people (62 Women and Girls) from 25 households.

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 Project Year 1, WWF provided a small subsidy to the KCAMC to upgrade 15 km of the main trekking route in the KCA to improve the trekking experience for tourists visiting the region. This improved trail forms the Tapethok-Lelep-Gyabla-Phale-Ghunsa section of the

trek to the Pangpema basecamp for climbing Kangchenjunga. It is expected that by improving this dangerous route, more trekkers will be encouraged to visit this remote region of Nepal, providing ecotourism income and benefits for 403 people (193 Men and Boys, 210 Women and Girls 210) from 84 households located in the five villages along this route. In addition WWF also provided support to upgrade small vistors' center in Ghunsa and Yamphudin Villages with provide information on biodiversity and local cultures of KCA to both tourists and residents alike.

Output/Results:

- 15 km of a dangerous stretch of the main trekking route are improved to improve the trekking experience for tourists, which will eventually lead more tourism in the KCA and direct benefits for 403 people (193 Men and Boys, 210 Women and Girls 210) from 84 households along this route.
- 2 village visitor's centers were upgraded to improve the access of both tourists and local residents to information the biodiversity and local cultures of KCA.

<u>Sub-objective 1.4: Conserve the snow leopard and its habitat in priority sites</u>

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.

Under this activity, WWF developed and field tested a draft monitoring protocol to assess the distribution of snow leopards and their prey species. In doing so, WWF employed a combination of techniques such as sign surveys, camera trap technologies, DNA analysis of scat samples, and prey species counts. The draft protocol is currently under review by experts and will be finalized by the end of Project Year 2. This protocol has been designed with a wide audience in mind and will be suitable for use by both local communities and citizen scientists as well as by wildlife biology students and researchers.

Output/Results:

- A draft protocol for monitoring snow leopards and their prey species has been prepared and field tested and is currently under expert review.

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.

Although it was planned to radio-collar two snow leopards in the KCA in Project Year 1, this activity could not be completed due to the time a longer than expected preparation period and delays in receiving government permission to conduct the activity. However, good progress was made in completing preparations for this activity. These preparations included identifying sites for collaring work based on sign and camera trap surveys, prey species counts, and DNA analysis of suspected snow leopard scat samples. In addition, WWF field tested satellite GPS collars produced by two different manufacturers to ensure that they would function at the latitude and terrain of the planned collaring sites. Finally, the

Government of Nepal recently granted permission for radio-collaring four snow leopards in the KCA, so this activity is on track to be completed in the first quarter of Project Year 2.

Output/Results:

- Preparatory work for the snow leopard radio-collaring activity is for the most part complete and on track to be completed in autumn 2013.

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.

Under this activity, WWF trained 16 citizen scientists (1 Woman), of whom 12 were SLCC members and 4 were herders, to monitor snow leopards and their prey species in the KCA. This training took place in October 2012 with a refresher training being given for 11 SLCC members (All Men) in Lelep Village in September 2013. With the help of these citizen scientists, 26 snow leopard sign transects have been established with a total length of 13.4 km in the Ramche, Khambachen, Yangma, and Olangchung Gola areas of KCA.

Output/Results:

- 16 local people were trained as citizen scientists to monitor snow leopards and their prey species in the KCA, greatly increasing the area of the reserve under regular monitoring for these species.

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

In Project Year 1, WWF provided continuous support to the KCAMC to coordinate its activities with those of the Department of National Parks and Wildlife Conservation (DNPWC), district line agencies, and other stakeholders to maximize effectiveness of their management activities in the KCA. And prior to the launch of the AHM Project, WWF had already been providing similar technical and financial support for conservation and natural resource management to the KCAMC through the Kangchenjunga Conservation Area Project (KCAP).

Output/Results:

- WWF is providing needed technical and financial support to the KCAMC, particularly with respect to coordinating management activities with other government and non-government stakeholders.

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 (eg. Snow leopards) in maintaining ecological health of pastures.

In Project Year 1, WWF conducted three awareness raising events in Gilgit-Baltistan (GB) to educate project communities about the role large predators, such as snow leopards, brown bears, wolves, lynx, and fox, play in maintaining the ecological health of mountain pastures, for example by controlling populations of wild ungulates, burrowing rodents, and pikas. The first event was organized for the school children from 13 schools in Central Hunza, at which students were educated about the importance of natural resources and the ecological importance of snow leopards during classroom talks. The second event was organized in cooperaration with Aga Khan Youth and Sports Board (AKYSB) to mark World Environment Day at which 11 schools from project communities participated in a thematic poster competition on the "Importance of prey-predator relationships for a healthy ecosystems." The third event was organized to mark the International Day for the Preservation of the Ozone Layer at the Hoper Valley project site, where four schools participated in a poster competition and three schools participated in a speech contest on the causes and effects of climate change and its impact on rural livelihoods and ecosystems.

Under this activity in Chitral, WWF organized a sporting event with horse and archery competitions and four conservation awareness-raising events. WWF organized the sporting event in Shekhan Deh in the Rumboor Valley with the goals of gathering community members, particularly youth groups, to inform them about WWF's snow leopard conservation, and related issues. At this gathering, WWF disseminated AHM Project messages to interested local community members, activists, and journalists, particularly with respect to the importance of snow leopard and wildlife conservation, and sought to obtain local media support for publicizing project activities. Two awareness-raising meetings were conducted with village conservation committee (VCC) members to introduce them to the role of predators in local ecosystems, climate change, and the climate change impacts on snow leopard habitat in the region. One awareness-raising session was organized for the secondary school students in Kuragh, where students were taught about the natural resources of Chitral and importance of wildlife and snow leopard conservation. Finally, an awareness raising session was organized for the Laspur middle school student government to mark World Water Day, at which students were taught about the importance and role of water in human life.

Outputs/Results:

- 1100 Adults and Children (640 Women and Girls) attended the three awareness raising events in GB while 841 Adults and Children (170 Women and Girls) attended the five awareness raising events in Chitral, increasing their awareness of the interconnectedness of wildlife, healthy pastures, and healthy watersheds in project areas and also about the importance of improving natural resource management.
- 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.

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.

1.1.10a: Institutional assessment of traditional tribe-based natural resource management groups.

In Project Year 1, WWF conducted rapid assessments of traditional groups and institutions governing local resource management in Chitral (Rumboor and Laspur Valleys) and Gilgit-Baltistan (Hassanabad Valley). These assessments were carried out by holding individual interviews and focus group discussions with tribal elders and other community members. In the Hassanabad Valley, individual interviews were conducted at project sites, while focus group discussions were held at the District Forest Officer's (DFO) offices in Aliabad (15 Men) and Karimabad (20 Men). In Chitral focus discussion groups for community members were held in six different villages and attended by 74 people (2 women). Key findings of this assessment in Gilgit-Baltistan (GB) were that the four tribes of the Hassanabad Valley each has a leader responsible for regulating grazing, firewood collection, farming, and mining and in the past also hunting, although hunting is now the responsibility of the GB Forest and Wildlife Department. These local resource leaders will be key to improving snow leopard conservation in GB. Key findings of the this assessment in the Rumboor and Laspur Valleys Chitral were that village-level traditional resource management committees are present that are responsible for regulating livestock grazing and fodder and fuel wood collection. However, these committees are not as active as in former times and need to be re-organized with capacity building trainings for community members. Also, in the Rumboor and Laspur Valleys, both men's and women's conservation committees and resource management groups exist, although these groups were not very active.

Outputs/Results:

- A total of 109 people (2 women) participated in 8 natural resource management discussion groups in GB and Chitral. Traditional natural resource management groups and leaders are identified and indigenous local resource management knowledge is documented.
- Ownership of project activities is developed among the key stakeholders, and their support for snow leopard and habitat conservation as well as watershed improvement is agreed upon.

1.1.10b: Formalizing tribe-based resource user groups in the form of village conservation and development committees.

In order to establish tribe-based community conservation organizations in the project region of GB, a series of 9 meetings were held in both the Hassanabad and Hoper Valleys. In the Hassanabad Valley, a multi-tribe conservation union could not be formed due to local hunters with vested interests blocking the creation of this group. However in the neighboring Hoper Valley, the local pre-existing Hoper Conservation and Development Organization (HCDO), which represents 5 tribes in the valley, agreed to participate in the project.

In Chitral, 7 meetings with indigenous natural resource use groups and village conservation committees were held at 5 sites in the Rumboor and Laspur Valleys that were attended by both men and women. The purpose of these meetings was to document these groups and initiate activities to re-activate them. During these meetings AHM Project details, including project objectives, implementation strategies, expected outcomes, and stakeholders roles were discussed at length. Moreover an action plan to strengthen and involve the local community conservation organizations was agreed upon.

Outputs/Results:

- In GB, 152 people (2 Women) participated in at least one of 8 meetings in the failed attempt to create a local multi-tribe conservation organization in the Hassanabad Valley. 35 people (All Men) participated in the successful meeting to gain HCDO support for local participation in the AHM Project in the Hoper Valley.
- In Chitral 221 people (100 Women) participated in a series of 7 meetings that led to the reactivation of local community conservation and resource management groups, such as village conservation committees (VCC) and women's conservation committees (WCC), and also led to an agreement for these organizations to participate in AHM Project activities.

1.1.10c: Provision of support in establishing formal set ups, e.g. offices, for these committees.

As part of providing capacity building and support for the community conservation organizations participating in the AHM project, VCCs secured local office space and two formal VCC offices were established in the Rumboor and Laspur Valleys, with the AHM project providing the initial stationery and furniture needed for these offices.

Outputs/Results:

- Two formal VCC offices established in the Laspur and Rumboor Valleys of Chitral providing dedicated work space for these VCCs to plan their project activities, hold meetings, and conduct their administrative business.

1.1.10d: Training session for building capacity for improved NRM.

In Raman Village in Chitral's Laspur Valley, a day-long natural resource management training was held for 33 participants (13 Women) from the VCC and other community organizations. This training sought to reactivate the VCC and other natural resource management (NRM) groups and to build their capacity with respect to NRM since local residents of the Laspur Valley are highly dependent on their local natural resource base, particularly with respect to local forests and pastures.

Outputs/Results:

- The local village conservation committee in Raman village was reactivated and introductory lessons on forest and pasture management presented.

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

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

1.2.3a: Conduct pasture assessment survey.

In order to improve watershed management and assess the condition of snow leopard habitat in the Rumboor Valley, a four-day long pasture assessment was conducted that made a complete review of vegetation, ecology, and past pasture management strategies in the valley. Findings of this assessment will be used to design future watershed, pasture, and snow leopard improvement activities at Rumboor.

Outputs/Results:

- Baseline information on the status and condition of high altitude pastures in Rumboor has been collected and will be used to design and guide future AHM pasture, snow leopard, and watershed conservation activities at Rumboor.

1.2.3b: Raise fodder crops on agricultural and marginal lands outside the core habitats and near the human settlements (seed sowing).

