

ADB GEF PROJECT IMPLEMENTATION REPORT (PIR)

I. Project Profile

ADB Official Project Title: Shaanxi Weinan Luyang Integrated Saline Land Management Project

ADB Project Number: Grant 0331-PRC

1. General Information	1	GEF ID (PMIS ID)	4633
	2	Focal Area(s)	LD
	3	Region	EAP
	4	Country	People's Republic of China (PRC)
	5	Project Title	Shaanxi Weinan Luyang Integrated Saline Land Management Project
	6	Project Size	FSP
	7	Trust Fund	GET TF
2. Milestone Dates	8	GEF CEO Endorsement Date (mm/dd/yy)	11/01/2012
	9	ADB Approval Date (mm/dd/yy)	12/17/2012
	10	GEF Grant Signing (mm/dd/yy)	5/07/2013
	11	Project Implementation Start Date (mm/dd/yy)	6/27/2013
	12	Date of 1st GEF Grant Disbursement (mm/dd/yy)	7/3/2013 (Imprest Account)
	13	Proposed/Revised Implementation End (mm/dd/yy)	12/31/2018
	14	Actual Implementation End (mm/dd/yy)	12/31/2018
3. Funding	15	PPG/PDF Funding (USD)	None
	16	GEF Grant (USD)	2,000,000.00
	17	Total GEF Disbursement as of 30 June 2018 (USD)	1,828,306.24
	18	Confirmed Co-Finance at CEO Endorsement (USD)	80,000,000.00
	19	Materialized Co-Finance at project mid-term (USD)	29,520,000.00
4. Evaluations	20	Materialized Co-Finance at project completion (USD)	NA
	21	Mid-Term date - if applicable (mm/dd/yy)	Mid-2017
	22	Actual Mid-Term date - if applicable (mm/dd/yy)	7/11/16 -7/16/16 (midterm mission)
	23	Proposed Terminal Evaluation date – if applicable	12/31/2020 (after loan completion)
	24	Actual Terminal Evaluation Date - if applicable	12/31/2018
	25	Tracking Tools Required (Yes/No/ Focal Area TT)	Yes - Land Degradation TT
5. Ratings	26	Tracking Tools Date - if applicable (mm/dd/yy)	Terminal Evaluation Tracking Tool
	27	Overall Implementation Progress Rating (IP)	Satisfactory
	28	Overall Development Objectives Rating (DO)	Satisfactory
	29	Overall Risk Rating	Modest
6. Status	30	Overall Project Rating	Satisfactory
	31	Status (for approval/on-going)	Completed
	32	Implementation Status (1 st , 2 nd , 3 rd PIR..., Final PIR)	5th and Final PIR (for: 1 July 2017–30 June 2018)
7. Files	33	PIR File Name	PIR 2018 (draft 19-Jul-2017)



II. Project Contacts

ADB Project Officer	Mingyuan Fan, Senior Water Resources Specialist (alternate: Mark R. Bezuijen, Senior Environment Specialist)
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III. Project Implementation

A. Project Description:

The purpose of L2980/G0331-PRC: *Shaanxi Weinan Luyang Integrated Saline Land Management Project* (the project) was to support the Weinan Municipal Government, Shaanxi Province to implement environmental and social improvements in the Luyanghu area. The project comprised a five-year (2013–2018) \$100 million loan (L2980) from the Asian Development Bank (ADB) and a \$2 million grant (G0331) from the Global Environment Facility (GEF). The executing agency was the Weinan Municipal Government, through its project management office (PMO). The implementing agency, through its project implementation office, was the Weinan Luyanghu Modern Industry Development Zone Management Committee. Between September 2013 and December 2015, the project also included TA 8293-PRC: *Management and Protection of Wetlands in Weinan City*, a \$350,000 technical assistance (TA) grant for wetland and waterbird management from the Multi-Donor Trust Fund under the Water Financing Partnership Facility. The loan, grant, and TA were approved on 17 December 2012. The loan and project agreements were signed on 7 May 2013. The TA was completed on 31 December 2015. The project management consultant team, AECOM, was mobilized on 23 April 2015 and finalized all grant activities on 30 June 2018.

