RESETTLEMENT PLAN

Anyang Wastewater Treatment & Water Supply Project

Under

Henan Wastewater Management and Water Supply Sector Project

IN THE

PEOPLE’S REPUBLIC OF CHINA

Anyang Municipal Water Supply Company
April 2005

THIS IS NOT AN ADB BOARD APPROVED DOCUMENT
Endorsement Letter of the Resettlement Plan

Anyang Water Affairs General Company has prepared the resettlement plan for Asian Development Bank (ADB) financed wastewater treatment project in our city. This resettlement plan fully complies with requirements of the relevant laws, regulations and policies of People’s Republic of China and Henan Province as well as complies with ADB’s policy on involuntary resettlement.

Anyang Municipal Government hereby confirms the content of this resettlement plan and will guarantee the land acquisition, compensation and relocation budget being provided according to the provisions of this resettlement plan. This resettlement plan is based on the feasibility study report and the initial surveys. If the final implemented engineering works are different from what have been described in the feasibility study report and that will cause the substantial impact on the resettlement plan, this resettlement plan should be future modified and approved by ADB before its implementation.

Anyang Municipal People’s Government

March 28, 2005
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<tr>
<td>RP</td>
<td>Resettlement Plan</td>
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<td>APs</td>
<td>Affected Persons</td>
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<td>ADB</td>
<td>Asian Development Bank</td>
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<td>WWTPLT</td>
<td>Anyang Zongcun Wastewater Treatment subproject Leading Team</td>
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<td>PMO</td>
<td>Project Management Office</td>
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<tr>
<td>AYWAG</td>
<td>Anyang Water Affairs Group</td>
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<td>PPO</td>
<td>Zongcun WWTP Project Preparation Office</td>
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<tr>
<td>LARO</td>
<td>Long’an Resettlement Office</td>
</tr>
<tr>
<td>VCRLT</td>
<td>Village Committee Resettlement Leading Team</td>
</tr>
<tr>
<td>CCSMEDRI</td>
<td>China Central South Municipal Engineering Design and Research Institute</td>
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<tr>
<td>MEA</td>
<td>Monitoring and Evaluation Agency</td>
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<td>TA</td>
<td>Technical Assistance</td>
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<td>EA</td>
<td>Executing Agency</td>
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<td>IA</td>
<td>Implementing Agency</td>
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<td>RIB</td>
<td>Resettlement Information Brochures</td>
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<td>NGO</td>
<td>Nongovernment Organization</td>
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<td>TOR</td>
<td>Terms of reference</td>
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<td>HWMWSP</td>
<td>Henan Wastewater Management and Water Supply Project</td>
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Executive Summary

A. Background and Impacts Assessment

1. The Project includes one wastewater treatment plant with capacity of 100,000 m$^3$/d, one wastewater recycle plant with capacity of 40,000 m$^3$/d and 62 km of sewage treatment pipelines and those for recycled water supply. The Project involves in 13.79 ha of land permanently acquired, among which the land for road construction accounts for 0.52 ha. Also, the Project occupies 37.2 ha land temporarily.

2. There are two administrative divisions—Long’an District and Yindu District in the affected area. According to the impact survey for feasibility study report, 2 villages and 7 neighborhood offices will be affected to some different degree by the Project including farmland acquisition and pipeline network construction. The land expropriated includes farmland of Zongcun Village and Houqili Village in Longan District. The adverse impact of wastewater collection system and recycled water supply system concentrates on 4 neighborhood offices in Yindu District. The following impacts are expected based on detailed measurement survey: (i) 132 rural households with 465 persons will be directly affected by land acquisition; and (ii) another 93 rural households with 279 persons will be affected temporarily.

B. Policy Framework and Entitlements

3. The resettlement principle of the Project is based on relevant laws and regulations of PRC and ADB’s Involuntary Resettlement Policy. Compensation, resettlement and income rehabilitation measures have been developed based on the local regulations and actual situation of the affected villages and communities to decide on support measures, cash compensation and selection of income rehabilitation between community-based organizations and affected groups. The key principle is to ensure that all the APs get sufficient compensation and assistance of income rehabilitation after demolition. The main purpose of RP is to rehabilitate APs income and living standard and minimizing the damage on their own economic and social environment. An entitlement matrix has been formulated for all varieties of impacts including loss and rehabilitation cost of land, house, enterprise, and temporary/permanent income sources.

C. Rehabilitation and Income Restoration

4. All affected persons will be compensated and provided with relocation assistance as set out in the project entitlement matrix of this RP. During Project implementation, efforts will be made to further minimize the land acquisition and resettlement impacts.

5. The income restoration and rehabilitation measures has been formulated in this RP according to the local economic situation with the objective of guaranteeing the living standards and livelihoods of the affected persons equal or better than the ones before the project. These income restoration and rehabilitation measures have been developed in consultation with all affected persons and they have reflected the most practical ways for the easy implementation during the project.

D. Institutional Arrangements

6. Anyang Water Utility Corporation, the implementation agency of the project, will be responsible for project implementation and coordination of the land acquisition and resettlement. Zongcun Sewage Project Preparation Office, subordinate to Anyang Water Utility Corporation, was established in May 2004. It will be responsible for the detailed issues. In August 2004, a Project Land Acquisition and Resettlement Office was established in the affected Long’an District. Also, a
District Resettlement Office, initiated by the district leaders, comprises 3 officials from the governmental departments, e.g. land administration, urban construction and civil administration. A representative will be nominated by the affected neighborhood offices and villagers’ committee individually to take the charge of the resettlement and implementation of economic rehabilitation plan together with the neighborhood offices and villagers’ commissions.

**E. Public Consultation and Disclosure**

7. Public participation is a key point in the Project, and five main consultation meetings (twice at district level and three times at village level) had been held in the Project area from March to May, 2004. The officials from the municipal government, district government, neighborhood offices (including officials from state land resources administration bureau, civil administrative bureau, women’s federation), the affected persons and consultants attended the meetings. The impact survey of the Project has covered 2 villages and 7 neighborhood offices. These meetings and survey outcomes have had remarkable influences upon policies and compensation entitlement in the resettlement plan, particularly in formation of compensation rate, compensation methods and formation of income rehabilitation based on livelihood/training program. Although several public consultations have been made, the Project owner still bears in their mind the need of extra consultation meetings during the land acquisition and construction. Main activities carried out include: (i) printing and distribution of the Resettlement Handbook in Chinese version, including description of policy, compensation entitlements, compensation rate and amount, appeal procedure and resettlement/land acquisition plan; (ii) holding formal villager meetings to decide the allocation of compensation; (iii) carefully making an on-the-spot detailed measurements; and (iv) reaching consensus with the affected families/enterprises in land, property and other final necessities for acquisition and resettlement.

**F. Complaints and Grievances**

8. An appeal procedure was set up to solve the disputes in compensation and the resettlement interest on the purpose of responding to the affected persons’ grievances timely and transparently. The affected persons are entitled to file the grievances against any dissatisfaction in land acquisition and rehabilitation, including the amount of compensation paid to them. In the Resettlement Handbook, detailed procedures for acceptance and processing of grievance have been issued, and these procedures will also be explained to the affected persons at the public meeting held by the Project owner or the district land acquisition and resettlement offices prior to the land acquisition and resettlement.

**H. Cost Estimate of Resettlement**

9. According to the project feasibility study report and resettlement survey, the resettlement costs are estimated to be CNY 24.64 million, including 15% contingency cost. The compensation and resettlement budget will be adjusted based on the actual implementation. The EA will ensure adequate funding for resettlement implementation and will provide resettlement funds as necessary to meet eventual shortfall that emerges in achieving the resettlement objectives.

**G. Monitoring and Reporting**

10. Implementation of this Resettlement Plan will be monitored internally and externally. Anyang Water Affairs Group (AYWAG) will assume responsibilities for the internal monitoring. District land acquisition and resettlement offices will be staffed with government supervisors. AYWAG will compile the quarterly progress report to submit to ADB, with contents cover the implementing progress, emphasizing whether it conforms to the principles set forth in the Resettlement Plan and requirements in the compensation entitlements matrix. The Henan Project Management Office will engage an independent monitoring organization to make external monitoring and evaluation (M&E), prepare M&E reports on the resettlement, specifying the distribution of the compensation, and other measures, and evaluating whether affected people have maintained or improved their social and
economic living conditions against the "non-project" state.
1. Introduction and Project Description

1.1. Introduction

In accordance with ADB policies on involuntary resettlement and other principle regarding social securities along with related social aspects, this resettlement plan is developed in reference to PRC’s laws/regulations and local governments’ policies on land acquisition and resettlement. This plan describes a policy framework to mitigate the adverse impacts caused by the proposed project of ZongCun wastewater treatment plant in Anyang through a serious of remediation measures. Also the resettlement plan for the affected people and rehabilitation plan for the affected villages, including how and when to take these measures.

Chinese governments and ADB are both concerned that the primary purpose of resettlement plan is to ensure the people who unavoidably lose lands or properties in the development program have the same or better livelihood and living standards compared with that under “non-projects situations. All the policies, suggestions and compensation measures in this resettlement plan are oriented to this purpose. The implementation agency has organized the ZongCun wastewater plant preparation office of Anyang Water Affairs Group (AYWAG) to construct and manage this Project. The office will directly assume the responsibility for the preparation, monitoring and financing of resettlement.

This resettlement plan is formulated the following basis:

1. “City Planning Act of PRC”
3. “Interim ordinance of PRC on Farmland Occupation”
5. “Implementation Rules for Land Administration Laws of Henan Province”
6. “Master plan of Anyang City”
7. “Resettlement Compensation Standards For the Urban Construction of Anyang City”
8. “Administration Rules For the master plan of Anyang”
9. ADB’s “Resettlement of Involuntary Movers”
10. Relevant project reports

This resettlement plan covers all aspects of resettlement and income rehabilitation caused by the construction of the proposed wastewater plant, wastewater collecting system and recycled water supply system.

On the basis of the feasibility study report and the preliminary designing report, this plan is made after detailed survey on land acquisition and demolition impact and socioeconomic survey. This Resettlement Plan has been approved by Anyang People’s Government.

1.2. Project Background

Anyang is one of the important central cities of Henan Province in economy, transportation, culture and technology. In the past few years, Anyang’s economy and all aspects of society have taken place massive changes, with a lot of outstanding achievements in city construction. However, with the rapid economic development and population growth, the volume of the municipal wastewater is getting more and more and the pollution load rises accordingly. For a long time, the construction of the sewage system in Anyang City is seriously lagged, and in Tiexi District there is no drainage system and municipal wastewater treatment plant until now and huge amount of domestic and industrial sewage in the completed districts flows down from the upstream portions into the major rivers across the urban area, which heavily contaminates the water and such situation tends to deteriorate, doing adverse influence on the former functions of the water basins, local agricultural and industrial production, city environmental sanitation and the public health. Therefore, to build a centralized wastewater treatment plant has become urgent on the agenda.

The field survey shows that the surface water of Hong river flowing across Tiexi district of Anyang
has been heavily contaminated, and the pollutant factors at each monitoring cross sections of the river, such as COD, BOD, NH₃-N and hypermanganate, have far exceeded Class V standards of surface water. Furthermore, the pollution of Hong River, mainly resulting from organic matters, is getting more and more heavy year by year. Since Hong river is a natural flood-discharging watercourse, most of agricultural lands are irrigated by the river. The infiltration in river course and irrigated lands has caused common pollution to the underground water getting worse as time passes. As an important river across Anyang urban area, the river basin contamination has directly affected the people’s life and production. However, with the acceleration of urbanization, the landscaping function of Hong River will become more important. So far, the issues of pollution control for Hong river have been highly noticed by Anyang People’s Government.

The proposed project of ZongCun wastewater plant is one of the important projects to be implemented in Anyang’s overall plan and wastewater control and prevention schedule. This project is designed to treat aggregate 100,000 m³/d of domestic and industrial sewage in the west of Anyang city. As designed, 40,000 m³/d treated water from the plant will be reused in Anyang power plant and other industrial companies and the rest of the treated water, 60,000 m³/d in total, will be discharged into Hong river, which plays a significant role in mitigating the pollution of the river through the urban area as well as the ground water along it, rehabilitating the agricultural and landscaping functions of the river, saving water resources and relieving the conflict between the scarcity of urban water supply and the lack of water resources to realize the social, economic and environmental sustainable development of Anyang City.

1.3. Project Description

1.3.1. Project Location

As proposed, Anyang ZongCun village wastewater plant, occupying 13.79ha, is located in ZongCun of Long’an district, southwest to the urban area, 150 meters to the east of ZongCun, 100 meters to the west of Beijing-Guangzhou railway, 200 meters to the south of Honghe river, 250 meters to north of Houqili village. See attached drawing for project location.

1.3.2. Main Construction

This Project has four parts to be constructed, including secondary treatment facility of the wastewater plant, recycled water treatment facility, sewage network outside the plant and the recycled water transportation pipelines.

Based on the expectation and integrated justification of the wastewater volume generation, the treatment capacity of the plant is confirmed to be 100,000m³/d for the near stage (2010) and 150,000m³/d for the long term stage (2020).

Under the agreement with the users and the comprehensive justification, it is confirmed that the capacity of reuse water is 40,000m³/d. The treated water will be used as the makeup water of the circulated cooling water of Huaxiang power plant.

The network outside the plant contains Wenyuan street sewage system, Wenfeng street sewage system Wenming avenue sewage system, Jinhua-Ancai avenue sewage system, sewage system to the south of Hong river and Tiexi street sewage system. The diameters of the reinforced concrete sewers ranges from 400 to 1600mm with a total length of 51.562km in length. The reuse water transportation pipes, 800mm in diameter, are made of prestressed reinforced concrete in the total length of 11km.

1.3.3. Investment Estimation and Implementation Schedule

Investment on this project is estimated to be CNY 254.0316million (including the tertiary sewer cost CNY 4.8016million), among which CNY 228.97million is for the capital cost, CNY 15.26million is for
the interest during construction, and 5 million CNY is for the PPTA.

Financing resources: A. US$ 14.3929 million (equivalent to CNY119.4607 million) loan from ADB, B. CNY 134.5709 million from local counterpart fund, including CNY 57.40 million loan from the Construction Bank of China, 2 million loan from provincial grant, and 75.1709 million loan from the local government and AYWAG.

According to schedule of resettlement, it is to commence acquisition of land for the plants in August and complete it by October 2005; to subsequently rehabilitate the livelihoods of affected people. The pipeline network construction will take place from June 2006 until December 2006.

According to schedule of wastewater plant, it is to start civil construction by August 2005, to start installation of equipments by December 2005 and finish it by March 2007, to finish the civil construction by May 2007, to start commissioning and acceptance between June and August 2007 and to start the formal operation of this project by October 2007.

1.3.4. Socioeconomic Benefits of the Project

The Zongcun wastewater plant serves the area to the east of Beijing-Guangzhou railway, south of Angang avenue, west of Huaxiang road and north to Hong river, covering 27 km².

The construction of ZongCun wastewater treatment plant is an important part of the infrastructural facilities of Anyang City and a symbol of the modern civilized city as well. The implementation of this project will play an active role in changing the situation that the civil sewage flows directly into urban rivers, reducing the contamination of the waters caused by sewage, improving the environmental sanitation conditions and developing the people’s living standard and the public health level. In addition, it will be also helpful to enhance city’s investment environment, attract project investment, promote economic development and increase the celebrities of Anyang at home and abroad. It has very conspicuous and remarkable social benefits.

The urban wastewater treatment plant is a kind of public affairs. After completion and operation, it will to charge the clients in the principle of keeping profits slightly above cost to maintain its normal operation without direct economic benefits.

The wastewater plant, when under operation, will produce long-term indirect or potential economic benefits by improving urban environment and promoting economic development. Each year it will reduce a pollutant discharge of 25,696 tons, including 12,410 tons of COD and 5,110 tons of BOD, which improves the environmental quality of urban rivers like Hong river to a large extent, recover the multi-functions of Hong River, reduce the contamination to the surface water sources and ground water and increase the usability of those water resources. With the improvement of the water quality, the city will assume beautiful, tidy and sanitary environment, which will be especially helpful to develop the west areas of Anyang City to gain better economic profits.
2. Socioeconomic Background of the Affected Areas

2.1. Background of the City Affected by the Project

2.1.1. Features of the city
Anyang city is located in the north of Henan province. At the confluence of four provinces of Shanxi, Shandong, Hebei and Henan, and it possesses advanced traffic with Beijing-Guangzhou railway, Beijing-Shenzhen railway and 107 national highway running through its urban area. As a famous historical and cultural city, Anyang is one of the seven ancient capitals and the political, economical and cultural center in the north of Henan Province. The urban layout is centered at the old city proper expanding to the surroundings constituting two parts of east and the west traversing Beijing-Guangzhou railway. Rich in natural resources, this city has become an industrialized city with steel, electronics and light textile as its major industries. In 2003, the GDP of Anyang amounted to CNY 36.1 billion.

2.1.2. Urban Layout
Anyang City exercises jurisdiction over one city (Lin Zhou City), four counties (Anyang, Tang Yin, Huaxian and Nei Huang County), and four regions (Wen Feng, Bei Guan, Yindu and Long'an region) with total area up to 7,413 km². The urban planning area as amounts to 543.6 km², in which, urban constructed area is 69 km².

2.1.3. Population
By the end of 2003, the total population has been up to 5.28 million with 0.65 million of urban population, and it’s planned that by 2010 the latter will reach 1 million.

