PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: PIDC365

Project Name	Landscape Approach to Wildlife Conservation in Northeast China (P122383)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Forestry (100%)
Theme(s)	Biodiversity (100%)
Lending Instrument	Investment Project Financing
Project ID	P122383
GEF Focal Area	Biodiversity
Borrower(s)	People's Republic of China
Implementing Agency	State Forestry Administration
Environmental Category	B-Partial Assessment
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Estimated Date of Appraisal Completion	29-Aug-2014
Estimated Date of Board Approval	31-Oct-2014
Concept Review Decision	Track I - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

1. China’s rapid growth is now a driving force in the global economy and is achieving unprecedented rates of poverty reduction. However, growth is also seriously impacting the natural resource base and generating major environmental liabilities. Human activities have led to increasing fragmentation of remaining natural forests, and the wildlife they support.

2. Systematic poaching of wildlife, and encroachment and degradation of habitat have led to severe losses in biodiversity, altering food webs and ecosystem function. According to the Ministry of Environmental Protection “The endangered status of wild animals continue to worsen - 233 vertebrate species face extinction and the population of about 44% wild animals demonstrate downward tendency.”

3. Up to the late 1990s logging and timber production was widespread throughout China based on State and provincial forestry farms. Following the national ban on logging declared in 2000, many of these forest farms were converted into provincial nature reserves and often included the retention of former farm staff. In parallel, the State government established a number of programs designed to restore ecosystem services, in particular focusing on soil and water conservation, of which the Natural Forest Protection Program (NFPP) and the Grain to Green Program (GTGP) were and remain potentially the most significant to generate additional ecological benefits including the restoration of critical habitat and conservation of biodiversity. More recently as China has continued to make substantial progress in the reduction of poverty and reaching economic standards comparable to the West, there has been a notable shift towards addressing other priorities including the improvement of environmental quality as supported by China's current 12th, Five-Year Plan which among other actions proposed the creation of new and strengthening of existing reserves to enhance biodiversity conservation. These factors are contributing to a favorable enabling environment to make a significant impact on biodiversity conservation in China.

Sectoral and Institutional Context

4. China is transitioning from forest management practices that focused on wood biomass and productivity of fast growing species in plantations, to a more multi-dimensional approach that recognizes the role of natural forest ecosystems in providing a multitude of goods and services including timber, water, carbon sequestration, and biodiversity. However, it has yet to mainstream principles of landscape conservation into land use planning and biodiversity at provincial and local levels which balance human needs with wildlife conservation. The result is that China's rich biodiversity, which includes over 6,400 species of vertebrates and over 30,000 species of vascular plants, over half of these endemic, is eroding under pressure from land use change, infrastructure development, and climate change. In addition to habitat fragmentation, poaching of wildlife--particularly major carnivores and their prey--is contributing to the loss of ecosystem structure and the diversity of natural communities, thus affecting the quality and flow of ecosystem services.

5. One priority area for biodiversity and wildlife conservation is the old growth forests of the Changbaishan Landscape found in northeastern China in proximity to the Russian and North Korean borders (Map). This area is home to the largest remaining tracts of natural temperate forest in China, with a diverse flora and significant amount of endemism. It is also home to the few remaining individuals of the iconic Siberian Tigers—the Amur Tiger (Panthera tigris)—in the wild in China. This sub-population is thought to vary in number from 18-22 individuals, which wander back and forth across the boundary with Russia, in Primorskye Krai where the main population resides. Recovering the Amur Tiger—and as a first step, doubling the number of individuals in the wild by 2022—is the goal of the People's Republic of China under the National Tiger Recovery Program (NRTP), to which Premier Wen Jiabao committed in a special forum of Heads of State at the St. Petersburg Tiger Summit in November 2010. China is one of 13 Tiger Range Countries (TRC) that have pledged their support for tiger recovery under the Global Tiger Initiative (GTI), a global partnership of countries, NGOs and donors, with strong Bank support.

6. This Landscape has historically supported far greater densities of wildlife and species diversity than currently exist today. Human activities in the past have led to fragmentation of much of the natural forests and the wildlife they support. This situation has been further exacerbated by pouching of both target and prey species, agriculture activities on forest lands and infrastructure development. However, while the number of large predators and their prey are low, the potential carrying capacity is high in particular given the proximity to the greater number of wildlife

populations in the Russian Far East which could represent a “source” area for wildlife recovery in China.

7. In 2010 a collaborative research project conducted by WCS, WWF and partners, analyzed ecosystem status and trend in the Changbaishan Conservation Landscape and identified priority areas for recovery of ecological community structure, including threatened and endangered species. The study employed scientific modeling to identify where priority conservation actions should be focused to consolidate high quality habitat and ensure its protection, create buffers and corridors of biodiversity friendly land use in the surrounding production landscape, and reduce further habitat fragmentation. The study concluded that there was approximately 31,000km2 of potentially high biodiversity habitat in the region, capable of supporting apex predators like the Amur Tiger. Of these the Hunchun-Wangquing Priority Area was deemed the top priority based on a range of factors including existing evidence of big cat species, low habitat fragmentation and connectivity to existing populations of these species in Southwest Primorye, Russia. The Hunchun-Wangquing Priority Area straddles the provinces of Jilin and Heilongjiang in China and extends to some extent into Russia. Lying at an average elevation of 589m, 12.8% of the area is protected (predominantly the 1087 km2 Hunchun Nature Reserve), the density of villages is 0.24/100 km2 and the density of secondary roads is 6.2k/100 km2.

