

### ${\bf PROJECT\ IDENTIFICATION\ FORM\ (PIF)}^1$

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

#### **PART I: PROJECT IDENTIFICATION**

Project Title:	Shaanxi Weinan Luyang Integrated Saline and Alkaline Land Management				
Country(ies):	People's Republic of China	GEF Project ID: <sup>2</sup>	4633		
GEF Agency(ies):	AsDB (select) (select)	GEF Agency Project ID:			
Other Executing Partner(s):	Weinan City Government	Submission Date:	2011-03-15		
GEF Focal Area (s):	Land Degradation	Project Duration (Months)	36 months		
Name of parent program (if	PRC-GEF Land Degradation	Agency Fee (\$):	200,000		
applicable):	Partnership for Dryland Ecosystems				
➤ For SFM/REDD+					

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives	Expected FA Outcomes	comes Expected FA Outputs		Indicative Grant Amount (\$)	Indicative Co-financing (\$)
(select) LD-1	Outcome 1.2: Improved agricultural management	Output 1.2 Innovative SL/WM practices introduced at field level	GEFTF	1,000,000	47,500,000
(select) LD-1	Outcome 1.3: Sustained flow of services in agroecosystems	Output 1.3 SL/WM interventions to increase vegetative cover in agroecosystems	GEFTF	975,000	30,000,000
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)			(select)		0
(select) (select)	Others		(select)		0
		Sub-Total		1,975,000	77,500,000
		Project Management Cost <sup>4</sup>	GEFTF	25,000	2,500,000
		Total Project Cost		2,000,000	80,000,000

#### B. PROJECT FRAMEWORK

Project Objective: To improve the natural environment and rural livelihoods in Luyanghu area through improved management of saline and alkaline soils							
Project Component	Grant Type	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)	
1. Improved management of saline and alkaline soils through rehabilitation of drainage system and and introduction of	Inv	1.1. Soil salinity of 4,000 ha of land reduced to normal level by 2017 leading to 50% increase in the agricultural yield per area and increase of	1.1.1. Testing of at least 10 innovative and replicable Best Practices in rehabilitation of saline and alkaline soils, identified through global knowledge platforms, such as WOCAT	GEFTF	900,000	37,500,000	

<sup>&</sup>lt;sup>1</sup> It is very important to consult the PIF preparation guidelines when completing this template.

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<sup>&</sup>lt;sup>2</sup> Project ID number will be assigned by GEFSEC.

<sup>&</sup>lt;sup>3</sup> Refer to the reference attached on the <u>Focal Area Results Framework</u> when filling up the table in item A.

<sup>&</sup>lt;sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project.

Sustainable Land and Water Management (SL/WM) best practices		income by one third for 51 villages and 40,000 people (LD1.2)	and UNCCD/PRAIS, covering a total of 100 ha (GEF)  1.1.2. Rehabilitate main desalination drainiage canals of about 50 km by 2015 (Loan)  1.1.3. Rehabilitate 70 km of drainage ditches and improve 316 small drainage ditches by 2015 (Loan)			
2. Improved resilience to climate change of agroecosystems and reduced flood risk to local people	Inv	2.1. Increased resilience to climate change of the Luyanghu agroecosystems and reduced flood risk to 40,000 villagers through improved land cover on 2,000 ha of land (LD1.3)	2.1.1. Testing of at least 2 innovative and replicable Best Practices in wetland rehabilitation (covering 10 ha), and 2 best practices for estbalishment of shelter belts (covering 2 ha), identified through global knowledge platforms, such as WOCAT and UNCCD/PRAIS (GEF)  2.1.2. 120 ha of wetlands rehabilited by 2016 using Best Practices (Loan)  2.1.3. 130 ha of greenbelts established by 2017 using Best Practices, and total forest area increased by 2,000 ha (Loan)	GEFTF	500,000	29,500,000
3. Improved wetland management and rural livelihoods in poor rural areas	TA	3.1. Improved wetland management on 800 ha of land and improved rural livelihoods in poor rural areas with 10% increase in income from ecotourims (LD1.3)	3.1.1. One management plan for the wetlands that incorporates ecosystem services valuation (GEF)  3.1.2. Training program established on wetland and saline land management by 2015 (Loan)  3.1.3. 50 officials trained on wetland ecosystem functions and management by 2016 (Loan)  3.1.4. 1,000 villagers, including 400 women, trained on livelihood skills (Loan)  3.1.5.100 villagers trained on wetland and salt pan ecotourism by 2015 (GEF)	GEFTF	475,000	10,000,000
4. Monitoring and	TA	4.1. Project	4.1.1. Project monitoring	GEFTF	100,000	500,000