The project impact was sustained and inclusive economic growth in Weinan Municipality. The project outcome was improved natural environment and rural livelihoods in the Luyanghu area. The project had four outputs: (i) *saline soils rehabilitated*, comprising (a) rehabilitation of the Luoxi drainage system, and (b) support for improving resilience to climate change of agro-ecosystems; (ii) *flood risk management implemented*, comprising construction of (a) Tianlu Lake, the middle and central main channels, and a connection to the existing Tianjiao Lake, and (b) 18.6 km of dike and road around Tianlu Lake; (iii) *wetland ecosystem conservation established*, comprising (a) support for development of the Luyanghu National Wetland Park (LNWP), and (b) promotion of tourism, livelihood, and employment opportunities for local communities; and (iv) *capacity development and project implementation support provided*, comprising (a) institutional strengthening, and (b) project management support.

The GEF grant had four outputs to support the corresponding loan outputs: **(i) improved management of saline and alkaline soils through rehabilitation of drainage system and introduction of SLM best practices** (activity: testing of at least 4 innovative and replicable best practices for soil rehabilitation; this complemented the loan activities: dredging and rehabilitation of 50 km of main salinity drainage canals and 569 km branch canals); **(ii) improved resilience to climate change of agro-ecosystems and reduced flood risk to local people** (activity: testing of at least 4 innovative and replicable best practices in wetland rehabilitation and establishment of shelter belts; this complemented the loan activities: 120 wetlands rehabilitated; 130 ha greenbelts established); **(iii) improvement of wetland management and rural livelihoods** (activities: 1 wetland management plan; 100 villagers trained on wetland and salt pan ecotourism; this complemented the loan activities: training program on wetland and saline land management established; 50 officials trained in wetland ecosystem functions and management; 1,000 villagers, including 400 women, trained on livelihood skills); **(iv) monitoring and evaluation** (activities: project progress reports and PIR produced; midterm and post-completion evaluation carried out; reports available; this complemented the loan activities: project monitoring system established).

To support the PMO for grant implementation, the grant funded 10 positions, comprising eight individuals (international and/or national specialists in soil management, rural business development, wetland management, eco-compensation, and monitoring, evaluation and operations) and two agencies (field schools establishment, and, alternative livelihoods).

B. Implementation Progress (IP) Rating: Satisfactory.

IP Status

The rating is based on substantial progress made between July 2017 and June 2018 (grant completion) for 2 of the 4 grant outputs. After a slow start to the grant (see 2017 PIR), activities proceeded quickly and successfully for two outputs (saline soils; land management) but remained slow and partly unsuccessful for the other two (wetlands; shelter belts). Delays for two outputs are largely due to reluctance of the government project management office (PMO) to engage strongly due to previous conflicts with a new government-funded scheme in the project area, which took new precedence and priority over the GEF-funded activities. It took around 1.5 years to resolve these conflicts, by which time the grant was near completion and conflicts with the government's plans for development in the project area. Although the ADB-funded loan and GEF program are intended to strengthen local livelihoods, land management, and wetland conservation, the principal priority of the PMO is for large-scale economic development. Under these considerable challenges, the GEF-funded consultant team provided comprehensive technical input and on-site implementation.

Output 1: Improved management of saline and alkaline soils through rehabilitation of drainage system and introduction of SLM best practices. Rating: Highly Satisfactory.

This is the most successful of the four GEF-funded outputs.

a) 10 innovative and replicable Best Practices (BPs) in rehabilitation of saline soils. The contractor (Yanglin Tongyuan Agro-technology Co. Ltd) completed the activity. Table 1 summarizes the 10 technical approaches that were developed and piloted.

Table 1: Ten innovative and replicable Best Practices in rehabilitation of saline soils

Category	Best practice piloted	Area (ha)	Households	Remarks
Chemical measures	Soil remediation with organic fertilizer	20.0	38	13% increase soil productivity
	Soil testing for fertilizer recommendation	20.7	18	11% increase soil productivity
	Decay disease control for pear trees	25.0	120	17% increase soil productivity
Biological measures	Improvement of soil fertility in orchard by planting herbaceous legumes	15.3	14	4% increase soil productivity
	Soil moisture preservation by straw mulching	3.7	8	6% increase soil productivity
	Winter Dates (<i>Ziziphusjuzuba</i> cv. Dongzao) introduction	3.0	6	Young seedling, no yielding
	Chinese Sour Cherry (<i>Cerasus pseudocerasus</i>) introduction	3.0	6	Young seedling, no yielding
Farming measures	Ridge cultivation in orchard	13.9	20	5% increase soil productivity
Physical measures	Soil moisture preservation by ground fabric mulching	17.0	21	7% increase soil productivity
	Fertigation	5 cisterns, 13 ha	8	Just in operation
		134.6	259	