Due to the large local dependence on livestock grazing in the Laspur Valley, grazing pressure on high mountain pastures can be severe in summer as is disturbance to snow leopards and their prey species in their core mountain habitat. In order to reduce grazing pressure on high mountain pastures in Lasper, and consequently disturbance to snow leopards, a demonstration was conducted to raise fodder crops 5 ha of agricultural and marginal land near human settlements in Laspur.

Outputs/Results:

- Use of fodder crops as an alternative to high altitude summer grazing has been demonstrated, and may be replicated at other project sites.

1.2.3c: Provide multipurpose forest tree species for planting on agricultural and marginal lands.

In order to address issues of land degradation, low farm incomes, timber and fuel wood shortages, habitat loss, and a shortage of fodder for livestock in Chitral, WWF distributed nearly 8,000 multipurpose forest tree seedlings for planting by community members in Balim Village in the Laspur Valley. Combined with improved protection of remaining natural forests in Laspur, this demonstration should make a large contribution to halting land degredation and a consequent decline in biodiversity in Laspur. If successful, the activity can be replicated elsewhere in the region. Tree species distributed included such fast growing species as Robinia, Alenthus, and Poplar.

Outputs/Results:

- Fast growing, multi-purpose tree species planted to demonstrate a simple method for addressing local issues of land degradation; habitat loss; and timber, fuel wood, and fodder shortages.

1.2.3d: Provide fruit tree seedlings for planting on agricultural land.

In order to lessen local dependence on livestock farming and grain and potato cultivation in Chitral's Laspur Valley, WWF has distributed 1200 fruit tree seedlings to Balim Village, including Apple, Pear, Walnut, Cherry and Apricot trees, which were planted under the supervision of local VCC members. Future benefits of this activity will include improved local nutrition, possible increased incomes from sale of excess fruit, and a contribution to improving the local watershed and valley habitat. If successful this demonstration can be replicated elsewhere in the region.

Outputs/Results:

- 1200 fruit tree seedlings planted at Balim Village in the Laspur Valley to diversify incomes, improve nutrition, and improve land cover and habitat around the settlement.

1.2.3e: Organise a livestock vaccination campaign.

In order to lessen the economic impact of predation on livestock by snow leopards and other predators, and also to build and maintain local support for snow leopard conservation activities, WWF sponsored a livestock vaccination campaign to reduce the loss of livestock to disease. This campaign was co-organized with the district livestock office and took place in Chitral's Rumboor and Laspur Valleys, where nearly 5,000 head of livestock, including sheep, goats, cows, and yaks, were vaccinated against enterotoxemia and black quarter disease. Vaccines for an additional 2000 head of livestock were provided to trained community members in Rumboor Valley to vaccinate additional livestock. Prior to the vaccination campaign, a short refresher course was organized for Community Livestock Extension Workers (CLEW) in basic techniques of livestock vaccination, de-worming, and treatment of common diseases. The campaign occurred in late spring, just before herders move their livestock to high mountain pastures. In addition, such types of vaccination campaigns not only protect local livestock from disease, but also reduce the threat of disease transmission from livestock to wild ungulates, such as snow leopard prey species.

Outputs/Results:

- Nearly 7000 head of livestock vaccinated against 2 diseases, ensuring an increased survival rate of livestock and building support amongst local herders for snow leopard protection and conservation activities.
- The vaccination campaign also provides benefits for snow leopard prey species, such as blue sheep, by reducing the chance of disease transmission from livestock to wild ungulates in high mountain pastures.

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.

Actions planned under this activity have been postponed until Project Year 2.

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 GB, WWF conducted a human-wildlife conflict social survey of 647 herders in the Hoper Valley to assess the economic impact of predation on livestock by snow leopards and other wild predators, such as wolves. The survey covered numerous topics including pastoral incomes, numbers and types of livestock in the valley, seasonal livestock grazing patterns, livestock mortality (from both predation and disease), reasons for human-predator conflict, economic losses due to livestock predation, herder response to human-wildlife conflict, etc. Survey findings will be design a program for mitigating human-predator conflict in the region, especially with snow leopards, through such interventions as corral improvement, livestock insurance, and improved herder education.

Outputs/Results:

- A survey report with baseline information on human-wildlife conflict in the Hoper Valley has been compiled and a program to mitigate this conflict has been designed to benefit both livestock herders and wild predators such as snow leopards.

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

In order to lessen dependence on the local natural resource base, improve natural resource management practices, and encourage support for snow leopard conservation activities, WWF organized two trainings in Chitral on home vegetable gardening and poultry farming to diversify livelihoods and improve the food security of the participants. The first training was co-organized with the Aga Khan Rural Support Programme (AKRSP) and consisted of establishing demonstration kitchen vegetable gardens in the Laspur Valley in conjunction with the fruit tree orchard planting activity conducted under Activity 1.2.3, above. 47 WCC members (All Women) participated in this training and 50 seed kits were distributed to them so that they could start their own vegetable gardens at home. The second training was conducted in the Rumboor Valley, where 50 members (All Women) of the Kalash Gram Village WCC participated in a day-long training on home poultry raising. This training was taught by an expert from the KP Livestock Department who discussed care and feeding of chickens and possible diseases affecting chickens and their treatment. Each participant was given a hen to start home egg production. Both trainings were accompanied by discussions on how diversifying livelihoods can provide benefits for snow leopard habitat and high altitude wetlands by reducing the need to keep grazing livestock. Vegetable growing and poultry raising were also discussed in the context of being a smart livelihood strategies for adapting

to a changing climate. An evaluation of the success rate of these trainings will be conducted in autumn 2013.

Outputs/Results:

- 97 Women participated in two trainings on vegetable gardening and chicken raising with the goal of diversifying livelihoods, reducing dependence on the local natural resource base, and providing suitable adaptation actions for adapting livelihoods to local climate change impacts.

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.

Under this activity, following in-house consultations WWF drafted a protocol for monitoring snow leopards and their prey species applicable to northern Pakistan. This protocol will utilize a combination of sign surveys, fixed-point counts and non-invasive genetic sampling of predator scat to monitor the distribution of snow leopards and their prey species at project sites. In addition, the protocol also provides guidelines for monitoring movement of snow leoprds and their predator and prey as well as dietary habits of snow leopards. This draft protocol will be reviewed, and once finalized, WWF will organize a training on how to use the protocol as well as methods for conducting snow leopard habitat assessments which will be attended by workers from relevant wildlife departments, partner NGOs, and other interested community members from the project region.

Outputs/Results:

- A draft snow leopard and prey species monitoring protocol prepared which will be used as a basis for training government wildlife agencies, conservation NGOs, and citizen scientists on how to monitor snow leopards and their prey species.

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.

Note: Due to opposition to project activities amongst tribal hunters at the intended survey site in the Hassanabad Valley, GB, this activity was shifted to the Rumboor Valley in Chitral District, KP.

In Project Year 1, WWF conducted a 6-day snow leopard survey in the Chimirsan area of the Rumboor Valley, an important high altitude pasture area covering roughly 4500 ha. Geographically, Chimirsan lies between the town of Chitral to the east, Chitral Gol National Park to the northeast, Lutkoh Valley to the north, Afghanistan's Nooristan Province to the west, and the Shekhan Deh area of Rumboor to the south. This survey followed SLIMS monitoring methodologies and was the first ever snow leopard survey conducted in

Chimirsane area. In the course this survey, 22 snow leopard sign survey transects were established in along different types of possible snow leopard travel routes such as ridge lines, valley bottom, cliff bases, and stream beds. Survey findings are currently being analyzed and will be used to develop a GIS snow leopard distribution map for the area as well as for eventually preparing a snow leopard conservation action plan for the region.

Outputs/Results:

- An initial snow leopard survey was conducted in the Chimirsan area of the Rumboor Valley, the findings of which will be used to develop a snow leopard distribution map and conservation action plan for northern Pakistan.

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 KP, the Rumboor and Laspur Valley project sites are home to such wildlife as snow leopards, markhor, Himalayan ibex, and brown bear. In order to build the capacity of KP Wildlife Department staff to monitor local wildlife, particularly snow leopards and their prey species, WWF, in cooperation with Chitral District Forest Division, organized a day-long training on SLIMS methodology snow leopard monitoring for the staff of the Booni Wildlife Range in Chitral. A total of 35 Wildlife Department and NGO workers (All Men) participated in the training. In addition to classroom teaching, follow-up field visits were also organized for the trainees to put into practice their new skills. In GB, WWF organized a second day-long training workshop on survey techniques for snow leopards and their prey species for 16 participants (All Men). Participants were 12 field staff game watchers from the GB Forests, Wildlife and Parks Department and 4 local livestock herders from central Hunza who were trained in snow leopard monitoring techniques as well as on snow leopard ecology and behavior, threats to prey species, and human-wildlife conflict prevention strategies.

Outputs/Results:

- Two trainings held for 51 government and NGO conservation workers and local herders who were trained in SLIMS methodologies for monitoring 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 the GIS-based map of snow leopard distribution in northern Pakistan as well as for developing a snow leopard conservation action plan for the region.
- Candidates for participating in the watch and ward wildlife protection system discussed in Activity 1.4.8, below, were identified.

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 GB, WWF, in cooperation with the Hoper Conservation and Development Organization (HCDO) established a community-based watch and ward system in the valley to document and stop such illegal activities as wildlife poaching, unregulated free grazing, and illegal logging. In addition, watch and ward program participants are also monitoring wildlife populations in the valley, particularly snow leopards and Himalayan ibex, and documenting human-wildlife conflict incidents. To this end, WWF and HCDO signed an agreement outlining each organizations responsibilities with respect to the watch and ward system and two Village Wildlife Guards (VWG) were selected to perform watch and ward duties under the HCDO, such as reporting all relevant illegal environmental activities to the GB Forests, Wildlife and Park Department through the HCDO. Simple Urdu language monitoring forms were provided to the two VWGs who are responsible for filling one in monthly and submitting it to the HCDO, WWF, and the GB Forests, Wildlife, and Parks Department. Each VWG has been provided with a pair of binoculars, and WWF will train the VWGs on wildlife monitoring and survey techniques in Project Year 2.

In KP, WWF, in cooperation with the Chitral District Wildlife Division, provided support for hiring one village wildlife guard to prevent illegal wildlife activities and to monitor wildlife, particularly snow leopards and their prey species, in the Laspur Valley, an ecologically important part of the Booni Wildlife Range. To increase the capacity of the Laspur Valley village wildlife guard as well as that of the VCC and other interested community members, WWF conducted a one-day training on improving watch and ward systems. A total of 17 participants (All Men) attended the training which briefed participants on the purpose of the watch and ward system, VWG duties and responsibilities, relevant wildlife protection laws, and submitting monthly VWG reports. In addition, the new VWG was presented with a pair of binoculars to help him perform his duties.

Outputs/Results:

- Three village wildlife guards (All Men) were hired to monitor wildlife and illegal wildlife activities at the Hoper and Laspur Valley project sites. These guards received basic training and were given binoculars to help them carry out their duties, which include submitting monthly reports on their findings. In addition, 16 community members also attended the Laspur Valley watch and ward training.
- Capacity of two local communities to protect wildlife and prevent wildlife crime strengthened.