8. To ensure the continued expansion of the population of wildlife in this critical landscape, there is a need to secure and consolidate ecological corridors both along the Russia-China boundary and “inland” in China itself. Long-term success to save a number of endangered species of which the Amur tiger as the “flagship” species is best known, will depend on commitment and increased coordination both between China and Russia building on existing agreements as well as among relevant administrative units within China itself. China has already demonstrated the ability to overcome these and other barriers to conserve biodiversity of global importance as documented in the success of bringing the endangered Giant Panda back from the brink of extinction through effective management of sub-tropical forests in Southwestern China. As in the case of the panda, the potential exists to realize t remendous gains for biodiversity in the temperate forests of the Northeast by embracing a landscape approach to forest ecosystem management suing a flagship species (in this case the Siberian tiger) —restoring ecological integrity and biological community structure with clear benefits to productivity and species richness that extend to the production landscape.

Relationship to CAS

9. The project is fully consistent with the World Bank’s current FY 2013 – FY 2016 China Country Partnership Strategy contributing to the Strategic Theme 1: Supporting Greener Growth, in particular through “demonstrating sustainable natural resource management approaches” (Outcome 1.5). The project will demonstrate ways to better manage ecosystems and conserve biodiversity including supporting forestry approaches that maximize ecosystem health and use concessional funding to promote globally important biodiversity. Finally, the project supports the Bank’s “knowledge through investments” core principle through assisting PRC to secure incremental GEF funding.

II. Proposed Development Objective(s)

Proposed Global Environmental Objective(s) (From PCN)

10. The project development objective is to help create the ecological conditions for recovery of

threatened biodiversity in priority ecological landscapes in the far northeast of China, using the Amur Tiger as an indicator species.

11. The project would do this through: (a) enhancing the extension and effectiveness of protected area/network management, (b) increasing wildlife carrying capacity through restoration, expansion and connectivity of critical habitats, including the expansion of biodiversity-friendly landscapes adjacent to protected areas; (c) promoting more effective law enforcement and monitoring in both protected areas and the greater landscape to reduce mortality of flagship species; and (e) reducing human/wildlife conflict by increasing benefits to and buy-in from local communities for wildlife conservation.

Key Results (From PCN)

12. Key Performance Indicators include the following:

- 3,713 km2 area brought under enhanced biodiversity protection in existing and new nature reserves (core sector indicator)
- 2,252 km2 new area outside of nature reserves managed as biodiversity friendly (core sector indicator)

III. Preliminary Description

Concept Description

13. A landscape approach will be used in order to decrease habit fragmentation and human/ wildlife conflict. The project will support the increased projection effectiveness of two clusters of nature reserves. One cluster forming a north-south axis along the Russian border where Russian nature reserves are located. The other cluster is inland" into China along an east-west axis. Both clusters will be linked by a forested area occupied by rural population where interventions to promote tiger-friendly habitat will take place with the participation of the local population. This landscape approach will create a larger area of good habitat in the Changbaishan Landscape, which should be able to support an increasingly complex biota that ultimately could sustain viable populations of higher order predators, like the Amur Tiger, leopards and their prey.

14. To address these priorities the project is based on a zonation approach defined by three sets of interventions designed to support: (a) increasing capacity in existing and creating new NRs in an inner zone; (b) landscape restoration (reforestation, forest diversification and thinning) in a second zone; the two zones together defined as the project's core zone; and (c) the establishment of a series of protection stations in a third (buffer) outer zone. The total project area is estimated to be 14,000 km2. The first zone would be a network of nature reserves including 2835 km2 of already existing nature reserves and 877 km2 of new nature reserves to be created with support from this project. The second zone will establish a corridor of 2,252 km2 of wildlife friendly habitat linking the network of nature reserves. These two zones result in a project's core zone of approximately 6,000 km2. The third zone is a buffer zone comprised of 8,000 km2 around the core project area. This buffer zone will be subject to increased enforcement.

15. Existing nature reserves proposed for project support occur in a cluster and consist of Hunchun NNR, Wangqing NNR (Jilin Province) and Laoyoling NNR (Heilongjiang). Two of these (Hunchun and Laoyoling) share a boundary with the Land of the Leopard NP in Russia. To strengthen this cluster, the project would support the creation of two new reserves, Lanjia "mini-reserve" and Niaoqingshan PNR in Jilin and Heilongjiang provinces, respectively. In response to

the second priority to establish the foundation for creating an “inland” corridor, the project would provide support to the existing Muling NNR (Heilongjiang) and the creation of the new Tianqiaoling nature reserve(Jilin) to be connected to the aforementioned cluster through providing support for the creation of wildlife-friendly habitat on forestry lands. (See Map).

