SFG3880 V1 REV

World Bank financed-Zhejiang Qiandao Lake and Xin'an River Basin Water Resources and Ecological Environment Protection Project

RESETTLEMENT ACTION PLAN

OF

World Bank-financed Zhejiang Qiandao Lake and Xin'an River Basin Water Resources and Ecological Environment Protection Project (Chun'an)

Chun'an Project Management Office

February 2018

Definition

This Resettlement Action Plan (RAP) is prepared according to the Laws and Regulations of PRC, and Zhejiang Province as well as the Guidelines of the World Bank (Operational Directive for Involuntary Resettlement OP 4.12). The purpose of this document is to set out an Action plan for the Resettlement and Rehabilitation of the Displaced persons (DPs) to ensure that they will benefit from the project and their standards of living will improve or at least be restored after the project impact.

Acquisition of land and other assets for the project will adversely affect the livelihood of persons who live, work or earn their living on the land that will be acquired for the project. DPs are defined as those persons whose income or livelihoods will be adversely affected by land acquisition for the project.

Displaced persons(DPs) include the following categories:

- 1) Persons who have a title, right, interest, in structures (houses, enterprises, shelters, or public buildings), land (including residential, agricultural, and grazing land) or any other asset acquired or possessed, in full or in part, permanently or temporarily;
- 2) Persons who use the structures, land or assets described above; or persons whose business, occupation, work, place of residence or habitat adversely affected; or
- 3) Persons whose standard of living is adversely affected as a consequence of land acquisition.

Affected Persons

"Affected Persons" means persons who on account of the execution of the project had or would have their: a) standard of living adversely affected; or b) right, title or interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable asset acquired or possessed, temporarily or permanently; or c) business, occupation, work or place of residence or habitat adversely affected.

DPs may be individuals or legal persons such as a company, a public institution. Definition of DPs is not to set a limit to their legal registration or permission to live or conduct business in the affected location, or to the compensation of their property. Thus, it includes:

- 1) All those affected by the project regardless of their legal rights or absence thereof to the assets being taken; and
- 2) Persons without residential permit to live in a certain area.

Therefore all such persons who are affected will be considered and recorded as DPs, regardless of their legal connection to assets land or location.

If there are more than one person, family or household using or holding a title to the same land or property that is acquired, they will be compensated and rehabilitated according to the loss they suffer, their rights, and the impact on their living standards. The definition of DPs is linked directly to the adverse effect of the project, regardless of legal rights title or interest.

All DPs are entitled to the improvement or at least restoration of their standards of living, and compensation for the material losses they suffer. Compensation for assets will cover replacement cost. No deductions or discounts will be applied to the compensation amount for depreciation or other reasons. All DPs deriving an economic benefit from the affected land and property are entitled to receive rehabilitation benefits in addition to the compensation for their assets lost. Those DPs without title, authorization or legal permission to reside, conduct business, cultivate land or construct structures are eligible for rehabilitation of their livelihoods and compensation for their assets on an equal footing with those with formal legal title, authorization or permissions to the assets.

Criteria for Eligibility. Displaced persons may be classified in one of the following three groups:

- (a) those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- (b) those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets—provided that such claims are recognized under the laws of the country or become recognized through a process identified in the RAP; and
- (c) those who have no recognizable legal right or claim to the land they are occupying.

Resettlement: refers to make an arrangement to people's production and living that are affected in order to make them benefit from the project. It includes:

- > the relocation of living quarters;
- Finding acceptable new employment for those whose jobs are affected;
- restoration (or compensation) of affected productive resources such as land, workplaces, trees and infrastructure;
- restoration of other adverse effect on DPs' living standards (quality of life) through land acquisition (such as the adverse effects of pollution);
- restoration of or compensation for affected private and public enterprises;
- restoration of adversely affected on cultural or common property.

Rehabilitation: means: the restoration of the DPs' resource capacity to continue with productive activities or lifestyles at a level higher or at least equal to that before the project.

The objective of this RAP is to provide a plan for the resettlement and rehabilitation of the DPs so

that their losses will be compensated and their standards of living will be improved or at least restored to the pre-project levels. To achieve these objectives the plan provides for rehabilitation measures so that the income earning potential of individuals are restored to sustain their livelihoods. Affected productive resources of businesses (enterprises including shops) and public property. Infrastructure and cultural property will also be improved or at least restored to their pre-project levels.

Compensation and resettlement measures: To address the following impacts of the involuntary taking of land: (i) relocation or loss of shelter; (ii) lost of assets or access to assets; or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location, a RAP or a resettlement policy framework will be prepared to cover the following:

- (a) The RAP or resettlement policy framework includes measures to ensure that the displaced persons are:
- (i) informed about their options and rights pertaining to resettlement;
- (ii) consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
- (iii) provided prompt and effective compensation at full replacement cost[®], for losses of assets attributable directly to the project.
- (b) If the impacts include physical relocation, the RAP or resettlement policy framework includes measures to ensure that the displaced persons are:
- (i) provided assistance (such as moving allowances) during relocation; and
- (ii) provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.
- (c) Where necessary to achieve the objective of the policy, the RAP or resettlement policy framework also includes measures to ensure that displaced persons are:
- (i) offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living;
- (ii) provided with development assistance in addition to compensation measures described in paragraph 4(a)(iii), such as land preparation, credit facilities, training, or job opportunities.

Cut-off date: The date of publication of the bulletin of land acquisition and relocation in this project. After this date, the displaced persons shall not build, rebuild or expand their houses; shall not change

the uses of their houses and land; shall not lease their land, lease, sell or purchase their houses; and any person that moves in after this date shall not qualify as a displaced person.

is the method of valuation of assets that helps determine the amount sufficient **Replacement cost:** to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard. Such additional assistance is distinct from resettlement measures to be provided under other clauses in OP 4.12, para. 6.

Involuntary land acquisition:

- (a) the involuntary taking of land resulting in
- (i) relocation or loss of shelter;
- (ii) lost of assets or access to assets; or
- (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or
- (b) the involuntary restriction of access9 to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

Abbreviations

AAOV Average Annual Output Value

AH Affected Household

AP Affected Person

DMS Detailed Measurement Survey

FGD Focus Group Discussion

LA Land Acquisition

M&E Monitoring and Evaluation

MLS Minimum Living Security

PRC People Republic of China

RIB Resettlement Information Booklet

RAP Resettlement Action Plan

PIU Project Implementation Unit

PMO Project Management Office

TNC The Nature Conservancy

Units

Currency unit = Yuan(CNY)

1.00 yuan = \$0.15

1 hectare = 15 mu

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Executive Summary

1 Basic Information of the RAP

World Bank-financed Zhejiang Qiandao Lake and Xin'an River Basin Water Resources and Ecological Environment Protection Project (hereafter referred as "the project"), involves Chun'an County and Jiande City respectively. The project financing plan and economic analysis was reviewed, and it was concluded that Project costs total US\$293.46 million over 6 years of implementation period, inclusive of price and physical contingencies, interest during construction, commitment fee, and front-end fee. Project operations will be financed by an IBRD loan of US\$150.00 million (about 51 percent of total project cost) and local counterpart funding of US\$143.46 million from local governments (about 49%). The Bank loan will be on standard IBRD terms.

The Qiandao Lake project includes 3 components, namely Component 1: Landscape Management Improvement. This component will support (a) Low Impact Crop Projection Practice; (b) Waste Management; (c) Forestry Eco-System Protection; (d) Wetland Management; Component 2: Water Resources Management Improvement component. This component will support: (a) Wastewater Management; (b) Water Course Improvement; (c) Portable Water Supply in Rural Areas; and Component 3: Institutional Capacity Building, Monitoring and Project Management component. This component would finance technical assistance, training, research/studies, extension, awareness raising, monitoring and evaluation, as well as the project management.

The project of Chun'an County involves 23 towns, and a total of 5 sub-projects. They are: (1) Chun'an County rural drinking water safety promotion component, (2) Chun'an County comprehensive management of small watershed component, (3) Chun'an County Embankment reinforcement and river improvement component, (4) Chun'an County agricultural non-point source pollution control project, (5) Chun'an County forest ecological restoration project. This RAP is prepared for the project contents proposed for Chun'an County and a separate RAP was prepared for Jiande City.

According to the investigation, the impacts of this project involves the permanent land acquisition, temporary land occupation, and ground attachment. Among them, Chun'an

County Rural Drinking Water Safety Promotion Component involves permanent land acquisition and temporary land occupation; Comprehensive Management of Small Watershed, Embankment Reinforcement and River Improvement Component involve temporary land occupation; Agricultural Non-point Source Pollution Control and Forest Ecological Restoration Component do not cause any resettlement.

2 Resettlement Impacts

The geographical space of this project impacts is defined in the Chun'an County, which covering its total 23 towns. The direct beneficiary area of the project is whole Chun'an County Total 4 59,000 and 3 95,000 people could also be benefited, directly and indirectly, from this project respectively.

Using the World Bank loan, this project occupies 1,411.09 mu land totally, which includes 39.4 mu of rural collective land as well as 1371.69 mu of land occupation temporarily. The total affected population of this project includes 1,585 households with 6,685 persons. Total 1,034 households with 4,461 persons (permanent land requisition affecting 71 households with 272 persons; while temporary land occupation affecting 963 households with 4,189 persons), are impacted by the subproject of Chun'an County rural drinking water safety promotion component. Total 56 households including 172 persons are impacted by the subproject of comprehensive management of small watershed. And total 495 households with 2052 persons are impacted by the subprojects of embankment reinforcement and river improvement.

- Permanent Requisition of Rural Collective Land. The permanent acquisition of collectively-owned land affects 12 administrative villages in six towns / sub districts, covering about 39.4 mu of collective land, and affecting 71 households with 272 persons. For the affected collective land, there are 0.9 mu of arable land, 19.57 mu of woodland, 18.05 mu of garden, and other 0.87 mu lands respectively. Only 0.03%-2.82% of cultivated land in these 12 administrative villages, is occupied by the project.
- Temporary Occupation of Rural Collective Land. This project occupies a total of 1371.69 mu land temporarily, all of which are rural collective land. Among them,

the Rural Drinking Water Safety Improvement Project, occupies an area of 910.31 mu temporarily. While the Small Watershed Comprehensive Treatment Project occupies an area of 58.4 mu temporarily, and the Embankment Reinforcement and River Reinforcement occupies 402.98 mu of land. The temporary occupation of collective land affects 22 villages and towns (sub-districts) in 127 townships and communities in Chun'an County, with impacting total 1,514 households and 6413 persons. The main reasons for leading to lots of affected population are that: network extension (721.87 km), the Comprehensive Management of Small Watershed (105.3 km), and Embankment Reinforcement and River Management (227 km) are all linear projects, while their distances are very long; local farmers have less land per capita, and their lands have been divided into some small pieces.

Some precautionary measures will be adopted during construction to reduce the negative impacts of the project such as, the time of excavating pipe network is limited in winter to 1) reduce water and soil erosion, 2) reduce the occupation of arable land. During harvest season the construction amount will be reduced. 3) The construction information will be conveyed to the APs in advance, so as to reduce the agricultural loss of APs; 4) restoration of arable land. During the construction period, the mellow soil will be centralized and refilled to reduce the farmers' loss.

3 Project Policies, Principles and Entitlements

The project plan is constantly optimized. The resettlement policy of this project will follow relevant policies of the People's Republic of China, Zhejiang People's Government, Local Authorities and of World Bank, such as the Land Administration Law of the People's Republic of China (2004), the Decisions for Further Reform and Strengthen Land Administration of State Council ([2004] No. 28) and OP4.12, etc.

4 Resettlement Measures

The permanent LA, temporary land occupation and ground attachment compensation are operated in accordance with the Notice of the Updated Benchmark Land Price in Chun'an County (CZF [2016] No.10), and the Notice on the Re-release Integrated Section Price of Chun'an County Collective Land Acquisition.

The permanent LA of this project mainly involves woodland, the APs are ineligible to be incorporated into the social security system. In this way, the compensation for the permanent LA of the project will be compensated according to the integrated land section prices, the compensation will be paid directly to the affected peasant households by the Land Resource Bureau of Chun'an County. The temporary occupation compensation will be paid directly to the APs according to the actual situation. The ground attachments will be reimbursed to the property owners by the Land Resource Bureau of Chun'an County in accordance with the replacement price.

In order to ensure the safety of compensation on the permanent and temporary LA, it is recommended that cash will not be paid directly, while the establishment of special bank account will also be adopted. This will ensure financial security and contribute to fund management of the project. It can effectively prevent fund being withheld and misappropriated. At the same time, local township administrators need to guide the APs that how to reasonable use of funds.

Moreover, in order to improve the benefits of the project and to reduce the negative feedback to the APs, some skill trainings and job opportunities will be provided.

5 Supports for Vulnerable Groups and Women

This project does not involve any vulnerable groups.

The affected female has the same legal rights that the male has, including but not limited to land contracting, accepting education, family planning and participating in elections. Most of the investigated female labors believe that they have the same production & operation decision-making power that the male has. In other words, they have the right to choose working in a company or setting up their own business. With division of labor, the male-female employment distribution in rural families shows a typical distribution model, namely "Male for Money & Female for Family". This means that most of the male are engaged in non-agricultural industries, while most of the female are engaged in agriculture and household duties. Since the female undertake more household duties and the task of raising children, they often choose to work locally; while it's more likely for the male to go to other places for work. In terms of working hours, the female and

male have basically same working hours. In terms of industries, the female has advantages in some industries such as catering industry, household service industry and wholesale & retail industry; but disadvantages in other industries such as construction industry and transportation industry. According to the survey, questions that what the female concerned are the same as that of the male: a) whether the compensation standard is in strict compliance with national laws and policies, and whether the compensation is given in a timely manner; b) whether the land compensation funds are directly given to the affected peasant households. In terms of gender differences, the female's following needs are different from that of the male: a) the female need training in planting, husbandry, household service and catering service; b) among most families, the male are the major force in village management. However, the female also wants to participate in village management. In addition, the contract which specifies the compensatory funds will be signed by both husband and wife. In order to protect the affected female's rights and interests, this project will invite the female to join "Supporting Group for Comprehensive Treatment of Ecological Environment of Thousand Island Lake of Xin'an River". In this way, their participation right, decisionmaking power and development right can be guaranteed.

While the project will take a series of measures to ensure that women's rights and interests are guaranteed during the preparation and implementation phase of the project. For example, affected women will receive information relating to LA and must ensure participation in LA and public consultation. The compensation agreement must be signed by both husband and wife. In skill training, priority is given to the affected women's labor to ensure that their economic status is not compromised. To ensure that a certain number of women (at least 50% of total affected women) can access to non-skilled jobs during the project construction process. In addition, women will receive the same pay equally as men since they work the same way. During the operation of the project, priority will be given to catering, temporary employment and other positions to women affected by the project, to ensure that their income is restored.

6 Public Participation and Information Disclosure

All APs have been informed of the key points of this RAP by various means and involved in the Project, such as meeting, interview, FGDs, public participation meetings and community consultations, and their opinions have been well incorporated into this RAP.

During the project preparation phase, the supportive teams have been established in all affected villages. 3—5 representatives in each village, which include women and village leaders. While in the RAP preparation phase, many issues that include policy advocacy, compensation and livelihood/income restoration have been discussed with the APs. Meantime, the PMO encourages the APs to participate in the resettlement and reconstruction work with the support of holding symposiums. Moreover, measures of enhancing policy advocacy and public participation will be improved through other channels and tools, such as notice and mobilization.

During the project implementation phase, PIUs officers will explain the relevant policies and regulations, compensation standards, and resettlement programs, etc., so that APs can understand specific issues, and will be able to make adequate arrangements. Participation is also of equal importance and the strategy to encourage participation is included in RAP. Copies of RIBs, which contain key information, will be provided to the affected persons before RAP implementation. The RAP will also be issued on World Bank's website and local government's website.

7 Grievance Redress Mechanism

Establishing a Complaints / Disputes Resolving Management System (CRMS) aims to timely resolve the issues faced by the APs during compensation and resettlement. The APs can appeal against any issue they faced during the resettlement and compensation. The Local Government Agencies (LGAs) and the village committees (VCs) will coordinate and put efforts to resolve the issues free of cost. The reasonable expenses incurred will be paid from the contingencies of the project.