Table 2-1 Population Structure of Anyang

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<th>Districts/county</th>
<th>Total household</th>
<th>Total population</th>
<th>Nonagricultural population</th>
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Data from “Anyang City’s statistics yearbook in 2003”

2.1.4. Geological Location
Anyang City locates in the north of Henan Province. Back against Taihang Mountains, it borders on Shanxi Province in the west. Separated by Zhang River, it is adjacent to Hebei Province to the north. This city is also adjacent to Puyang City to the east and in connection with Xinxiang City and Hebei City to the south. In terms of the geological coordinate, this city has a northern latitude ranging from 35°13’ to 36°22’ and an eastern longitude ranging from 113°38’ to 114°58’. The city, 122km in width from east to west and 128km in length from south to north, covers an area of 7,413 km² with the urban area of 247 km². The urban area of it is divided into the eastern part and the western part by Beijing-Guangzhou railway.
2.1.5. Climate

Anyang situated at temperate and warm northern zone, subject to continental climate, together with local feature of transiting from mountain to plain, boasting mild climate, sufficient sunlight, concentrated rainfall and clearly-demarcated four seasons.

2.1.6. Water System

Surface water of Anyang municipal planning zone belongs to south canal system of Haihe River Basin. The main rivers wandering through this city are Anyang River, Wanjin Canal, Shengli canal and Hong River.

2.2. Basic Situations of Affected Areas

Two administrative districts, Long’an Subdistrict and Yindu Subdistrict, will be involved in the construction of Anyang Zongcun Wastewater Treatment Plant Project. What is shown below are the brief introduction of the socioeconomic situation of the two subdistricts.

2.2.1. Long’an Subdistrict

Located to the southeast of the urban area of Anyang City, Long’an subdistrict exercises jurisdiction over 2 countries, 1 town, 130 villages, 6 offices and 13 residents’ committees. This subdistrict covers an area of 236 km² with the total population of 11,920. In 2003 GDP of the subdistrict was CNY 6.2 billion, among which the primary sector accounted for 40% followed by 32% for the secondary sector and 28% for the tertiary sector. This share indicates that agriculture is the major activity in Long’an and this region is a typical mixture of urban and rural area.

The proposed wastewater treatment plant is in the vicinity of Wenchang Neighborhood Office of this subdistrict.

2.2.2. Yindu Subdistrict

Yindu Subdistrict is an important industrial base of Anyang City, where such large-scaled enterprises as Anyang Steel Company, Anyang Glass Plant and Anyang Cigarette Factory are settled. GDP of this subdistrict was 16.8 billion CNY in 2003. The primary sectors accounted for 6% of GDP, followed by the secondary sectors with 62% and the tertiary sectors with 32%. Within the last few years, the tertiary sectors have shown rapid development, driven mainly by some real estate projects such as Guo Yuan Xin Cun Residential Area, residential district of Guo Yuan New Village, Shi Ji Ming Cheng Residential Area and Civilization Residential Area.

2.2.3. Socioeconomic Situations of Project Area

Table 2-2 Social Population Situations

<table>
<thead>
<tr>
<th>Items</th>
<th>Long’an Subdistrict</th>
<th>Yindu Subdistrict</th>
<th>Total of the two subdistricts</th>
<th>Total of the city</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of household</td>
<td>50183</td>
<td>71734</td>
<td>121917</td>
<td>1422998</td>
</tr>
<tr>
<td>No. of population</td>
<td>191729</td>
<td>237738</td>
<td>429467</td>
<td>5286598</td>
</tr>
<tr>
<td>Nonagriculture Population</td>
<td>138077</td>
<td>183792</td>
<td>321869</td>
<td>1115807</td>
</tr>
<tr>
<td>Agriculture Population</td>
<td>53652</td>
<td>53946</td>
<td>107598</td>
<td>4170791</td>
</tr>
</tbody>
</table>
2.3. Socioeconomic Survey for Resettlement

To further comprehend the socioeconomic situation of the affected area, especially the basic information on the APs, a series of survey were carried out on the affected villages by Anyang Construction Committee, the local government divisions, the project construction agency — Anyang Water Affair Group and the project design institute — China Central South Municipal Engineering Design & Research Institute from April to December 2004.

2.3.1. Villages Affected by Permanent Land Acquisition and Resettlement

Permanent land acquisition concerning Zongcun Waste Water Treatment Plant project involves in two administrative villages those are Zongcun Village and Houqili Village subordinate to Wenchang Neighborhood Office in Long’an Sub-district. A total of 206.76mu of land will be acquired permanently by the project. The socioeconomic situations of these regions are shown in Table 2.3.

Table 2-3 Socioeconomic Situations of the Villages Affected by the Project

<table>
<thead>
<tr>
<th>Items</th>
<th>Zongcun</th>
<th>Houqili Village</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Total population</td>
<td>2348</td>
<td>1523</td>
<td>3871</td>
</tr>
<tr>
<td>II. Total household</td>
<td>518</td>
<td>335</td>
<td>853</td>
</tr>
<tr>
<td>III. Labor</td>
<td>1408</td>
<td>914</td>
<td>2322</td>
</tr>
<tr>
<td>1. Agriculture</td>
<td>563</td>
<td>365</td>
<td>928</td>
</tr>
<tr>
<td>2. Construction</td>
<td>211</td>
<td>182</td>
<td>393</td>
</tr>
<tr>
<td>3. Communication and transportation</td>
<td>422</td>
<td>228</td>
<td>650</td>
</tr>
<tr>
<td>4. Others</td>
<td>212</td>
<td>139</td>
<td>351</td>
</tr>
<tr>
<td>IV. Arable land area (mu)</td>
<td>1878</td>
<td>1447</td>
<td>3325</td>
</tr>
<tr>
<td>1. arable land area per capita</td>
<td>0.8</td>
<td>0.95</td>
<td>0.86</td>
</tr>
<tr>
<td>2. land acquisition area planned</td>
<td>97.76</td>
<td>109</td>
<td>206.76</td>
</tr>
<tr>
<td>3. arable land area after land acquisition per capita</td>
<td>0.76</td>
<td>0.88</td>
<td>0.81</td>
</tr>
</tbody>
</table>

2.3.2. Regions Affected by Temporary Land Use

Temporary land use concerns mainly construction of sewage pipe collection system and recycle water transporting pipelines. This project will cover 2 offices in Long’an Region and 4 offices in Yindu District and temporary land occupation will affect 60 mu of arable land in three villages in Long’an district. The temporary land use for the construction will mainly cause some economic loss, involving in 93 households 279 persons in total. Meanwhile municipal administrative roads up to 563 mu will be temporarily occupied. As the project is planned to be laid along the roads according to the sewage layout design, permanent land acquisition and resettlement can be avoided.

2.3.3. Households Affected by the Project

The land acquisition and resettlement of the Project will affect 132 peasant households (with 465 persons) by loss of land access in Zongcun and Houqili villages, and specific conditions are presented in Table2.4:
The land acquisition and demolition also involves in that for parts of enclosing wall and warehouses for Zongcun Chemical Plant, which is a township enterprise producing chemical materials, and is in production suspension at present due to its improper operation. And information regarding its employees is listed in Table 2.5:

### Table 2-5 Socioeconomic Information for Employees of the Affected Enterprise

<table>
<thead>
<tr>
<th>Affected enterprise</th>
<th>Numbers of staff</th>
<th>Age status</th>
<th>Average salary</th>
<th>Average salary of local city</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Male Female permanent temporary Lower than 35 35-50 Higher than 50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zongcun chemical plant</td>
<td>54 32 22 4 50</td>
<td>37 13 4</td>
<td></td>
<td>4800</td>
</tr>
</tbody>
</table>

### Table 2-4 Socioeconomic Profile of the Villages Affected by Permanent Land Acquisition

<table>
<thead>
<tr>
<th>Village</th>
<th>Villagers’ team</th>
<th>Households</th>
<th>Families Of agriculture</th>
<th>Population</th>
<th>Population of agriculture</th>
<th>Land acquisition area (hectare)</th>
<th>Land per capita after land acquisition (hectare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zongcun Village</td>
<td>1</td>
<td>60</td>
<td>60</td>
<td>240</td>
<td>240</td>
<td>97.76</td>
<td>0.76</td>
</tr>
<tr>
<td>Houqili Village</td>
<td>2</td>
<td>72</td>
<td>72</td>
<td>225</td>
<td>225</td>
<td>109</td>
<td>0.88</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>132</td>
<td>132</td>
<td>465</td>
<td>465</td>
<td>206.76</td>
<td>0.82</td>
</tr>
</tbody>
</table>

2.4. Sampling Survey on the APs

To acquire the basic information on the income and expenditure of the APs, a random sampling survey, which covers 20% (171 households with 598 persons) of the affected people in the two villages, was conducted by Anyang Water Affair Group and China Central South Municipal Engineering Design & Research Institute in June 2004. All the 132 households affected by land acquisition were inquired. Another random sampling survey on the households to be affected by pipeline network construction was also conducted to cover 20% of those people (19 households with 54 persons). The integrated analysis are shown as follows,

2.4.1. Statistic characteristics of APs

Among the respondents 133 are male and 57 are female, whose ages range from 23 to 72 with the average age of 36. As for their marital status, 175 (92%) of them have been married and 16 are single (8%). For those who are married, 4 persons (2% of the total) were living solitarily without children living with them.

The detailed educational background of the APs in the survey is presented in Table 2.6.
2.4.2. Scale of the Families Interviewed

Among the 190 families interviewed, each family has 1 to 7 members with the average number of 3.5, and the total APs amounts to 655. The specific result of this survey is shown in Table 2.7;

<table>
<thead>
<tr>
<th>Item description</th>
<th>No. of Members</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td></td>
<td>2.11</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>74</td>
<td></td>
<td>38.95</td>
</tr>
<tr>
<td>4</td>
<td>79</td>
<td></td>
<td>41.58</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td></td>
<td>5.26</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td></td>
<td>1.57</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td></td>
<td>0.53</td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

2.4.3. Time of Living in the village

The survey indicates that most of the people have been living in the village for a long time, and the details are shown in Table 2.8.

<table>
<thead>
<tr>
<th>Residence time</th>
<th>No. of cases</th>
<th>Percentage of cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five years and below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5~10 years</td>
<td>1</td>
<td>0.53</td>
</tr>
<tr>
<td>10~20 years</td>
<td>2</td>
<td>1.05</td>
</tr>
<tr>
<td>20~30 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30~50 years</td>
<td>16</td>
<td>8.42</td>
</tr>
<tr>
<td>For generations</td>
<td>171</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td>100</td>
</tr>
</tbody>
</table>

2.4.4. Average annual family income and expenditure per household

As shown in the statistics on 190 households in survey, their annual family income is CNY 2.0447 million among which agricultural income is CNY 1.1444 million (55.97%) and nonagricultural income is CNY 0.9003 million (44.03%).

For expenditure, their total annual family expenditure amounts to CNY 1.5396 million, among which CNY 0.4732 million is paid for production, accounting for 30.74%, and CNY 1.0082 million is for daily...
consumption, accounting for 65.48%. The income and expenditure structure is shown in Table 2.9.

**Table 2-9 Annual Income and Expenditure Structure of the Families Interviewed**

<table>
<thead>
<tr>
<th>Item</th>
<th>Total income (10,000 yuan)</th>
<th>Per capita income (yuan/person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting industry</td>
<td>86.88</td>
<td>1326.38</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>24.61</td>
<td>375.76</td>
</tr>
<tr>
<td>Forestry</td>
<td>2.95</td>
<td>45.06</td>
</tr>
<tr>
<td>Wages</td>
<td>60.55</td>
<td>924.50</td>
</tr>
<tr>
<td>Private business</td>
<td>18.03</td>
<td>275.27</td>
</tr>
<tr>
<td>Others</td>
<td>11.45</td>
<td>174.77</td>
</tr>
<tr>
<td>Total</td>
<td>204.47</td>
<td>3121.74</td>
</tr>
<tr>
<td>Family operating expenditure</td>
<td>36.78</td>
<td>561.46</td>
</tr>
<tr>
<td>Taxes and other expenses</td>
<td>3.98</td>
<td>60.75</td>
</tr>
<tr>
<td>Purchase for productive fixed assets</td>
<td>6.56</td>
<td>100.22</td>
</tr>
<tr>
<td>Daily life</td>
<td>100.82</td>
<td>1539.20</td>
</tr>
<tr>
<td>Properties</td>
<td>0.28</td>
<td>4.35</td>
</tr>
<tr>
<td>Transfer expenditure</td>
<td>5.54</td>
<td>84.52</td>
</tr>
<tr>
<td>Total</td>
<td>153.96</td>
<td>2350.52</td>
</tr>
<tr>
<td>Annual net income per capita</td>
<td>165.65</td>
<td>2529.00</td>
</tr>
</tbody>
</table>

Generally these two villages, close to the urban area, are contained in the construction area in the urban planning. As they are also close to large-scale industrial enterprises, they share considerable nonagricultural income.

### 2.4.5. Minority Families and Vulnerable Groups

As for the survey on 190 households, all are of Han nationality without minor nationality families. Among the families interviewed, neither female-household family nor widow/orphan family was found. In case some vulnerable groups are to be affected by the project during implementation, appropriate subsidy according to different situations will be disbursed by use of contingency.

### 2.4.6. Willingness of Compensation for Land Acquisition

This project does not involve in displacement and house demolition and the interviewed farming households’ reply to the compensation method for permanent land acquisition in survey is summarized as follows:
Table 2-10 Willingness of Compensation for Land Acquisition

<table>
<thead>
<tr>
<th>Project title</th>
<th>Options</th>
<th>Cases</th>
<th>Percentage accounted for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmland compensation</td>
<td>Cash compensation</td>
<td>72</td>
<td>37.89</td>
</tr>
<tr>
<td></td>
<td>Farmland with same size and quality</td>
<td>90</td>
<td>47.37</td>
</tr>
<tr>
<td></td>
<td>Employment arrangement for family members</td>
<td>3</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>Not available</td>
<td>12</td>
<td>6.32</td>
</tr>
<tr>
<td></td>
<td>Do not know</td>
<td>13</td>
<td>6.84</td>
</tr>
</tbody>
</table>

2.4.7. Willingness to obtain training

if possible Many APs wish they would accept retraining for reemployment, which is shown in Table 2.11. In fact, 75.13% people in survey indicated "willing", 0.79% "not willing" and 9.94% were unsettled, and 14.14% did not reply, however, if there were good employment opportunities, they would change their opinions,, this can be seen in Table 2.11 for specifics.

Table 2-11 Willingness to Obtain Reemployment Training

<table>
<thead>
<tr>
<th>Reply</th>
<th>Respondent people</th>
<th>Responding rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>287</td>
<td>75.13</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>0.79</td>
</tr>
<tr>
<td>Unsettled</td>
<td>38</td>
<td>9.94</td>
</tr>
<tr>
<td>No reply</td>
<td>54</td>
<td>14.14</td>
</tr>
<tr>
<td>Total</td>
<td>382</td>
<td>100</td>
</tr>
</tbody>
</table>

2.4.8. Information about the Project and Land Acquisition

See Table 2.12 for the social survey result concerning the affected people’s knowledge on the project and land acquisition.

As reflected from table 2.12, 80% of the APs came to know the project within nearly half a year; 50% in survey only learnt their land acquisition 2 months in advance mainly from the project social investigators, accounting for 40%, 30% learnt the message from their neighbors and 10% from the newspaper, and 20% from the meeting assembly.

As indicated from the survey result, a more effective and strong publication procedure is needed and mass media shall also display their functions in boosting the affected community and people learning the information concerning this project and other land acquisition-related information.
Table 2-12 Information Sources and Time Concerning the Project and Land Acquisition

<table>
<thead>
<tr>
<th>First knowledge</th>
<th>&lt;half a year</th>
<th>Half a year to 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responding rate</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Information sources</td>
<td>Newspaper</td>
<td>Meeting</td>
</tr>
<tr>
<td>Responding rate</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

2.4.9. Understanding and attitudes

The APs hold positive attitude towards fair compensation corresponding to their losses, and actually, 90% of them believed reasonable compensation; and 10% doubted. 80% respondents believed the relevant departments in charge would assist in them, 20% were not sure. When questioned about whether their families would benefit from this project, 70% respondents said “yes”, and 10% said “no” 20% indicated uncertain.

As also shown in the survey result, the APs hold support to the project overwhelmingly, as 95% agree and 5% not sure. The survey result is shown in Table 2.13:

Table 2-13 The APs’ Attitude and Opinion Towards the Project

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you family benefit from this project?</td>
<td>70%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Would your losses be fairly compensated?</td>
<td>90%</td>
<td>0</td>
<td>10%</td>
</tr>
<tr>
<td>In addition to reasonable compensation, will the relevant departments in charge help you?</td>
<td>8%</td>
<td>0</td>
<td>20%</td>
</tr>
<tr>
<td>Do you agree and support this project?</td>
<td>95%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Project Impacts

3.1. Types of loss Caused by Land Acquisition

According to the preliminary design and field survey for the project, the types of losses caused by land acquisition and resettlement are shown as follows:

- Permanent arable land acquisition;
- House demolition;
- Temporary land use;
- Infrastructure and special facilities demolition and;
- Loss of other productive assets such as trees and standing crops
3.2. Measures to Avoid or Reduce Land Acquisition to the Uttermost

3.2.1. Measures to reduce land acquisition during project design

In terms of land acquisition, resettlement and /or damage incurred, the following measures have already been applied in the project designing to reduce losses arising from project construction.

During project planning, comparative selection of schemes should be carried out and then possible consideration shall be taken in respect to influences to the local construction project and key factors to optimized scheme shall be brought out:

- to the utmost reducing farmland acquisition and house resettlement and dismantlement
- factory location selection shall avoid villages, commercial, financial and cultural amusement facilities as far as possible
- optimizing construction and organization design, shortening construction phase and reasonably arranging construction time

Based on the principles mentioned above, two sites are selected as the optional sites for the waste water treatment plant:

Site I: Zongcun, located at the south bank of Hong River and to the south of Xiangyang Chemicals Plant.

