

Resettlement Plan

Project number: 48274
July 2017

PRC: Shanxi Urban–Rural Water Source Protection and Environmental Demonstration Project

Prepared by the Zuoquan County People's Government for the Asian Development Bank

CURRENCY EQUIVALENTS

(as of 17 July 2017)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1478
\$1.00	=	CNY6.7637

ABBREVIATIONS

AAOV	-	average annual output value
ADB	-	Asian Development Bank
AH	-	affected household
AP	-	affected person
CNY	-	Chinese yuan
M&E	-	monitoring and evaluation
PIU	-	project implementation unit
PMO	-	project management office
PRC	-	People's Republic of China
RP	-	resettlement plan
ZCHSUCMB	-	Zuoquan County Housing Security and Urban–Rural Construction Management Bureau
ZCSRMD	-	Zuoquan County Shixia Reservoir Management Division
ZCLRB	-	Zuoquan County Land Resources Bureau
ZCWRB	-	Zuoquan County Water Resources Bureau

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**Shanxi Urban–Rural Water Source Protection and
Environmental Demonstration Project**

**Resettlement Plan
(Draft)**

**Zuoquan County People's Government
July 2017**

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ABBREVIATIONS

AAOV	-	average annual output value
ADB	-	Asian Development Bank
AH	-	affected household
AP	-	affected person
CNY	-	Chinese yuan
DMS	-	detailed measurement survey
HD	-	house demolition
IA	-	implementing agency
JMG	-	Jinzhong Municipal Government
LA	-	land acquisition
M&E	-	monitoring and evaluation
PIU	-	project implementation unit
PMO	-	project management office
PRC	-	People's Republic of China
RIB	-	resettlement information booklet
RP	-	resettlement plan
SPG	-	Shanxi Provincial Government
TOR	-	term of reference
WTP	-	water treatment plant
WWTP	-	wastewater treatment plant
ZCG	-	Zuoquan County Government
ZCHSUCMB	-	Zuoquan County Housing Security and Urban–Rural Construction Management Bureau
ZCSRMD	-	Zuoquan County Shixia Reservoir Management Division
ZCLRB	-	Zuoquan County Land Resources Bureau
ZCWRB	-	Zuoquan County Water Resources Bureau

Units

Currency unit	=	yuan (CNY)
CNY1.00	=	\$0.151
1 hectare	=	15 <i>mu</i>

Letter of Commitment

The contents in the Resettlement Plan for Shanxi Urban-Rural Water Source Protection and Environmental Demonstration Project have been confirmed being consistent with the ADB safeguard policy statement and relevant laws and regulations of the Peoples Republic of China (PRC). In order to carry out the resettlement work more successfully, the plan also includes some additional measures, implementation and monitoring arrangements. The resettlement works will be carried out strictly in accordance with the Resettlement Plan during the process of project implementation.

The Zuoquan County People's Government has confirmed the contents in this Resettlement Plan (RP), and committed to include the budget fund of the RP into the total project budget and fully fund timely. The Zuoquan County People's Government has discussed the draft RP with related units and got their approval. The Zuoquan County People's Government authorizes the Zuoquan County Housing Security and Urban-Rural Construction Management Bureau (ZCHSUCMB), the Zuoquan County Water Resources Bureau (ZCWRB) and Zuoquan County Shixia Reservoir Management Division (ZCSRMD) for the implementation of this project and the corresponding resettlement work.

This RP is prepared based on the latest feasibility study report, and will be further updated based on the detailed design and Detailed Measurement Survey results of the project, and submitted to the ADB for review and approval before the land acquisition and house demolition and resettlement action.

Signature of the Zuoquan County People's Government

张世伟



Nov 2016

EXECUTIVE SUMMARY

I. Project Introduction

1. The Shanxi Urban–Rural Water Source Protection and Environmental Demonstration Project (hereinafter referred to as the Project) consists of four components or outputs: (1) Shixia Reservoir operation and its watershed vegetation improved; (2) Qingzhang River and Binhe Road rehabilitated; (3) inclusive water supply and wastewater collection services achieved; (4) institutional capacity strengthened. Among them, the project components (1), (2), and (3) will involve land acquisition, land leasing, and house demolition; while project component (4) does not involve any land acquisition, land leasing, and house demolition. This document is mainly for the land acquisition and house demolition. A land use right transfer framework is prepared for the land leasing. The project component or output 1: Shixia Reservoir operation and its watershed vegetation improved includes three subcomponents: (i) revegetation around existing Shixia Reservoir and planting of forest belt along two headwaters; (ii) improvement of the reservoir spillway gate and construction of flood discharge and washout tunnel; and (iii) construction of the hydrological and water quality monitoring stations around Shixia Reservoir. The project component or output 2: Qingzhang River and Binhe Road rehabilitated consists of five subcomponents: (i) dredging of selected sections of the river and tributaries which are heavily silted; (ii) river rehabilitation, and construction of embankment; (iii) construction of a wetland park and associated amenity facilities; (iv) low-impact design (sponge city concept) for road improvement, expansion for easement, and storm water drain installation; and (v) flood warning system. The project component or output 3: Inclusive water supply and wastewater collection services achieved consists of three subcomponents: (i) rural water supply system; (ii) water pollution control works (including sewage treatment plant); and (iii) related roads and bridges improvement. The project component or output 4: Institutional capacity strengthened consist of four subcomponents (i) project management; (ii) water resource assessment (surface and groundwater); (iii) water demand management plan to ensure efficient use of water resources; and (iv) institutional and capacity strengthening for integrated urban–rural water supply.

II. Impacts of Land Acquisition and House Demolition

2. The The project needs to permanently occupy a total of 3,693.95 *mu* land, including 2,309.04 *mu* of state-owned land and 1,398.29 *mu* of collective land; and of the collective land, the cultivated land area is 528.26 *mu*.¹ As this project is an environmental improvement project, the greening works do not change the nature of farmland and do not need to acquire (changing the land property and the ownership) of 348.64 *mu* land. This project will permanently acquire a total of 1,049.65 *mu* collective land, including 528.26 *mu* cultivated land and 521.39 *mu* non-cultivated land, which affects a total of 33 villages in 4 townships and/or towns, namely Hanwang Township, Liaoyang Town, Longquan Township, and Shixia Township. The land acquisition and cultivated land occupation affects 1,384 persons in 591 households (HHs), among which the female population is 650. The project involves 8,099.62 square meters (m²) of residential house demolition, and will affect 104 persons in 24 HHs, who are also affected by the land acquisition; four enterprises with total of 32 employees who need to be relocated, and with 2,475 m² buildings to be demolished are also affected by land acquisition.² The project will temporarily occupy 231 *mu* collective land, which affects 231 HHs with 647 persons. At least 30 HHs of the affected persons (APs) belong to the vulnerable groups. Generally, the project affects a total of 2,031 persons in 822 HHs, among which 1,384 persons in 591 HHs will be affected by permanent land occupation; and 647 persons in 231 HHs

¹ The 1,398.29 *mu* of collective land is included in the 348.64 *mu* of land to be rented and 1,049.65 *mu* of land to be acquired.

² The 32 employees are villagers living nearby, and they will also be affected by the land acquisition.

affected by temporary land occupation. A total of 961 females will be affected by the project, among which are 650 persons affected by the land acquisition, and residential and non-residential house demolition; and 311 persons affected by the temporary land occupation. For details, please see table 1.

Table 1: Project Impacts

Component	PIU	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	Affected Persons										
				Collective Land ^a	State-Owned	Subtotal	Collectively Owned		Land Acquisition		House Demolition		Land Acquisition+ House Demolition		Subtotal		Enterprise		
				<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>		HH	Pop	HH	Pop	HH	Pop	HH	Pop	HH	Pop	HH
Shixia Reservoir operation and its watershed vegetation improved	ZCSRMD	Revegetation around Shixia Reservoir and planting of forest belt along two headwaters	Haogou, Changcheng, Dianshang, Daofogou, Heyu, Chuankou, Zhuning, Guantou, Weijiazhuang Village, Xiaolingdi, Pushang, Huiji, Shiyan	0.00	1,922.65	1,922.65	0.00	0.00	0	0	0	0	0	0	0	0			
	ZCSRMD	Improving the reservoir spillway gate and construction of flood discharge and washout tunnel	Shixia Reservoir	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0			
	ZCSRMD	Construction of hydrological and water quality monitoring stations around Shixia Reservoir	Haogou, Chuankou, Shiyan, Xiajiao, Shixia Reservoir	13.38	0.00	13.38	0.00	0.00	3	9	0	0	0	0	3	9			
Qingzhang River and Binhe Road rehabilitated	ZCHSUCMB	Dredging selected sections of the river and tributaries which are heavily silted	Shixia Township, Liaoyang Town	0.00	0.00	0.00	25.50	0.00	0	0	0	0	0	0	0	0			
	ZCHSUCMB	River rehabilitation and construction of embankment	Xiguan, Qilidian, Xiaohui, Xichangyi, Jinggou, Dongchangyi, Xihetou, Shixia, Majiu, Sanjia	467.51 ^a	323.02	790.52	0.00	0.00	67	152	0	0	0	0	67	152			
	ZCHSUCMB	Construction of a wetland park and associated amenity facilities	Xiaohui, Xichangyi	470.31 ^b	44.98	515.29	0.00	0.00	273	630	0	0	0	0	273	630			
Inclusive water supply and wastewater collection services achieved	ZCHSUCMB	Water pollution control	Shixia Township, Liaoyang Town, Longquan Township, Hanwang Township	29.06	0.00	29.06	0.00	0.00	0	0	0	0	0	0	0	0	4	32 ^c	2,475
	ZCHSUCMB	Related roads and bridges improvement and widening works	Xiguan, Qilidian, Xiaohui, Xichangyi, Jinggou, Dongchangyi, Xihetou, Shixia, Majiu, Songgou	374.97	5.012	379.98	0.00	8,099.62	226	543	24	104	24	104	226	543			
	ZCWRB	Rural water supply system	Pumping station: Dongchangyi, Songgou, Shigangkou, Wulihou, Majiaguai. Water supply pipeline: Majiu, Xichangyi, Jinggou, Dongchangyi, Fengpoyu, Henan, Liujiayao, Guojiayao.	43.07	0.00	43.07	205.19		22	51	0	0	0	0	22	51			

Component	PIU	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	Affected Persons										
				Collective Land ^a	State-Owned	Subtotal	Collectively Owned		Land Acquisition		House Demolition		Land Acquisition+ House Demolition		Subtotal		Enterprise		
				<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>	m ²	HH	Pop	HH	Pop	HH	Pop	HH	Pop	HH	Pop	HH
			Songgou, Yuyuekou, Tudi, Qianzhai, Shigangkou, Xiazhiqi, Qinghedian, Shuiheng, Wulihou, Dongzhai, Gaozhuang, Majiaguai, Liangyu, Baoze, Caoting, Zhangba																
Total				1,398.29	2,295.66	3,693.95	230.69	8,099.62	591	1,384	24	104	24	104	591	1,384	4	32	2,475

HH = household, m² = square meter, *mu* = a Chinese unit of land measurement (1 *mu* = 0.067 hectares), PIU = project implementation unit, Pop = population, ZCHSUCMB = Zuoquan County Housing Security, and Urban–Rural Construction Management Bureau, ZCSRMD = Zuoquan County Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

^a Among which, 348.64 *mu* land will be rented; all for construction of wetland park and associated amenity facilities.

^b Among which, 348.64 *mu* land will be rented.

^c They will be also affected by the land acquisition for the road component, and their numbers as affected persons are included accordingly (see next row).

III. Legal Framework and Policies

3. This resettlement plan (RP) follows the relevant laws and regulations of the People's Republic of China, but also be in line with the Asian Development Bank's (ADB) Safeguard Policy Statement (2009).

4. The relevant laws and regulations of the People's Republic of China mainly include the Land Administration Law of the People's Republic of China (2004), the Law of the People's Republic of China on Land Contracting in Rural Area (effective as of 1 March 2003), the Decision of the State Council on Deepening Reform and Strengthening Land Administration (published on 21 October 2004), and the Guidelines on Improving Land Compensation and Resettlement System (effective as of 3 November 2004). The relevant policies on compensation for land acquisition and relocation and resettlement of Shanxi Province, Jinzhong City, and Zuoquan County; and ADB's Safeguard Policy Statement (June 2009) will also be adopted. In accordance with the above law and policy, and on the basis of consultation with the local government and the APs, the resettlement principles of the project are determined as follows: (i) avoid the involuntary resettlement as far as feasible; (ii) ensure that the APs will be better off or at least not worst off as a result of the project; (iii) the APs are given compensation and assistance no matter if he or she has legal title or not; (iv) if the replacement land for the APs to maintain his or her livelihood is insufficient, cash compensation and other income restoration measures will be provided to the APs; (v) ensure that all APs fully know and understand their entitlements, their resettlement measures and compensation standards, their livelihood and income restoration plan, and project schedule; and also ensure that they can participate the resettlement preparation and implementation; (vi) the project implementation unit and external monitor will be responsible in monitoring the whole resettlement and income and/or livelihood restoration process; (vii) vulnerable groups will be provided with special assistance so that they can be better off; and all APs should have opportunities to benefit from the project; at least two members of each affected household will receive skills training, including at least one woman; (viii) the RP is consistent with the master plans of the affected city and/or county and township; and (ix) the resettlement costs are sufficient to cover all affected aspects.

5. The cut-off date of this project is 30 July 2016.

IV. Public Participation and Grievance Redress

6. To avoid or reduce negative impacts of the land acquisition, adequate consultations have been conducted on site selection and optimizing at the feasibility study stage. All current plans were selected through comparison.

7. In the project preparation stage, a series of consultations (9 times) have been conducted with the APs, the village committee, and the project resettlement offices at all levels, as well as other project stakeholders (approximately 757 person-times). The APs are involved in the preparation of the land acquisition and house demolition compensation and the RP through physical measurement and socioeconomic survey, and their concerns and comments have been incorporated into the present RP. In the detailed design stage of the project and during the implementation of this RP, further consultation will be carried out. Complaints and appeal mechanism has been established for the APs, with complaint and appeal channels including (i) village resettlement offices; (ii) township (town) resettlement offices; (iii) the Zuoquan County Land Resources Bureau and its component implementation units; (iv) the Zuoquan project management office (PMO); and (v) the external monitor.

8. The resettlement information booklets have been issued to the APs and villages in October 2016, and the draft RP was disclosed on the ADB website in November 2016.

V. Compensation Rates of Land Acquisition and House Demolition

9. All APs are eligible to compensation and assistance. The compensation rates on the land acquisition will be executed according to the Notice on the Adjustment of the Province's Unified Average Annual Output Value by the Shanxi Province People's Government (JZF [2013] No. 22 as follows: CNY28,800–CNY43,200/*mu* for cultivated land; CNY26,400–CNY40,320/*mu* for garden land; CNY24,000–CNY37,440/*mu* for woodland; CNY21,600–CNY34,560/*mu* for grassland; CNY4,800–CNY5,760/*mu* for construction land in city, town, and/or village, and industry mining land; and CNY4,800–CNY5,760/*mu* for transportation land, and CNY1,440/*mu* for green crops/year. The annual compensation rate is CNY1,440/*mu* for temporarily occupied land. The real land leasing price will be determined by negotiation; and the guiding land leasing price is CNY960/*mu*/year for cultivated land, while CNY480/*mu*/year for forest land, CNY384/*mu*/year for grass land, and CNY576/*mu* for other land (including transportation land, urban land, and others).

10. The final compensation rates for house demolition will be determined on the base of the appraised price following replacement principle. An independent real estate appraisal agency (will be jointly determined by the APs and the project implementation units) undertakes the housing appraisal for this project. The guiding prices for compensation for house demolition are CNY2,300/m² for brick-concrete structure, and CNY1,980/m² for brick-wood structure. In addition, the APs will receive transition subsidy of CNY8/m²; and moving subsidy of CNY10/m² during the transition period (1 year for choosing replacement house). The ground attachments and auxiliary buildings will be compensated with replacement cost.

VI. Resettlement Measures and Livelihood Restoration

11. To minimize the impact, detailed resettlement and livelihood restoration measures are developed. These measures are developed based on socioeconomic surveys and analysis on the affected households and villages, and reference to the successful experience from similar local projects. These measures include cash compensation for the land acquisition, pension insurance for land-loss farmers, employment opportunities created by existing and new enterprises in Zuoquan County, skills training for APs, employment of APs by component itself, and other non-cash compensation supports.

12. The resettlement and livelihood restoration measures also include cash compensation for demolished houses, and providing resettlement houses. According to survey, 23 relocated HHs selected cash compensation. They will buy apartments in the real-estate market of Zuoquan County by themselves, and one HH chose the replacement house to be provided by the government.

13. The APs original housing site will be compensated with CNY5,760/*mu*.

VII. Institutional Arrangements

14. The Zuoquan County Shixia Reservoir Management Division is responsible for the implementation of Output 1: Shixia Reservoir operation and its watershed vegetation improved. The Zuoquan County Housing Security and Urban–Rural Construction Management Bureau is responsible for the implementation of Output 3: Qingzhang River and Binhe Road rehabilitated (including the river dredging works; river flood control, and ecological rehabilitation works; and construction of a wetland park and associated amenity facilities, and sewage treatment plant works), water pollution control works, and related roads and bridges improvement and widening works. The Zuoquan County Water Resources Bureau is responsible for the implementation of rural water supply system. The Zuoquan PMO is the coordinator for the overall project management and the implementing agency for the

resettlement, including RP preparation, implementation and management, progress reporting, internal monitoring, and engagement of external monitor. Each component implementation unit will be responsible for implementation of the RP with the assistance of local authorities, including the confirmation of affected land and houses, consultation with the APs, financing and payment of compensation fund, and the implementation of resettlement measures for APs. The township (town) government and village committees will be actively involved in the implementation of the RP. To guarantee the smooth implementation of the project, the Zuoquan PMO will organize training on how to implement the land acquisition and house demolition. This RP also includes the training plan to strengthen the capacity of resettlement-related staffs at all levels.

VIII. Resettlement Cost and Implementation Schedule

15. All resettlement costs have been included in the total project budget. Calculated at the price level of October 2016, the total resettlement cost of this project is CNY105,134,307 (about 9.77% of the total project budget of CNY1.075 billion), including the basic resettlement cost of CNY74,760,634 for the land acquisition and house demolition, accounting for 71.11% of the total resettlement cost; other costs is CNY20,816,055 (including land tax, resettlement monitoring fee, management fees for resettlement, personnel training costs for resettlement agencies, and the assistance fund for helping and supporting the vulnerable groups etc.), accounting for 19.80%; and contingency of CNY9,557,669, accounting for 9.09%.

16. The whole project will be started in September 2017, and completed in August 2022. The land acquisition and house demolition of all components will be started in July 2017, and finished before December 2019.

IX. Monitoring and Evaluation

17. This RP also includes a detailed plan for internal and external monitoring and evaluation. During implementation of the RP, the Zuoquan PMO will submit an internal monitoring report to ADB every 6 months. The Zuoquan PMO will hire an experienced agency as the independent resettlement external monitor to conduct external monitoring on the implementation of the RP and prepare external monitoring reports. Prior to the implementation of the RP, the external monitor will complete baseline survey; and submit the baseline survey report; and after that, submit a monitoring report to ADB every 6 months within 2 years until the land acquisition and house demolition works are finished. After APs' income and living conditions are at least restored or even better off, the Zuoquan PMO will submit a resettlement completion report to ADB.

CHAPTER 1: OVERVIEW

1.1 Project Background

1. The proposed project consists of four components: (1) Shixia Reservoir Operation and its Watershed Vegetation Improved; (2) Qingzhang River and Binhe Road Rehabilitated; (3) Inclusive Water Supply and Wastewater Collection Services Achieved; (4) Institutional Capacity Strengthened. The total investment is CNY1.075 billion, of which US\$100 million is funded by the loan from the Asian Development Bank. The project components (1), (2), and (3) involve land acquisition and house demolition in the project areas, while the project component (4) does not involve any land acquisition and house demolition. Therefore, this resettlement plan (RP) is prepared specific to the land acquisition and house demolition involved in the project components (1), (2), and (3).

2. The project component (1) Shixia Reservoir operation and its watershed vegetation improved includes three subcomponents: (i) revegetation around Shixia Reservoir and planting of forest belt along two headwaters; (ii) improvement of the reservoir spillway gate, and construction of flood discharge and washout tunnel; and (iii) construction of the hydrological and water quality monitoring stations around Shixia Reservoir. The project component (2) Qingzhang River and Binhe Road rehabilitated consists of five subcomponents: (i) dredging of selected sections of the river and tributaries which are heavily silted; (ii) river rehabilitation, and construction of embankment; (iii) construction of a wetland park and associated amenity facilities; (iv) low-impact design (sponge city concept) for road improvement, expansion for easement, and storm water drain installation; and (v) flood warning system. The project component (3) Inclusive water supply and wastewater collection services achieved consist of three subcomponents: (i) rural water supply system; (ii) water pollution control works (including sewage treatment plant); and (iii) related roads and bridges improvement. The project component (4) Institutional capacity strengthened consist of four subcomponents: (i) project management; (ii) water resource assessment (surface and groundwater); (iv) water demand management plan to ensure efficient use of water resources; and (iv) institutional and capacity strengthening for integrated urban–rural water supply.

3. The project construction will be very positive for water source conservation and ecological environment improvement in the Shixia Reservoir, and Qingzhang River basin. The project is intended for increasing the efforts in ecological construction and water sources protection and striving to build a green ecological barrier. The project accords with the popular will, benefit both current and future generations, and guarantees the sustainable development of the ecological environment in Zuoquan County.

4. The current village situation of in the project area is shown in Figure1-1. The project component (1) Shixia Reservoir Operation and its Watershed Vegetation Improved is shown in Figure1-2. The project component (2) Qingzhang River and Binhe Road Rehabilitated is shown in Figure1-3. The subcomponent of planting of forest belt along the rivers is shown in Figure1-4. The map of urban area along Xiyuan section, Qingzhang is shown in Figure1-5. The location map of project component (3) Inclusive Water Supply and Wastewater Collection Services Achieved is shown in Figure1-6.



Figure 1-1: Current Village Situation in Zuoquan County (Master Plan of Zuoquan County, 2011–2030)



Figure 1-2: Location Map of Output 1: Shixia Reservoir Operation and its Watershed Vegetation Improved



Figure 1-3: Satellite Image of Output 2: Qingzhang River and Binhe Road Rehabilitated

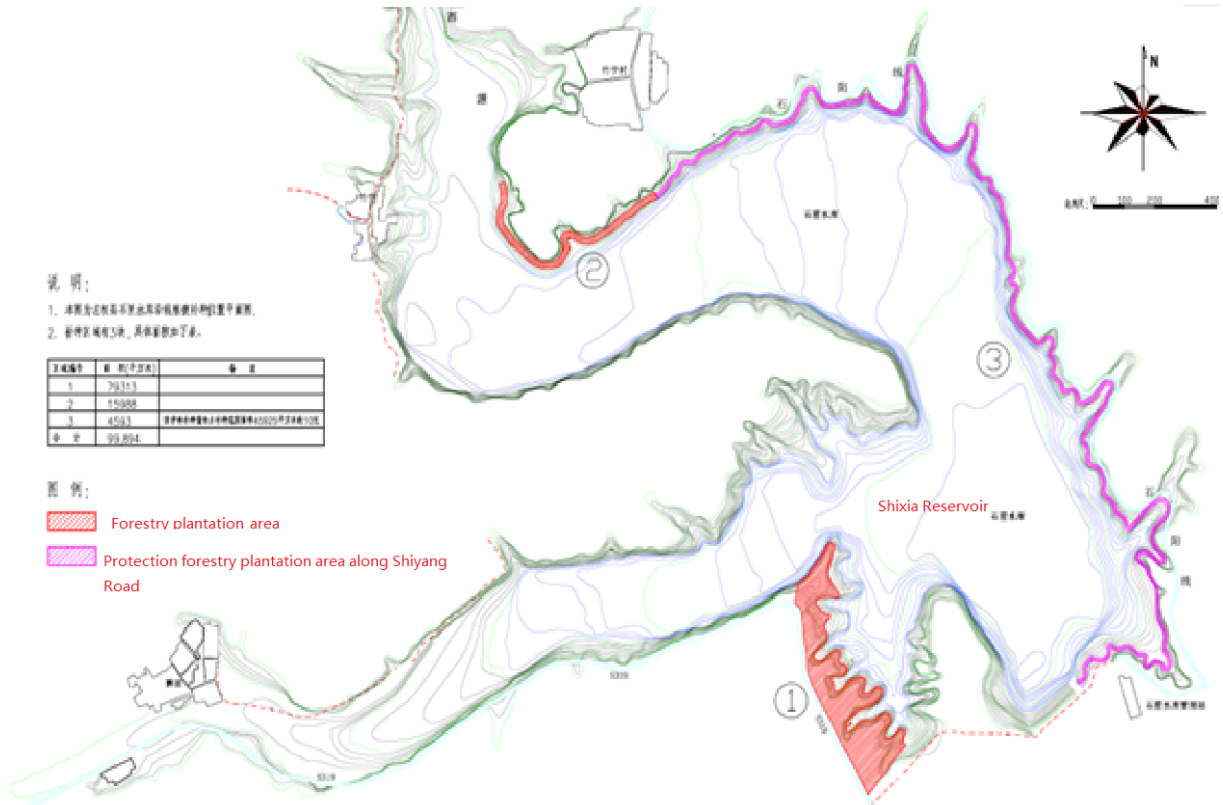


Figure 1-4: Planting of Forest Belt along the Rivers

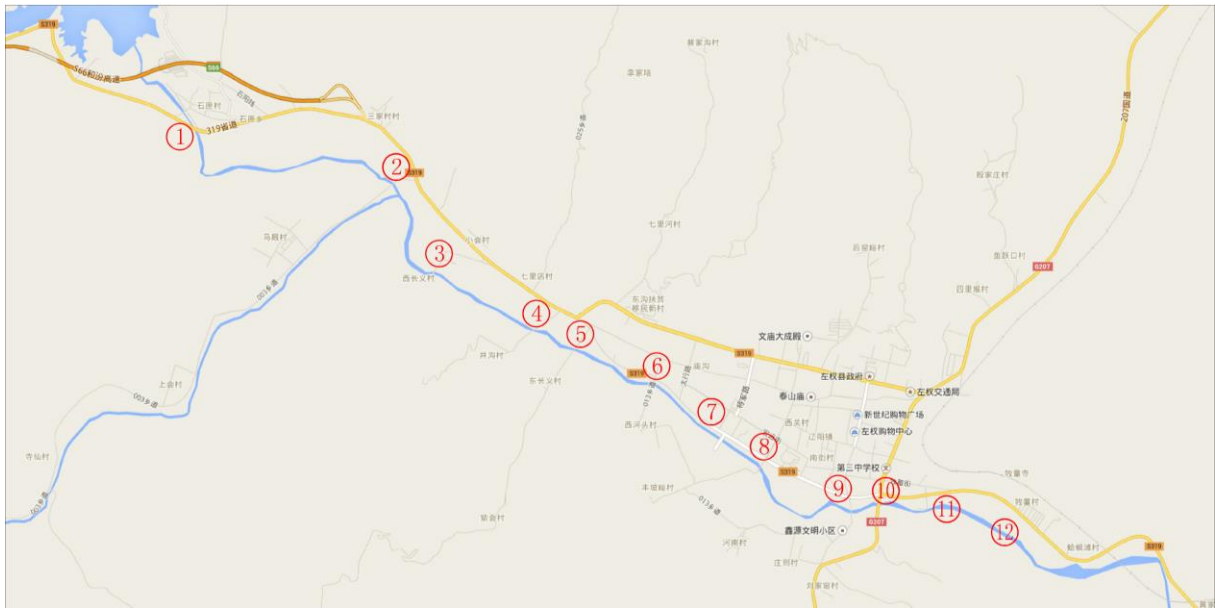


Figure 1-5: Sketch Map of the Urban Area along Xiyan section of the Qingzhang River

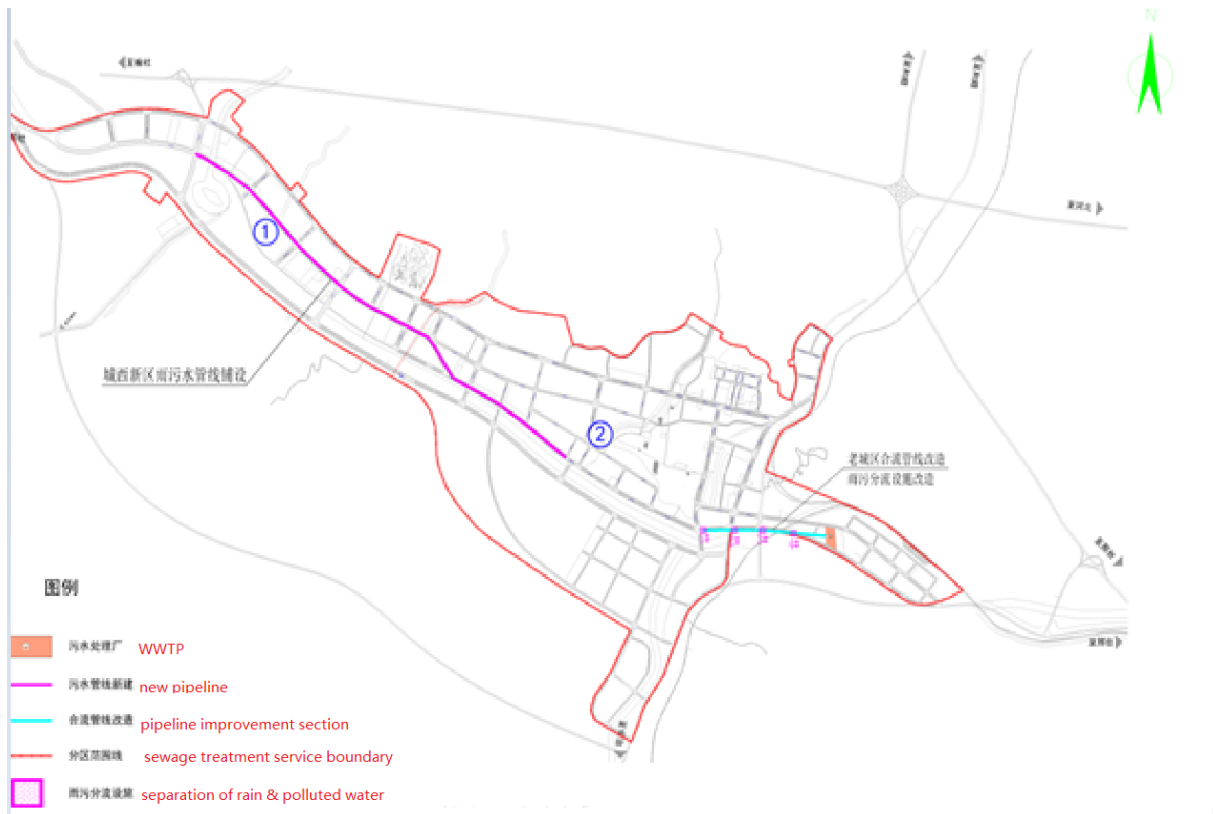


Figure 1-6: Location of the Wastewater Collection Services Component

1.2 Project Content

5. The project consists of four components: (1) Shixia Reservoir Operation and its Watershed Vegetation Improved; (2) Qingzhang River and Binhe Road Rehabilitated; (3) Inclusive Water Supply and Wastewater Collection Services Achieved; (4) Institutional Capacity Strengthened. For details, please refer Table 1-1.

