

INTEGRATED SAFEGUARDS DATA SHEET

CONCEPT STAGE

Report No.: 75387

Date ISDS
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I. BASIC INFORMATION

A. Basic Project Data

Country:	Nepal	Project ID:	P130015
Project Name:	Enhancing Resilience of Endangered Species to Climate Change (P130015)		
Task Team Leader:	Sumith Pilapitiya		
Estimated Appraisal Date:	07-Jun-2013	Estimated Board Date:	03-Oct-2013
Managing Unit:	SASDI	Lending Instrument:	Specific Investment Loan
Sector:	General Agriculture, fishing and forestry sector (100%)		
Theme:	Biodiversity (50%), Climate Change (50%)		
Financing (in USD Million)			
Financing Source			Amount
BORROWER/RECIPIENT			0.00
Strategic Climate Fund Grant			5.00
Total			5.00
Environmental Category	B - Partial Assessment		
Is this a Repeater project?	No		

B. Project Objectives

The development objective of the proposed project is to assist the GoN to develop and implement climate-resilient biodiversity plans for selected protected areas and to improve the livelihoods of communities in the buffer zones.

C. Project Description

The proposed project would be designed to increase the resilience of endangered species, ecosystems and ecological processes while improving the well being of natural resource dependent communities by reducing the decline in biodiversity in two pilot protected areas and its surrounding landscape. Project activities would be structured around three themes: (i) improved information, knowledge and capacity regarding climate change impacts and resilience measures on the natural habitats of endangered species; (ii) improved natural habitats and eco system health; and (iii) improved well being of natural habitat dependent communities.

Component 1: Climate resilient biodiversity management plan development

Global climate change is already having significant effects on species and ecosystems. The effects of climate change present a new set of challenges to the efforts to protect and conserve biodiversity and natural habitats of endangered species. Many observations suggest that recent climatic changes in Nepal have already influenced animal and plant populations in a number of ways: the timing of seasonal events (e.g. flowering, migration), growth and reproduction rates, and in the distribution of species. Ultimately, these changes are leading to species and habitat loss. The key to respond to adverse impacts of climate change on ecosystems and species is a better understanding of climate impacts on ecosystems and species through knowledge building and adaptation as well development of institutional and human resources. The proposed project would provide technical assistance for improved information, knowledge and capacity regarding climate change and resilience measures on the natural habitats of endangered species by supporting the following indicative activities:

- Climate vulnerability assessments for Shey-Phoksundo National Park (SPNP), Dhorpatan Hunting Reserve (DHR) and surrounding conservation landscapes focusing on climate vulnerability of terrestrial biodiversity and the communities living in the surrounding landscapes;
- Preparation and/or updating of Protected Area Management Plans for SPNP and DHR to be climate sensitive;
- Development of a framework for wildlife conservation and ecologically responsible livelihood development for communities in the landscape outside SPNP and DHR;
- Preparation of conservation strategies to enhance climate resilience of the focal species;
- Capacity assessment of conservation agencies (DNPWC and DOF), local government bodies and buffer zone communities for participatory management of conservation landscapes;
- Institutional and human resource capacity building, conservation education and community awareness programs;

Component 2: Management plan implementation

New approaches to the management of ecosystems and biodiversity are required to respond to the emerging threats of climate change. In response to anticipated effects of climate change adaptation strategies to facilitate the adjustment of human society and ecological systems to altered climate regimes would be identified during the climate vulnerability assessments of the pilot PAs. Adaptation measures would involve a landscape level approach to wildlife conservation since wildlife populations are not restricted to protected areas. Since conservation landscapes susceptible to climate change would require targeted support for conservation and recovery programs endangered species, implementation of conservation strategies developed for the focal species becomes important. Management of endangered species, natural habitats and improvements in eco system health will be supported through the following indicative activities:

- Implementation of priority actions of the climate sensitive protected area management plans;
- Investments for key actions of the conservation strategies developed for enhancing climate resilience of the focal species;
- Support for habitat improvement activities in the conservation landscapes outside the focal PAs as identified in the climate vulnerability assessment;

Component 3: Livelihood enhancement

The rich ecological landscape surrounding the pilot PAs has been integral to the lives, well-being, and livelihoods of the local community in the buffer zones. These ecosystems and their diversity have

sustained the supply of food, water, fodder, fuelwood, clothing, shelter, medicine, and energy of the local community. Biodiversity is the foundation of agriculture and rural livelihoods. Community livelihoods are derived in large part from forestry, fishery, and tourism, and the services performed by its ecosystems support life (through soil formation, nutrient cycling, primary production, oxygen production, and habitats) and regulate processes crucial to well-being (air quality, climate, water flow, soil retention, water purification, and biological and disease control). Biodiversity has thus been crucial to ensuring food security, income, nutrition, access to improved water, good health, safety, and the environmental sustainability of the local communities. The ability to adapt to changes in the environment is also determined in great part by the variation and resilience of species and ecosystems. Appropriate management of natural systems can therefore play a critical role in contributing to cost effective adaptation. As the natural habitats of endangered species are changing as a result of climate change, the livelihoods of the dependent communities are also affected. It is therefore important to enhance the livelihoods of communities by providing alternative livelihood options. Improving the well-being of natural habitat dependent communities would be supported through the following indicative activities:

- Based on the findings of the climate vulnerability assessment, support would be provided for activities such as community based eco-tourism, diversification of local products, marketing high value products such as fruits, NTFPs, medicinal plants, animal breeds and on-farm fodder and forage support;
- Due to the changing habitats there may be an increased incidence of human wildlife conflict. Support for specific activities that could be initiated to reduce such incidences such as introducing or strengthening insurance or compensation schemes towards crops and livestock loss, fencing, and awareness/education would be provided;

Component 4: Project coordination and management

The implementation of the proposed project would be coordinated through a Project Coordination Unit (PCU) already in existence for coordination of the Strengthening Regional Cooperation for Wildlife Protection Project. The PCU function has been delegated to the National Trust for Nature Conservation (NTNC) under the Strengthening Regional Cooperation for Wildlife Protection Project. This component would support PCU activities such as the day-to-day coordination and supporting the implementation of the project components, including technical and fiduciary responsibilities.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project would be piloted in two mountain Protected Areas (PAs) and the surrounding landscapes. The PAs are Shey-Phoksundo National Park (SPNP) and Dhorpatan Hunting Reserve (DHR). The PAs were identified based on specific criteria (II A above) and have high vulnerability to climate change, contain habitats of endangered species, such as snow leopard and red panda and habitats of high value and threatened medicinal plants, such as yarcha gunbu and kutki (both have a high livelihood relevance). The selected PAs include areas affected by human activities and also contain wilderness areas.

SPNP, established in 1984 is an IUCN Management Category II (National Park) located in the Mid-Western development region of Nepal. The park supports the prime habitat for the highest number of the snow leopard in Nepal. In addition to climate vulnerability, SPNP is threatened by habitat destruction, over grazing, poaching of snow leopard and musk deer, hunting of blue sheep and over harvesting of medicinal plants. The buffer zone is jointly managed by the park and local communities.

DHR is an IUCN Management Category VIII (Game Production/Multiple Use Management Area) located in the Dhaulagiri Himal range in West Nepal. DHR was established in 1983 under the National Parks and Wildlife Act of Nepal. Hunting of blue sheep, himalayan tahr, barking deer, wild boar and some other common bird species is permitted in the reserve, based on a formal hunting license issued by the Department of National Parks and Wildlife Conservation (DNPWC). The reserve contains the prime habitat for blue sheep, which are the main prey species of the snow leopard and has sizable populations of red panda and snow leopard. Red Panda are found in three hunting blocks in DHR and have a declining population in Nepal. Currently, the conservation of blue sheep in Nepal is a national concern because it is not clear if populations were affected by the Maoist insurgency beginning in 1996. In addition, with a record of poor enforcement of wildlife conservation laws and increased poaching in Nepal, DHR needs better regulation and management of hunting to ensure conservation of wildlife.