This factory site has the following advantages:
- within the planning area of Anyang City with definite subordination relationship, easy for project construction and management, as determined by overall planning requirements;
- plain and abundant land area satisfies waster water treatment and long-term land acquisition requirement;
- where belongs to urban land acquisition range, and most of them are farmlands with small dismantling works (small works are related to roads leading to the factory)
- where is situated at the edge of the city, having small impacts on urban environment;
- Surrounding the factory, storehouse land and public Greenland are planned to be built, to the south, there are some civil houses which having far distance, situating at upper wind direction of summer main wind guiding, without concentrated residential area having small impacts on living environment;
- currently there are simple roads connected with urban roads, to the west of factory, are extended lines of Tiexi railway, with convenient traffic;
- where is located at the downstream of waste water flowing direction, Tiexi District, convenient for waste water collection and treatment;
- Where is situated beside Hong River, convenient for nearest discharge of waste water after treatment;
Disadvantages of the factory address are:

- to the west of the factory, the extended line has not been finished, being in need of new-built factory-leading roads, which shall be taken as waste water factory leading pipes and pile corridor for regeneration water discharge pipes
- incrementing land acquisition area with small demolition
- having comparatively long inlet and outlet pipes to factory

Scheme II: triangle plot to the north of Hong River, where this plant lies in the north of Hong River and to south of Anyang station of Beijing-Guangzhou Railway

Advantages:

- where is situated within Anyang City Urban Planning area with definite subordination relation, convenient for project construction and management
- The factory faces to the west Tiexi Road with convenient traffic
- Where is situated at the edge of the city with small influences on living environment;
- where is located at downstream of waste water flowing of Tiexi District, convenient for waste water collection and discharge after treatment
- where is situated beside Hong River, convenient for nearest waste water discharge having short out pipes’

Disadvantages:

- Having quantities of buildings near Tiexi Road to the west of factory, having large demolition quantities
- provided with small usable land area, satisfying the short-term land acquisition requirement but suffering intense long-term land without development space
- Wanjin Canal passes through the factory premises, needing treatment with reduction of factory premises;
- part of the area is low located in need of filling and groundsill treatment with larger project investment

Through comparison of the foregoing two schemes, scheme I has advantages such as less demolition, lower costs and smaller influences. Now site selection opinion letter has been issued by the planning department and therefore scheme I is determined (Zongcun) as the proposed waste water treatment plant site.

Scheme of pipeline network lying along roads has been made and pipe jacking will be selected for road crossing to minimize demolition.

3.2.2. Measures in Construction Stage to Avoid Augmenting Land Acquisition and Resettlement

i ) Enhancing public participation mechanism
Before the commencement of project construction, such information related to project starting time and project construction schedule will be made to public in form of bulletin and measures of land acquisition and resettlement will be announced for purpose of accepting the residences’ supervision; during construction, preferential consideration will be given to utilize the local materials, transportation and labor force, such that the affected people could benefit from the project construction.

ii) Strengthening construction and management, reasonably arranging the construction site, minimizing influences on crops and plants, strictly controlling noises, dusts and influences on surrounding environment.

iii) Accelerating implementation progress, reducing construction influences, adopting advanced methods especially by using the mechanized construction in sewage network to shorten the construction time and to minimize the adverse impacts.

3.3. Project Impacts

3.3.1. Survey Methods

The survey on the physical index for the project impacts mainly involves governmental statistics, questionnaire, site survey and group discussion, fully related to such physical index as land, house and auxiliaries which might be lost during project construction. The data mainly spring from the following aspects:

- Site investigation report by China South Municipal Engineering Design & Research Institute, carried out in June 2004;
- Physical loss statistics concerning project affected items by Long’an Subdistrict Government;
- Visit and investigation concerning project impacts by the project owners, Anyang Water Affair Group, by which relevant data have been collected from the Statistic Bureau, Planning Bureau and other departments concerned. Local officials, the village leaders and the farmers whose farmland may be acquired were also visited to find out their opinion on the land acquisition, resettlement and the compensation on the land and houses. All the households potentially to be affected have been visited by the investigators due to the small scope of land acquisition and demolition impact.

As certain flexibility exists in preliminary project design, the precision of project impact may vary as follows:

1) Impacts of permanent land acquisition for waste water treatment plant have been identified meanwhile the affected people have been determined;
2) Impacts resulted from the location of the trunk sewers have been broadly been determined; and
3) A certain variable exists concerning specific location of the main sewers, and comparative impacts and affected people to be determined

The quantity and cost of the land acquisition and demolition will be tested further before the commencement of the project.
### 3.3.2. Summary of Project Impacts

#### i) Permanent land acquisition

The waste water treatment plant for this project needs permanent land acquisition, involving Zongcun and Houqili Village in Long’an District, with total collective land 199 mu, which will directly affect 132 farmers, with total 465 people. Detailed conditions are shown in Table 3.1:

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Village</th>
<th>Affected household</th>
<th>Affected person</th>
<th>Farmland to be permanently acquired (mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plant Site</td>
<td>Zongcun</td>
<td>60</td>
<td>240</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Houqili</td>
<td>72</td>
<td>225</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Access road to the plant</td>
<td>Zongcun</td>
<td>0</td>
<td>0</td>
<td>7.76</td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td></td>
<td>132</td>
<td>465</td>
<td>7.76</td>
</tr>
</tbody>
</table>

#### ii) Affected enterprises

Permanent land acquisition of this project will demand the demolition of Zongcun Chemicals partially Plant. This plant, mainly dealing in such chemical products as sulfur black, is a village enterprise owned by the villagers, where 30 staff were once employed during the most prosperous business stage. However the plant has not operated for over 10 years, failing in market competition and environmental protection, therefore no labor resettlement is involved. The plant occupies the land by means of renting the collective land, and it has been counted as part of the village land to be acquired for the proposed project. The plant will be affected by the project in terms of the demolition of some buildings and fence, these being: 160m² of simple brick houses, 400m² of single-structure houses and 1000m² of brick fence. Compensation will be made for the affected houses and walls at the reconstruction price and paid to the village collective.

<table>
<thead>
<tr>
<th>Item</th>
<th>Simple brick house (m²)</th>
<th>Single-structure house (m²)</th>
<th>Brick fence (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zongcun chemical plant</td>
<td>160</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

#### iii) Temporary land use

Temporary land use of this project mainly refers to the land temporarily acquired by the construction of pipeline networks. 52km of the wastewater collection pipes and along with 11km of regeneration water transportation pipelines will be constructed for the project, with 2 districts and 4 offices being temporarily acquired, which covers an area of 563.10 mu, including 60 mu of farmland and 503.10 mu of road. The trunk mains will temporarily occupy an area of 286.39 mu, and the lateral mains of 276.71 mu. As a whole, the temporary farmland use of the network engineering will be 60 mu for 1 to 3 months.
Table 3-3  Profile of the Farmland Temporarily Affected by the Pipeline Network

<table>
<thead>
<tr>
<th>Item</th>
<th>Village to be affected</th>
<th>Household to be affected</th>
<th>Person to be affected</th>
<th>Farmland to be used temporarily (mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main pipe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zongcun</td>
<td>18</td>
<td>70</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Houqili</td>
<td>41</td>
<td>167</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Hanxiaoazhuang</td>
<td>10</td>
<td>42</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>69</td>
<td>279</td>
<td>60</td>
</tr>
</tbody>
</table>

iv） Ground attachment

The survey on the trees, tombs and other properties within the 199 mu of farmland indicates that a total number of 15 trees, including 5 big trees and 10 saplings, 1 vegetable bed (500 m²) and 600 m² of single-structure houses will be affected by the project.

Table 3-4 Categories and Quantities of the Ground Attachment within the Land Acquired

<table>
<thead>
<tr>
<th>Item</th>
<th>Trees</th>
<th>Greenhouse</th>
<th>Single-structure house</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Big</td>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>Waste water treatment plant</td>
<td>5</td>
<td>10</td>
<td>500 m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>600 m²</td>
</tr>
</tbody>
</table>

v） Infrastructural and special facilities

Special facilities affected by this project are mainly electric lines and pumping well, including 6 electric poles, 1 pumped well, which will be protected and relocated during the construction project. In addition, 1000 meters of culvert and 280 meters of tractor road roads will be demolished after land acquisition.

Infrastructural facilities affected by this project are mainly 28km of roads damaged in network construction, including 0.5km main road, 3km sub-main road and 24.5km pavement. All infrastructures damaged will be reconstructed after the construction being completed.

Table 3-5 Type and Quantity of Infrastructures and Special Facilities

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Electric pole</th>
<th>Pumped well</th>
<th>Culvert (m)</th>
<th>Mechanically farming land (m²)</th>
<th>Main road (km)</th>
<th>Sub-main road (km)</th>
<th>Pavement (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Waste water treatment plant</td>
<td>6</td>
<td>1</td>
<td>1000</td>
<td>560</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Sewage</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>3</td>
<td>24.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6</td>
<td>1</td>
<td>1000</td>
<td>560</td>
<td>0.5</td>
<td>3</td>
<td>24.5</td>
</tr>
</tbody>
</table>
3.3.3. Historical Relics and Vulnerable Groups

i) The project has no impact on historical relics;

ii) Vulnerable groups

Among the two villages affected by land acquisition, there are no minority people. Taking the poverty baseline of annual income of 865 yuan per capita defined by the government, none of the 132 households directly affected by land acquisition is underprivileged.

3.3.4. Public Concerns

Survey on project demand and feedback of the affected people has been made, satisfying the affected people’s demands. Problems concerned are environmental protection, employment and enterprising opportunities. What they concern are

i) Fair compensation;

ii) regulating adequate land;

iii) assistance to livelihood;

iv) timely and adequate compensation

3.4. Project Impact Analysis

Those who lost their land due to project construction are richer comparatively, because of their income and laboring in non-agricultural activities. Viewing from the degree of impact from land acquisition, at least 2/3 of the families are engaged in non-agricultural activities with average annual income up to 2000 yuan per capita.

<table>
<thead>
<tr>
<th>Name of Project</th>
<th>Name of village</th>
<th>Household population (person)</th>
<th>Farmland (mu)</th>
<th>Per household farmland (mu/h)</th>
<th>Land acquisition (mu)</th>
<th>Per capita farmland before land acquisition (mu / p)</th>
<th>Per capita farmland before land acquisition (mu / p)</th>
<th>Land loss(%)</th>
<th>Income loss(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater treatment plant</td>
<td>Zongcun</td>
<td>518</td>
<td>2348</td>
<td>1878</td>
<td>3.63</td>
<td>97.76</td>
<td>0.8</td>
<td>0.76</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Houqili</td>
<td>335</td>
<td>1523</td>
<td>1447</td>
<td>4.32</td>
<td>109</td>
<td>0.95</td>
<td>0.88</td>
<td>7.37</td>
</tr>
</tbody>
</table>

After discussion with the affected farmers and other villager representatives arranged by the village committee, it is proposed that the affected farmers, after being paid the resettlement subsidy in cash, should rehabilitate the livelihood on their own. Since the farmlands will not be redistributed, the village committee has agreed to pay the affected farmers 1,000 yuan/mu each annum for the acquired land to compensate for their loss until the second round of land contract (30 years) is expired. Since the net income of crops planting is less than 1000 yuan/mu, this method is accepted among the affected farmers due to the reasonable compensation for their loss, and the affected families can do nonagricultural business with the cash compensated to them annually.
4. Legal and Policy Framework

Legal and law framework for this project has two sets of sources: PRC’s laws and regulations and policy requirements of ADB. This chapter is aimed to describe demolition and resettlement policies and strategy concerning land acquisition and compensation.

4.1. Legal framework - State/Local Law and Regulation

4.1.1. Legal framework

Compensation to the affected people and land and resettlement adheres to the Land Administrative Law initiated in 1999, involving land access and ownership, land use and protection and compensation, resettlement subsidy and proper resettlement measures to the affected people. According to the Land Administrative Law (Article 8), rural land belongs to the state land, rural and suburb land is owned collectively by village (residential land, arable land and mountain regions). Such collective and its members (majority of two thirds) have the right to determine whether reallocate or rearrange the arable land (Article 31). Furthermore (Article 47) it elaborates when land acquisition is necessary, compensation shall be made as per the original land purpose containing land compensation, resettlement subsidy, compensation for land attachment and standing crops.

Arable land compensation shall be multiple of average annual output of 3 years preceding such acquisition (based on local standard as prescribed by law). alike, the resettlement subsidy for each agricultural population to be settled shall be calculated based on multiple of the average annual output of 3 years preceding the land acquisition. Compensation for standing crops shall be calculated as per one season output. Compensation method and standard for the attachments will be carried out pursuant to prescription of Provincial People’s Government. Augmenting attachments will not be compensated at the date of announcement release for land acquisition. Article 48 and 49 demand consultation to the compensation standard and the compensation be appropriated to collective owned. All the compensations will be paid to the land owners including agency or collective organization.

Arable land occupancy tax will be calculated according to actual land area tax payers occupied which will be collected at once based on the specified amounts.

As regards to the specific implementation principle, compensation eligibility, deadline, procedures of information publicity, resettlement plans and monitoring have been specified. During urban building demolition, specialized state policy and local regulations will be in charge of the management, demolition, compensation and resettlement. The laws and regulations used for the project are shown as follows:

- Practice Directive for Land Administrative Law of PRC
- State Council Notice of the Decision to Deepen the Reform for Restrict Land Administration.
- Land Acquisition Announcement of Land Resources Ministry
- Urban Demolition Management Regulations, China
- Land Administrative Law Act of PRC
- Provisional regulations for Arable Land Occupancy of PRC
- Basic Farmland Protection regulations, Henan Province
- Land Administrative Law Act, Henan Province
- Announcement of Anyang People’s Government on Adjusting compensation standard of LAND acquisition For National Construction（2003）
- Regulation on Strengthening land Acquisition and Resettlement Works Management, Anyang People’s Government
4.1.2. Relevant Legal Extracts

Relevant regulations of Land Administrative Law of PRC:

**Article 10** land collectively owned by peasants will be organized legally by the collective economic committee; peasant collective-owned land respectively owned by more than two villages will be managed by the rural collective institutes of village or farmer teams; collective land subordinated to village (town) farmers will be managed and administrated by village(town )collective economic forms.

**Article 14** Land owned by farmer collectives shall be operated under a contract by members of the economic organizations of the farmer collectives for crop cultivation, forestry, animal husbandry or fishery. Within the duration of the contract for operation of land, any appropriate readjustment of the land between individual contractors shall be made with the agreement of at least two-thirds of the members of the villagers assembly or of the representatives of villagers and submitted to the township (town) people's government and the agriculture administration department of the people's government of the county for approval.

**Article 24** National protective arable land is forbidden to be changed into non-arable land. Land occupancy compensation policy is implemented by nation. In case land is approved for non-agricultural construction, the principle of “cultivating according to occupation” must be observed; non-observance cultivation or cultivated land not conforming to the requirements, land cultivation fees shall be paid as per the regulations as specified by province, autonomous or municipal level.

**Article 31** Land damage caused by digging, sinking and occupying shall be restored in charged by relevant regulations of the nation; non-restoration or non-observance shall be subjected to land recovery expenses.

**Article 42** Land acquired shall be compensated for on the basis of its original purpose of use.

Compensation for acquired cultivated land shall include compensation for land, resettlement subsidies and attachments and standing crop crops on the acquired land. Compensation for acquisition of cultivated land shall be six to ten times the AAOV of the acquired land for three years preceding such acquisition. Resettlement subsidies for acquisition of cultivated land shall be calculated according to the agricultural population to be resettled. The agricultural population to be resettled shall be calculated by dividing the amount of acquired cultivated land by the average amount of the original cultivated land per person of the unit the land of which is acquired. The standard resettlement subsidies to be divided among members of the agricultural population needing resettlement shall be four to six times the AAOV of the acquired cultivated land for three years preceding such acquisition. However, the highest resettlement subsidies for each hectare of the acquired cultivated land shall not exceed fifteen times its AAOV for the three years preceding such acquisition.

Standards of land compensation and resettlement subsidies for acquisition of other types of land shall be prescribed by provinces, autonomous regions and municipalities directly under the Central Government with reference to the standards of compensation and resettlement subsidies for acquisition of cultivated land.

Standards for compensation for attachments and standing crop crops on the acquired land shall be prescribed by provinces, autonomous regions and municipalities directly under the Central Government.

For acquisition of vegetable plots in city suburbs, the land users shall pay towards a development and construction fund for new vegetable plots in accordance with the relevant regulations of the
If land compensation and resettlement subsidies paid in accordance with the provisions of the second paragraph of this Article are still insufficient to help the farmers needing resettlement to maintain their original living standards, the resettlement subsidies may be increased upon approval by people's governments of provinces, autonomous regions and municipalities directly under the Central Government. However, the total land compensation and resettlement subsidies shall not exceed 30 times the AAOV of the acquired land for the three years preceding such acquisition.

**Article 47.** After deciding on the policy of land acquisition compensation, announcement shall be issued by relevant local government and opinions of the collective farmers and local organizations shall be listened.

**Article 48** The rural collective economic organization, the land of which is acquired, shall accept supervision by making known to its members the income and expenses of the compensation received for land acquisition.

The compensation and other charges paid to the unit for its land acquired is forbidden to be embezzled or misappropriated.

**Article 49** Local people's governments at all levels shall support the rural collective economic organizations, the land of which is acquired, and the farmers in their efforts to engage in development or business operation or to start enterprises.

**Article 50** Nation-owned land used by the construction unit shall be obtained by such compensable attitude as selling; however, the following types of construction land as approved by the people's government above county level can be obtained by appropriation:

(I) National governmental organization land use
(II) Urban infrastructure land and public welfare land
(III) Infrastructure construction land primarily supported by the nation related to energy, transportation and water conservancy works, and
(IV) Land of other purposes as specified by law or administrative regulations

**Article 54** Where land owned by the State or by farmer collectives needs to be used temporarily for construction of projects or for geologic prospecting, the matter should be subject to approval by the land administration departments of people's governments at or above the county level. However, if the land to be temporarily used is located in the area covered by urban planning, the matter shall be subject to agreement by the urban planning administration department concerned before it is submitted for approval. The land user shall, depending on who owns the land and who has the land-use right, enter into a contract for the temporary use of the land with the land administration department concerned, or the rural collective economic organization, or the villagers committee and pay compensation for it in accordance with the provisions of the contract.