8 Institutional Arrangement

In order to ensure the successful implementation of the project, a project leading group in Chun'an County has been established for overall leadership and high-level coordination. Meantime, to ensure the smoothly implementation of RAP, more measures have been conducted, such as strengthening the communication with the Zhejiang province PMO, capacity buildings for resettlement agencies and PMOs, arranging full-time staffs in PMOs in charge of resettlement implementation, coordination and organizations. These personnel are well-experienced and engaged in land acquisition related work for many years.

9 Monitoring and Evaluation

In order to ensure successful implementation of the RAP, internal and external monitoring on resettlement will be carried out. The WB Project Management office of Chun'an County, together with related agencies will provide a semi-annual internal monitoring report to the WB during the resettlement process. WB PMO of Zhejiang Provincial Housing and Urban-rural Construction Department will engage an independent monitoring agency to conduct the semi-annual external monitoring and evaluation. Monitoring and evaluation costs are included into the estimated resettlement budget. The cost of external monitoring is charged by the PMO of Chun'an County.

10 Resettlement Cost

The resettlement cost of this project consists of the cost of permanent LA, compensation for affected infrastructures and ground attachments, and related taxes, management fees, etc. The estimated resettlement cost for the project is 7.76674 million Yuan. Among them, 0.2336 million yuan is for resettlement cost for comprehensive management of small watershed component; 1.61192 million yuan is for Embankment reinforcement and river improvement component; 5.92122 million yuan is for rural drinking water construction project.

1 Basic Information of the Project

1.1 Construction Content and Resettlement Impacts

1.1.1 Construction Content

World Bank-financed Zhejiang Qiandao Lake and Xin'an River Basin Water Resources and Ecological Environment Protection Project involves Chun'an County (Chun'an Sub-project) and Jian'de City (Jian'de Sub-project). The total investment of the project is about 293.46 million USD, including the World Bank loan of 150 million USD. The project of Chun'an County involves 23 towns, and a total of 3 sub-components. The detail content of the project is given below.

To achive the project development objectives, the project includes the following three components:

Component 1: Landscape Management Improvement. This component will support:

- (a) Low Impact Crop Production practice, to reduce non-point sources of pollution in the Xin'an river and Qiandao lake catchments in Chun'an county and Jiande city. To address this issue, the project would promote: (a) soil nutrient management to reduce the use of chemical fertilizers; (b) integrated pest management (IPM) practice including the use Biological prevention measures such as insect traps, lights and natural predators for the key cropping systems to reduce the use of pesticides; and (c) conservation agriculture (CA) pilots by the use of low impact soil tillage and minimum tillage practices for the main crops to reduce soil erosion, run-off and nutrient loss.
 - (b) Waste Management (LWM), through undertaking waste treatment for livestock farms identified in the selected project selected catchments. The project willprovide sub-grants to participating farms to cost share the construction of LWM facilities and to promote the proper collection and treatment of pig and chicken manure.
 - (c) Forestry Eco-System Protection, through improving the hydrological functions of plantations in the Qiandao catchment by replanting and /or inter planting pest infested and degraded plantation monocultures and abandoned farmlands with native species to form a mixed forest structure. It would also improve fire prevention and control operations. The component would focus mainly around

- the lakeshore, between the shoreline and the first ridge, where most degraded and monoculture forests are located and where most fires occur.
- Component 2: Water Resources Management Improvement This component would support:
- (a) Water Course Improvement. Water course improvements, greening and landscaping will be used to increase water infiltration in project watersheds, expand water storage capacity, reduce peak run-off and non-point sources of pollution discharges, stabilize river bank slopes and reduce Total Suspended Solid (TSS) discharges into Qiandao Lake through the drainage channel of the crop field along the river bank. It will also provide irrigation water to the crop field along the river. The main project activities are: (a) the improvement of water courses through the rehabilitation of river embankments, the dredging of river channels, and the rehabilitation weirs in the five selected catchments.
- (b) Potable Water Supplies in Rural Areas. The project would expand the existing piped network to provide potable piped water to around 218,000 rural inhabitants in 19 townships in the project area, all of whom presently depend on supplies from antiquated and poorly managed installations, as well as to upgrade and expand supplies to a further 8 villages (clusters) by replacing certain aging pipe distribution networks.

Component 3: Institutional Capacity Building, Monitoring and Project

- Management. This component would finance technical assistance, training, research/studies, extension, awareness raising, monitoring and evaluation, as well as the project management. More specifically, it would support:
- (a) Technical assistance and training. It will finance the institutional strengthening and capacity building of PPMO and two CPMOs, as well as project entities and farmers by providing technical assistance and training to the relevant staff and farmers on implementing technical design adopting new technologies and effective project management.

- (b) Promoting Inter-Provincial Collaboration. Given the inter-provincial nature of the causes of water pollution in Qiandao lake and the Xin'an river, the project will pay special attention to promoting inter provincial collaboration, by fostering communication and coordination between the Anhui and Zhejiang provinces, more specifically through organizing (a) training and workshops to introduce effective watershed management practice and to disseminate the lessons learned, to facilitate the exchanges of knowledge among involved agencies of two provinces; and promoting cross provincial institutional collaboration arrangements, such as setting up bi-provincial meetings for relevant authorities of two provinces.
- (c) Study and Research program. Several study and research activities are planned. In particular, given that the project aims to support implementing the Zhejiang Xin'an River and Qiandao Lake Water Resources and Ecological Protect Plan, the project will finance analytical and advisory work aimed at improving the effectiveness of the Plan. This study aims to provide clear recommendations to the Zhejiang Government on how to improve the efficacy of the Plan and its implementation.
- (d) Monitoring and Evaluation. The project will finance monitoring: (a) the project implementation progress; (b) the quality and performance of project activities and its technical and institutional support systems; (c) the achievement of the PDO; and (d) environmental and social impacts with special emphasis on water quality. It will also support strengthening the Qiandao Lake water and catchment-wide monitoring system, especially regarding detecting trends in pollutant levels, their passage through the catchments, their points of origin and their causes, as well as water quality through financing additional monitoring stations, equipment and facilities, and improved systems and methodologies for data collection and analysis.

Payments for ecosystem service (PES) pilot. Collaborating with the Bank, The Nature Conservancy (TNC) is planning to support payments for ecosystem service (PES) pilot

in the project areas. A water fund will be developed and operated as an institutional platform by cities and conservation practitioners (including TNC) within the overall framework of the 'Payments for Ecosystem Services' concept. By mobilizing innovative sources of funding, the water fund will help communities improve water quality by bringing water users together with the objective of collectively investing in upstream agriculture land management to reduce pollutions under the set project technical framework.

1.1.2 Types of Resettlement impacts

According to the resettlement impacts survey, the project involves permanent land acquisition, temporary land occupation, and ground attachments. Among them, Chun'an County rural drinking water safety promotion component involve permanent land acquisition and temporary occupation; comprehensive management of small watershed, embankment reinforcement and river improvement project of Chun'an County involve temporary land occupation; agricultural non-point source pollution control and forest ecological restoration does not involve the resettlement impacts. The contents of each sub project and the main types of resettlement impacts are shown in table 1.

Table 1 Types of Resettlement impacts

| 77 0 75 | | | | | | | |
|---------|--|--|--|--|--|--|--|
| Serial | Construction | Types of resettlement | Measures to reduce the impact of resettlement | | | | |
| number | content | impacts | | | | | |
| 1 | Chun'an rural drinking water safety promotion component | permanently land acquisition, temporary land occupation and ground attachments | The construction of water plant is going to permanently expropriate rural collective land, temporary land occupation and ground attachments; lay the pipe network is going to temporary land occupation, not involve land acquisition and house demolition | | | | |
| 2 | Chun'an County comprehensive management of small watershed component | temporary land occupation | To minimize the impact of resettlement, only involve temporary land cover, not land acquisition and house demolition | | | | |

| Serial number | Construction content | Types corresettlement impacts | of | Measures to reduce the impact of resettlement |
|------------------|---|-------------------------------|----|--|
| 3 | Chun'an County Embankment reinforcement and river improvement component | temporary lan | d | To minimize the impact of resettlement, only involve temporary land cover, not land acquisition and house demolition |
| 4 | Chun'an County agricultural non-point source pollution control project | Not involve | | |
| 5 | Chun'an County forest ecological restoration project | Not involve | | |

1.1.3 Resettlement Impacts

Chun'an Sub-project affected 1586 households, 6685 persons, 39.4 mu of permanent land acquisition; permanent land acquisition involving 6 villages and towns, 12 villages, affecting 71 households, 272 persons. Temporary covers an area of 1371.69 mu, affecting 1514 households, 6413 persons. Among them:

- (a) Rural drinking water safety promotion component will permanently collect 39.4 mu of rural collective land, including 0.9 mu of arable land, 19.57 mu of forest land, 18.05 garden land, and 0.87 mu of other land types. The permanent collection of rural collective land involves 71 households and 272 persons. The sub project covers an area of 910.31 mu, all of which are rural collective land. Temporary covers 963 households, 4,189 persons.
- ➤ (b) comprehensive management of small watershed component involves temporary covers, covering an area of 58.4 mu, involving 56 households and 172 persons.
- (c) Embankment reinforcement and river improvement component involve temporary covers, covering an area of 402.98 mu, involving 495 households and

2052 persons.

The main resettlement impacts of Chun'an Sub-project and is listed in table 2 .

Table 2: Summary of Major Migration Impacts of the Project

| | Permanently land acquisition | | | | | | APs caused by permanently land Termanently | | Tempera | Temporary land occupation area | | APs caused byThe Temporary land | | | |
|--|------------------------------|------------|--------|-------|-------------------------|----------|--|-----|-------------------------|--------------------------------|----------|------------------------------------|------------|--|-----------|
| | | Collective | land | | | | | | acquisi | • | Temporar | y iana occupa | ition area | | ccupation |
| Component | Arable land | Woodland | Garden | Other | State- owned land | Subtotal | AHHs | Aps | State- owned land | Collective land | Subtotal | AHHs | APs | | |
| Chun'an County rural drinking water safety promotion component | 0.9 | 19.57 | 18.05 | 0.87 | 0 | 39.4 | 71 | 272 | 0 | 910.31 | 910.31 | 963 | 4189 | | |
| Chun'an County comprehensive management of small watershed component | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58.4 | 58.4 | 56 | 172 | | |
| Chun'an County Embankment reinforcement and river improvement component | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 402.98 | 402.98 | 495 | 2052 | | |
| Total | 0.9 | 19.57 | 18.05 | 0.87 | 0 | 39.4 | 71 | 272 | 0 | 1371.69 | 1371.69 | 1514 | 6413 | | |

1.2 Project Beneficial Area and Impact Area

1.2.1 Project Beneficiary Area

Chun'an County rural drinking water safety promotion component adopts two water supply system manners. First, the current water pipe network extension project. The status quo and extension project of water supply water supply system including Fenkou Town, Linqi Town, Zuokou Township, Langchuan Township, Jieshou Township, Fuwen Township, 85 administrative villages and town of Lake Jiang Jia Zhen 9 township water supply situation, the population 97300persons. Second, the new cross piece on rural water supply project, across the village piece on the water supply project of water supply scope mainly includes 107 administrative villages: Wangfu, Weiping, Zhongzhou, Fengshulin, Pinmen, Linqi, Zitong, Lishang, Anyang villa, 10 towns. Water supply situation has a population of 106 thousand and 700. The design of the water supply population of 110 thousand and 700 persons, the total size of the water is 19 thousand and 500 m³/d.

> Chun'an County Comprehensive management of small watershed component:

Wuqiang scream basin management involves 2 townships. Yu chuan scream basin management involving a total of 2 villages and towns of the 1 river 11 tributaries.

Liuduyuan watershed management involving a total of 1 in 1 towns of 5 tributaries.

Chun'an County Embankment reinforcement and river improvement component:

Langchuan Township, Fenkou Town, Dashu Town, Anyang Town, Li shang Township, Linqi Town, Jiangjia Town, Fuwen Township, Pingmen Township, Weiping Town, Zuokou Township, Fengshuling Town, Wenchang Town, Yaoshan Township, Wangfu Township, Songcun Township, Jiukeng Township, Jinfeng Township, Jieshou Township,Anyang Township,all together 20 towns. Among them, Chun'an County dike reinforcement project involves 33 administrative villages, protect 22955 persons; Chun'an river regulation project involves 92 administrative villages, protect 62865 persons.

The direct project beneficial area is the whole county, the direct beneficial population of 45, 900 persons, and the indirect beneficial population of 39, 500 persons.

Table 3: Social Benefits of the Project

| Subproject | Service area | Service population (10000 persons) | Water supply capacity (10000m³/ d) | Sewage treatment capacity (100003/d) | Garbage disposal capacity (10000m³) | Pump station (seat) | Dry branch pipe (km) | Road (strip) | Flood bank (km) |
|--|-----------------|---|------------------------------------|---|--|---------------------------|-------------------------|-----------------|-----------------------|
| Chun'an County rural drinking water safety promotion component | 17 townships | 21.05 | 1.91/1.93 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chun'an County comprehensive management of small watershed component | 5 townships | 9.89 | 0 | 0 | 0 | 0 | 0 | 0 | 59.95 |
| Chun'an County embankment reinforcement and river improvement component service area | 20 townships | 8.582 | 0 | 0 | 0 | 0 | 0 | 0 | 227 |
| Total | | | | | | | | | |

1.2.2 Project Impact Areas

The impacts of the Chun'an Sub-project include the effects of permanent land acquisition, temporary land cover, ground appendage effects and changes in the state land use patterns below the 108 meters water level.

- (a) Permanent Land Acquisition Affected Areas. 12 administrative villages project permanent land acquisition of Wangfu Township Xinhe Village, Weiping Town Yejia Village, Weiping Town Qinkeng Village, Weiping Town Longtan Village, Weiping Town Houchuankou Village, Weiping Town Kaochuan Village, Weiping Town Pengcun Village, Weiping Town Feiyuan Village, Zhongzhou Town Xiashan Village, Pingmen Township Pingmen Village, Fengshuling Town Zhaikeng Village and Guanchuan Village, Zitong Town Lianxi Village, 12 administrative villages in 7 townships, will affect 71 households (272 persons).
- **(b) Temporary Occupation of Land Affecting Area.** The project covers an area of 127 administrative villages, temporary affects Langchuan Township Fenkou town, Dashu Town, An'yang Township, Lishang Township, Lin Qi Town, Jiangjia Town, Fuwen Township, Pingmen Township, Weiping Town, Zuokou Township, Fengshuling Town, Wenchang Town, Yaoshan Township, Wangfu Township, Songcun Township, Jiukeng Township, Jinfeng Township, Jieshou Township, An'yang Township, including 20 villages and towns in 27 administrative.

1.3 Project Progress

The project progress of Chun'an Sub-project is shown in table 4.

Table 4Progress of Chun'an Sub Project

| Duciost | | Feasibility study | | ental assessment | Resettlement program | |
|--|----------|---|----------|--|----------------------|---|
| Project | Progress | PIU | Progress | PIU | Progress | PIU |
| Comprehensive management of small watershed project | Complete | Zhejiang water conservancy and Hydropower Survey Design Institute | Complete | Zhejiangwater conservancy and Hydropower Survey Design Institute | | |
| Embankment reinforcement and river improvement project | Complet | Zhejiang water conservancy and Hydropower Survey Design Institute | Complete | Zhejiang water conservancy and Hydropower Survey Design Institute | 2017.11 | National Research Center for Resettlement, Hohai University |
| Rural drinking water safety promotion component | Complet | Zhejiang water conservancy and Hydropower Survey Design Institute | Complete | Zhejiang Huanlong environmental protection Co., Ltd. | | |

The Land acquisition pre-examination status of each sub item is shown in table 5...