Table 1-1: Summary of Project Outputs and Components

No.	Output/Component	Contents/Purposes	Remarks	Project Implementation Unit
Output 1—Shixia Reservoir Operation and its Watershed Vegetation Improved				ZCSRMD
1.1	Revegetation around Shixia Reservoir and planting of forest belt along two headwaters	Planting forest belts in the following locations: (i) West Qingzhang River (upper stream of Shixia Reservoir) - 0.744 km ² (ii) Xiaolingdi River - 0.438 km ² (iii) Around Shixia Reservoir - 0.100 km ² Total Area: 1.282 km ²		ZCSRMD
1.2	Improvement of the reservoir spillway gate, and construction of the flood discharge and washout tunnel	Construction of a sluice with two gates in the spillway, and a flood discharge and washout tunnel	Downstream farmers can benefit from flood control	ZCSRMD
1.3	Construction of the hydrological and water quality monitoring stations around Shixia	Construction of five hydrological and water quality automatic monitoring stations with telecommunication system		ZCSRMD

No.	Output/Component	Contents/Purposes	Remarks	Project Implementation Unit
	Reservoir			
Output 2—Qingzhang River and Binhe Road Rehabilitated				ZCHSUCMB
2.1	Dredging of selected sections of the river and tributaries which are heavily silted	Length: 11.6 km Volume: 78,700 m ³	The sludge will be treated in existing landfill site (state-owned valley), no need to acquire additional land or temporary occupation, no affected persons.	ZCHSUCMB
2.2	River rehabilitation and construction of embankment	Construction of river embankment of about 8.9 km to enhance flood control and restore ecology along the river. Shixia Reservoir to Xihetou Village: 7.1 km Taizilianchi Road to Kuhe River: 1.8 km		ZCHSUCMB
2.3	Construction of wetland park and associated amenity facilities	Provision of wetland, flood retention zone, waterborne platform, pedestrian walks, bridges, etc. of about 41 hectares	The existing wetland park area is a low discharge area where has no cultivated land.	ZCHSUCMB
2.4	Low-impact design (sponge city concept) for road improvement, expansion for easement and storm water drain installation	Improvement of Binhe Road of 4.925 km, including four bridges and 13 km of storm water drains together with low-impact facilities designed in accordance with the sponge city concept		ZCHSUCMB
Output 3—Inclusive Water Supply and Wastewater Collection Services Achieved				ZCWRB
3.1	Rural water supply system	<p>Raw Water Transmission</p> <p>(i) City West raw water pumping station expansion (add capacity 28,700 m³/d)</p> <p>(ii) Raw transmission pipelines (DN 280–450, 45.298 km)^a</p> <p>Rural Industrial Water Supply</p> <p>(iii) Wulihou pumping station expansion (add capacity 18,200 m³/d)</p> <p>(iv) Songgou pumping station expansion (add capacity 10,500 m³/d)</p> <p>(v) Majiaguai pumping station expansion (add capacity 17,000 m³/d)</p> <p>(vi) Shigangkou pumping station expansion (add capacity 9,000 m³/d)</p> <p>(vii) Water distribution pipelines (DN 355–450, 48.32 km)</p> <p>Rural Domestic Water Supply</p> <p>(viii) Two water treatment stations for rural drinking water supply (1,200 m³/d and 1,500 m³/d);</p> <p>(ix) Five pumping stations and associated facilities;</p>	Shixia Reservoir is the water source, and the water purification plant is within the Majiaguai pumping station area.	ZCWRB

No.	Output/Component	Contents/Purposes	Remarks	Project Implementation Unit
		(ix) Replacement of existing water supply pipelines (36.5 km, DN 63–250).		
3.2	Water pollution control	(i) Zuoquan County wastewater treatment plant expansion and upgrading (expand existing facilities from 10,000 m ³ /d to 15,000 m ³ /d; add advanced treatment system 15,000 m ³ /d; replacement of aging and fault equipment); (ii) Construction of 4.97 km trunk sewers (DN 400–500) and associated manholes (124 Nos.) in City West New District; (iii) Replacement the existing DN 600 main sewer with DN 800 pipeline (1.29 km, with 25 Nos. of manholes); (iv) Reconstruction of four overflow manholes.	Zuoquan County wastewater treatment plant (phase 1) has been constructed. The due diligence review for it is in Appendix 3.	ZCWRB
Output 4—Institutional Capacity Strengthened				Zuoquan PMO
4.1	Project management	(i) Consultancy service for project execution (ii) Training for reservoir management and operating procedures; dam safety management including dam safety monitoring, compilation and implementation of reservoir operation maintenance and surveillance manual (OMS), and compilation of annual dam safety reports (iii) Training for eco-compensation mechanisms (iv) Resettlement external monitoring		
4.2	Water resource assessment (surface and groundwater)	Assessment of total available water resources in Zuoquan		
4.3	Water demand management plan to ensure efficient use of water resources	(i) Training in techniques for operation and maintenance to reduce water losses. (ii) Promotion of public awareness and education to save water		
4.4	Institutional and capacity strengthening for integrated urban–rural water supply	To be discussed in the final review mission.		

d = day, km = kilometer, km² = square kilometer, m³ = cubic meter, PMO = project management office, ZCHSUCMB = Zuoquan County Housing Security and Urban–Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

^a DN stands for *diametre nominel*, the metric equivalent of nominal pipe size.

1.3 Project Impact Scope

6. This RP has been prepared by the Zuoquan County People's Government and submitted to the Asian Development Bank for approval and released to the affected persons (APs). The Zuoquan County Land Resources Bureau, the Zuoquan County Shixia Reservoir Management Division, the Zuoquan County Water Resources Bureau, and the Zuoquan County Housing Security and Urban–Rural Construction Management Bureau (ZCHSUCMB) are respectively responsible for specific implementation of the corresponding components in this RP. The Zuoquan County project management office will manage, coordinate, and supervise the implementation of this RP.

7. The project needs to permanently occupy a total of 3,693.95 *mu* land, including 2,309.04 *mu* state-owned land and 1,398.29 *mu* collective land; of the collective land, the cultivated land area is 528.26 *mu*. As this project is an environmental improvement project, the greening works do not need to change the land property and do not need to acquire (changing the land property and the ownership right). This project will permanently acquire a total of 1,049.65 *mu* collective land, including 528.26 *mu* cultivated land and 521.39 *mu* non-cultivated land, which affects a total of 33 villages in 4 townships and/or towns, namely Hanwang Township, Liaoyang Town, Longquan Township, and Shixia Township. The land acquisition and cultivated land occupation will affect 1,384 persons in 591 households (HHs), among which the female population is 670; the project involves 8,099.62 square meters of house demolition, and will affect 104 persons in 24 HHs, who are also affected by the land acquisition; four enterprises with total of 32 employees need to be relocated with 2,475 square meters of buildings to be demolished, who are also affected by the land acquisition. The project will temporarily occupy 231 *mu* collective land, which affects 231 HHs with 647 APs; and 37 HHs of these APs belonging to the vulnerable groups. Generally, the project will affect a total of 2,031 persons in 822 HHs, among which 1,384 persons in 591 HHs will be affected by permanent land occupation, and 647 persons in 231 HHs affected by temporary land occupation. Among the permanently APs, 1,384 persons in 591 HHs will be affected by the land acquisition; 104 persons in 24 HHs will be affected by the house demolition of residential houses; and 104 persons in 24 HHs will be affected by both the land acquisition and the house demolition of residential houses.

1.4 Measures to Minimize the Resettlement Impacts

8. Resettlement impacts have been considered to minimize as far as possible at the design stage. The main principles are as follows:

- (i) Avoiding or minimizing occupation of existing and planned residential areas (urban and rural),
- (ii) Avoiding or minimizing the occupation of high-quality farmland land,
- (iii) Avoiding or minimizing occupation of environmentally sensitive areas, and
- (iv) Cancelled the proposed Shiyang Road.

9. After optimization, the total resettlement cost reduces 57.3%; and the population of APs caused by land acquisition reduced 72.8%. For more details, please see Table 1-2.

Table 1-2: Reduced Resettlement Impacts

Item	Unit	1st Draft RP	Final Draft RP	Difference	Difference Ratio
Total land area	<i>mu</i>	4,595.77	3,693.95	(901.82)	(19.6%)
Cultivated land	<i>mu</i>	1,280.33	528.26	(752.07)	(58.7%)
Affected HHs by land acquisition	HH	2,239	591	(1,648)	(73.6%)
Affected persons by land acquisition	capita	5,082.00	1,384.00	(3697.75)	(72.8%)

Item	Unit	1st Draft RP	Final Draft RP	Difference	Difference Ratio
Houses to be demolished and relocated	m ²	8,099.62	8,099.60	0.00)	0.0%
HHs to be relocated	HH	24	24	0	0.0%
Investment	CNY	246,503,266.00	105,134,357.00	(141,368,909.00)	(57.3%)

CNY = Chinese yuan, HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), RP = resettlement plan.

CHAPTER 2: PROJECT IMPACT IDENTIFICATION AND ANALYSIS

2.1 Project Impact Survey

10. With the assistance of feasibility study report team, the Zuoquan project management office and the social team of Architectural Design and Research Institute of Tongji University (Group) Co., Ltd conducted the impact survey from March 2015 to November 2016, including the number of the affected persons (APs), houses to be demolished, land acquisition area, and other facilities. The surveys also include the socioeconomic status of the affected townships and villages, and affected households (AHs), namely the sampling 258 AHs in Liaoyang Town and Shixia Township caused by the land acquisition and house demolition, as well as the scope of impact by the project on the local socioeconomic conditions.

11. The contents of the resettlement survey can be divided into three parts, namely:

2.1.1 Second-Hand Data Survey

- (i) Social and economic statistics of Zuoquan County and township and village where the project is involved; and
- (ii) Laws and regulations of the State, Shanxi Province, Jinzhong City, and Zuoquan County related to land acquisition and house demolition, and resettlement work.

2.1.2 Socioeconomic Survey

- (i) Basic information of the AHs, and the situations of vulnerable families within the scope of project;
- (ii) Public opinions and recommendations; and
- (iii) Basic situations of affected villages within the scope of the project: population, labor force, industrial structure, and cultivated land.

2.1.3 Preliminary Survey on Physical Objects Affected by Land Acquisition and House Demolition

- (i) Land acquisition and land occupation: location, category, and area; and
- (ii) Demolished buildings, auxiliary buildings and other land attachments: location, type, quantity, and property ownership.

12. Discussions on the resettlement policies, measures, and recommendations were collected from village committees, the representatives of the AHs and the local government.³ Scope of the survey is as follows: Dazhaigou Village, Dongchangyi Village, Jinggou Village, Majiu Village, Qilidian Village, Sanjia Village, Shixia Village, Xiajiao Village, Xiaohui Village, Xichangyi Village, Xiguan Village, and Xihetou Village.

2.2 Occupied Collective Land

2.2.1 Scope of Impact on Occupied Collective Land

13. This project occupies collective land in a total area of 1,384.91 *mu*, of which the cultivated land in area of 528.26 *mu* accounts for 14.3% of the total land occupied; and the non-cultivated land accounts for 85.7%. Among the collective land, 1,049.65 *mu* collective land will be acquired and the rest will be leased. The land acquisition, same as land occupation, will affect a total of 1,384 persons in 591 AHs.

14. The water conservation protection works on Qingzhang River will permanently occupy a total of 1,936.03 *mu* land, among which the water conservation protection component will occupy 1,922.65 *mu* land, mainly for the greening works along Xiaolingdi River, and the west

³ Please refer table 5-1.

source of Qingzhang River. The occupied lands are river-beach land, and no cultivated land is occupied. At least 13 villages are involved, including Haogou Village. The hydrological monitoring stations occupied grasslands, totaling 13.38 *mu*; and cover five villages, including Shixia Village and the Zuoquan County Shixia Reservoir Management Division, resulting to 3 AHs and 9 APs.

15. The Qingzhang River and Binhe Road Rehabilitated component will permanently occupy a total of 1,305.81 *mu* land, including 790.29 *mu* for flood control and ecological rehabilitation; and 515.26 *mu* for wetland park and auxiliary facilities, resulting to 782 APs, 340 AHs, and 15 affected villages in Liaoyang Town and Shixia Township.

16. The Inclusive Water Supply and Wastewater Collection Services Achieved component will permanently occupy a total of 452.11 *mu* land, including 379.98 *mu* for auxiliary road works (Binhe Road); and 43.07 *mu* for pumping stations. The wastewater treatment plant covers an area of 29.06 *mu*. A total of 594 APs, 248 AHs of 15 villages in Liaoyang Town and Shixia Township will be affected, among which 104 APs in 24 AHs will be affected by house demolition. Four enterprises will be demolished and relocated for the sewage treatment works, and 32 employees will be affected (who are also affected by the land acquisition).

17. The impacts on the permanently occupied land of this project are shown in Table 2-1 (by component) and Table 2-2 (by project implementation unit).

18. As the project is an environmental improvement project, to minimize the land acquisition quantity, some non-cultivated land for the Qingzhang River and Binhe Road Rehabilitation component will be rented, not acquired. As the land to be leased does not have income, land leasing does not have AH nor AP. A land use rights transfer framework has been prepared for this. The land types to be leased are shown in Table 2-3.

Table 2-1: Impact of Permanent Acquisition and Occupation of Collective Land (By component)

Component	Subcomponent	State-Owned Land	Collective Land				Affected Households (by land acquisition, same as land occupation)	Affected Persons (by land acquisition, same as land occupation)	
			Requisition			Rent ^a			Subtotal
			Cultivated Land	Non-Cultivated Land	Subtotal				
<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>				
Shixia Reservoir operation and its watershed vegetation improved (formerly Water conservation for Qingzhang River)	Water conservation and protection	1,922.65	0.00	0.00	0.00	0	1,922.65	0	0
	Hydrological monitoring station	0.00	3.02	10.36	13.38	0	13.38	3	9
	Subtotal	1,922.65	3.02	10.36	13.38	0.00	1,936.03	3	9
Qingzhang River and Binhe Road rehabilitated	River flood control and biology	323.02	64.15	54.71	118.86	348.64	790.52	67	152
	Wetland and auxiliary facilities	44.98	268.36	201.95	470.31	0.00	515.29	273	630
	Subtotal	368.00	332.51	256.66	589.18	348.64	1,305.81	340	782
Inclusive water supply and wastewater collection services achieved	Supporting road works (Binhe Road (previously Zhongyang Avenue))	5.01	172.42	202.55	374.97	0	379.98	226	543
	Sewage works (water pollution)	0.00	0.00	29.06	29.06	0	29.06	0	0
	Pumping stations, water supply piping works, water purification facilities (rural water supply)	0.00	20.30	22.76	43.07	0	43.07	22	51
	Subtotal	5.01	192.73	254.37	447.10	0.00	452.11	248	594
Total	2,295.66	528.26	521.39	1,049.65	348.64	3,693.95	591	1,384	

mu = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

^a Does not have affected household nor person.

Table 2-2: Permanent Occupied Lands for the Project (By Project Implementation Unit)

Project Implementation Units	State-owned Land <i>mu</i>	Collective Land					AH (by land acquisition, same as land occupation)	AP (by land acquisition, same as land occupation)
		Land Acquisition			Land Rent <i>mu</i>	Subtotal <i>mu</i>		
		Cultivated Land <i>mu</i>	Non-Cultivated Land <i>mu</i>	Subtotal <i>mu</i>				
ZCSRMD	1,922.65	3.02	10.36	13.38	0.00	1,936.03	3	9
ZCHSUCMB	373.01	504.90	488.27	993.21	348.64	1,714.86	566	1,325
ZCWRB	0.00	20.30	22.76	43.07	0.00	43.07	22	51
Total	2,295.66	528.26	521.39	1,049.65	348.64	3,693.95	591	1,384

AH = affected household, AP = affected person, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), ZCHSUCMB = Zuoquan County Housing Security and Urban–Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

Table 2-3: Land Types and Quantity for Leasing

	Unit	River Surface	Inland Beaches	Marsh	Bare Land	Other Grassland	Subtotal
Collective land	<i>mu</i>	143.25	175.42	4.35	1.06	24.57	348.64

mu = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

2.2.2 Collective Land Acquisition

19. The quantity of land acquisition, AHs, and APs caused by the permanent collective land acquisition are shown in Table 2-4. The proportion of the acquired cultivated lands to their total cultivated lands without land acquisition is 3.83%.

Table 2-4: The Villages, Households, and Persons Affected By Collective Land Acquisition

Township or Town or Pumping Station	Village	Village Group	Total Cultivated Land Area	Total HHs	Total Population	Average Land Area per HH	Average Land Area per Capita	Land Acquisition Area	AHs	APs	Average Affected Land Area per HH	Average Affected Land Area per Person	Land Loss Ratio
		Quantity	<i>mu</i>	HH	Population	<i>mu</i> /HH	<i>mu</i> /Population	<i>mu</i>	HH	Population	<i>mu</i> /HH	<i>mu</i> /Population	
Shixia Township	Shixia	3	1,700	945	2,150	1.799	0.791	0.8100	8	18	0.101	0.044	0.05%
	Majiu	3	2,400	555	1,040	4.324	2.308	142.380	113	220	1.260	0.648	5.93%
	Sanjia	1	930	218	530	4.266	1.755	49.270	52	126	0.948	0.390	5.30%
	Subtotal	7	5,030	1,718	3,720	2.928	1.352	192.462	173	364	1.112	0.528	3.83%
Liaoyang Town	Xiguan	3	465	747	1,803	0.622	0.258	0.000	0	0	0.000	0.000	0.00%
	Qilidian	5	1,582	386	915	4.098	1.729	39.710	40	95	0.993	0.419	2.51%
	Xiaohui	2	285	142	334	2.007	0.853	189.350	216	508	0.877	0.373	66.44%
	Xichangyi	2	599	129	356	4.643	1.683	58.800	70	193	0.840	0.304	9.82%
	Jinggou	3	667	161	400	4.143	1.668	3.840	3	7	1.281	0.516	0.58%
	Dongchangyi	3	849	220	503	3.859	1.688	14.720	15	34	0.981	0.429	1.73%
	Xihetou	2	460	429	1,050	1.072	0.438	13.870	55	135	0.252	0.103	3.01%
Subtotal	20	4,907	2,214	5,361	2.216	0.915	320.290	399	972	0.803	0.329	6.53%	
Pumping Station	Songgou	1	1,100	131	393	8.397	2.799	3.020	3	9	1.007	0.336	0.27%
	Shigangkou	1	520	190	459	2.737	1.133	5.330	5	12	1.067	0.441	1.03%
	Wulihou	1	1,820	518	1,250	3.514	1.456	3.330	5	12	0.667	0.276	0.18%
	Majiaguai	1	409	139	335	2.942	1.221	3.820	6	14	0.637	0.264	0.93%
	Subtotal	4	3,849	978	2,437	3.936	1.579	15.507	19	48	0.816	0.326	0.40%
Total	31	13,786	4,910	11,518	2.808	1.197	528.257	591	1,384	2.731	1.184	3.83%	

AH = affected household, AP = affected person, HH = household, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

20. At least 173 AHs in Shixia Township will be affected by the project, among which 20 AHs with collective land acquisition ratio below 10%, 70 AHs with land acquisition ratio of 10%–20%, 83 AHs with land acquisition ratio of 20%–40%, and the average ratio of 3.67%. A total of 192.46 *mu* of cultivated lands will be acquired in Shixia Township, accounting for 26.55% of the total amount of cultivated land of the AHs.

21. At least 418 AHs in Liaoyang Town will be affected by the construction of the project, among which 40 AHs with land acquisition ratio below 10%, 155 AHs with land acquisition ratio of 10%–20%, 153 AHs with land acquisition ratio of 20%–40%, and 70 AHs with land acquisition ratio of 40%–60%, and the average land acquisition ratio of 6.22%. A total of 433.58 *mu* of cultivated lands will be acquired in Liaoyang Town, accounting for 20.93% of the total amount of existing cultivated land. The details are as shown in Table 2-5.

Table 2-5: Land-Loss Analysis of the Affected Villages by Collective Land Acquisition

Township or Town	Village	Cultivated Land Area owned by HHs	Land Acquired	Remaining Cultivated Land	Average Land Acquisition Ratio	Affected HHs
		<i>mu</i>	<i>mu</i>	<i>mu</i>		HH
Shixia Township	Shixia	14.39	0.81	13.58	5.62%	8
	Majiu	488.65	142.38	346.27	29.14%	113
	Sanjia	221.83	49.27	172.56	22.21%	52
	Subtotal	724.88	192.46	532.41	26.55%	173
Liaoyang Town	Xiguan	0.00	0.00	0.00	0.00%	0
	Qilidian	163.94	39.71	124.23	24.22%	40
	Xiaohui	433.52	189.35	244.17	43.68%	216
	Xichangyi	325.04	58.80	266.24	18.09%	70
	Jinggou	12.43	3.84	8.58	30.93%	3
	Dongchangyi	57.89	14.72	43.17	25.43%	15
	Xihetou	58.97	13.87	45.11	23.51%	55
	Songgou	0.00	0.00	0.00	0.00%	0
	Shigangkou	25.19	3.02	22.17	11.99%	3
	Wulihou	13.68	5.33	8.35	38.97%	5
		17.57	3.33	14.23	18.97%	5
	Majiaguai	17.65	3.82	13.83	21.65%	6
	Subtotal	1,125.88	335.79	790.08	20.93%	418
	Total	1,850.76	528.26	1,322.50	28.54%	591

HH = household, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

22. The land-loss ratio and its distribution of the AHs is showed in Table 2-6.

Table 2-6: Land-loss Ratio Distribution of Affected Households

Village	Land-Loss Area	HH	HH	HH	HH	HH	HH	HH
	Cultivated Land	<10%	10%–20%	20%–40%	40%–60%	60%–80%	80%–100%	Total
Shixia	1 <i>mu</i> –2 <i>mu</i>	0	4	4	0	0	0	8
Majiu	4 <i>mu</i> –5 <i>mu</i>	10	54	49	0	0	0	113
Sanjia	4 <i>mu</i> –5 <i>mu</i>	10	12	30	0	0	0	52
Subtotal		20	70	83	0	0	0	173
Xiguan	≤1 <i>mu</i>	0	0	0	0	0	0	0
Qilidian	4 <i>mu</i> –5 <i>mu</i>	5	20	15	0	0	0	40
Xiaohui	2 <i>mu</i> –3 <i>mu</i>	10	80	86	40	0	0	216
Xichangyi	4 <i>mu</i> –5 <i>mu</i>	10	15	25	20	0	0	70
Jinggou	4 <i>mu</i> –5 <i>mu</i>	0	3	0	0	0	0	3
Dongchangyi	3 <i>mu</i> –4 <i>mu</i>	2	8	5	0	0	0	15
Xihetou	1 <i>mu</i> –2 <i>mu</i>	6	19	20	10	0	0	55
Songgou	1 <i>mu</i> –2 <i>mu</i>	0	0	0	0	0	0	0
Shigangkou	2 <i>mu</i> –3 <i>mu</i>	3	0	0	0	0	0	3

Village	Land-Loss Area	HH	HH	HH	HH	HH	HH	HH
	Cultivated Land	<10%	10%–20%	20%–40%	40%–60%	60%–80%	80%–100%	Total
Wulihou	3 mu–4 mu	1	4	0	0	0	0	5
Majiaguai	2 mu–3 mu	2	3	0	0	0	0	5
Subtotal		40	155	153	70	0	0	418
Total		60	225	236	70	0	0	591
	≤1 mu	0	0	0	0	0	0	0
	1 mu–2 mu	9	23	24	10	0	0	66
	2 mu–3 mu	12	87	88	40	0	0	227
	3 mu–4 mu	4	11	5	0	0	0	20
	4 mu–5 mu	35	104	119	20	0	0	278
Total		60	225	236	70	0	0	591

HH = household, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

23. The cultivated land area per capita of AHs decreased to 0.96 *mu* from 1.34 *mu* before land acquisition, reduced 29% of the total as shown in Table 2-7.

Table 2-7: Affected Persons' Cultivated Land Area Per Capita Before and After Land Acquisition

Township or Town or Pumping Station	Village	Affected Persons		Before LA	Cultivated Land Acquired	Remaining Cultivated Land Area After LA	Average Cultivated Land Area Before LA	Average Cultivated Land Area After LA
		HH	Pop.	<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i> /Pop.	<i>mu</i> /Pop.
Shixia Township	Shixia	8	18	14.39	0.81	13.58	0.79	0.75
	Majiu	113	220	488.65	142.38	346.27	2.23	1.58
	Sanjia	52	126	221.83	49.27	172.56	1.75	1.36
	Subtotal	173	364	724.88	192.46	532.41	1.99	1.46
Liaoyang Town	Xiguan	0	0	0.00	0.00	0.00	0.00	0.00
	Qilidian	40	95	163.94	39.71	124.23	1.73	1.31
	Xiaohui	216	508	433.52	189.35	244.17	0.85	0.48
	Xichangyi	70	193	325.04	58.80	266.24	1.68	1.38
	Jinggou	3	7	12.43	3.84	8.58	1.67	1.15
	Dongchangyi	15	34	57.89	14.72	43.17	1.69	1.26
	Xihetou	55	135	58.97	13.87	45.11	0.44	0.34
Subtotal	399	972	1,051.79	320.29	731.50	1.08	0.75	
Pumping Stations	Shonggou	3	9	25.19	3.02	22.17	2.8	2.46
	Shigangkou	5	12	13.68	5.33	8.35	1.13	0.69
	Wulihou	5	12	17.57	3.33	14.23	1.46	1.18
	Majiaguai	6	14	17.65	3.82	13.83	1.22	0.96
Subtotal	19	48	74.10	15.51	58.59	1.56	1.23	
Total	591	1,384	1,850.76	528.26	1,322.50	1.34	0.96	

HH = household, LA = land acquisition, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), Pop. = population.