evaluation		implementation conducted with adaptive results- based management, supported by progress monitoring and evaluation. (LD 1.2 & 1.3)	system operating and systematically providing information on progress in meeting project output and outcome targets, and identifying lessons learned (Loan)  4.1.2. Six-montly project progress reports and annual Project Implementation Review (PIR) produced (GEF)  4.1.3. Midterm and post-completion evaluation carried out and reports available (GEF)			
(	(select)		, ,	(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
(	(select)			(select)		
	(select)			(select)		
			Sub-Total		1,975,000	77,500,000
	Project Management Cost <sup>5</sup>			GEFTF	25,000	2,500,000
			Total Project Costs		2,000,000	80,000,000

# C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
GEF Agency	AsDB	Hard Loan	50,000,000
Local Government	China	Unknown at this stage	30,000,000
(select)		(select)	
Total Cofinancing			80,000,000

### D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
AsDB	GEF TF	Land Degradation	China	2,000,000	200,000	2,200,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0

<sup>&</sup>lt;sup>5</sup> Same as footnote #3.

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(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Gran	Total Grant Resources			2,000,000	200,000	2,200,000

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

2 Please indicate fees related to this project.

#### PART II: PROJECT JUSTIFICATION

#### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

#### A.1.1 the GEF focal area/LDCF/SCCF strategies:

The objectives and activities of the proposed project are consistent with the Land Degradation focal area and its objective 1 on: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities. It will contribute to:

Outcome LD 1.2 Improved agricultural management through introduction of at least ten innovative sustainable land and water management practices to improve agricultural management on alkaline and saline lands through land rehabilitation and introduction of innovative SL/WM practices that will enhance soil productivity, and

Outcome LD 1.3 Sustained flow of services in agro-ecosystems through land rehabilitation and planting of shelter belts that will improve vegetation cover thereby also enhancing the provision of ecosystem services, such as soil retention, water storage, and agricultural productivity on 4,000 ha of land.

## A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

N/A

A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

#### **National 5 Year Plan (2011-2015):**

The project supports the new 12th Five Year Plan, which emphasizes the importance of reducing the degradation of lands. In particular, it includes binding targets for local governments to ensure that there will be no net loss of farming land resources during the 2011 to 2015 period.

#### Linkages to UNCCD NAP and NBSAP:

The government prepared a PRC National Action Plan (NAP) for Implementation of the United Nations Convention to Combat Desertification (UNCCD) in 1996, followed by revisions in 2002 and 2006. The NAP provides an opportunity for the government to focus its efforts to remediate desertification in Gansu, Qinghai, and Shaanxi Provinces, and Inner Mongolia, Ningxia Hui, and Xinjiang Uygur Autonomous Regions. The proposed GEF financing will support land rehabilitation work in Shaanxi province, which is fully in line with the priorities of the first phase of the NAP to control 22 million hectares of degraded land.

The project will also contribute to the implementation of the Convention on Biological Diversity (CBD) and the National Biodiversity Strategy and Action Plan (NBSAP) of PRC through demonstration of management approaches and techniques for sustainable management of inland wetlands.