Table 5 Land Acquisition Pre-examination Status

| SN. | Component Name | Permanent Land Occupation or Not | Examination and Approval of Project Land Use | |
|-----|------------------------------|----------------------------------|--|--|
| 1 | Comprehensive management | no | on-going | |
| | of small watershed component | | | |
| | Embankment reinforcement | | | |
| 2 | and river improvement | no | on-going | |
| | component service area | | | |
| 2 | Rural drinking water safety | | | |
| 3 | promotion component | yes | on-going | |

1.4 Measures to Reduce the resettlement Impacts

1.4.1 Project Design and Resettlement Principle

To reduce land acquisition and house demolition in the stage of feasibility study, the following principle will be considered:

- Avoid or minimize the occupation of existing and planning residential areas
- Avoid or minimize the occupation of high quality arable land;
- Avoid or minimize the use of environmental sensitive areas;
- Use existing national and local roads to the construction areas.

1.4.2 Project Planning and Design Phase

The project authorities have designed some affective measure in planning and design phase to reduce the construction impacts of the project on social and economic condition of the locals.

A, In the planning phase of the project, to reduce land acquisition and resettlement to reduce the negative impact of the project on the local economy used as a key factor in project optimization selection.

B, In the process of locating the layout of the project, the design unit makes reasonable analysis of the line direction, laying the pipe network in the middle or edge of the road,

optimizing the construction methods, minimizing the housing demolition.

C, Optimization design, reasonable arrangement of the project. As far as possible occupy the wasteland, sloping land and state-owned and minimize the acquisition of arable land.

The optimization measures and effects of Chun'an Sub-project and Jian'de Sub-project in the planning and design phase are shown in table 6.

Table 6 Measure to reduce the resettlement impacts of Chun'an Sub-project and the effects

| Serial number | Component | Main optimization measures | Results |
|------------------|--|--|--|
| 1 | Wangfu water works and supporting pipe network project | Pipeline optimization, as far as possible with the planning road synchronization construction | Reduced the land acquisition and affected ground attachments, and reduced the temporary occupation of land |
| 2 | Yejia water works and supporting pipe network project | Site optimization scheme: Program 1 is build a new scheme in An'chuan Village waterworks; Program two is expand on the original site of the Yejia waterworks | The original proposed land acquisition sites is the basic farmland which need to be reelected, so held a forum for re siting, the new factory cited the expansion of the existing leaf spring water plants |
| 3 | Xiashan water works and supporting pipe network project | Pipe network construction mode optimization: basically, adopt excavation road and along planning road construction, road direction and width optimization | Reducing the impact of road construction, reducing the temporary land area and the number of resettlement |
| 4 | Pinmen water works and supporting pipe network project | Select the higher oil tea garden to reduce the occupation of | Avoid moving graves, reducing excavation and temporary land occupation |

| Serial number | Component | Main optimization measures | Results |
|------------------|--|--|---|
| | | arable land | |
| 5 | Fengshuling water works and supporting pipe network project | The pipeline will be optimized, as far as possible along the embankment, field or along the road, high water tank as far as possible to select the construction sites have been levied, the use of gravity flow water supply | It reduced the land acquisition and removal and affected the ground attachments, and reduced the excavation of earthwork and the temporary occupation of land |
| 6 | Baima water works and supporting pipe network project | Pipeline and road direction optimization, pipe network as far as possible along the embankment, fields or along the road laying, the road as far as possible to avoid demolition | Reduced land acquisition and demolition, reduced earthwork excavation and temporary land occupation |
| 7 | Zitong water works and supporting pipe network project | The pipeline is optimized, as far as possible along the embankment, field or along the road | Avoid demolition, reduce excavation and temporary land occupation |

1.4.3 Construction Stage of Project

A. Reduce the impacts of pipeline excavation. In the process of pipeline excavation, the working surface will be properly spray to keep a certain humidity. Meanwhile, the fence or partial fence will be adopted to reduce the diffusion range of construction dust. And dust emissions. Building materials and construction waste will be cleaned in time. Beware of truck loading, and try to cover, airtight measures, reduce the spilled ways and timely cleaning the dirt and dust scattered on the road.

B. **Pipe network excavation.** Network excavation as far as possible in the fall and winter season, so that soil erosion can be reduced. Especially during the Tour season,

the excavation of the network will be avoided and the impacts on the local tourism will be reduced.

- C. Does not utilize arable land during the crop season.
- D.To reduce the constructions impact on farmer's cultivation and harvesting, it is better to avoid the construction in the harvesting season.
- E. **Disclose construction information in advance.** The project construction team needs to inform the affected farmers in advance to reduce the loss of agricultural input/output.
- F. **Farmland restoration.** In the course of construction, the soil of the tillage layer needs to be piled up centrally and backfilled to reduce the losses of the farmers.
- 1.4.4 Land Acquisition and Implementation Stage of Project

When land acquisition and resettlement are unavoidable, in order to reduce the project impacts on the local, the following measures will be taken:

- A, Strengthen the collection of basic data and analyzed the local socio-economic status and future development in depth, working out feasible RAP according to the local conditions and ensure that the persons who affected by the project are not hurt by the component construction;
- B, Encourage public participation actively, strengthen information disclosure and accept the supervision of APs.
- C, Strengthen the internal and external monitoring, establish efficient and unobstructed feedback mechanism and channel. Shorten the information processing cycle as much as possible in order to ensure all kinds of problems which appeared in the process of the project implementation can be resolved timely.

2 Project Impact

2.1 Project Impact Survey

2.1.1 Project Survey Process

According to the requirements from World Bank and Zhejiang Provincial PMO, with the assistance of National Research Center for Resettlement of Hohai University, co-conducted the impacts survey with local township government, County Construction Bureau, Land Resources Bureau, Environmental Protection Bureau, Water Resource Bureau and other departments of Chun'an County separately in February, June, July, September of 2017. The cut-off day was set up as the day of July 22, 2016, agreed upon by the World Bank task team, provincial and municipal agencies.

The APs participated in the impact survey. The survey team collected the APs' opinions on land acquisition and resettlement, and carried out extensive consultations. The social and economic investigation team also carried out the sampling questionnaire surveys within the affected areas. As as a result, a total of 122 households (Chun'an County 103 households, Jian'de City 19 households) were surveyed. The impact survey process is shown in table 7.

Table 7 Impacts Survey Process

| Serial numb er | Cmponent | Investig ation time | Investigation method | Participated Investigation agencies |
|----------------------|--|---|---|---|
| 1 | Chun'an County rural drinking water safety promotion component | Feb 12, -Feb 25; June 27, -July 5, 2017 | impacts survey and and socioeconomic surveys for APs | The Chun'an county government, the township government concerned, and the Hohai University |
| 2 | Chun'an County comprehens ive managemen t of small | Feb 12, -Feb 25; June 27, -July 5, 2017 | impacts survey, and socioeconomic surveys | The Chun'an county government, the township government concerned, and the Hohai University |

| Serial numb er | Cmponent | Investig ation time | Investigation method | Participated Investigation agencies |
|----------------------|--|---|--|--|
| | watershed | | | |
| | component | | | |
| 3 | Chun'an County embankmen t reinforceme nt and river improveme nt component | Feb 12, -Feb 25; June 27, -July 5, 2017 | impacts survey, and socioeconomic surveys | The Chun'an county government, the township government concerned, and the Hohai University |

2.1.2 Public Participation in Project

Under the guidance of experts in technical assistance and consultation, Chun'an County World Bank loan leading group, project design unit and Hohai University investigation group, have carry out a series of socio-economic surveys and public opinion consultation (including about 30% of women) since February 2016. During the preparation of the project, Chun'an County World Bank loan leading group, Project implementation unit and Project design unit had intensive negotiations about the land acquisition and resettlement of this project. Public participation activities in the project are detailed in table 8:

Table 8 Public participation which has already been launched

| Component | Time | Location | Participants | The reaction problems of the | Measures |
|---|---------------------------------|--|---|--|--|
| Component Comprehensi ve management of small watershed component Embankment reinforcement and river improvement component | Feb,20 17 - July,20 17 | Chun'an Water Conservanc y Bureau Chun'an Water Conservanc y Bureau | Chun'an County World Bank loan leading group, staff of investigation organization, Land Resources Bureau, Water Conservancy Bureau, Water Conservancy Stations, cadres of various Township, | The reaction problems of the affected person Compensation standard for temporary land occupation; Land quality after reclamation Treatment of construction waste water, construction waste and so on during construction | Timely public standards of permanent land acquisition, temporary land occupation; Top soil will be concentrated and backfilled in the process of temporary land occupation; Carry out environmental management plan strictly according to environmental impact report Strict requirements of the construction team in accordance with environmental protection requirements to discharge construction wastewater, regular cleaning of construction waste and daily cleaning of construction waste; Strictly implement the environmental management plan according to the requirements of the environmental impact report |
| | | | Towns and Villages, representatives of affected population | | |

| Component | Time | Location | Participants | The reaction problems of the affected person | Measures |
|--------------|---------|----------|-----------------|--|---|
| Rural | Feb | | Chun'an | Compensation standards of young | Publication of resettlement information Booklet |
| drinking | 22,201 | | County World | crops; Procedures and fees of | on time; Land Resources Bureau, Resettlement |
| water safety | 6 - | | Bank loan | grave relocation; Temporary | planning agencies and other departments to carry |
| promotion | July,20 | | leading group, | employment; The quality | out policy advocacy; Negotiate grave removal |
| component | 17 | | staff of | guarantee of land reclamation; | procedures with affected households; Topsoil will |
| Component | 1 / | | investigation | Construction time; Compensation | be concentrated and backfilled in the process of |
| | | | organization, | standards of permanent land | temporary land occupation; Carry out |
| | | | Land | acquisition. | environmental management plan strictly |
| | | | Resources | acquisition. | according to environmental impact report |
| | | | | Inflyones of a size dyning | 1 1 |
| | | | Bureau, Water | Influence of noise during | Strict requirements, the construction party will be |
| | | | Conservancy | construction | built within the specified time, night construction |
| | | | Bureau, Water | | is strictly prohibited, put an end to the |
| | | | Conservancy | | construction behavior which will affect the daily |
| | | | Stations, | | life of farmers; Carry out environmental |
| | | | cadres of | | management plan strictly according to |
| | | | various | | environmental impact report |
| | | | Township, | | |
| | | | Towns and | | |
| | | | Villages, | | |
| | | | representatives | | |
| | | | of affected | | |
| | | | population | | |

2.2 Project Impact Scope

The impact type of the project includes permanent land acquisition and temporary land occupation. Chun'an county Rurul Drinking Water Safety Promotion Component involves permanent land acquisition and temporary land occupation, comprehensive management of small watershed, Embankment reinforcement and river improvement components involve temporary land occupation. Agricultural non-point source pollution control and forest ecological restoration projects do not cause any resettlement issue

At this stage, the project's permanent land acquisition and temporary land use are determined according to feasibility study report. According to statistics, in Chun'an county, the rural drinking water safety project is to enhance the permanent land acquisition and temporary land which are related to the comprehensive control project of 6 towns and 12 administrative villages in Chun'an County, small watershed temporary land covering 2 townships, 13 administrative villages in Chun'an county and river embankment reinforcement engineering of temporary land involving 20 townships and 110 villages. The scope of the project resettlement is shown in table 9.

Table 9Resettlement Impacts Scope

| | | | | A | ffect villages / o | communities | |
|----------------------|--|--------------------------------|---|--|---------------------|------------------------------|---|
| Serial numb er | Component | District (city / county) | Township /sub- district | Land acquisition | House demolition | Land acquisition and removal | Temporary occupation |
| 1 | Chun'an County rural drinking water safety promotion component | Chun'an County | Wangfu Township,Pingmen Township,Zitong Village,Weiping Town,Fengshuling Town,Zhongzhou Village | Xinhe Village,Lianxi Village,Yejia Village,Zhaikeng Village,Guanchuan Village,Xiashan Village,Pingmen Village,Qinkeng Village,Longtan Village,Houchuankou Village,KaochuanVillag e,Pengcun Village,Feiyuan Village | Not involve | Not involve | Xinhe Village,Lianxi Village,Yejia Village,Zhaikeng Village,Guanchuan Village,Xiashan Village,Pingmen Village,Qinkeng Village,Longtan Village,Houchuanko u Village,KaochuanVil lage,Pengcun Village,Feiyuan Village |
| 2 | Chun'an County comprehensive management of small watershed | Chun'an County | An'yang Township,Zitong Village | Not involve | Not involve | Not involve | Fanjia Village,Hongshan'ao Village,Huangjiayua n Village,Changshu Village,Wulong |

| | | | Township /sub- district | A | ffect villages / c | communities | |
|----------------------|---|--------------------------------|--|------------------|---------------------|------------------------------|---|
| Serial numb er | Component | District (city / county) | | Land acquisition | House demolition | Land acquisition and removal | Temporary occupation |
| | component | | | | | | Village, Huang Village, Yejiazhuang Village, Bingfeng Village, Helian Village, Jiemeng Village, Jiangtong Village, Hujiang Village, Changning Village |
| 3 | Embankment reinforcement and river improvement service area | Chun'an County | Wangfu Township,Songcun Township,Fuwen Township,An;yang Township,,Fengshulin g Town,Lishang Township,Zuokou Township,jiangjia Town,Qiandaohu Town,Jieshou Township,Dashu Town,Wenchang | Not involve | Not involve | Not involve | Hehuaping Village,Xinfan Village,Xinhe Village,Mashan Village,Huaping Village,Wangfu Village,about 110 villages |

| | | | | At | ffect villages / c | communities | |
|----------------------|-----------|--------------------------------|----------------------------|------------------|---------------------|------------------------------|-------------------------|
| Serial numb er | Component | District (city / county) | Township /sub- district | Land acquisition | House demolition | Land acquisition and removal | Temporary occupation |
| | | | TownPengmen | | | | |
| | | | Township, Yaoshan | | | | |
| | | | Township,Linqi | | | | |
| | | | Town, WeipinTown, Ji | | | | |
| | | | nfeng | | | | |
| | | | Township,Jiukeng | | | | |
| | | | Township,Fenkou | | | | |
| | | | Town,Langchuan | | | | |
| | | | Township | | | | |

2.3 Project Impact

According to the physical investigation and analysis, the main categories of the project include:

- (a) Permanent land acquisition of rural collective land;
- (b) Temporary land occupation;
- (c) Ground attachments and ground attachments.

2.3.1 Project Impact Population

Using the World Bank loan, the total impact population of Xin'anjiang Qiandao Lake watershed ecological environment project was 3447, and 12434 persons. Among that, Chun'an involving 1585 households with 6685 persons (permanent land acquisition affecting 71 households (272 persons), temporary land affecting 1514 households (6413 persons).

Chun'an County rural drinking water safety promotion component involving 1034 households, 4461 persons (permanent land acquisition affecting 71 households, 272 persons) while temporary land affecting 963 households(4189 persons); Comprehensive Management of Small Watershed Component affects 56HHs and 172 presons; and Embankment Reinforcement and River Improvement Component affects 495HHs and 2052 persons. The direct impact of the project on the population is shown in table 10.

Table 10 Affected population of Chun'an Sub-population

| Seria l | Component | Land acquisition impacts | | occuj | oorary pation pacts | Subtotal | |
|------------|---|--------------------------|-----------------|---------------|---------------------------|---------------|-------------|
| num ber | Component | househ old | per son s | house hold | person s | hous ehold | perso ns |
| 1 | Chun'an County rural drinking water safety promotion component | 71 | 272 | 963 | 4189 | 1034 | 4461 |
| 2 | Chun'an County comprehensive management of small watershed component | 0 | 0 | 56 | 172 | 56 | 172 |

| 3 | Chun'an County Embankment reinforcement and river improvement | 0 | 0 | 495 | 2052 | 495 | 2052 |
|-------|---|----|-----|------|------|------|------|
| Total | | 71 | 272 | 1514 | 6413 | 1585 | 6685 |

2.3.2 Permanently Rural Collective Land Acquisition of Chun'an Sub-project

The permanent Acquisition of collective land affects 12 administrative villages in 6 townships / sub-district offices, covering about 39.4 mu of collective land, affecting 71 households (272 persons). Among them, the new village of about 5.27 mu, about 3.76 mu of leaf village, Summer Hill Village of about 6.76 mu, the village gives about 3.48 mu, narrow pit village of about 8.78 mu, 6.38 mu of LianXi Village, GuanChuan Village Qin Village of about 4.06 mu, about 0.15 mu of sugar cane, Sichuan Village of about 0.15 mu, three deltas the village of about 0.15 mu, about 0.15 mu of KaoChuan Village, 0.3 mu of Ping Village. In the collection of collective land, 0.9 mu of arable land, woodland 19.57 mu, 18.05 garden, and other land types of 0.87 mu. For the permanent collection of collective land, see table 11. As a whole, the land acquisition of this project has limited impacts, mainly due to:

Small area Affected and less Land Acquisition Required

- (a) The permanent land acquisition required for the project is about 39.4 mu, which are consist of collective land. The average rate of acquisition of cultivable is about 0.03% 0.82% which has a small effect on the village. Details given in the table 10.
- (b)Before and after the land Acquisition, the arable land area per capita decreased by only 0.00378 mu which accounting for 99.11% while the per capita arable land reduced by 0.000378 which accounting for 99.11% of the land before land acquisition. Details given in the table 11.