Key endangered and climate vulnerable faunal species such as the snow leopard (*Panthera uncial*), red panda (*Ailurus fulgens*), and plant species such as yarcha gunbu (*Ophiocordyceps sinensis*) and kutki (*Neopicrorhiza scrophulariiflora*) which has medicinal value and of livelihood importance to communities have been identified as the focal species for conservation under the proposed project. In addition to climate vulnerability, the key species were selected based on distinctiveness of the species, threat level, utilitarian value and viable population levels.

The endangered snow leopard (*Panthera uncial*) occurs over most of the high altitudes of Central Asia and Himalaya. Little is known about the species' ecology, status and distribution. The coarse global population estimate for the snow leopard is 7,400 individuals and the species is classified as endangered in the IUCN's Red List. Global warming may bring about unprecedented changes in the snow leopard's mountain habitat threatening the very survival of the species. With its wide distribution, precarious conservation status particularly due to climate change, and immense aesthetic appeal, the snow leopard is an effective flagship species for wildlife conservation in the Himalayan high altitudes in Nepal and is a good focal species for the proposed project on enhancing climate resilience of endangered species.

The red panda's (*Ailurus fulgens*) natural habitat is in mountains living in elevations of 4,900 feet to 13,000 feet. Such elevations are preferred due to the cool weather and temperature since the red panda is very sensitive to heat unable to handle temperatures above 25 degrees C. The impact of climate change has the ability to completely obliterate the red panda population. As climate change occurs, many damaging events, such as bamboo flowering, could destroy the habitat and the red panda's way of life. This is very harmful to the red panda because they have a terrible digestive system making them very picky eaters and as the selected food sources are gone, they would starve and eventually die.

Flagship species act as symbols for the threats to the broader ecosystem in which they occur, and can thus provide a catalyst for wide-ranging conservation activities. The caterpillar fungus *Ophiocordyceps sinensis* (often referred to as "Cordyceps" or yarcha gunbu) is one of a select group of fungal species for which there is global concern for conservation and sustainable harvest (Cannon et al. 2009; Negi et al. 2006; Sharma 2004; Winkler 2008), and it clearly qualifies for flagship status. It is advantageous to think of *O. sinensis* in this way for two reasons. Firstly, it emphasizes its importance to non-specialists and provides an easily understood message for the lay community. Secondly, conservation activities in support of this species can act as a framework for others and a stimulatory mechanism to bring fungi into the mainstream of conservation decision-making. Interactions with one particular species – *Homo sapiens* – cannot be ignored. On the one hand, humans represent by far the greatest threat to survival of *O. sinensis* both directly by unsustainable harvest and indirectly through habitat loss, climate change etc. On the other hand, the very value placed on the product is a powerful incentive to ensure its continuing availability.

Kutki (*Neopicrorhiza scrophulariiflora*) which is a Himalayan medicinal plant is highly threatened by large scale exploitation for trade and also by climate change. It grows in alpine meadows and prefers moist habitat formed by winter snow. The long term sustainability of the species is threatened in Nepal unless proper management action is taken to control excessive harvesting. The estimated trade of *N. scrophulariiflora* is around 650 – 1000 tons/year.

E. Borrowers Institutional Capacity for Safeguard Policies

Government of Nepal (GON) has established Environmental Impact Assessment system for developmental projects with the formulation of Environmental Protection Rules 1997 as well as sectoral policy, laws and guidelines. Based on the formulated Act, regulations, and guidelines, criteria for Initial Environmental Examination (IEE)/EIA has established that the development projects certainly require environmental assessment study as per the nature of the projects unless they cross the given threshold for the disruption of the environmentally sensitive areas and their natural environment. Some of the sectoral laws also provide opportunity to conduct environmental assessment studies. Socially, Land Acquisition Act 1977, Land Acquisition Rules of 1969 and Buffer Zone Management Rules 1996 provides direction to guarantee the right to property of Nepalese citizens, although this project do not envisage any type of land acquisition due to project activities. As is typical in developing countries, enforcement capacity is low and there is a potential for corruption.