b) Replication of BPs in saline soil management through establishment of Farmer Field School (FFS) in Pucheng and Fuping Counties. The consultant (Northwest Agroforestry University) completed the activity. This included: (i) identification of the farmer's needs and preparation of the training plan and materials; (ii) six rounds of FFS training, involvement of 660 farmers (297 female); (iii) 34 ha demonstration of BPs in saline soil management in Linjia and Gaomi villages, including: (a) soil amendments, such as different types of desalination agents, and integrated pesticide and fertilizer management; (b) biological measures, such as planting of green manure, use of green mulch, cover crops, improved crop rotations, etc.; and (c) physical measures (e.g., water-saving irrigation practices and conservation tillage); (iv) study tours for

43 farmer representatives to Dali saline soil improvement demonstration park and Fuping National Agriculture Experimental Research Station; and (v) farmers environmental school establishment. More than 100 farmers from the Luyang lake area interacted with volunteers (including two PhD and eight MSc students) from environmental and Resources College of Northwest Agroforestry University.

The output resulted in a range of small knowledge products (manuals, brochures) and local awareness, and was widely publicized. Reasons for the success of this output include the following: (i) aligned with PMO objectives for management of the project area, which (despite overall goals for economic development) still retains many farm lands; (ii) implemented by two local agencies, which were able to utilize their local support networks and (in the case of the agro-college) receive in-kind support to allocate considerable time to their tasks and to scale up their activities; and (iii) straightforward technical concepts dealing with well-established issues familiar to decision makers (in this case, the problem of poor agricultural returns on saline soils).

Output 2: Improved resilience to climate change of agro-ecosystems and reduced flood risk to local people. Rating: Moderate.

a) Testing of at least 2 best practices for establishment of green belts (covering 2 ha). Rating: Unsatisfactory. The activity originally included 2 best practices for establishment of green belts (covering 2 ha), including: (a) establishment of a multifunctional Greenway system that supports ecotourism in agricultural areas; and (b) planting of indigenous and multi-purpose tree species as shelterbelts along irrigation canals. Local farmers were not interested in “establishment of a multifunctional Greenway system that supports ecotourism in agricultural areas” and the best practice was cancelled. For the best practice of “planting of indigenous and multi-purpose tree species as shelterbelts along irrigation canals”, the action of planting along irrigation canals conflicts with the PRC’s canal governance policies. After long delays, the site was located at the south bank of Tianlu Lake (a lake established under the Loan 2980). The contractor did not follow the designs prepared by the GEF specialist, including species selection and planting density, and due to the high clay content of the lake bank, expensive topsoil was required. The activity was concluded by ADB to be a failure (annual review mission 9–17 April 2018) and the remaining funds were re-allocated to another GEF activity (purchase of bird diverter tags for improved wetland management; below). The failure of this activity appears to be due to poor design and limited research and consultation by the consultants that prepared the activity during loan and grant preparation.

b) 100 villagers (80 female) trained on alternative livelihoods, including wetland and salt pan ecotourism, marketing, etc. Rating: Satisfactory. The rural business development specialists together with Gender Development Solution (GDS) had: (i) completed review of socio-economic status of 6 target villages (100 respondents); (ii) held alternative livelihoods eco-tourism hospitality training, involvement of 150 local farmers, including 80 females; and (iii) formulated handbook of alternative livelihoods development. The activity was based on comprehensive stakeholder consultations and community outreach.

c) Establishment of an incubator for small rural enterprise development, including ecotourism. Rating: Moderate. GDS together with the rural business development specialists: (i) identified 10 small “community business pilots”; (ii) prepared business plans for each pilot; (iii) organized study tours to Beijing and Hechuan, Shaanxi; and (iv) disbursed start-up fund of US\$ 10,000 each. The activity was highly successful in that comprehensive training was completed and a range of alternative livelihoods were developed and piloted. However, the 10 households selected for the pilots were already successful and established business people in their communities, hence the positive impact to poor and vulnerable households was limited.