Table 11 Analysis of the Impact of Acquisition of Rural Collective Land

| | | | | | | Tota | Ara | ble land |
|-------------------|---|---|-----|---------------------------------------|--|-------------------------------|------------------------|--------------------|
| City | Affected villages / communiti es | Numbe r of househ olds affecte d | APs | Own arable land area (MU) | Per capita arabl e land area (MU) | l land acqu isitio n area (MU | The me asu re of are a | Influenc e rate |
| | XinheVillag e | 15 | 54 | 406 | 0.27 | 5.27 | 5.27 | 1.30% |
| | Yejia Village | 8 | 29 | 708 | 0.36 | 3.76 | 3.76 | 0.53% |
| | Pingmen Village | 4 | 13 | 517 | 0.34 | 3.48 | 3.48 | 0.67% |
| | Zhaikeng Village | 1 | 5 | 430 | 0.54 | 8.78 | 8.78 | 2.04% |
| | Guanchuan Village | 1 | 5 | 430 | 0.54 | 4.06 | 4.06 | 0.94% |
| Cl. ? | Lianxi Village | 17 | 72 | 226 | 0.43 | 6.38 | 6.38 | 2.82% |
| Chun'an County | Xiashan Village | 16 | 63 | 337.85 | 0.42 | 6.76 | 6.76 | 2.% |
| | Zhechuan Village | 2 | 8 | 595 | 0.29 | 0.15 | 0.15 | 0.03% |
| | Sanzhou Village | 1 | 3 | 479 | 0.34 | 0.15 | 0.15 | 0.03% |
| | Pingcun Village | 4 | 13 | 211 | 0.29 | 0.3 | 0.3 | 0.14% |
| | Qinkeng Village | 1 | 4 | 548 | 0.42 | 0.15 | 0.15 | 0.03% |
| | Kaochuan Village | 1 | 3 | 148 | 0.21 | 0.15 | 0.15 | 0.10% |

Most of the land is forest land and garden land. Survey shows: 49.67% (19.57 mu) of land for forest land, 45.81% (18.05 mu) of land for the garden, 2.28% (0.9 mu) of land for arable land.

Local income is mainly based on non-agricultural Source.

The field survey shows that, Chun'an county rural drinking water safety project is to enhance overall economic condition, less per capita arable land, low agriculture output, the main source of farmers' income was non-agriculture source, most of the farmers are migrant works, so the project land has less effect on the rural residents.

Table 12 Pemanent Collective Land Acquisition of Chun'an Sub-projects

| | | | Land acquisition (MU) | | | | | | | Demographic impact | |
|------------------|--|-------------|-----------------------|----------------|----------------------------|----------------|-------|----------|-----------|--------------------|--|
| Serial number | Component | Arable land | woodland | Garden plot | Surface of the water | Unused land | Other | Subtotal | Household | Persons | |
| 1 | Chun'an County rural drinking water safety promotion component | 0.9 | 19.57 | 18.05 | 0 | 0 | 0.87 | 39.4 | 71 | 272 | |
| 2 | Chun'an County comprehensive management of small watershed component | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3 | Chun'an County Embankment reinforcement and river improvement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| | | | Land acquisition (MU) | | | | | | | Demographic impact | |
|------------------|----------------|-------------|-----------------------|----------------|----------------------------|----------------|-------|----------|-----------|--------------------|--|
| Serial number | Component | Arable land | woodland | Garden plot | Surface of the water | Unused land | Other | Subtotal | Household | Persons | |
| I | Proportion (%) | 2.28% | 49.67% | 45.81% | 0 | 0 | 2.21% | 100% | 0 | 0 | |
| | Total | | 19.57 | 18.05 | 0 | 0 | 0.87 | 39.4 | 71 | 272 | |

Table 13Land change per capita before and after expropriation

| | A ffootod village | Before land acquisition | | After land | acquisition | Dow oonito | After/Before |
|---------|-------------------|-------------------------|-----------------------|------------|-------------|---------------------------|--------------|
| | Affected village | Own arable Per capita | | Own arable | Per capita | Per capita arable land | land |
| City | C | land area | land area arable land | | arable land | | |
| | Community | (MU) | area (MU) | (MU) | area (MU) | area change | acquisition |
| | Xinhe Village | 406 | 0.2738 | 400.73 | 0.2702 | -0.00355 | 98.70% |
| Chun'an | Yejia Village | 708 | 0.3607 | 704.24 | 0.3588 | -0.00192 | 99.47% |
| | Pingmen illage | 517 | 0.3399 | 513.52 | 0.3376 | -0.00229 | 99.33% |
| County | Zhaikeng Village | 430 | 0.5422 | 421.22 | 0.5312 | -0.01107 | 97.96% |

| | A ffootod village | Before land | acquisition | After land | acquisition | Dom conito | After/Before |
|------|-------------------|-------------|-------------|-----------------------|-------------|---------------------------|--------------|
| | Affected village | Own arable | Per capita | Own arable | Per capita | Per capita arable land | land |
| City | Community | land area | arable land | land area arable land | | area change | acquisition |
| | Community | (MU) | area (MU) | (MU) | area (MU) | area change | acquisition |
| | Guanchuan Village | 430 | 0.5416 | 425.94 | 0.5364 | -0.00511 | 99.06% |
| | Lianxi Village | 226 | 0.4297 | 219.62 | 0.4175 | -0.01213 | 97.18% |
| | Xiashan Village | 337.85 | 0.4176 | 331.09 | 0.4093 | -0.00836 | 98.00% |
| | Zhechuan Village | 595 | 0.2950 | 594.85 | 0.2949 | -0.00007 | 99.97% |
| | Sanzhou Village | 479 | 0.3434 | 478.85 | 0.3433 | -0.00011 | 99.97% |
| | Pingcun Village | 211 | 0.2906 | 210.7 | 0.2902 | -0.00041 | 99.86% |
| | Qinkeng Village | 548 | 0.4261 | 547.85 | 0.4260 | -0.00012 | 99.97% |
| | Kaochuan Village | 148 | 0.2108 | 147.85 | 0.2106 | -0.00021 | 99.90% |

2.3.3 The Impact of Temporary Land Occupation

Rural Drinking Water Safety Promotion Project, Embankment Reinforcement and River Improvement Project, Comprehensive Management of Small Watershed Project, none of these involve any permanent Acquisition collective land, housing demolition, only temporary land occupation involved.

Design principle: (a) Design units adhere to the principle of minimal impact on local residents in the planning process. And water plants are selected on the mountain or away from the residential areas. Therefore, it does not involve land acquisition or housing demolition. (b) To reduce the effect on temporary occupation the Pipe were laying along the roads and ditches (3) there is no permanent acquisition, even if it involves arable land that will be only temporarily occupied.

This project covers 1371.69 mu temporary land occupation, all of which are rural collective land. which includes the rural drinking water safety promotion project covers 910.31 mu temporary land occupation. And the Comprehensive management of small watershed project covers 58.4 mu temporary land occupation. Embankment reinforcement and river improvement project covers 402.98 mu temporary land occupation. The temporary occupation of collective land affected 127 towns and communities in 22 villages and towns/sub-district offices in Chun'an County. Temporary land occupation covers 1514 households (6413 persons). Details of the temporary land occupation of the project are shown in table 14.

The main reason is that the affected population led to the temporary occupation:

- (a) Network extension (721.87km), Comprehensive management of small watershed (105.3km), Embankment reinforcement and river improvement (227km), all of these are linear project with a very long distance;
- (b) Local farmers have less land per capita and most of them having small piece of land and the temporary land occupation had covered large population.

Table 14Temporary land occupation of the Chun'an Sub-project

| | Tem | porary cov area (MU | Temporary occupation influence | | |
|---|-----------------------------|------------------------|--------------------------------|---------------|---------|
| Entry name | State- owne d land | collectiv e land | Subtot al | Househo ld | Persons |
| Chun'an County rural drinking water safety promotion component | 0 | 910.31 | 910.31 | 963 | 4189 |
| Chun'an County comprehensive management of small watershed component | 0 | 58.4 | 58.4 | 56 | 172 |
| Chun'an County Embankment reinforcement and river improvement component | 0 | 402.98 | 402.98 | 495 | 2052 |
| Total | 0 | 1371.69 | 1371.6 9 | 1514 | 6413 |

2.3.4 Ground attachments and Ground attachments

The ground attachments of Chun'an Sub-project include: 13 Tombs; 29.81 mu Camellia oleifera; 253 hickory trees; 1982 Osmanthus trees. See table 15 for details.

Table 15Affected Ground Attachments of Chun'an Sub-project

| Influenc e type | Compa ny | Chun'an County rural drinking water safety promotion component | Chun'a n County compre hensive manage ment of small watersh ed compon ent | Chun'an County Embankm ent reinforcem ent and river improveme nt component | Total |
|--------------------|----------------|--|---|--|-------|
| Grave | individu al | 13 | 0 | 0 | 13 |
| Tea tree | Mu | 29.81 | 0 | 0 | 29.81 |
| Pecan | Tree | 253 | 0 | 0 | 253 |

| Influenc e type | Compa ny | Chun'an County rural drinking water safety promotion component | Chun'a n County compre hensive manage ment of small watersh ed compon ent | Chun'an County Embankm ent reinforcem ent and river improveme nt component | Total |
|-------------------------------|-------------|--|---|--|-------|
| Persimm on tree | Tree | 6 | 0 | 0 | 6 |
| Sweet scented osmanth us tree | Tree | 1982 | 0 | 0 | 1982 |

2.3.5 Affected vulnerable groups and women

This project does not involve vulnerable groups.

The affected women and men enjoy the same legal powers, including contracting farmland, education, family planning, participation in the rights of election. Most of the women who visit the labor force believe that they have the same production and management autonomy as men, and they can choose to work or to do small business independently. With the migration of rural labor force, the allocation of employment time of male and female labor force shows typical "male owner outside". Men are more engaged in non-agricultural industries, and women are more engaged in agriculture in order to take care of their families. Women take on more housework and bear the responsibility of raising children, often choose to work locally, while men are more likely to choose migrant workers. From the time point of view, women and men work roughly the same time. From the industry point of view, women have certain competitive advantage in the catering industry, domestic service industry, wholesale

and retail industries, but women are at a disadvantage in the construction and transportation sectors. According to the survey, women are concerned about the same problems as men: (a) The compensation standards shall be strictly implemented according to the laws and policies of the state, and timely release in place; (b) The land compensation fund will be issued directly to the affected farmers. Among the gender differences, women have different needs than men: (a) Women are required to provide training in planting, aquaculture, housekeeping, food and beverage services, etc.; (b) Most of the families of participants are males, but women also hope to be able to participate in village management, compensation funds are approved and signed by both husband and wife is the best situation.

In addition, the role of village women directors in project participation and supervision will be brought into play, and they need to be represented by a wide range of women to protect women's rights and interests.

3 Social and Economic Survey of Project Area

3.1 Social and Economic Backgrounds in Zhejiang Province

Zhejiang Province is located in the southeast coast of China, the south wing of the



Yangtze River Delta. East of the largest river Qiantang River, due to the river twists and turns, called the river, also known as Zhejiang, the province to Jiang name, referred to as "Zhejiang", the provincial capital is Hangzhou. It's east-west and north-south straight-line distance of about 450 km, land area of 10.18

million square km, 1.06% for the country, is one of the smallest provinces in China. The province now has 11 provincial cities, under the jurisdiction of 90 counties (cities, districts), of which 22 county-level cities, 36 counties, 32 municipal districts. According to a sample survey of 5% of the population in the entire province in 2016, the total permanent resident population in the province at the end of the year was 55.9 million, an increase of 510,000 over the previous year. Among them, the male population is 28.67 million and the female population is 27.223 million, accounting for 51.3% and 48.7% of the total population respectively. The annual population of 62.4 million persons, the birth rate was 11.22 ‰; the death toll was 307,000, the mortality rate was 5.52 ‰; the natural growth rate was 5.70 ‰. The urbanization rate was 67.0%, an increase of 1.2 percentage points over the previous year.

Initial accounting, the annual gross regional product (GDP) of 464485 million yuan, up 7.5% over the previous year in which the added value of the primary industry was 196.6 billion yuan, the added value of the secondary industry was 2.0518 trillion yuan and the added value of the tertiary industry was 2.41 trillion yuan, up by 2.7%, 5.8% and 9.4% respectively. The contribution rate of tertiary industry to GDP growth was 62.9%. The value-added structure of the three industries was adjusted from 4.3: 45.9: 49.8 in the previous year to 4.2: 44.2: 51.6 in the previous year, with a 1.8 percentage point

increase in the proportion of the tertiary industry. Per capita GDP was 83,538 yuan (converted into 12,577 U.S. dollars at the average annual exchange rate), an increase of 6.7%. Full labor productivity of 124,000 yuan / person, according to comparable prices increased 6.8% over the previous year.

3.2 Social Economic Profile of Chun'an County

45.Chun'an county is located in the western mountainous area of Hangzhou City, east of Tonglu, Jian'de, South of Changshan, Qu County, southwest of Kaihua, bordering West and Anhui, Xiuning, Shexian adjacent to the north of Ling'an, the total land area of 272 thousand and 500 mu of arable land in 4427km2. Chun'an County is one of Zhejiang in the old revolutionary base areas, made contribution to the establishment of the new China extremely hard and bitter of the revolutionary era, in the period of socialist construction, in order to build the famous national key projects of the national Xin'An river reservoir power station contribution. With the reduction of natural resources, the water conservancy, agriculture, transportation and other basic conditions are backward, the economic construction is restricted and the person's living standard is improving slowly. After years of hard work, the "poor county" hat has been taken off in recent years. It is still an underdeveloped County.

46.In 2015, the County realized the gross domestic product (GDP) of 20 billion and 742 million yuan, according to the household population per capita GDP 45170 yuan. The total output value of agriculture is 4 billion 556 million yuan. The per capita disposable income of urban residents is 33432 yuan, and the per capita disposable income of rural residents is 14632 yuan. The total number of tourists is 11 million 220 thousand, and the total economic income of tourism is 10 billion 488 million yuan. At the end of 2015, the county's household population of 459 thousand and 400 persons, an increase of 400 persons over the previous year. In the household population, the agricultural population is 37.64 and the non-agricultural population is 83 thousand.

3.3 Social and Economic Situations of Affected Towns/Sub-districts of Chun'an

County

The 5 components of the project affect 23 townships/ sub-district offices. These towns / sub-district offices accounted for two or three of the GDP industry, and the net annual income per capita was around 5000~8000 yuan, indicating that the social and economic situation is good.

Wangfu Township is located in the northwest of Chun'an County of Hangzhou City, Zhejiang Province, east of Pingmen Township, South of Songcun Township, west of Weiping Town, and west of Shexian Province in Anhui, along the river town bordering the north and Ling'an City, 60 km from the Chun'an County town of Lake area of 168 square km. Wangfu Township is Chun'an County of Hangzhou City, Zhejiang province township jurisdiction. Wangfu Township Chun'an county Party committee is the earliest location and the birthplace of the first meeting held in April 1935 Chun'an County Banqiao Village of stone temple, 1986 approved by the Hangzhou municipal government for the old revolutionary base areas. By the end of 2016, Wangfu Township a total of 18 administrative villages, the total population of 5901 persons, including non-agricultural population of 305 persons. Realize the GDP of 901 million 260 thousand yuan, of which the first output value is 625 million 630 thousand yuan, the output value of the second industry is 173 million 550 thousand yuan, and the output value of third yuan is 85 million 970 thousand yuan.