The scale and nature of proposed investments are unlikely to result in any significant adverse environmental or social impacts. The capacity of GON to address social issues is quite weak but GON’s environmental clearance processes, in principle, are consistent with World Bank environmental and public disclosure requirements. However, all activities with an impact on the environment under the proposed project will need to be subjected to environmental. The extent of the analyses will depend on a given activity and the specific sites selected

Prior to appraisal, GON would conduct an environmental and social assessment and would develop environmental and social management frameworks to ensure that (a) the environmental and social baseline condition under which the project will be implemented; (b) relevant investments are screened for any potential adverse safeguards related impacts as per IDA and country-specific policies and regulations; and (c) necessary mitigation measures that should be put in place are identified as part of project preparation for environmental and social sustainability of the project. The environmental and social management frameworks will include a framework to address general environmental issues, a resettlement framework to address potential livelihood issues and an indigenous peoples development plan.

F. Environmental and Social Safeguards Specialists on the Team

Parthapriya Ghosh (SASDS)

Darshani De Silva (SASDI)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered ?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	As stated above, no major environmental issues are expected in the implementation of this project. The primary focus of the project is to build capacity through training, better

		<p>communication and increased support for human resources. GON will conduct an environmental and social assessment and management framework outlining the procedures to be followed in screening subprojects, allocating specific accountabilities, and designing feasible, cost-effective solutions to impacts that may be identified. Responsibility for designing and implementing environmental and social management plans rests with project proponents as well as monitoring and evaluation and the costs of mitigation will be incorporated into project costs. The project will have a list of activities that will be ineligible for funding under the project.</p> <p>In addition, existing guidelines, for example, World Bank's guidelines on health and safety related issues would be applied for investments that refurbish infrastructure. A checklist for applicable guidelines and where these needs to be applied would be prepared and incorporated in project design.</p>
Natural Habitats OP/BP 4.04	Yes	<p>While this policy is triggered, the project investments would be designed to result in better management of natural habitats, as risk management of climate change vulnerabilities. Natural habitats would greatly benefit from realization of project objectives through enhancing climate resilience of critically endangered species and by safeguarding their natural habitats.</p>
Forests OP/BP 4.36	Yes	<p>Similar to Natural habitats policy, the project investments is expected to result in better management of forests. The project envisages improvements of community well-being in the buffer zones of selected Protected Areas, which will include better usage and management of forest resources. However, the project will not engage in commercial forestry activities.</p>
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	No	
Indigenous Peoples OP/BP 4.10	Yes	<p>The policy is triggered as there is presence of indigenous (<i>Adivasi / Janjati</i>) community in the project area.</p>

Involuntary Resettlement OP/BP 4.12	Yes	The policy is triggered as management of protected area may result in loss of livelihood or sources of livelihood for some community members in and around the identified protected areas.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

III. SAFEGUARD PREPARATION PLAN

Tentative target date for preparing the PAD Stage ISDS:

A. 6-May-2013

Time frame for launching and completing the safeguard-related studies that may be needed.

B. The specific studies and their timing should be specified in the PAD-stage ISDS.

The environmental and social assessment and related environmental and social management frameworks for the project will commence in early March and expected to be completed by end April, 2013.

IV. APPROVALS

Task Team Leader:	Name: Sumith Pilapitiya	
<i>Approved By:</i>		
Regional Safeguards Coordinator:	Name: Sanjay Srivastava	Date: 02/13/2013
Sector Manager:	Name: Herbert Acquay	Date: 02/13/2013

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.