2.2.3 Income Loss Caused by Collective Land Acquisition

24. The income loss caused by collective land acquisition is as shown in Table 2-8.

Table 2-8: Income Loss Caused by Collective Land Acquisition

Township or Town or Pumping Station	Village	Annual Per Capita Net Income	Annual Per Capita Net Agricultural Income	Agricultural Income Ratio	AHs	APs	Cultivated Land before LA	LA Area	Average HH Income Loss	Per Capita Income Loss
		CNY	CNY		HH	Person	mu	mu	CNY	CNY
Shixia	Shixia	4,647	2,324	0.500	8	18	14	0.8	101	44
	Majiu	5,144	1,543	0.300	113	220	489	142.4	1,260	648
	Sanjia	4,883	1,465	0.300	52	126	222	49.3	948	390
	Subtotal				173	364	725	192.5	1,112	528
Liaoyang	Xiguan	6,137	3,068	0.500	0	0	0	0.0	0	0
	Qilidian	5,841	2,336	0.400	40	95	164	39.7	993	419
	Xiaohui	5,623	2,531	0.450	216	508	434	189.4	877	373
	Xichangyi	2,121	1,060	0.500	70	193	325	58.8	840	304
	Jinggou	5,737	2,868	0.500	3	7	12	3.8	1,281	516
	Dongchangyi	5,769	2,308	0.400	15	34	58	14.7	981	429
	Xihetou	5,977	2,391	0.400	55	135	59	13.9	252	103
	Subtotal	6,046	2,418	0.400	399	972	1,052	320.3	803	329
	Songgou	5,607	2,804	0.500	3	9	25	3.0	1,007	336
	Shigangkou	4,648	2,324	0.500	5	12	14	5.3	1,067	441
	Wulihou	4,540	2,497	0.550	5	12	18	3.3	667	276
	Majiaguai	4,432	2,305	0.520	6	14	18	3.8	637	264
Subtotal				19	48	74	15.5	816	326	
Total				591	1,384	1,851	528.3	894	382	

AH = affected household, AP = affected person, CNY = Chinese yuan, HH = household, LA = land acquisition, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

25. **Analysis of income loss.** Among 591 AHs caused by the collective land acquisition, 285 AHs' (accounting for 48.2% of the AHs) annual income loss below 10%, and 306 AHs (51.7% of the AHs) with annual income loss of 10%–20%, as shown in Table 2-9. According to the survey, it is found besides the cash compensation, more sustainable livelihood and income restoration measures shall be provided to the APs. The project predict that the loss of land is not likely to have significant consequences for APs, as the project will provide compensation for land loss and income restoration support to the APs. The APs can enjoy more non-agricultural working or business opportunities, improve net income, enjoy urban living manners with better infrastructure conditions, more available development opportunities, etc. A risk that poor implementation might result in low net income and unsustainable livelihood, particularly for venerable groups and females, which will be avoided or mitigated with proper implementation and monitoring mechanisms included in the resettlement plan.

Table 2-9: Household Income Loss Caused By Land Acquisition

Township or Town	Village	R≤10%	10% <R≤20%	Subtotal
Shixia Township	Shixia	4	4	8
	Majiu	64	49	113
	Sanjia	22	30	52
	Subtotal	90	83	173
Liaoyang Town	Xiguan	0	0	0
	Qilidian	25	15	40
	Xiaohui	90	126	216
	Xichangyi	25	45	70
	Jinggou	3	0	3
	Dongchangyi	10	5	15
	Xihetou	25	30	55
	Songgou	3	0	3
	Shigangkou	5	0	5
	Wulihou	5	0	5
	Majiaguai	4	2	6
	Subtotal	17	2	19
Total	285	306	591	

Note: Household income loss = loss of land % x annual agricultural income.

2.3 Temporary Land Occupation

26. The component of dredging, water supply, and wastewater collection system will temporarily occupy 231 *mu* collective land of Hanwang and Longquan townships, resulting to 647 APs in 231 AHs. The wastewater pipelines will be constructed by different segments one by one, and the occupation time for each section will not exceed 1 year. The temporary land occupation situation of this project is shown in Table 2-10. As the temporary land occupation period within 1 year, compensated for short-term impacts and will be restored after occupation, without long-term livelihood or income restoration problems for the APs.

Table 2-10 Temporarily Occupied Land

Project Implementation Unit	Component	Township or Town	Village	Population	Total Cultivated Land	Temporary Occupied Land	AHs	APs		Remarks
				Pop.	mu	mu	HH	Pop.	Among which, No. of Female	
ZCHSUCMB	River dredging	Liaoyang Town	Jinggou	400	667	7.50	0	0		Village land
			Fengpoyu	335	409	12.00	0	0	0	Village land
			River bed of Qingzhang River	0	0	6.00	0	0	0	Village land
			Subtotal	735	1,076	25.50			0	
ZCWRB	Water supply system works	Shixia Township	Majiu	1,040	2,400	10.80	6	16	8	Temporary land occupation for 1 year
		Liaoyang Town	Xichangyi	356	599	9.00	6	18	9	
			Jinggou	400	667	9.00	6	18	9	
			Dongchangyi	503	849	9.00	6	18	9	
			Fengpoyu	335	409	7.80	8	21	10	
			Henane	415	505	6.00	6	17	8	
			Liujiayao	430	420	6.60	8	23	11	
			Guojiayao	385	680	2.40	2	5	2	
			Songgou	706	270	6.00	19	53	25	
			Yuyuekou	673	752	12.00	13	36	18	
			Tudi	2,526	3,485	13.80	12	34	16	
			Qianzhai	502	486	11.40	14	40	20	
			Shigangkou	459	520	11.40	12	34	16	
			Xiazhiqi	986	1,044	10.80	12	34	16	
			Qinghedian	711	828	16.20	17	47	22	
			Shuiheng	324	500	7.80	6	17	8	
			Wulihou	1,250	1,820	7.80	6	18	8	
			Dongzhai	695	930	6.00	5	15	7	
			Gaozhuang	745	875	3.60	4	10	5	
			Majiaguai	335	409	9.00	9	25	12	
Liangyu	929	1,064	10.80	11	32	15				
Baoze	1,626	710	8.40	23	65	32				
Caoting	594	691	4.80	5	14	7				
Zhangba	367	150	4.80	14	39	19				

Project Implementation Unit	Component	Township or Town	Village	Population	Total Cultivated Land	Temporary Occupied Land	AHs	APs		Remarks
				Pop.	<i>mu</i>	<i>mu</i>	HH	Pop.	Among which, No. of Female	
			Subtotal	17,292	21,063	205.19	231	647	317	
			Total	18,027	22,139	230.69	231	647	311	

AH = affected household, AP = affected person, HH = household, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), Pop. = population, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCWRB = Zuoquan County Water Resources Bureau.

2.4 Affected Residential Houses

27. The construction of the supporting road works requires demolishing 8,099.62 square meters of rural residential houses in Liaoyang Town. Total 24 AHs, including 104 farmers, all along the road, will be affected. The details are as shown in Table 2-11. As most AHs have their second house within the village, most of them choose cash compensation manner. One AH has chosen to be resettled to Xueyuan Community. As this AH lives near the county urban area and the Xueyuan community is not far from the original house, there is no short- or long-term socioeconomic shock expected for this AH.

Table 2-11: Residential Houses Demolition Situation of the Project

Town	Village	Brick and Concrete	Brick-wood	Subtotal	AHs	APs		
		m ²	m ²	m ²	HH	Pop.	Among which, female	
Liaoyang	Qilidian	31.28	0.00	31.28	1	6	3	
	Qilidian	200.46	46.86	247.32	1	5	2	
	Qilidian	166.40	22.50	188.90	1	4	2	
	Qilidian	92.06	154.83	246.89	1	2	1	
	Qilidian	210	101.50	311.50	1	4	2	
	Qilidian	80.08	147.28	227.36	1	5	2	
	Qilidian	0.00	149.86	149.86	1	4	2	
	Qilidian	166.08	77.35	243.43	1	4	2	
	Qilidian	34.31	83.76	118.07	1	2	1	
	Qilidian	126.00	61.60	187.60	1	4	2	
	Qilidian	159.84	0.00	159.84	1	4	2	
	Qilidian	114.38	89.41	203.79	1	3	1	
	Qilidian	---	18.00	18.00	1	0	0	
	Qilidian	225.00	153.00	378.00	1	2	1	
		Subtotal	1,605.89	1,105.95	2,711.84	14	49	23
	Xihetou	497.31	45.21	542.52	1	6	3	
	Xihetou	522.72	72.93	595.65	1	6	3	
	Xihetou	212.80	---	212.80	1	4	2	
	Xihetou	---	95.02	95.02	1	4	2	
	Xihetou	135.60	546.34	681.94	1	7	3	
	Xihetou	99.00	674.30	773.30	1	7	3	
	Xihetou	275.76	380.44	656.20	1	6	3	
		Subtotal	1,743.19	1,814.24	3,557.43	7	40	19
	Xichangyi	295.70	102.40	398.10	1	5	2	
Xichangyi	---	224.85	224.85	1	4	2		
Xichangyi	266.94	940.46	1,207.40	1	6	3		
	Subtotal	562.64	1,267.71	1,830.35	3	15	7	

AH = affected household, AP = affected person, HH = household, m² = square meter, Pop. = population.

2.5 Nonresidential House Demolition (Affected Enterprises)

28. Four enterprises will be demolished and relocated for the project. Their 32 employees are affected, and all enterprises can maintain normal operation after moving to a new place in advance. 2,475 square meters of houses will be demolished and reconstructed. For details, please see Table 2-12.

Table 2-12: Affected Non-Residential Houses to be Demolished and Relocated

Sn.	Name	Nonresidential House Area to be Demolished	Employee	Monthly Wage of Employee	Can Normally Operate during the Displacement Process
		m ²	Pop.	CNY/month	
1	Sitong Car Repair Shop	485	8	2,000–3,000	Yes, will find a new business site and moving to there in advance.
2	Steel Mold Company	9	2	2,000–3,000	Yes, will find a new business site and moving to there in advance.
3	Logistics Company	1,780	20	2,000–3,000	Yes, will find a new business site and moving to there in advance.
4	Piggery	201	2	2,000–3,000	Yes, will find a new business site and moving to there in advance.
Total		2,475	32		

CNY = Chinese yuan, m² = square meter, Pop. = population.

2.6 Affected Ground Attachments and Auxiliary Buildings

29. The detail information of ground attachments, including 42 fruit trees and 109,114 trees, affected by land acquisition are as shown in Table 2-13.

Table 2-13: Affected Ground Attachments

Town	Village	Unit	Fruit Tree	Trees
Shixia	Shixia	Qty	0	10,704
	Zhaigou	Qty	14	22,697
	Xiajiao	Qty	0	871
	Majiu	Qty	14	34,273
	Sanjia	Qty	0	0
	Subtotal	Qty	28	68,545
Liaoyang	Xiguan	Qty	0	0
	Xilidian	Qty	0	1,452
	Xiaohui	Qty	0	0
	Xichangyi	Qty	0	645
	Jinggou	Qty	0	2
	Dongchangyi	Qty	0	2,099
	Xihetou	Qty	0	0
	Nanjie	Qty	0	0
	Hamatan	Qty	0	0
	Songgou	Qty	0	0
	Shigangkou	Qty	0	0
	Wulihou	Qty	0	0
	Majiaguai	Qty	14	36,371
	Subtotal	Qty	14	40,569
Total			42	109,114

30. The detail information of affected auxiliary buildings are listed in Table 2-14.

Table 2-14: Affected Auxiliary Buildings

Item	Unit	Qilidian Village	Xihetou Village	Dongchangyi Village	Total
Indoor floor (red brick)	m ²	82	41	18	141
Indoor floor (brick)	m ²	75	73	18	166
Outdoor ground (cement)	m ²	95	60	70	225
Outdoor ground (red brick)	m ²	75	70	65	210
Door	m ³	57	59	11	127
Simple door	Qty	10	5	2	17
Brick wall	m ³	28	135	10	173
Earth wall	m ³	20	0	0	20
Concrete foundation	m ³	21	0	0	21
Vegetable cellar	m ²	0	250	9	259
Vegetable cellar	m ³	3	0	0	3
Cellar	m ³	14	14	0	28
Pool	m ³	630	210	0	840
Water cellar	m ²	28	560	0	588
Toilet	Qty	10	10	1	21
Heatable brick bed	Qty	8	8	5	21
Heatable earthen bed	Qty	6	6	0	12
Cooking stove	Qty	1	1	3	5

m² = square meter, m³ = cubic meter, Qty = quantity.

2.7 Affected Population

2.7.1 Summary on Affected Population

31. The project affects a total of 2,031 persons in 822 AHs, among which 1,384 persons in 591 AHs will be affected by permanent land acquisition, residential and nonresidential house demolition; and 647 persons in 231 AHs affected by temporary land occupation. Among persons affected by permanent land acquisition, 104 persons in 24 AHs will be also affected by residential house demolition; these 104 persons in 24 AHs will be affected by both land acquisition and residential house demolition. The details are as shown in Table 2-15.

Table 2-15: Summary of Affected Persons Caused by Permanent Land Acquisition, and Residential and Non-Residential House Demolitions by the Project Components

Component	PIU	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	APs										
				Collective Land ^a	State-Owned Land	Subtotal	Collectively Owned Land		Land Acquisition		House Demolition		Land Acquisition + House Demolition		Subtotal		Enterprise		
				mu	mu	mu	mu		m ²	HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.
Shixia Reservoir Operation and its Watershed Vegetation Improved	ZCSRMD	Re-vegetation around Shixia Reservoir and planting of forest belt along two headwaters	Haogou ChangchengDianshang Daofogou Heyu Chuankou Zhuning Guantou Weijiazhuang Xiaolingdi Pushang Huili Shiyan	0.000	1,922.650	1,922.650	0.000	0	0	0	0	0	0	0	0	0			
	ZCSRMD	Improving the reservoir spillway gate and construction of flood discharge and washout tunnel	Shixia Reservoir	0.000	0.000	0.000	0.000	0	0	0	0	0	0	0	0	0			
	ZCSRMD	Construction of hydrological and water quality monitoring stations around Shixia Reservoir	Haogou Chuankou Shiyan Xiajiao Shixia Reservoir	13.380	0.000	13.380	0.000	0	3	9	0	0	0	0	3	9			
Qingzhang River and Binhe Road Rehabilitated	ZCHSUCMB	Dredging selected sections of the river and tributaries which are heavily silted	Shixia Township Liaoyang Town	0.000	0.000	0.000	25.500	0.000	0	0	0	0	0	0	0	0			
	ZCHSUCMB	River rehabilitation and construction of embankment	Xiguan Qilidian Xiaohui Xichangyi Jinggou Dongchangyi Xihetou	467.510 ^a	323.020	790.520	0.000	0.000	67	152	0	0	0	0	67	152			

Component	PIU	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	APs										
				Collective Land ^a	State-Owned Land	Subtotal	Collectively Owned Land		Land Acquisition		House Demolition		Land Acquisition + House Demolition		Subtotal		Enterprise		
				<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>		HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.	HH
			Shixia Majiu Sanjia																
	ZCHSUCMB	Construction of a wetland park and associated amenity facilities	Xiaohui, Xichangyi	470.310 ^b	44.980	515.290	0.000	0.000	273	630	0	0	0	0	273	630			
Inclusive Water Supply and Wastewater Collection Services Achieved	ZCHSUCMB	Water pollution control	Shixia Township Liaoyang Town, Longquan Township, Hanwang Township	29.060	0.000	29.060	0.000	0.000	0	0	0	0	0	0	0	0	4	32 ^c	2,475
	ZCHSUCMB	Related roads and bridges improvement and widening works	Xiguan Qilidian Xiaohui Xichangyi Jinggou Dongchangyi Xihetou Shixia Majiu Songgou	374.970	5.012	379.980	0.000	8,099.620	226	543	24	104	24	104	226	543			
	ZCWRB	Rural water supply system	Pumping stations: Dongchangyi Songgou Shigangkou Wulihou Majiaguai Water supply pipeline: Majiu Xichangyi Jinggou Dongchangyi Fengpoyu Henan Liujayao Guojayao Songgou Yuyuekou Tudi Qianzhai Shigangkou Xiazhiqi Qinghedian Shuiheng Wulihou Dongzhai Gaozhuang Majiaguai	43.070	0.000	43.070	205.190		22	51	0	0	0	0	22	51			

Component	PIU	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	APs											
				Collective Land ^a	State-Owned Land	Subtotal	Collectively Owned Land		Land Acquisition		House Demolition		Land Acquisition + House Demolition		Subtotal		Enterprise		m ²	
				<i>mu</i>	<i>mu</i>	<i>mu</i>	<i>mu</i>		HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.		
			Liangyu Baoze Caoting Zhangba																	
			Total	1,398.290	2,295.660	3,693.950	230.690	8,099.620	591	1,384	24	104	24	104	591	1,384	4	32	2,475	

AP = affected person, HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), PIU = project implementation unit, Pop. = population, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCSRMD = Zuoquan County Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

^a Among which, 348.64 *mu* land will be rented, all for Construction of wetland park and associated amenity facilities.

^b Among which, 348.64 *mu* land will be rented.

^c They will be also affected by the land acquisition for the road component, and their numbers as APs are included accordingly (see next row).

2.7.2 Affected Vulnerable Groups

32. The types of vulnerable groups involved in the project are as follows:
- (i) **Minimal assurance households.** The annual net household (HH) income is below CNY2,300;
 - (ii) **Single-parent family.** It refers to the families in which the head of family is single, and there are young children;
 - (iii) **Disabled persons.** From the angle of psychology, physiology, and body structure, it refers to the persons whose certain tissues or functions are lost or abnormal; or who's whole or some limbs are lost, but still engaged in certain activities in a normal way; and
 - (iv) HHs with other special hardships.

33. According to the survey, there are 30 HHs belonging to vulnerable groups (accounting for 4.5% of the affected HHs), in which 24 HHs belong to minimal assurance families, and 6 HHs are the five guarantees facility.⁴ The vulnerable HHs are only affected by land acquisition, and the land-loss proportion is between 0% and 36%. The conditions of vulnerable HHs affected by the project are shown in Table 2-16.

Table 2-16: Affected Vulnerable Households

Village	Type of Vulnerable Group			Cultivated Land before Land Acquisition	Expropriated Cultivated Land	Land-loss Proportion	House Demolition(m ²)
	Minimum Assurance	Five-Guarantees	Sub-total				
	No. of HHs	No. of HHs	No. of HHs	<i>mu</i>	<i>mu</i>		
Shixia	4	2	6	10.79	3.39	31%	0
Stables	4	0	4	17.30	4.67	27%	0
Sanjia	2	0	2	8.53	1.80	21%	0
Subtotal	10	2	12	35.13	12.78	36%	0
Xiguan	0	0	0	0.00	0.00	0%	0
Qilidian	2	2	4	16.39	3.54	22%	0
Xiaohui	1	0	1	2.01	0.86	43%	0
Xichangyi	0	2	2	9.29	1.66	18%	0
Jinggou	1	0	1	4.14	0.95	23%	0
Dongchangyi	4	0	4	15.44	3.03	20%	0
Xihetou	6	0	6	6.43	1.38	21%	0
Subtotal	6	0	6	6.43	1.38	21%	0
Chengxi Yuanshui	0	0	0	0.00	0.00	0%	0
Wulihou	0	0	0	0.00	0.00	0%	0
Majiaguai	0	0	0	0.00	0.00	0%	0
Chengxi Yuanshui	0	0	0	0.00	0.00	0%	0
Songgou	0	0	0	0.0	0.0	0%	0
Subtotal	0	0	0	0.00	0.00	0%	0
Total	24	6	30	88.83	24.19	27%	0

HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

34. The monthly allowance for rural HHs enjoying the minimum living guarantee at Zuoquan County in 2016 is CNY450/month/person.

⁴ Five guarantees family (the aged, the infirm, old widows, and orphans) taken care of by the people's communes in five ways (food, clothing, medical care, housing, and burial expenses); households enjoying the five guarantees, i.e., childless and infirm old persons who are guaranteed food, clothing, medical care, housing, and burial expenses by the communes.

2.7.3 Affected Ethnic Minority

35. After investigation and verification, there is no ethnic minority population or ethnic minority villages within the APs and the affected villages.

2.7.4 Affected Women

36. A total of 961 females will be affected by the project; among which, there are 650 persons affected by the land acquisition, and residential and non-residential house demolition; and 311 persons affected by the temporary land occupation. As an HH member, the women will be affected by the land acquisition and house demolition. The gender analysis is seen in Section 3.4. In the project, the gender action plan is also developed and detailed in a separate gender action plan of the project.

CHAPTER 3: SOCIOECONOMIC SURVEY

3.1 Social and Economic Profile of Affected Areas

3.1.1 The Social and Economic Profile of Jinzhong City and Zuoquan County

(i) Jinzhong City

37. The project is located in Zuoquan County, Jinzhong City of Shanxi Province. Jinzhong is a prefecture-level city under the jurisdiction of Shanxi Province, located in central region of Shanxi Province. It is an ancient and also a modern city with profound cultural heritage. In 2015, the gross domestic product (GDP) of Jinzhong was CNY104.61 billion, up by 6.4% than 2014. Jinzhong City covers about 16,400 square kilometers (km²), including Yuci District, Jiexiu City (county level), Taigu County, Qi County, Pingyao County, Lingshi County, Shouyang County, Xiyang County, Heshun County, Zuoquan County, and Yushe County, with total of 2 districts, 1 city, and 9 counties; 118 villages and towns (59 townships, 59 towns); 14 subdistrict offices; and 138 communities. According to the sample survey, the city's permanent residents' population in 2015 is 3,335,694. Per capita annual disposable income of all residents is CNY27,525. Per capita cultivated land area is 1.7 *mu*.

(ii) Zuoquan County

38. Zuoquan County is located in the southeast of Jinzhong City, Shanxi Province, in the middle Tai-hang Mountain area. The county covers an area of 2,028 km². Topography is high west, north and east, and low central south. The county has more than 2,260 rivers and streams, watershed area accounting for 98% of the total area of the county. The main stream of Qingzhang River spans 125.4 kilometers with 2,000 km² of watershed area.

39. The county has 10 towns and 207 administrative villages. In 2015, the GDP of whole county is CNY4.3412 billion, increased by 6.5% over the previous year. Among them, the added value of primary industry is CNY384,330, increased by 6.6%; the added value of secondary industry is CNY2.053 billion, increased by 5.3%. Among them, the industrial added value is CNY1.51099 billion, increased by 6.6% year-on-year; the added value of tertiary industry is CNY1.90299 billion, increased by 7.8%. The proportion of the three industry of last year 8.0:448.9:43 is adjusted to 8.9:47.3:43.8. Per capita GDP is CNY26,310. In 2015, per capita disposable income of farmers is CNY4,430.

3.1.2 The Social and Economic Situation of Affected Town or Township in 2015

40. Liaoyang Town is located in Zuoquan County covering an area of 180,000 km² with 9,201 households (HHs), 24,152 persons, 26 administrative villages under its jurisdiction, and 8 natural villages. The cultivated land of the whole town is 23,987 *mu*, total economic income is CNY297.7974 million, and per capita income is CNY4,920.

41. Shixia Township is located in the west of Zuoquan County, Qingzhang River running through and Nan-Tai line and Shi-Yang line passing through bringing convenient traffic. The township have jurisdiction over 28 administrative villages, 30 villages, 6,289 HHs, and 14,154 persons. Collectively owned cultivated land of whole township is 23,425 *mu*. The total income of rural economy is CNY65.8015 million. Per capita income of farmers is CNY3,807.

42. Longquan Township has 20 administrative villages, 3,267 HHs, 10,149 persons, and cultivated land 13,395 *mu*. The township has basically formed the regional economic development pattern, including Dongshan ecological tourism area, Xishan high-efficiency agricultural area, and industrial development district along the highway.

43. Hanwang Township covers an area of 169.4 km² with rich coal resources, renowned as an important industrial town. The township has 19 administrative villages, 16 natural villages, 4,685 HHs, and 13,447 persons.

3.1.3 The Social and Economic Situation of the Affected Villages (Occupying Cultivated Land)

44. Shixia Village of the Shixia Township is affected by flood control of river channel and ecological restoration project, and auxiliary facilities project for comprehensive treatment of river channel. There are three farmers' group, 945 HHs, 2,150 persons, and 1,700 *mu* of cultivated land. The total economic income of the village was CNY10.7299 million.

45. Sanjia Village of the Shixia Township will be affected by flood control of river channel and ecological restoration project and auxiliary facilities project for comprehensive treatment of river channel. The village has 1 farmers' group, 218 HHs, 530 persons, and 930 *mu* of cultivated land. The total economic income of the village was CNY3.1442 million.

46. Majiu Village will be affected by flood control of river channel and ecological restoration project, auxiliary facilities project for comprehensive treatment of river channel, and auxiliary road project for water supply safety and pollution control. The village has 1 farmers' group, 555 HHs, 1,040 persons, and 2,400 *mu* of cultivated land. The total economic income of the village was CNY5.3217 million.

47. DongChangyi Village of the Liaoyang Town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 220 HHs, 503 persons, and 849 *mu* of cultivated land. The total assets were CNY1.3807 million, the total economic income was CNY4.8276 million, and per capita income was CNY5,337.97.

48. Jinggou Village of the Liaoyang Town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 161 HHs, 400 persons, and 667 *mu* cultivated land. The total assets were CNY451,000, the total economic income was CNY3.7272 million, and per capita income was CNY5,307.25.

49. XiChangyi village of the Liaoyang town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 129 HHs, 356 persons, and 599 *mu* of cultivated land. The total assets were CNY2.294 million, the total economic income was CNY2.9916 million, and per capita income was CNY1,962.92.

50. Xihetou Village of the Liaoyang Town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 429 HHs, 1,050 persons, 460 *mu* cultivated land. The total assets were CNY3.3701 million, the total economic income was CNY9.0237 million, and per capita income was CNY5,529.14.

51. Qilidian village of the Liaoyang town will be affected by flood control of river

channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 386 HHs, 915 persons, 1582 mu cultivated land. Total assets were CNY2.6862 million, total economic income was CNY9.6062 million, and per capita income was CNY5,486.94.

52. Xiaohui village of the Liaoyang town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 142 HHs, 334 persons, 285 mu cultivated land. In 2015, total assets were CNY1.3389 million, total economic income was CNY4.8728 million, and per capita income was CNY5,202.10.

53. Xiguan village of the Liaoyang town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 747 HHs, 1803 persons, 465 mu cultivated land. In 2015, total assets were CNY56.0827 million, total economic income was CNY27.4296 million, and per capita income was CNY5,677.

54. Nanjie village of the Liaoyang town will be affected by flood control of river channel and ecological restoration project and auxiliary road project for water supply safety and pollution control. The village has 594 HHs, 1596 persons, 709 mu cultivated land. In 2015, total assets were CNY11.6298 million, total economic income was CNY27.0872 million, and per capita income was CNY5,593.79.

55. Songgou village of the Liaoyang town will be affected by auxiliary road project for water supply safety and pollution control. The village has 155 HHs, 415 persons, 270 mu cultivated land. In 2015, total assets were CNY2.5101 million, total economic income was CNY7.0796 million, and per capita income was CNY5,187.95.

56. Shigangkou village of the Hanwang Township will be affected by auxiliary road project for water supply safety and pollution control. The village has 195 HHs, 459 persons and 520 mu cultivated land. The per capita income is CNY4,300.

57. Wulihou village of the Hanwang Township will be affected by auxiliary road project for water supply safety and pollution control. The village has 518 HHs, 1,250 persons and 1,820 mu cultivated land. The per capita income is CNY4,200.

58. Majiaguai village of the Hanwang Township will be affected by auxiliary road project for water supply safety and pollution control. The village has 139 HHs, 335 persons and 409 mu cultivated land. The per capita income is CNY4,100.

3.2 Social and Economic Conditions of Affected Persons

59. For further understanding the basic situation of village HHs involved in the project and making an analysis of the impact of the project on the local residents, Zuoquan PMO made an investigation on the factual matter amount of land acquisition and house demolition; at the same time, resettlement specialists did social economic survey of the affected villages involving 258 sample HHs. The following sub-sections/paragraphs summarize the findings of the survey.

3.2.1 The Basic Situation of Affected Households

60. The age, gender, occupation and education level of the effected population are shown in table 3-1. The sample number of APs is 258 HHs, with 798 APs which includes 411 men and 387 women. 62.40% of the population aged from 18 to 50 years old. 73.68% of the labor force has received education above middle school. 57.52% of

them engaged in farming, seldom working outside (24.06%), few doing business.

Table 3-1: Age, Sex, Education, and Occupation of Affected Persons

HHs	258			
Total population	798			
Population per HH	3.09			
	Male	Female	Subtotal	Proportion
	411	387	798	
Age				
0–17	63	51	114	14.29%
18–50	261	237	498	62.41%
Above 50	87	99	186	23.31%
Subtotal	411	387	798	100.00%
Education				
Illiteracy	15	15	30	3.76%
Primary school	69	111	180	22.56%
Middle school	129	102	231	28.95%
High school	159	141	300	37.59%
University	42	15	57	7.14%
Total	411	387	798	100.00%
Occupation				
Student	63	51	114	14.29%
Farmer	189	270	459	57.52%
Worker	21	0	21	2.63%
Outside employment ^a	126	66	192	24.06%
Businessman	6	0	6	0.75%
Cadres	6	0	6	0.75%
Total	411	387	798	100.00%

HH = household.

^a The incomes of perennial working outside farmers are included.

3.2.2 Income and Expenditure of Affected Households

61. Living conditions, agricultural production and family property status of the affected HHs see table 3-2. HH income and expenditure see table 3-2.

Table 3-2: Agricultural Production, Property, and Living Conditions of Affected Households

Category		Unit	Total Qty	Average Qty per HH
Basic situation		HH	258	
		Person	798	
Land	Farmland	<i>mu</i>	664.83	2.58
House		m ²	51,084	198.00
Family property	Color TV	Qty	273	1.06
	Refrigerator	Qty	207	0.80
	Washing Machine	Qty	243	0.94
	Tractor	Qty	30	0.12
	motorcycle	Qty	213	0.83
	Water pump	Qty	9	0.03

Category	Unit	Total Qty	Average Qty per HH
Large livestock	Qty	0	0.00
Network	Qty	162	0.63
Telephone	Qty	339	1.31
Car	Qty	84	0.33

HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), Qty = quantity..