### Linkages to Shaanxi's Integrated Ecosystem Management (IEM) Plan to Combat Land Degradation

Shaanxi Province adopted an IEM Plan in 2008 that was developed under the PRC-GEF Land Degradation Partnership to Combat Land Degradation in Dryland Ecosystem that was formed in 2002 to support the implementation of the UNCCD NAP in PR China. Shaanxi's IEM Plan is operationalizing the NAP at provincial level. The proposed Project is consistent with the key priorities of this plan and in particular the priority activities related to 'Identifying and popularizing best practices for land reclamation to improve the productivity of the Shaanxi provincial ecosystems', as well as its focus on transformation and recovery of desert forest and grasslands in the Yellow River basin.

#### Linkages to the National Poverty Reduction Strategy and Country Partnership Strategy:

The project area is part of the Guanzhong-Tianshui Economic Zone, which was approved by the State Council in 2009 to strengthen the development of the western region of the People's Republic of China (PRC). The baseline project will provide small-scale infrastructure for environmental and agricultural development in line with the PRC's overall development strategies, particularly the development of the western provinces and a 'harmonious countryside'.

Linkages with the National Wetlands Conservation Action Plan: To enforce the Ramsar Convention on Wetlands, this plan covers the designation of important wetlands as national reserves. In line with national plans, Shaanxi Provincial Government has developed several relevant regulations and measures to promote management of natural resources and reverse the impacts of land degradation. This includes Regulations for Wetland Protection in Shaanxi Province (2006), which will be supported through Component 3 activities related to the improvement of wetland management and rural livelihoods.

#### **B. PROJECT OVERVIEW:**

#### B.1. Describe the baseline project and the problem that it seeks to address:

Background. The Project is located in the northern part of the Guanzhong Plain, Shaanxi Province, and is part of the Guanzhong–Tianshui Economic Zone, which was approved by the State Council in 2009 to strengthen the development of the western region. The Luyanghu area has been barren for decades, mainly due to the long-term problems of saline and alkaline soils, high groundwater tables, and a poor drainage system. Luyanghu is a low-lying waterlogged area, with a watershed of 1,120 square kilometers (km²) across Fuping and Puchen counties. The lake was formed more than 10,000 years ago, and was gradually silted because of dry weather and agricultural activities. The water gradually receded further after a devastating earthquake in 17th century. Currently, only two shallow mud flats are left in Luyanghu area, namely Luboa Tan and Neifu Tan. The groundwater table in Luyanghu area is around 0–3 meters below the ground surface. Salt and mineral contents in the groundwater and soils have become very high, which make agricultural activities almost impossible. Local people grow limited cotton and corn crops, with productivity only half of that in the surrounding Weinan area.

The saline soils in the Luyanghu area are located in small closed basins, where underground runoff and salt have no discharge path. Controlled by a semi-arid climate with low precipitation and high evaporation rates, the salt accumulation process is accelerated at the soil surface. Saline soil reclamation measures need to be specific to this area and the management of the groundwater table is critical, as it must be lower than the critical depth at which soil becomes salinized and crops suffer from salt damage, which is estimated to be 1.8 meters. The basic method for saline soil acclamation in this area is to establish drainage systems for lowering of the groundwater table and discharging water with high mineralization. Saline soil reclamation should be implemented combining biological measures with agricultural practices, such as forest plantation and crop planting, which could result in very high-yielding agro-ecosystems.

Luyang Lake includes a wetland complex consisting of a variety of wetland types: natural saline lakes, seasonal marshes, man-made canals and sodium sulfate ponds. It is a unique wetland area in the Guanzhong Plain and also a representative site of this wetland type in PR China. There are rare species of birds stopping by the wetlands in the project area during migratory seasons, such as red-crowned crane, whooper swan, little egret, and Temminck's stint. Two globally threatened species, Chinese Softshell and Great Bustard, have also been recorded in the project area. However, the area of reed marsh that provides a critical habitat for many of these species are threatened by agricultural encroachment. In 2009, the State Forestry Administration designated part of the Luyanghu area as one of the national pilot wetland parks

to protect the brackish wetland environment, and to strengthen institutional capacity of wetland management in the country. Weinan city government also has a plan dating from 2008 to rehabilitate the wetland environment and to develop the ecotourism potential of the area.