**Article 57** In case that the following conditions are met, and subject to approval of the people's government or government with approval right, national land use right may be retrieved: (I) land use for public interest; (II)when land needs to be regulated arising from old city reconstruction for implementation of urban planning.

**Article 58** Rural peasants can only own one residence for each household, with the area not exceeding the standard for province, autonomous region and municipalities. Rural residences shall meet the overall planning of town land utilization and maintain the original residing base and village spare area. Rural residing land shall be inspected by town people's government and approved by country-level government; in which, where farmer-used land is occupied, procedures shall be addressed according to Article XXXXIV of this law.

Relevant Stipulates of Provisional Regulations of Farmland Land Occupancy Tax in PRC, 1987
Article 2 The farmland referred in the regulations means the land for planting. And that for planting 3 years preceding the acquisition is regarded as the farmland as well.

Article 3 Both unit and individual who need to occupy farmland for building construction or other nonagricultural construction should be responsible to pay farmland occupancy tax (thereafter called taxpayer). They should pay farmland occupancy tax in accordance with the regulation.

Article 4 Farmland occupancy tax should be calculated based on the actual area of farmland occupation. The amount of tax should be collected payment once.

Article 5 The tax amount of farmland occupancy should be stipulated as follows:
   (1) Take a county as a unit (same thereafter), for the area that the average farmland area is less than one mu per capita(included), the tax should be CNY 2 to CNY 10 per square meter;
   (2) For the area that the average farmland ranges from one (1 included) to two (2 included) mu per capita, the tax should be CNY 1.6 to CNY 8 per square meter;
   (3) For the area that the average farmland ranges from 2 to 3 mu per capita, the tax should be CNY 1.3 to CNY 6.5 per square meter; and
   (4) For the area that the average farmland is more than 3 mu per capita, the tax should be CNY 1 to CNY 5 per square meter.

Article 9 The farmland occupancy tax should be collected by finance department. The land administrative bureau should inform all finance departments timely after approval of land occupation for unit and individual. The unit and individual should declare and pay tax to finance department with the document approved by land administrative bureau above county level. The land administrative bureau will transfer the land to unit and individual based on the receipt of tax payment or approval document for land acquisition.

Relevant Regulations on the State Council Decision to Deepen Reform and Restrict Land Administration

Implications of new regulations for land use and land compensation “Document (28) 2004” - a State Council Circular on the “Decision to Deepen Reform and Strictly Enforce Land Administration” was issued on 21st October 2004 and contains several very important provisions in respect of LAR activity. The document points out that “the relationship between ensuring socio-economic development and protecting land resources must be correctly addressed” with the stated objectives “to bring the growth of land for construction use under strict control, take efforts to activate land reserves, strengthen (the awareness of) land saving, deepen reform, improve the legal system, take overall arrangements into consideration and further improve the strictest land system that is in tally with the national conditions of the country”.

The document urges local governments to take action to, inter alia:

- Strengthen land use planning and utilise approved land use plans as the basis for approving proposed construction projects.
- Involve local land use departments in the approval process for construction projects
- Publicise minimum values for sale and transfer land to avoid land acquisition taking place at below market rates
- Strengthen the application of “no detriment” for affected persons
- Ensure compensation payments are targeted to those most affected by LAR activity
- Strengthen audit and monitoring arrangements

The issue of document 28 was followed up by:

(i) The issue (on 1st November 2004) of Decree 27 by the Ministry of Land Resources.
Decree 27 contains administrative procedures for use by local Land Use departments in reviewing proposed construction projects. These procedures attempt to strengthen land use planning and control.

(ii) Ministry of Land Resources “Guidelines on Improving the System of Land Acquisition Compensation and Resettlement” which was issued on 3rd November 2004, makes specific reference to Document 28 and gives specific guidance on its implementation.

iv) Guidelines for the Implementation of the Land Administrative Law of PRC in Henan Province

Article 25 Where non-agricultural construction project is approved for land occupancy, cultivation plans shall be made by land users, forwarding to land administrative department for approval responsible for cultivation the land quantity and quality as appropriate. Where there’s not proper condition for land cultivation, corresponding cultivation fees shall be paid and the cultivation fees collection, utilization and management method shall be otherwise specified by provincial people’s government. Where land is supplied in unified manner within urban construction land occupancy under overall land planning, arable cultivation shall be shouldered by land use unit; where arable land is occupied by village and towns, land cultivation shall be taken charge by rural collective organizations or village committee.

Article 24 For acquiring farmer’s collective land, compensation should be made as follows:

(1) Land compensation: compensation for acquired cultivated land in the outskirt of primary city shall be eight (8) to ten (10) times the AAOV of the acquired land for three years preceding such acquisition; in the outskirt of secondary city and mining area seven (7) to nine (9) times the AAOV; in other areas six (6) to eight (8) times the AAOV. Of the farmland acquisition, various sideline products (excluding vegetable) shall be counted as 15% to 20% of the annual production based on major products. (AAOV: arable land averaged output value)

(2) Resettlement subsidies: for acquisition of cultivated land, compensation shall be paid based on each 667 m²: For the average farmland per capita is over 667 m², compensation shall be four (4) to five (5) times the AAOV of the acquired cultivated land for three years preceding such acquisition; for the average farmland per capita is over 334 m² and under 667 m², compensation shall be six (6) to nine (9) times the AAOV of last three years; for the average farmland per capita is less than 334 m², compensation shall be ten (10) to twelve (12) times the AAOV of last three years. Under special circumstance, compensation shall not be over 15 times the AAOV of the acquired cultivated land for last three years preceding such acquisition of 667 m².

(3) Standing crops: one times the AAOV.

(4) Compensation standards for attachments shall be executed according to the regulation of Provinical People’s Government. No compensation shall be paid to the newly added attachments from the date of public notification.

Article 35 in case the land occupied belong to rural collective owners or village committee, land compensation shall be paid to rural collective owners or village committee; where it belongs to villagers team; compensation shall be paid to the team and where it belongs to town collective organizers, it shall be paid to the organizers. Compensation for land attachment and green crops subsidy shall be performed as per Article 26 of Promulgation Rules for Land Administrative Law.

Article 38 The annual production value for land compensation and resettlement subsidies shall be based on the average annual production and current average nation-regulated product price of last three years. If no nation-regulated price, the local market price shall be used.

Article 39 Within the area of land acquisition, if there is water source, culvert, culvert gate, pipeline, road, electric cable and production and living related facilities, the local People’s Government shall
organize relevant departments as well as the land use unit and construction unit to resettle properly, without obstruction and damage on purpose; if obstruction and damage can not be avoided, the items shall be rehabilitated or constructed relevant facilities according to regulations.

Article 40 Temporary land use shall be implemented according to Article 57 of Land Administrative Law. Expiration of temporary land shall subject it to original status and land returned.

v) Several regulations of compensation standards for land acquisition for national construction in Anyang City
Compensation rate for power supply, communication wires (electric pole) is 168-210 yuan /pc; for pumped well (50-80m) is 7000-10000 yuan/pc; trees (big tree) 21-56 yuan/pc, (small trees) 1-8.4 yuan/pc. Compensation standard for greenhouse is 10-20 yuan /m2; canals 15 yuan/m; mechanical-farming roads 10 yuan/ m2; and houses 110-370 yuan/m2.

4.2. ADB Policy on Involuntary resettlement

4.2.1. Overall Objective of ADB Involuntary Resettlement Policy

(i) avoid involuntary resettlement wherever feasible;
(ii) minimize resettlement where population displacement is unavoidable, and ensure that displaced people receive assistance, preferably under the project, so that they would be at least as well-off as they would have been in the absence of the project; and
(iii) help the affected people to improve their livelihood and living standard, making them at least restoring to the level before resettlement or at beginning of the project construction.

4.2.2. Resettlement Plan Preparation

According to the Bank policy, the contents and level of detail of a resettlement plan, which may vary with circumstances, especially the magnitude of resettlement, should normally include a statement of objectives, policies and strategy, and should cover the following essential elements:

i) Corresponding measures shall be taken for resettlement within the policy frame making sure that the affected people have their optional right and other rights concerning the resettlement; familiar with the feasible schemes technologically and economically, participating in negotiation and enjoying opportunity of selection; obtaining compensation rapidly and duly based on the resettlement costs to counteracting the direct financial loss caused by project.

ii) In case resettlement is involved, corresponding measures shall be taken in line with resettlement planning or resettlement schedule, guaranteeing the affected people could get subsidy (such as resettlement subsidy); obtaining house or housing base, or farming site according to their requests. The production potential, positioning advantages and other comprehensive factors shall at least correspond with the advantageous conditions of the original site. And

iii) To achieve the objectives of this policy, necessary measures shall be taken regarding the policy frame for resettlement plans resettlement to ensure during the transitional period as expected reasonably the affected people could get proper assistance and subsidy in accordance with the livelihood and living standard restoration.

4.3. Resettlement Objectives and Planning Principles

4.3.1. Resettlement target

Compensation and resettlement policy to the affected people are formed based on China State laws and regulations as well as requirements from Asian development Bank. The purpose of the resettlement and rehabilitation plan is to ensure that the affected people will regain or surpass their
living standards after the resettlement. Priority shall be given to poverty-stricken people and vulnerable groups.

4.3.2. Resettlement planning principles
Requirements both from China State laws and Asian Development Bank are reflected in the Resettlement principles provided in Table 4.1 are principles involving compensation, dismantling and income rehabilitation; which are adequately flexible: allowing differences between villages, and urban communities; the differences are embodied on the one hand between land redistribution and cash payment; and on the other hand, the income rehabilitation of individual income based on community. The key lies in guaranteeing all affected people could get assistance and compensation for income rehabilitation after resettlement.

Table 4-1 Abstract of Resettlement Principles

<table>
<thead>
<tr>
<th>Principles</th>
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<tbody>
<tr>
<td>1</td>
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<td>5</td>
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<tr>
<td>6</td>
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<td>7</td>
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</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

4.4. Compensation Rate

4.4.1. Compensation Principle
- Compensation rate should be determined according to replacement principle
- Compensations shall be paid before acquisition of land and property
- Houses that must be demolished due to the project shall be compensated according to
reconstruction price

- Where the enterprises and shops cease their operation incurred by project construction, loss compensation shall be given till operation recovery and the compensation rate will be determined in line with the average wage level paid by the enterprises or shops as well as averaged profits and actual operation stopping duration.
- Construction management shall be consolidated to shorten the down time for enterprises and shops affected
- Land compensation rate and resettlement subsidy for land acquisition shall be executed in compliance with Henan Land Administrative Regulations and Administrative Method for Land Examination and Approval and Houses Demolition Compensation for Public Welfare Construction of Anyang, and
- The attachments involving standing crops and trees shall be compensated to the contractors or proprietors in line with the policy regulations.

4.4.2. Compensation Rates for Land Acquisition and Resettlement

1. Compensation Rate for Permanent Land Acquisition

According to the survey and measurement, the average productivity of the affected farmland in last three years was evaluated as 2727 yuan per mu.

Permanent Land Acquisition and Resettlement Compensation Rate has been decided as 26 times of the average productivity in last three years of the acquired land based on the Land Administration Law of the PRC, Henan Provincial Management Guidelines for Implementation of the Land Administration Law of the PRC, Anyang Compensation Guidelines for Land Acquisition by Construction, The detailed compensation Rates have been decided, see Table 4.2 and 4.3.

<table>
<thead>
<tr>
<th>Item</th>
<th>AAOV in last 3 years (CNY/mu/year)</th>
<th>Compensation Multiplier</th>
<th>Standard of compensation (yuan/mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>land compensation subsidy</td>
<td>standing crops</td>
</tr>
<tr>
<td>Farmland</td>
<td>2727</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27270</td>
<td>16362</td>
</tr>
<tr>
<td></td>
<td></td>
<td>44996</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2 Compensation Rates Calculation for Permanent Land Acquisition

<table>
<thead>
<tr>
<th>Item</th>
<th>Land Compensation and Resettlement Subsidy</th>
<th>Standing crops</th>
<th>User fee for land occupation for new construction</th>
<th>Tax on Farmland Acquisition</th>
<th>Land Management Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmland</td>
<td>43632</td>
<td>1364</td>
<td>13600</td>
<td>6667</td>
<td>4500</td>
<td>2100</td>
</tr>
<tr>
<td></td>
<td>71863</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver</td>
<td>Village commission</td>
<td>Contractor</td>
<td>Land bureau</td>
<td>Land bureau</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compensation Rate for Temporary land use (assuming 1 to 3 months occupation)
Table 4-4 Compensation Rate for Temporary Land Use

<table>
<thead>
<tr>
<th>Average crop season output value pre 3 years</th>
<th>Compensation Multiplier</th>
<th>Compensation Rate (CNY/mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standing crops</td>
<td>Land Rehabilitation</td>
</tr>
<tr>
<td>farmland</td>
<td>1364</td>
<td>3</td>
</tr>
</tbody>
</table>

Compensation rate for Production Buildings

The compensation rate for production building replacement cost is shown in table 4.5.

Table 4-5 Compensation Rate for Production Building

<table>
<thead>
<tr>
<th>Yuan/square meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of house</td>
</tr>
<tr>
<td>Production Buildings</td>
</tr>
</tbody>
</table>

Compensation rate for ground attachment & special facilities

Table 4-6 Compensation Rate for Ground Attachment & Special Facilities

<table>
<thead>
<tr>
<th>Yuan/unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
</tr>
<tr>
<td>Unit</td>
</tr>
<tr>
<td>Rate</td>
</tr>
</tbody>
</table>

V) Compensation Rate for Infrastructure

Table 4-7 Compensation Rate for Affected Roads for Pipeline Network

<table>
<thead>
<tr>
<th>Yuan/square meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>Affected roads for pipeline network</td>
</tr>
</tbody>
</table>

4.4.3. Cut-off Date

The qualifying deadline for compensation was decided on Dec 30th 2004 and notifications were made to villages. Any newly built structures or planted trees after this date purely for getting extra compensation will not be taken into account.
4.4.4. Payment of Compensation
In principle, the compensation for the land acquisition and other attachment should be directly paid to the legal owners of the property, and compensation rate should be determined at replacement cost.

Compensation for land acquisition and resettlement paid by AYWAG should be distributed to the owner or user of the land directly before land acquisition. According to the Land Administrative Law of People’s Republic of China, the compensation for land loss should be handed to the former owners and users of the land before the land acquisition, while the resettlement subsidies must be used to directly benefit the affected farmers. Therefore, the collective land compensations will be handed to the collective economic entity who owns the lands; the resettlement subsidies will be handed to village committee for the resettlement of farmers. Village Committee will compensate CNY1000/mu/year to the affected farmers. The compensation fund will be distributed at end of each year.

4.4.5. Procedures for Compensation Payment
The flow chart below shows the process and supervision of the compensation fund payment. The Compensation for land acquisition, demolition and resettlement should be paid to Anyang State Land Administrative Bureau by AYWAG using a special bank account. Anyang Land Bureau will then distribute the compensation to affected village committee and land owners. Village Committee will disburse compensation fund to the affected contractors. Long’an District Government will monitor and audit the use of the fund, assess and evaluate the effect of the fund use and give necessary instruction to scan for fraud.

Figure 4.1 Compensation Payment Procedures for Permanent Land Acquisition
4.4.6. Eligibility and Entitlement for Compensation

All the APs should get compensation for loss of their property due to its reconstruction value. The remaining materials will be obtained by the APs in no charge.

All affected enterprises shall be entitled to get compensation and subsidy. Enterprises which demand for rehabilitation will be relocated in “nearest” principle; all affected people including temporary employees will get employment from the enterprises. Affected workers have rights to ask for subsidy during down time.