Table 3-3: Income and Expenditure of Affected Persons

	HH	HH	258
	Person	Person	798
Income	Cash wage income	CNY/person	4,961
	Cash business income	CNY/person	872
	Cash property income	CNY/person	539
	Cash transfer income	CNY/person	557
	Subtotal	CNY/person	6,929
Expenditure	Food, cigarette and wine	CNY/person	2,139
	Clothing	CNY/person	779
	Living	CNY/person	509
	Daily necessities and services	CNY/person	284
	Traffic and communication	CNY/person	499
	Education, culture and entertainment	CNY/person	306
	Medical care	CNY/person	343
	Other goods and services	CNY/person	336
	Subtotal	CNY/person	5,195
	Cash expenses of production and operation	CNY/person	704
Net income		CNY/person	6,225

HH = household.

3.3 Willingness of Land Acquisition, House Demolition, Compensation, and Resettlement

62. Willing investigation of land acquisition, house demolition, compensation, and resettlement found that affected HHs choose cash compensation. The compensation will be used mainly for working outside, savings, house purchasing and subsidies for daily expenses. All relocated HHs except one choose to receive cash and buy house in urban residential area. The willingness of using Compensation sees table 3-4.

Table 3-4: Willingness of Using Compensation

Category	Households	Percentage
1. Answered samples of using land acquisition compensation money	150	100.0%
(1) Put into production	60	40.0%
(2) Purchase vehicles	60	40.0%
(3) Seasonal work	135	90.0%
(4) Repair water conservancy facilities	0	0.0%
(5) Restoration of low yield farmland	0	0.0%
(6) Deposit in bank	135	90.0%

Category	Households	Percentage
(7) House building	78	52.0%
(8)Subsidies for daily expenses	75	50.0%
(9) Purchase social insurance	0	0.0%
(10) Pay tuition	60	40.0%
2. Answered samples of "housing compensation way" (i.e., mode of resettlement)	24	100.0%
(1) Resettlement housing	1	4.17%
(2) Give money to buy house	23	95.84%

3.4 Gender Analysis

63. A total of 961 females will be affected by the project, among which, there are 650 persons affected the land acquisition, residential and non-residential house demolition, and 311 persons affected by the temporary land occupation.

64. Women's rights and their status is equal with men in the project affected area, and they play a very important role in economic development activities.⁵ Women focus on farming and doing housework, mastering their own family's economic situation. In the survey, they pay more care and attention to resettlement and livelihood restoration. This project will offer equal training and employment opportunities for APs including men and women. If the job is suitable for women, women will be first considered. Therefore, the status of women will be raised from the perspective of employment and economic development.

65. Gender difference in education. Table 3-1 shows slightly difference between female and male in education level. For the proportion of education degree above middle school, women at 66.67% are lower than men at 80.29%.

66. Gender differences in employment. 45.99% of men and 69.77% of women are farmers; 30.66% of men and 17.05% of women work outside.

67. Gender differences in income: For income of seasonal work, men accounted for 80%, women accounted for 20%.

68. Different gender's opinion on resettlement see table 3-5.

Table 3-5: Gender Analysis

Project Concerns	Male		Female	
	Major	Minor	Major	Minor
1. Just compensation	√		√	
2. Timely reimbursements	√		√	
3. Start a business	√			√
4. Returned land used for farming		√		√
5. Loss of income		√	√	
6. Future employment	√		√	
7. Children's education	√		√	
8. Help during resettlement	√		√	
9. Separation between children and relatives		√	√	

⁵ Other project benefits are also shown in paras. 140 and 141.

69. For the impact of house demolition under the project, residents will get better living conditions than before in their new houses. For women who bear most housework, the improvement of living conditions and environment will reduce their burden and improve their living quality.

70. During the detailed design stage, women's needs will be particularly taken into consideration, so that they benefit more from the project. Design of public facilities or services such as street lights, warning signs, green belt, vocational, and technical training will consider women's needs.⁶

⁶ Please refer section 6.6.

CHAPTER 4: LEGAL FRAMEWORK AND POLICY

4.1 Overview

71. The resettlement plan (RP) follows relevant laws of People's Republic of China (PRC) and relevant provisions of Shanxi Province and the Asian Development Bank's (ADB) Safeguard Policy Statement (2009).

4.2 ADB Policy

72. ADB's policy on involuntary resettlement has three key elements: (i) compensation for lost properties, livelihoods and income; (ii) assistance in resettlement; and (iii) assistance for restoration, as a minimum, to the standard of living in the absence of the project, taking into account the following basic principles:

- (i) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- (ii) Carry out meaningful consultations with affected persons, host communities, and concerned nongovernmental organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- (iii) Improve or at least restore, the livelihoods of all displaced persons through (a) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (b) prompt replacement of assets with access to assets of equal or higher value, (c) prompt compensation at full replacement cost for assets that cannot be restored, and (d) additional revenues and services through benefit sharing schemes where possible.
- (iv) Provide physically and economically displaced persons with needed assistance, including the following: (a) if there is relocation, secured tenure to relocation land, better housing at urban residential areas with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (b) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (c) civic infrastructure and community services, as required.

- (v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- (vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- (vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.
- (viii) Prepare a RP elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- (ix) Disclose a draft RP, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final RP and its updates to affected persons and other stakeholders.
- (x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- (xi) Pay compensation and provide other resettlement entitlements before physical or economic relocation. Implement the RP under close supervision throughout project implementation.
- (xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the RP have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

4.3 The PRC Laws and Policies

73. The Land Administration Law of the PRC is the main policy basis of the project. The Ministry of Land and Resources and the Shanxi Province People's Government have promulgated policies and regulations on this basis.

74. The Decision of the State Council on Deepening the Reform and Rigidly Enforcing Land Administration (SC [2004] No.28) promulgated in October 2004 defines the principles and rates of compensation and resettlement for land acquisition, and land acquisition procedures and monitoring system. These legal documents constitute the legal basis for resettlement in the project together with the Guidelines on Improving Compensation and Resettlement Systems for Land Acquisition (MLR [2004] No.238).

The abstract of the Land Administration Law and Relevant Policies is shown in appendix 6.

4.4 Policies of Shanxi Province

75. Notice of the Shanxi Province People's Government on Adjusting Uniform AAOV Rates, SPG [2013] No.22: A uniform AAOV rate consists of a uniform AAOV and a compensation multiple, and local uniform AAOV rates are the basis for LA compensation calculation: (i) these rates apply to collective farmland in Shanxi Province except basic farmland; (ii) where the occupation of basic farmland is inevitable for key state construction projects, the highest statutory rate shall apply after approval by the State Council; (iii) when collective farmland is acquired for any nonagricultural construction project, the uniform AAOV and the compensation multiple shall be based on location; (iv) these rates shall include land compensation and resettlement subsidy only, and exclude compensation for young crops and ground attachments. The compensation for young crops shall not exceed the output value per harvest, and ground attachments will be compensated for at cost; (v) if any farmland in any state-owned farm or forest farm is to be acquired for state economic construction or local public welfare purposes, compensation may be based on these rates (including land compensation, resettlement subsidy, and compensation for young crops and ground attachments); (vi) land compensation for acquired construction and unused land shall be based on the upper limit of the compensation multiple, and that for acquired rural housing land based on the compensation rate for nearby cultivated land; and (vii) land reclamation costs and social insurance premiums for Land-loss farmers shall be based on the adjusted uniform AAOV rates and the multiples stipulated in the province. If the former living standard of Land-loss farmers cannot be maintained after land compensation and resettlement subsidy are paid at the published rates, resettlement subsidy shall be increased or a subsidy paid from income on the compensated use of state-owned land. Local governments shall increase the proportion of distribution to farmers in value-added land income. All local governments and departments should attach great importance to land acquisition compensation and resettlement, and take effective measures to coordinate the new and old rates properly. Land acquisition compensation and resettlement shall be organized and implemented by municipal and county governments in a unified manner, and acquired land shall not be used if land acquisition compensation and resettlement funds, or social insurance premiums for land-loss farmers are not available.

76. Notice on pension insurance cost for land-loss farmers, issued by Office of the Shanxi Province People's Government, No. [2009] 72: (i) among the pension insurance cost paid by the construction agency, 60% of it will be used to pay the pension insurance cost which originally undertaken by APs themselves, and the other 40% to pay the cost which original should be paid by the village committee; and (ii) if the pension insurance cost paid by construction agency is still insufficient, the insufficient part will be paid by the local government by using the land fund.

4.5 Main Differences between ADB's Policy and The PRC Laws, and Solutions to Fill the Differences

77. Compensation for Land

- (i) **Difference.** ADB requires that compensation should be sufficient to offset any income loss, and restore long-term, income-generating potential. The PRC standards are based on the average annual output value (AAOV).
- (ii) **Solution.** An early-stage solution is to provide replacement land, which

is hardly practical because of both limited remaining collective land resource and the complicated legal procedure for re-adjusting the land contracting system. The project affected area is near the Zuoquan County; and remaining collective land for all villages is limited, especially the cultivated land. The 2nd round of national collective land contracting was conducted in 1997, and land contracts validity will last for 30 years. Cash compensation is the preference of most people, though they may not ensure the rational use of such compensation. Therefore, further technical support is needed to monitor the income of seriously affected households (AHs),⁷ especially those in vulnerable groups, and local governments will provide assistance to those in need.

78. **Compensation and resettlement of Vulnerable Groups**

- (i) **Difference.** ADB require that special assistance is granted to all vulnerable groups faced with impoverishment. The PRC provisions do not require social analysis, and compensation is based only on the amount of loss.
- (ii) **Solution.** Special funds are available to assist the vulnerable groups, who will be confirmed during the detailed measurement survey. All measures have been specified in the RP.

79. **Consultation and Disclosure**

- (i) **Difference.** ADB require APs are fully informed and consulted as soon as possible. The PRC provisions have improved the transparency of disclosure and compensation. However, APs still play a weak role in project decision making, and the disclosure period is usually too short.
- (ii) **Solution.** Consultation has begun at the early stage (before and during the technical assistance). Zuoquan PMO will disclose the RP to APs as required by ADB.

80. **Lack of Legal Title**

- (i) **Difference.** ADB require all demolished houses, whether lawful or not, should be compensated for at the same rates. According to the PRC laws, people without local registered residence are entitled to the same compensation as local people. In addition, prevailing PRC laws stipulate that no compensation should be provided for the acquisition of illegally owned land and houses.
- (ii) **Solution.** For an ADB-financed project, all APs, whether lawful or not, whether having ownership or right of use, will be protected, and provided with compensation or assistance.

55. **Resettlement Monitoring, Evaluation, and Reporting**

- (i) **Difference.** ADB requires that internal and external resettlement monitoring be conducted. However, there is no such requirement in the PRC laws, except for reservoir projects.
- (ii) **Solution.** Internal and external resettlement monitoring systems have been established for all ADB-financed projects, and this has been included in the RP. The requirements for internal and external

⁷ Please refer Section 8.2.

monitoring reporting are specified in the RP.

4.6 Resettlement Principles of the Project

81. The project will strictly follow ADB's requirements, and take ADB's resettlement policy (see section 4.2) as the resettlement principles of this project.

82. In addition, this project will (i) avoid the involuntary resettlement as far as feasible; (ii) ensure that the affected persons will be better off or at least not worst off as a result of the project; (iii) the APs are given compensation and assistance no matter it has legal title or not; (iv) if insufficient replacement land for the APs to maintain his/her livelihood, cash compensation and other income restoration measures will be provided to the APs; (v) ensure all APs fully know and understand their entitlements, their resettlement measures and compensation standards, their livelihood and income restoration plan, project schedule; and ensure they can participate the resettlement preparation and implementation; (vi) the PIU and external monitor will monitor the whole resettlement and income and/or livelihood restoration process; (vii) vulnerable groups will be provided with special assistance so that they can be better off; and all APs should have opportunities to benefit from the project; at least 2 members of each AHH will receive skills training, including at least one woman; (viii) the RP is consistent with the master plans of the affected city/county and township; and (ix) the resettlement costs are sufficient to cover all affected aspects.

4.7 Cut-off Date

83. The cut-off date of the project is 30 July 2016. The cut-off date was disclosed to the APs during the impacts survey phase and within the resettlement information booklet.

4.8 Compensation Rates

4.8.1 Compensation Rates for Land Acquisition⁸

84. The land acquisition compensation rates will be carried out according to the related laws and regulations of the PRC, the Shanxi Province People's Government, the Jinzhong City People's Government, and the Zuoquan County People's Government, as well as the policies of the ADB. The compensation rate for land acquisition and temporary occupation is shown in the Table 4-1.

⁸ The compensation rates meet replacement cost. For more details, please see section 6.2.2.

Table 4-1: Compensation rate for the Acquisition of Land Owned by Rural Collective and for the Occupation of Land Owned by the State

Location	Land Category	AAOV	Land Compensation	Resettlement Allowance	Increase	Subtotal	Compensation Rate	Village involved in the Project
		CNY	Multiple	Multiple	Multiple	Multiple	CNY/mu	
Planned areas of the county territory	Cultivated land	1,440	9	19	2	30	43,200	Xiguan, Qilidian, Xiaohui, Xichangyi, Jinggou, Dongchangyi, Xihetou, Majiu, Sanjia Songgou
	Garden land	1,440	9	19	0	28	40,320	
	Forest land	1,440	9	19	-2	26	37,440	
	Grassland	1,440	9	19	-4	24	34,560	
	Land used by authorities of city, town or village or used for industry and mining	1,440	4	0	0	4	5,760	
	Land used for traffic and transportation	1,440	4	0	0	4	5,760	
	Land used for water area or water conservancy facilities	1,440	0	0	0	0	0	
	Other lands	1,440	4	0	0	4	5,760	
	Compensation for young crops	1,440	1	0	0	1	1,440	
	Pension/insurance	1,440				5	7,200	
Central mountainous area	Cultivated land	1,210	9	19	2	30	36,300	Heyu Chuankou Zhuning Shiyan Huili Shixia Xiajiao Majiaguai Shigangkou
	Garden field	1,210	9	19	0	28	33,880	
	Forest field	1,210	9	19	-2	26	31,460	
	Grass field	1,210	9	19	-4	24	29,040	
	Land used by authorities of city, town or village or used for industry or mining	1,210	4	0	0	4	4,840	

Location	Land Category	AAOV	Land Compensation	Resettlement Allowance	Increase	Subtotal	Compensation Rate	Village involved in the Project
		CNY	Multiple	Multiple	Multiple	Multiple	CNY/mu	
	Land used for traffic and transportation	1,210	4	0	0	4	4,840	
	Land used for water area and water conservancy facilities	1,210	0	0	0	0	0	
	Other lands	1,210	4	0	0	4	4,840	
	Compensation for young crops	1,210	1	0	0	1	1,210	
	pension/insurance	1,210	0	0	0	5	6,050	
Eastern and western mountainous area	Cultivated land	1,200	9	13	2	24	28,800	Haogou, Changcheng, Dianshang, Daofogou, Xiaolingdi, Guantou, Pushang, Weijia
	Garden field	1,200	9	13	0	22	26,400	
	Forest field	1,200	9	13	-2	20	24,000	
	Grass land	1,200	9	13	-4	18	21,600	
	Land used by authorities of city, town or village or used for industry and mining	1,200	4	0	0	4	4,800	
	Land used for traffic and transportation	1,200	4	0	0	4	4,800	
	Land used for water area and water conservancy facilities	1,200	0	0	0	0	0	
	Other lands	1,200	4	0	0	4	4,800	
	Compensation for young crops	1,200	1	0	0	1	1,200	
	Pension/insurance	1,200						

AAOV – average annual output value, CNY = Chinese yuan, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

85. Except the cultivated land and garden land, other land to be rented has no income. The compensation rate is confirmed after negotiating with the APs. The guiding rent fee for garden land is CNY960/*mu*/year, while CNY480/*mu*/year for forest land, CNY384/*mu*/year for grassland, CNY576/*mu* for other land (including transportation land, urban land, and others).

86. In addition, the following taxes and expenses will be paid at the acquisition of the collectively-owned land: (i) Land reclamation expense; (ii) expense for compensated use of newly added construction land; and (iii) tax for occupation of cultivated land. Please see the Table 4-2 for details.

Table 4-2: Standard of Other Expenses for Land Acquisition

Name	Standard of Land Acquisition	
	CNY/ m ²	CNY/ <i>mu</i>
Expense for land reclamation	10	6,667.0
Expense for compensated use of newly added construction land	14	9,333.8
Tax for occupation of cultivated land	16	10,667.2

CNY = Chinese yuan, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

4.8.2 Compensation Rates of Housing Demolition

87. The standard of final compensation for housing demolition will be determined according to the real estate appraisal price at the principle of replacement cost. An independent estate appraisal agency (will be jointly determined by the APs and the PIUs) should undertake real estate appraisal of the project. Please see the Figure 4-3 for the guiding compensation rate of housing demolition.

88. One HH choose replacement house. The PIU will provide replacement housing with same area to the AH.

Table 4-3(1): Guiding Compensation Rates for House Demolition

Type	Unit	Standard	Remark	
Brick and concrete	CNY/m ²	2,300		
Brick and timber	CNY/m ²	1,980		
Attachment	CNY/m ²	56		
Transition resettlement	CNY/m ² / month	8	CNY240/month will be granted for an area of housing less than 30 m ² and CNY8/month will be granted for areas no less than 30 m ² for 18 months.	
Relocation allowance	Residential housing	CNY/m ² / month	10	CNY300 for an area less than 30 m ²
	office	Relocation allowance	12	
	Business housing	Relocation allowance	15	
Telephone	CNY/HH	80		
Closed Circuit TV	CNY/HH	250		
Solar energy	CNY/HH	200		

CNY = Chinese yuan, HH = household, m² = square meter.

89. Table 4-3(2) shows the estimated price of replacement house construction. The compensation price of re-housing will be higher than the replacement price and further determined by an independent real estate appraisal agency which will be co-selected by the APs and the PIUs. The one HH who lives in Xihetou Village, 656.2 m², six family members, including three females, chooses replacement house will get new house with same area of house. The other HHs who choose cash compensation will buy their new houses in Zuoquan City. The Zuoquan County People's Government will coordinate this and ensure all APs can get their replacement house before house demolition.

Table 4-3(2): The Replacement Price of Project Area

Area of the Proposed Housing	Unit	Unit Price	Brick and Concrete Structure		Brick and Timber Structure	
	m ²	CNY	185.11 m ²		119.70 m ²	
Project			Qty	Investment	Use level	Investment
Labor cost	Work day	150	180	27,000	110	16,500
Common steel	t	1,840	6.932	12,754.88	0	0
Ordinary cement	t	270	44.64	12,052.8	25.3	6,831
Red brick	m ³	390	85.643	33,400.77	0.00	0.00
Others				23,000		17,000
Total				108,208.45		40,331.0
Unit price	CNY/m ²			584.56		336.93

CNY = Chinese yuan, m² = square meter, m³ = cubic meter, t = ton..

4.8.3 Compensation Rate for Temporary Land Occupation

90. If the cultivated land is temporarily used, the people who are affected will be granted compensation, with the compensating principle of granting 1-year compensation of AAOV. The cost for land restoration is incorporated into the civil engineering agreement.

4.8.4 Compensation Rate for the Young Crops and Other Ground Attachments

91. As for the compensation rate of the over-ground attachment, please see the Table 4-4, and as for the compensation rate of the trees with different tree diameters, please see the Table 4-5. The economic value of different kinds of trees will be considered when the compensation for trees is being considered (Table 4-6).

Table 4-4: Compensation Rates for the Attached Construction and Over-ground Attachment

Item	Unit	Price (CNY)	Remark
Garage	m ²	700	
Door (Type one)	m ²	600	
Door (Type two)	m ²	400	
Door (Type three)	m ²	300	
Door (Type four)	m ²	200	
Simple Door	piece	500-1,000	
Brick wall	m ³	200	

Item	Unit	Price (CNY)	Remark
Earthen wall	m ³	120	
Concrete floor	m ²	50	
Concrete basis	m ²	300	
Indoor floor (Red brick)	m ²	50	
Indoor floor (floor tile)	m ²	70	
Outdoor ground (Cement)	m ²	50	
Outdoor ground (Red brick)	m ²	30	
Cistern	m ³	100	
Pool	m ³	100	
Water channel	piece	200	
Vegetable cellar	m ²	100	
Vegetable cellar (simple)	piece	260	
Heatable brick sleeping platform	piece	600–800	
Heatable earth sleeping platform	piece	600	
Oven	piece	600	
Toilet	piece	200–800	
Cow enclosure	m ²	240–350	
Pig Sty	m ²	240–350	
Donkey enclosure	m ²	240–350	
Sheep fold	m ²	240–350	
Doghouse	piece	100	
poultry house	piece	100	
Biogas digester	m ³	200	
Green house	m ²	22	

CNY = Chinese yuan, m² = square meter, m³ = cubic meter.

Table 4-5 Compensation Rates for Trees

Specification of Tree Diameter (cm)	Economic Forest (CNY/tree)	Commercial Forest (CNY/tree)
Saplings (including willow, elm, locust, pines and cypress, robinia pseudoacacia)	20	10
Diameter from 14.0 cm to 15.9 cm	360	140
Diameter from 26.0 cm to 27.9 cm	1,200	380
Diameter from 32.0 cm to 33.9 cm	1,400	600
Diameter from 40.0 cm to 41.9 cm	1,800	1,000

CNY = Chinese yuan, cm = centimeter.

Table 4-6 Compensation Rates for Special Economic Nursery Stock

Type	Specification of the Diameter of the Tree (cm)	Unit Price of Compensation (CNY/tree)
Grapevine	1-year plant	60
	2-year plant	100
Medlar	Annual plant	60
	2-year plant	100
	5-year plant	300
Fruit tree	Diameter of from 6.0 cm to 7.9 cm	200
	Diameter of from 14.0 cm to 15.9 cm	700
	Diameter of from 18.0 cm to 19.9 cm	900
	Diameter of from 26.0 cm to 27.9 cm	1,150
Jujube tree	Diameter of from 6.0 cm to 7.9 cm	200
	Diameter of from 14.0 cm to 15.9 cm	700

CNY = Chinese yuan, cm = centimeter.

4.9 Entitlement Matrix

92. Please see the Table 4-7 for Entitlement Matrix, prepared based on the applicative policies mentioned in this chapter.

Table 4-7. Entitlement Matrix

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate
Acquisition of collectively-owned land	1,049.65 <i>mu</i> of collectively-owned land	33 villages	Providing the land acquisition compensation, among which 80% of the land compensation fee will be allocated to HH in cash, and 20% of the land compensation fee will be allocated to village collectives	CNY28,800/ <i>mu</i> : Haogou Village, Changcheng Village, Dianshang Village, Daofogou Village, Xiaolingdi Village, Guantou Village, Pushang Village, Weijia Village CNY36,300/ <i>mu</i> : Heyu Village, Chuankou Village, Zhuning Village, Shiyan Village, Huili village, Shixia Village, Xiajiao village, Majiaguai Village, Shigangkou Village CNY43,200/ <i>mu</i> : Xiguan Village, Qilidian Village, Xiaohui Village, Xichangyi Villadge, Jinggou Village, Dongchangyi Village, Xihetou Village, Majiu Village, Sanjia Village, Songgou Village
		591 HHs and 1,384 persons	(1) Cash compensation. The standard of the AAOV and the compensation policy published by the Shanxi Province People's Government; (2) Non-agricultural job placement. The government will arrange public service positions or positions created by the Project for the APs; (3) Skills training. Provide agricultural and non-agricultural technical training through the normal training courses which is free of charge and is opened by the Human Resource and Social Safeguard Bureau of Zuoquan County; (4) Pension insurance. Provide pension insurance for the APs; and (5) young crops compensation.	80% of the land acquisition compensation (see above row) will be allocated to HH in cash
Land occupation	348.64 <i>mu</i> collective land to be rented	Affected villages	(1) The project owner or the PIUs will sign land leasing agreements with the affected villages. (2) The real land leasing price will be determined by negotiation and the guiding land leasing price is CNY960/ <i>mu</i> /year for cultivated land, while CNY480/ <i>mu</i> /year for forest land, CNY384/ <i>mu</i> /year for grassland, CNY576/ <i>mu</i> for other land (including transportation land, urban land, and others).	CNY384–CNY960/ <i>mu</i> /year
	1,951.2 <i>mu</i> of State-owned land	<i>mu</i>	The state-owned land will be allocated to the Project at free	Free

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate																									
Housing		24 HHs and 104 persons	<p>(1) The APs can choose cash compensation or the replacement houses.</p> <p>(2) For APs choosing cash compensation, the structures below 2 stories on the legal housing site will be compensated as the appraised price, the highest appraised price cannot exceed 160% of local market price.^a</p> <p>(3) For APs choosing the replacement houses, the structures below 2 stories on the legal housing site will be compensated in 2 ways, one is the highest compensation area cannot exceed 150% of the original areas, the other way is providing 160% housing sites area to the APs.^a For those replacement housing area is less than 160%, the PIU will provide replacement price for the insufficient housing site area. Only one household choose replacement house.</p>	<p>The real compensation amount will be determined by appraisal conducted in the implementation phase. The guiding minimum price is the following.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Unit</th> <th>Standard</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Brick and concrete</td> <td>CNY/m²</td> <td>2,300</td> <td></td> </tr> <tr> <td>Brick and timber</td> <td>CNY/m²</td> <td>1,980</td> <td></td> </tr> <tr> <td>Attachment</td> <td>CNY/m²</td> <td>56</td> <td></td> </tr> <tr> <td>Transition resettlement</td> <td>CNY/m²/month</td> <td>8</td> <td>CNY240/month will be granted for an area of housing less than 30 m² and CNY8/month will be granted for areas no less than 30 m² for 18 months.</td> </tr> <tr> <td>Relocation allowance</td> <td>Residential housing</td> <td>CNY/m²/month</td> <td>10</td> <td>CNY300 for an area less than 30 m²</td> </tr> </tbody> </table>	Type	Unit	Standard	Remark	Brick and concrete	CNY/m ²	2,300		Brick and timber	CNY/m ²	1,980		Attachment	CNY/m ²	56		Transition resettlement	CNY/m ² /month	8	CNY240/month will be granted for an area of housing less than 30 m ² and CNY8/month will be granted for areas no less than 30 m ² for 18 months.	Relocation allowance	Residential housing	CNY/m ² /month	10	CNY300 for an area less than 30 m ²
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Relocation allowance	Residential housing	CNY/m ² /month	10	CNY300 for an area less than 30 m ²																									
Houses of enterprise		4 HHs and 32 persons	Compensated as the appraised replacement price. And restore their production and business after the compensation by the guidance of local government	<p>The real compensation price will be determined by appraisal conducted in the implementation phase.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Unit</th> <th>Standard</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Brick and concrete</td> <td>CNY/m²</td> <td>2,300</td> <td></td> </tr> <tr> <td>Brick and timber</td> <td>CNY/m²</td> <td>1,980</td> <td></td> </tr> <tr> <td>Attachment</td> <td>CNY/m²</td> <td>56</td> <td></td> </tr> <tr> <td>Transition resettlement</td> <td>CNY/m²/month</td> <td>8</td> <td>CNY240/month will be granted for an area of housing less than 30 m² and CNY8/month will be granted for areas no less than 30 m² for 18 months.</td> </tr> <tr> <td>Relocation allowance</td> <td>Business housing</td> <td>CNY/m²/month</td> <td>15</td> <td></td> </tr> </tbody> </table>	Type	Unit	Standard	Remark	Brick and concrete	CNY/m ²	2,300		Brick and timber	CNY/m ²	1,980		Attachment	CNY/m ²	56		Transition resettlement	CNY/m ² /month	8	CNY240/month will be granted for an area of housing less than 30 m ² and CNY8/month will be granted for areas no less than 30 m ² for 18 months.	Relocation allowance	Business housing	CNY/m ² /month	15	
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Relocation allowance	Business housing	CNY/m ² /month	15																										

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate
Temporarily occupying the land	230.69 mu	231 HHs and 647 persons	(1) Cash compensation: the compensation of young crops will be provided to the persons who are affected. (2) The land restoration cost will be incorporated in the civil construction agreement.	The compensation will be offered to the HH who are affected according to the proportion of 100% of the AAOV, with the compensation period of 1 year (CNY1,440/mu).
Young crop and overland attachment	Trees, other agriculture production facilities and attached construction	Farmer determined by the proprietorial right	Cash compensation will be provided to the persons being affected according to the replacement price.	See the tables 4-3, 4-4 and 4-5 for details.
Vulnerable groups	Land acquisition and house demolition	30 HHs	(1)The PMO and the village committee will use the vulnerable group assistance reserve fund (used for such actions as leasing car, hiring, heart-warming assistance in winter, etc.) (2) The vulnerable group can preferentially obtain the job opportunities provided by the construction unit of the project or other life recovery measures. (3)The PMO and the Village Committee will help to build a new home and improve livelihoods.	
Complaint and appeal		All the persons being affected	It is free of charge to complain and appeal, and all the reasonable expenses caused from the complaint and appeal will be paid with the reserve fund of the project.	

AAOV = average annual output value, CNY = Chinese yuan, HH = household, m² = square meter, m³ = cubic meter.mu = a Chinese unit of measurement (1 mu = 666.67 square meters or 0.067 hectares), PIU = project implementation unit, PMO = project management office.

^a All residential houses to be demolished this project are all on the legal housing sites.