To remove salts from the soil and improve agricultural productivity in Luyanghu area, the government established the Luoxi desalination drainage system in 1974, which consists of four main desalination drainage canals, i.e., main, west, central, and east canals; and associated minor drainage ditches. The desalination drainage system serves an area of about 418 km². The original design of the desalination system was of low quality partly due to insufficient investment. Because of the lack of maintenance and management, the system has silted and fails to remove salts to the expected extent. The soil salinity is still high, and agricultural activities are therefore hampered.

The Luyanghu area is one of the national poverty areas, with about 32,400 villagers. Most of them were mainly immigrants from Henan and Shandong provinces. More than 90% of the villagers are impoverished. Their 2006 average per capita income was only CNY1,480, which is CNY780 lower than the Shaanxi provincial average. Because of the flat topography and poor flood management system in the area, flooding is common during the rainy season. The heavy storm in August 2003 is a case in point that caused heavy casualties and stranded thousands of villagers for days. International development organizations, such as the Department for International Development of the United Kingdom, the Government of Finland, and the World Bank have provided financial support to improving irrigation infrastructure and rural livelihoods in the area in projects such as: Expansion Project of Donglei Yellow River Pumping in Shaanxi Province; Western Provinces Rural Water Supply, Sanitation, and Hygiene Promotion Project; and Sustainable Development in Poor Rural Areas Project.

ADB has also been providing investment and technical assistance in the region to help address land degradation, biodiversity recovery, environmental quality, and transport in projects such as Xi'an-Xianyang-Tongchuan Environment Project; Shaanxi Roads Development Project; Capacity Building to Combat Land Degradation Project co-financed by GEF, Zhengzhou-Xi'an Railway Project; and Shaanxi Qinling Biodiversity Conservation and Demonstration Project, also co-financed by GEF. ADB has also worked with the GEF-funded FAO LADA Project to disseminate best practices for salinization control in dryland.<sup>6</sup>

The baseline project will help the Weinan City Government to improve land uses in Luyanghu area, and achieve its goals of attracting high-tech industrial investment, promoting tourism, and creating job opportunities. The project impact will be sustained economic growth in Guanzhong–Tianshui Economic Zone. The project outcome will be improved natural environment and rural livelihoods in Luyanghu area.

It is estimated that the total investment cost of the *baseline project* will be \$220 million, including \$100 project co-financing from ADB, and \$120 million counterpart funds from government. The investment cost will be used to (i) rehabilitate main and branch desalination drainage canals, and access and improvements of associated bridges and roads along the canals; (ii) rehabilitate a wetland area of 800 hectares (ha), and reconstruct Tianjiao and Tianlu lakes. The designed flood storage capacity of the wetland area will be around 6.1 million cubic meters (m³) based on an extreme storm event of once in 100 years. About 130 ha of greenbelts will also be constructed along the canals; (iii) develop capacity for infrastructure and wetland management, and sustainable livelihoods in poor rural areas by providing training and

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<sup>&</sup>lt;sup>6</sup> China Forestry Publishing House. 2008. *Best Practices for Land Degradation Control in Dryland Areas of China*. Beijing.

establishing training facilities and materials and support development of ecotourism activities; and (iv) develop capacity on monitoring and evaluation procedures to support project management.

The project will rehabilitate degraded land and improve the physical environment by reducing the salinity and alkalinity of soils in the project area, and reduce the impact of floods to the local residents. This will improve agricultural production and the project is expected to increase the agricultural yield per area by 50% and to increase farmers' income by one third.