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

In addition to support provided to government wildlife departments under the activities discussed above, at the request of community activists and the GB Forests, Wildlife, and Park Department, WWF provided support for establishing a wildlife crime check post at the mouth of the Hassanabad Valley to deal with wildlife poachers. Equipment provided included tents, bedding, kitchen utensils, and uniforms for field staff. WWF is also providing limited short-term support and technical guidance to the Gilgit-Baltistan Forest, Wildlife, and Parks Department to develop a wildlife rescue center for orphaned and injured animals, an activity which came about due to the find of an abandoned six-month old snow leopard cub in GB in December 2012.

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 among the individual range countries and at a regional scale, 3) update range-wide information on snow leopard trafficking and provide this information 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 1, due to the secretariat of the Climate Summit for a Living Himalaya (CSLH) having been moved from Bhutan to India and the summit's activities largely put on hold, the international alliance building component of the AHM Project has shifted resources originally intended for the CSLH to the GSLCF, where good progress was made in forming a 12-nation alliance for snow leopard conservation. Good progress has also been made in preparing the updated snow leopard trade report and in encouraging INTERPOL to include snow leopard trade information in their Project Predator 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 US Conservation Science Department oversaw production of reports on climate vulnerability and water provision in snow leopard range areas. Detailed descriptions of regional activities carried out under AHM Objective 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 2.1.7: Conduct Climate Summit for a Living Himalayas inter-governmental body annual meetings to support implementation of framework of cooperation.

Note: Although the only activity planned under project Sub-objective 2.1 in Project Year 1, this activity was cancelled due to the shift of the intergovernmental Climate Summit for a Living Himalayas (CSLH) secretariat from Bhutan to India. At this time, CSLH activities largely ceased, and the new CSLH secretariat refused to accept any further non-member support, including from WWF. Since that time, the AHM project has re-oriented its international alliance building focus from the CSLH to the new Global Snow Leopard Conservation Forum process, as discussed under project Sub-objective 2.5.

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.

As a follow-up to the 2010 USAID report, *Changing Glaciers and Hydrology in Asia: Addressing Vulnerabilities to Glacier Melt Impacts*, WWF supported the writing of a report titled *Assessing Community and Ecosystem Vulnerability to Climate Change and Glacial Melt in Asia's High Mountains*. This report contains six major summary sections on: 1) the state of scientific knowledge on glaciology, hydrology, and climate change in Asia's High Mountains (AHM); 2) a summary of the literature on climate change vulnerability and impacts in AHM; 3) a summary of current climate adaptation efforts in AHM; 4) a summary of current climate change and glacial melt research in AHM; 5) a summary of current policy adaptation and resilience policy initiatives in AHM; and 6) recommendations for future climate adaptation efforts. The intended audience is both the larger scientific community studying climate change in the region and WWF and partner field staff working in the six field sites. Examples of adaptation projects in each of the seven mountain ranges in the region were included specifically to help guide adaptation efforts in FY14 field activities.

Outputs/Results:

- A report reviewing climate change impacts and vulnerability across the major mountain systems of the snow leopard's range areas was prepared. This report will inform and guide conservationists and decision makers in the snow leopard range nations with respect to climate change impacts, research, adaption, and policy for high mountain areas.

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 Project Year 1, WWF participated in the annual meeting of the Central Asian Interstate Commission on Sustainable Development (ICSD) held in Dushanbe, Tajikistan. A brief overview of the WWF AHM Project was presented followed by a discussion on how to address climate change impacts on snow leopard habitat within the national snow leopard conservation action plans of the four ICSD member states with snow leopard populations. A discussion of WWF Russia's Econet Program (an ecological network of protected areas and territories under sustainable natural resource use in the former Soviet Central Asian States) was also presented. In "Decision 3" of the ICSD meeting outcomes, it was recommended that member governments: a) pay special attention to climate change impacts and address these impacts in national strategies and action plans on snow leopard conservation; b) participate in the upcoming Global Snow Leopard Conservation Forum in Bishkek, Kyrgyzstan; c) consider promoting development of WWF's Econet work in the context of the WWF–ICSD agreement on transboundary Econet implementation; and d) consider using the results of these projects for further development and implementation of similar environmental protection activities. Under this activity, WWF also actively participated in the development of the Kyrgyz Republic's National Snow Leopard Conservation Strategy and Action Plan with the goal of making the plan "climate smart" by addressing climate change impacts on snow leopard habitat in sensitive high mountains ecosystems and including possible actions to mitigate these impacts.

Outputs/Results:

- At the 2013 ICSD annual meeting, WWF received support from the ICSD for integration of climate change impact mitigation actions into national snow leopard conservation action plans of ICSD member states.
- The ICSD also endorsed member state participation in the Global Snow Leopard Conservation Forum in Bishkek and promoted further adherence to WWF Econet recommendations on protected area system design and management and sustainable natural resource use.
- Three snow leopard range nations not receiving direct support from the AHM Project were engaged by WWF at the ICSD meeting with respect to enhancement of their snow leopard conservation efforts, namely Kazakhstan, Tajikistan, and Uzbekistan.
- WWF provided active support for development of the Kyrgyz Republic's National Snow Leopard Conservation Strategy and Action Plan, including by recommending inclusion of climate change impact mitigation actions. The final 2013-2023 national snow leopard action plan developed has now been approved by the Kyrgyz Prime Minister .

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.

Although release of the final updated snow leopard trade report has been delayed until Project Year 2 due to staffing changes, TRAFFIC made good progress towards completing this report in Project Year 1. To date, TRAFFIC has compiled information on snow leopard trade from published sources such as news stories, wildlife trade reports, conservation project newsletters, and scientific papers. To bolster these findings, TRAFFIC is also now conducting interviews with relevant law enforcement officials and gathering unpublished materials, such as human wildlife conflict surveys and wildlife trade seizure records. Finalization of the snow leopard trade report is planned for autumn 2014.

Outputs/Results:

- Good progress made towards completion of the updated wildlife trade reported which is expected to be finalized by autumn 2014.

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 report in autumn 2013. 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.

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 by 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 is currently 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 and soon-to-be-established secretariat and by reviewing new trade sections in the revised Snow Leopard Survival Strategy and various national snow leopard conservation action plans. TRAFFIC is also targeting law enforcement and customs officials in the snow leopard range nations with a survey questionnaire on the snow leopard trade, the findings of which will be presented in the new updated snow leopard trade report discussed in Activity 2.3.1, above.

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 participate in the Global Snow Leopard Conservation Forum in this capacity.

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

In Project Year 1, an initial roundtable meeting on WWF-TRAFFIC-SLT-INTERPOL-USAID snow leopard trade cooperation was held on the sidelines of the CITES CoP 16 meeting in Bangkok, which was attended by 11 representatives (3 Women) of these five organizations. The preliminary outcome of this discussion was that while funding for a snow leopard-specific wildlife trade law enforcement training was not available, with support from WWF and USAID, TRAFFIC and INTERPOL would work together to include snow leopard trade information in tiger trade-focused law enforcement trainings planned for South Asia. The first such INTERPOL-TRAFFIC law enforcement training to include information on the snow leopard trade was held in New Delhi in July 2013, as detailed in Activity 2.3.5, below.

Outputs/Results:

- Initial verbal agreement on WWF-TRAFFIC-INTERPOL cooperation with respect to including snow leopard trade information in INTERPOL's USAID-funded "Project Predator" wildlife trade law enforcement trainings achieved.

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

A first effort to hold a joint training involving TRAFFIC and INTERPOL's USAID-funded 'Project Predator' took place in July 2013 in New Delhi, where, in cooperation with the Government of India, the "Integrated Investigative Capacity Development and Operational Planning Meeting" was held for building the capacity of the 8-nation South Asian Wildlife Enforcement Network (SAWEN). This meeting was a high-level capacity development and planning meeting, the purpose of which was to identify regional priorities for wildlife enforcement, implement a common approach for regional operations, and bridge communication gaps between agencies at the national and international level. The meeting also focused on skills development needed to strengthen SAWEN's ability to implement its resolutions and achieve its objectives of eliminating illegal wildlife trade, including snow leopards, in South Asia. Engagement with China for eliminating Snow Leopard trade will be

conducted through SAWEN. TRAFFIC will continue to catalyze this engagement effort by proposing to organize a joint meeting of SAWEN and China's National Interagency CITES Enforcement-Coordination Group (NICE-CG) to address ton tackling regional wildlife trade issues.

Outputs/Results:

- TRAFFIC participated in an INTERPOL Project Predator-led high-level wildlife trade law enforcement training for SAWEN member countries that included discussion of snow leopard trade issues (36 Participants, 7 Women).
- TRAFFIC will continue to promote SAWEN-China cooperation on tackling regional wildlife trade issues and has proposed a joint meeting on these issues between SAWEN and China's NICE-CG.

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.

Under this activity, three major steps were carried out as part of creating a GIS data-base on snow leopard habitat. The first was holding of a workshop at the Snow Leopard Network meeting held under Activity 2.4.3, below, which solicited expert feedback on this activity. Major points made at the workshop included: 1) increased temperatures and treeline shifts were less of a threat to snow leopards than increasing grazing pressure and conversion of pastures to cropland in snow leopard habitat, 2) the relationship between snow leopards, their habitat, and downstream water provision is not clear, and needs further research, and 3) the 'best existing' range-wide snow leopard distribution map was agreed to be the 2008 WCS-SLT-Panthera workshop map, though this needs improvement, particularly with respect to detailed land cover and land cover condition. The second step involved hiring a consultant and interns to assist the WWF Conservation Science Department with producing GIS data base layers needed for this analysis. The comprehensive GIS database created included data layers on regional climate, precipitation, land cover, elevation, snow leopard distribution, prey species distribution etc. for all known snow leopard range areas. Finally, these data sets were used to compile a map book titled *Snow Leopard Habitat, Water Provision and Climate Vulnerability*, which examined climate vulnerability throughout the known snow leopard range areas. This map book included over 25 maps on such themes as current snow leopard habitat, possible future climate influenced changes to snow leopard habitat, and water provision from snow leopard habitat as well as discussions of livestock and grazing impacts on snow leopard habitat. This map book will assist decision-makers and conservationists in planning both local and regional-scale conservation projects, although further refinement of data layers will need to be done for detailed local-scale analyses.

Outputs/Results:

- A GIS database and map book examining land cover, land use, water provision, and climate change impacts on snow leopard range areas throughout the species range. These data sets will assist in planning both local and regional-scale snow leopard

range area conservation projects, although further refinement of data layers will need to be done for detailed local-scale analyses

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 2.4.3: Convene a Technical Meeting of the Snow Leopard Network to discuss climate change, water security, and challenges facing snow leopard conservation.