Fengshuling Town is located in the southwest of Chun'an County, 42 km from the county, east of Dashu Town, south of Changshan County, West of Longyuan Town, to the north of Qiandao Lake. The administrative area of the town is 308 square km, covering 64 administrative villages, 188 farmers' groups, and 19 thousand persons. August 2006, the former white horse and Maple Ridge merger, set Maple Ridge town. Agriculture is based on planting food crops, and concurrently deals with trees, tea, cocoons and so on. The agricultural production around five tea, mulberry, bamboo, herbs and mountain vegetables into pieces into pieces, and the formation of massive urban agriculture pattern of five. The Chinese herbal medicine and bamboo planting

area accounted for 45% and 24.8% of the county, and Chun'an County town of bamboo is medicinal materials in Zhejiang province town. In the Yellow Gardenia brand -- "Qiandao Shizhen" as Chun'an famous brand. As of 2016, the number of rural households in the whole town was 5795, and the agricultural population was 18215, of which 13066 were laborers. The total arable land area is 13525 mu, the forest area is 340757 mu, the total income of the village is 221812 yuan, and the per capita net income of farmers is 16012 yuan.

Zitong Town is located in the Northwest Lake of Qiandao Lake, about 30 km away from the county town of thousand islands, and it takes about half an hour's drive. Zitong Town as one of the nine key towns in Chun'an County, the territory of the beautiful bay source bay of Zitong Bay, a tributary of the water diving - Zitong source, there are mountains, the quaint charm of Yin Mountain, is also the Tang Dynasty emperor Chen Shuozhen and Ming Jia heroine Shangshu Hugongchen's hometown, traditional culture the profound painting tradition atmosphere, Chun'an county is the only "municipal folk painting and calligraphy". The town has 19 administrative villages, 67 natural villages, 6242 households, 19068 persons. Area of 153.6 square km, of which 10954 mu of arable land, forest 175 thousand mu. In 2016, the total income of rural economy was 2 billion 963 million yuan, the total output value of agriculture and industry was 1 billion 438 million yuan, and the per capita income of farmers was 15762 yuan, up by 107.1%, 52.9% and 79.1% respectively over 2011.

Dashu Town household population of 13929 persons, the town of GDP was 4 billion 195 million yuan, of which the first industry was 145 million 800 thousand yuan, industrial added value of 1 billion 475 million yuan, the third industry for the town of farmers' per capita net income of 166 million 150 thousand yuan to 13826 yuan.

Weiping Village has a total of 15686 households, 45986 persons, of which labor has 28521 persons, 12607 persons of migrant workers. A total of 15256 mu of arable land, the town's total income of 2016 rural economy was 4 billion 99 million 400 thousand yuan, the farmers out of labor income of 102 million 180 thousand yuan, the per capita

income of farmers was 13726 yuan.

Zhongzhou Town has a total of 6104 households, consisting of agricultural population abut 20418 persons, the labor force 14129 persons, 6499 persons of migrant labor. There are 9038 mu of arable land in the town. In 2016, the total income of the rural economy was 1 billion 242 million 200 thousand yuan, and the income of farmers in 2016 was 71 million 970 thousand yuan, and the per capita income of farmers was 12691 yuan.

Jiangjia Town has 8163 households, 25856 agricultural population, including 17551 labor force, 10464 migrant workers. There are 12649 mu of arable land in the town. In 2016, the total income of rural economy was 2 billion 542 million 610 thousand yuan, and the per capita income of farmers was 15066 yuan.

Pingmen Township has 3807 households, the resident population of 11322 persons, consisting of 5714 men and 5608 women. The township has 4598 mu of arable land, 3473 mu of paddy fields, 1125 mu of dry land, 10491 mu of tea plantations, walnut planting area of 42829 mu, pecan yield in 2016 910 kg. In 2016, the total income of rural economy in the township was 112990 yuan, and the per capita income was 13570 yuan.

Fenkou Town has 51 administrative villages and 1 communities, with a total of 58000 persons, including non-agricultural population of 5000 persons. 18600 mu of arable land, 127000 mu of forest, the town called as the village 71, through the cable TV village 70. It is a pilot town of comprehensive reform of small towns in Zhejiang Province, and is also one of the 136 provincial central towns and 141 provincial key towns at the provincial level.

3.4 Research Methodology and Process

Hohai University resettlement investigation team conducted survey from July 22, 2016, on the basis of feasibility study, investigated the project socio-economics status, Land Acquisition, affected households and units. The survey includes household population, land, impact on household's economic status and willingness to displacement. The

investigation team took interviews of the affected community about the land acquisition, displacement and resettlement and also listen the views of the villager's committee. The survey team also consulted the World Bank Project in Chun'an County, Chun'an County Forestry Bureau, Land Resource Bureau, Environmental Protection Bureau, Human Resources, Social Security Bureau and other relevant departments and collected data to understand deeply the Chun'an County land acquisition and resettlement policies. The team conducted in-depth investigation and completed the resettlement program of the project on the basis of feasibility study, surveyed data and public participation and interviews.

3.5 Socio-eonomic status of Affected Villages/Neighborhood committees

The following are the villages affected by the safe drinking water upgrading project in Chun'an County

Wangfu Township: Xinhe Village. A total of 520 households, 1550 persons, the total land area of 14706 mu, of which 406 mu of arable land, garden 917 mu, 13383 mu of woodland. The total labor force of the new village is 1110, with 422 persons working out of the year, accounting for 38.01% of the labor force. Village pure income 58 million 661 thousand and 500 yuan, per capita net income 11262 yuan.

Fengshuling Town Baima waterworks: Guanchuan Village. The village has a total of 213 Households, with a total population of 660 persons, including 648 agricultural population. The village has a total workforce of 458 persons, including 36 industrial, 249 agricultural and third industrial labor forces 173. The total arable land of the whole village is 516 mu and the net annual income per capita of the whole village in 2016 was 13501 yuan.

Fengshuling Town new Fengshuling waterworks: Zhaikeng Village. The village has a total population of 238 HHs, with a total population of 788 persons, with an agricultural and non-agricultural population 70 and 80 respectively. The village has a total workforce of 548 persons. The total cultivated area of the whole village is 430 mu, and by the end of 2016, the per capita net income of farmers in the village is 12574

yuan.

Zitong Town Zitong waterworks: Lianxi Village. The village has a total of 524 persons, 179 households, the village has an labor force of 295 persons, including migrant workers 119 persons, the village collective land 10529 mu, of which 226 mu of arable land, 452 mu of garden land, 9847 mu of woodland, 4 mu of aquaculture water. By the end of 2016, the village's per capita income was 15856 yuan.

Weiping Town Yejia waterworks: Yejia Village. The total number of households in the village of 664, 1963 persons, including 1155 labor force, the number of migrant workers 667 persons. The village arable land is 708 mu, 404 mu of garden, 11359 mu of forest land and 10 mu of aquaculture water surface, and the average income of rural economy in 2016 was 60 million 851 thousand and 300 yuan, and the per capita income of farmers was 12587 yuan.

Zhongzhou Town Xiashan waterworks:Xiashan village. A total of 240 households, 809 persons, including a total of 560 labor force, 258 migrant workers. The total area of all agricultural land in the whole village is 21132 mu, of which there are 337.85 mu of arable land, 881 mu of garden land, 19910 mu of forest land and 3 mu of cultivated water surface. In 2016, the average income of rural economy was 48858500 yuan and the per capita income of farmers was 12987.18 yuan.

Pingmen Township Pingmen waterworks:Pingmen Village. There are 456 households and 1534 persons in the whole village, among which the agricultural population is 1320. The cultivated area of the whole village is 1200 mu and the mountain forest is more than 2000 mu. Per capita income of village farmers in 2016 was 8900 yuan.

Weiping Town Weiping waterworks (water pressure pump):

- (a) Qinkeng Village. There are 403 households and 1286 persons in the whole village. The whole village has cultivated area of 548 mu. Per capita income of the farmers in 2016 was 12724 Yuan.
- **(b) Zhechuan Village.** There are 671 households and 2017 persons in the whole village.

The whole village has cultivated area of 595 mu. Per capita income of the farmers in 2016 was 12691 Yuan.(c) Sanzhou Village. The village consist of 487 households (1395 persons) The whole village has cultivated area of 479 mu. Per capita income of the farmers in 2016 was 13727 Yuan.

(d) Kaochuan Village. There are 232 households and 702 persons in the whole village, with 442 working force labors. The whole village has cultivated area of 148 mu. Per capita income of the farmers in 2016 was 12,768. (e) Ping Village. There are 252 households and 726 persons in the whole village. The whole village has cultivated area of 211 mu. Per capital income of the village farmer in 2016 was about 12741 Yuan.

4 Socioeconomic Profile of the Affected Population

For the purpose of understanding the basic information of the APs in the affected area, a sampling survey was conducted by the Investigation Panel of Hohai University from June to July, 2017. During the survey total 103 households including 348 persons were investigated

4.1 Ethnic and Gender Analysis

Total 103 households included 348 persons were sampled and investigated. The average size of a family was 3.39 persons approximately. Women accounted for about 47.8% of total population. These women mainly engaged in farming, housekeeping and other service industries.

4.2 Age Distribution

Within the total 103 households (including 348 persons), the juveniles (\leq 16 years old), the persons aged between 17 and 60 years, and the elderly persons (> 60 years old), accounted for 20.17%, 67.68% and 12.15% of total investigated persons, respectively. It is clear that the trend of population aging is strengthening. More details given in Fig.1.

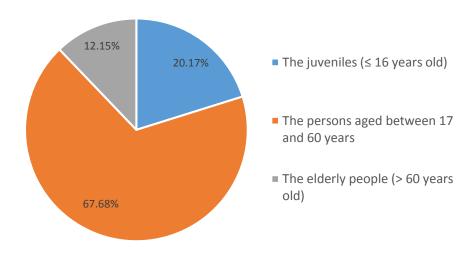


Figure 1 Age distribution of the sampled persons

4.3 Educational Level

Among the total 348 persons of the 103 households, total almost 31.22% of surveyed persons were illiterate. While the proportions for the persons who received primary school education, senior high / tech-education, and junior college, respectively, were 41.99%, 13.81% and 12.98% respectively. It is clear that most of the APs has a lower level of education. More details given in Fig.Error! Reference source not found.

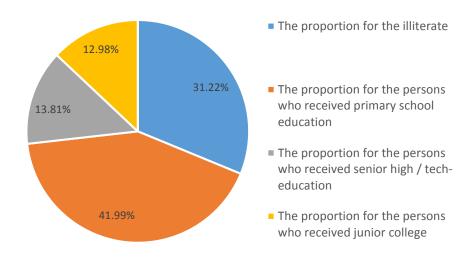


Figure 2 Literacy status distribution

4.4 Production Condition

For the sampled 103 households including total 348 persons, the per capita area of farmland was approximately 0.42 mu, while the farmland size per household was 1.77 mu. The farmlands were mainly used to produce rice, mulberry-leaves, Chinese walnut, and vegetables. Based on the field investigation, condition for the development of high-efficiency in agriculture sector is limited because of the lower per capita land resources holding. Moreover, most of the work-force is involved in cities, which also limits the development of large greenhouses and other industries.

4.5 Household Asset

For the sampled 103 households (that including total 348 persons), per household the number of television-sets, refrigerators, air-conditioners, phones, motorbikes (or bikes), tractors (or water suction pumps) was 2.21, 1.01, 2.67, 3.41, 1.13 and 0.91, respectively. As thus, we could indicate that the livelihood quality of these APs had not declined.

4.6 Annual Household Income and Expenditure

4.6.1 Annual Household Income

According to the household investigation, annual per capita household income was 19,873.46 Yuan. It included 1,821 Yuan of agricultural-income (accounting for 9.16% of total income), 3,980 Yuan of operating forest-fruit industry (accounting for 20.03% of total income), 1,021 Yuan of wage income (accounting for 5.14%), 12,437.35 Yuan of employment income (accounting for 62.58% of total income), 521.98 Yuan of other nonagricultural-income (accounting for 2.63% of total income), and 92.13 Yuan of property income (only accounting for 0.46% of total income) respectively. We can find that agricultural income accounts for a very low share of household income, while employment income account for a very high proportion of household income. The APs are less dependent on land. Therefore, this project will not adopt the approach of agriculture resettlement.

4.6.2 Annual Household Expenditure

Based on the household investigation, annual per capita household expenditure was 6,981.21 Yuan. It included 4,132.79 Yuan of operating expenditure (68.03%), 2,142.21 Yuan of living expenditure (30.69%) and, 89.21 Yuan of other expenses accounted for only 1.28% of household total expenditure, respectively. More details please see the Table Error! Reference source not found.6.

Table 16 Income of expenditure of the rural households affected by LA

| Item | | Average per HH (Yuan) | Per capita (Yuan) | Percent (%) |
|-------------------------------|---------------------|--------------------------|----------------------|-------------|
| | Agricultural income | 7665.1 | 1821 | 20.45 |
| Annual household income | Forest-fruit income | 16753.02 | 3980 | 14.46 |
| | Wage income | 4297.70 | 1021 | 19.26 |
| | Employment income | 52352.57 | 12437.35 | 40.71 |

| Item | | Average per HH (Yuan) | Per capita (Yuan) | Percent (%) |
|------------------------------------|------------------------------|--------------------------|----------------------|-------------|
| | Other nonagricultural income | 2197.17 | 521.98 | 2.53 |
| | Property income | 387.80 | 92.13 | 1.06 |
| | Subtotal | 83653.40 | 19873.46 | 100 |
| A 1 | Operating expenditure | 17396.16 | 4132.79 | 40.86 |
| Annual household expenditure | Living expenditure | 9017.21 | 2142.21 | 58.03 |
| | Other | 375.51 | 89.21 | 1.11 |
| | Subtotal | 29386.02 | 6981.21 | 100 |
| Household net income ² | | 66257.23 | 15740.67 | 0 |

4.7 Summary

The investigation findings include: 1) the scale of LA and has less negative effects. Adopting the policy-tools of cash compensation and employment resettlement, can relieve the negative impacts of LA. 2) The major source of income of the effected household is employment thus the LA could hardly cause the affected household livelihoods. 3) A majority of the farmers in the project areas consider that this project is beneficial to the regional and local sustainable development. Moreover, these farmers could assist and support the project construction as long as the compensation is reasonable and timely. 4) The APs are less dependent on land. Therefore, this project will not adopt the approach of agriculture resettlement. 5) Condition for the development of high-efficiency agriculture is limited because of the lower per capita land resources. Moreover, most of the work-force is in cities, which also limits the development of large greenhouses and other industries. 6) The elderly persons are engaged in farming, to achieve the purpose of household self-sufficiency

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²Household net income = annual household income – annual household expenditure

5. Legal and Policy Framework

5.1 Policy Framework and Main Clauses

In this project, for the successful completion of work on LA and Resettlement the policies adopted are relevant to People's Republic of China, Zhejiang Provincial Government, Local Authorities and World Bank.