According to the compensation rules, entitlement and eligibility, a resettlement entitlement matrix table (Table 4.8) is set up to guide resettlement implementation, which includes loss of various types (such as loss of houses, land, shops_ENTERPRISES, temporary/fixed income resources), covering measures, regulations and standard as provided in this chapter and other chapters. See specifics in Table 4.8 Compensation Entitlement Matrix.
<table>
<thead>
<tr>
<th>Types of Losses</th>
<th>Causes for occupation or loss</th>
<th>unit or individual who has entitlement</th>
<th>Quantity of unit or individual who has entitlement</th>
<th>Compensation policy</th>
<th>Compensation detail</th>
<th>Implementation procedure</th>
</tr>
</thead>
</table>
| Permanent land acquisition | Village committee, tenant, enterprise | 2 villages with 132 villagers, 1 chemicals plant and 1 breeding plant | - with agreement of 2/3 villagers utilize the land compensation and resettlement subsidy for profit-getting production  
- obtain compensation fund due to area of demolished house | Obtain CNY43632/mu as compensation for land loss and resettlement subsidy;  
- utilize land compensation and resettlement subsidy to restore all APs’ income | • adequate compensation to collective economic organizations and farmers and the common parts are determined by villager representative meeting | Villager representative meeting studies and determines the relevant issues on fund allocation and allocating methods of compensation fund, timely and adequate compensation allocation to the farmers who have lost productive materials since land acquisition; the solution program to the grievance and feedback about compensation fund from villagers and then take it into practice. Due to ruled procedure the house compensation should be paid to the enterprises damaged by demolition |
| Current arable land is expropriated because of WWTP construction | Land tenant | 139 villagers | • obtain training and employment opportunities and take measures to maintain their business income | • land tenants get compensation due to the compensation policy  
• house compensation fund is calculated at reconstruction price | • compensate the labor force for loss of land acquisition | • WAG, district government, village committee organize skills training to strengthen laborers’ knowledge and knowledge  
• village committee pays compensation fund at the end of each year  
• formulate favor measures for laborers’ own business engagement |
<table>
<thead>
<tr>
<th>Types of Losses</th>
<th>Causes for occupation or loss</th>
<th>unit or individual who has entitlement</th>
<th>Quantity of unit or individual who has entitlement</th>
<th>Compensation policy</th>
<th>Compensation detail</th>
<th>Implementation procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of rented land acquisition</td>
<td>tenant</td>
<td>132 tenants</td>
<td>-obtain CNY5456/mu as compensation fund for standing crops and land recovery cost</td>
<td></td>
<td>-adequate compensation due to relevant policies</td>
<td>After village committee placards compensation rate policy, it allocates the compensation fund directly to the tenants who are to be compensated</td>
</tr>
<tr>
<td>Temporary land use</td>
<td>Usual production and business is affected since construction of sewage treatment pipeline network</td>
<td>tenant</td>
<td>93 tenants</td>
<td>-obtain CNY5456/mu as compensation fund for standing crops and land recovery cost</td>
<td></td>
<td>-adequate compensation due to relevant policies</td>
</tr>
<tr>
<td>Ground attachment</td>
<td>Income loss because of ground attachment lost</td>
<td>Property owners</td>
<td>2 villagers, power bureau, 15 farmers</td>
<td>-obtain adequate compensation at reconstruction price. CNY7000/pumped well, CNY5/m² for tractor road, CNY15/m for earth channel, CNY5/tree for small trees, CNY40/tree for big trees and CNY200/pole for electric poles.</td>
<td></td>
<td>-adequately compensate the owners of ground attachment, among which that for the pumped wells and tractor roads is given to village committee; that of earth channels is given to the three households with property rights; that for the trees is given to 9 households, that for power facilities is given to the power bureau</td>
</tr>
<tr>
<td>Public facilities</td>
<td>Public facilities demolition because of sewage treatment pipeline network</td>
<td>Property owners of Public facilities</td>
<td>Property owners of Public facilities</td>
<td>-obtain compensation fund for damaged structures or facilities.CNY30-80/m² by categories of main road, sub-road, branch road</td>
<td></td>
<td>-adequate compensation to structure or facilities owners because of their loss</td>
</tr>
</tbody>
</table>
5. Compensation and Rehabilitation Measures

5.1. Resettlement Strategy

5.1.1. Resettlement Objective
The general objective of this RP is to ensure that: the affected person (AP) will be compensated for their land loss and will improve their living standards or at least not worsen than the current level. Based on the features of economic development and employment of the affected village, with integrated analysis the resettlement objectives are determined as follows:

i) Develop the Second and Tertiary Industry and increase APs’ income.

ii) Actively take economic rehabilitation measures to ensure AP regain or surpass their living standards after the resettlement.

5.1.2. Principle
Based on the relevant state regulations & rules and the ADB involuntary resettlement policy, this RP should observe the following basic principle:

- Make the resettlement soundly, fix relevant compensation into action, so as to boost or at least restore the effected residents’ living standards.
- The resettlement should consider the relations of nation, community and individual.
- RP should be compiled in accordance with physical index and compensation rates for land acquisition and demolition. Resettlement projects scale & standards shall be subject to the principle of original scale and standards restoring. Meanwhile, the investment gap should not be left on the basis of planned amount limitation.
- RP should involve comprehensive negotiation with APs.
- In the principle of “favorable for production and convenient for living”, formulate planning layout.
- As making the resettlement, we also should take local city’s plan, resource plan, economic development and environment into consideration. We should take effective measures based on real & local conditions, so as to create the opportunity for resettlers’ own development.

5.2. Rehabilitation Plan for Permanent Land Acquisition
Based on the impact evaluation, 2 villages and 1 enterprise have been identified affected. Rehabilitation plan has been prepared for those affected entities.

As making the village-level rehabilitation plan, the staff introduced it to the village leaders and villagers. Afterwards, the participants calculate their own resources according to the method of “family property calculations”, and then make a summary on the advantages, disadvantages, opportunities and crisis (unfavorable factors). Based on this analysis, the alternative measures and strategy on economy restoration have been determined. This plan vividly reflects the process, in which the villagers actively formulate their own village’s economic restoration plan. And the villager representatives appreciated this method, which brings out their enthusiasm to set up their own plan based on the regulations and in this way they have a sense of master to the plan.

5.2.1. Zongcun Production Rehabilitation Plan
Zongcun village has 518 households, with 2348 people, and the arable land amounts to 1878 mu. The main income sources include: 1) plantation 2) transportation 3) factory & store, 4) stock raising. In 2003, the average income per capita was CNY 2584.

Land acquisition and demolition impact. There is no structure/house demolished. However the land acquired amounts to 90 mu, accounting for 4.8% of the whole village land. Therefore, it will influence the 60 families who possessed the use rights of these expropriated land and the land is equal to the compensation of about CNY 4.2655 million, of which CNY X million will be paid to affected households as resettlement subsidy.
Based on the reality of Zongcun and after many negotiations, the economic rehabilitation measures are formed as follows:

1) Invest to set up a Transportation Enterprise
Due to the scanty average land, the development should be shifted to the second & tertiary industry which is a long term orientation. Nearby to three medium and large enterprises, especially Anyang Coking factory boasts a large quantity of daily transportation. Therefore, the village decided to invest CNY2 million to set up a joint-shared cooperative enterprise. The capital source includes CNY200,000 yuan of compensation for land acquisition, CNY200,000 coming from villager’s shares, CNY1.6 million coming from mortgage loan. Due to the good long term relationship between village committee and these enterprises, and a stable supply of goods, it is expected that annual income could be increased by CNY800,000 and 40 agricultural labors can be arranged.

2) Develop the Tertiary Industry and Improve the Farmers’ income
Closeness to the city means more commercial opportunities in itself. According to the social investigation, many villagers have been or were going to expand into the urban tertiary industry such as small stores, restaurants, and food processing, and etc. After the payment of compensation, villagers can enlarge the former operation scale and develop new services. For example, three villagers plan to set up a common bathing pool with an investment of CNY200,000, but they lack CNY50,000 investment. Village Committee will lend CNY50,000 to them and this project can be started soon, so that 20 employment opportunities are available.

3) Carry out Technical Training and Improve the Farmers’ Skills
Combined with district government and village committee, the water affairs group will open three skill training classes, which are respectively organized by municipal labor bureau, municipal traffic bureau and municipal women’s federation. Each effected rural family will get two training opportunities. One is given to the male member and another is to the female member. The cost of training is CNY65,000 which will be paid by local government.

   a) Vocational Skills Training Class
   Sponsor: municipal labor bureau, training period: one month, training expense: CNY10000; capital source: the unit which runs the project
   Training items: boiler operation skill, welding skill, computer maintenance, agricultural machinery maintenance skill, pipeliner, house decoration, small business registration & operation.
   Training population: 50

   b) Driver Training Class
   Sponsor: Driver school of traffic bureau, training period: one month, training expense: CNY45000; capital source: 50% supplied by the project unit, and another 50% borne by the trainee.
   Training population: 30

   c) Ladies’ Training Class
   Sponsor: ladies’ association, training period: three weeks, training expense: CNY10000; capital source: borne by the project unit.
   Training items: domestic service, computer operation, courtyard economy, food manufacturing.
   Training population: 50

4) Employment Opportunity
The project construction will create some temporary and half-fixed construction jobs, which include material transportation and earth and rock engineering. This can not only provide extra-income for living but also new skill training to help get further employment. When preparing the contract with the contractor, providing more employment opportunity for the APs should be included in the contract agreement. It is expected to create 2700 person days of labour work for 30 persons.
increase CNY100,000 as income.

5) Apart from the rehabilitation activities mentioned above and CNY100,000 for village community construction, the remaining large portion of the compensation fund (more than CNY3 million) will be put into a special account for payment of compensation each year (CNY90,000) and suitable investments in the future.

5.2.2. Houqili Village Rehabilitation Plan

This village has 335 families with 1523 persons and arable land of 1447 mu. The village's major income source is from agriculture, which accounts for 53% of the net income. The rest is from the temporary work and transportation. 2003 annual net income boasts CNY 2433 per capita.

There will be 109 mu of land acquired, which accounts for 7.5% of the total village land. 72 households will be affected. The compensation for expropriated land will be CNY4.7559 million, of which CNY X million will be paid to affected households as resettlement subsidy.

According to the reality of Houqili village and after many discussions, the rehabilitation measures are established as follows:

1) Set up an Automobile Garage
There are three medium and large enterprises near Zongcun Village, which boosts a large quantity of daily transportation. Also due to its location very close to Anlin Expressway and 107 National Road, it has been decided to setup a heavy automobile garage together with Dongfeng Automobile Co. The capital fund of the garage will consist of the following: CNY400,000 of land compensation fund; CNY1.6 million of compensation from the land and productive structure of a closed collective enterprise; CNY400,000 of villagers' share; CNY600,000 of Equipment from Dongfeng Automobile Co. It is expected that the annual income could be increased by CNY600,000 and 50 agricultural labors can be arranged for employment.

2) Improve the agricultural structure and farmers’ income
Due to the current advantage that some farmers plant mushroom, it is planned to set up 10 new greenhouses, so as to form the mushroom production scale. The total investment is CNY400,000, the capital source includes CNY 100,000 of compensation, CNY300,000 of villager gathering. So it is expected that annual income can add CNY50,000 and 30 agricultural labors can be arranged.

3) Carry out Technical Training and Improve the Farmers ‘Skills
Combined with district government and village committee, the water affairs group will open three skill training classes, which are respectively organized by municipal labor bureau, municipal traffic bureau and municipal women’s federation. Each effected rural family will get two training opportunities. One is given to the male member and another is to the female member. In view of long distance from the urban area, the training class will not cover accommodation. The cost of training is CNY65,000 which will be paid by local government.

a) Vocational Skills Training Class
Sponsor: municipal labor bureau, training period: one month, training expense: CNY10000; capital source: the unit which runs the project
Training items: boiler operation skill, welding skill, computer maintenance, agricultural machinery maintenance skill, pipeliner, house decoration, small business registration & operation
Training population: 50

b) Driver Training Class
Sponsor: Driver school of traffic bureau, training period: one month, training expense: CNY45000; capital source: 50% supplied by the project unit, and another 50% borne by the trainee.
Training population: 30

c) Ladies’ Training Class
Sponsor: ladies’ association, training period: three weeks, training expense: CNY10000; capital source: borne by the project unit.
Training items: domestic service, computer operation, courtyard economy, food manufacturing.
Training population: 50

4) Employment Opportunity
The project construction will create some temporary and half-fixed construction jobs, which include material transportation and earth and rock engineering. This can not only provide extra-income for living but also for new skill training. When preparing the contract with the contractor, providing more employment opportunity for the APs should be included in the contract agreement. It is expected to create 2700 person days of labour work for 30 persons and increase CNY100,000 as income.

5) Apart form the rehabilitation activities mentioned above and CNY100,000 for village community construction, the remaining large portion of the compensation fund (more than CNY 3 million) will be put into a special account for payment of compensation each year (CNY109,000) and suitable investments in the future

5.2.3. Rehabilitation Plan for Enterprise Affected by Land Acquisition
Permanent land acquisition will affect one village enterprise: Zongcun chemicals Plant.

1) Zongcun chemicals Plant rehabilitation plan
Currently the enterprise has suspended operations for almost 10 years due to the poor profit and environmental protection regulations. The demolition caused by this Project only accounts for 10% of the total assets, and thus the effect is light. The rehabilitation compensation totals CNY114,600, which will be used for cow raising and production of concrete poles.

5.3. Rehabilitation Plan for Temporary land use
The temporary land use for service area network construction includes the state land and village collective land.

Temporarily land use includes 503.1 mu state land (roads) occupied temporarily during pipeline network construction in urban area. After the pipe network is completed, the road function can be recovered to urban roads.

Temporary acquired land also includes 60 mu collective village lands. After the pipeline network is completed, the land will be re-cultivated by the former farmers. According to Henan Land Administrative Regulations, temporary land use should apply to municipal and district land departments for approval. The compensation for temporary land use shall be paid by the contractors to the owners to compensate for lost crops and land production value based on the duration of occupation. The contractors will also pay the cost for restoring the land to its former use.

5.4. Women Rights Protection
In the scope of land acquisition, the proportion of male and female is comparably balanced, which is 51%: 49% on average. Amongst the affected households, there are no single woman-headed households due to the divorce, losing spouse and being abandoned. Females have the same rights as males, which includes cultivating, education, family planning, village election, etc. Most woman labor interviewed thought they had the same production and business right as that of men, such as doing the part-time job or doing tiny business or doing the farm work. Of course, there is a different division between male and female in the housework and production. The women will tend to choose the housework, farm work, handicrafts and native & specialty business, while more young people choose to make a living by migrating to coastal areas.

The construction and land acquisition of the Project will not have obvious influence on the women whose land is expropriated. However, during the project construction stage, the project owner will organize a group meeting concerning women representatives annually taking a village as unit.
Meanwhile, village leaders will also conduct regular meetings with affected families so as to collect women’s suggestions, appeals and to accept their consultation. The village will report to the Project owner the grievances concerning the women resettlement compensation and rehabilitation. The Project owner shall send representatives to answer or settle the question within a week.

6. Institutional and Organizational Structure

6.1. Institutional Framework

In order to ensure the successful operation of the resettlement, the organizations responsible for planning, controlling, execution and supervision of the RP are listed as follows:

- Anyang Zongcun Wastewater Treatment subproject Leading Team (WWSTLT) and Office (PMO)
- Anyang Water Affairs Group (AYWAG), Zongcun WWTP Project Preparation Office (PPO)
- Long’an Resettlement Office (LARO)
- Village Committee Resettlement Leading Team (VCRLT)
- Relevant Government Functions
- China Central South Municipal Engineering Design and Research Institute (project design agency - CCSMEDRI)
- External Independent M&E Agency (MEA).

6.2. Institutional Framework and Responsibilities

6.2.1. WWTPLT

It is comprised of Anyang Municipal Government, Anyang Project Management Office, Anyang Construction Commitment, Anyang State Land Bureau, Anyang Environment Bureau and Anyang Water Affair Group, and etc. This team is responsible for enhancing leadership of the project, formulating resettlement policy and coordinating the organizations. Also, the leading team has the sub-office which is to treat routine issues, subordinated to Anyang Construction Committee.

6.2.2. AYWAG, PPO

It is made up of management staff, engineers and treasurers, which are employees of Anyang Water Affairs Group. The resettlement office will be exclusively setup by the preparation office, which will be responsible for the planning, execution and coordination of resettlement.

Its main responsibility covers:

- resettlement concerning the land acquisition and resettlement
- organizing survey on social economy and physical losses of the APs
- application for land using and land construction licenses
- formation and execution of resettlement plan
- be responsible for the management and supervision of resettlement compensation fund
- guidance, coordination and supervision of resettlement execution and progress
- dealing with the disputation and problems occurred during the execution.

6.2.3. LARO

It is made up of Long’an District Government, Long’an State Land Bureau, Long’an Civil Administration and Village Committee, etc.

Its duties mainly cover:

- conducting project survey and offering assistance for the preparation of RP
- propagating the resettlement plan among the public
- execution, inspection, supervision and recording of resettlement activities
- disbursement and management of land compensation fund
- supervision of land acquisition and building demolishment
- express the suggestions to the higher level departments for the APs
- dealing with the disputation and problems occurred during resettlement
● execution of relative national regulation and rules concerning the land acquisition
● participating in the monitoring of project land acquisition compensations
● carry out the procedures for the approval of the project land acquisition compensation
● conducting economic survey
● preparation and review of resettlement plan
● issuing the land planning & construction license
● guidance, coordination and supervision of resettlement execution and progress
● dealing with the disputation and problems occurred during land acquisition and land readjustment.

6.2.4. VRLG
VRLG is made up of village committee members and villager team comprising affected families and villager representatives.

Its duties mainly cover
● participating in the socioeconomic project influence investigation
● participating in the compilation of RP
● propagating land acquisition policy among the public
● distribution of land acquisition compensation fund and organizing rehabilitation activities
● expressing the suggestions to higher level departments for the villagers
● reporting on resettlement progress
● offer assistance to the underprivileged families

6.2.5. Relevant Government Functions

Its duties mainly cover:
● participating in the socioeconomic survey
● participating in preparation and review of resettlement plan
● participating in compensation rate for land acquisition and affected attachment
● handling the procedures for project land acquisition
● offering the policy consultation to the resettlers
● offering the assistance to the underprivileged families
● offering the assistance to difficulties and problems during project construction and resettlement

6.2.6. CCSMEDRI
● reducing the projection influence via optimizing design
● determining the scope of land acquisition impact
● assisting to compile RA
● offering TA to municipal project office while the data investigation and process concerned

6.2.7. External Independent MEA
● offering the TA for land acquisition and resettlement
● As the independent supervision institute, it monitors RP and its implementation and submits EA to Municipal Project Office and ADB.

6.3. Staffing
In order that the resettlement will operate successfully, the preparation office within each IA and relevant organizations involved in the resettlement implementation at various levels will assign competent and devoted staff to form a channel for the free flow of information from bottom-up. The staff of resettlement organizations will be made up of professional technicians and management staff who possess the special management and resettlement & relocation experiences. Long’an District has set up a special resettlement organization with professional technicians provided.
### 6.4. Measures to Strengthen Institutional Capacity Building

1. **Staffing Enhancement**
   - All organizations are made up of professional technicians and administration personnel who possessed the professional knowledge and management quality.

2. **Training Enhancement**
   - Major staff training and understanding of China state resettlement policies and the requirements of ADB.
   - To organize resettlement staff training so as to improve the operation quality and policy handling ability.