In Project Year 1, a four-day long joint Asia High Mountains Project Inception Workshop/Snow Leopard Network (SLN) Meeting was held in Bishkek immediately following the first planning meeting for the Global Snow Leopard Conservation Forum. The meeting was attended by 35 people (6 Women), including staff members of WWF, TRAFFIC, SLT, Snow and Leopard Conservancy; 5 of 7 SLN steering committee members; and various researchers who were all members of the Snow Leopard Network. These participants came from the snow leopard range nations, including China, as well as from Europe, the United States, and Australia - 12 countries in total. Meeting sessions included: an introduction to the AHM Project and the project's goals and objectives, particularly with respect to climate change adaptation and water security; snow leopard monitoring best practice methodologies; a discussion of existing and potential climate change impacts on snow leopards, their habitat, livestock grazing patterns, and water availability in snow leopard range areas; the impact of climate change on high mountain ecosystems of Central Asia; and the impacts of climate change on Kyrgyzstan in particular; and designing climate adaptation and climate-smart snow leopard conservation activities . One outcome of the workshop was a commitment by the Snow Leopard Survival Strategy (SLSS) drafting committee to include a new section on climate change impacts and adaptation strategies for snow leopard range areas in the edition of the SLSS.

Outputs/Results:

- AHM Project team members from all six project countries met to discuss the project and share activity ideas, with the broader goals of the AHM Project, such as climate adaptation, water security, and building an international alliance on protection of Asia's high mountain landscapes, being discussed at length.
- SLN expert researchers shared the most up-to-date thinking on snow leopard monitoring in a series of presentations.
- Current and potential impacts of climate change on snow leopards and their habitat were discussed and participants were introduced to climate-smart conservation project design as well as climate adaptation strategies for snow leopard range areas.
- The SLSS drafting committee committed to including a new section on climate change impacts and adaptation strategies for snow leopard range areas in the updated SLSS.

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.

Due to delays by the Snow Leopard Survival Strategy (SLSS) drafting committee in updating the SLSS in time for the October 2013 Global Snow Leopard Forum in Bishkek, the review of the strategy by the WWF climate adaptation team for climate smartness has also been delayed. This review is now planned to be completed in Project Year 2. As discussed in Activity 2.2.4 above, WWF did participate in the drafting of Kyrgyzstan's National Snow Leopard Conservation Strategy and Action Plan and ensured that language addressing climate change impacts on snow leopard habitat was included in the plan. Other national snow leopard action plans will be reviewed as possible.

Outputs/Results:

- Full review of the updated SLSS by WWF for climate smartness was deferred to Project Year 2 due to late receipt of the draft SLSS from the SLN drafting committee. WWF did participate in the drafting of Kyrgyzstan's National Snow Leopard Conservation Strategy and Action Plan and ensured that climate change impacts were addressed in that strategy.

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 Project Year 1, the 2013 SLN Snow Leopard Conservation Grant Program guidelines were announced in June. A total of 21 initial grant concepts were received from applicants requesting a total of USD 141,000 in support. These concepts were reviewed by an independent team of reviewers and 15 were invited to submit full proposals. The 15 proposals come from seven nations as follows: India (1), Kazakhstan (1), Mongolia (2), Nepal (8), Pakistan (1), Russia (1), and Uzbekistan (1). Full proposals are currently being reviewed with final decisions expected in December 2013 and funding being distributed to grantees in late December or early January.

Outputs/Results:

- With co-financing by the WWF AHM Project, the SLN Snow Leopard Conservation Grant Program competition will award competitive small grants to a number of recipients working in the field of snow leopard conservation. In 2013, for the first time the grant program includes a climate change category that grant applicants are eligible to apply for. Small grant recipients will be announced in December 2013.

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

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. Note: This is a new activity added by agreement with USAID after submission of the original grant proposal.

Under this activity in Project Year 1, WWF attended four planning meetings for the Global Snow Leopard Conservation Forum. Three were range-wide meetings held in Bishkek, Bangkok, and Moscow, while one meeting was held in Beijing and dedicated to planning China's National Snow Leopard Conservation Action Plan in preparation for attending the forum. At these meetings, WWF gave two presentations titled "The Importance of the Snow Leopard and its High Mountain Ecosystems" and "Valuation of Snow Leopard Ecosystems." WWF also sponsored government delegations from Bhutan, India, and Nepal to attend these planning meetings. In addition, WWF reviewed a series of National Snow Leopard Ecosystem Protection Programs (NSLEP) being prepared by each range nation for presentation at the forum and provided comments on these and the forum "Bishkek Declaration" that was collectively drafted at these meetings. Throughout Project Year 1, WWF also actively participated in monthly forum planning teleconferences led by World Bank GTI.

Outputs/Results:

- With support from all six WWF AHM project country offices as well as WWF US, WWF Russia, and WWF International, AHM project country national delegations successfully prepared NSLEPs and joined together to draft a "Bishkek Declaration" in preparation for the Global Snow Leopard Conservation Forum to be held in Bishkek in Autumn 2013.
- In partnership with SLT, World Bank GTI, and other organizations, WWF made a large contribution towards the successful planning of the Global Snow Leopard Conservation Forum. After the forum, a forum secretariat will guide implementation of the NSLEPs developed and serve as an important international body for protection of Asia's high mountain landscapes.

III. MEASURES AND ADAPTIVE MANGEMENT

a. Adaptive Management Measures Taken Based on Current Context

Bhutan

In order to address capacity shortcomings at the WCP field site, where the majority of staff members are new to research, direct guidance on implementing AHM Project activities is now being provided by both the WWF Bhutan country office and WWF Network scientists.

India

Due to restrictions on entering snow leopard range areas of North Sikkim, WWF India has attempted to educate border patrol personnel about threats to wildlife in North Sikkim since these patrols have a permanent presence in restricted border zones and can play a very positive role in conservation of ecologically important border areas.

Kyrgyzstan

Due to delayed approval of the work plan, in the fall of 2012 and winter of 2013, there was a greater emphasis on implementing AHM-related activities supported with project co-financing from WWF Netherlands.

Mongolia

Due to the sprawling nature of the western Mongolia project site, although education and snow leopard distribution survey work extends over the entire project region, actual demonstration activities such as detailed wildlife monitoring, livestock insurance schemes, climate adaptation, and pasture management work are presently being concentrated at three project sites only, Jargalant Khairkhan, Bumbat Khairkan, and Baatar Khairkahn Mountains.

Nepal

As part of Nepal's permit agreement for the snow leopard collaring activity, WWF will continue its mutually beneficial collaboration with Government of Nepal Wildlife Technicians in the new area of snow leopard collaring. This collaboration will include sending one government wildlife technician to SLT's Tost Uul snow leopard research base for training and having a government veterinarian accompany the team to Kangchenjunga.

Pakistan

In order to save money and put an end to project implementation delays caused by opposition from influential hunters groups at the intended Hassnabad Valley, GB project site, WWF shifted activities planned for Hassanabad to Hoper Valley where the pro-active Hoper

Conservation and Development Organization (HCDO) already had the support of the five tribes in the valley. This shift allowed WWF to immediately begin implementation of activities that had originally been planned for Hassanabad.

Regional

While WWF will continue to engage the new Climate Summit for a Living Himalaya (CSLH) secretariat located in New Delhi, until such time as this body is willing to accept non-member support, the AHM Project will not be able to provide assistance to the CSLH secretariat. Therefore, the AHM Project has shifted its focus for developing an international alliance on protection of Asia's high mountain landscapes to providing support for the Global Snow Leopard Conservation Forum (GSLCF) and its secretariat. The objectives and geographic scope of the GSLCF align well with AHM Project and cooperation with GSLCF should be beneficial for achieving both GSLCF and AHM Project objectives.

b. Lessons Learned

Bhutan

- In future AHM project years, better planning will be needed to reconcile differences between mid-summer WCP project activity delivery expectations and actual AHM project implementation schedules.
- WWF and WCP management recognize that success of conservation activities in WCP will require the participation and goodwill local communities in WCP.

India

- When enlisting community members to help conduct project social surveys, it is important to accompany these volunteers through several initial surveys to ensure quality of data recording.
- In many areas of North Sikkim, feral dog packs pose a larger threat to both livestock and wild ungulates than wild predators. Therefore the feral dog problem in the project areas of Sikkim needs to be addressed.
- More pro-active promotion is needed for effectively marketing community-based tourism operations in the project area.

Kyrgyzstan

- Project cooperation with other projects and organizations can be very efficient and bring added value to both project implementation and outcomes, such as cooperation with UNEP during climate change adaptation capacity building activities in Kyrgyzstan, but only if a common vision and approaches can be agreed upon.

Mongolia

- Several citizen scientists trained under this project have proven to be particularly adept at operating camera traps and monitoring wildlife, including efficient reporting of findings. These citizen scientists have also become effective local advocates for wildlife conservation. Therefore there is great potential to extend the project's wildlife conservation efforts to a larger area by effective training and encouragement of enthusiastic citizen scientists.

Nepal

- Empowered local communities can effectively manage natural resources as has been shown in the KCA. They can also handle new technologies such as camera traps for monitoring snow leopards and other wildlife, as SLCC members and citizen scientists are currently doing in the KCA. The collaboration and partnerships built between WWF and local communities have resulted in improved project outcomes. Other local conservation and resource management partnerships established include with the KCAMC, COFSUN, and FECOFUN. Working with local partners is not only cost effective, but also helpful in building local capacity for biodiversity conservation and natural resource management, which in turn increases sustainability of project activities.

Pakistan

a. Gilgit-Baltistan:

- Communities receptive to development activities are not necessarily interested in undertaking conservation work. Initially it was assumed that the progressive, well educated communities of the Hassanabad Valley in central Hunza would welcome a conservation project. But following eight months effort including holding numerous formal and informal meetings with tribal elders and community members, WWF was unable to convince all valley tribes to participate in a collective conservation program.
- Conservation projects, whether small interventions or large programs, should be rooted in a strong community mobilization process. In GB, conservation programs have only been successful when rooted in a strong social mobilization process. The AHM Project did not anticipate the need for a large scale social mobilization effort at Hassanabad. Therefore, while selecting the alternative project site in GB, the need for a mobilized, proactive community to cooperate with was kept in mind.

b. Chitral:

- Keeping in view the difficult terrain and harsh climatic conditions, the time frame for delivering agreed upon activities needs be kept flexible. Also, additional resources need be allocated for longer-term livelihood diversification and conservation research capacity building.

Regional

- With respect to land cover in snow leopard range areas, there is very little detailed data available that depicts land cover condition. Information on degradation of land cover in snow leopard range areas will therefore have to be generated on a site-by-site basis over a period of several years.
- Not all national snow leopard conservation action plans are available in English, thus assessing climate smartness of non-English action plans will be problematic.
- The Global Snow Leopard Conservation Forum is currently more amenable to cooperation with WWF than the Climate Summit for a Living Himalaya. Therefore, the Global Snow Leopard Conservation Forum is now the focus of AHM efforts to build trans-national cooperation on conservation of Asia's high mountain landscapes.
- Not all AHM project country offices have sufficient climate adaptation experience. Therfore additional effort will need to be directed towards these country offices to build their capacity with respect to climate adaptation.

IV. Next Steps and Priorities

Bhutan

In Project Year 2 in Bhutan, top priorities for WWF in WCP will be to complete the third and final snow leopard survey in the park and to implement a springshed restoration project as major climate adaptation activity. In addition, WWF will also continue to build the capacity of WCP staff and residents alike with respect to natural resource management and climate adaptation.