16. Other key considerations that influenced the project concept were: (a) the management of large carnivores such as tigers confined to protected areas in the absence of connective corridors will not suffice to support their populations; (b) the existence of large, State funded forestry programs that if properly leveraged could be used to achieve a significant impact in creation of these corridors; and (c) the fact that available project funds are dwarfed by the tasks at hand and thus need to be used strategically to maximize their impact in particular on influencing how leveraged co-financing is to be used to achieve project objectives. International experience demonstrating that for this four-year project to be successful, it would need to support: (i) long-term c ommitment and planning for corridors, (ii) integration of conservation corridors into land use planning, (iii) a requirement for new institutional arrangements and inter-sectoral cooperation and (iv) the need to link corridors with community development, capacity building and public awareness.

Project Component

17. Component 1: Institutional coordination to mainstream wildlife conservation across sectors. (Estimated at US $5.59 million, including US$0.49 million from GEF and US$5.1 million from co-financing sources). This component would support:

- Policy and planning (identification of priority habitat areas for tiger protection, provincial conservation and restoration plans, development/updating policies and regulations to reduce human/ tiger conflicts (e.g., through e.g., compensation mechanisms); and

- Institutional arrangements (establishing a Northeast wildlife conservation panel); promoting increased Sino-Russian cooperation for tiger conservation (e.g., promoting joint anti-poaching activities, staff training and consolidation of statistics).

The expected outcomes are a strengthened policy framework for the implementation and management of priority ecological landscapes to protect tiger and other wildlife habitat in Heilongjiang and Jilin Provinces.

18. Component 2: A landscape approach to the conservation and restoration of priority ecosystems and increased effectiveness of habitat protection in the Changbaishan Landscape. (Estimated at US$ 7.96 million, including US$ 1.36 million from GEF and US$ 6.6 million from co-financing sources). This component would support:

- Increased management effectiveness in 4 existing NRs (equipment, NR management plans and plan regulation plans and training);

- Creation of 3 new NRs (support for preparation & application materials and processes and limited investment in 2 of the 3 reserves);

- Ecological restoration (prey re-introduction, restoration of habitat, snare removal); and

- Technical monitoring (wildlife/cats/prey, habitat, CC impacts).

The expected outcomes are: (a) increased management effectiveness among project supported NRs measured by METT (target to be defined during preparation), (b) 3 new NRs established creating 877 km2 of new protected area for tiger and other wildlife enhanced forest ecosystem integrity in priority landscapes in Northeast China and (c) integrated cross-provincial ecological monitoring program established.

19. Component 3: Reducing human wildlife conflict in priority forest landscapes (capacity building and enforcement, environmental education, incentives to build community support for conservation). (Estimated at US$3.43 million, including US$0.93 million from GEF and US$2.50 million from co-financing sources). This component would support:

- Training of forestry staff outside of NRs focused on local community participation and promoting tiger friendly land use;

- Improved patrolling and enforcement through the implementation of SMART patrolling for wildlife conservation in priority sites in Jilin and Heilongjang provinces (with phased adoption throughout the PA network of the target area);

- Pilot mitigation measures (compensation, tiger-friendly forestry production through reforestation, forest thinning and forest diversification); and

- Increased public awareness

The expected outcome is: increased buy-in from local communities to conserve wildlife and protect ecosystems.

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20. Component 4: Project Management and Monitoring and Evaluation (Estimated at US$1.02 million, including US$0.22 million from GEF and US$0.8 million from co-financing sources). This component would support project management activities to be carried out by the implementing agency and coordination between provinces and across international boundaries.

21. Three provincial project management units (PPMUs) will be set up at the provincial level in Jilin (1) and Heilongjiang Provinces (2); two in the latter province due to participation of two partners, the Provincial Forestry Bureau and the Forestry Corporation in the project. These PPMU will coordinate with the managers of the nature reserves and procure the good and services demanded by them to carry out the day-to-day work inside the reserves. Support from the NGO and research communities, including in particular World Conservation Society (WCS) and World Wide Fund for Nature (WWF) and the Feline Management Center (FMC) located in China's Northeastern Forestry University will also be provided. The PPMUs will also coordinate with tiger conservation programs across the border in the Russian Far East, and sustainable forest management within the two provinces. A modest project coordination unit (PCU) will be established within the State Forest Administration to ensure fiduciary requirements are met during project implementation, to coordinate cross-provincial and cross-international boundary project activities, carry out M&E and facilitate reporting to the World Bank.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	×		
Natural Habitats OP/BP 4.04	×		
Forests OP/BP 4.36	×		
Pest Management OP 4.09	×		
Physical Cultural Resources OP/BP 4.11			×
Indigenous Peoples OP/BP 4.10	×		
Involuntary Resettlement OP/BP 4.12	×		
Safety of Dams OP/BP 4.37		×	
Projects on International Waterways OP/BP 7.50		×	
Projects in Disputed Areas OP/BP 7.60		×	

V. Financing (in USD Million)

Total Project Cost:	18.00	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	Amount
Borrower	15.00
Global Environment Facility (GEF)	3.00
Total	18.00

VI. Contact point

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