3. **Ensuring sufficient capital and equipments so as to develop the working efficiency.**

4. **Establishment of perfect bonus-penalty measures concerning the demolition and resettlement so as to boost the performance of the staff.**

5. **Data base establishment and information feedback enhancement so as to guarantee the successful delivery of information. Meanwhile, the major issues shall be handled by resettlement leading team.**

6. **Enhancement of report system and internal supervision so that the problems can be settled soon.**

7. **Establishment of external independent M&E institute as well as the pre-warning system.**

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**Table 6-1 Resettlement Organization Staffing Referred in the Project**

<table>
<thead>
<tr>
<th>Resettlement organization</th>
<th>No. Of Full-Time Resettlement Staff</th>
<th>Total No. of Resettlement Staff during peak</th>
<th>Personnel</th>
<th>Working schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resettlement leader team</td>
<td>3</td>
<td>6</td>
<td>Relative government leaders</td>
<td>Start from Apr.,2004</td>
</tr>
<tr>
<td>Anyang Water Affair Group Zongcun WWTP Preparations Office</td>
<td>8</td>
<td>22</td>
<td>Relative Water company department</td>
<td>Start from Apr.,2004</td>
</tr>
<tr>
<td>Longyang project resettlement office</td>
<td>5</td>
<td>12</td>
<td>Personnel in district government, office</td>
<td>Start from July.,2004</td>
</tr>
<tr>
<td>Village committee</td>
<td>4</td>
<td>10</td>
<td>Relative village commitment personnel</td>
<td>Start from Aug.,2004</td>
</tr>
<tr>
<td>China Central South Municipal Engineering Design and Research Institute (project design unit)</td>
<td>2</td>
<td>4</td>
<td>Senior engineer, engineer</td>
<td>Start from Nov.,2004</td>
</tr>
<tr>
<td>External Monitoring and Evaluation Agency</td>
<td>3</td>
<td>6</td>
<td>Economist, engineer</td>
<td>Start from June.,2005</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>25</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Public Participation and Consultation

7.1. Public Participation

7.1.1. Resettlement Information Brochures (RIB)
AYWAG has compiled and issued a brochure (Chinese) to APs according to the resettlement policy and entitlement model to inform them that: (1). Applied policies and regulations (2). entitlements; and (3) the plan to restore income and living standard after land acquisition and the brochure is to strengthen movement openness. The brochure includes the basic key point of the construction project, the project schedule arrangement and the affected area, land acquisition and resettlement policy. The RIB can be seen in attachment.

The brochures were handed to all the affected people in November 2004. Meanwhile, the copies have been sent to all the offices and village committees located in the affected areas, and then, AYWAG convened a series of meetings with affected people and conducted home visits of affected households from August 5th to November 4th 2005. In the meetings, AYWAG also answered questions regarding issues on the land acquisition and resettlement and heard the suggestions and opinions.

The survey again confirmed the support from the APs. Actually, 95% of the APs supported the subproject; only 5% of the APs showed indifferent. No AP against the subproject has been found. The APs were satisfied with the compensation rates and entitlements, but wished compensations could be paid to them as soon as possible that they could restore the income and living standard the sooner the better. Some resettlers inquired about the compensation procedures and got the guarantee that the land acquisition, demolition and resettlement would not be carried out until they agreed and signed the agreements with AYWAG and that all the compensation for ground attachment should be paid to every family via village committee at the same time.

And also the brochure interpreted to APs that the demands and grievance procedures can taken out through various channels (including construction bureau of area, office and village commission). Meanwhile, satisfaction of restoration plan was among the inquired people and some of whom were willing to participate in the plan.

7.1.2. RP Distribution
The RP will be handed to the affected villages, and moreover, any person who wants to know the plan can get the access to the information in the villages. AYWAG office will keep copies of the Chinese-version RP, while ADB will hold some of English-version.

7.1.3. Process of Public Consultation
The China Central South Municipal Engineering Design and Research institution had launched a series of investigations from June 2004, which was the commence of the public consultation. The socio-economic survey showed that 95% of people supported the project and the rest did not know the project at all; 70% of people recommended that the project would profit them, while 20% unknown; while 20% got the knowledge of the project for half a year and the rest were unknown. 20% of people knew the project for six months ago as 80% knew in half a year. In the course of survey the project was unknown to the people who were not influenced. 40% of affected people got the knowledge that they would be replaced by the staff and investigators of the project, 20% through the meeting, 30% via neighbors, relatives and friends, while 10% knew from the newspaper, if anything, the relocation plan were not unknown to all people.

APs’ suggestions and attitudes towards the projects by the meeting between the village commission and householders have been summarized as follows:

- Asking for fair compensation
- corresponding compensation should be paid to them based on the relevant laws and regulations.
- Minimizing the land acquisition
- Proper land relocation and living standard restoration should be guaranteed.
The point focused by ADB is public consultation, especially by the activities as follows:

- The socioeconomic survey towards the affected people of CSCMDRI from June to August 2004.
- The experts of resettlement and TA of ADB had informal meetings with the village leaders and APs on September 2 2004.
- PMO and governments at different levels and semi-government staff had a series of meetings from June 2004 to now, and the meeting notes are shown in the Appendix I and Appendix II.

The keynotes on consultation are shown in Table 7.1 which are included in the land acquisition and demolition plan.

**Table 7-1 Public Participation During TA of the Project**

<table>
<thead>
<tr>
<th>Organization-in-deputy</th>
<th>Propose</th>
<th>Date</th>
<th>Key issues discussed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locations of wastewater treatment plant, offices, village leaders and deputies of relevant affected enterprises</td>
<td>Compensation rate for land acquisition and demolition formulated after discussion with village leaders</td>
<td>06/08/2004</td>
<td>Compensation rate for land acquisition and temporary land of use and demolition quantity of houses, ground attachment.</td>
</tr>
<tr>
<td>Water group, Central South Designing Institution of Municipal Construction of China, survey team, the office of wastewater treatment plant where located, village leaders</td>
<td>Coordination for RRA</td>
<td>03/07/2004</td>
<td>Combined with the realities of project area, collecting the opinions of local government and villagers.</td>
</tr>
</tbody>
</table>
| Water group, Central South Designing Institution of Municipal Construction of China, survey team, the office of wastewater treatment plant where located, village leaders | Conducting survey on land acquisition and demolition                    | 01/08/2004 ~ 30/08 | Technical demand of the land acquisition and demolition investigation on the assets  
Sampling survey on the socioeconomy of the affected households  
Investigate the technical data of the project area. |
| Water group, Central South Designing Institution of Municipal Construction of China, survey team, the office of wastewater treatment plant where located, village leaders | Sending out the brochures of immigration, handling with feedback suggestions, and revising resettlement report | August ~ December 2004 | The households, shops and other relevant agencies which are affected. |
| Water group, Central South Designing Institution of Municipal Construction of China, survey team, the office of wastewater treatment plant where located, village leaders | Collecting the suggestions of land acquisition and demolition           | 02/09/2004 to 04/09/2004 | Opinions about resettlement compensation scheme gathered from leaders of village committee  
Influenced and the enterprises and villages |
| Water group, Central South Designing Institution of Municipal Construction of China, survey team, the office of wastewater treatment plant where located, village leaders | Identification of the scope of land acquisition and movement           | September ~ December 2004 | Affected land and houses  
Eligible for compensation  
Rules and regulations for the land acquisition and house demolition  
Compensation rate  
Main themes and components of land acquisition and demolition report  
Principles to identify impact degree |

**7.1.4. Public Participation and Consultation Plan**

The local governments, offices, village committees and APs at all levels have had discussed about
land acquisition and demolition plan and its implementation comprehensively and specially pay attention to compensation, land re-distribution, income and living standard restoration. The public participation and consultation plan is shown in Table 7.2

### Table 7-2 Public Participation Plan

<table>
<thead>
<tr>
<th>Aims of activities</th>
<th>Activities mode</th>
<th>Date</th>
<th>Implementing agencies</th>
<th>participants</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide APs with the specifications of the project and land relocation and</td>
<td>Public meeting</td>
<td>Technical assistance (Nov 2004 to Dec)</td>
<td>executing agencies, offices, and village committee</td>
<td>All APs</td>
<td>meeting is a must for every village</td>
</tr>
<tr>
<td>collecting opinions from the APs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. proposing the final land acquisition and demolition plan on to APs</td>
<td>Focused Group meeting</td>
<td>Drafting final reports and implementation (Dec 2004)</td>
<td>executing agencies, offices, and village committees</td>
<td>All APs</td>
<td>handing the draft of relocation to every AP</td>
</tr>
<tr>
<td></td>
<td>for public and</td>
<td></td>
<td></td>
<td></td>
<td>discussing issues and differences on land acquisition and demolition</td>
</tr>
<tr>
<td></td>
<td>affected area</td>
<td></td>
<td></td>
<td></td>
<td>discussing with each focused group and collecting opinions and suggestions</td>
</tr>
<tr>
<td>3. Informing beneficiary of the progress of construction and final design and</td>
<td>Focused group meeting</td>
<td>Loan approval (June 2005)</td>
<td>executing agencies, offices, and village committees</td>
<td>The interest holders and beneficiary and APs</td>
<td>holding meetings with beneficiary residents and APs</td>
</tr>
<tr>
<td>project schedule</td>
<td>in the affected area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. conducting final survey on the assets and demolition</td>
<td>inner-door visiting</td>
<td>implementation (Dec 2004 to Jan 2005)</td>
<td>executing agencies, offices, and village committees</td>
<td>All APs</td>
<td>-inventory of all property and land</td>
</tr>
<tr>
<td></td>
<td>and survey on physical property</td>
<td></td>
<td></td>
<td></td>
<td>-collecting the augmenting socio-economic data</td>
</tr>
<tr>
<td>5. Informing APs of the entitlements and compensation date.</td>
<td>Public meeting</td>
<td>implementation (Feb 2005)</td>
<td>executing agencies, offices, and village committees</td>
<td>All APs</td>
<td>Holding residents meeting to inform of key points of entitlements</td>
</tr>
<tr>
<td>6. APs’ supervision and health impact and beneficiaries</td>
<td>inner-door visiting</td>
<td>After demolition (April 2005 to June 2006)</td>
<td>executing agencies, offices, and village committees, independent outside supervisors</td>
<td>Random sampling</td>
<td>-Determining whether to augment supports, especially for the underprivileged and vulnerable groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-providing brief introductions and latest supervision on land acquisition and demolition for plan</td>
</tr>
</tbody>
</table>

### 7.2. Grievance Redress Procedures

#### 7.2.1. Targets for Grievance Redress Procedure

In order to safeguard the relevant personnel have proper resolutions to the issues on land acquisition and resettlement, the detailed grievance redress procedures have been established on purpose that it can guarantee the relevant persons’ opinions about the project can be solved fairly, properly and rapidly. The procedure is simple, feasible, open, and fair. In the long view, it aims to prevent APs from forcibly resorting to complicated formal channel to express grievance and opinions, namely, to redress relevant persons’ grievance or opinions inner the project management organizations, which minimizes impact on project progress and makes the redress process more efficient as well.

#### 7.2.2. Grievance Redress Approaches

In order to safeguard benefit and property of relevant enterprises and individuals from damaging, their opinions and grievance redress should observe the following approaches:

- **Step 1**, any individual who dissatisfy with the project should propose the verbal or written
suggestions to the village committee, where not been solved, they can hand to the neighborhood offices, district PMO. If still no satisfactory reply within 3 weeks, they can submit written opinions to AYWAG.

- Step 2, on receiving relevant individual or enterprise's opinion, AYWAG should settle it with 4 weeks; if the relevant persons are still unsatisfied with the resolutions, they can report to the Municipal PMO and Municipal Land Bureau and the foregoing PMO and Land Bureau will resolve the problem via negotiation. If the AP is still not satisfied, he can take AYWAG to the District People's Court.
- Step 3, if the people still dissatisfy with the verdict of the People's Court, they can sue to Anyang Middle People's Court. And the final verdict of this count should be enforced.

7.2.3. Grievance Redress Scope

The APs can sue all aspects of resettlement and payment of compensation including the compensation amount. They have been informed of the procedure through the resettlement information brochure. Addition information will be delivered to the APs via public meetings preceding land acquisition.

During the whole course of project construction, the grievance redress procedures are still available for safeguarding the villagers utilizing these to handle the issues regarding the infrastructure rehabilitation, such as irrigation, the entrance of usual roads, temporary utilization of land and the like. Thus, villages can propose the problems to the management agencies in an effective way for timely solution.

Figure 7.1 Grievance Redress Procedure
8. Monitoring & Evaluation

In order to implement land acquisition and RP strictly due to demands, regular M&E should be carried out in the implementation stage. The M&E on RP can be divided into two parts: internal and external M&E.

8.1. Internal M&E

The Leading Team, relevant functions and project preparation section are responsible for the internal M&E, with internal monitoring office of 3 persons in the preparation section to carry out internal M&E of resettlement safeguard timely in accordance with the Resettlement Plan in order to protect APs' rights and benefits.

8.1.1. Main Monitoring Contents
- Compensation Payment
- APs' house demolition/reconstruction and movement
- Grievance acceptance
- Income restoration/training plan
- Assistance to vulnerable groups

8.1.2. Internal Monitoring Objectives
- Inspecting the completing progress of land acquisition and demolition
- Safeguarding the establishment and being straightway communication and coordination channels between the project management personnel and the APs.
- Safeguarding compensation payment for the APs full and punctual.
- Ensuring the APs' grievance being handled in the given time.
- Strictly ensuring compensation payment for land loss to the APs and provision of resettlement subsidy due to rules and regulations.

8.2. External M&E

The external M&E for resettlement should be carried out by an organization or institution which is extremely independent of project executing agencies and local government. The Henan Project Management Office will retain an independent institution to take charge of external M&E for all sub-projects.

8.2.1. External Monitoring Objectives
- Confirming whether APs' welfare is restored or maintained after completion of land acquisition and demolition
- Identifying the restraints in policy and implementation if no restoration or maintenance
- Evaluating the general efficiency, result, impact, APs' behavior reaction and the sustainability of land acquisition and demolition policy and practice.

8.2.2. Means and Methods

The general method is monitoring the activities, evaluating project impact and safeguarding public participation of all the APs, especially of women and vulnerable groups. The monitoring tools include both qualitative and quantitative ones:

- The baseline survey on the affected households is a representative sampling survey, which categorize due to gender and vulnerable groups to get relevant information of main indicators such as compensation distribution, efficiency, validity, impact, sustainability and etc. 20% of the APs were taken as random samples.
- Group discussion allows consultation from every related party of M&E (local government, host site personnel, NGO, community leaders and affected groups)
- The talks with key persons, visiting the significant persons with relevant experience in land
acquisition, resettlement and implementation, such as local leaders, village leaders.

- Community public meetings: Holding the public meetings in the resettlement site, and explaining the information on the demolition resettlement
- Direct Structural/objective observation: Carrying out filed study on the implementation of demolition and resettlement and cross-visiting the individuals and groups for the messages.
- Informal survey or dialogues: Adopting non-sampling way to carry out informal survey on APs, main villages, workers, resettlement staff and those of executing agencies

8.2.3. Reporting Requisition
The result of the internal M&E should be reported to AYWAG quarterly.

The M&E reports on project half-completion and total-completion should comprise evaluation reports on project key points, detailed interpretation of compensation payment and other measures to maintain or increase a little APs’ socioeconomic situations compared to the “no project” state. And moreover, the experience and lessons from the land acquisition and resettlement should be included in the report for policy and method formulation in the future.

During the process of RP implementation, the external M&E institution should compile and submit M&E reports to ADB once half a year and then it should compile socioeconomic tracer survey and evaluation reports every year until the APs' livelihood was fully restored. These reports will be provided to AYWAG so they can incorporate recommendations.

8.2.4. Resettlement M&E Outline

Please see Table 8.1 for resettlement M&E outline.

Table 8.1 Resettlement M&E Outline

<table>
<thead>
<tr>
<th>M&amp;E Institution</th>
<th>Types of M&amp;E</th>
<th>M&amp;E Indicators</th>
</tr>
</thead>
</table>
| **Internal M&E** | Budget and time frame | - Has the capacity building and training activities been carried out as planned?
- Has resettlement implementation being completed due to the negotiated implementation schedule?
- Has the compensation fund be paid to the resettlement office on time?
- Has all the land for project construction been acquired or occupied? |
| | Delivery of AP Entitlements | - Have all the APs got their entitlements as stipulated in Entitlement Matrix?
- Have the APs received compensation fee on time?
- Has the income and livelihood rehabilitation been carried out as planned? |
| | Consultation, Grievance and special Issues | - Has the consultation been carried out as planned? Is the RIB ready to be distributed to APs?
- How many APs know about their rights? How many APs know whether they are entitled to the rights?
- Has any AP used grievance redress procedure? What is the result?
- Has the problem been solved? |
| | Effect M&E | - Has the APs’ income and expenditure pattern changed compared to that before the subproject was carried out?
- Has the living expense of the APs changed? Does their income match to the changes? |
<table>
<thead>
<tr>
<th>External M&amp;E</th>
<th>Restoration of living standard</th>
<th>· Whether do the APs obtain main substitutes in culture and society?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restoration of livelihoods</td>
<td></td>
<td>· Has the compensation fee been discounted due to depreciation and discounts?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Is the compensation fee enough for the APs to recover their lost assets?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Have the affected enterprises received enough compensation to reconstruct the enterprise?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Have the farmers been provided with opportunity to profit getting? Are the measures effective and sustainable?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Have the APs regain their living standards after the resettlement by using the proposed rehabilitation measures?</td>
</tr>
<tr>
<td>Levels of AP Satisfaction</td>
<td></td>
<td>· How much do APs know about the resettlement process and their entitlements?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· How do APs assess their living standards and livelihood after the rehabilitation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Do the APs know about the grievance redress procedure and conflict solving approaches?</td>
</tr>
<tr>
<td>Effectiveness of the RP</td>
<td></td>
<td>· Have the APs and their possessions been correctly recorded?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Have the time frame and budget been carried out sufficiently?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· How does AYWAG deal with contingencies?</td>
</tr>
</tbody>
</table>

**Resettlement Budget**

The costs incurred by land acquisition and resettlement are included in the overall budget of the project. The total cost of land acquisition and resettlement for Anyang subproject is estimated to be CNY 24.6428 million.