India

In Project Year 2 in Sikkim, top priorities will be to conduct a systematic snow leopard camera trap survey in North Sikkim and involve local residents in wildlife monitoring as well as to launch a climate change awareness campaign, including the introduction of biomass briquettes as an alternative to fuel wood cutting. WWF will also work to improve promotion of community-based tourism operations in Sikkim and work to improve solid waste management at tourism centers in the project region.

Kyrgyzstan

In Project Year 2 in Kyrgyzstan, a top priority will be further development of the protected area system in the project region, implementing systematic methods for the monitoring and conservation of snow leopards, and increasing participation of local communities in conservation activities such as implementation of trial climate adaptation actions. WWF will also begin preparing a draft climate vulnerability assessment for the project region of eastern Kyrgyzstan.

Mongolia

In Project Year 2 in Mongolia, priority activities for WWF will include beginning implementation of improved pasture management strategies at four sites and also preparation of a climate vulnerability assessment for the project region of western Mongolia. WWF will also continue with the strategy of mobilizing locals to monitor wildlife and also supporting volunteer rangers to curb poaching and illegal wildlife trade in the project region. Work will also begin in earnest on educating communities about climate change impacts, climate adaptation initiatives, and water resource protection activities, with an emphasis being placed on livelihood diversification options.

Nepal

In Project Year 2 in Nepal, completing the snow leopard radio-collaring activity initiated in Project Year 1 will be a high priority, while WWF will continue its efforts to improve sustainability of pastureland management in the KCA for the benefit of livestock, snow leopards, and their prey species. WWF will also continue to mobilize local youth to curb poaching and illegal wildlife trade in the project areas as well as strengthen community-based snow leopard and prey base monitoring by SLCCs and citizen scientists. Vulnerable communities will be supported to implement community-based climate adaptation initiatives, including increasing water use efficiency, alternate and energy efficient technologies, and

adaptive agricultural practices. WWF will also continue institutional support for KCAMC and other community-based organizations in the KCA to improve local natural resource management practices.

Pakistan

In Project Year 2 in Pakistan, WWF will immediately start a snow leopard and prey species survey in Hoper Valley and implement a human-carnivore conflict mitigation program based on survey findings. This survey will also be used as a forum for training local citizen scientists on wildlife monitoring techniques. WWF will also proactively support local village wildlife guards participating in watch and ward anti-poaching programs. Support will also be continued for community-based organizations (CBO), such as by raising community conservation awareness, demonstrating alternative livelihood activities as part of climate adaptation work, and building the capacity of these CBOs to design and conduct sustainable natural resource management activities. Finally, WWF will begin work on a formal climate vulnerability assessment for the project region of Pakistan.

Regional

One of the highest regional priorities for AHM Project Year 2 will be working with a consortium of organizations to set up, support, and advise an international secretariat for implementation of the Global Snow Leopard Ecosystem Protection Program (GSLEP) agreed upon at the Global Snow Leopard Conservation Forum in Bishkek in October 2013. WWF will also continue to foster international cooperation on conservation by supporting and participating in the annual ICSD meeting as well as other international meetings. Another high regional priority will be completion of TRAFFIC's updated report on the snow leopard trade. Notably, WWF will support building of a bilateral dialogue on snow leopard conservation between Nepal and China along their shared frontier in the KCA.

V. ANNEXES

Annex 1. Activity Timeline

Table A1.1. Bhutan

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.2a	May 2013	Kurtoe Geog	Local forest management plan developed	One local forest management plan developed 416 ha mapped 6 (3 Women) Local administrators are trained in LFMP
~~Activity 1.1.2b~~	~~June 2013~~	~~Gangzur Geog~~	~~Local forest management plan developed~~	~~One local forest management plan developed~~ ~~6 (3 Women) Local administrators are trained in LFMP~~
Activity 1.2.1	January-February 2013	9 of 10 geogs in WCP. Lunana Geog not surveyed.	Conduct survey to document local climate change interventions and coping strategies	498 households surveyed 1 survey report compiled
Activity 1.2.3	March 1-5, 2013	Tang and Chhokhor Geogs	Degraded pastureland identified to plant fodder species as part of a pasture improvement strategy	19 ha of degraded land identified for improvement 57 households selected for participation
Activity 1.2.5	1. June 27-28, 2013 (WWF-CHARIS Cooperation Meeting) 2. May 11-13, 2013 (Hydro-meteorological station installation) 3. Sept. 17-30, 2013 (Site visit to Bhutan by University of Colorado CHARIS Team)	1. Boulder, Colorado 2. Khangdang, central WCP 3. Thimphu, Bumthang, Trashi Yangtse- Sherbutse College	Partner with University of Colorado to establish a system of monitoring and evaluation to test headwater ecosystem conservation	1. 9 Participants (3 Women) 2. 2 Participants (All Men) 3. 3 Participants (1 Woman)
Activity 1.3.1	Postponed	WCP	Strengthen participation of local communities in conservation of snow leopards and	This activity has been postponed until Project Year 2.

			climate change adaptation	
Activity 1.3.11	Cancelled	WCP	Promote sustainable Community Based Tourism	This activity has been cancelled under the AHM Project and will be funded under a different project.
Activity 1.4.1	1. November-December 2012 (WCP Western Range Blue Sheep Survey) 2. March to May 2013 (WCP Western Range Snow Leopard Survey)	Western Range WCP	Develop a monitoring protocol for selected field sites to assess abundance and distribution of snow leopards and their prey base	1. snow leopard prey species surveys completed; 3 WCP rangers fully trained (All Men) 2. Snow leopard sign and camera trap survey completed; 3 WCP rangers fully trained (All Men)
Activity 1.4.6	Postponed until AHM Project Year 2.	Central WCP	Train local community members to be citizen scientists to monitor snow leopard populations, prey species, and threats to snow leopards	Train 30 yak herders as citizens scientists/guards to monitor wildlife and record wildlife sightings

Table A1.2. India

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.10	July 28-30, 2013 (Survey Conducted) Sept. 18, 2013 (Report Completed)	Lachen	Survey on natural resource management	One survey completed 33 households surveyed and 12 individuals participated in a focus group discussion
Activity 1.2.4	April 4 -May 15, 2013	All 4 districts in Sikkim	Conduct survey on impact of climate change and variability on local agricultural practices	One survey completed, involving 146 farmers (25 women) in 13 villages.
Activity 1.3.1	1. March 7-9, 2013 (Biodiversity and wildlife trade Monitoring training)	1. Yuksam, West Sikkim	Conduct training programs for Himal Rakshaks to build their capacity in biodiversity	1. 31 Himal Rakshaks trained (All Men)

	2. June 1, 2013 (Snow leopard monitoring training)	2. Uttarey, West Sikkim	monitoring and illegal wildlife trade	2. 20 Himal Rakshaks trained (All Men)
Activity 1.3.2	August 8-10, 2013	North Sikkim	Conduct human-snow leopard conflict survey in snow leopard range areas	One survey completed with input from 30 herders
Activity 1.3.11	1. Nov. 7, 2012	Lachen	1. Convene stakeholder consultation and awareness raising meeting to discuss waste management	1. 1 meeting convened with 54 participants (18 women)
	2. Sept. 15, 2013	2. Lachen	2. Establish community-run recycling center	2. 1 community recycling center established
	3. May 2, 2013	3. Lachen	3. Conduct village clean-up campaign	3. 260 people (30 women) participated in village clean-up
	4. April 4-May 8, 2013	4. Yuksam, Lachen, Dzongu, Kewzing, Pastanga, Darap, Kabi, Maniram, Namthang	4. Survey on success and failures of tourism initiatives	4. 1 tourism survey completed in the 9 most visited tourism sites
	5. June 11, 2013	5. Gangtok	5. Convene a meeting of the Zero Waste Himalayas Group to discuss solid waste management in Sikkim	5. Zero Waste Himalayas Group meeting convened.
Activity 1.4.1	August 2013	Lasher Valley and Tso Lhamu Plateau, North Sikkim	Conduct SLIMS snow leopard sign and prey species survey	1 SLIMS survey completed covering 374 km²
Activity 1.4.6	June 4-5, 2013	Chaten and Yongri army camps, North Sikkim	Conduct conservation awareness programs for army personnel to discuss biodiversity, wetlands, and waste management	2 awareness programs conducted for 66 army personnel (All Men)

Table A1.3. Kyrgyzstan

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.2	1. April 12, 2013 (Engilchek	1. Engilchek	1 and 2. Conduct training with local	1 and 2. 44 people (25 Women)

	Training) 2. May 10, 2013 (Akshyrak Training) 3.WWF/UNEP Climate Trainings a) Feb. 25, 2013 b) May 21-22, 2013 (7 Sessions) c) May 23-24, 2013 (2 Sessions) d) June 24-25, 2013	 2. Akshyrak 3. Kyrgyzstan/ Kazakhstan a) Astana b) Bishkek c) Almata d) Astana	communities on climate change impacts in the project region 3. Trainings on climate change, funding, and UN climate negotiations for national-level stakeholders	familiarized with climate change impacts 3. 297 People (148 Women) trained on climate change impacts, UN climate negotiations, and climate project funding a) 41 Participants (16 Women) b) 197 Participants (102 Women) c) 23 Participants (14 Women) d) 36 Participants (16 Women)
Activity 1.1.3	1. October 2012, Ongoing 2. May 22,2013 (Engilchek Snow Leopard Festival) 3. Sept. 15, 2013 (Akshyrak School Conservation Day)	1. Engilchek, Akshyrak, Karakolka 2. Engilchek 3. Akyshyrak	1. Local NGO capacity building 2. Snow Leopard Festival conservation awareness raising activity 3. School conservation awareness raising day.	1. 37 NGO members (25 Women) 2. 80 participants: 53 adults (22 woman) and 27 children (12 girls) 3. 37 schoolchildren (23 Girls)
Activity 1.1.6	December 8, 2012	Bishkek	Convene discussions with Kumtor Gold Mine about assistance with anti-poaching and environmental education	1. meeting convened, preliminary cooperation points developed
Activity 1.2.3	Ongoing since 2011	Sarychat-Ertash State Nature Reserve Buffer Zone	Demonstrate climate adaptation strategy for highland livestock herders	Use of yaks as climate adaptation strategy demonstrated
Activity 1.3.9	1. October 2012, Ongoing	1. Engilchek Akshyrak, and Karakolka	1. Develop alternative forms of income generation, such as production and sale of crafts and food specialties	1. 495 people (108 Women and 287 Children) from 108 Households benefited

				from alternative income generation
	2. June 2013	2. Sarychat Ertash Reserve	2.Ranger sheep raising activity	2. 128 people (29 Women and 70 Children) from 29 Households are benefiting from this activity.
Activity 1.4.4	Sept. 10-14, 2013 and October 5-10, 2013	Sarychat-Ertash State Nature Reserve	Conduct reserve-wide snow leopard sign, camera trap, and prey species survey	Survey conducted by 20 reserve rangers (all men) with 20 camera traps
Activity 1.4.9	1. Aug. 17, 2013 (Reserve zoning and patrol workshop)	Sarychat-Ertash State Nature Reserve	Conduct a workshop to discuss new zoning and patrol regime for the newly expanded reserve	One workshop convened to discuss the new zoning system and protection regime, attended by 11 people (2 women)
	2. Sept. 14, 2013 (Equipment Donation)			2. Ranger uniforms, point-and-shoot cameras, camping equipment, one computer, and other necessary items donated to the Sarychat Ertash Reserve.
Activity 1.4.10	1. April 11, 2013 (Anti-poaching team trained)	1. Engilchek	1. Launch community anti-poaching team to protect wildlife	1. 5 people (all men) trained as conservation inspectors and 1 community anti-poaching team started
	2. April 10, 2013 (Community awareness raising campaign)	2. Engilchek	2. Village snow leopard protection awareness campaign	2. 90 people (37 Women) participated in a training on preventing harm to snow leopards
	3. April-September, 2013 (Snow leopard protection media campaign)	3. Bishkek/Issyk Kul Province	3. Snow leopard protection media campaign	3. Campaign results in 2 TV broadcasts, 7 radio broadcasts, and 19 internet news stories
Activity 1.4.11	1. Feb. 1, 2013 (Expansion Date)	1. Bishkek/ Sarytchat-Ertash State Nature Reserve	1. Support campaigning and policy advocacy to expand the reserve	1. Reserve expanded 77,037 ha
	2. 2011-2014	2. Bishkek/ Khan Tengri Region	2. Support the establishment of	2. 187,000 ha Khan Tengri National