CHAPTER 5: PUBLIC PARTICIPATION AND CONSULTATION

93. In the decision-making process of the planning, design and implementation, the Zuoquan County People's Government and governments of related villages (towns) have disclosed the basic information of the project in various ways, sought for opinions from all stakeholders, including the affected persons, and made consultation on the questions involving common interest, through carrying out social-economic survey and investigation.

5.1 Public Participation and Consultation Activities Carried Out in the Preparatory Stage of the Project

94. See the Table 5-1 for the details of the publication of the main resettlement information and the public consultation activities.

Table 5-1: Main Resettlement Information Disclosure and Consultation Activities

No.	Time	Content	Participants	No. of participants	Among which: Females	Organizer
				Pop.	Pop.	
1	2014.3—2016.11	Optimization of the design program of the Project	Zuoquan PMO, Tongji University Designing Institute, and representatives of the village collective and the APs	160	70	Zuoquan PMO
2	2015.3-2016.11	Determination of the amount / number of the land acquisition and demolished housing	The PMO of Zuoquan County, the Design Institute of Tongji University, the Land Bureau, the Housing Bureau, and the affected villages and HHS	65	30	Zuoquan PMO
3	2015.3-2016.11	Standard of compensation for land acquisition	The PMO, and the representatives of village collective and APs	65	26	Zuoquan PMO
4	2015.3-2016.11	Standard for housing compensation	The PMO, and representatives of village collective and APs	35	15	Zuoquan PMO
5	2015.3-2016.11	Social impact of the Project	The PMO, the Design Institute of Tongji University, resettlement specialist and APs	102	30	Zuoquan PMO
6	2015.7-2016.11	Mode of resettlement and intentions	Zuoquan PMO	110	30	Zuoquan PMO
7	2015.7-2016.11	Resettlement policy	Zuoquan PMO, the Design Institute of Tongji University, and APs	110	30	Zuoquan PMO
8	2015.7-2016.11	Consultation on the place for resettlement	Zuoquan PMO, the Design Institute of Tongji University, APs	35	10	Zuoquan PMO

No.	Time	Content	Participants	No. of participants	Among which: Females	Organizer
				Pop.	Pop.	
9	2015.12-2016.11	Consultation on the place for resettlement	Zuoquan PMO, the Design Institute of Tongji University, APs	75	20	Zuoquan PMO
Total				757	261	

AP = affected person, HH = household, PMO = project management office.

95. Meetings concerning housing demolition and the resettlement measures for the APs were held by the People's Government of Shixia Village, the People's Government of the Liaoyang Town, and the Zuoquan PMO during 22–24 July 2015 and in April, August, and October 2016; and an investigation concerning 'opinions and ideas on the project' was carried out. As for the matters of concern of the HHs with their housing to be demolished, please see the Table 5-2, as for the intentions and concerns of the affected HHs, please see the Table 5-3, and as for the results of consultation to related departments of the Zuoquan County People's Government, please see the Table 5-4, and as for the current plans of the affected HHs, please see the Table 5-5.

Table 5-2: Matters of Concern of the HHs with Their Housing Being Demolished

Sn	Consultation Content or Concern for APs	Answer provided to APs
1	Mode of compensation and resettlement for housing acquisition	One-time cash compensation, and replacement houses
2	How to determine the area for which the property right is exchanged?	(1) The APs can choose cash compensation or the replacement houses. (2) For APs choosing cash compensation, the structures below 2 stories on the legal housing site can be compensated as the appraised price, the highest appraised price cannot exceed 160% of local market price. (3) For APs choosing the replacement houses, the structures below 2 stories on the legal housing site can be compensated in 2 ways, one is the highest compensation area cannot exceed 150% of the original areas, the other way is providing 160% housing sites area to the APs. For those replacement housing area is less than 160%, the PIU will provide replacement price for the insufficient housing site area.
3	What facilities are there in the urban residential area?	There are 3-4 potential residential areas that can provide the replacement house for the AH. These residential areas are not for this project, but this project can use it to resettle the APs. There are such infrastructures as school, hospital, kindergarten, park and commercial network as well as basic facilities which is clean and beautiful, with convenient transportation.
4	What facilities are there in the urban residential area?	Water supply, sewage disposal, power supply, and heating facilities.
5	What preferential policy can be enjoyed by the HHs with their housing being demolished?	Transition subsidy, displacement allowance.
6	Can the APs directly move to	The resettlement housing is located in the existing urban

Sn	Consultation Content or Concern for APs	Answer provided to APs
	the resettlement housing after their old houses are demolished?	residential area, which has already been constructed.

AH = affected household, AP = affected person, HH = household, PIU = project implementation unit.

Table 5-3: Willingness and Concerns of the Affected Households

Sn.	Inquiry by the Survey Team	Answer from Villages
1	How much impacts will be on the agricultural income after the land acquisition?	There will be a big impact, so the governments should pay much attention on land acquisition.
2	Is it possible to adjust the land? Is it possible to adjust the land with the village group as the unit for adjustment? Is there any experience of this in the local area in the past? Is it possible for this method of adjustment to be carried out in the future?	There is no possibility to carry out land adjustment neither in the past nor in the future.
3	What measures can be adopted to reduce the agricultural loss as far as possible? How to increase the income? What things can be done by the government in livelihood restoration?	Work and make money by ourselves. We wish the government to arrange employment and provide technical training. The salary for working in the local area is fairly low.
4	Who issues the compensation for land acquisition? What does the land acquisition process include? Is there any other requirement for the land-acquisition compensation?	The compensation will be issued by the Land Bureau of Zuoquan County to villages and then to individuals, and the land-acquisition announcement will be posted in the towns, villages and groups.
5	Are you intended to move to the urban residential area? What suggestion or requirement do you have on the resettlement housing? What requirement do you have on housing-demolition compensation?	We would like to move to the urban residential area, and we have expressed our opinion on the type of the resettlement options at the conference of the village, and I have determined the housing type which I want to buy/obtain, and I hope the housing compensation is higher to some extent.
6	What requirement do the APs have on the assistance?	We hope the government grant reasonable allowance and necessary living security for the APs being resettled and also arrange employment for us and our children. The care from the government will let our life be increasingly happier.

AP = affected person.

Table 5-4: Consultation Results with Government Departments

Consulted Departments	Questions	Reply
Civil Affairs Bureau	Poverty line of rural poor persons	The per capita net income is CNY2,300 (at 2010 price)
	Allowance	Type I: CNY159; Type II: CNY117; Type III: CNY90; Type IV:

Consulted Departments	Questions	Reply
	standard for rural HHs enjoying the minimum living guarantee	CNY50
Bureau of Human Resources and Social safeguard	Pension insurance for land-loss farmers	The compensation fees will be included in the fiscal account of social safeguard fund for land-loss farmers, and the special fund will be used to cover the social safeguard costs of the project. 60% is used to cover the costs to be borne by individual farmers, and 40% to cover the costs to be borne by the rural collective. 60-year-old people needing maintenance and cure can immediately enjoy guarantees after application of insurance. For the insured land-loss people at the working age (16 to 59 years old), in the second month since they reach the age of receiving the pension, the insured people can monthly receive the pension payments according to the basic old-age security standard in the current year.
	Farmer training	The training of Bureau of Human Resources and Social safeguard is divided into two types, such as simple and vocational training (at least 3 months). The trainee is voluntary to participate in the training free of charge.
ZCHSUCMB	Property assessment	Factors considered in the property assessment are as follows: 1. Building structure; 2. Materials used; 3. Labor costs required by building materials; 4. Market transaction price
	Content of compensation for house demolition	The compensation for house demolition includes: 1. Building structure; 2. Homestead; 3. Auxiliary buildings and facilities; 4. Compensation for removal; 5. Transition costs; 6. Incentive fee
	Dispute settlement of housing assessment	The assessment results will be verified with the principal. If there are disputes, the house will be reassessed until the principal signs.
Land and Resources Bureau	Land compensation rate	The notice about adjusting the unified annual output value standard of the whole province's land acquisition by the Shanxi Province People's Government. JZF No. (2013) 22
	Land taxes	Land taxes include: 1. Land reclamation fee is CNY10 per square meter; 2. Land use fee of new construction land is CNY14 per square meter; 3. Farmland use and occupation fee: CNY16 for farmland per square meter
	Land use approval	One approval for a parcel of land

CNY = Chinese yuan, HH = household, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau.

Table 5-5: Current Plan of affected HHs

sn	Question to APs	Reply by APs
1	The main source of HH income	The main source of HH income is the agricultural

sn	Question to APs	Reply by APs
		income.
2	Engaged time of seasonal working	At least one person of each HH is engaged in seasonal working for 3 to 4 months in a year, with CNY200 per day for skilled work and CNY180 per day for unskilled work.
3	Women's responsibilities	Women are responsible for farming at HH and taking care of children and the elderly.
4	Intentions after land acquisition and house demolition	Willing to be employed and do small business.
5	Resettlement at the urban residential area	Willing to move to the urban residential area. Resettlement site is suitable for doing small business, and operating small shops and small restaurants.
6	Price of surrounding land	Price of surrounding land has been lifted up. Trading cannot be recognized until the land transfer agreement is signed under the witness of the village committee.
7	Pension insurance	All people have participated in pension insurance.
8	Use of land compensation	1. Land transfer and doing small business, operating small shops and small restaurants; 2. For the children to school; 3. Domestic subsidies; 4. Bank deposit

CNY = Chinese yuan, HH = household.

5.2 Improvement Measures for Public Participation and Consultation

96. Based on the comments and recommendations obtained during public participation and consultation from July 2015 to October 2016, the engineering design has been improved further, and the comments and recommendations have been fully considered and absorbed in the preparation of the RP. Further improvement measures for RP updating and implementation are as follows:

- (i) Finalize the scope of impacts as soon as possible, and promptly notify APs, so that the APs can make living arrangements in advance. Meanwhile, adopt the forms that people love to hear and see, such as radio, television, notices, meetings, etc. Through wide spread of information about the project, people can have a deep and full understanding of the project.
- (ii) The government and relevant departments of Zuoquan County will explain the compensation rates so that the masses know the standards fairly well.
- (iii) The disclosure of system and finance will be strictly implemented, such as disclosure of compensation rates, measured quantity, assessment level, etc. After determining the compensation, the notices will be put up to accept the participation and supervision of APs. Land compensation will be paid directly to the APs. Housing compensation is deposited into the personal account for house replacement.
- (iv) Issue the resettlement information booklet, and establish the channels for comments, complaints and feedback, such as setting up complaint hotline, suggestion boxes, etc. Establish consultation system. The symposium to be participated in by the PMO, township government, representative of village committee, and APs will be often held to jointly solve problems through negotiation.

5.3 Further Consultation Plan with Affected Persons

97. The further consultation between the APs and the PIUs is shown in Table 5-6. According to the work arrangement of the Zuoquan PMO, the towns and villages will hold meeting to negotiate problems with the APs and report the situations to the Zuoquan PMO. In addition, Zuoquan PMO will organize consultation activities with the APs and the external monitor will also independently consult with the APs for their complaints and suggestions.

Table 5-6: Consultation Schedule with Affected Persons

Consultation Content	Schedule	Participants
Resettlement manner and specific implementation plan	Jan 2017 to Dec 2019	Zuoquan PMO, design department, external monitor
Problems arising in the course of project implementation	Whole process of project implementation	Zuoquan PMO, village resettlement office, affected villages (groups), external monitor
Suggestions and complains	Whole process of project implementation	Zuoquan PMO, external monitor

PMO = project management office.

5.4 Information Disclosure

98. To allow all APs to promptly and fully understand the resettlement policies and implementation details of the project, and make the resettlement work really open, fair and transparent, Zuoquan PMO have taken the following measures to ensure the openness of resettlement policies:

- (i) Before the end of August 2016, the information of this project have been disclosed in cable TV, public notice and other forms;
- (ii) Before the middle of November 2016, the cadres of affected villages have disclosed the impacts situations, compensation rates, resettlement measures, channels for complaints and other information in the village meetings or other public occasions;
- (iii) The draft RP has been placed at the each village committee at the mid-November 2016.

99. After the RP is endorsed by Zuoquan PMO and reviewed by ADB, the RP will be disclosed on the ADB's website. Similarly, the Resettlement Information Booklet will be issued to each affected HH.

CHAPTER 6: RESETTLEMENT MEASURES AND LIVELIHOOD RESTORATION

6.1 Resettlement Objective and Principles

100. The objective of resettlement of the project is restoration for those affected by the project so that they benefit from the project, and their living standard is improved or at least restored to the pre-project level.

101. Some principles for resettlement and rehabilitation have been developed according to the above objectives:

- (i) The willingness of the APs will be respected, and their existing production and living traditions maintained;
- (ii) Resettlement rehabilitation programs will be tailored to land acquisition impacts, and based on compensation rates for land acquisition;
- (iii) Resettlement rehabilitation programs will be combined with construction, resources development, economic development and environmental protection programs so as to ensure the sustainable development of the affected village groups and persons; and
- (iv) The standard of living of vulnerable groups adversely affected by the project will be improved.

6.2 Livelihood Restoration Plan of Farmers affected by Land Acquisition⁹

6.2.1 Production Arrangement Measures

102. The farmland occupied by the project is near Zuoquan County and it is in the process of urbanization. Agricultural income accounts for 40% to 50% of total revenue. The main source of income of farmers affected by the project includes (i) payment of land compensation; (ii) participating in various non-agricultural activities (such as industry, commerce, services, etc.) or part-time job; (iii) revenue of remaining cultivated land; and (iv) the rented land with no direct economic income will be compensated annually at the price of AAOV.

103. The objective of production arrangement of APs is to ensure that the living standard of individuals after resettlement will not be reduced, and existing income level of APs will be recovered and exceeded. Through the analysis of geographic locations, quantity of land resources, income structure of local residents, etc., of villages within the scope of project area, on the basis of full consultation with APs, the production arrangement program including the following: (i) 80% of land compensation fund is paid to APs affected by land acquisition, and 20% is left to the village collective; (ii) APs are guided to engage in secondary and tertiary industries; (iii) transform low-yield and medium-yield fields, and increase output per unit of land; and (iv) land-loss farmers' income is recovered mainly by component employment and non-agriculture employment and skills training and other means.

104. The income restoration plan will adopt flexible, democratic, independent, and diverse forms according to the characteristics of various villages. In order to reduce the impacts, throughout the livelihood restoration process of the project, the PIUs responsible for land acquisition and resettlement and relevant government departments will adopt a series of measures to provide adequate help and support to the APs.

⁹ Please refer to section 7 for budgets for relevant activities.

105. Specific measures include
- (i) Paying land compensation as per policies, and actively guiding the APs' rational use of compensation.
 - (ii) Strengthening the production skills training and non-agriculture employment of APs.
 - (iii) Providing income increasing opportunities associated with the project.

6.2.2 Risk-Free Benefit Analysis

106. According to the survey, farmers' will and usual practices, based on the consent of all APs, the land compensation will be distributed in the form of "20% for village collective and 80% for farmers".

107. The net output of cultivated land and garden plot within the project scope is CNY600 per mu. Net output of woodland is CNY136 per mu. Net output of grassland is CNY30 per mu. The net output of remaining land is zero. Based on the annual interest rate of 1.95%, the interest income from compensation of land occupation by the project and the net land output are shown in Table 6-1. Because the area of non-cultivated land occupied by this project reaches 84%, the risk-free return calculated by unit of village is higher than the net land output value. Therefore, AP income will not be reduced after the land occupation by the project.

Table 6-1: Risk-Free Benefit Analysis (I)

Land Category	County Planning Area			Central Mountainous Area			East and West Mountainous Areas		
	Standard	Annual Interest	Net Income	Standard	Annual Interest	Net Income	Standard	Annual Interest	Net Income
	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>	CNY per <i>mu</i>
Cultivated land	43,200	842.4	600	36,300	707.85	600	28,800	561.6	400
Garden land	40,320	786.24	600	33,880	660.66	600	26,400	514.8	400
Woodland	37,440	730.08	136	31,460	613.47	136	24,000	468	136
Grassland	34,560	673.92	30	29,040	566.28	30	21,600	421.2	30
Mining and industry land	5,760	112.32	0	4,840	94.38	0	4,800	93.6	0
Transportation Land	5,760	112.32	0	4,840	94.38	0	4,800	93.6	0
Water and water conservancy facilities	0	0	0	0	0	0	0	0	0
Other land	5,760	112.32	0	4,840	94.38	0	4,800	93.6	0

CNY = Chinese yuan, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares).

108. In the use of compensation funds, the local governments at all levels and all related PIUs will actively guide the APs to use their own funds to appropriately purchase property for leasing, shops and service industry so as to obtain a steady income. The Zuoquan County People's Government will organize the departments of industry and commerce, taxation, health, etc., to actively provide door-to-door services; implement preferential policies and measures of reducing relevant taxes, simplifying procedures; and help solve the practical difficulties and problems of land-loss farmers encountered in the service industry.

6.2.3 Strengthen the Production Skills Training and Non-Agriculture Employment of Affected Persons

109. In the project, the training and employment services mechanism will be established for land-loss farmers, so as to provide free employment guidance and employment promotion, free handling of labor registration and management procedures, and free provision of labor employment and skills training, as well as to implement the rural labor transfer training. In order to improve the employability of these rural workers and improve their professional skills, the PIU will provide CNY440,000 for training. The agricultural department, sci-tech department, the Women's Federation, department of social safeguard and other departments will jointly work to provide training for all whole affected HHs, especially directly affected labor force, so as to enhance income-generating capacity. It mainly includes: vegetable cultivation, characteristic breeding, housekeeping, landscaping and other skills. Training funds will be directly allocated to training institutions such as vocational technical schools or the Women's Federation.

110. **Purpose of training.** On the basis of actual training requirements, different natural environment characteristics and the impacts types, help APs recover their livelihood and improve their labor skills. This training can alleviate the impact on them by the land acquisition, and the living standards of the APs will be restored at least to their original (non-project) status.

111. **Training program.** In the possible conditions, at least one person of each affected HH will be arranged to attend the training. Training content and program are shown in Table 6-2.

Table 6-2: Training Plan of Affected Persons

No.	Skill	Objective	Women	Budget
		Pop.	Pop.	CNY '000
1	Vegetable cultivation	230	120	12
3	Characteristic breeding	100	50	8
4	Home appliances, motorcycles, motor vehicle repairs	120	25	4
5	Garden greening	110	25	4
6	Housekeeping	100	45	4
7	Working skills of targeted enterprise	200	44	12
Total		860	309	44

CNY = Chinese yuan, Pop. = population.

112. For labor forces among the APs especially those over-50-year male and over-40-year female workers, guidance on a step-by-step basis will be provided for their engagement in social service industries, including greening works, road maintenance, real estate management, and housekeeping to procure their prompt and relative steady jobs in their neighboring areas. Enterprises applying for bidding for greening

works, road maintenance, and real estate management within the new urban and township areas will recruit over 40% of local farmer–workers. Furthermore, related departments in Zuoquan County will arrange public welfare-related labor employment opportunities for APs, especially such personnel including over-50-year male and over-40-year female personnel. For APs to be self-employed, small-amount guaranteed loans will be provided to assist their production. In the aspect of non-agricultural employment, APs are mainly employed by local enterprises (such as Riyuexin Eco-Park) around the project area, as shown in Table 6-3.

Table 6-3: Name of Enterprises for Potential Employment

S. No.	Enterprise Name	S. No.	EnterpriseName
1	Riyuexin Eco-Park	6	Zuoquan specialty shop
2	Lianhuayan Eco-Park	7	Zuoquan Shengshi Jixiang Crafts Store
3	Taiyuan Trade Co., Ltd.	8	Zhongxin Stationery Store
4	Xingda Grain and Oil Salesroom		
5	Zuoquan Aibaijia Curtain Store		

6.2.4 Pension Insurance of Land-Loss Farmers

113. Since the approval date of land acquisition plan, the land-loss farmers can participate in the pension insurance. Land-loss farmers are divided into three groups by age: maintenance and care age (the age is 60 or over 60), working age (age between 16 and 59 during land acquisition) and non-working age (age below 16 years old). The people at the maintenance and care age and the working age will pay pension insurance expense and enjoy the corresponding benefits as per the land-loss farmer pension insurance policy.

114. The assurance rates of pension insurance of land-loss farmers will follow the principle of expenditure determined by revenue and gradual increase. The assurance standard will meet the payment level, and the standard payment amount will be reasonably determined as per the benefit standard. Meanwhile, the assurance standard will adapt to the level of local economic and social development, in principle, not lower than local urban minimum living standard. The area with conditions can also determine the assurance standard by 80% of the local minimum wage. With the continuous development of social economy, and improvement of average living level of urban and rural residents, the assurance standard will also be gradually improved. During the calculation and determining the assurance standard, for APs with all land acquired and completely losing living security, the assurance standard is estimated according to 100% of the pension demand, i.e., payment standard = basic pension standard (monthly receiving standard) x 12 months x number of receiving years. For APs with part of land acquired, the basic pension standard: basic pension standard of local farmers with all land acquired in the same term is multiplied by the land-loss ratio (quantity of land acquired at this time or in the project and/or quantity of land owned in the first round of contracting).

115. The pension plan can not be prepared during this stage. Because the numbers of the Aps actually eligible can only be calculated after the land acquisition and then be reconfirmed by the Zuoquan Social Security Bureau and the affected villages and APs. Then Zuoquan Social Security Bureau will calculate the detail pension fee for each AP by a complicated fomula, considering gender, age etc. The APs can choose to participate pension or not. According to the survey, about 95% APs opt for pension.

6.2.5 Other Potential Project Benefits

116. During the project construction, the APs can provide construction-related services. For example, the APs can run shops, providing food, cigarettes, beer, beverage, etc., to construction workers. The APs can also operate small shops and restaurants. The start-up capital is about CNY40,000, and the annual net income is about CNY15,000.

117. Increasing the working time is another option for income restoration. Previously, the income of male farmers engaged in seasonal working for 3 months in a year is from CNY9,000 to CNY10,000. After land acquisition, the male farmers can work for at least 8 months in a year. With the monthly income of CNY3,000 calculated, the annual income of $\text{CNY}3,000 \times 8 \text{ months} = \text{CNY}24,000$ can be obtained.

118. In view of the advantageous transportation and strategic location of urban residential area, 23 HHs choose cash compensation and want to buy their new house in new urban residential housing areas. And 1 HH directly choose a replacement in one urban residential area. Besides the residential needs, they can rent the remaining houses to get more fixed long-term rental income, about CNY1,500 per 100 m²/ month.

119. In the project, the APs have the priority to be construction workers. The project construction units will provide some employment opportunities to the APs, including land leveling, greening works, etc. Some engineering operations are temporary, but according to the income survey of the similar types of work at Zuoquan, the construction workers with the employment opportunities can obtain the income of about CNY2,000/month. It can provide short-term income to local APs, and also can help improve the living level of the APs and restore their livelihoods.

120. This project provides diversified resettlement measures for APs, which covers a range of affected rural HHs, The livelihood restoration measures for land-loss farmers are shown in Table 6-4.

Table 6-4: List of Livelihood Restoration Measures for Land-Loss Farmers

Township	Village	AHs	APs	Cash Compensation	Skills Training	Non-Agricultural Employment	Small Loan	Social Safeguard (Land-Loss Farmers' Pension Insurance)
		HH	Pop.	HH	HH	HH	HH	HH
Shixia Township	Shixia	8	18	8	8	1	0	8
	Majiu	124	232	124	124	13	3	124
	Sanjia	52	126	52	52	20	1	52
	Subtotal	173	377	173	173	34	4	173
Liaoyang Town	Xiguan	0	0	0	0	0	1	0
	Qilidian	40	95	40	40	5	1	40
	Xiaohui	216	508	216	216	3	1	216
	Xichangyi	70	193	70	70	7	1	70
	Jinggou	3	7	3	3	0	1	3
	Dongchangyi	15	34	15	15	2	1	15
	Xihetou	55	135	55	55	2	1	55
	Subtotal	399	972	399	399	19	7	399
Pumping stations	Chengxi Yuanshui	0	0	0	0	0	5	0
	Songgou	12	32	12	12	2	1	12
	ShiGangKou	5	12	5	5	1	1	5
	WuliHou	5	12	5	5	1	1	5
	MajiaGuai	6	14	6	6	1	1	6
	Subtotal	28	71	28	28	5	9	28
Total		591	1,384	591	591	58	20	591

AH = affected household, AP = affected person, HH = household, Pop. = population.

6.2.6 Income Restoration Analysis of Seriously Affected Villages

121. In this project, there are 7 villages affected severely in farmland acquisition, namely, more than 10% of their farmland will be acquisitioned.

(1) Shixia Village

122. In Shixia Village Committee, there are 8 HHs (18 persons) who are affected. These HHs had 14.39 *mu* of cultivated land area before land acquisition, but they have 9.87 *mu* after land acquisition. Proportion of land acquisition reaches 31.38%; per capita cultivated land was 0.791 *mu* before land acquisition, but 0.54 *mu* after land acquisition. In the village, per-capita net income is CNY4,647/year, including 50% of agricultural income and 50% of other sources of income; 2 HHs are enjoying the five guarantees, and 4 HHs are enjoying the minimum living guarantee; In the past, APs have experienced land acquisition.

(2) Majiu Village

123. In Majiu Village, there are 124 HHs (232 persons) who are affected. These HHs had 536.22 *mu* of cultivated land area before land acquisition, but they have 391.46 *mu* after land acquisition. The proportion of land acquisition reaches 27%. Per capita cultivated land was 2.31 *mu* before land acquisition, but 1.68 *mu* after land acquisition. Therefore, APs have lost farmland to a large extent. In the village, per-capita net income is CNY4,759/year, including 30% of agricultural income and 70% of other sources of income.

(3) Qilidian Village

124. In Qilidian Village, there are 216 HHs (508 persons) who are affected. These HHs had 163.94 *mu* of cultivated land area before land acquisition, but they have 128.55 *mu* after land acquisition. The proportion of land acquisition reaches 21.59%. Per capita cultivated land was 1.73 *mu* before land acquisition, but 1.36 *mu* after land acquisition. In the village, per-capita net income is CNY5,841/year, including 40% of agricultural income and 60% of other sources of income. There are 14 HHs whose houses have to be demolished with 2,711 m² of demolition area.

(4) Xiaohui Village

125. In Xiaohui Village, there are 216 HHs (508 persons) who are affected. These HHs had 433.52 *mu* of cultivated land area before land acquisition, but they have 248.6 *mu* after land acquisition. The proportion of land acquisition reaches 42.65%. Per capita cultivated land was 0.85 *mu* before land acquisition, but 0.49 *mu* after land acquisition. Therefore, the persons have lost farmland to a large extent. In the village, per-capita net income is CNY5,623/year, including 45% of agricultural income and 55% of other sources of income.

(5) Xichangyi Village

126. In Xichangyi Village, there are 70 HHs (193 persons) who are affected. These HHs had 325.04 *mu* of cultivated land area before land acquisition, but they have 266.82 *mu* after land acquisition. The proportion of land acquisition reaches 21.38%. Per capita cultivated land was 1.68 *mu* before land acquisition, but 1.38 *mu* after land acquisition. Therefore, the persons have lost farmland to a large extent. In the village, per-capita net income is CNY2,121/year, including 50% of agricultural income and 50% of other sources of income.

(6) Dongchangyi Village

127. In Dongchangyi Village, there are 15 HHs (34 persons) who are affected. These HHs had 57.89 *mu* of cultivated land area before land acquisition, but they have 46.52 *mu* after land acquisition. The proportion of land acquisition reaches 19.63%. Per capita cultivated land was 1.69 *mu* before land acquisition, but 1.36 *mu* after land acquisition. In the village, per-capita net income is CNY5,769/year, including 40% of agricultural income and 60% of other sources of income. There are 3 HHs whose houses have to be demolished with 1,830.35 m² of demolition area.

(7) Xihetou Village

128. In Xihetou Village, there are 55 HHs (135 persons) who are affected. These HHs had 58.97 *mu* of cultivated land area before land acquisition, but they have 46.36 *mu* after land acquisition. The proportion of land acquisition reaches 21.38%. Per capita cultivated land was 0.44 *mu* before land acquisition, but 0.34 *mu* after land acquisition. In the village, per-capita net income is CNY5,977/year, including 40% of agricultural income and 60% of other sources of income. There are 7 HHs whose houses have to be demolished with 3,557.43 m² of demolition area.

129. Analysis on the 7 villages above shows that in the project location, agriculture focuses on commercial crops, food crops, and vegetables, and that some of local persons are engaged in vegetable selling, and others work in Taiyuan. In Zuoquan County, there are several enterprises for the APs (whose land is used by this project) to choose to work in. Local housekeeping service also needs to recruit some personnel. Guiding persons to work in non-agricultural industry and compensating them for land acquisition may help them increase their income.

130. In general, the income recovery measures mentioned above will provide offset to the APs, and the APs can develop individual businesses by means of obtained land acquisition compensations and resettlement subsidies or to be recruited by enterprises. A multitude of livelihood restoration measures can guarantee to maintain the living standards from decreasing.