Saline soil reclamation measures will be designed to be specific to the project area, with special consideration to management of the groundwater table, i.e., groundwater table depth must be lower than the critical depth at which soil becomes salinized and crops suffer from salt damage. The basic method for saline soil reclamation will be to support investments in drainage systems (and associated infrastructure) for lowering of the groundwater table to at least 1.8 meters and discharging water with high mineralization. These investments can be further enhanced by combining biological measures with agricultural practices such as forest plantation, land leveling, fertilizer addition and crop sowing. High yield farmland ecosystems characterized by saline soil reclamation, secondary soil salinization control and soil fertility amendment should be established where possible.

Flood management infrastructure improvements will be supported by (i) improvements to the drainage channels to decrease the severity of flood events, (ii) reconstruction of lakes with flood storage capacity, and (iii) construction of road for operations and maintenance, emergency access and flood evacuation. To design and assess flood management improvements, including the drainage improvements and increased storage capacity, detailed modeling will be conducted, and the project will be designed to be fully integrated, with multipurpose operation being the most important aspect.

B. 2. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

To help the government develop the western region and improve livelihoods in Luyanghu area, the GEF grant resources will be used to enhance the project outcomes through four project components: (i) improve management of saline and alkaline soils through rehabilitation of drainage system and introduction of sustainable land and water management best practices; (ii) improve resilience to climate change of agro-ecosystems and reduce flood risk to local people; (iii) improve wetland management and rural livelihoods , and (iv) support monitoring and evaluation. The requested support from GEF will be instrumental in enhancing the environmental benefits of the project in several ways:

### Component 1. Improved management of saline and alkaline soils through rehabilitation of drainage system and and introduction of S/WLM best practices

GEF funding will be used to introduce and test at least 10 innovative Best Practices in rehabilitation of saline and alkaline soils on around 10 ha of land each, using biological measures, such as planting of green manure, use of green mulch, cover crops, improved crop rotations, introduction of more salt tolerant crops, as well as agroforestry and water saving irrigation practices. Identification of these practices will be aided by global knowledge platforms, such as World Overview of Conservation Approaches and Technologies (WOCAT), and the UNCCD Performance Review and Assessment of Implementation System (PRAIS) module on Best Practices. This will allow for the assessment of the environmental and socio-

economic benefits, as well as replication and upscaling potential for further investment in the selected approaches and technologies. This, in turn, will maximize the impact of the investment component of the project and ensure that promotion of SL/WM on rehabilitated land will lead to increase in provision of ecosystem services thanks to improved vegetation cover, improved storage of carbon in soils and vegetation, and improved irrigation flows.

## Component 2. Improved resilience to climate change of agro-ecosystems and reduced flood risk to local people

This component will reduce the vulnerability of local communities to climate change through enhanced provision of regulating ecosystem services, such as water regulation and soil retention, which will improve the resilience of ecosystems to climate change. GEF funding will be used to introduce and test at least two innovative and replicable best practices in wetland rehabilitation and two best practices for establishment of shelter belts in the wider Luyanghu area and drainage basin surrounding the lakes and salt pans. Identification of these practices will be supported by platforms, such as WOCAT, UNCCD PRAIS, etc. Rehabilitation of wetlands will lead to improved provision of habitats for biodiversity and rare species in the project area, including two globally threatened species. Planting of green belts will increase vegetation cover and lead to increased carbon sequestration below and above ground. Flood behavior and its impact within concerned areas will also be analyzed with special consideration given to management of ecological impacts.

#### Component 3. Improvement of wetland management and rural livelihoods

GEF funding will be used to integrate ecosystem services valuation into a management plan for the wetlands that will provide the basis for development of income generating activities to support sustainable livelihoods and protect ecosystems. This component will build capacity, through a training program, of local officials and villagers in wetland and saline soil management to improve ecosystem functioning and rural livelihoods. Ecotourism activities will be piloted, as the Project site lends itself to the development of ecotourism that combines cultural and environmental experiences with underlying conservation and educational benefits, such as the salt pan landscape that is both an important habitat for biodiversity and an important cultural and historical heritage. The site also has the potential to complement existing tourism in Shaanxi due to its proximity to Xi'an City.