Output 3: Improved wetland management. Rating: Unsatisfactory.

a) One management plan for the wetlands that incorporates ecosystem service assessment, evaluation and integrated land and water management arrangements. Rating: Unsatisfactory. The PMO had recruitment of a design institute to prepare the LNWP Master Plan in December 2016. The wetland management specialists and eco-compensation specialist helped the design institute to finalize the LNWP boundary. The wetland specialists identified off-site of the new salt pans. The PI had completed construction of the new salt pans (110 ha) arranged subsequent operation, maintenance management and monitoring. Despite 1.5 years of GEF consultant support for the LNWP Master Plan and four years of technical support (through the GEF grant, ADB-funded loan, and a \$0.35 million technical assistance project) for wetland management, by June 2018: the LNWP Master Plan was still not completed; the plan contained many inaccuracies and errors; the 100 ha salt pan offset habitats were not yet 100% operational; management arrangements for the protection of the remaining (original) salt pan habitats remained unclear. All activities have been characterized by long delays by the PMO, a reluctance to share information on land tenure and other development plans, and a general lack of commitment. This has been largely due to conflicts with a new government-funded scheme (Guan Zhong Water Scheme) in the project area, which arose two-three years *after* the designs for the ADB-funded loan and GEF grant were approved by the government but which the government subsequently stated to take priority. The new scheme would have involved destruction of most remaining salt pans in the project and finally contributed to the cancellation of \$30 million of the ADB loan proceeds. It took around 1.5 years to resolve these conflicts (which included cancellation of one lake under the scheme). This utilized the time that was needed to prepare and finalize the LNWP Master Plan and 110 ha salt pan habitats.

Overall, the protection of remaining salt pans (a key mitigation measure agreed by the government, as part of the project's environment management plan; EMP) is not aligned with the government's plans for development in the project area. It is anticipated that after completion of the loan and grant, it is likely that many remaining areas of salt pans which are currently protected through the project actions, will be cleared and developed. Due to these issues, a significant opportunity to prepare a master plan for a national wetland park to international best-practice standards (via the GEF consultants) has largely been lost.

b) Assessment of opportunities for establishment of an eco-compensation mechanism. Rating: Unsatisfactory. The eco-compensation specialist had: (i) reviewed eco-compensation; (ii) identified eco-compensation mechanism; (iii) proposed potential financing mechanisms for the LNWP; and (iv) formulated an eco-tourism business plan for the saltpan culture development. Despite these efforts, no eco-compensation pilots were ever conducted and no specific financing and revenue streams for the LNWP were confirmed. The reasons for this are due to: (i) the conflicts with a new scheme (see above) and subsequent delays; (ii) the lack of familiarity of the PMO with eco-compensation; and (iii) lack of PMO interest in furthering the development of financing streams for the LNWP.

c) Testing of at least 2 innovative and replicable Best Practices in wetland management (covering 10 ha). Rating: Moderate. The wetland management specialists had: (i) identified two wetland management demonstration pilots; (ii) completed designs of the two wetland management demonstration pilots; (iii) the contractor had completed construction of the two pilots; and (iv) The PI had arranged subsequent operation, maintenance, management and monitoring. Both pilot sites were sub-plots within the 110 ha of salt pan offset habitats that PMO was required to construct as part of the project EMP. The two sub-plots were intended to be demonstration sites to assist in the completion and operation and maintenance of the remaining 100 ha. Both sub-plots were completed and operational by June 2018, including power

lines, water pumps, and salt harvesting regime of benefit to farmers and migratory waterbirds. However, the 2 plots took two years to prepare, due to long delays by PMO in selecting the sites (and then cancelling these and selecting new sites), constructing the salt pans, establishing the basic infrastructure, and hiring a site manager. It was originally planned that all works for the 2 plots would be completed in one year, so that one year would be assigned for monitoring and evaluation and to guide the new site manager. Due to these delays, the opportunity to provide international technical guidance for management of the offset habitats was largely lost.

Output 4: Development of adaptive management capacity, monitoring and evaluation. RATING: Satisfactory.

Reporting. This is the fourth and final PIR for the GEF grant. This and the three previous PIRs have been submitted annually as required. Project monitoring for the loan and grant has been well supported by an average of two ADB missions per year and submission of PMO quarterly progress reports and semi-annual reports for safeguards and external monitoring. The ADB-funded loan will be completed on 31 December 2019. A Project Completion Report for the loan will be prepared one year after completion i.e. Q1 2021. This will include: (i) a component on the GEF grant; (ii) a Validation Report from IED; (iii) updated Land Degradation Tracking tool for the project; and (iv) a GEF Terminal Evaluation Report (TER).