**9.1. Contents of Resettlement Costs**

**9.1.1. Land Acquisition & Resettlement**

**Permanent land acquisition:**
According to the project plan and the contract signed between AYWAG and Anyang State Land Administrative Bureau as well as the agreement signed with village committees, the permanent land acquisition of this project is 206.76 mu, along with compensation fee is CNY9.3042 million, including land compensation, resettlement subsidies, compensations for standing crops.

**Temporary land use:**
The sewage pipeline network needs to occupy 563.10 mu of land temporarily, of which 60 mu is collective land. The total compensation fee is CNY0.33 million, including CNY82,500 for standing crops, CNY247,500 for land rehabilitation.

**Compensations for ground attachment:**
Affected ground attachment includes 3 kinds with 4 items namely 5 big trees (compensation rate CNY40 per tree), 10 small trees (CNY5 per tree), 500-square-meters greenhouse (CNY10/m²); 600m² simple-structured houses (CNY110/m²). Total compensation is CNY71,300.
Compensation for enterprise demolition:
The compensation rate for enterprise demolition: brick-wood structure house 160 m² for 310 yuan per m²; simple structured house 400 m² with 110 yuan per m²; 1000 m² of brick fence with 21 yuan per m², and the total demolition costs are CNY114,600.

9.1.2. Infrastructures and Special Facilities
The compensation for special facilities includes 4 items of 4 kinds, of which 6 wire poles with CNY200 per pole as compensation rate, a hole of well with CNY7000; 560 m² of tractor-ploughing roads, CNY5 per m², and 1000 meters of channel with CNY15 per meter and totally CNY26,000 of compensation.

The compensation for infrastructures is 503.10 mu roads temporarily occupied for the purpose of wastewater pipeline network, of which 3000 m² of damaged roads with compensation of CNY80 per meter as compensation rate, 18,000 m² of sub-roads with CNY60 per m², 147,000 m² of the roads and pathways for CNY30 per m² and the total compensation is CNY5.73 million.

9.1.3. Other Costs
The designing & reconnaissance costs counted for 2 percent of the land acquisition, resettlement, infrastructures and special facilities
The M&E costs counted for 2 percent of the land acquisition, resettlement, infrastructures and special facilities
The management costs counted for 3 percent of the land acquisition, resettlement, infrastructures and special facilities
The training fee is CNY85,000 for three training classes.

9.1.4. Relevant Taxes and Fees
The relevant taxes and fees for permanent land acquisition include land cultivation fee, land access fee with charge for new construction, farmland occupancy tax, management fee and compensation for attachment, totally CNY 5.555 million.

9.1.5. Contingencies
Contingencies budgeted for is 15% of the total cost of land acquisition and rehabilitation, of which 10% is physical contingency for unexpected cost for the purpose of various costs owing to the changes of qualities in the course of resettlement; 5% is price contingencies for currency inflation and any prices changes during the resettlement.

9.2. Budget Table on Resettlement Costs
The land acquisition and resettlement cost budget of Anyang Zongcun Wastewater Treatment Project is shown in Table 9.1.

9.3. Resettlement Investment Plan
According to the implementation schedule, the LAR investment plan is budgeted for 1.43% of the plan be carried out in 2004, 74.89% in 2005, 14.34% in 2006, 9.34% in 2007. The detailed schedule is shown in Table 9.2.
<table>
<thead>
<tr>
<th>Type</th>
<th>Standard of Compensation</th>
<th>Amount</th>
<th>Costs(10,000 yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land acquisition and rehabilitation</td>
<td>45,000 yuan/mu</td>
<td>206.76mu</td>
<td>930.42</td>
</tr>
<tr>
<td>Permanent land acquisition</td>
<td>5,500 yuan/mu</td>
<td>60mu</td>
<td>33</td>
</tr>
<tr>
<td>Temporary land use</td>
<td>10 yuan/m²</td>
<td>500m²</td>
<td>0.5</td>
</tr>
<tr>
<td>Compensation for attachments</td>
<td>110 yuan/m²</td>
<td>600m²</td>
<td>6.6</td>
</tr>
<tr>
<td>Big trees</td>
<td>40 yuan/tree</td>
<td>5</td>
<td>0.02</td>
</tr>
<tr>
<td>Small trees</td>
<td>5 yuan/tree</td>
<td>10</td>
<td>0.005</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>10 yuan/m²</td>
<td>500m²</td>
<td>0.5</td>
</tr>
<tr>
<td>Simple Structured House</td>
<td>110 yuan/m²</td>
<td>600m²</td>
<td>6.6</td>
</tr>
<tr>
<td>Compensation fee for Enterprise Demolition</td>
<td>310 yuan/m²</td>
<td>160m²</td>
<td>4.96</td>
</tr>
<tr>
<td>Simple brick-wood flat houses</td>
<td>110yuan/m²</td>
<td>400m²</td>
<td>4.4</td>
</tr>
<tr>
<td>Brick fence</td>
<td>21yuan/m²</td>
<td>1000m²</td>
<td>2.1</td>
</tr>
<tr>
<td>Infrastructure and special facilities</td>
<td>15 yuan/m</td>
<td>1000</td>
<td>1.5</td>
</tr>
<tr>
<td>Infrastructure (road rehabilitation)</td>
<td></td>
<td></td>
<td>573</td>
</tr>
<tr>
<td>Special facilities</td>
<td>200yuan/pc</td>
<td>6</td>
<td>0.12</td>
</tr>
<tr>
<td>Wire poles</td>
<td>7,000 yuan/pc</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Motor-pumped wells</td>
<td>5 yuan/m²</td>
<td>560m²</td>
<td>0.28</td>
</tr>
<tr>
<td>Tractor-ploughing roads</td>
<td>13600 yuan/mu</td>
<td>206.76mu</td>
<td>281.19</td>
</tr>
<tr>
<td>Land canal</td>
<td>6667 yuan/mu</td>
<td>206.76mu</td>
<td>137.85</td>
</tr>
<tr>
<td>Farmland occupancy tax</td>
<td>4500 yuan/mu</td>
<td>206.76mu</td>
<td>93.04</td>
</tr>
<tr>
<td>Land Management Fee</td>
<td>2100 yuan/mu</td>
<td>206.76mu</td>
<td>43.42</td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td>233.64</td>
</tr>
<tr>
<td>Physical Contingencies</td>
<td>10%</td>
<td></td>
<td>155.76</td>
</tr>
<tr>
<td>Price Contingencies</td>
<td>5%</td>
<td></td>
<td>77.88</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>2464.28</td>
</tr>
</tbody>
</table>
Table 9-2 Resettlement Investment Plan by Stages

<table>
<thead>
<tr>
<th>Items</th>
<th>Investment Amount (CNY10,000)</th>
<th>Investments per year (CNY10,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment Amount (CNY10,000)</td>
<td>2004</td>
</tr>
<tr>
<td>1 Land acquisition &amp; resettlement</td>
<td>982.01</td>
<td>942.73</td>
</tr>
<tr>
<td>2. infrastructure &amp; special facilities</td>
<td>575.6</td>
<td>230.24</td>
</tr>
<tr>
<td>3. other costs</td>
<td>117.53</td>
<td>35.26</td>
</tr>
<tr>
<td>4. relevant taxes and fees</td>
<td>555.5</td>
<td>555.5</td>
</tr>
<tr>
<td>5. Contingencies</td>
<td>233.64</td>
<td>70.09</td>
</tr>
<tr>
<td>Total investment</td>
<td>2464.28</td>
<td>35.26</td>
</tr>
</tbody>
</table>

Implementation Arrangements and Schedule

As the schedule the wastewater treatment project will commence in August 2005. Resettlement schedule is confirmed to be in conjunction with the project construction schedule.

10.1. Principles on Confirming Resettlement Schedule

- The scope of land acquisition and demolition should be eventually determined due to engineering plan, and the determination should be completed prior to the kind measurements and calculation in land acquisition and demolition.
- The land acquisition should be prior to the constructions of each area.
- The labor resettlement should be finished prior to the land acquisition.
- The affected enterprises and shops should be compensated for loss in down time prior to the commencement of project.
- The calculation and distribution of the compensation should be done before land acquisition or demolition and after agreement signed.

10.2. Overall Schedule of Land Acquisition and Resettlement Activities

Overall schedule of land acquisition and resettlement activities is studied out according to the schedule of land acquisition and resettlement preparation and implementation. See Table 10.1 for the overall schedule.
Table 10-1 Schedule of land acquisition and resettlement activities

<table>
<thead>
<tr>
<th>LAR Activities</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
</tr>
<tr>
<td><strong>Planning of Land Acquisition and Resettlement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct detailed survey of Aps</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply the permission of land acquisition and house demolition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finalize the choice of resettlement areas of Aps</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify and confirm poor and vulnerable Aps</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finalize compensation/resettlement strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiate and sign contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Land Acquisition and Resettlement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide compensation payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocate replacement land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolish structures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income Restoration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment of Aps in the project construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural extension service/training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New skill training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income rehabilitation program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special assistance to the vulnerable group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>M&amp;E</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish internal m&amp;e system, procedures and formats</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage M&amp;E agency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approve TOR by ADB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of resettlement staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor land acquisition and resettlement activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor income restoration programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct external evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 1 Minutes of Group Meeting with Parts of Village Leaders, Enterprises and Public Representatives

Date: June 16th, 2004
Place: Conference room of AYWAG

Participants:

- Huang Wenyang, Anyang PMO Director
- Cheng Yanbo, Central South Designing & Researching Institution of Municipal Construction of China
- Liu Quan, Vice Director of Long’an District State Land Resources Bureau
- Liu Haiping, Vice Director of Wenchang Office of Longan District
- Meng Shubing, Director of Land Station of Wenchang office of Loangan District
- Wang Chuncheng, General Engineer of AYWAG
- Xu Yimin, Officer of Wastewater Treatment Plant of AYWAG
- Wang Haiping, Village Leader of Zongcun of Longan District
- Li Guotai, Director of Zongcun Chemicals Plant of Longan District
- Hou Qingfen, Poultry-breeding owner of Houqili Village of Longan District
- Villager Representatives: 14 persons including Yang Yuandong, Yang Guoping, Meng Hesheng, Meng Tailin and others

The AYWAG studied the regulations and laws of reference and invited some enterprises and personal deputies summoned to discuss the issues by what can make the each village and persons, those who suffered a lot from the project of land acquisition of wastewater handling factory of Zongcun as loaned from the ADB, knew the better
knowledge of the contents, objects, standards of compensations for the land acquisition, ways of compensations, payment and policy of relocation. In the course of meeting, pre-established construction office had a good parley with persons anticipated on the plausible rules or the planned compensations, and copied the modes of relocations to them. The compromises and suggestions reached lodged by each recorded as follows:

I. The deputies expected that the land acquisition should be performed based on the Land Administrative Law of People’s Republic of China revised on the 5th council of 7th standing committee of national people’s congress on 29th December 1998, and Management Rules on Demolishing houses of City issued by 40th conference of State council in 2001 and the details of demolition for Anyang under construction.

II. The deputies expected that the compensation at length and ways of relocation should be discussed at any time in the future after the land acquisition policy and rules were fully understood.

III. They expected that the project owners took the actions to minimize the damages to the local people and the PMO promised to carry out the project in this principle.

IV. The wastewater treatment plant is expected to give priority to employing local APs its completion of construction.

Anyang Water Affairs Group

16/06/2004
Appendix 2 Minutes of Negotiation Meeting on

Resettlement and Rehabilitation

Date: 04/09/2004
Place: Conference room of Wenchang Office of Longan District
Participants:

Cheng Yanbo Central South Designing &
Researching Institution of
Municipal Construction of
China

Liu Haiping Vice director of Wenchang
Office of Longan District

Meng Shubing Director of Soil Bureau of
Wenchang office of Loangan
District

Wang Chuncheng Chief Engineer of AYWAG

Xu Yimin Officer of Wastewater
Treatment Plant of AYWAG

Wang Haiping Village Leader of Zongcun of
Longan District

Li Guotai Director of Chemical Factory
of Zongcun of Longan District

Hou Qingfen Farm owner of Qili Village of
Longan District

Villager Representatives 15 villagers including Li
Chunsheng (villager), Hou
Guozhang(villager), Meng
Taiping (villager) and 15 other
villagers

The Anyang Water Affair Group, Central South Designing & Researching Institution of Municipal Construction of China visited the persons who suffered a lot and coordinate with them for the purpose that the inhabitants who suffered from the land acquisition could revive the normal standard as usual, and had a parley with the local government, village commission, enterprises and the deputies of villagers. The officers and the investing units got the suggestions and advices lodged by the relative units and deputies and then made the preliminary resettlement and rehabilitation plan with minutes as follows:

1. Introducing to the participants the profiles, contents, meaning, capital collection,
limited period of construction, and the demands of the ADB. It is of great pleasure for local government hand a feasible and practical proposal of relocation to safeguard the living standard of the people after project construction.

2. Engineer Cheng Yanbo, Central South Designing & Researching Institution of Municipal Construction of China introduced the scope of land acquisition of the project and the effect on each village to the participants.

3. The local leaders and villager representatives have discussed about the relevant regulations and rules provided by PMO and they demanded that the compensation rate should be determined due to the reality of APs without restraint of the relevant methods or rules.

4. The local government, PMO and the villagers representatives got the consensus on the compensation means as follows:
   - Compensation of Agriculture
     The permanent farmland loss should be compensated in cash to APs as five times of average output in the past 3 years. The individual or enterprise using farmland legally shall be settled by means of land reallocation or other methods in land exchange mechanism.
     The temporary farmland loss should be made up with land restoration subsidy at 3 times of average output of the affected farmland with cash compensation direct to APs and the land acquisition can not exceed half a year.
   - Standing crop Crops
     All APs of permanent farmland loss including the renters or illegal users will receive the 0.5 time as full compensation according to the average output of the past three years, namely, in addition to land restoration subsidy, the compensation for standing crops shall be paid.
   - Land resettlement Subsidy
     All the APs of permanent farmland loss have rights to obtain land resettlement subsidy which is equal to 6 times of average output of the past 3 years.
   - The losses of the houses and buildings will directly be given to the APs no matter the legal conditions of them.
   - Training Costs for APs
     The special subsidiary will be given to the APs and the subsidies are divided into 2 parts. Each affected household will get two of this, for a male and the other for a female.

5. The local government, PMO and village representatives have got consensus on the following fund payment methods
   The local government of relevance should inform and hear the suggestions of the rural collective economic organization and villagers according to the newly-issued Land Administrative Law of People’s Republic of China; the rural collective economic organizations whose land has been acquired should inform of the income and expenditure status to the members and receive their supervision.

In order to get the compensation in account timely and adequately, the subsidy funds of land acquisition and demolition should set up special accounts for special use and no
embezzlement.

The special accounts are necessary for the subsidiary of each relocation for the purpose of making the subsidiary costs been on time.

During the process of demolition and resettlement, all accountings should be safeguarded by special persons and every check should be signed by more than 3 persons for openness, justification and transparency. No single one can decide anything and all kinds of compensation fund tables should be placarded to eye-striking places in red paper for APs and the mass to know it clearly at first sight.

The EA will always pay close attention to resettlement and rehabilitation and coordinate with the local governments actively ensuring that the affected residents should be resettled actively and safely and the living standards of residents in the scope of project affected area should be increased steadily after completion of project construction.

Anyang Water Affairs Group
September 4, 2004
Appendix 3 Resettlement Information Brochure

Anyang Zongcun Wastewater Treatment Project

Anyang Water Affairs Group
November 2004
1. Project summary

1.1 Project Location

The proposed Anyang Zongcun wastewater treatment plant locates in ZongCun of Long’an subdistrict. Southwest to the urban area, it is 150 meters to the east of ZongCun, 100 meters to the west of Beijing-Guangzhou railway, 200 meters to the south of Hong river and 250 meters to north of Houqili village. It will cover an area of 11.30 hectares.

1.2 Major work

This project has four parts to be constructed, including secondary treatment facility of the wastewater plant, reuse water treatment facility, sewage network outside the plant and the reuse water transportation pipelines.

Based on the wastewater volume projection along with the justification, the treatment capacity of the plant is defined to be 100,000m³/d for the near stage (2010) and 150,000m³/d for the long term stage (2020).

Under the agreement with the users along with the comprehensive justification, it is decided that the capacity of reuse water is at 40,000m³/d. The treated water will be used as the makeup water of the circulated cooling water of Hua Xiang power plant.

The network outside the plant contains Wenyuan street sewage system, Wenfeng street sewage system Wenming avenue sewage system, Jinhua-Ancai avenue sewage system, sewage system to the south of Hong river and Tiexi street sewage system. The diameters of the reinforced concrete sewers range from 400 to 1600mm with a total length of 51.562km in length. The reuse water transportation pipes, 800mm in diameter, are made of prestressed reinforced concrete with the total length of 11km.

2. Cost estimate and project progress

2.1 Project investment estimate

Investment on this project is estimated at CNY 254.0316million (including the tertiary sewer cost CNY 4.8016million), among which 228.97million CNY is for the capital cost, CNY15.26million is for the interest during construction, and CNY5million is for the PPTA.

2.2 Financing sources
A. US$ 14.3929 million (equivalent to CNY119.4607million) loan from ADB;
B. CNY 134.5709million from local counterpart fund, including CNY 57.40 million loan from the Construction Bank of China, CNY2million loan from provincial grant, and CNY75.1709million loan from the local government and AYWAG.
2.3 Overall schedule of the project

It is expected to finish the feasibility study report and environmental impact assessment report by June 2004 and finish the preliminary design and approval by December 2004. Civil work is expected to be initiated in August 2005 and installation initiated in December 2005 and finished by March 2007. By May 2007, the civil work will be completed. Commissioning and acceptance will be carried out from June to August 2007 the wastewater treatment project will be placed under operation in October 2007.

2.4 Resettlement Schedule

It is expected to start the resettlement of movers inside the plant region in June and finish it by August 2005. The resettlement for people affected by the network construction will be commenced in June 2006 and finished by December 2006.