	3. 2013	3. Engilchek Region	Khan Tengri National Park 3. Establish ecological corridors connection the Sarychat-Ertash and Khan Tengri PAs.	Park to be established in 2014. 3. Ecological corridors connecting these two PAs included in the UNDP Khan Tengri GEF Project planning process.
Activity 1.4.12	2013	1. Khan Tengri National Park	Promote plans for sustainable wildlife and habitat management practices	Plan developed in cooperation with UNDP-led Khan Tengri GEF project

Table A1.4. Mongolia

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.4	1. Aug. 18- Sept. 29, 2013 2. Oct.10-Nov 15, 2012 3. October 24, 2012 (Khajingiin Nuruu PA established)	1. 6 western provinces of the Mongolian Altai-Sayan Ecoregion 2. Jargalant Khairkhan Mountain region of Kovd Aimag 3. Khajingiin Nuruu PA (established), Khokh Serkh National Park, plus 5 other sites.	1. Conduct snow leopard human-wildlife conflict survey 2. Support development of business plans for CBOs 3. Support establishment of new protected areas	1. 1,115 people (65 Women) participated in the survey 2. 5 CBOs supported in the development of business plans 3. 1 local protected area established: area 22,124 ha; 6 other proposals submitted to protect 606,862 ha of land.
Activity 1.2.3	Postponed		Promote climate-smart grazing practices that maintain healthy pastures for livelihoods and wildlife	This activity has been shifted to Project Year 2. Based on the findings of the human-wildlife conflict survey conducted in Activity 1.1.4
Activity 1.3.1	Dec. 2012	Bumbat Khairkhan Mountain, Khovd	Disseminate information on preventing livestock depredation by snow leopards through "Buy Goat" program	18 herders (9 Women) from 9 households receive HWC information through the "Buy Goat" program
Activity 1.3.3	1. Dec. 2012	1. Bumbat Khairkhan, Khovd	1. Expand "Buy Goat" HWC compensation program	1. "Buy Goat" program expanded to one site and 40 people (9 Women, and 22 children)

	2. Dec. 2012	2. Khoid Otor, (adjacent to Turgen Mountain SPA), Uvs Aimag	2. Trial community-funded and managed livestock insurance scheme	from 9 Households receive 21 sheep in compensation for livestock lost to snow leopards. 2. 1 livestock insurance scheme set up that provided compensation for 8 head of livestock lost to wild predators
Activity 1.4.1	Sept. 2, 2013	Ulaanbaatar	Prepare and translate a simplified SLIMS snow leopard and prey species monitoring protocol	300 copies of the protocol prepared and disseminated
Activity 1.4.3	1. Feb. 8, 2013 2. a) Feb. 26, 2013 b) March 1, 2013 c) March 13, 2013 d) March 21, 2013 e) April 4, 2013 f) April 12, 2013	1. WWF, Ulaanbaatar 2.a) Bayan Olgii b) Zavkhan c) Uvs d) Gobi Altai e) Khovsgol f) Khovd	1. Project inception workshop for Mongolian government partners 2. Snow Leopard distribution mapping workshops	1. 15 people (2 women) participated in the workshop 2. 1 Snow Leopard Distribution Map produced a) 104 Participants (10 Women) b) 20 Participants (3 Women) c) 44 Participants (6 Women) d) 50 Participants (12 Women) e) 130 Participants (28 Women) f) 36 Participants (4 women)
Activity 1.4.6	1.a) Sept. 4-27, 2012 b) Sept. 5-18, 2013	1.a) Jargalant Khairkhan, Khovd b) Jargalant	1. Conduct SLIMS snow leopard sign and camera trap surveys while training citizen scientists in the process	1a) Preliminary snow leopard camera trap survey conducted. 5 Citizen Scientists (1 Woman) trained b)SLIMS and

		Khairkhan, Khovd		camera trap survey; 5 Citizen Scientists (1 Woman) Trained
	c) Sept. 19-21, 2013	c) Bumbat Khairkhan, Khovd		c) SLIMS survey conducted; 2 Citizen Scientists trained (1 Woman)
	d) Sept. 22-26, 2013	d) Baatar Khairkhan, Khovd		d) SLIMS survey conducted; 2 Citizen Scientists trained (1 Woman)
	2. May.15 2013	2. Ulaanbaatar	2. Develop MoU with the SID and NPA to combat illegal wildlife crime.	2. MOU signed with 2 national agencies to combat illegal wildlife poaching and trade
Activity 1.4.13	Sept. 5-26 2013	Jargalant khairkhan, Bumbat khairkhan and Baatar khairkhan Mountains, Khovd Aimag,	Provide technical and financial support to forest departments and communities to protect habitat	9 GPS units, 32 batteries, 9 compasses, and 9 meter sticks distributed to herder community conservation groups to monitor snow leopards and their prey

Table A1.5. Nepal

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.1	1. Sept. 15-17, 2013 (Yamphudin VDC) 2. Sept 19- 21, 2013 (Tapethok VDC)	1. Yamphudin VDC 2. Tapethok VDC	Train members of local natural resource management groups on principles of good governance, gender and social inclusion	Two 3-day workshops conducted 46 community members (20 Women) trained
Activity 1.1.7	1. Sept. 5, 2013 (Timbungpokhari CFUG) 2. Sept. 6, 2013 (Deurali CFUG)	Yamphudin VDC	Conduct workshops on gender and power analysis	Two 1-day workshops conducted 48 CFUG members (23 Women) participated in the workshops
Activity 1.1.8	June 3-5, 2013	Phungling VDC	Conduct pro-poor planning training for youth to be local resource persons and mobilize them to prepare	1 3-day training conducted 15 local youth (6 Women) participated in the

			livelihood improvement plans	training
Activity 1.1.9	1. Sept. 16-18, 2013 (Yamphudin) 2. Sept. 22-24, 2013 (Lelep)	1. Yamphudin Village 2. Lelep Village	Conduct leadership skills training for traditionally excluded local community groups	Two 3-day trainings conducted 48 community members (23 Women) participated in the trainings
Activity 1.2.1	April-June 2013	Yamphudin, Lelep, Tapethok, and Ghunsa villages	Support implementation of community-based climate change adaptation actions	499 people (259 Women and Girls) from 104 households benefitted
Activity 1.2.2	Aug. 25-26, 2013	Kalikhola VDC	Organize workshop to assess impacts of climate change on agriculture production and possible adaptation actions	2-day workshop conducted 34 farmers (16 Women) participated in the workshop
Activity 1.2.3	1. February and April, 2013 2.a) Feb. 23, 2013 (Lelep) b) June 1, 2013 (Tapethok) c) July 3, 2013 (Yangma) 3. May-July 2013 4. October 2012	1. Ghunsa, Phale, Gyabla, and Yangma villages 2. a) Lelep Village b) Tapethok Village c) Yangma Village 3. Lelep, Tapethok, Yangma, Ramche, Ghunsa, Hellok, and Yamphudin Villages 4. Khambachen Village	1. Conduct assessment of pastureland management practices in highland villages 2. Conduct training on sustainable grazing and pastureland management 3. Improve pastureland management practices in seven villages in KCA 4. Demonstrate predator-proof corrals to reduce loss of livestock to wild predators	1. One assessment conducted and strategy developed to improve practices 2. Three 1-day trainings on sustainable grazing and pasture land management conducted 55 herders (All Men) participated in the 3 trainings 3. Management of 2,000 ha of pasturelands improved 4. One demonstration predator-proof corral constructed
Activity 1.3.1	1. March and May 2013	1. Lelep, Olangchung Gola, Yamphudin, and Tapethok VDCs	1. Support mobilization of CBAPOs to curb poaching and illegal wildlife trade	1. 8 CBAPO teams mobilized with 92 team members (All Men)

	2. March-May 2013 3. April-August 2013	2. Ghunsa Yamphudin, Olangchung Gola, Yangma 3. Lelep, Olangchung Gola, and Iladanda	2. Mobilize SLCCs to monitor snow leopards and their prey base 3. Strengthen KCAMC institutions by providing partial funding for renovation of field offices	2. 4 SLCCS mobilized with 31 committee members (All Men) 3. 3 KCAMC field offices renovated
Activity 1.3.2	July and August 2013	Lelep and Yamphudin VDCs	Conduct human-wildlife conflict survey to assess conflict and mitigation measures	One study conducted surveying 25 people (4 Women) One human-wildlife conflict mitigation strategy is being finalized
Activity 1.3.6	May-June, 2013	KCA	Support preparation of sustainable harvesting plans for NTFPs/MAPs	Sustainable harvesting plans prepared for three NTFP/MAP species
Activity 1.3.7	1. May, 2013 2. April-May 2013	1. Ghunsa village 2. Lelep Village	Support establishment of a community-based enterprise 2. Support establishment of a NTFP/MAP "conservation cooperative"	One community-based NTFP enterprise established 163 people (85 Women and Girls, 78 Men and Boys) from 34 households are benefiting from this enterprise 2. 1 NTFP/MAP "conservation cooperative" 120 people (62 Women and Girls, 58 Men and Boys) from 25 households are benefiting from this enterprise
Activity 1.3.11	1. March-June 2013	1. Tapethok-Lelep-Gyabla-Phale-Ghunsa section	1. Provide partial support to upgrade the main trekking route in KCA	1. 15 km of trekking route improved 403 people (193 Men and Boys, 210 Women and Girls 210) from 84 households