(a) GEF Grant Disbursement - status as of 30 June 2018

Contract awards. Cumulative contracts awarded were USD1.95 million accounting for 97.5% of the grant amount due to foreign exchange fluctuation and suspension of *Testing of at least 2 best practices for establishment of green belts (covering 2 ha)*.

Disbursement. Cumulative disbursement was USD 1.82 million, accounting for 91% of the grant amount due to foreign exchange fluctuation and suspension of *Testing of at least 2 best practices for establishment of green belts (covering 2 ha)*.

(b) Gender Action Plan Implementation Status

Status of the project social and gender action plan (SGAP): (i) reporting of the SGAP targets in the PMO quarterly progress reports has improved; (ii) progress toward the SGAP targets, such as women employment, remains very low; (iii) although the GEF-funded activities has made some contribute to the SGAP targets there is a need for the PMO, loan consultants to work together to design the project activities to support the SGAP targets, and to prioritize households affected by land acquisition and resettlement (LAR); and (iv) a plan for social support is still not included in the updated resettlement plan. To help address these issues: (i) a national social specialist was mobilized by ADB in 2016 to support the PMO in social safeguards management; and (ii) the ADB team provides regular guidance to PMO, including review of the internal and external monitoring reports. Overall, the GEF grant has played a critical role in contributing to the SGAP targets, by bringing inclusiveness to the loan project through gender-sensitive stakeholder consultations and the deployment of a local firm (Gender Development Solutions) specializing in gender-based approaches.

(c) Social and Environmental Safeguard Plan Implementation Status

For both social and environmental safeguards, no grievances have been documented under the project grievance redress mechanism. For social safeguards, submission of internal and external monitoring reports has been subject to delays and poor-quality reporting. This has required close supervision from the ADB team, supplemented by the support of the national social staff consultant.

For environment safeguards, construction works have largely complied with the project environment management plan (EMP) except for long delays (4 years) to complete the new salt pan offset habitats. Due to this, the project was out of compliance with the loan agreement (which requires implementation of the EMP) until 2018.

Overall, implementation of the project loan and GEF grant has required a huge input of ADB staff time and technical and administrative guidance, due to the low capacity of the PMO, and lack of responsiveness of the PMO to address agreed corrective actions (such as the deployment of qualified senior financial and procurement staff and social and environmental officers to administer the project).

C. Global Environmental Benefits (GEB) Objective/ Development Objective (DO) Rating:

GEB/DO Status

The project loan and GEF grant remained highly relevant. The DMF provides a strong basis for a “satisfactory” GEB/DO. There have been no design changes to the project. The design was based on a comprehensive review of socio-economic and physical conditions in the project area. The grant outputs contributed to the GEF Focal Areas for Land Degradation (*Outcome LD 1.2 Improved agricultural management; Outcome LD 1.3 Sustained flow of services in agro-ecosystems*) and Biodiversity (*Conservation of globally significant biodiversity*). Therefore, the GEB/DO for the grant warrants a rating of “satisfactory”.

1. Risk Rating: Moderate.

The project has experienced significant delays; initially, within the first two years of implementation (which necessitated a two-year extension); and then for several subcomponents, as discussed above. Despite comprehensive efforts by the ADB and GEF-funded teams, overall results of the grant are mixed: the four outputs are rated as highly satisfactory (1), satisfactory (1), moderate (1), and unsatisfactory (1).

2. Overall Rating of the Project: Moderate/Satisfactory.

3. Additional Comments – Good Practices and Lessons Learned:

Good Practices

The GEF grant initiated innovative approaches in 4 key areas:

- (i) Diversifying local livelihoods on saline-affected soils (through the introduction of new crop types, skills training, and/or business management planning);
- (ii) Salt pan construction and management. This appears to be the first project in the PRC to establish new salt pans as a biodiversity offset measure; while globally, there are few examples of the creation of salt pan habitats for migratory waterbirds;
- (iii) Identifying potential eco-compensation mechanisms to support financing for a wetland park;
- (iv) Introduction of bird diverters on electricity lines. The project is among the first in the PRC to introduce *bird diverters*, an international best-practice method to reduce waterbird mortality from collisions with powerlines. The diverters are plastic tags attached to powerlines and which glow in the dark.