6.3 Resettlement Measures for Demolished Residential Households

131. Among the total affected 24 HHs, 7 HHs have their second house in their original village.

132. According to the survey, 23 AHHs want to buy their new apartments in the real estate market of Zuoquan. They will be compensated for their original houses and land. Old materials from demolished houses will belong to them and be sold by themselves. All affected HHs agree to such arrangement. According to the survey, there are a total of available 3000 commercial apartments separated in 5 resettlement communities within Zuoquan real estate market at present time. The average housing price is about CNY1,500–CNY3,500 per m². And as the affected houses of this project is along the street, and referring the recently similar projects, the real appraisal and negotiated price for the house demolition in this project area is about CNY3,000–CNY3,500/m² which is higher than the current average housing price of Zuoquan County. The APs have plenty choosing opportunities to choose the location, area and floors of their new house according to their own willings. And as most AHs have their secondary houses in the village, some AHs, about 10 HHs, will use the compensation to invest some business, instead of buying new house.

133. One HH will be resettled in the Xueyuan Community which has a total of 16 11-story residential buildings and 4 commercial buildings. The AH can chose among 1,613 apartments which can be used as replacement house. The resettlement house in this residential area is special for the low-income population, which is cheaper than commercial apartments.

6.4 Resettlement of Affected Enterprises (Nonresidential Houses)

134. During the construction of the sewage treatment plant, the houses of four enterprises will be displaced and these four enterprises choose the way of cash compensation. After compensated and before the house demolition, these enterprises will respectively find another place to continue their business. When it is hard to find the proper business place, the government will provide them with assistance. The compensation amount for houses and lands is subject to the appraisal result by real estate appraisal agency. The operators of these 4 enterprises undertake that these workers will be continued to be employed and their wages will not be decreased. Besides, the PIUs will pay their transition subsidy during the transition period and pay them displacement allowance.

135. The impacts on enterprise and RP of them are shown in Table 6-8.

Table 6-8: Influence on Enterprise and Resettlement

Name	Address	Area of House	Employee	Monthly Wage of Employee	Normally Operating or not during House Demolition?	Resettlement			
		m ²	Capita	CNY/month		Place	Compensation	Employee	Remark
b1	Sitong Car Repair Shop	485	8	2,000–3,000	Yes	Self-selected	Assessment	Continued employment	No decrease in wage
b2	Steel Mold Company	9	2	2,000–3,000	Yes	Self-selected	Assessment	Continued employment	No decrease in wage
b3	Logistics company	1,780	20	2,000–3,000	Yes	Self-selected	Assessment	Continued employment	No decrease in wage
b4	Piggery	201	2	2,000–3,000	Yes	Self-selected	Assessment	Continued employment	No decrease in wage
Total		2,475	32						

6.5 Supporting Measures for Vulnerable Groups

136. During the whole resettlement process, the competent departments of this project will pay special attention to the resettlement of vulnerable groups. In the affected HHs, there are 30 HHs belonging to vulnerable groups (a total of 35 persons). The PIUs will pay special attention to resettlement of these persons.

137. For the affected vulnerable groups (including elderly persons of no family, the disabled, HHs with fewer male members, and poverty-stricken families), the PIUs will give them special help in addition to life and work relocation according to project implementation plan. Relevant supporting measures are as follows:

138. Minimum subsistence guarantee: the minimum subsistence guarantee of rural residents in Zuoquan County in 2015 is more than CNY3,000/year. Monthly subsidy for the minimum living guarantee of Zuoquan County can be divided into four levels: Level I, CNY159/person/month; Level II, CNY117/person/month; Level III, CNY90/person/month; and Level IV, CNY50/person/month. The personal payment part of Class I and Class II persons enjoying the minimum living guarantee will be withheld and paid from medical assistance fund.

139. Families enjoying the minimum living guarantee can be classified into the following:

- (i) Class I: main members are severely disabled, and therefore no source of income for such families; main members of such families suffer from diseases throughout a year, so they bear a heavy burden, presenting a phenomenon that their expenditure is beyond income; or single parent families whose basic life is hard to maintain due to an accident or change in family.
- (ii) Class II: life is difficult in such families, for they belong to individual businesses and lease-holding farm HHs and they have to support and bring up college students.
- (iii) Class III: in spite of labor forces, members of such families are disabled or suffering from diseases, leading to difficulty in maintaining their basic life needs.
- (iv) Class IV: other poor families for whom it is difficult to maintain their basic life needs.

140. This project particularly prepares the vulnerable group supporting reserve fund of

CNY300,000, which will be used to help vulnerable groups and other families with financial difficulty.

6.6 Measures for Affected Women's Participation and Development

141. Women have the same opportunity to participate in discussing about land acquisition and house demolition and relocation and other relevant problems and expressing their attitudes, worries, and cares.

142. In the compilation process of RP, Zuoquan PMO has collected for women's opinions and wishes for resettlement and income restoration. Their opinions and wishes have been included in RP.

143. In this project, the PIUs will encourage women to participate in implementation the RP by respecting women's custom and time table and providing female staff at the PMO and implementing agencies, and they will play an important role in implementation measures for income restoration stated in the RP. Meanwhile, Resettlement Office will be provided with a female staff, so as to better communicate with women and guarantee women to participate in implementation. During the construction period of this project, the PIUs will offer employment opportunities for women. Meanwhile, the gender action plan and social development action plan specify the opportunity for women to participate in this project and benefit from it.

144. Most of women affected by this project work on the land and look after other family members. After the land is lost, they will be entitled to receive training and work as enjoyed by men affected by the project. If a position is suitable for women, the PIUs will give priority to them. If a woman can earn CNY1,500/month, she will have an annual income of CNY1,500×12 (CNY18,000), which is 10 times more than annual average value of each *mu* of cultivated land.

145. The training institution affiliated to Human Resources and Social Safeguard Bureau of Zuoquan County particularly arranges such regular training courses for women as weaving, cosmetology and hairdressing, catering service, room service, and housekeeping service, so that women may grasp certain occupational skills to carry out individual business operation or work in service industry. Even they may carry out individual business operation in their own houses. For the business operation, about CNY50,000 of start-up capital is needed, and it is estimated that CNY20,000 of annual net income will be received. Currently, the county is launching and promoting family and community service for the aged, and the PIUs believe they are able to play a part in this field.

CHAPTER 7: RESETTLEMENT COST AND RESETTLEMENT SCHEDULE

7.1 Composition of Resettlement Cost

146. All resettlement costs have been included in the total project budget. Calculated at the price level of October 2016, the total resettlement cost of this project is CNY105,134,307 (about 9.77% of the total project budget of CNY1.075 billion), including the basic resettlement cost of CNY74,760,634 for land acquisition and house demolition, accounting for 71.11% of the total resettlement cost; other costs is CNY20,816,055 (including land tax, resettlement monitoring fee, management fees for resettlement, personnel training costs for resettlement agencies, and the assistance fund for helping and supporting the vulnerable groups etc.), accounting for 19.8%; and contingency of CNY9,557,669, accounting for 9.09%. Please see Table 7-1 for the details of resettlement cost, and Table 7-2 for annual investment plan of the project.

147. In the project, the Zuoquan County People's Government will be responsible for allocating money for resettlement. The money for resettlement will be distributed based on the right category of various items affected. When the land whose right is confirmed, 80% of land compensation fee will be paid to APs, and 20% will be paid to collective economic organization.

148. To guarantee compensation can be distributed to the APs in full amount and in a timely manner, Zuoquan PMO will, on one hand, give full play to internal supervision of project implementation institutions, External monitoring of individual agencies, and audit of audit institution; on the other, try to reduce intermediate link to directly distribute resettlement fund to individuals and institutions in a simple and feasible way.

Table 7-1: Resettlement Cost

Item	Land Category	Unit	Compensation Rate CNY	Quantity				Expenses				Proportion
				ZCSRMD	ZCHSUCMB	ZCWRB	Subtotal	ZCSRMD CNY	ZCHSUCMB CNY	ZCWRB CNY	Subtotal CNY	
I. Land acquisition cost												38.81%
Land acquisition compensation cost	Cultivated land (01)	mu	43200	3.021	504.93	20.3	528.26	130507	21813127	877133	22820767	
	Garden plot (02)	mu	40320	0	0.28	0	0.28	0	11128	0	11128	
	Forest land (03)	mu	37440	0	458	0	458	0	17147445	0	17147445	
	Grassland (04)	mu	34560	0	7.82	2.72	10.54	0	270397	93882	364280	
	Cities and towns and villages as well as land for industrial and mining area (20)	mu	5760	0	22.17	7.96	30.13	0	127727	45827	173553	
	Land for transportation (10)	mu	5760	0	0	4.08	4.08	0	0	23484	23484	
	Land for water area and water conservancy facilities (11)	mu	0	0	0	0	0	0	0	0	0	
	Other land (12)	mu	5760	10.36	0	8.01	18.37	59659	0	46155	105814	
Subtotal	mu		13.38	993.21	43.07	1,049.65	190166	39369825	1086480	40646471		
Land leasing fee	Land	mu	576	0	348.64	0	348.64	0	151322	0	151322	
Free Occupy	State-owned	mu	0	1,922.65	373.01	0	2295.66	0	0	0	0	
Subtotal	mu			1,936.03	1714.86	43.07	3693.95	190166.4	39521147.18	1086480	40797793.58	
Compensation cost for young crops	Cultivated land (01)	mu	1440	3.02	504.93	20.3	528.26	4350	727104	29238	760692	
Pension Insurance for land-loss farmers	Cultivated land (01)	mu	7200	3.02	504.93	20.3	528.26	21751	3635521	146189	3803461	
Subtotal (I)								216268	43883773	1261907	45361947	
II. Cost for temporary land occupation			1440	0	25.5	205.19	230.69	0	36718	295473	332191	0.00%
III. Expense for house demolition											0	22.76%
Farmers' house	Brick and concrete	m ²	2300	0	3912	0	3912	0	8996956	0	8996956	
	Brick and wood	m ²	1980	0	4188	0	4188	0	8292042	0	8292042	
	Resettlement allowance for transition	m ²	96	0	8100	0	8100	0	777564	0	777564	
	Subsidy for relocation	m ²	10	0	8100	0	8100	0	80996	0	80996	
	Telephone	CNY/HH	80	0	24	0	24	0	1920	0	1920	
	Closed circuit	CNY/HH	250	0	24	0	24	0	6000	0	6000	
	Solar energy	CNY/HH	200	0	24	0	24	0	4800	0	4800	
	Bounty	HH	0	0	0	0		0	0	0	0	
Subtotal								0	18160278	0	18160278	
Enterprise	House	m ²	2300	0	2475	0	2,475.00	0	5692500	0	5,692,500	
	Stop loss	HH	20000	0	4	0	4	0	80000	0	80,000	
	Subtotal							0	5,772,500	0	5,772,500	
Subtotal (III)								0	0	0	23,932,778	
VI. Compensation for auxiliary buildings and attachments on the ground	Auxiliary buildings	m ²	56	0	0	0	0	0	0	0	0	4.88%
	Fruit trees	Qty	300	0	14	0	14	0	4140	0	4140	
	tree	Qty	140	0	36640	0	36640	0	5129577.6	0	5129578	
	Subtotal (IV)							0	5133718	0	5133718	
I-VI Subtotal	Basic expenditure							216268	72986986	1557380	74760634	71.11%
V. Other expenses											20816054	19.80%
Administrative fee for land acquisition and house demolition			0.035					7569	2554545	54508	2616622	
External monitoring fee			0.015					3244	1094805	23361	1121410	
Training fee for the staff of institutions			0.01					2163	729870	15574	747606	
Fees for surveying and delimitation as well as detailed investigation and assessment		CNY/mu	0.01					2163	729870	15574	747606	

Item	Land Category	Unit	Compensation Rate	Quantity				Expenses				Proportion
				ZCSRMD	ZCHSUCMB	ZCWRB	Subtotal	ZCSRMD	ZCHSUCMB	ZCWRB	Subtotal	
			CNY					CNY	CNY	CNY	CNY	
Fee for use of newly-added construction land		CNY/mu	9333.8	3.021	504.93	20.3	528.26	28197	4712948	189513	4930659	
Land reclaiming fee		CNY/mu	6667	3.021	504.93	20.3	528.26	20141	3366392	135367	3521899	
Farm land occupation tax			10667.2	3.021	504.93	20.3	528.26	32226	5386227	216587	5635039	
Supporting fund for vulnerable groups			0.02					4325	1459740	31148	1495213	
Subtotal (V)								100028	20034395	681631	20,816,055.00	
I-V Subtotal								316296	93021381	2239011	95576688	90.91%
VI. Contingency								31630	9302138	223902	9557668	9.09%
I-VI Subtotal								347926	102323520	2462912	105134357	
Proportion								0.30%	97.30%	2.30%	100.00%	

CNY = Chinese yuan, HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), Qty = quantity, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

Table 7-2 Annual Investment Plan (Unit: CNY)

Year	2016	2017	2018	2019	Total
Proportion	5%	40%	45%	10%	100%
ZCSRMD	17,396	139,170	156,567	34,793	347,926
ZCHSUCMB	5,116,176	40,929,408	46,045,584	10,232,352	102,323,520
ZCWRB	123,146	985,165	1,108,310	246,291	2,462,912
Total	5,256,718	42,053,743	47,310,461	10,513,436	105,134,357

ZCHSUCMB = Zuoquan County Housing Security and Urban–Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

7.2 Allocation, Management, and Monitoring of Resettlement Fund

7.2.1 Allocation of Resettlement Fund

149. For this project, resettlement fund will be allocated based on the below principles:
- (i) All expenses relating to land acquisition and house demolition will be incorporated into general project cost. Compensations for land acquisition and house demolition of each component will be subject to review and approval of component implementation unit, and later submitted to Zuoquan PMO for allocation. Compensations will be paid through a special account to the affected villages by Zuoquan PMO.
 - (ii) Compensations for land acquisition and house demolition and varied subsidies will be paid to the affected HHs in the form of bankbook.¹⁰ The bankbook will be provided by the bank in the affected village for APs.
 - (iii) Land acquisition compensation will be paid after the signing of land acquisition agreement and before the land occupation.

150. Therefore, compensations for land acquisition and house demolition will be allocated as below:

Zuoquan County Finance Bureau → Zuoquan PMO (Reservoir Management Division, ZCHSUCMB, ZCWRB) → Affected Villages → Affected HHs

7.2.2 Management and Monitoring of Resettlement Fund

151. The expenditure of resettlement fund must be paid in accordance with relevant laws and regulations of the State on land acquisition and house demolition and policies stated in the RP, and will not be lower than the compensation rate and scope determined in the RP.

152. Each PIU will submit monthly land acquisition and house demolition progress to Zuoquan PMO. Resettlement groups of villages will review and approve payment report, signed by their person in charge of this issue, and then apply to each PIU for payment.

153. Land acquisition compensation, house demolition compensation, attachment compensation, and relocation compensation, including indoor equipment relocation charge, relocation fee, moving expense, relocation incentives and so on will be confirmed by Zuoquan PMO.

154. Finance Department and Audit Department of Zuoquan County will be entitled to supervise and audit the use of special fund.

¹⁰ Please also refer Section 7.3 and Table 7-3.

155. External resettlement monitor will track and monitor the allocation of compensations paid to the affected HHs during external monitoring.

7.3 Resettlement Schedule

156. Civil works of each component are proposed to commence in September 2017. The RP will be updated and submitted to ADB for approval before award of the civil works contracts involving resettlement. To ensure the APs can be properly resettled, land acquisition and resettlement work will be completed before the start of civil works. Resettlement schedule is as shown in Table 7-3:

Table 7-3 Resettlement Schedule

NO.	Tasks	Target	Responsible Unit	Commencement Time	Completion Time	Remarks
1	Information disclosure on draft RP					
1.1	RIB	33 villages	PMO	20161115	20161130	
1.2	Disclose draft RP on ADB website		Zuoquan PMO and ADB	20161130	20161231	
2	Resettlement Cost review and RP updating					
2.1	Approve of RP and budget (including compensation rate) (Unit: CNY)	105134357	Zuoquan County People's Government	20161201	20161231	
2.2	Detail measurement survey (based on detail design, by component)	33 Villages	ZCHSUCMB, Transportation Bureau, ZCSRMD, ZCWRB	20161130	20170430	
2.3	Update resettlement plan based on detailed design	33 Villages	Zuoquan PMO	20170331	20170430	
3	Updated RP and Land acquisition disclosure					
3.1	Disclose updated version of RP	33 Villages	ZCHSUCMB, Transportation Bureau, ZCSRMD, ZCWRB	20170331	20170430	
3.2	disclose updated land acquisition plan	33 Villages	Zuoquan County People's Government	20170331	20170531	
4	Compensation agreement					
4.1	Sign land compensation agreement and pay compensations (by component)	591 HHs from 33 villages	Zuoquan County Land Resources Bureau, Shixia Village Government, Liaoyang Township Government	20170601	20170630	
4.2	Sign house demolition agreement and pay	24 HHs+4 Enterprises	Liaoyang Township Government	20170601	20170630	

NO.	Tasks	Target	Responsible Unit	Commencement Time	Completion Time	Remarks
	compensations (by component)					
4.3	Houses demolition	24 HHs+4 Enterprises	Liaoyang Township Government	20170701	20170830	
5	Implementation of livelihood restoration measures					
5.1	Suggestions on livelihood restoration and reemployment	Affected HHs from 33 villages	ZCHSUCMB, Transportation Bureau, ZCSRMD, ZCWRB	20161130	20181231	
5.2	Implement of training plan	Affected HHs from 33 villages	Zuoquan PMO, Human Resource and Social safeguard Bureau of Zuoquan County, affected villages and farmers	20170630	20181231	
5.3	Hire the APs for project construction	Affected HHs from 33 villages	Zuoquan PMO and employers	20170831	20191231	
5.4	Assistance for the vulnerable groups	Affected vulnerable groups	Zuoquan PMO	20170630	20181231	
6	capability building for resettlement organization					
6.1	Personnel training for Zuoquan PMO, Land and Resources Bureau and related organizations	50 persons	Zuoquan PMO	20161130	20181231	
6.2	Training of related persons towns and villages	200 persons	Zuoquan PMO	20161130	20181231	
7	Monitoring and Evaluation					
7.1	baseline survey	Affected HHs from 33 villages	External monitor	20161231	20170331	
7.2	Building up internal monitoring mechanism	Subject to RP	Zuoquan PMO	20161231	20191231	
7.3	Engage an external monitor	One HH	Zuoquan PMO	20161201	20161231	
7.4	Submitting internal monitoring report	semi-annual report	Zuoquan PMO	20170630	20201231	
7.5	Submit external monitoring report		External monitor	20170101	20170331	Baseline survey report
				20170701	20170831	Report 1
				20180101	20180331	Report 2
				20180701	20180831	Report 3
				20190101	20190331	Report 4
7.6	Submit external assessment report	Annual report	External monitor	20200101	20200331	Report 5
				20210101	20210331	Report 6

NO.	Tasks	Target	Responsible Unit	Commencement Time	Completion Time	Remarks
7.7	Submit resettlement completion report	One report	Zuoquan PMO	20210101	20210331	
8	Public consultation and recording		Zuoquan PMO	20161130	20210331	
9	Complaint and appeal record		Zuoquan PMO	20161130	20210331	
10	Compensation Allocation					
10.1	allocate to the Land and Resources Bureau	Compensation fee	Zuoquan County People's Government	20170331	20180731	
10.2	allocate to Shixia Village and Liaoyang Township	Compensation fee	Zuoquan County Land Resources Bureau	20170430	20180731	
10.3	allocate to the affected HHs	Compensation fee	Village Government	20170001	20180831	
11	Civil works commencement					
11.1	Protect the water of Qingzhang River Source			2017-9	2022-8	
11.2	Improve Qingzhang River thoroughly			2017-9	2022-8	
11.3	Water supply safety and water pollution control			2017-9	2022-8	

ADB = Asian Development Bank, AP= affected person, CNY = Chinese yuan, HH = household, PMO = project management office, RIB = resettlement information booklet, RP = resettlement plan, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

CHAPTER 8: RESETTLEMENT ORGANIZATION

8.1 Organization Composition

157. Zuoquan County People's Government is responsible for the whole project. The ZCSRMD is responsible for the implementation of the Shixia Reservoir Operation and its Watershed Vegetation Improvement (formerly Water Source Protection of the Qingzhang Headwaters). The ZCHSUCMB is responsible for the implementation of Qingzhang River and Binhe Road Rehabilitation (including the river dredging works; river flood control and ecological rehabilitation works; construction of a wetland park and associated amenity facilities, Sewage treatment plant works), water pollution control works, and related roads and bridges improvement and widening works. The ZCWRB is responsible for the implementation of rural water supply system. The Zuoquan PMO is the coordinator for the overall management and the implementing agency for the resettlement, including RP preparation, implementation and management, progress reporting, internal monitoring, and engagement of external monitor. Each component implementation unit will be responsible for implementation the RP with the assistance of local authorities, including the confirmation of affected land and houses, consultation with the APs, financing and payment of compensation fund, and the implementation of measures for resettlement of APs. The township (town) government and village committees will be actively involved in the implementation of the RP.

8.2 Organization Responsibility

8.2.1 Project Leading Group

158. A project leading group has been established at Zuoquan County level. The mayor of Zuoquan County is the director of the leading group. The responsibility of the leading group is to be responsible for organizing the resettlement activities of the project, developing relevant policies and coordinating all resettlement agencies.

8.2.2 Zuoquan PMO

- (i) Formulating the land acquisition, house demolition, and resettlement policies for the project;
- (ii) Entrusting the design agency to define the project area, measure the data on physical objects affected by land acquisition and house demolition, and save such data;
- (iii) Applying for the license for planning of land use and the license for land used for construction;
- (iv) Giving operational training to the key resettlement officials of the land acquisition, house demolition, and resettlement offices;
- (v) Organizing and coordinating the preparation and implementation of the RP;
- (vi) Responsible for the management and disbursement of the resettlement funds, and supervising the use thereof;
- (vii) Directing, coordinating and supervising resettlement activities and their progress;
- (viii) Taking charge of and inspecting internal monitoring, and preparing land acquisition, house demolition, and resettlement progress reports;
- (ix) Selecting the external monitoring agency and assisting in external monitoring activities.

8.2.3 ZCSRMD. Taking charge of water source protection project, reservoir cleaning project, flood discharge facilities improvement project, and hydrological monitoring station.

8.2.4 ZCHSUCMB. Taking charge of the implementation of Qingzhang River Improvement Project (including river cleaning, flood control and eco-remediation, and comprehensive river improvement auxiliary facilities), water pollution control project, and relevant road and bridge improvement and expansion project.

8.2.5 ZCWRB. Taking charge of the implementation of water supply system project.

8.2.6 Village Resettlement Group

159. Village resettlement groups will report to relevant leaders of villages and consist of workers from village government, Land Resource Bureau, local police station and village collective. Main duties are as below:

- (i) Participating in the preparation of RP;
- (ii) Assisting in the implementation of RP;
- (iii) Organizing participation and advertising of resettlement policy for the public;
- (iv) Executing, examining, supervising and recording all resettlement-related activities;
- (v) Taking charge of distribution and management of house demolition compensation;
- (vi) Be responsible for the management of resettlement materials and archives;
- (vii) Reporting relevant situations of how did land acquisition, house demolition, and resettlement goes to Zuoquan PMO;
- (viii) Dealing with complaints and appeals that may occur during resettlement;
- (ix) Helping out the disadvantaged families;

8.2.7 Village Committee Resettlement Group

160. Most members of village committee resettlement groups will take part in the resettlement work and will be responsible for:

- (i) Taking part in the social economic investigation and project impact study;
- (ii) Taking part in the preparation of RP;
- (iii) Organizing public discussion and publicize land acquisition, house demolition, and resettlement policy;
- (iv) Helping implement the RP;
- (v) Recording all activities relating to land acquisition, house demolition, and resettlement work of villages to which they belong;
- (vi) Taking charge of the distribution and management of land acquisition compensation;
- (vii) Administering the resettlement materials and archives;
- (viii) Reporting to monitor relevant situations of how did land acquisition, house demolition, and resettlement goes;
- (ix) Communicating the opinions and suggestions of the APs to the monitor;
- (x) Dealing with complaints and appeals raised by the APs;
- (xi) Helping out the disadvantaged families.

8.2.8 External Monitor

161. External monitor in charge of resettlement work during the implementation of RP will provide external resettlement Monitoring and Evaluation report and completion report to Zuoquan PMO and ADB. Duties and responsibilities of external monitor are detailed in the chapter 10.

8.3 Staff and Equipment of Resettlement Organizations at all Levels

162. Zuoquan PMO currently has two staff in charge of Resettlement Department who have strong organization and coordination capability, and also skilled in computer. Village resettlement groups are also composed by experienced staff. Staffing of resettlement department at all levels is referred to in Table 8-1.

Table 8-1 Resettlement Personnel Arrangement at All Levels

Resettlement Office	Total Staff Number	Staff and Qualification	Date of Work and Operation
Zuoquan PMO	2 (one female worker)	Person-in-charge has more than 5 years of experiences in the resettlement work and has university education background	From March 2015 to the end of resettlement work
Zuoquan County Land Resources Bureau	8 (one female worker)	Long-term similar working experiences; 3-year college education background	From March 2015 to the end of post-resettlement assessment work
ZCSRMD	5 (two female worker)	Long-term similar working experiences; 3-year college education background	From March 2015 to the end of post-resettlement assessment work
ZCHSUCMB	5 (one female worker)	Long-term similar working experiences; 3-year college education background	From March 2015 to the end of post-resettlement assessment work
ZCWRB	5 (one female worker)	Long-term similar working experiences; 3-year college education background	From March 2015 to the end of post-resettlement assessment work
Shixia Village Resettlement Working Group	5 (one female worker)	Long-term similar working experiences; 3-year college education background	From March 2015 to the end of post-resettlement assessment work
Liaoyang Township Resettlement Group	5 (one female worker)	Long-term similar working experiences; 3-year college education background or above	From March 2015 to the end of post-resettlement assessment work
Longquan Village Resettlement Group	5 (one female worker)	Long-term similar working experiences; 3-year college education background or above	From March 2015 to the end of post-resettlement assessment work
Hanwang Village Resettlement Group	5 (one female worker)	Long-term similar working experiences; 3-year college education background or above	From March 2015 to the end of post-resettlement assessment work
External Monitor	3 (at least one female worker)	Long-term similar working experiences; 3-year college education background or above	From March 2017 to the end of post-resettlement assessment work

PMO = project management office, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

8.4 Measures for Strengthening Capabilities of the Resettlement Organizations

163. Zuoquan PMO will provide a series of staff training in term of the following aspects for resettlement organizations at all levels: (1) ADB social safeguard policies; (2) national policies regarding compensations for land acquisition and housing demolition; (3) practical experience of Shanxi Province and other provinces in the PRC. Training will include field survey and special courses and will start in January 2017. Zuoquan PMO may also invite ADB officer to provide training on project management, including the resettlement management. CNY747,606 the capacity building of resettlement staff which has already been covered in this Resettlement Cost.

CHAPTER 9: GRIEVANCE REDRESS MECHANISM

164. The Zuoquan County People's Government has built up a set of highly transparent, straightforward complaint collection and handling procedures to deal with people's complaints objectively and efficiently, so as to ensure resettlement work to be conducted successfully.

9.1 How to Collect Complaints

165. Problems that may occur during resettlement and complaints raised by the APs may be collected through:

- (i) Reports of village resettlement office, including complaints of the masses, progress, work measures, existing problems
- (ii) Builder's diary faxed by builder to the project owner, mainly including how the construction affects people
- (iii) Land acquisition and house demolition problems discovered by development organizations during inspection on construction site.
- (iv) Relevant information reflected by external monitors
- (v) APs' letter and appeals
- (vi) Relevant problems that are detected by auditing departments
- (vii) fund allocation situation
- (viii) Internal monitoring and evaluation

9.2 Complaints and Appeals Procedures

166. Complaint and appeal procedures are as below. The APs may get involved in any stage of such procedures:

167. Stage 1: If any right of any AP is infringed on in any aspect of land acquisition, house demolition, and resettlement, he/she (the appellant) can report this to village committee. The village committee or the AP may resort to the township to solve the issue. The resettlement office shall record such grievance or appeal and strive to solve it together with the village committee or the AP within 2 weeks.

168. Stage 2: If the appellant is dissatisfied with the disposition of Stage 1, he/she may file an appeal to the Zuoquan PMO after receiving such disposition, which shall make a disposition within 2 weeks;

169. Stage 3: If the appellant is still dissatisfied with the disposition of Stage 2, he/she may file an appeal to competent administrative authorities' level by level (e.g., county water resources bureau) in accordance with the Administrative Procedure Law of the PRC for arbitration after receiving such disposition.

170. Stage 4 if the appellant person is still dissatisfied with the disposition of Stage 3, he/she may file an action in a civil court in accordance with the Civil Procedure Law of the PRC after receiving the arbitration award. The remedies from court can be invoked by APs anytime and in parallel with the project grievance redress mechanism.

171. APs can also submit complaints to the Asian Development Bank (ADB) which will be handled by the Zuoquan project team. If an AP is still not satisfied and believes they have been harmed due to non-compliance with the ADB policy, they may submit a complaint to ADB's Office of Special Project Facilitator or Office of Compliance Review in accordance with ADB's Accountability Mechanism.¹¹

¹¹ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

172. All complaints, oral or written, will be reported to ADB through internal and external resettlement monitoring reports.