	2. May-June 2013	2. Ghunsa and Yamphudin Villages	2. Provide support to upgrade the visitors centers to improve access to information about biodiversity and local culture	2. 2 visitors centers upgraded
Activity 1.4.1	March-June 2013	Kathmandu and KCA	Develop and field test a draft monitoring protocol to assess distribution of snow leopards and their prey species	A draft protocol for monitoring snow leopards and their prey species prepared and field tested
Activity 1.4.5	September 2013	Khambachen and Lhonak Villages	Perform preparatory work for snow leopard radio-collaring completed	Sites selected for trapping snow leopards based on earlier snow leopard sign and camera trap surveys and two different types of satellite GPS collars field tested.
Activity 1.4.6	1. October 2-3, 2012 (Initial Training) 2. September 4-5, 2013 (Refresher Training) 3. September 2013	1. and 2. Lelep 3. Ramche, Khambachen, Yangma, and Olangchung Gola areas	1. and 2. Train local people to be citizen scientists and monitor snow leopards and their prey species 3. Establish snow leopard sign transects	1. 16 People (1 Woman) trained as citizen scientists 2. 11 People (All Men) participate in the refresher training 3. 26 snow leopard sign transects established over 13.4 km
Activity 1.4.13	Ongoing	KCA	Provide technical and financial support to forest departments and communities	Technical and financial support provided to KCAMC

Table A1.6. Pakistan

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 1.1.5 Event #1	July 1, 2013	Central Hunza, GB	Classroom Lectures to raise conservation awareness	650 Participants (350 Woman/Girls)
Activity 1.1.5 Event #2	July 8, 2013	Karimabad, Hunza, GB	World Environment Day Poster Competition	250 Participants (150 Woman/Girls)
Activity 1.1.5 Event #3	September 21, 2013	Hoper Valley, GB	International Ozone Preservation Day Poster and Speech	200 Participants (140 Woman/Girls)

			Competition	
Activity 1.1.5 Event #4	April 7, 2013	Shekhanan Deh, Rumboor Valley, Chitral	Sports Events to raise conservation awareness	500 Participants (All Men)
Activity 1.1.5 Event #5	June 28, 2013	Kurangh, Chitral	Meeting with school students to raise conservation awareness	142 Participants (130 Women/Girls)
Activity 1.1.5 Event #6	June 29, 2013	Laspur, Chitral	World Water Day meeting with students to raise conservation awareness	130 Participants (40 Women/Girls)
Activity 1.1.5 Event #7	July 22, 2013	Rumboor, Chitral	VCC conservation awareness raising meeting	44 Participants (All Men)
Activity 1.1.5 Event #8	August, 2, 2013	Laspur, Chitral	VCC conservation awareness raising meeting	25 Participants (All Men)
Activity 1.1.10a Event #1	May 29, 2013	Aliabad, GB	Focus Group Discussion for natural resource management group assessment	15 Participants (All Men)
Activity 1.1.10a Event #2	May 30, 2013	Karimabad, GB	Focus Group Discussion for natural resource management group assessment	20 Participants (All Men)
Activity 1.1.10a Event #3	March 15, 2013	Rumboor Kalash Gram Village, Chitral	Focus Group Discussion for natural resource management group assessment	17 Participants (2 Women)
Activity 1.1.10a Event #4	March 15, 2013	Shiekhandeh, Rumboor Valley, Chitral	Focus Group Discussion for natural resource management group assessment	7 Participants (All Men)
Activity 1.1.10a Event #5	March 20, 2013	Sor Laspur Village, Laspur Valley, Chitral	Focus Group Discussion for natural resource management group assessment	20 Participants (All Men)
Activity 1.1.10a Event #6	March 20, 2013	Balim Village, Laspur Valley, Chitral	Focus Group Discussion for natural resource management group assessment	15 Participants (All Men)
Activity 1.1.10a Event #7	March 21, 2013	Raman Village, Laspur Valley, Chitral	Focus Group Discussion for natural resource management group assessment	8 Participants (All Men)
Activity 1.1.10a Event #8	March 21, 2013	Brook Village, Laspur Valley Chitral	Focus Group Discussion for natural resource management group	7 Participants (All Men)

			assessment	
Activity 1.1.10b Event #1	September 13, 2012	Gilgit, GB	Meeting to formalize village conservation committees	2 Participants (Both Men)
Activity 1.1.10b Event #2	January 11, 2013	Aliabad, GB	Meeting to formalize village conservation committees	20 Participants (All Men)
Activity 1.1.10b Event #3	February 3, 2013	Aliabad, GB	Meeting to formalize village conservation committees	150 Participants (All Men)
Activity 1.1.10b Event #4	April 13, 2013	Aliabad, GB	Meeting to formalize village conservation committees	29 Participants (All Men)
Activity 1.1.10b Event #5	May 29, 2013	Aliabad, GB	Meeting to formalize village conservation committees	34 Participants (All Men)
Activity 1.1.10b Event #6	June 1, 2013	Karimabad, GB	Meeting to formalize village conservation committees	30 Participants (All Men)
Activity 1.1.10b Event #7	June 3, 2013	Aliabad, GB	Meeting to formalize village conservation committees	23 Participants (All Men)
Activity 1.1.10b Event #8	June 8, 2013	Karimabad, GB	Meeting to formalize village conservation committees	40 Participants (2 Women)
Activity 1.1.10b Event #9	August 13, 2013	Hoper Valley, GB	Meeting to formalize village conservation committees	35 Participants (All Men)
Activity 1.1.10b Event #10	March 15, 2013	Rumboor Kalash Gram Village, Chitral	Meeting to formalize village conservation committees	16 Participants (All Men)
Activity 1.1.10b Event #11	March 15, 2013	Shiekhandeh, Rumboor Valley, Chitral	Meeting to formalize village conservation committees	12 Participants (All Men)
Activity 1.1.10b Event #12	March 21, 2013	Raman Village, Laspur Valley, Chitral	Meeting to formalize village conservation committees	25 Participants (All Men)
Activity 1.1.10b Event #13	March 21, 2013	Raman Village, Laspur Valley, Chitral	Meeting to formalize village conservation committees	30 Participants (All Women)
Activity 1.1.10b Event #14	March 15, 2013	Rumboor Kalash Gram Village, Chitral	Meeting to formalize village conservation committees	32 participants (All Women)
Activity 1.1.10b	April 4,2013	Balim Village,	Meeting to	65 Participants

Event #15		Laspur Valley, Chitral	formalize village conservation committees	(30 Women)
Activity 1.1.10b Event #16	April 5, 2013	Sor Laspur, Laspur Valley, Chitral	Meeting to formalize village conservation committees	73 Participants (40 Women)
Activity 1.1.10c	May 2013	Laspur and Rumboor Valleys, Chitral	Support setup of VCC offices	1 Office setup
Activity 1.1.10d	September 20, 2013	Raman, Laspur Valley, Chitral	VCC Natural Resource Management Training	33 Participants (13 Women)
Activity 1.2.3a	September 3-6, 2013	Rumboor Valley, Chitral	Conduct pasture assessment to evaluate watershed management and snow leopard habitat	Baseline information on the status and condition of high altitude pastures in Rumboor collected.
Activity 1.2.3b	April 20, 2013	Balim, Laspur Valley, Chitral	Demonstration plot planted with fodder crops as an alternative to high altitude summer grazing	Demonstration conducted to raise fodder crops on 5 ha of agricultural and marginal land
Activity 1.2.3c	April 26, 2013	Laspur Valley, Chitral	Provide multipurpose forest tree species for planting on agricultural and marginal lands	8,000 multi-purpose forest tree seedlings distributed for planting
Activity 1.2.3d	April 26, 2013	Laspur Valley, Chitral	Provide fruit tree seedlings for planting on agricultural land	1,200 fruit tree seedlings planted
Activity 1.2.3e	May 31, 2013 to June 1, 2013	Laspur and Rumboor Valleys, Chitral	Organize a livestock vaccination campaign	Nearly 7,000 head of livestock vaccinated against 2 diseases
Activity 1.3.2	Aug. 26-Sept. 1, 2013	Hoper Valley, GB	Study the severity of livestock depredation and develop a comprehensive human-snow leopard conflict mitigation program	A survey report with baseline information on human-wildlife conflict has been compiled based on 647 participant interviews and a program to mitigate this conflict has been designed
Activity 1.3.8	April 10, 2013 (Vegetable Training, Brook Village, Laspur Valley)	Laspur and Rumboor Valleys, Chitral	Organize trainings on home vegetable gardening and poultry farming to diversify livelihoods and	97 women (47 in Laspur and 50 in Rumboor) participated in two trainings on vegetable gardening

	June 27, 2013 (Chicken Training, Kalash Gram Village, Rumboor Valley)		improve the food security of the participants	and chicken raising
Activity 1.4.1	April, 2013	WWF Pakistan	Develop a monitoring protocol to assess abundance and distribution of snow leopards and their prey base using sign surveys, fixed-point counts, camera traps, and genetic analysis	A draft snow leopard and prey species monitoring protocol prepared
Activity 1.4.2	June 7-12, 2013	Chimirsan, Rumboor Valley, Chitral	Conduct snow leopard survey using SLIMS monitoring methodology	Initial snow leopard survey conducted over 6 days 22 snow leopard sign survey transects established
Activity 1.4.6	1. June 1, 2013 (Hunza, GB – 16 Men) 2. June 3, 2013 (Booni, Tehsil Mastuj, Chitral – 35 Men)	Rumboor and Laspur Valleys	Build capacity to monitor local wildlife, particularly snow leopards and their prey species, using SLIMS methodology	Two trainings held for 51 government and NGO conservation workers and local herders (All men)
Activity 1.4.8	1. July 15, 2013 (1 VWG hired in Laspur Valley, Chitral) 2. August 22, 2013 (1 VWG and 16 VCC members given Watch and Ward Training, Laspur Valley) 3. Sept. 1, 2013 (2 VWGs hired, Hoper Valley, GB)	Hoper, GB and Laspur, Chitral Valleys	Establish a watch and ward system of Village Wildlife Guards to protect snow leopards and other species against hunting and poaching	Three village wildlife guards (all men) hired and trained to monitor wildlife and illegal wildlife activities as are 16 VCC members (All Men).
Activity 1.4.13	1. December 2012 (Khunjerab National Park) 2. July 1-Aug. 31, 2013 (Wildlife checkpoint established in the Hassanabad Valley, GB).	1. Khunjerab National Park, GB Hassanabad Valley	Provide technical and financial support to forest departments and communities to protect habitat	1. Limited support provided for a Wildlife Rescue Center. 2. Support provided to establish a wildlife crime check post.