#### **Component 4: Monitoring and evaluation**

To be implemented efficiently and effectively, project management will need a specific M&E system, allowing for a close monitoring of the different project activities, outcomes and impacts, as well as for midterm and post-completion evaluations to draw all useful lessons for the future and capitalize on the experience acquired.

The project will make use of the ongoing activities by the PRC-GEF Partnership to establish a comprehensive land degradation and sustainable land management monitoring and assessment framework, involving relevant sectors (agriculture, forestry, water resource, and rangeland sectors), to identify appropriate land degradation and SLM monitoring indicators and assessment methodologies to measure global environmental benefits of GEF support to the Partnership. This includes (i) defined relevant indicators at the national and local levels drawing from the Land Degradation Assessment in Drylands Project; and (b) defined SLM indicators for GEF-5. This will include land cover, land productivity, water use efficiency, rural poverty, and carbon sequestration.

The funding requested from GEF is considered to be vital in facilitating broader systemic

cross-sectoral planning of the project and ensuring that innovative investments are planned that take into consideration the value of ecosystem services provided by the Luyanghu area.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

Farmers in the area are relatively poor due to the low quality of the soil and will benefit from the improved soil quality through improved income from agriculture. The beneficiaries are expecting improved agricultural productivity, increased arable land, and reduction in flood occurrence and impacts of floods on livelihood and living conditions.

Agricultural production in the PRC is increasingly carried out by women, a fact that has increased their workload. Improved arable land will increase the available income; and thus, improve the living standard of women; and reduce the need for out-migration, and potentially decreasing their workload. The project will work on engineering as well as biological solutions for the problem of saline soils and recurrent flooding. The project will (i) improve the living conditions for all people in the project area, (ii) provide some labor opportunities during project implementation, and (iii) improve development and growth opportunities in agricultural and associated development. Added socio-economic benefits will accrue from the piloting of ecotourism activities in the rehabilitated wetlands and rural hinterland.

The potential to improve women's access to these opportunities will be further assessed during project preparation. The project will assess poverty reduction, social and gender impacts, and conduct benefits distribution analysis. During project preparation, possible interventions that have positive impact on gender will be considered and incorporated in the project.

#### B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

Project risks are summarized in the matrix below and will be further assessed during project

preparation.

Risk	Level	Mitigation measure
Weak capacity of the	Medium	The project will provide support to the
executing agency to manage		Weinan City Government for training to
the project:		familiarize its staff, particularly the staff of
The Weinan City Government		the WLCDC, with ADB procurement and
has never before been involved		disbursement procedures.
as an executing agency of an		
ADB lending project.		The project will also ensure that the technical
		capacity that has been built under the GEF-
		PRC Land Degradation Partnership at the
		national and provincial level will support the
		Weinan City Government.
Climate related risks:	Medium	The rehabilitated drainage system will keep
Extreme weather affects		the groundwater table low enough to keep
agricultural productivity and		salts from moving up to surface soil.
salt movement in the soil.		
		The rehabilitated drainage system and
Extreme rainfalls exceed the		wetlands will be designed to cope with the

design storage capacity of the		once in a 100-year extreme in rainfall.		
wetlands				
Sustainability of project	Low	As part of the project, the Weinan City		
interventions		Government has agreed to allocate regular		
		annual budgets to maintain the drainage		
		system and the wetlands.		

### B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The primary beneficiaries are the farmers using the land in the project area. The project will improve low-yielding saline and alkaline agricultural land to land with stable agricultural production. In summary, the key stakeholders include: Shaanxi Provincial Government, Weinan Municipal Government, the Weinan Luyanghu Development and Construction Co. Ltd. (WLCDC), beneficiaries in the project area, other people living in the Luyanghu area, people using the lakes to be deepened. Consultation with the beneficiaries in the project area will form part of the project preparation process. Village workshops and possibly other consultations will be held to ensure local ownership.