173. All agencies will accept grievances and appeals from the APs for free, and costs incurred reasonably will be disbursed from the contingencies. At the whole construction stage, the above procedure will remain effective so that the APs can use it to solve relevant issues. The above appeal channel will be disclosed to the APs via the mass media.

9.3 Complaint Handling Principles

174. Resettlement offices at all levels must do field survey and study, seek public opinions, conduct negotiation patiently and repeatedly for the complaints raised by the public, give objective and fair advices based on various principles and standards specified in the national laws, regulations and RP, timely report any complaints beyond their capability to their superiors, and offer assistance in the investigation. If the decision-making organ fails to reply within specified time limit, the complainant has the right to appeal.

175. Women may have their particular complaints during resettlement; therefore, the PMO will engage at least one female worker for each resettlement group to process complaints raised by female residents. In addition, local government and nongovernment organizations, for instance the civil affairs department, women's federation, will also monitor resettlement to ensure the rights and interests of the APs especially the women.

9.4 Complaint Details and Mode

9.4.1 Details of Reply to Complaint

176. Reply to complaint will include

- (i) Brief introduction of what they are complaining about
- (ii) Investigation results
- (iii) Related national regulations, principles and standards in RP
- (iv) Handling suggestions and references

9.4.2 How to Make Reply to Complaint

177. Reply could be made as follows:

- (i) Provide written materials directly to those who complaint regarding individual phenomena
- (ii) Inform village community where he/she is in by holding farmers conference or issuing document regarding the regularly complained issues
- (iii) Furnish materials to the resettlement department to which he/she belongs regardless of how the reply is made.

9.5 Complaint Recording, Tracking, and Feedback

178. During the execution of RP, resettlement groups of counties and villages will properly register and manage complaint materials and handling results, and report registration and management situations in a written form to each PIU once every month. Subsequently, each PIU will make monthly summarization and report to the Zuoquan County PMO which later will regularly checkup the complaint handling and registration.

9.6 Contact Information of Complaint and Appeal Handling Person

179. Resettlement groups of county and villages will arrange for a person to collect and process the complaints raised by APs. The name of such person, office address, and phone

number are referred to in the Table 9-1. If local complaint mechanism cannot satisfy the APs, complaints may also be directly reported to Zuoquan PMO which will directly or dispatch someone else to deal with complaints.

Table 9-1: Complaints receivers' information and Appeals Processing Organizations

Unit	Contact	Address	Phone Number
Zuoquan PMO	Huo Jianbin	3/F, Administrative Convenience Building, Binhe Road, Zuoquan County	03543893095
ZCLRB	Hao Jianzhong	12/F, Administrative Convenience Building, Binhe Road, Zuoquan County	03548636389
ZCSRMD	Zhao Lianhu	Shixia Reservoir Management Division, Zuoquan County	03548982324
ZCHSUCMB	Wang Feng	5/F, Administrative Convenience Building, Binhe Road, Zuoquan County	18035410666
ZCWRB	Han Lijun	Chengbilei Street, Zuoquan County	15935095358
Shixia Village	Kang Jinhou	Shixia Village People's Government	03548982631
Liaoyang Township People's Government	Wang Xiaoyan	Liaoyang Township People's Government	03548653814
Longquan Village	Wang Shuping	Longquan Village People's Government	03548932085
Hanwang Village	Qiao Ruihua	Hanwang Village People's Government	03548970730

PMO = project management office, ZCHSUCMB = Zuoquan County Housing Security and Urban-Rural Construction Management Bureau, ZCLRB = Zuoquan County Land Resources Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

9.7 Complaint and Appeal Resolving Budget

180. During project implementation, cost for solving complaints and appeals are covered in the management budget as listed in the RP.

CHAPTER 10: MONITORING OF RESETTLEMENT

181. Monitoring and Evaluation (M&E) of resettlement refers to the continuous investigation and examination. M&E will be conducted for the implementation of resettlement activities according to the RP. The monitoring of resettlement consists of internal monitoring and external monitoring.

10.1 Internal Monitoring

10.1.1 Objectives of Internal Monitoring

182. Objectives of internal monitoring are to ensure performance of duties during the resettlement process and complete the task of restoring Aps' living standard. Each PIU (resettlement PIU) will undertake the job of internal M&E.

10.1.2 Internal Monitoring Procedures

183. During the implementation of the RP, the project PIU will report quarterly to the PMO of Zuoquan County, and the PMO of Zuoquan County will submit an internal monitoring report on resettlement implementation to ADB semiannually.

10.1.3 Internal Monitoring Contents

184. Internal monitoring will cover the following contents:

- (i) Organization setting, personnel allocation and capacity building;
- (ii) The actual implementation of the policy for removal and relocation and compensation rates;
- (iii) Land acquisition and house demolition and implementation schedule of resettlement activities;
 - (iv) Resettlement cost and its implementation;
 - (v) Land acquisition and resettlement of production and employment (including vulnerable groups);
 - (vi) House demolition and living resettlement (including vulnerable groups);
 - (vii) Complaints, appeals, public participation, consultation, information disclosure and external monitoring, etc.
 - (viii) The handling of relevant issues in the memorandum of understanding the ADB's review mission;
 - (ix) Standing issues and their solutions.

10.1.4 Internal Monitoring Organizations and Personnel Allocation

185. Refer to table 10-1 for personnel in executive organization for monitoring.

Table 10-1: Personnel in Executive Organization for Internal Monitoring

Resettlement Organizations	Normally Allocated Staff	Total Staff at Peak
Resettlement Department of the Zuoquan Project Management Office	2	3
Component Project Implementation Units of Zuoquan County	8	12
Village committees (Community/group)	39	52

10.2 External Monitoring

186. According to the relevant requirements of ADB, the PMO of Zuoquan County will commission an independent external monitor for external M&E of resettlement. The agency will track the resettlement and Livelihood restoration activities for M&E so as to ensure their implementation in line with the RP. External monitoring includes the baseline survey of APs' living standard and regular M&E.

10.2.1 Baseline Survey of Affected Persons' Living Standard

187. The external monitor will carry out baseline survey of the affected villages and HHs. The baseline survey will look into the production levels and living standards of APs and will be conducted with census method.

188. Main contents of the baseline survey on the affected HHs' living standard mainly include: family members, production and operation situation, housing construction area, annual HH income, employment structure, annual HH expenditure, transportation conditions, water supply conditions, power supply conditions, heating conditions, living environment, and subjective assessment of production and living conditions, etc.

10.2.2 Regular Monitoring and Evaluation

189. During the implementation of the RP, the external monitor will conduct M&E of resettlement twice a year, with the main monitoring indicators as follows:

- (i) Whether the compensation prices of houses and other items attached to the land are set according to the principle of cost of replacement;
- (ii) (2) Whether the allocation of compensation is properly and sufficiently transferred and funded;
- (iii) (3) The construction and allocation of compensated replacement houses;
- (iv) (4) Whether the resettlement schedule is reasonable;
- (v) (5) Whether the transition expense and relocation expense are paid;
- (vi) (6) Whether the compensation of material object is discounted;
- (vii) (7) Whether the hospital, school, etc. are easily accessible in new resettlement locations.
- (viii) (8) Whether the compensation rates of land acquisition are in accordance with relevant national laws and the RP;
- (ix) (9) Whether the allocation procedures of land compensation cost can make sure that the affected village can be fully funded;
- (x) (10) Whether the amount of land acquisition, compensation rates and compensation amount are publicized in the village and what form of disclosure is used;
- (xi) (11) What special preferential policies vulnerable groups enjoy in the resettlement;
- (xii) (12) Whether vulnerable groups get help during the process of house demolition;
- (xiii) (13) Whether special needs of affected female populations have been given adequate consideration in the resettlement measures;
- (xiv) (14) Whether vulnerable groups, particularly women, are accessible to job opportunities related to the project and are employed in the project construction;
- (xv) (15) Whether the APs get training, the numbers of people obtained training (among which, the number of females), the quantity of employment (among which, the number of females), and their assessment (of which, female's attitude) on compensation fees, resettlement and income recovery plan;
- (xvi) (16) The implementation progress and effect of the livelihood restoration measures for the APs of the land acquisition.

190. The external monitor will participate in some public consultation and negotiation meetings, and evaluate the outcome of public participation. The agency will also irregularly visit the affected villages, township governments and institutions handling complaints, proposing appropriate suggestions and problem solving approaches.

10.2.3 Follow-up Survey of Affected Persons

191. For the affected HHs, the external monitor will conduct a follow-up survey 6 months after their resettlement. The follow-up survey will be the follow-up of the objects of baseline survey on living standard as much as possible. Similar to baseline survey of living standard, the follow-up survey will adopt the same structured questionnaire, which will reflect the changes brought by the resettlement to the APs in living and production, with the subjective assessment of APs on resettlement work consulted to assess the effect of the resettlement. The monitoring reports will also reflect the AP's opinions, suggestions and requirements, and will be disclosed to the APs in affected villages, the PMO, local government website, and ADB's website.

10.2.4 Reporting System of External Monitoring and Evaluation

192. External monitoring report will be submitted to Zuoquan PMO and ADB according to the schedule (see Table 10-2), with the reporting periods subject to the following requirements:

- (i) Conduct investigation of the APs' living standard and conditions, and submit a resettlement baseline report in the initial stage of resettlement implementation.
- (ii) Submit an M&E report on August 31 and March 31 respectively each year, until the completion of land acquisition and house demolition activities.
- (iii) Carry out twice annual assessment and submit a report to prove that the resettlement work has restored the APs' livelihood, income and living standard.

Table 10-2: Report Submission Schedule

Report No.	Submission time
External monitoring report No.1	August 31, 2017
External monitoring report No.2	March 31, 2018
External monitoring report No.3	August 31, 2018
External monitoring report No.4	March 31, 2019
External monitoring report No.5	March 31, 2020
External monitoring report No.6	March 31, 2021

193. The external monitor will submit reports to Zuoquan PMO and ADB in both Chinese and English versions. Regular monitoring report will include at least the following contents: (i) Monitoring object of the report; (ii) progress of resettlement work; (iii) main findings of the monitoring by the monitor; (iv) main existing problems; and (v) basic assessment opinions and suggestions on the external monitoring;

APPENDIX 1: DUE DILIGENCE OF SHIXIA RESERVOIR

1. Shixia Reservoir is located in the midstream of Haihe River Basin, South Canal river system and the west source of Qingzhang River. It lies in the southeast of Jinzhong City, west side of the main peak of the Taihang Mountains, and Shixia Village at 2 km northwest of Zuoquan County. The headwater is Ba Fu Ling Mountain of Heshun County. Shixia Reservoir is the only controlling backbone multipurpose project on the main stream of west source of Qingzhang River. The main body and auxiliary works of the Reservoir are mainly composed of the main dam, auxiliary dam, spillway, water-supply tunnel, diversion tunnel, north and south main canals and hydroelectric power station.

2. Shixia Reservoir started construction in November 1959 and undertook the role of flood detention and water storage in 1960. Flood control standard designed for the dam of the Reservoir is the design of flood with a 100-year return period, with the check of flood with a 1,000-year return period. Reservoir storage level is 1,142.5 meters (m), design flood level of 1,149.36 m, check flood level of 1,152.56 m, and seismic intensity is 6 degrees. The total capacity is 50.99 million cubic meters, control drainage area of 754 square kilometers, average runoff of 64.13 million cubic meters, with a water area of 5,600 acres. Since construction, it has never conducted dredging work.

3. Shixia Reservoir has run for many years. The land acquisition and resettlement issues have been properly addressed in the past, without remaining problems.

APPENDIX 2: DUE DILIGENCE OF WATER SUPPLY SYSTEM DISTRIBUTION HUB

1. Water transfer station for water distribution of water supply system has finished construction, covering 2 *mu* of construction land. The construction land is a very small part of the land for Zuoquan Lake Ecological Agriculture Demonstration Park that is developed by Zuoquan Agricultural Project Development Co., Ltd.
2. To build the Zuoquan Lake Ecological Agriculture Demonstration Park, Zuoquan Agricultural Project Development Co., Ltd. has signed a Contract on Contractual Operation of Transferred Rural Lands in Zuoquan County with the village where the project is located. A contract on transfer of land use rights is signed by the parties in accordance with the principle of law compliance, voluntariness, making compensation and equality. The contract specified the type, location, four boundaries, area and quality level of the land contracted. The parties agreed that the transfer period of land use rights will be 30 years, starting from 30 June 2012, and ending 31 December 2041. The land under the contract will be transferred to Zuoquan Agricultural Project Development Co., Ltd. by means of lease, with the transfer fee paid in cash. During the contract period, the Company will pay the transfer fee to the village leasing the land under the contract. The payment standard is CNY960/*mu* for farmland, CNY320/*mu* for forest land, and CNY200/*mu* for other types of land. The annual payment time will be 30 November of the year.
3. Rights and obligations of the village leasing the land: 1. Rights: (1) The village is entitled to collect transfer fee according to the contract and recover the land transferred according to the deadline specified in the contract; (2) if the contracted land is acquired according to law, the village is entitled to obtain appropriate compensation. 2. Obligations: exercise the land management rights without intervening business activities of Zuoquan Agricultural Project Development Co., Ltd.
4. Rights and obligations of Zuoquan Agricultural Project Development Co., Ltd.: 1. Rights: (1) It owns independent production and operation rights on the contracted land; (2) it is entitled to obtain appropriate compensation for lawful expropriation of the land or the land being recovered according to law before the expiration of the transfer contract. 2. Obligations: The Company will conduct agricultural production and operation activities within the allowable range of the national law, regulations and policies, and pay the transfer fee in full and on time. It may not arbitrarily change the purpose of the transferred land and will give effective protection to the farmland transferred under this contract.
5. Currently, the contract is properly implemented, without problems left over and the living standard of the APs has not dropped.

APPENDIX 3: RESETTLEMENT DUE DILIGENCE REVIEW OF THE ZUOQUAN COUNTY WASTEWATER TREATMENT PLANT (PHASE 1)

1. The Zuoquan County wastewater treatment plant (Phase 1) is located near the Hama village of the south area of Zuoquan County. It was constructed on 10 August 2005 according to the approval of the Shanxi Provincial Development and Reform Commission and completed in 2009. The sewage treat capacity of Phase 1 is 10,000 tons per day.
2. The plant occupied 28.65-*mu* land. The treated sewage become into reclaimed water and discharged into Qingzhang River. The land acquisition was conducted in 2005, affecting about 20 persons of Nanjie village (about 8 persons) and Hama village (about 12 persons). The compensation fees have been paid to the affected village and persons. According to the survey, the living and income levels of the affected persons have not declined, and there are no remaining issues of the resettlement.

APPENDIX 4: RATIO OF OCCUPIED COLLECTIVE LAND (%)

Village	Collective Land								
	Cultivated Land (01)	Garden Plot (02)	Forest Land(3)	Grassland (04)	Resident and Industry Lands(20)	Land for Transportation (10)	Land for Water and Water Conservancy Facilities	Other Lands (12)	Subtotal
Haogou	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Changcheng	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Dianshang	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Daofo Gou	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Heyu	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Chuankou	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Zhuning	0.00%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	0%	0.00%
Subtotal	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Guantou	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Weijia Zhuang	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Xiaolingdi	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Pushang	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Huili	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Shiyan	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
Subtotal	0.00%	0.00%	0.00%	30.00%	0.0%	0%	50.00%	20%	100.00%
West of Shixia Reservoir auxiliary dam	0.00%	0.00%	0.00%	100.00%	0.0%	0%	0.00%	0%	100.00%
South of Xin Zhuning	0.00%	0.00%	0.00%	100.00%	0.0%	0%	0.00%	0%	100.00%
The section of Shiyang Line along the reservoir	0.00%	0.00%	0.00%	100.00%	0.0%	0%	0.00%	0%	100.00%
Subtotal	0.00%	0.00%	0.00%	100.00%	0.0%	0%	0.00%	0%	100.00%
Haogou	91.88%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	8%	100.00%
Chunkou	0.00%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	100%	100.00%

Village	Collective Land								
	Cultivated Land (01)	Garden Plot (02)	Forest Land(3)	Grassland (04)	Resident and Industry Lands(20)	Land for Transportation (10)	Land for Water and Water Conservancy Facilities	Other Lands (12)	Subtotal
Xiajiao	0.00%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	100%	100.00%
Shiyan	0.05%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	100%	100.00%
Zuoquan County Shixia Reservoir Management Division	0.00%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	0%	0.00%
Subtotal	22.58%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	77%	100.00%
Shixia	0.43%	0.00%	74.41%	0.00%	1.8%	1%	22.59%	0%	100.00%
Maju	28.79%	0.06%	53.61%	0.36%	0.0%	2%	13.78%	1%	100.00%
Sanjia	56.22%	0.00%	12.81%	8.24%	0.0%	10%	6.81%	6%	100.00%
Subtotal	24.97%	0.04%	54.06%	1.17%	0.4%	3%	15.14%	2%	100.00%
Xiguan	0.00%	0.00%	0.00%	3.83%	96.2%	0%	0.00%	0%	100.00%
Qilidian	39.32%	0.00%	0.00%	2.87%	20.8%	16%	17.65%	3%	100.00%
Xiaohui	85.43%	0.00%	0.03%	2.37%	0.0%	5%	5.03%	3%	100.00%
Xichangyi	37.61%	0.00%	12.16%	2.07%	0.0%	4%	43.80%	0%	100.00%
Jinggou	9.11%	0.00%	0.00%	0.00%	0.0%	2%	87.88%	1%	100.00%
Dongchangyi	18.70%	0.00%	12.46%	0.00%	0.2%	2%	66.39%	1%	100.00%
Xihetou	93.00%	0.00%	0.14%	0.00%	0.0%	1%	0.00%	6%	100.00%
Subtotal	37.45%	0.00%	3.38%	2.41%	29.5%	4%	21.84%	1%	100.00%
Chengxi Yuanshui	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#####	#DIV/0!	#DIV/0!	#DIV/0!
Songgou	91.88%	0.00%	0.00%	0.00%	0.0%	0%	0.00%	8%	100.00%
Shigangkou	88.45%	0.00%	0.00%	0.00%	2.9%	0%	0.00%	9%	100.00%
Wulihou	43.34%	0.00%	0.00%	0.00%	3.6%	53%	0.00%	0%	100.00%
Majiaguai	53.56%	0.00%	0.00%	38.07%	0.0%	0%	0.00%	8%	100.00%
Subtotal	64.24%	0.00%	0.00%	11.25%	1.9%	17%	0.00%	6%	100.00%
Total	14.81%	0.01%	12.42%	19.91%	7.1%	2%	33.18%	11%	100.00%

APPENDIX 5: RESETTLEMENT INFORMATION BOOKLET

A. Purpose of Resettlement Information Booklet

1. This resettlement information booklet is prepared with main purpose of introducing this project, especially the compensation principle and resettlement-related interests, the payment method of other funds, the time to pay for individuals/collective affected by requisitioned land. This is part of the information disclosure, aiming at disclosing the policies and procedures of land acquisition, relocation, compensation, payment, handling of correspondences and visits and steps for filing complaints. Related execution units will distribute this handbook to all the owners and village committees of requisitioned land before careful measuring and investigation.

B. Basic Project Information

2. Shanxi Urban–Rural Water Source Protection and Environmental Demonstration Project (hereinafter referred to as the Project) consists of four components: (1) Shixia Reservoir Operation and its Watershed Vegetation Improved; (2) Qingzhang River and Binhe Road Rehabilitated; (3) Inclusive Water Supply and Wastewater Collection Services Achieved; (4) Institutional Capacity Strengthened. Among them, the components (1), (2) and (3) will involve land acquisition, land leasing, and house demolition, while component (4) does not involve any land acquisition, land leasing, and house demolition. This document is main for the land acquisition and house demolition. A land use right transfer framework is prepared for the land leasing. The project component Output 1: Shixia Reservoir Operation and its Watershed Vegetation Improved includes three subcomponents: (1) Revegetation around Shixia reservoir and planting of forest belt along two headwaters; (2) Improving the reservoir spillway gate and construction of flood discharge and washout tunnel; (3) Construction hydrological and water quality monitoring stations around Shixia reservoir. The project component Output 2: Qingzhang River and Binhe Road Rehabilitated consists of five subcomponents: (1) Dredging selected sections of the river and tributaries which are heavily silted; (2) River rehabilitation and construction of embankment; (3) Construction of Wetland Park and associated amenity facilities. (4) Low impact design (sponge city concept) for road improvement, expansion for easement and storm water drain installation; (5) flood warning system. The project component Output 3: Inclusive Water Supply and Wastewater Collection Services Achieved consist of three subcomponents: (1) Rural water supply system; (2) water pollution control works (including sewage treatment plant); (3) related roads and bridges improvement; The project component Output 4: Institutional Capacity Strengthened consist of four subcomponents (1) Project Management; (2) Water Resource assessment (surface and groundwater); (3) Water demand management plan to ensure efficient use of water resources; (4) Institutional and capacity strengthening for integrated urban-rural water supply.

3. The management of Qingzhang River will start construction in September 2017 and is expected to be completed in August 2022.

C. Impacts of Land Acquisition and House Demolition

4. The project needs to permanently occupy a total of 3,693.95 *mu* land, including 2,309.04 *mu* state-owned land and 1,398.29 *mu* collective land; of the collective land, the cultivated land area is 528.26 *mu*.¹² As this project is an environmental improvement project, the greening works do not change the nature of farmland and do not need to acquire (changing the land property and the ownership). This project will permanently acquire a total of 1,049.65 *mu* collective land, including 528.26 *mu* cultivated land and 521.39 *mu* non-cultivated land, which affects a total of 33 villages in 4 townships and/or towns, namely Shixia Township,

¹² Including 348.64 *mu* land to be rented and 1,049.65 *mu* land to be acquired.

Liaoyang Town, Hanwang Township, and Longquan Township. The land acquisition and cultivated land occupation affects 1,384 persons in 591 households, among which the female population is 650; the project involves 8,099.62 m² residential house demolition, and will affect 104 persons in 24 households, who are also affected by land acquisition; 4 enterprises with totally 32 employees need to be relocated with 2,475 m² buildings to be demolished.¹³ The project will temporarily occupied 231 *mu* collective land, which affects 231 households with 647 persons. 30 households of the APs belong to the vulnerable groups. Generally, the project affects a total of 2,031 persons in 822 households, among which 1,384 persons in 591 households will be affected by permanent land occupation, and 647 persons in 231 households affected by temporary land occupation. A total of 961 females will be affected by the project, among which, there are 650 persons affected the land acquisition, residential and non-residential house demolition, and 311 persons affected by the temporary land occupation. For details, please see table 1.

¹³ They are the villagers nearby, and they will also affected by the land acquisition.

Table 1: Project Impacts

Component	Project Implementation Unit	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	APs										
				Collective Land ^a	State-Owned	Subtotal	Collectively Owned		Land Acquisition	House Demolition		Land Acquisition + House Demolition		Subtotal		Enterprise		m ²	
										mu	mu	mu	mu	m ²	HH	Pop.	HH		Pop.
Shixia Reservoir Operation and its Watershed Vegetation Improved	ZCSRMD	Revegetation around Shixia reservoir and planting of forest belt along two headwaters	Haogou, Changcheng, Dianshang, Daofogou, Heyu, Chuankou, Zhuning, Guantou, Weijiazhuang Villlage, Xiaolingdi, Pushang, Huli, Shiyao	0	1,922.65	1922.65	0	0	0	0	0	0	0	0	0	0			
	ZCSRMD	Improving the reservoir spillway gate and construction of flood discharge and washout tunnel	Shixia Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0			
	ZCSRMD	Construction hydrological and water quality monitoring stations around Shixia reservoir	Haogou, Chuankou, Shiyao, Xiajiao, Shixia Reservoir	13.38	0	13.38	0	0	3	9	0	0	0	0	3	9			
Qingzhang River and Binhe Road Rehabilitated	ZCHSUCMB	Dredging selected sections of the river and tributaries which are heavily silted	Shixia Township, Liaoyang Town	0	0	0	25.5	0	0	0	0	0	0	0	0	0			
	ZCHSUCMB	River rehabilitation and construction of embankment	Xiguan, Qilidian, Xiaohui, Xichangyi, Jinggou, Dongchangyi, Xihetou, Shixia, Majiu, Sanjia	467.51	323.02	790.52	0	0	67	152	0	0	0	0	67	152			
	ZCHSUCMB	Construction of a wetland park and associated amenity facilities	Xiaohui, Xichangyi	470.31 ^b	44.98	515.29	0	0	273	630	0	0	0	0	273	630			
Inclusive Water Supply and Wastewater Collection Services Achieved	ZCHSUCMB	Water pollution control	Shixia Township, Liaoyang Town, Longquan Township, Hanwang Township	29.06	0	29.06	0	0	0	0	0	0	0	0	0	4	32	2,475	
	ZCHSUCMB	Related roads and bridges improvement and widening works	Xiguan, Qilidian, Xiaohui, Xichangyi, Jinggou, Dongchangyi Xihetou, Shixia, Majiu, Songgou	374.97	5,012.00	379.98	0	8,099.62	226	543	24	104	24	104	226	543			
	ZCWRB	Rural water supply system	Pumping station: Dongchangyi, Songgou, Shigangkou, Wulinou, Majiaguai. Water supply pipeline: Majiu, Xichangyi, Jinggou,	43.07	0	43.07	205.19		22	51	0	0	0	0	22	51			

Component	Project Implementation Unit	Subcomponent	Affected Village	Land Occupation			Temporarily Occupied Land	House Demolition	APs													
				Collective Land ^a	State-Owned	Subtotal	Collectively Owned		Land Acquisition		House Demolition		Land Acquisition + House Demolition		Subtotal		Enterprise					
									mu	mu	mu	mu	m ²	HH	Pop.	HH	Pop.	HH	Pop.	HH	Pop.	HH
			Dongchangyi , Fengpoyu, Henan, Liujaiyao, Guojaiyao, Songgou, Yuyuekou, Tudi, Qianzhai, Shigangkou, Xiazhiqi, Qinghedian, Shuiheng, Wulihou, Dongzhai, Gaozhuang, Majiaguai, Liangyu, Baoze, Caoting, Zhangba																			
Total				1,384.91	2,295.66	3,693.95	230.69	8,099.62	591	1,384	24	104	24	104	591	1,384	4	32	2,475			

AP = affected person, CNY = Chinese yuan, HH = household, m² = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.67 square meters or 0.067 hectares), Pop. = population, ZCHSUCMB = Zuoquan County Housing Security and Urban–Rural Construction Management Bureau, ZCSRMD = Zuoquan Shixia Reservoir Management Division, ZCWRB = Zuoquan County Water Resources Bureau.

^a Among which, 348.64 *mu* land will be rented, all for Construction of wetland park and associated amenity facilities.

^b Among which, 348.64 *mu* land will be rented.

D. Implementation Organization

5. Shixia Reservoir Management Division will be responsible for the implementation of water conservation protection project, flood-releasing facilities improvement project and hydrological monitoring station project. the Housing Security and Urban-Rural Development Bureau of Zuoquan County for the implementation of the comprehensive improvement of Qingzhang River watercourse (including watercourse dredging project, flood control and ecological restoration project and comprehensive improvement of watercourse auxiliary facilities), water pollution control project and the related road and bridge improvement and widening project. The ZCWRB of Zuoquan County is responsible for the implementation of water supply system project. Zuoquan County ADB Project Management Office (PMO) will assume the overall management and supervision responsibility of the implementation of RP, including the preparation and implementation management of the RP, the progress report and internal monitoring of the RP and employment of external monitor. Component PIUs, with the assistance of local authorities, will be responsible for the specific implementation of the RP, including confirmation of affected lands and houses, consultation of APs, financing and payment of compensation fund, and the implementation of resettlement measures for APs. Township (government) and village committees will actively participate in the implementation of the RP. In order to ensure the smooth implementation of the project, Zuoquan County PMO will organize training on the implementation of compensation and resettlement for land acquisition and house demolition, which will be handled by the competent person in charge of the resettlement. The RP also includes the training program to strengthen the capacity of resettlement-handling staff at all levels.

E. Land Acquisition and House Demolition Compensation

6. The compensation rate for land acquisition will be subject to the Notice on Adjusting the Provincial Unified Annual Output Value Standard for Land Acquisition (JZF [2013] No.22) released by the Shanxi Province People's Government.

7. The compensation rate for land acquisition includes the following standards: CNY28,800–CNY43,200/*mu* for cultivated land, CNY26,400–CNY40,320/*mu* for garden plot, CNY24,000–CNY37,440/*mu* for forest land, CNY21,600–CNY34,560/*mu* for grassland, CNY4,800–CNY5,760/*mu* for resident and industry land, CNY4,800–CNY5,760/*mu* for land for transportation, CNY1,440/*mu* for young crops and CNY1,440/*mu* for land temporarily occupied for 1 year. The compensation rate for rented land is CNY960/*mu*.

8. The final compensation rate for demolished houses will be determined according to the assessment based on market price of housing replacement cost. An independent housing assessment firm (jointly determined by the APs and the Housing Security and Urban–Rural Development Bureau of Zuoquan County at the time of project implementation) will undertake the housing assessment for the project. The guiding prices for housing demolition compensation are CNY2,300/m² for brick-concrete-structured house, and CNY1,980/m² for post-and-panel-structured house. Besides, HHs to be resettled will receive CNY8/m² as transitional settlement fee and CNY10/m² as relocation allowance. Each HH will obtain an award of a certain percentage of the total amount of compensation for signing resettlement compensation agreement and demolishing the house prior to the deadline prescribed by local government.