Of these four approaches, the most success was achieved in (i). In general, the outputs of the GEF grant have strengthened the quality of loan implementation e.g. by contributing to the design and/or operation and maintenance of the loan-funded facilities.

Lessons Learned

(i) Implementation of the GEF grant should have been led by a full-time team leader i.e. part of the grant funds should have been utilized to fund such a position. The PMO lacked such capacity and failed to strengthen its administrative team despite repeated ADB requested and agreed corrective actions. A full-time team leader would have strengthened coordination, administration, reporting, technical oversight, and integrated approaches between team members.

(ii) The GEF program should have been implemented before the loan implementation. This would have enabled the foundation for the Loan to be established and would have provided better leverage to confirm the LNWP wetland park boundary, development and livelihoods for households, completion of the 110 ha salt pan habitats, and prepare the LNWP master plan. It is possible that the GEF component would have been more effective had it been conducted prior to the lake infrastructure development. This would have allowed the environmental, social and economic components of the project to be completed and legislated (such as the wetland park boundary and salt-pan development), and to prepare “project impacted” households for alternate livelihoods before the impact itself.

(iii) Continuous consultant inputs would have been more effective than intermittent inputs. The project could have been more rigorously implemented.

(iv) The loan EMP required that the 110-ha salt pan offset habitats be established prior to construction of the loan-funded Tianlu Lake. This requirement was relaxed by ADB, at the request of the government, to enable works to proceed. In hindsight this resulted in a loss of leverage (e.g. loan disbursements) to ensure the salt pans were completed. Had the original requirement been implemented, much more critical habitat would have remained available to waterbirds.

(v) Two biodiversity monitoring programs established and/or supported by the GEF grant (waterbirds and aquatic invertebrates) continue to be among the most successful conservation initiatives of the loan and grant. The results of these studies will lay a strong foundation for future management activities in the conservation zone of the LNWP to maintain its biodiversity values. There is value in exploring the possibility of continuing both bird and invertebrate monitoring until the end of the ADB loan project (2020) to allow an assessment of the wetland compensation package – this having not been possible so far due to the extreme delay in implementation of the ground works.

(vi) The lack of PMO capacity contributed to long delays for contracts to be awarded and implemented. This resulted in much time and opportunities lost for the GEF grant.

4. Knowledge Management:

Reporting outputs from the GEF-funded consultant team are listed below (digital copies available from the ADB project officer). Materials are in English language unless indicated. Digital copies available from the PMO).

Livelihoods on saline soils – surveys and assessments

Gender Development Solutions. 2016. Alternative livelihoods – Inception Report.

Gender Development Solutions. 2016. Skateholder's workshop – Summary report.

Gender Development Solutions. 2017. Alternative livelihoods – Progress Report.

Gender Development Solutions. 2017. Alternative livelihoods – Annual Progress Report.