The resettlement implementation of this project complies with the RAP. Any policy-changes in the process of the resettlement implementation, will be approved by World Bank. More details of the policy framework given in the Table.17

Table 17An overview of the resettlement policy framework

| | Policies | Time in Force |
|---|--|----------------|
| | Land Administration Law of the People's Republic of China | 2004-8-28 |
| | Regulations on the Implementation of the Land Administration Law of the PRC (Decree No.256 of the State Council) | 1998-12- 27 |
| | Regulations Regarding on the Administration of Urban Housing Removal (Decree No.305 of the State Council) | 2001-11-1 |
| Nationa | Decisions for Further Reform and Strengthen Land Administration of State Council ([2004] No. 28) | 2004-10- 21 |
| l Level | Guidelines on Improving Compensation and Resettlement Systems for Land Acquisition (MLR [2004] No.238) | 2004-11-3 |
| | Notice of the State Council on Strengthening Land Adjustment and Control (SC [2006] No.31) | 2006-8-31 |
| | Provisional Regulations on the Land Occupation Tax of the | |
| | People's Republic of China (Decree No.511 of the State Council) | |
| | Planning and Design of Land Acquisition for Water Conservancy and Hydropower Projects (SL290-2009) | 2009-11 |
| | | |
| Zhejian g Provinc ial Level | Measures of Zhejiang Province for the Implementation of the Land Administration Law of the PRC | 2000-6-1 |
| | Regulations on the Management of Urban Housing Demolition in Zhejiang Province | 2007-3-29 |
| | Urban Road Management Method in Zhejiang Province (Decree No.511 of the Zhejiang People's Government) | 2002-10-1 |
| | Notice on the Issues of Urban Road Occupying and Mining Fee (ZJF [2007] No.136) | 2007-6-1 |

| | Policies | Time in Force |
|-----------------------|--|---------------|
| | Notice on the Issuance of Rehabilitation Fee for Urban Road Excavation in Zhejiang Province (ZJC [1993] No.410) | 1993-11-1 |
| | Methods of Land Reclamation in Zhejiang Province (Decree No.33 of the Zhejiang People's Government) | 1993-6-9 |
| | Measures for the Transfer of State-owned Land Use Rights in Cities and Towns in Zhejiang Province (Decree No.33 of the Zhejiang People's Government) | 1992-3-12 |
| | Notice of the People's Government of Zhejiang Province on the Administration of Land Occupation Tax Collection and Administration (ZZ [2008] No.38) | 2008-5-30 |
| | Notice of the People's Government of Zhejiang Province on Adjusting the Collection Standard of Land Reclamation Fee (ZZF [2008] No.39) | 2008-6-11 |
| | Notice of the People's Government of Zhejiang Province on Adjusting the Minimum Protection Standard of Land Expropriation (ZZF [2009] No.17) | 2009-1-1 |
| | The Implementation Opinions of the People's Government of Zhejiang Province on Establishing the Social Insurance System for Urban and Rural Residents (ZZF [2009] No.62) | 2010-1-1 |
| | Methods of the People's Government of Zhejiang Province on the Compensation and Farmers Basic Livelihood Safeguard (Decree No.264 of the Zhejiang People's Government) | 2010-1-1 |
| | Regulations on the Budget of Design of Zhejiang Water Conservancy and Hydropower Projects (2010) | 2010-10 |
| | | |
| | Measures of Improving the Social Security System of Land Acquisition Peasants (CZF [2014] No. 144) | 2014-11 |
| Chun'a n County | Measures of the Implementation of the Compensation and Resettlement of Acquiring Collectively-owned Lands (CZF [2015] No.162) | 2015-12 |
| | Measures of the Compensation of Acquiring the Houses on Collectively-owned Lands (CZF [2015] No.163) | 2015-12 |
| | Notice of the Update Results of Basic Land Price in Chun'an County (CZF [2016] No.10) | 2016-11 |
| | | |
| World | Operational Policy OP4.12 on Involuntary Resettlement and Appendixes | 2002-1-1 |
| Bank | Bank Procedure BP4.12 on Involuntary Resettlement and Appendixes | 2002-1-1 |

The Land Administration Law of the PRC is the main policy basis of the Project. The Ministry of Land and Resources and the Zhejiang Provincial Government have promulgated relevant policies and regulations accordingly. More details of the terms in these policies please see the Table.18.

Table 18 Articles of laws and policies

| Items | Descriptions of the items | Item index |
|--|---|--|
| 1. change in ownership | In order to meet the demands of public interests, the re quisition of lands owned collectively, prmises owned by entities and individuals or other immovable is perm itted according to the limits of statutory power and procedures. The requisition of collectively-owned land requires in accordance with the law, the full payment of land compensation fees, relocation subsidies, compensation for the above-ground fixtures of the land and seedlings, etc., the arrangement of social security fees for farmers affected by the land acquisition, the guarantee of their livelihood and protection of their lawful rights and interests. | Property law Article 42-43 |
| | The State practices, in accordance with law, a system of compensated use of state-owned land, with the exception of land the right to the use of which is allocated by the State within the provisions of laws. | Land administration law of the PRC, Article 2 |
| 2. Constructi on project land processing procedure | Need of occupation of state-owned land for construction for a specific construction project within the scope of land for urban construction determined in the overall planning for land utilization will be handled pursuant to the following provisions: (1) At the time of the construction project feasibility study, the competent department of land administration will examine the matters relating to land use for the construction project and come up with a report on the preliminary examination of land use for the construction project; at the time of submission of the feasibility study for approval, the report on the preliminary examination of land use for the construction project produced by the competent department of land administration must be enclosed therewith. (2) The construction unit will, on the strength of the relevant approval document of the construction project, file an application for land for construction with the competent department of land administration of municipal or county people's government, the competent department of land administration of the | Regulation on the Implementation of the Land Administration Law of the People, Article 22 |

| Items | Descriptions of the items | Item index |
|--|---|---|
| | municipal or county government shall examine the same, draft a land provision plan and submit it to the municipal or county people's government for approval; where approval by people's government at the next higher level is required, it will be submitted to the people's government at the next higher level for approval. (3) Municipal or county people's government will, upon approval of the land provision plan, issue a certificate of approval for land for construction for the construction unit. In the case of paid-for use of state-owned land, the competent department of land administration of municipal or county people's government will conclude a contract on the paid-for use of state-owned land with the land user; in the case of appropriation for use of state-owned land, the competent department of land administration will verify and issue a certificate of decision on the appropriation of state-owned land. (4) The land user will file an application for land registration according to law. | |
| 3. Allocation of rights to use land | The allocation of the right to use land will mean the handover of a tract of land by the People's Government above the county level for use by a land user in accordance with the law for compensation, settlement, etc. or gratis. The right of land use obtained through allocation in accordance with this law, except those prescribed otherwise by the laws and administrative rules, has no time limit. | Urban real estate administration Article 23 |
| 4. Resettleme nt compensat ion and basic life security | Requisitioning land collectively owned by peasants, will pay the land compensation fees and resettlement fees, compensation for ground attachments and green crops on the land and other costs (hereinafter generally referred to as the land acquisition compensation) in full in accordance with the laws, arrangement of landless peasants social security costs, protection of the landless farmers' basic life security of the legitimate rights and | Compensation for land acquisition and methods of securing the basic life of landless peasants |

| Items | Descriptions of the items | Item index |
|----------------------|---|----------------|
| | interests of landless peasants. When the funds for | (issued in |
| | landless farmers' basic livelihood have no ability to | 1.1.2010) |
| | bear 2 months of payment, the local people's | |
| | governments will adopt the methods of transferring | |
| | social security risk reserve to fill up the gap, ensuring | |
| | that the landless farmers' basic livelihood funds are | |
| | issued timely. For expropriation of land collectively | |
| | owned by peasants, peasants who should participate in | |
| | the basic life security should be verified. The peasants | |
| | who have not reached the age of 16 should be provided | |
| | one-time land compensation fees and resettlement fees. | |
| | The peasants who participate in the basic life security | |
| | will receive the basic living allowances in the month of | |
| | the month after the woman turns 55 years old and the | |
| | man turns 60 years old respectively. If the peasants who | |
| | participate in the basic life security are still not | |
| | employed after employment training, the People's | |
| | government of the city or county where they are located | |
| | will have a certain living allowance. The construction of such facilities as various pipes and | |
| | lines, and pole networks appendant to urban roads will | |
| | be carried out upon approval of the competent | |
| | municipal engineering administrative departments. | |
| | The temporary occupancy and use of urban roads due | |
| | to extraordinary circumstances must be approved by the | |
| | competent municipal engineering administrative | |
| _ | department and the public security and traffic | |
| 5. T | administrative departments, and the roads in question | Regulations on |
| Temporary | may thus be occupied and used as approved. | Administration |
| occupancy and use of | The temporary occupancy and use with approval will | of Urban Roads |
| urban | not damage urban roads, the sites occupied and used | Article 29, 31 |
| roads | will be promptly cleaned up and restored to the original | and 33 |
| Todus | conditions of urban roads upon the expiration of the | |
| | approved occupation and use duration; if damage is | |
| | made to the urban roads they will be repaired or | |
| | compensation will be made therefor. | |
| | Where it is required by construction projects to dig | |
| | urban roads, the examination and approval formalities | |
| | will be gone through with the competent municipal | |
| | engineering administrative department and public | |

| Items | Descriptions of the items | Item index |
|--|---|---|
| | security and traffic administration department, on the strength of the documents issued with approval of the municipal planning authorities and the relevant design documents. No newly-built, extended or renovated urban road, within 5 years of its completion, and no urban road to which major repairs have been made, within 3 years of the completion of the repair, may be dug up. Where it is needed to dig up due to special circumstances, it will be approved by the people's governments of cities at or above the county level. | |
| 6. Social endowmen t insurance for urban and rural residents | The urban and rural residents who have the household registration of Zhejiang Provence and over the age of 16 (beside full-time school students), and engage in non-state organs, public institutions, social groups without attending the basic old-age insurance can participate in the social endowment insurance. Urban-rural social endowment insurance fund should make up of individual pay cost, collective allowance and government subsidies. Residents who participate in urban and rural social endowment insurance will pay endowment insurance by the regulation. The standard of basic pension should not less than 60 yuan per person per month. The monthly standard of personal account pension is divided by 139 per personal account. The principle of the monthly payment of the pension will be graded according to the principle of long pay. In another word, for the insured person that has made payment for no more than 5 years (including 5 years), the monthly payment of old-age pension will be calculated and issued by the standard of RMB 1/year; for the insured person that has made payment for more than 6 years and no more than 10 years (including 10 years), the monthly payment of old-age pension will be calculated and issued by the standard of RMB 2/year from the 6th year; for the insured person that has made payment for no more than 11 years (including 11 years), the monthly payment of old-age pension will be calculated and issued by the standard of RMB 3/year from the 11th year. | The implementation opinions of the People's Government of Zhejiang Province on establishing the social endowment insurance system for urban and rural residents |

The Main Difference between World Bank's policies and Chinese's law Land resettlement compensation.

Difference: the WB's policy demand compensation should be enough to offset any loss of income and restore long-term earning potential. Chinese standards are based on annual production.

Solution: early solution is to provide replacement land, but are less likely to practice. Cash is the first choice for most people, even though they cannot ensure reasonable use of these compensation. As a result, the WB needs further technical support, for severely affected, especially vulnerable groups to monitor household income, while the local government to help people who need help.

Compensation resettlement for vulnerable groups

Difference: the WB's policy is to give full compensation for special vulnerable groups, especially those facing poverty seriously affected households. Chinese regulations do not require social analysis, therefore compensation based solely on the number of losses. Solution: Special funds are available to assist the vulnerable groups, and they will be determined during the detailed measurement survey. Various measures have been stipulated in the RAP.

Consultation and disclosure

Difference: the WB's policy demands all the affected staffs fully informed, and negotiate with them as soon as possible. The regulation of China has improved the transparency of the notice and compensation. However, affected by personnel's role in project decision-making is not strong, usually released period is too short.

Solution: negotiation has begun at an early age. Project department agreed to publish RAP according to the requirements of the bank to the associated affected personnel.

Lack of legal rights

Difference: WB policy requires all demolished buildings, whether they are legal or illegal, should be compensated in accordance with the same standards. According to Chinese law, a man without a local registered residence may not have and the local

people have the same right to compensation. In addition, the current Chinese laws for illegal acquisition of land and house owners without compensation.

Solution: For the WB loan project, all lawful and unlawful affected people, regardless of ownership or have the right to use, will be protected. In accordance with the requirements of the WB, will help.

Resettlement monitoring, evaluation and reporting

Difference: WB requirements for internal and external resettlement monitoring. But China's laws have no such requirement except for reservoir project.

All WB projects have established internal and external resettlement monitoring systems, which are written in the RAP. The external and internal reporting requirements have specific provision in the RAP.

5.2 Resettlement Principles of this Project

Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. For these reasons, the overall objectives of the Bank's policy on involuntary resettlement are the following:

- (a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.2
- (b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons3 should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.
- (c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

5.3 Resettlement Policies of the Project

5.3.1 Acquisition of Collectively-owned Land and Resettlement of Labor-forces

The area of permanent LA for the project is 39.4 mu in total. Scope of the LA includes eight water supply plants namely, Wangfu, Yejia, Xiashan, Pingmen, Fengshulin, Baima, Zitong and Weiping to be constructed within total 12 counties and six towns.

The standards and procedures of the resettlement and compensation will be followed in accordance with the Land Administration Law of the PRC and also World Bank's safeguard policy(OP 4.12/BP4.12). the local regulations on LAincludes. Decisions for Further Reforms and strengthening Land Administration of State Council ([2004] No. 28), Guidelines on Improving Compensation and Resettlement Systems for Land Acquisition (MLR [2004] No.238), Measures of Zhejiang Province for the Implementation of the Land Administration Law of the PRC, The Implementation Opinions of the People's Government of Zhejiang Province on Establishing the Social Insurance System for Urban and Rural Residents (ZZF [2009] No.62), Methods of the People's Government of Zhejiang Province on the Compensation and Farmers Basic Livelihood Safeguard (Decree No.264 of the Zhejiang People's Government).

Methods of the People's Government of Zhejiang Province on the Compensation and Farmers Basic Livelihood Safeguards, was issued on 1st Jan, 2010. According to these methods, the age of participating in the social endowment insurance in the social endowment insurance is 16-year-old and above, the age of drawing the pension is 60-year-old for male and 55-year-old for female respectively. Because rules for the implementation of these methods have not been built in project area, this report uses the original policies of the project area.

In 2009, Zhejiang Province issued the Implementation Opinions of the People's Government of Zhejiang Province on Establishing the Social Insurance System for Urban and Rural Residents (ZZF [2009] No.62). These implementation rules the urban and rural residents can participate in the social endowment insurance who have the

household registration of Zhejiang Provence and over the age of 16 (beside full-time school students), and engaged in non-state organs, public institutions, social groups without attending the basic old-age insurance. Residents who participate in urban and rural social endowment insurance shall pay endowment insurance by the regulation. The condition of drawing the pension is that, residents are over the age of 60 and without enjoying the benefits of government-sections, enterprise units and other social groups. Similarly, this report uses the original policies of the project area. The implementation opinions will be implemented when the project begins.

The implementation opinions also claim that the persons who have participated in the urban-rural social endowment insurance can participate in the basic life insurance of landless farmers as well. Correspondingly, the person who participated in the basic life insurance of landless peasant, can transfer their personal funds into the accounts of urban-rural social endowment insurance. The grant of old-age pension will be in accordance with the arrangement of urban-rural social endowment insurance.

Furthermore, the Notice on Further Improving Endowment Insurance for Land Loss Farmers was issued by Chun'an Government in 2014, which includes the arrangement of health care and job security for landless farmers. It figures out that the landless farmers in Chun'an County can participate in the works basic health care insurance or the urban-rural social endowment insurance. Based on the measures, the training of worker's skills will be strengthened to improve the employment competitiveness of the farmers. At the same time, the farmers who have the ability and desire to apply for jobs, will accept the employment assistance

5.3.2 Temporary Land Occupation

The area of temporary land occupation of the project is 1,371.69 mu, which is rural collectively-owned land. It includes the land occupation of rural drinking water safety promotion (910.31 mu), comprehensive management of small watershed (58.4 mu) and of embankment reinforcement and river improvement (402.98 mu).

Occupying rural collectively-owned land temporarily, will be approved by the land

administration department of local government. The user of rural collectively-owned land will sign a contract with farmers' committee or rural collective economic organization, and the land compensation will be paid in accordance with the contract. The occupied land must not be used for building permanent constructions. When the contract expires, the land will be restored to the original state. If the land cannot be restored and cause loss, the users shall bear the corresponding responsibility for economic compensation.

Occupying rural collectively-owned land temporarily will be in accordance with the Land Reclamation Ordinance (Decree No.592 of the State Council), Technical Standards for Land Reclamation, Preparation Procedures for Land Development and Consolidation (TD\T1011-2000), and Planning and Design of Land Development and Consolidation project (TD\T1012-2000). Temporary use of land will not normally exceed two years.

5.3.3 Ground Attachments

All the ground attachments that affected by the project will be restored in accordance with the special requirements. Compensation for using land will be paid or incorporated into project budget. Meantime, the compensation will be paid to the property owners based on the principle of replacement value.