F. Cut-off Date

9. The cut-off date of the project was 30 July 2016. Anyone who is affected by requisitioned land will not be compensated or subsidized if they cultivate new land, build new house or settle down in the affected areas after the deadline.

G. Payment of Land Compensation Fees

10. The calculation of full replacement cost will be based on the fair market value, transaction cost, accrued interest, transition and rehabilitation costs and other possible reasonable costs.

11. The amount of compensation will not be detained or depreciated, and no taxation is included. The compensation received by property owner must be calculated as per the open compensation rate. All assets of the original building are owned by the original owner. The value of buildings cannot be depreciated according to useful life. The remaining value of remaining material after demolition cannot be deducted from compensation. Any taxes or other fees for re-registration of land and property will be exempted or paid by the project undertaker.

H. Grievance Redress Mechanism

12. To protect the interests, rights and properties of related units and individuals from violating and damaging, their opinions and appeals will be reported through the below procedures:

- (i) Stage 1; The APs lodge oral or written complaint to the village committee. In case of oral complaint, village committee must write it down properly and give reply within 2 weeks.
- (ii) Stage 2; If the reply in stage 1 cannot satisfy the complainant, complainant may further complaint to the village resettlement group and village government must give clear reply within 2 weeks.
- (iii) Stage 3; Complainant may complaint to each PIU within a month after receipt of stage-2 reply, and each PIU makes decision within 3 weeks.
- (iv) Stage 4; The APs may complaint to Zuoquan PMO within a month after receipt of stage-3 reply if they find component PIU's reply unsatisfactory. Zuoquan PMO makes reply within 4 weeks. Administrative arbitration may be resorted to for settlement if no agreement can be reached.

13. APs can also submit complaints to the Asian Development Bank (ADB) which will be handled by the Zuoquan project team. If an AP is still not satisfied and believes they have been harmed due to non-compliance with ADB's policy, they may submit a complaint to ADB's Office of Special Project Facilitator or Office of Compliance Review in accordance with ADB's Accountability Mechanism.¹⁴

14. Appeal can be conducted against all aspects of resettlement work and compensation fees, including compensation limit approved. This resettlement information booklet sets forth procedures for owners of requisitioned land to express their opinions and file appeals, which will also be disclosed to them at public meeting before land acquisition.

15. These procedures will remain valid during the whole project construction in order to make sure farmers are able to deal with matters in relation to rehabilitation of infrastructures, including rebuilding of irrigation system, location selection and design

¹⁴ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

for drainage pipelines and sidewalks, utilization of normal roads entrance and temporary land and so on. Thus, farmers will be able to efficiently report these problems to the project management institutions and parties to contract for open discussion, so these problems could be solved in a timely manner.

Table 2: Information of Organization and Personnel Receiving Complaints and Appeals of Affected Person

Unit	Contact	Address	Tel
Zuoquan Project Management Office	Huo Jianbin	3rd Floor, Administrative Convenience Building, Binhe Road, Zuoquan County	03543893095
Zuoquan County Land Resources Bureau	Hao Jianzhong	12th Floor, Administrative Convenience Building, Binhe Road, Zuoquan County	03548636389
Shixia Reservoir Management Division	Zhao Lianhu	Shixia Reservoir Management Division	03548982324
Housing Security and Urban-Rural Development Bureau	Wang Feng	5th Floor, Administrative Convenience Building	18035410666
ZCWRB of Zuoquan County	Han Lijun	Chengbeilie Street, Zuoquan County	15935095358
Shixia Village People's Government	Kang Jinhou	Shixia Village People's Government	03548982631
Liaoyang Town People's Government	Wang Xiaoyan	Liaoyang Town People's Government	03548653814
Longquan Town People's Government	Wang Shuping	Longquan Town People's Government	03548932085
Hanwang Town People's Government	Qiao Ruihua	Hanwang Town People's Government	03548970730

I. Disclosure of RP

16. The project RP contains resettlement measures. AP may check the documents at Zuoquan PMO (3rd Floor, Administrative Convenience Building, Binhe Road, Zuoquan County)

J. Entitlement Matrix

Table 3: Entitlement Matrix

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate
Acquisition of collectively owned land	1,049.65 <i>mu</i> of collectively owned land	33 villages	Providing the land acquisition compensation, among which 80% will be allocated to HH in cash, and 20% will be allocated to village collectives	CNY28,800/ <i>mu</i> : Haogou Village, Changcheng Village, Dianshang Village, Daofogou Village, Xiaolingdi Village, Guantou Village, Pushang Village, Weijia Village CNY36,300/ <i>mu</i> : Heyu Village, Chuankou Village, Zhuning Village, Shiyan Village, Huili village, Shixia Village, Xiajiao village, Majiaguai Village, Shigangkou Village CNY43,200/ <i>mu</i> : Xiguan Village, Qilidian Village, Xiaohui Village, Xichangyi Villadge, Jinggou Village, Dongchangyi Village, Xihetou Village, Majiu Village, Sanjia Village, Songgou Village
		591 HHs and 1,384 persons	(1) Cash compensation. The standard of AAOV and the compensation policy published by the Shanxi Province People's Government; (2) Non-agricultural job placement. The government will arrange public service positions or positions created by the project for the APs; (3) Skills training. Provide agricultural and non-agricultural technical training through the normal training courses which is free of charge and is opened by the Human Resource and Social Safeguard Bureau of Zuoquan County; (4) Pension insurance. Provide pension insurance for the APs; and (5) Young crops compensation.	80% of the land acquisition compensation (see above row) will be allocated to HH in cash
Land Occupation	348.64 <i>mu</i> collective land to be rented	Affected villages	(1) The project owner or the PIUs will sign land leasing agreements with the affected villages. (2) The real land leasing price will be determined by negotiation and the guiding land leasing price is CNY960/ <i>mu</i> /year for cultivated land, while CNY480/ <i>mu</i> /year for forest land, CNY384/ <i>mu</i> /year for grassland, CNY576/ <i>mu</i> for other land (including transportation land, urban land and others).	CNY384-CNY960/ <i>mu</i> /year
	1,951.2 <i>mu</i> of State-owned land	<i>mu</i>	The state-owned land will be allocated to the project at free	Free
Housing		24 HHs and 104 persons	(1) The APs can choose cash compensation or the replacement houses. (2) For APs choosing cash compensation, the structures blow 2 stories on the legal housing site ^a will be compensated as the	The real compensation price will determined by appraisal conducted in the implementation phase. The guiding minimum price is the following:

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate																									
			<p>appraised price, the highest appraised price cannot exceed 160% of local market price.</p> <p>(3) for APs choosing the replacement houses, the structures blow 2 stories on the legal housing site^a will be compensated in 2 ways, one is the highest compensation area cannot exceed 150% of the original areas, the other way is providing 160% housing sites area to the APs. For those replacement housing area is less than 160%, the PIU will provide replacement price for the insufficient housing site area. Only one household choose replacement house.</p>	<table border="1"> <thead> <tr> <th>Type</th> <th>Unit</th> <th>Standard</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Brick and concrete</td> <td>CNY/m²</td> <td>2,300</td> <td></td> </tr> <tr> <td>Brick and timber</td> <td>CNY/m²</td> <td>1,980</td> <td></td> </tr> <tr> <td>Attachment</td> <td>CNY/m²</td> <td>56</td> <td></td> </tr> <tr> <td>Transition resettlement</td> <td>CNY/m²/month</td> <td>8</td> <td>CNY240/month will be granted for an area of housing less than 30 m² and CNY8/month will be granted for areas no less than 30 m² for 18 months.</td> </tr> <tr> <td>Relocation allowance</td> <td>Residential housing</td> <td>CNY/m²/month</td> <td>10</td> <td>CNY300 for an area less than 30 m²</td> </tr> </tbody> </table>	Type	Unit	Standard	Remark	Brick and concrete	CNY/m ²	2,300		Brick and timber	CNY/m ²	1,980		Attachment	CNY/m ²	56		Transition resettlement	CNY/m ² /month	8	CNY240/month will be granted for an area of housing less than 30 m ² and CNY8/month will be granted for areas no less than 30 m ² for 18 months.	Relocation allowance	Residential housing	CNY/m ² /month	10	CNY300 for an area less than 30 m ²
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Relocation allowance	Residential housing	CNY/m ² /month	10	CNY300 for an area less than 30 m ²																									
Houses of enterprise		4 HHs and 32 persons	Compensated as the appraised replacement price. And restore their production and business after the compensation by the guidance of local government	<p>The real compensation price will determined by appraisal conducted in the implementation phase.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Unit</th> <th>Standard</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>Brick and concrete</td> <td>CNY/m²</td> <td>2,300</td> <td></td> </tr> <tr> <td>Brick and timber</td> <td>CNY/m²</td> <td>1,980</td> <td></td> </tr> <tr> <td>Attachment</td> <td>CNY/m²</td> <td>56</td> <td></td> </tr> <tr> <td>Transition resettlement</td> <td>CNY/m²/month</td> <td>8</td> <td>CNY240/month will be granted for an area of housing less than 30 m² and CNY8/month will be granted for areas no less than 30 m² for 18 months.</td> </tr> <tr> <td>Relocation allowance</td> <td>Business housing</td> <td>Relocation allowance</td> <td>15</td> <td></td> </tr> </tbody> </table>	Type	Unit	Standard	Remark	Brick and concrete	CNY/m ²	2,300		Brick and timber	CNY/m ²	1,980		Attachment	CNY/m ²	56		Transition resettlement	CNY/m ² /month	8	CNY240/month will be granted for an area of housing less than 30 m ² and CNY8/month will be granted for areas no less than 30 m ² for 18 months.	Relocation allowance	Business housing	Relocation allowance	15	
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Relocation allowance	Business housing	Relocation allowance	15																										
Temporarily occupying the land	230.69 mu	231 HHs and 647 persons	<p>(1) Cash compensation: the compensation of young crops will be provided to the persons who are affected.</p> <p>(2) The land restoration cost will be incorporated in the civil construction agreement.</p>	The compensation will be offered to the HH who are affected according to the proportion of 100% of the AAOV, with the compensation period of 1 year (CNY1,440/mu).																									

Type of Affection	Degree of Affection	Right-holder	Policies for Resettlement Compensation	Compensation Rate
Young crop and overland attachment	Trees, other agriculture production facilities and attached construction	Farmer determined by the proprietary right	Cash compensation will be provided to the persons being affected according to the replacement price.	See the tables 4-3, 4-4 and 4-5 for details.
Vulnerable groups	Land acquisition and house demolition	30 HHs	(1)The PMO and the Village Committee will use the vulnerable group assistance reserve fund (used for such actions as leasing car, hiring, heart-warming assistance in winter, etc.) (2) The vulnerable group can preferentially obtain the job opportunities provided by the construction unit of the project or other life recovery measures. (3)The PMO and the village committee will help to build a new home and improve livelihoods.	
Complaint and appeal		All the persons being affected	It is free of charge to complain and appeal, and all the reasonable expenses caused from the complaint and appeal will be paid with the reserve fund of the project.	

AAOV = average annual output value, CNY = Chinese yuan, HH = household, m² = square meter, m³ = cubic meter.mu = a Chinese unit of measurement (1 mu = 666.67 square meters or 0.067 hectares), PIU = project implementation unit, PMO = project management office.

^a All residential houses to be demolished this project are all on the legal housing sites.

APPENDIX 6: ABSTRACT OF THE LAND ADMINISTRATION LAW AND RELEVANT POLICIES

Item	Key Points	Index
Land ownership	The People's Republic of China resorts to a socialist public ownership i.e., an ownership by the whole people and ownerships by collectives, of land. The State introduces the system of compensated use of land owned by the State except the land has been allocated for use by the State according to law.	Article 2 of the Land Administration Law
Application for construction land	Any unit or individual that need land for construction purposes should apply for the use of land owned by the State according to law; Whereas occupation of land for construction purposes involves the conversion of agricultural land into land for construction purposes, the examination and approval procedures in this regard shall be required.	Articles 43 and 44 of the Land Administration Law
Land acquisition authority	The acquisition of basic farmland or land exceeding 35 hectares outside the basic farmland, and other land exceeding 70 hectares shall be approved by the State Council. Acquisition of land other than prescribed in the preceding paragraph shall be approved by the governments of provinces, autonomous regions, and municipalities; and submitted to the State Council for the record.	Article 45 of the Land Administration Law
Land acquisition announcement system	For the acquisition of land by the State, the local governments at and above the county level shall make an announcement; and organize the implementation after the approval according to the legal procedures. After the plan for land compensation and resettlement fees is finalized, related local governments shall make an announcement; and hear the opinions of the rural collective economic organizations and peasants whose land has been acquired. Rural collective economic organizations shall make public to its members the receipts and expenditures of the land compensation fees for land acquired and accept their supervision.	Articles 46, 48, and 49 of the Land Administration Law
Compensation rates for land acquisition	In acquiring land, compensation should be made according to the original purposes of the land acquired. Compensation fees for land acquired include land compensation fees, resettlement fees and compensation for attachments to or green crops on the land. The land compensation fees shall be 6-10 times the average annual output value of the 3 years preceding the acquisition of the cultivated land. The resettlement fee shall be calculated according to the number of agricultural population to be resettled. The number of agricultural population to be resettled shall be calculated by dividing the amount of cultivated land acquired by the per capital land occupied of the unit whose land is acquired. The resettlement fees for each agricultural person to be resettled shall be 4-6 times the average annual output value of 3 years preceding the acquisition of the cultivated land. However, the maximum resettlement fee per hectare of land acquired shall not exceed 15 times of the average annual output value of 3 years prior to the acquisition.	Article 47 of the Land Administration Law
Temporary land use	Users who use the land temporarily should use the land according to the purposes agreed upon in the contract for the temporary use of land and should not build permanent structures. The term for the temporary use of land shall not usually exceed 2 years.	Article 57 of the Land Administration Law

Key Provisions of SC [2004] No.28 and MLR [2004] No.238 and Their Application

	SC [2004] No.28—Improvement of Compensation and Resettlement Systems for Land Acquisition	MLR [2004] No.238
<p>Article 12 Improvement of measures for compensation for land acquisition</p>	<p>County-level and above local governments shall take practical measures so that the standard of living of LEFs is not reduced by land acquisition.</p> <p>Land compensation, resettlement subsidy, and compensation for ground attachments and crops shall be paid in full and timely pursuant to law. If the land compensation and resettlement subsidy pursuant to the prevailing laws and regulations are insufficient to maintain the former standard of living of the LEFs or to pay the social security expenses of farmers who lose all land due to land acquisition, governments of provinces, autonomous regions, and municipalities directly under the central government shall approve an increased resettlement subsidy. If the sum of the land compensation and the resettlement subsidy attains the statutory upper limit and is still insufficient to maintain the former standard of living of the LEFs, local governments may pay a subsidy from the income from compensated use of state land.</p> <p>Governments of provinces, autonomous regions, and municipalities directly under the central government shall fix and publish the uniform AAOV rates or integrated land prices for land acquisition of all cities and counties, so that the same price applies to the same kind of land. For key construction projects of the state, land acquisition expenses must be listed in the budgetary estimate in full.</p>	<p>Fixation of uniform AAOV rates</p> <p>Determination of uniform AAOV multiples</p> <p>Fixation of integrated land prices for land acquisition areas</p> <p>Distribution of land compensation</p>
<p>Article 13 Proper resettlement of LEFs</p>	<p>County-level and above local governments shall take specific measures to guarantee long-term livelihoods of LEFs.</p> <p>For projects with a stable income, farmers may become a shareholder using the right to use of land used for construction approved pursuant to law.</p> <p>Within the urban planning area, local governments shall bring farmers who lose all land due to land acquisition into the urban employment system, and establish a social security system; out of the urban planning area, in acquiring land collectively owned by farmers, local governments shall reserve necessary arable land or arrange appropriate jobs for LEFs within the same administrative area; farmers without land who do not have the basic living and production conditions shall be subject to non-local resettlement.</p> <p>The labor and social security authorities shall propose guidelines for the employment training and social security systems for LEFs as soon as possible.</p>	<p>Resettlement for agricultural production</p> <p>Resettlement by reemployment</p> <p>Resettlement by dividend distribution</p> <p>Non-local resettlement</p>
<p>Article 14 Improvement of land acquisition procedures</p>	<p>During land acquisition, the ownership of collective land of farmers and the right to contracted management of farmers' land shall be maintained.</p> <p>Before acquisition is submitted for approval pursuant to law, the use, location, compensation rate and mode of resettlement of the land to be acquired shall be notified to LEFs; the survey results of the present situation of the land to be acquired shall be confirmed by rural collective economic organizations and farmers to be affected by land acquisition; if necessary, the land and resources authorities shall organize a hearing in accordance with the applicable provisions. The materials for notification to and confirmation by the LEFs shall be taken as requisite materials for approval for land acquisition.</p> <p>Accelerate the establishment and improvement of the coordination and judgment mechanism for disputes over compensation and resettlement for land acquisition to protect the lawful rights and interests of LEFs and land users. Approved matters of land acquisition shall be disclosed unless in special cases.</p>	<p>Disclosure of information on land acquisition</p> <p>Confirmation of land acquisition survey results</p> <p>Organization of land acquisition hearing</p>
<p>Article 15 Strengthening Supervision over the implementation of land acquisition</p>	<p>If the compensation and resettlement for land acquisition has not been implemented, the acquired land shall not be used forcibly.</p> <p>Governments of provinces, autonomous regions and municipalities directly under the central government shall formulate the procedures for the distribution of the land compensation within rural collective economic organizations on the principle that the land compensation is used for rural households affected by land acquisition mainly.</p> <p>Rural collective economic organizations affected by land acquisition shall disclose the receipt, disbursement, and allocation of land compensation fees to their members and accept supervision. The agricultural and civil affairs authorities shall strengthen the supervision over the allocation and use of land compensation fees within rural collective economic organizations.</p>	<p>Disclosure of approval items of land acquisition</p> <p>Payment of compensation and resettlement expenses for land acquisition</p> <p>Post-approval supervision and inspection of land acquisition</p>

AAOV = average annual output value, LEF = ?, MLR = Ministry of Land and Resources, SC = State Council.

APPENDIX 7: LAND USE RIGHTS TRANSFER FRAMEWORK

A. Introduction

1. Shanxi Urban–Rural Water Source Protection and Environmental Demonstration Project (hereinafter referred to as the Project) consists of four components: (1) Shixia Reservoir operation and its watershed vegetation improved; (2) Qingzhang River and Binhe Road rehabilitated; (3) Inclusive water supply and wastewater collection services achieved; (4) Institutional capacity strengthened. As this project is an environmental improvement project, the greening works do not change the nature of farmland and do not need to acquire (changing the land property and the ownership), that is, 348.64 mu rural collective land will be rented for this project. For making this land rent can follow ADB requirements/best practices for voluntary agreements, Zuoquan PMO prepared the LAND USE RIGHTS TRANSFER FRAMEWORK with the assistance of PPTA consultant.

B. Objective and Principles

2. This Land Use Rights Transfer Framework (LURTF) is to help the Zuoquan PMO manage land use rights transfer, and to satisfy the requirements of ADB and the PRC laws and regulations. The LURTF guiding principles are:

- (i) *Equality, voluntary, legal procedure, and, fair compensation.* Equality means both of parties have equal legal status. Voluntary means the transfer of land contracting management right must be completely voluntary for both parties, and one party shall not force another party to transfer or accept transfer of land. Legal procedure means that land use rights transfer must be concluded per legal procedure with legal agreement. Fair compensation means the transferred land use rights shall be compensated at negotiated market price.
- (ii) *Unchanged ownership and agricultural use of transferred land.* Land use rights transfer means transferring use right, not ownership, therefore ownership of transferred land shall remain unchanged. Yet future users of transferred land shall not change the agricultural land use nature, i.e., shall not convert transferred land for non-agricultural uses.
- (iii) *Government's direction and administration.* Zuoquan County shall direct and administrate legal transfer of rural land
- (iv) *Conflict resolution through the grievance redress mechanism.* The grievance redress system of project shall be used to resolute complaints and conflicts, if any.

C. Legal Framework

3. All LURT must comply with the PRC Rural Land Contract Law and Rural Land Management Right Transfer Management Method, other relevant policies of Shanxi Province and Zuoquan County, and should not involve involuntary resettlement as defined under ADB's SPS. Key laws and policies are as follows:

- (i) Law of the People's Republic of China on Land Contract in Rural Areas – no change of collective ownership; no change of agricultural land use (not allowed to convert farmland into construction land for establishment of permanent structures).
- (ii) Administration Methods on Rural Land Use Rights Transfer, Ministry of Agriculture of the PRC, relevant regulations of Shanxi provincial and project county governments:
 - a. Land use rights transfer duration within defined period;
 - b. Negotiated agreements between transferor and transferee;
 - c. Land use rights transfer per legal procedures;
 - d. Standard contract sanctioned by an authority according to law.

- e. Official registration and documentation for land use rights transfer.
- f. As necessary, the township/town governments endorse the contract.
- (iii) The PRC Law on the Mediation and Arbitration of Rural Land Contract Disputes, and relevant implementation methods of Shanxi provincial and Zuoquan County People's Government – mediation and arbitration of disputes per a bottom-up Grievance Redress Mechanism (GRM).
- (iv) ADB's requirements/best practices on voluntary agreements – meaningful consultations; negotiated agreements; establishment and functioning of a GRM; record-keeping; and; independent monitoring.

4. In addition, the best practices in the project area also will be adapted for the land use rights transfer under the project, such practices include:

- (i) Land use rights transfer period of 30 years (2017-2047);
- (ii) Land use rights transfer rate (or land rental rate) based on negotiated price;
- (iii) Endorsement of land use rights transfer contract.

D. Legal Procedures of Land use rights transfer

5. Legal procedures are as follows (also the following chart):

- (i) Information collection. Farmers with intention to transfer land use rights present the details of the land, like location, area, usage, and reference price to village committee, which will then report to the township government.
- (ii) Information disclosure. The township government, after collecting data, will sort out information about land use rights transfer of different villages and establish a database. The sorted information will be disclosed timely by means of network, radio, newspapers, board, electronic display, and etc. The township government will also update land use rights transfer databases.
- (iii) Negotiation between transferor and transferee. With the arrangement of township and/or town government, both sides negotiate about the land use rights transfer conditions and price based on the principle of equality, voluntariness and mutual benefiting.
- (iv) Signing land use rights transfer contract. When both parties agree on conditions and price, township government provides 4-5 copies of a standard contract (the fifth copy for endorsement, if needed), for both parties to sign.
- (v) Endorsing land use rights transfer contract. As needed, the township government endorses the contract.
- (vi) Registration for land use rights transfer. The township government registers the land use rights transfer information timely and exactly, and submits the relevant materials to the Zuoquan PMO for documentation.
- (vii) Documentation. The relevant government department leasing land with the help of PMO documents all relevant materials for land use rights transferred.
- (viii) Supervising contract implementation. Both parties should perform the contract positively, and township government supervises the contract execution. In case of conflicts or disputes, the township government will timely report to the county PMO.

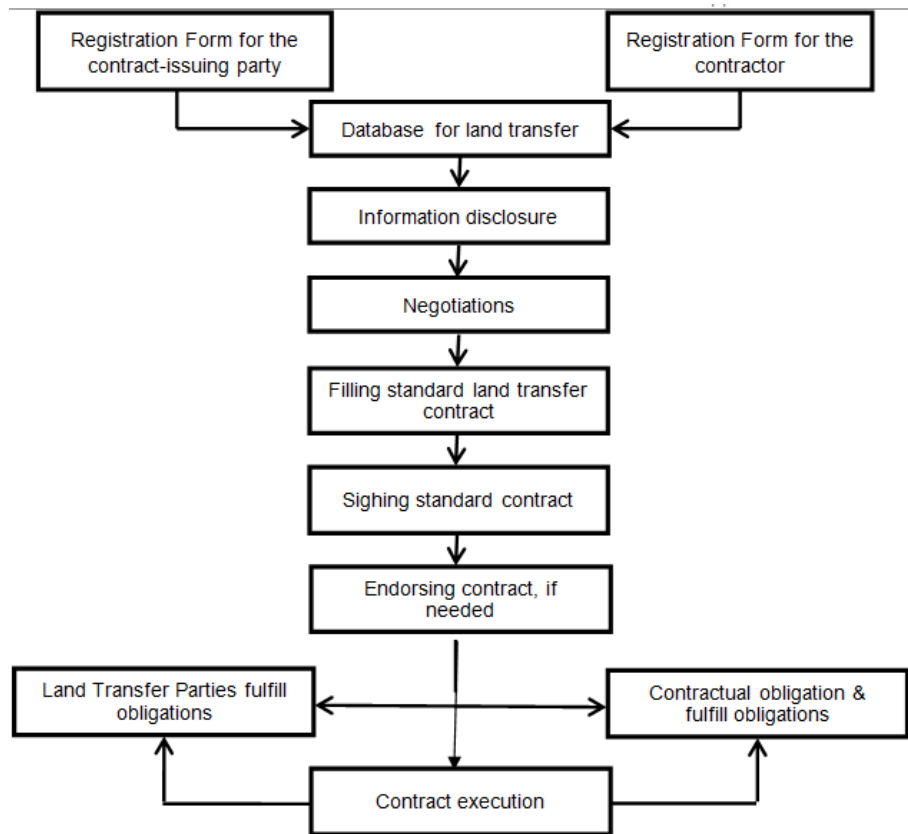


Figure 1: Land Use Rights Transfer Procedure Chart

E. Contents of Land Use Rights Transfer Contract

6. Land use rights transfer contract shall include the following clauses:
- (i) names and domiciles of two parties;
 - (ii) location, borders, area and quality of the land for transferring;
 - (iii) term of transfer and dates of beginning and completion;
 - (iv) ways of transfer;
 - (v) usage of land;
 - (vi) rights and obligations of two parties;
 - (vii) land use rights transfer expense and method of payment;
 - (viii) handling of appurtenance and relevant facilities after expiry of contract;
 - (ix) liabilities for breach of the contract;
 - (x) method of conflict resolution;
 - (xi) other clause that both parties thought necessary;
 - (xii) stamping of endorsing agency; and
 - (xiii) date of contract conclusion.

F. Measures to Safeguard Interests of Contract Parties

7. The following measures will be taken to safeguard the interests of contract parties:
- (i) In case of severe damage of transferred land due to natural disasters or force majeure during the contract term, both parties can terminate or change the contract through negotiation, and the land shall be returned to the original users. When there are specific contract provisions on severe damage of land, the provisions prevail.

- (ii) The land leasing contracts will be signed by both husband and wife in case of involving individual households.
- (iii) Contract endorsement by township free of charge.
- (iv) According to the Rural Land Contract Law and the Rural Land Management Right Transfer Management Method of the PRC and other relevant land use rights transfer laws and regulations of Shanxi Province and Zuoquan County, the land use rights transfer duration shall be negotiated equally by both parties.
- (v) The land use rights transfer rate will be based on market prices, i.e. referred to local similar land use right transfer cases and land type, grade, and condition of referential corps, or the price of land use rights transfer in nearby villages. Taking farmer's interest into consideration, both transferor and transferee will set a time to renegotiate land price in case of land use rights transfer for over 5 years.
- (vi) The PMO's social specialist consultant will review the contracts and prepare a due diligence report for ADB's endorsement before start of works on relevant lands.

G. Grievance Redress Mechanism

8. Where land use rights transfer contracts are based on negotiations and mutual agreement, complicated disputes are unlikely to occur. However, there might be some unexpected issues during and after land being transferred. According to Law of the People's Republic of China on the Mediation and Arbitration of Rural Land Contract Disputes, the project has set up a transparent and efficient grievance redress procedure to settle such disputes and defaults after land use rights transfer. The GRM is described in the resettlement plan.

H. Institutional Arrangement and Responsibility

9. According to relevant laws and regulations, Shixia Reservoir Management Division and township and/or town governments will manage and guide rural land use rights transfer in their administrative areas.

10. Responsibilities of Shixia Reservoir Management Division:

- (i) direct rural land use rights transfer and contracting;
- (ii) manage and guide the rural land use rights transfer;
- (iii) settle the disputes;
- (iv) provide consultation services for land use rights transfer policies; and
- (v) develop the standard contract.

11. Responsibilities of township and/or town government:

- (i) information collection, analysis and disclosure, land use rights transfer can be signed at the locations of township and/or town governments;
- (ii) providing a standard contract for farmers/village committees and help them to reach agreements on contract conditions and terms, and assisting them to sign contract signing;
- (iii) functioning as a third party to endorse the signed contract;
- (iv) record the land use rights transfer information timely and exactly;
- (v) documenting land use rights transfer materials;
- (vi) investigate and rectify the illegal land use rights transfer;
- (vii) settling disputes about rural land use rights transfer;
- (viii) guide and administrate land use rights transfer legally; and
- (ix) providing consultancy services.

12. Responsibilities of village committee:

- (i) Information collection and classification on land use rights transfer, to be reported to township and/or town government; and
 - (ii) assisting township and/or town in settling disputes.
13. Responsibilities of the PMO:
- (i) supervising contract execution;
 - (ii) participating in conflict/dispute resolution at county level if not resolved at township and/or town level; and
 - (iii) engaging a social specialist consultant to review and verify contracts and prepare a due diligence report to ADB.