Table A1.7. Regional Activities (in chronological order)

Activity Number	Date	Location	Activity Description	Activity Indicators
Activity 2.5.3	Dec. 1-3, 2012	Bishkek	1st Global Snow Leopard Forum Planning Meeting	106 Participants (17 Women) including Govt. Officials, NGO workers, and Scientists.
Activity 2.4.3	Dec. 4-7, 2012	Bishkek	Project Inception Workshop and Technical Meeting of the Snow Leopard Network	35 Participants (6 Women) including NGO workers and Scientists.
Activity 2.3.4	March 8, 2013	Bangkok	WWF-TRAFFIC-SLT-INTERPOL-USAID Cooperation Meeting	11 Participants (3 Women)
Activity 2.5.3	March 9, 2013	Bangkok	2nd Global Snow Leopard Forum Planning Meeting	40 Participants (5 Women)
Activity 2.5.3	May 26-27, 2013	Beijing	China National Snow Leopard Conservation Action Plan Planning Meeting	47 Participants (13 Women)
Activity 2.5.3	May 29-30, 2013	Moscow	3rd Global Snow Leopard Forum Planning Meeting	32 Participants (1 Woman)
Activity 2.2.4	June 20, 2013	Dushanbe	Central Asian ICSD Annual Meeting (attended by representatives from the 5 former Soviet Central Asia States as well as from the UN, UNEP, OEEC, EU-WECOOP, WWF, and Russia	56 participants (19 Women)
Activity 2.3.5	July 1-5, 2013	New Delhi	INTERPOL/TRAFFIC Law Enforcement Training for SAWEN	36 Particpants (7 Women)
Activity 2.1.7	**WWF Activity POSTPONED INDEFINITELY in July 2013**	Thimphu	Climate Summit for a Living Himalayas Annual Meeting	
Activity 2.2.1	Delivered September 20, 2013	WWF US	Report: *Assessing Community and Ecosystem Vulnerability to Climate Change and Glacial Melt in Asia's High Mountains*	1 Report Produced
Activity 2.4.1	Delivered September 24, 2013	WWF US	Map Book Report: *Snow Leopard Habitat, Water Provision and Climate Vulnerability*	1 Report Produced
Activity 2.3.1	Ongoing	TRAFFIC	Updated Snow Leopard Trade Report	1 Report
Activity 2.3.2	Ongoing	TRAFFIC	Snow Leopard Trade	1 Report

			Recommendations	
Activity 2.3.3	Ongoing	TRAFFIC	Incorporate recommendations into range-wide dialogues on snow Leopard Trade	Adoption of Recommendations
Activity 2.4.4	Ongoing	WWF US	Review SLSS and National Snow Leopard Action Plans for Climate Smartness	Reviews of SLSS and Action Plans
Activity 2.4.5	Ongoing	SLT/SLN	Award SLN Snow Leopard Conservation Grants	Grants Awarded

Annex 2. Project Manager Site Visits

Dates	Project Country/State	Places Visited
April 21-28, 2013	Sikkim	WWF Gangtok Field Office, Yuksam KCC Office
May 5-11	Bhutan	Wangchuck Centennial Park East, Central, and West Park Offices
August 15-27, 2013	Mongolia	WWF Ulaanbaatar Office, WWF Khovd Field Office, Khokh Serkhiin Protected Area, Silkhem B Protected Area, Gulzat Local Protected Area, Turgen Mountain Protected Area, Jargalant Khairkhan Mountain, Khar Us National Park
Aug. 30-Sept. 11, 2013	Kyrgyzstan	Bishkek, Karakol, Sarychat Ertash State Reserve, Akshyrak, Engilchek, Engilchek River Valley
November 7-26, 2013	Nepal	Kangchenjunga Conservation Area – Taplejung, Chirwa, Tapethok, Lelep, Gyabla, Pahle, Ghunsa, Khambachen, Lhonak, Pangpema.

Annex 3. Project Year 1 Photos

Bhutan

Activity 1.2.1: Climate change interventions and coping strategies survey interviews, Tang Geog, Bumthang District, Wangchuck Centennial Park, Bhutan

Activity 1.2.3. Local government and park officials explaining fodder crop activity to villagers in Nasiphel, Bumthang District, Wangchuck Centennial Park, Bhutan.

Activity 1.2.5: Installation of the first high-altitude (4033 m) hydro-meteorological station in Wangchuck Centennial Park at Khangdang, Bhutan.

Activity 1.2.5. WWF-University of Colorado CHARIS Group cooperation meeting, June 27-28, 2013, Boulder, Colorado.

Melanistic Asiatic leopard.

Snow Leopard

Red Fox.

Dhole (Asiatic wild Dog)

Activity 1.4.1. Wildlife images from a snow leopard camera trap survey conducted in Wangchuck Centennial Park, Bhutan.

India

Activity 1.2.4. Interactive farmers group meeting on climate change impacts, South Sikkim, India.

Activity 1.2.4. Participants of a survey on climate change impacts, South Sikkim, India.

Activity 1.3.1. WWF staff member teaching Himal Rakshaks (Mountain Guardians) on how to use GPS units for biodiversity monitoring, Sikkim, India.

Activity 1.3.11. Community stakeholder's meeting with local Dzumsa (Village Council) in Lachen, North Sikkim, India.

Activity 1.4.1. WWF snow leopard sign and prey species survey, North Sikkim, India.

Kyrgyzstan

Activity 1.1.3. Participants of the Snow Leopard Festival in Engilchek, Issyk Kul, Kyrgyzstan.

Activity 1.1.3. Participants of the Akshyrak School conservation Day, Akshyrak, Issyk Kul, Kyrgyzstan.

Activity 1.3.9. Discussion of felt product design with the Akshyrak women's group leader, Akyshyrak, Issyk Kul, Kyrgyzstan.

Activity 1.3.9. Felt products made by the Karakolka women's group, Karakolka, Issyk Kul, Kyrgyzstan.

Activity 1.4.4. Reserve rangers planning snow leopard monitoring survey transects, Sarychat-Ertash State Reserve, Issyk Kul, Kyrgyzstan.

Activity 1.4.4. Reserve rangers setting up a camera trap as part of a snow leopard monitoring survey, Sarychat-Ertash State Reserve, Issyk Kul, Kyrgyzstan.

Mongolia

Activity 1.4.3. Snow leopard distribution mapping workshop, Gobi-Altai Aimag, Mongolia.

Activity 1.4.3. Snow leopard distribution mapping workshop, Khovsgol Aimag, Mongolia.

Activity 1.4.6. Local herder citizen scientist setting up a camera trap as part of a snow leopard monitoring survey, Khovd Aimag, Mongolia.

Activity 1.4.6. Local herder citizen scientists setting up a camera trap as part of a snow leopard monitoring survey, Khovd Aimag, Mongolia.

Activity 1.4.6. Local herder citizen scientists installing batteries in a camera trap as part of a snow leopard monitoring survey, Khovd Aimag, Mongolia.

Activity 1.4.6. WWF staff member pointing out a snow leopard urine spray point during a snow leopard monitoring survey, Khovd Aimag, Mongolia.

Nepal

Activity 1.1.1. Good governance training for community groups, Yamphudin, Kangchenjunga Conservation Area, Nepal.

Activity 1.1.7. Gender and power analysis training for community groups, Yamphudin, Kangchenjunga Conservation Area, Nepal.

Activity 1.2.1. Adaptive agriculture demonstration vegetable greenhouse, Ghunsa, KCA, Nepal.

Activity 1.3.1. Community-based anti-poaching operation team patrolling in the KCA, Nepal.

Activity 1.4.5. Field testing radio collars for the planned snow leopard satellite tracking activity, KCA, Nepal.

Activity 1.4.6. Citizen scientist wildlife monitoring training in Lelep, KCA, Nepal.

Pakistan

Activity 1.1.5. School conservation awareness raising event, Kuragh, Chitral, KP, Pakistan.

Activity 1.1.5. Student explaining her poster developed on prey-predator relationships for a school conservation awareness poster contest, Karimabad, Gilgit-Baltistan, Pakistan.

Activity 1.1.5. School conservation awareness raising event, Laspur, Chitral, KP, Pakistan.

Activity 1.1.10. Women's conservation committee natural resource management training, Laspur, Chitral, KP, Pakistan.

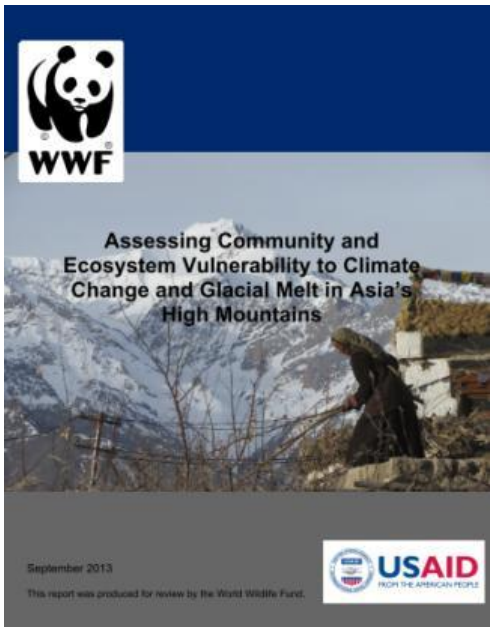
Activity 1.2.3. Fruit and multi-use tree planting activity to restore degraded land, Balim Village, Laspur Valley, Chitral, KP, Pakistan.

Activity 1.3.8: Kitchen vegetable gardening training and seed kit distribution, Laspur, Chitral, KP, Pakistan.

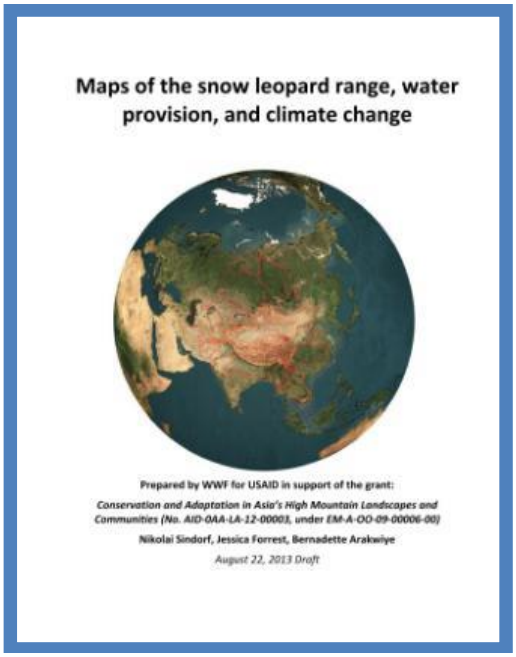
Activity 1.3.8. Home poultry rearing training in Rumboor Valley, Chitral, KP, Pakistan.

Activity 1.4.6: Participants in snow leopard and prey species survey training, Hunza, Gilgit-Baltistan, Pakistan.

Regional Activities



Activity 2.2.1. Regional climate vulnerability assessment report for snow leopard range areas prepared by WWF US.



Activity 2.4.1. Regional water provision map book for snow leopard range areas prepared by WWF US.

Activity 2.4.3. Participants of the AHM project launch workshop and Snow Leopard Network technical meeting, December 5-7, 2012, Bishkek, Kyrgyzstan.

Activity 2.5.3. First Global Snow Leopard Forum planning meeting, Dec. 1-3, 2012, Bishkek Kyrgyzstan.

Activity 2.5.3. Second Global Snow Leopard Forum planning meeting March 9, 2013, Bangkok, Thailand.

Activity 2.5.3. China National Snow Leopard Conservation Action Plan planning meeting, May 26-27, 2013, Beijing, China.

Activity 2.5.3. Third Global Snow Leopard Forum planning meeting, May 29-30, 2013, Moscow, Russia.