- (1) For the compensation of public facility, its compensation standard will be made in accordance with methods of market assessment, and the functional restoration of public facility will be restored in the meantime.
- (2) Works of trees transplantation needs to be noticed six months earlier for affected farmers, especially to avoid the summer planting of Osmanthus trees.
- (3) The units whose land is Acquisitioned, the PMO can inform the acquisition information to them half a year in advance. In this way, the units can have enough time to replace ground attachments to other places. Taking the water supply plant named Fengshulin, Osmanthus trees were on the land that would be used to this water supply plant, the acquisition unit hoped that the PMO could inform the

- acquisition information to them in advance, and could help them find enough space for plantation of those trees.
- (4) The compensation for relocating graves will be paid to the AHHs, new sites for graves will be selected by the APHs with the supports of village leaders. Based on the field investigation, we found that the removal of the graves will be according to the local customs. The compensation for graves relocations shall include the fee of performing ceremonies.
- (5) The infrastructures, such as power facilities, which affect the daily life of APs, need to be restored in time. Some infrastructures have little impact on APs in the short term, needs to be restored in time after completion.

6 Compensation Policy and Standards

According to the legal framework, combined with the actual situation of Chun'an County of Zhejiang Province, we make the compensation standards for this project.

6.1 LA of Rural Compensation standards

LA compensation is based on the "Land Administration Law of the Peoples Republic of China", "Guiding opinions on improving Land Administration and Resettlement Compensation", "Land Administration Law of the Peoples Republic of China" implemented by Zhejiang province, "notice to update the basic data of benchmark land of Chun'an county" (Chun'an, 2016 No. 10) and Chun'an county "on the re-released notice of Chun'an county Land Administration area comprehensive price" and many other relevant policies and regulations.

The detailed compensation standards for the compensation of permanent LA of rural collective land in this project are shown in table 19.

Table 19Standards for Compensation of LA of Rural Collective Land (districts and cities)

Unit: 10000 Yuan / Mu

| | | | Chun'an | County | | |
|--|---------------------|-------------------------|-----------------------|------------------|--------------------|----------------|
| Items | Pingmen Villages | Fengshu ling Town | Zhongz hou Town | Weipin g Town | Wangfu Villages | Zitong Town |
| Cultivate land Constructive land | 4.0 | 4.4 | 4.0 | 4.4 | 4.0 | 4.4 |
| forest land and unused forest land | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| others | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 |

6.2 Compensation standards of Temporary Occupation of Collective Land

The temporary occupation of collective land will be approved by the competent

department of LA of the municipal or county people government at the site where the land is located. The land user will sign contract with land administrative departments or the rural collective economic organization and villagers' Committee for temporary occupation of collective land, and pay compensation fees to the ownership of land.

Users of temporary land use will use land in accordance with the temporary use of land contract and will not build permanent buildings. When the contract is expired, the users are responsible for the restoration of the original use of the land; if cannot be restored, the users will pay compensation. The longest contract period is no more than 2 years. The provisional temporary land compensation standard is 1000 yuan / mu according to Zhejiang Province.

LA compensation is paid to Chun'an Land Resource Bureau of Chun'an County by Qiandao Lake Construction Group Co., Ltd., and then transferred to AFs.

6.3Compensation standards for Affected Ground attachments and Ground Attachments

Compensation standards for affected ground attachments and ground attachments are carried out in accordance with the principle of replacement.

This detail of compensation standards for affected ground attachments and ground the detailed influence is shown in table 20.

Table 20Compensation Standards for Affected Ground attachments and Ground Attachments

| Affected | | Com | Compensation standard (Yuan/Unite) | | | | | | |
|------------------------------|-------|-----------------|------------------------------------|--------|-------|--------------|--|--|--|
| items | Unite | Extremely Large | Large | Middle | Small | Seedlin g | | | |
| Hickory | Zhu | 1800 | 1440 | 1080 | 360 | 18 | | | |
| Persimmon tree | Zhu | 130 | 104 | 65 | 19.5 | 5 | | | |
| Sweet Scented osmanthus tree | Zhu | 338 | 208 | 143 | 78 | 6.5 | | | |
| Mulberry | Mu | | | 4000 | | | | | |

| A 664 - J | | Compensation standard (Yuan/Unite) | | | | | | | |
|-------------------|-------|------------------------------------|-----------|------------|---------------|--------------|--|--|--|
| Affected items | Unite | Extremely Large | Large | Middle | Small | Seedlin g | | | |
| (piece) | | | | | | | | | |
| Bamboo | Zhu | | | 5.2 | | | | | |
| Tea | | | | | | | | | |
| plantation | Mu | Average | 4000-6000 | , Good qua | ality, 6000-1 | 0000 | | | |
| (area) | | | | | | | | | |
| Oil tea | Mu | 2000 4000 | | | | | | | |
| garden | IVIU | | 2 | 2000-4000 | | | | | |
| Oil tea | | | | | | | | | |
| garden | cm | | | 10 | | | | | |
| (odd) | | | | | | | | | |
| 380V pole | Zhu | | | 1800 | | | | | |
| Grave | Ge | 1800 | | | | | | | |
| Nursery garden | Zhu | | | 10000 | | | | | |

6.4 Cut-off Date of Eligibility

The cut-off day was set up as the day of July 22, 2016, agreed upon by the World Bank task team, engaged provincial agencies and municipal agencies. The World Bank sent its task team as project pre-identification mission to visit the project areas and had discussions in line to the application to the World Bank involuntary resettlement policy OP 4.12 in February and June 2016. The World Bank task team, engaged provincial and municipal agencies reached agreements to the project components and the project areas, specific to the affected project areas and starting day of the resettlement census survey. From February to June 2016, the information of the cut-off day and the resettlement census survey were disseminated to all villagers through municipal, township agencies and village committees. The broad resettlement information disclosure received broad supports from villagers when the resettlement census survey team interviewed to each affected family to identify the potentially negative impacts toward to them since July 22, 2016. This census survey, combined by municipal, township agencies and village committees, was the milestone that the project preparation was started and the negative impacts will be accounted to be compensated, based on the World Bank and National

requirement.

7 Income and Livelihood Support Strategy

Make reasonable compensation for the APs and ensure their livelihoods recover or exceed the original level. According to the actual living standard of the project area, and the national economic and social development plan of the county (District, city), the purposes of the resettlement are as follows:

- (1) Ensure self-sufficiency in food generally. Try to adjust the agricultural structure and improve land productivity in the areas with less cultivated land resources.
 - (2) Ensure the per capita net income of APs restored to the pre-resettlement level.
- (3) Improve public infrastructures, schools, medical treatment, social welfare, natural environment and traffic conditions.

All APs will be covered as part of the project construction and will be provided with adequate funding, making APs benefit from the project as much as possible. The temporary occupation of the rural collective economic will be compensated, including farming production restoring costs and compensation for APs, as funding for livelihood reconstructions.

In the process of preparation and implementation, we encourage migrant's participation. Meanwhile, we make every effort to information transparency, consultations, and fully respect the wishes of APs. All these will ensure the restoration of production and living standards of APs reach or exceed origin level.

7.1 Compensation for Permanent LA

The compensation standard for permanent LA is varies from district from district.

39.4 Mu land of 12 affected villages is exquisite and the compensation fee is 1.11138 million yuan (28.2 thousand per mu). Compensation is one-time payment to farmers.

Details are shown in table 21

Table 21Analysis of Compensation for Permanent Collective LA

| City/County | | | LA area(Mu) | | | | Compensation Standard (10000yuan/Mu) | | | | | |
|-------------|-----------------------------|---------------------|-----------------|---|--------------------|-------|---|----|---|---|------------|--|
| | Affected County /Town | Affected Village | Garden field | | Cultiva te Land | Other | Househ old (hu) | n) | Cultivate d land /construct ion land compensa tion standard | Woodlan d/unused land compensa tion standard | Other land | Compe nsation Fee (1000 Oyuan) |
| | Wangfu County | Xinhe village | 5.27 | 0 | 0 | 0 | 15 | 54 | 4.0 | 1.9 | 3.7 | 19.499 |
| Chun'an | | Yejia Village | 3.76 | 0 | 0 | 0 | 8 | 29 | 4.4 | 1.9 | 3.7 | 13.912 |
| County | Weiping Town | Zhechuan village | 0 | 0 | 0.15 | 0 | 2 | 8 | 4.4 | 1.9 | 3.7 | 0.66 |
| | | Sanzhou Village | 0 | 0 | 0.15 | 0 | 1 | 3 | 4.4 | 1.9 | 3.7 | 0.66 |

| | PingVillage | 0 | 0 | 0.3 | 0 | 4 | 13 | 4.4 | 1.9 | 3.7 | 1.32 |
|-------------------|---------------------|------|------|------|------|----|----|-----|-----|-----|--------|
| | QinkengVill age | 0 | 0 | 0.15 | 0 | 1 | 4 | 4.4 | 1.9 | 3.7 | 0.66 |
| | Kaochuan Village | 0 | 0 | 0.15 | 0 | 1 | 3 | 4.4 | 1.9 | 3.7 | 0.66 |
| Zhongzhou Town | XiashanVilla ge | 5.54 | 0.67 | 0 | 0.55 | 16 | 63 | 4.0 | 1.9 | 3.7 | 23.806 |
| Pingmen County | Pingmen Village | 3.48 | 0 | 0 | 0 | 4 | 13 | 4.0 | 1.9 | 3.7 | 12.876 |
| Febgshuling | Zhaikeng Village | 0 | 8.78 | 0 | 0 | 1 | 5 | 4.4 | 1.9 | 3.7 | 16.682 |
| Town | Guanzhou Village | 0 | 4.06 | 0 | 0 | 1 | 5 | 4.4 | 1.9 | 3.7 | 7.714 |
| Zitong Town | Lianxi Village | 0 | 6.06 | 0 | 0.32 | 17 | 72 | 4.4 | 1.9 | 3.7 | 12.689 |

According to the "notice on the adjustment of basic life safeguard of Chun'an county LA affected persons" (issued by the [[2016]136] Chun'an County), "If LA other except the project, the persons who participate in basic living social safeguard is defined according to the number of the LA and the corresponding personnel. Clearly, the county unified according to 16 mu / person calculation resettlement population."

Due to the diversification of the development of each village and the different impact of project on villages, the relocation and income restoration plan is made in accordance with the willingness of APs. After the investigation of social economy and the affected village and representatives of resettlement persons, we make different resettlement and income recovery plan, namely the combination of monetary compensation and employment for resettlement restoration. Monetary compensation is that every APs is willing to accept and can receive. After obtaining monetary compensation, the LA households may be compensated by means of non-agricultural resettlement (including employment, training, going out to work, running small businesses, etc.).

Plan One: Cash compensation

This project offers cash compensation for affected villages and affected famers, according to "notice on the adjustment of basic life safeguard of Chun'an county LA APs" (issued by the [[2016]136] Chun'an County)", this project offers cash compensation. In the compensation process, the fees for compensation and relocation are paid directly to affected farmers, including young seeds and ground attachments compensation. After receiving cash compensation, affected farmers can start both agricultural development and non-agricultural for livelihood restoration.

Rural safe drinking water projects need to build water plants and install pipelines, resulting in loss of farmer's land. Because Zhejiang is a developed province, the local farmers mainly rely on out-migrant work and the second or third industry-based income. The per capita income is exceeding over the other provinces in rest of the China. In

Chun'an County, much arable land left unused due to a large population of migrant workers. While the project will cause part farmers losing their land, the affected farmers are less dependent on their land and can transfer the land to neighbor without asking for rent. So, the impact of LA on farmers is tiny.

Plan two: Non-agricultural

Non-agricultural is mainly divided into employment guidance, employment opportunities from the project and skills training.

(1) Employment Guidance.

The township government provides employment services for agricultural surplus labor by organizing the employment meeting specially for affected farmers; providing them detailed information regarding related industries, providing legal advisory assistance and knowledge to assist affected farmers for non-agricultural employment.

(2) Employment opportunities and arrangements offered by the project.

According to estimates, the project will produce 8613 temporary jobs every year, including 1861 technical positions and 6752 non- technical positions during the implementing period, and will provide 212 permanent jobs, including 50 technical positions and 162 non-technical positions during the maintenance period. During the implementing period, jobs such as phase transformation in Miscanthus deforestation, plantation of new species will give priority to landless farmers, during the maintenance period, the permanent employment post will also give priority to landless farmers to promote former's employment.

- (3) Skills Training. To help the land-loss farmers employed flexibly or startup businesses independently after receiving training, a skills training program has been developed for them., this project plans to train 750 persons.
- 1) Training objects: The training object must have registered permanent residence of Chun'an County, affected due to the Land loss, who are over 18 years of age and educated labors, related skills training certificate will be issued by the Chun'an County Personnel Bureau of labor and social security.
 - 2) Training contents: For agriculture training, efficient seed production and

vegetables cultivation training will be given in accordance with the relocation plan. For non-agricultural training, chefs, waiters, and technical training, etc. are provided in accordance with social and economic development needs of Chun'an County.

At the same time, Out-migrant workers will be trained in common sense of urban life, protection of rights and interests, safety in production, prevention and reduction of natural disasters, and national employment policies.

3) Organization arrangements. The training activities will be carried out by the Bureau of labor and social security of Chun'an county and township.

The allocation of LA compensation fee (land compensation fee and resettlement subsidies fee) for each sub project-affected village is shown in table 22.

Table 22 Ways of LA Compensation Fee

| Component | Usage of payment method |
|-----------|--|
| Payment | I A companyation for pays directly to A Do |
| method | LA compensation fee pays directly to APs |
| Payee | Land Resource Bureau of Chun'an County |

7.2Women's Rights and Interests

The sub projects will take a series of measures to ensure that women's rights and interests are guaranteed during the preparation and implementation of the project. Mainly as follows:

- (1) Affected women will receive information relating to LA and must ensure participation in LA and public consultation. The compensation agreement must be signed by both husband and wife.
- (2) In technical training, priority is given to the affected women's labor to ensure that their economic status is not compromised;
- (3) To ensure that a certain number of women (at least 20% of unskilled labor) have access to non-skilled jobs during the project construction process. In addition, women will receive the same pay equally as men since they work the same way;
- (4) During the operation of the project, priority will be given to catering, temporary employment and other positions to women affected by the project, to ensure

that their income is restored.

7.3 Affected Infrastructure and Ground Attachments

The affected infrastructure and ground attachments will be compensated as well as restored after the project by the property right unit.

7.4 Restoration of Temporary Land Occupation

The dumping sites in the project construction will temporarily occupy the rural collective land, and the temporary occupation of the land will be compensated based on the actual occupation time. The construction period of the project is expected to be 24 months. According to the relevant regulations of Chun'an County, the temporary compensation for the area of 1000 yuan / mu·years, the temporary compensation will be paid directly to the APs. Where the farmland is occupied, the land restoration unit will be responsible for restoration. The temporary area will not be more than two years.

7.4.1Restoration Principles

Based on the requirements of economic feasibility, technical, scientific, rational, comprehensive benefits, optimum and convenient operation, we made the principles combine the characteristics of the project and the actual situation in accordance with the local natural environment and social and economic development:

- 1) In line with the overall land use planning, land development and project planning requirements;
- 2) Engineering technology feasible and economical reasonable, to coordinate with social benefit, economic benefit and ecological benefit;
 - 3) Carry out development according to local conditions and improve the feasibility;
- 4) Improve land use conditions, promote the sustainable utilization of land resources, improve land use efficiency and land quality, and optimize land use structure.

7.4.2Restoration Measures

1) Technical standards

Temporary land restoration technical standards is made based on the "standard of land restoration technology (Trial)" the relevant provisions: flood control standard is

higher than the current land standard; the slope of the ground is generally not more than 5°; the drainage facilities meet the site requirements; the soil blocks will set drainage canal to meet the drainage requirements for paddy field; for drainage requirements, setting irrigation channels; the traffic in the restoration area is set according to the traffic requirement, pavement elevation will above the elevation of 30cm ~ 50cm.