#### **B.6.** Outline the coordination with other related initiatives:

The project will become an integral part of the PRC-GEF Land Degradation Partnership in Dryland Ecosystems. It will consult and coordinate its activities with the provincial and national technical experts who have been involved in the Partnership. Notably these include the experts of the Shaanxi Provincial Project Coordination Office (PPCO) and the Provincial Project Management Office (PPMO). Moreover, the project will cooperate with the Integrated Ecosystem Management Data Center, that has been established in the Province. The Data Center has established monitoring procedures for land degradation in the province and has built up an important database of relevant information which is crucial for the proposed project.

Best practices for land degradation control in dryland areas of the PRC, such as the World Bank-financed project on salinization control by hidden pipe drain and its lessons, will be capitalized on to ensure the success of the investment project. The project will also benefit from lessons learnt from all seven projects under the PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, its best practices publications and monitoring and assessment framework.

The Project will also develop close links with the FAO/UNEP/GEF project on Land Degradation Assessment in Drylands (LADA) and its partner program World Overview of Conservation Approaches and Technologies (WOCAT) that is being institutionalized in China, to identify suitable best practices for rehabilitation of saline and alkaline soils.

In addition, synergies will be developed with the government funded Desertification Prevention Programs that include Plain Farmland Shelterbelt System Program, Taihang Mountain Afforestation Program, and National Program for Prevention and Control of Desertification, including shelterbelt forests in the middle and lower reaches of the Yangtze and Yellow rivers.

#### C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

ADB took the lead role in developing and coordinating the PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, and has served as the lead GEF agency for the Partnership and as the GEF agency responsible for supporting capacity building efforts coordination mechanisms. Notably, the ADB has taken the lead in preparing and supervising the implementation of the Capacity Building to Combat Land Degradation Project and the

Management and Policy Support for Combating Land Degradation in Dryland Ecosystems project. ADB's comparative advantage as the lead GEF agency for the proposed program includes considerable experience with the identification, design and implementation of investment projects with the PRC as well as the ability to incorporate capacity building and technical assistance into its projects. The ADB has developed the two new larger investment projects being implemented through the Partnership, namely the 'Ningxia Integrated Ecosystem and Agricultural Development Project', that commenced in 2009 (\$211.0 million total, including a \$100.0 million ADB loan and \$4.55 million GEF grant); and the 'Forestry and Ecological Restoration Project in Three Northwest Provinces' (\$181.76 million total, including a \$100.0 million ADB loan and \$5.76 million GEF grant).

#### C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

The government requests a loan of \$100 million from ADB's ordinary capital resources to finance investments under components (i) and (ii) of the project. 50 per cent of the loan, i.e. \$50 million, can be counted as direct co-financing to the GEF project.

### C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The proposed project fits into the Asian Development Bank's results framework by providing infrastructure and improvement of environmental conditions. It was included in ADB's 2012 lending pipeline for the PRC during the Country Programming Mission conducted in Manila in December 2009.

During the implementation of the PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, significant institutional capacity has been built in the central government, and participating provinces and autonomous regions, including Shaanxi province. Provincial legal and policy frameworks have been developed, provincial integrated ecosystem management strategies have been prepared, and an integrated ecosystem approach has been applied to combat land degradation. There will be adequate knowledge and officials in the Ministry of Finance, and Shaanxi provincial government to follow up the implementation of the proposed GEF activities in the project area in Luyanghu, Weinan city.

## PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY		DATE (MM/dd/yyyy)
Jiandi Ye	GEF Operational Focal Point for China / Director, International	MINISTRY FINANCE	OF	08/29/2011
	Department			

#### **B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.

		1 3	•	1	
Agency		DATE	Project		Email Address
Coordinator,	Signature	(MM/dd/yyyy)	Contact	Telephon	
Agency name	_		Person	e	
Nessim Ahmad		03/16/2012	Frank	+632 632	fradstake@adb.org
Director,	N-1. B		Radstake,	5636 / +	
Environment and	. ,		Senior	632 632	
Safeguards			Environment	6951	
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Practice Leader					
(Environment)					
Asian Development					
Bank					