3. Socioeconomic Benefits of the Project

The Zongcun wastewater plant serves the area to the east of Beijing-Guangzhou railway, south of Angang avenue, west of Huaxiang road and north to Hong river, covering 27 km².

The construction of ZongCun wastewater treatment plant is an important part of the infrastructural facilities of Anyang City and a symbol of the modern civilized city as well. The implementation of this project will play an active role in changing the situation that the civil sewage flows directly into urban rivers, reducing the contamination of the waters caused by sewage, improving the environmental sanitation conditions and increasing the people’s living standard and the public health level. In addition, it will be also helpful to enhance city’s investment environment, attract project investment, promote economic development and increase the celebrities of Anyang at home and abroad. It has very conspicuous and remarkable social benefits.

The municipal wastewater treatment plant is a kind of public affairs. After completion and operation, it will base on the principle of keeping profits slightly above cost to charge the clients to maintain its normal operation instead of bringing direct economic benefits.

The wastewater plant, when under operation, will produce long-term indirect or potential economic benefits by improving city environment and promoting economic development. Each year it will reduce a pollutant discharge of 25,696 tons, including 12,410 tons of COD and 5,110 tons of BOD, which improves the environmental quality of urban rivers like Hong river to a large extent, recover the multi-functions of Honghe, reduce the contamination to the surface or ground water sources and increase the usability of those water resources. With the improvement of the water quality, the city will boast beautiful, tidy and sanitary environment, which will be particularly helpful to develop the west lands of Anyang City to gain better economic profits.
4. The types of loss caused by the project land acquisition

According to the preliminary design and baseline survey for the project, the types of losses caused by land acquisition and resettlement types are shown as follows:
1. permanent arable land loss;
2. house demolition
3. Temporary land use
4. Infrastructure and special facilities resettlement and;
5. Other productive assets loss such as trees and standing crops

5. Project Impacts

5.1 Permanent land acquisition

The wastewater treatment plant for this project needs permanent land acquisition, involving Zongcun and Houqili Village in Long’an subdistrict, totaling collective land 199 mu, which will directly affect 132 rural households with 465 people. Detailed conditions are shown in the following table:

The types and quantities of the land permanently acquired for the waste water treatment plant

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Village</th>
<th>Affected household</th>
<th>Affected person</th>
<th>Farmland to be permanently acquired (mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Arable land</td>
<td>Non-arable land</td>
</tr>
<tr>
<td>1</td>
<td>Plant</td>
<td>Zongcun</td>
<td>60</td>
<td>240</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Houqili</td>
<td>72</td>
<td>225</td>
<td>109</td>
</tr>
<tr>
<td>2</td>
<td>Access road to the plant</td>
<td>Zongcun</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>132</td>
<td>465</td>
<td>7.76</td>
</tr>
</tbody>
</table>

5.2 Affected enterprises

Permanent land acquisition of this project will demand for the partial demolition of Zongcun Chemicals Plant. This plant, mainly dealing in such chemical products as sulfur black, is a village enterprise owned by the villagers, where 30 staff were ever employed with the most popular business. However the plant has collapsed for almost 10 years, because of market competition and environmental protection, therefore no resettlement will be carried out. The plant occupies the land by means of renting the collective land, and it has been counted as part of the village land to be acquired for the proposed project.
The plant will be affected by the project in terms of the demolition of some buildings and fence, these being: 160m² of simple brick houses, 400m² of single-structure houses and 1000m² of brick fence. Compensation will be made for the affected houses and fence at the replacement cost.

### Physical Index for the Project Resettlement

<table>
<thead>
<tr>
<th>Item</th>
<th>Simple brick house (m²)</th>
<th>Single-structured house (m²)</th>
<th>Brick fence (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zongcun chemicals plant</td>
<td>160</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

5.3 Temporary land use

Temporary land use of this project mainly refers to the land involved in construction of pipeline networks.

52km of the wastewater collection pipes and along with 11km of reuse water transportation pipes will be constructed for the project, with 2 districts and 4 offices being temporarily acquired, which covers an area of 563.10 mu, including 60 mu of arable land and 503.10mu of road. The trunk mains will temporarily occupy an area of 286.39 mu, and the lateral mains of 276.71 mu. As a whole, the temporary land use of the network engineering will be 60 mu for 1 to 3 months.

### The Profile of the Farmland Temporarily Affected by the Pipeline Network

<table>
<thead>
<tr>
<th>Item</th>
<th>Village to be affected</th>
<th>Household to be affected</th>
<th>Person to be affected</th>
<th>Land acquisition (mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main pipe</td>
<td>Zongcun</td>
<td>18</td>
<td>70</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Houqili</td>
<td>41</td>
<td>167</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Hanxiaozhuang</td>
<td>10</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>69</td>
<td>279</td>
<td>60</td>
</tr>
</tbody>
</table>

5.4 Ground Attachment

The survey on the trees, tombs and other properties within the 199mu of farmland indicates that a total number of 15 trees, including 5 big trees and 10 small trees, 1 vegetable pelt (500m²) and 600m² of single-structured houses will be affected by the project.

### Type and Quantity of the Ground Attachment within the Scope of Land Acquisition
### 5.5 Infrastructure and special facilities

Special facilities affected by this project are mainly electric lines and pumped well, including 6 electric poles, 1 pumped well, which will be protected and relocated during the construction project. In addition, 1000 meters of culvert and 280 meters of tractor road roads will be dismantled after land acquisition.

Infrastructural facilities affected by this project are mainly 28km of roads damaged in network construction, including 0.5km main road, 3km sub-main road and 24.5km pavement. All damaged infrastructures will be reconstructed after the construction work being finished.

#### Type and Quantity of Infrastructures and Special facilities

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Electric pole</th>
<th>Pumped well</th>
<th>Culvert (m)</th>
<th>Mechanically farming land (m²)</th>
<th>Main road (km)</th>
<th>Sub-main road (km)</th>
<th>Pavement (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Waste water treatment plant</td>
<td>6</td>
<td>1</td>
<td>1000</td>
<td>560</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Sewage pipeline</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>3</td>
<td>24.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6</td>
<td>1</td>
<td>1000</td>
<td>560</td>
<td>0.5</td>
<td>3</td>
<td>24.5</td>
</tr>
</tbody>
</table>

#### 6. Compensation Rates for Land Acquisition and Resettlement

All the compensation rates are formulated according to the replacement cost.

##### 6.1 Permanent Land Acquisition Compensation Rates

#### Compensation Rates Calculation for Permanent Collective Land Acquisition

<table>
<thead>
<tr>
<th>Item</th>
<th>Average productivity in last 3 years (CNY/mu/year)</th>
<th>Compensation Multiplier</th>
<th>Standard of compensation (yuan/mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Land Compensation</td>
<td>Resettlement Subsidy</td>
</tr>
<tr>
<td>Cultivated land (grains)</td>
<td>2727</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>
### 6.2 Compensation Rates for Temporary land use

**Compensation Rates for Temporary land use**

<table>
<thead>
<tr>
<th>Average Quarterly output pre 3 years</th>
<th>Compensation Multiplier</th>
<th>Compensation Rate (CNY/mu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standing crops</td>
<td>Land Rehabilitation</td>
</tr>
<tr>
<td>Cultivated land</td>
<td>1364</td>
<td>3</td>
</tr>
</tbody>
</table>

### 6.3 Compensation rate for Infrastructure

**Compensation Rate for Infrastructure**

Yuan/square meter

<table>
<thead>
<tr>
<th>Type of house</th>
<th>Wood –Bricks</th>
<th>Simple Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>House for Production</td>
<td>310</td>
<td>110</td>
</tr>
</tbody>
</table>

### 6.4 Compensation Rate for Attachments & special facilities

**Compensation Rate for Ground Attachments & Special Facilities**

Yuan/unit

<table>
<thead>
<tr>
<th>Items</th>
<th>Unit</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big trees</td>
<td>CNY/tree</td>
<td>40</td>
</tr>
<tr>
<td>Small trees</td>
<td>CNY/Tree</td>
<td>5</td>
</tr>
<tr>
<td>Electric poles</td>
<td>CNY each</td>
<td>200</td>
</tr>
<tr>
<td>Pumped Well</td>
<td>CNY/well</td>
<td>7000</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>Yuan/m2</td>
<td>10</td>
</tr>
<tr>
<td>Tractor Road</td>
<td>Yuan/m2</td>
<td>5</td>
</tr>
<tr>
<td>Culvert</td>
<td>Yuan/m</td>
<td>15</td>
</tr>
<tr>
<td>Fences</td>
<td>Yuan/m</td>
<td>21</td>
</tr>
</tbody>
</table>

### Compensation Rate for Affected Roads for pipeline Network
### 7. Deadline for Compensation Eligibility

The deadline for compensation eligibility was decided on Dec 30th, 2004. Any newly built or planted buildings or trees after this cut-off date, purely for getting extra compensation, will not be taken into account.

### 8. Procedures for compensation Allocation

8.1 Compensation Allocation Procedures for Permanent Land Acquisition

```
```

![Diagram showing the procedures for compensation allocation.](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>Main road</th>
<th>Sub-road</th>
<th>Branch road</th>
<th>Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected roads for pipeline network</td>
<td>80</td>
<td>60</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
8.2 Compensation Allocation Procedures for Temporary land use

9. Economic Rehabilitation Measures

1. Compensate the APs at the end of each year
2. Develop second and tertiary industry for labor force transfer
3. Carry out skills trainings and improve farmers’ ability
4. Create new employment opportunities
5. Others

10. Institutional Framework

- Anyang Zongcun Wastewater Treatment subproject Leading Team and PMOs
- Anyang Water Affair Group, Zongcun WWTP Project Preparation Office
- Long’an Resettlement Office
- Village Committee Resettlement Leading Team
- Relative Government Functions
- China Central South Municipal Engineering Design and Research Institute (project design unit)
- External Independent Monitoring & Evaluation Agency

11. Grievance Procedures

Grievance Procedure
## 12. Public Participation Plan

### Public Participation Schedule

<table>
<thead>
<tr>
<th>Aims of activities</th>
<th>Activities mode</th>
<th>Date</th>
<th>Implementing agencies</th>
<th>Participants</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide APs with the specifications of the project and land relocation and collecting opinions from the APs</td>
<td>Public meeting</td>
<td>Technical assistance (Nov 2004 to Dec)</td>
<td>executing agencies, offices, and village committee</td>
<td>All APs</td>
<td>-meeting is a must for every village</td>
</tr>
<tr>
<td>2. proposing the final land acquisition and demolition plan on to APs</td>
<td>Focused Group meeting for public and affected area</td>
<td>Drafting final reports and implementation (Dec 2004)</td>
<td>executing agencies, offices, and village committees</td>
<td>All APs</td>
<td>-handing the draft of relocation to every AP</td>
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<tr>
<td>3. Informing beneficiary of the progress of construction and final design and project schedule</td>
<td>Focused group meeting in the affected area</td>
<td>Loan approval (June 2005)</td>
<td>executing agencies, offices, and village committees</td>
<td>The interest holders and beneficiary and APs</td>
<td>-holding meetings with beneficiary residents and APs</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
<td>Implementation Period</td>
<td>Executing Agencies</td>
<td>All APs</td>
<td></td>
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<tr>
<td>4.</td>
<td>Conducting final survey on the assets and demolition</td>
<td></td>
<td>Executing agencies, offices, and village committees</td>
<td>All APs</td>
<td></td>
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<tr>
<td></td>
<td>inner-door visiting and survey on physical property</td>
<td>Dec 2004 to Jan 2005</td>
<td></td>
<td>-Inventory of all property and land -collecting the augmenting socio-economic data</td>
<td></td>
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<tr>
<td>5.</td>
<td>Informing APs of the entitlements and compensation date.</td>
<td>Public meeting</td>
<td>Executing agencies, offices, and village committees</td>
<td>All APs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feb 2005</td>
<td></td>
<td>-Holding residents meeting to inform of key points of entitlements</td>
<td></td>
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<tr>
<td>6.</td>
<td>APs’ supervision and health impact and beneficiaries</td>
<td>Inner-door visiting</td>
<td>Executing agencies, offices, and village committees</td>
<td>Random sampling</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>After demolition (April 2005 to June 2006)</td>
<td></td>
<td>-Determining whether to augment supports, especially for the underprivileged and vulnerable groups -providing brief introductions and latest supervision on land acquisition and demolition for plan</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4 Terms of Reference for Independent External Monitor

The following terms of reference were agreed with ADB during their visit to Henan in January 2005.

A. Introduction
1. According to the requirements stipulated in the “Regulations on Construction Supervision” promulgated by the Construction Ministry of the People’s Republic of China (PRC) in 1995, all construction projects shall be properly supervised. It is also a requirement of the Asian Development Bank (ADB) that loan projects that result in resettlement be properly monitored and evaluated. In order for the implementation of the land acquisition and resettlement program of the Henan Wastewater Management and Water Supply Project (HWMWSP) to comply with the provisions of the Resettlement Plan (RP), monitoring of implementation, both “internal” and “external”, will be carried out during and after the implementation of the Project.
2. An independent monitoring agency (Monitor) will be engaged through competitive tenders for the external supervision, monitoring and evaluation. The Consultant will be a PRC consulting entity who has experience in ADB or World Bank projects dealing with resettlement issues.
3. Monitoring and evaluation will include, but not be limited to:
   - Monitoring the progress and effectiveness of RP implementation;
   - Evaluation of income restoration and post-resettlement conditions of the APs and affected communities.

B. Objectives and Requirements of Monitoring and Evaluation
4. The objectives of monitoring and evaluation are to assess if the land acquisition and resettlement is implemented in accordance with the RP and if the goals and principles of the RP are achieved. Specifically, monitoring and evaluation will focus on the following aspects of the APs’ situation and the resettlement process.
   - Economic situation prior to and after displacement of land or housing;
   - Timely payment of funds;
   - Rehabilitation of the vulnerable groups;
   - Condition of land temporarily acquired when it is returned to the original land users;
   - Measures taken by the village committees to restore affected livelihoods; and,
   - Living conditions and economic status of APs following resettlement in comparison to the non-affected household in the Project areas.
5. Monitoring and evaluation will include the establishment of socio-economic baselines
of the APs prior to land acquisition or physical relocation, and the regular monitoring of their relocation or adjustment during Project implementation, and evaluation of their situation for a period of one or two years afterwards. Qualitative and quantitative methods will be used to evaluate the standard of living of the APs. Investigation will include interviews with IAs, local officials, village leaders, and survey of at least 20% of affected households. Focus group discussions can be conducted to address issues related to women, poor, other vulnerable groups and unemployed workers.

C. Monitoring Indicators
6. The following indicators will be monitored and evaluated in accordance with principles, entitlements and rehabilitation strategies/plans set out in the RP:
   Disbursement of entitlements to APs and businesses: compensation, housing, cultivated farmland, and employment as specified in the RP.
   Development of economic productivity: re-allocation of cultivated land, land restoration, job opportunities provided to APs.
   Provision of alternative housing: the affected persons must move into their alternative housing before demolition; the affected persons must receive on time their moving and transportation allowances.
   Restoration of civic infrastructure: all necessary infrastructure should be restored at the resettlement sites at least up to a standard equal to the standard at the original location.
   Level of satisfaction of APs: level of satisfaction of APs with various aspects of the resettlement program; the process for grievance redress the timely resolution of problems.
   Standard of living: Throughout the implementation process, the trends in standards of living will be observed and the potential problems in the way of restoration of standards of living will be identified and reported. The Consultant will carry out a comprehensive socio-economic survey after the completion of resettlement implementation to document the standards of living and the conditions of the APs after resettlement. The survey will be conducted annually for two years, or until most affected households have fully restored their living standards and income generation.
   Participation of affected persons: Involvement of APs in measurements of impacts, negotiation of compensation, decisions for collective investment of land compensation, and monitoring of progress.
   Support for vulnerable households: impacts on children, the elderly and other vulnerable groups and implementation of preferential policies, income restoration measures, and improvements in women’s status.
   Adequacy of resettlement funds: full and timely disbursement of resettlement budget, results of financial audits and increased in funding meet any shortfalls.

D. Special Considerations
7. Special attention/provisions specified in the RP will be paid to women, the poor and vulnerable groups during monitoring; these include:
   The status and function of women: Closely monitor any change in women’s status, function and situations. At least 50% of APs surveyed will be women.
   Care and attention to vulnerable groups: Closely monitor living conditions of elders, the
handicapped, and other vulnerable groups after resettlement, to ensure that no hardship is experienced.

E. Contents and Distribution of Independent Monitoring Reports
8. A monitoring report will include, among other things:
summary of findings and conclusion of investigations and evaluation;
major problems identified (existing and potential);
recommended mitigation or prevention measures which need to be taken;
assessment of previous follow-up actions.
9. The Monitor will provide ABD and the HPMO with monitoring reports every six months during the implementation of the RPs. After the PMOs prepare their resettlement completion reports, the Monitor will conduct annual evaluations for two years, or until all issues have been successfully resolved.
10. All reports will be provided in English and Chinese. PMOs shall ensure that information on the progress and status on all aspects of land acquisition and resettlement activities will be provided to the external monitor for verification. The Monitor will forward copies of the reports directly to ADB.

F. Duration and Frequency of Visits
11. The consulting services will be required during a period of 3 years (2005 to 2007).
12. During implementation of the RP, external monitoring by the Monitor will be undertaken every six (6) months for an input of one (1) month. Two annual evaluations will be conducted for each subproject; the timing of these investigations may be staggered depending upon the progress of each subproject. The total input of the Consultant will amount to 15 months for domestic consultancy (excluding survey assistants).

Monitoring Schedule

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Timing</th>
<th>Report Due</th>
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<tbody>
<tr>
<td>1) Baseline Surveys</td>
<td>May 2005</td>
<td>June 30, 2005</td>
</tr>
<tr>
<td>2) Monitoring of Implementation</td>
<td>June 2005</td>
<td>July 31, 2005</td>
</tr>
<tr>
<td>4) Monitoring of Implementation</td>
<td>June 2006</td>
<td>July 31, 2006</td>
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