- Microfinance Services Pty Ltd, Australia / Gender Development Solutions. 2017. Survey on the Local Capacity, and Needs, for Alternate Livelihoods in Rural Villages in Luyanghu Area.
- Tong, Y.A. 2016. Interviews and questionnaire surveys to assess key problems for saline soil management for the local farmers. (In Chinese).
- Tong, Y.A. 2016. Salt content in soil and in ground and surface water survey. (In Chinese).
- Tong, Y.A. 2016. Field experiment and demonstration for saline soil control in maize field. (In Chinese).
- Tong, Y.A. 2016. Field experiment and demonstration for saline soil control in wheat field. (In Chinese).
- Tong, Y.A. 2017. Inventory for 10 best practical technologies for saline land comprehensive control and management. (In Chinese).
- Tong, Y.A. 2017. Help to carry out of the 10 best practical technologies: Soil remediation with organic fertilizer /chemical agents for saline soil control. (In Chinese).
- Tong, Y.A. 2017. Help to carry out of the 10 best practical technologies: Winter dates *Ziziphus jujuba* planting. (In Chinese).
- Tong, Y.A. 2017. Help to carry out of the 10 best practical technologies: Cherry tree *Cerasus pseudocerasus* planting. (In Chinese).
- Zhang J. 2017. Rural business development – Progress Report.
- Gender Development Solutions. 2018. Alternative livelihoods – Final Report.
- Zhang J. 2018. Rural business development – Final Report.
- Tong, Y.A. 2018. Soil management – Final Report.
- Yangling Tongyuan Agro-technology Co., Ltd. 2018. Best practices for saline soil management in Luyanghu project area, Shaanxi (WOCAT format)
- Yangling Tongyuan Agro-technology Co., Ltd. 2018. Nitrogen and Phosphorus Management of Farmland and Water Eutrophication Estimation of Tianlu-Tianyang Lakes in the Project Area
- Training materials for farmer field schools (in Chinese)**
- Ji, Puhui and T.Y. Tong. 2016. Training textbook for technology on saline land comprehensive control and management.
- Ji, Puhui and T.Y. Tong. 2016. Seminar on saline land control and management technology.
- Ji, Puhui and T.Y. Tong. 2016. Training seminar conducted at Fanjia Village, Dangmu County, Weinan City.
- Ji, Puhui and T.Y. Tong. 2016. Farmer study tour to Dali County – examples of saline soil management.
- Ji, Puhui and T.Y. Tong. 2017. Prepare for the two classroom and buy more than 30 different kind of agricultural technical books.
- Design of greenbelts**
- Sun, O.J. 2016. Designs of Best Practice Greenbelts for Luyang National Wetland Park.
- Sun, O.J. 2017. Assessment of Drainage and Salinity-Reduction Systems.
- Eco-compensation**
- Quetier Fabien. 2017. Eco-compensation - Progress report
- Quetier Fabien. 2018. Eco-compensation – Business plan for saltpan ecotourism
- Wetland management**
- David Melville. 2017. Wetland management - Progress report
- David Melville. 2018. Wetland management - Final report
- David Melville. 2018. Wetland management – Appendix 1-7 of the final report
- GEF grant M&E and operation management**
- PMO. 2018. Grant program management - Final report of GEF-funded Program

5. Location Data:

The project is located in the Luyanghu¹ area of Weinan Municipality of Shaanxi Province, PRC. The Luyanghu area comprises a large, low-lying depression within a flat, cultivated landscape. The

¹ Referred to as “Luyanghucun” in www.geonames.org. “Luyanghu” is retained in this report as it is the standard English translation used by the government and ADB in project documents.

approximate project boundaries are N34.8000⁰–N34.92778⁰ and E100.2033⁰–E109.7658⁰, which encompasses the entire Luyanghu area.

For Projects that have conducted Midterm Review Mission and Project Completion Mission (from 1 July 2017 to 30 June 2018)

IV. Materialized Cofinancing

Co-financing Table

(For projects which underwent a mid-term review/evaluation or terminal evaluation in FY)

Materialized Co-financing

[Please refer to the PIF template on the GEF webpage]

Sources of Co-financing ²	Name of Co-financer	Type of Co-financing ³	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at Midterm	Actual Amount Materialized at Closing
GEF Agency	ADB	Hard Loan	USD 50,000,000	16,060,000	NA ⁴
Local Government	PRC	Hard Loan	USD 30,000, 000	USD 13,460,000	NA
		TOTAL	USD 80,000, 000	USD 29,520,000	

Explain “Other Sources of Co-financing”: In-kind counterpart funding, including: 30% co-financing for the civil works under the loan (before increase in ADB financing of the civil works from 70% to 100%); PMO offices, equipment and vehicles; PMO staff salaries; and, workshop and meeting facilities.

Reminder: Kindly include in your submission a copy of the following:

1. For projects that conducted **Midterm Review Mission**: Copy of the MOU Midterm Review Mission; BTOR and Updated Tracking Tools
2. For projects that conducted **Project Completion Mission**: Copy of the PCR, Copy of the MOU Midterm Review Mission; and Updated Tracking Tools

² Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Other

³ Type of Co-financing may include: Grant, Soft Loan, Hard Loan, Guarantee, In-Kind, Other

⁴ The loan project has been extended and the close date will be on 31 December. 2020

Signature: 
Name of Project Officer: **Mark R. Bezuijen** (former officer; continuing lead for GEF grant) /
Mingyuan Fan
Position: Senior Environment Specialist / Senior Water Resources Specialist
Date: 1 Aug 2018

Endorsed by: *for* 
Qingfeng Zhang
Division Director, EAER