- 2) restoration measures
- (1) The debris on the surface of soil will be removed for rehabilitation of land farming layer;
 - (2) After the temporary use of the land has been completed, its basic level;
- (3) Completion of restoration of cultivated land; the quality of cultivated land will be the same as that before;
- (4) Finally, construction of irrigation and drainage channels and agricultural traffic network.

8 Institutional Arrangements and Implementation Schedule

8.1 Institutional Arrangement

To ensure the implementation of the project, the World Bank loan work leading group is established in Zhejiang province. Water conservancy and Hydropower Investigation and Design Institute completed preliminary research work and environmental assessment and the RAP is conducted by Hohai University. At the same time, each project from city and county level also establish the PMO, which is responsible for the preparation of the resettlement program of each sub project, LA, implementation management and internal monitoring etc. The collection and resettlement of rural collective land will be coordinated by the Land Resource Bureau of the Chun'an County and will be handled by the township land authorities. Project resettlement organizations and responsibilities are shown in table 23.

Table 23Responsibilities of Organizations

| Responsibility | Organization | County | Pesonnel |
|--------------------|-------------------|------------------|-----------------|
| Full consideration | Land Resource | LA office | |
| Full Consideration | Bureau of Chun'an | LA Office | |
| | | Wangfu Village | Cheng Honglai |
| | All levels of | Weiping Town | Zhang Weibin |
| Implementation | government and | Zhongzhou Town | Jiang Xiangyong |
| Implementation | Land Resource | Ping Men village | Wang Daoping |
| | Bureau | Fengyeling Town | Yu Qingping |
| | | Zitong Town | Xiao Jinping |

In the implementation of the World Bank loan in Zhejiang Qiandao Lake, the Xin'an River basin water resources and ecological environment protection project in Zhejiang Province, the following institutions are grouped. They are responsible for the city project resettlement activities, planning, management, implementation and monitoring.

- Zhejiang World Bank loan leading group
- Chun'an World Bank loan leading group
- World Bank Loan Project Management Office
- Project implementation unit

- ➤ Government functional departments
- Project Design Unit
- ➤ National Research Centre for Resettlement, Hohai University

The World Bank loan in Zhejiang province leading group and Chun'an Component Leading Group is responsible for the leadership and coordination of the project and responsible for selecting the program for making the resettlement of the project.

Chun'an city World Bank Project Management Office (located in Chun'an city development and Reform Commission)

- ➤ Coordination with the relocation and resettlement advisory bodies for the preparation of the program.
- Responsible for coordination between the consulting company and other organizations during the preparation of the project.
- Coordinate the progress of the implementation of the project and the RAP;
- Report the resettlement funds plan and urge the payment of funds
- > Coordination with the related agencies of the resettlement work;
- Responsible for raising funds for project resettlement
- Responsible for the allocation of resettlement funds
- Responsible for the resettlement of the project
- Responsible for tracking and supervising the allocation of resettlement funds for the project
- ➤ Dealing with complaints of APs during the resettlement process
- Responsible for coordinating the work of external monitoring institutions for resettlement;
- The collection and arrangement of various materials required for the internal monitoring reports of the project
- Responsible for the management of the resettlement files of the project

The Chun'an Municipal Land Resources Bureau

- ➤ Coordination with the relevant departments to formulate policies for resettlement programs;
- Overall responsibility for LA (including assisting to handle social insurance for landless farmers);

- Participate in the investigation of the impact of the project resettlement
- > Supervise the implementation of resettlement activities

The Shouchang Town/ Hangtou Town/ Datong Town/ Xin'an River Sub-district / Yang Xi Sub-District People's Government

- Participation in physical quantity surveys;
- Participation in calculating the compensation funds of the affected households
- Participating in the payment of compensation funds for the APs;
- Participation in the complaints of APs during the settlement process
- Participation in the training of the employment skills of the APs;
- Responsible for the implementation of the employment measures for the APs;

The project design agency

- > To reduce the impacts of Engineering resettlement through optimization design
- > Determine the scope of LA and removal

Independent External Monitoring and Assessment Mechanism.

In the process of RAP preparation, the implementation of the external monitoring, independent external monitoring and assessment agencies are responsible for the resettlement work, provision of resettlement progress report and supervision report to the Chun'an PMO, Zhejiang Province PMO and World Bank. Zhejiang Province PMO will employ monitoring agencies as resettlement external monitoring and assessment unit. The main responsibility is:

- ➤ as the monitoring and evaluation of the independent organization in the RAP to start after the observation of the RAP and implementation of all aspects of the monitoring and evaluation of the relocation and resettlement work and the implementation effect and the social adaptability of APs, and through the Chun'an PMO to provide assessment report monitoring resettlement to WB.
- Provision of technical advice to the Chun'an PMO on data survey and resettlement activities.

To ensure the smooth implementation of RAP, to strengthen the communication with the Zhejiang province PMO, resettlement enforcement agencies and the World Bank timely and effectively. The sub PMO also arranged a full-time staff that is responsible for implementation, coordination and organization. These personnel are well-experienced in LA.

8.2Implementation Schedule

According to the schedule, the projects are expected to be completed in four years from 2018 to 2023. The main resettlement work is expected to start from 2018 and end in 2020

The basic principles of scheduling are as follows:

- (1) LA, relocation and resettlement will be completed at least 1 months before the construction of the project, so as to enable the APs to have sufficient time to prepare the production and recovery plan;
- (2) In the process of resettlement, the APs will have the opportunity to participate in the project. The scope of LA areas will be announced before construction, and the publicity manual for resettlement will be issued and prepared for public participation;
- (3) All kinds of compensation fees will be fully paid directly to the ownership of property 3 months ahead of approving of LA compensation and resettlement programs. Any units and individuals will not use the compensation fee on behalf of APs. The compensation fee will be fully paid with no exception.

According to the progress of the preparation and implementation of LA and resettlement, the overall schedule for resettlement of sub projects will be worked out. The actual implementation time may be adjusted due to deviations from the overall progress of the project. Detailed implementation time and contents are shown in table 24.

Table 24 Component LA and Relocation Timetable

| Stage | Task Name | Chun'an City |
|-------------|--|----------------------|
| | Determination of LA and resettlement | Aug. 2017 |
| | Physical investigation of LA and removal | Sept. 2017 |
| | Preliminary survey of social economy | Oct.2017 |
| Preparation | Consultation on resettlement programs | Aug. 2017 |
| | Preparing resettlement action plan | Aug.to Oct.2017 |
| | Releasing resettlement action plan | Oct. 2017 |
| | Resettlement action plan approved | Oct. 2017 |
| | Collection of rural collective land related approval procedures | Mar. 2018 |
| | Hold the mobilization meeting of LA and removal, and announce the policy | Mar. 2018 |
| Implementa | Announcement of LA | Mar. 2018 |
| tion | Negotiate and sign an agreement for compensation and placement | Mar. 2018 |
| | facility relocation | Mar. to Jun. 2018 |
| | Construction land delivery | Jun. 2018 |
| | M&E | Dec. 2017 ~Aug. 2020 |

9 Resettlement Cost and Disbursement

9.1Budget

The total budget includes permanent LA costs, compensation fees for affected infrastructure and ground attachments, related taxes and fees, management fees, etc. The total resettlement budget for the project is 7.76674 million Yuan.

Among them, the construction of small watershed projects, LA compensation is 0.2336 million Yuan; embankment reinforcement and river regulation construction LA compensation is 1.61192 million Yuan; rural drinking water construction projects LA compensation is 5.92122 million Yuan. The budget for each project is shown in table 25. The total cost of the migration will be included in the cost of the whole project.

Table 25Project resettlement compensation and resettlement budget

Unit: 10000 yuan

| numb er | Items | Small watershed management sub project | embankm ent reinforce ment and river regulation constructi on | rural drinking water construction projects | Total |
|------------|--|--|---|--|-------------|
| 1 | Permanent LA of collective land | 0 | 0 | 111.13 8 | 111.13 8 |
| 2 | infrastructure and ground attachments | 0 | 0 | 116.86 | 116.86 |
| 3 | Temporary land compensation and land Restoration fee | 23.36 | 161.192 | 364.124 | 548.676 |
| | subtotal (1-3) | 23.36 | 161.192 | 592.122 | 776.674 |

9.2Annual investment plan

According to the land requisition and demolition progress of each sub project, the annual fund utilization plan is compiled, which is shown in table 26.

Table 26 annual fund usage plan

Unit: 10000Yuan

| Project | 2018 | 2019 | 2020 | Total |
|--------------------|----------|----------|----------|---------|
| APs relocation fee | 310.6696 | 271.8359 | 194.1685 | 776.674 |
| percentage | 40% | 35% | 25% | 100% |

9.3 Sources of fund

The total investment of this project is 7.76674 million Yuan, which comes from loans from the

World Bank and local finance. According to the project arrangement, the sub projects investment come from financial subsidy, World Bank loan and so on. Among them, the sources of resettlement fund are the counterpartfunds of Chun'an County government and the international bank for reconstruction and development / international development association.

9.4 Appropriation and management of funds

9.4.1 Resettlement funding

This project resettlement self-financing and commercial bank loans in part by the project office or the owners is paid to the demolition or land bureau. Financial funds will be paid to the project office. Compensation policies and standards in the implementation process will be in accordance with the resettlement plan. The LA compensation fee will be paid the to the affected units or individuals. The flow chart of funds appropriation is shown in figure 3.

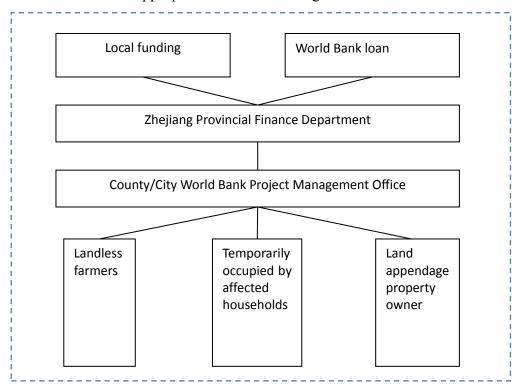


Figure 3 Flow Chart of Resettlement fund

9.4.2 Resettlement fund management

To ensure that the funds for resettlement can be allocated in time and in full order, and that the production, living and income levels of affected farmers are restored, the following measures will be taken:

All and resettlement related expenses will be included in the total project budget, resettlement compensation fees and other expenses will be paid to the county PMO of the relevant units and individuals through the implementation mechanism;

| > | To ensure the smooth implementation of LA, PMO must establish financial and regulatory agencies at all levels, to ensure that all funds disbursed on time. |
|---|--|
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| | |

10 Public participation, consultation and complaint channels

During the update period of the RAP, the public participation process shall include at least the following activities:

Consultation with APs during the census and detailed survey is conducted to ensure that they understand the project indicators and their rights, and that they have the opportunity to make comments.

A public consultation meeting open to all APs to announce the Cut-off Date for the project and to determine its geographical scope.

A public consultation meeting with all APs to disclose qualifications, rights, complaints, complaints procedures, monitoring matters, and discuss other issues related to changes and other concerns of the affected and other stakeholders.

The public consultation shall discuss the replacement cost principle and the valuation of the affected property as well as the results thereof, and negotiate the contract individually and deal with individual concerns.

Negotiate the terms of the contract with the affected party individually.

A public consultation meeting with all APs discloses the latest LA plan and announces the date, place and time of payment of the agreed property transfer price and other compensation or rights.

The consultation and participation records in the process of the documentation (meeting minutes, list of participants, photos).

Easy accessible and understandable information disclosure manners, such as RIB, bulletin board.

10.1Public Participation stage

10.1.1Public Opinion Survey

During the implementation of this project, the public will be encouraged to participate actively in the following procedures and methods:

Resettlement representatives will participate in land acquisition and resettlement work

Representatives of farmers are elected by the affected villages, and deputies cooperate with the relevant departments to solicit opinions and demands from APs, listen to rationalization proposals, and communicate regularly. Give answers to questions raised by them and give serious consideration to their opinions and suggestions. In the process of land acquisition survey, land acquisition compensation standard determination, compensation and resettlement negotiations, representatives will participate in the above work process, in order to fully reflect the interests and opinions of resettlement, and ensure the fair, reasonable and transparent of resettlement work.

(2) Negotiated determination of land acquisition and resettlement.

Through public participation in the work, let the APs and the government to negotiate and communicate, so that the APs put forward reasonable suggestions.

(3) Holding consultative meetings

The Forum on the participation of the APs and women representatives (including the proportion of female representatives will be more than 30%) will be convened. The contents of the project will be introduced, their opinions and suggestions will be heard, and their suggestions and opinions will be recorded in time, and the consideration and attention will be given to them.

(4) Holding participation meetings

Before land acquisition, we will extensively and deeply explain the policies, regulations, compensation standards and RAPs to APs, so that APs know and arrange early. The purpose is to combine the local actual situation and the opinions and suggestions of APs, and strictly implement the project in accordance with the World Bank policy and national policy.

Using multi-media tools to disclose resettlement policy.

Through television, newspapers and radio and other widely carried out the relevant land acquisition and resettlement policy, as far as possible to let the APs understand information. On the other hand, a booklet is sent to the affected person, and detailed consultation can be carried out on the spot.

Release notice.

Notice the main contents: the project brief overview, land acquisition and resettlement policies (including the scope of compensation and resettlement standards) responsible for the organization, housing migration schedule and the APs rights and obligations, complaints and complaints, monitoring and evaluation etc..

(7) RAP for public

The RAP will be announced on the bank after passing the examination, let the APs and non-governmental organizations to consult, at the same time, the copies are sent to the affected villages and relevant units of the office or the reference room, persons can access. The address of the PMO will publish a notice in the local newspaper, and explain the RAP check location.

(8) RIB

RIB. The main part of the RAP is written as a RIB, and the manual must be sent to the resettlement before the project is implemented. The main contents of the RIB are: project overview, project impact, compensation policy, implementation agencies, complaint channels, etc. By reading the Resettlement Information Booklet, resettlement can understand the whole content of the project, and put forward reasonable suggestions to the PMO for the problems of the project.

In February, June and July 2016, the PPMOs and PMOs with the Hohai University organized a survey

of public opinion in the affected areas.

A total of 7 townships (towns) of 12 villages were investigated in this survey, with a total of 103 valid samples. Most respondents believe that this project is meaningful in the improvement of living environment and is conducive to physical and mental health, most persons think that the legitimate rights and interests are violated shall appeal, and the vast majority of persons required to protect the legitimate rights and interests, guarantee the land demolition work transparent, fair and impartial. The survey results of public will be shown in table 27.

Table 27Public opinion survey statistics

| | | Results | S | | | |
|---|--|---------|------|-----|-----|---|
| Questions | Answers | 1 | 2 | 3 | 4 | 5 |
| Types of affected respondents | ①House Demolition ②Land acquisition ③ House Demolition/ land acquisition | 0 | 100% | 0 | 0 | 0 |
| Are you familiar with the construction of this project? | ① Clear ② not clear ③ unclear | 39% | 53% | 8% | 0 | 0 |
| Are you in favor of the construction of the project? | ① Favor ② Disapproval ③ I don't know | 57% | 33% | 10% | 0 | 0 |
| In your opinion, the possible benefits of project construction are (allowing multiple choices) | ① Improve the living environment, ② improve the operating environment, ③ solve drinking water problems, ④ increase employment opportunities and income ⑤others | 56% | 5% | 39% | 14% | 0 |
| In your opinion, the possible disadvantage of the project construction is (allowing multiple choices) | ①Life is affected; ② work or production is affected; ③ the relationship between man and land is more intense; ④ income is reduced; ⑤ others | 37% | 21% | 53% | 22% | 0 |
| Do you understand the current compensation policy in our county? | ① Clear ② not clear ③ unclear | 11% | 62% | 27% | 0 | 0 |
| What are your views and suggestions on the project | ① Reduce the amount of | 57% | 42% | 72% | 59% | 0 |

| Quartiana | Angwong | Results | | | | |
|--|--|---------|-----|-----|-----|---|
| Questions | Answers | 1 | 2 | 3 | 4 | 5 |
| construction? | demolition ②reduce the amount of land acquisition ③employ local labor force ④ use local raw materials ⑤others | | | | | |
| What are your requirements for land compensation and placement fees? (affected by the land acquisition) | ① All allocated to affected households, self-employed ② Land compensation fees remain in the village collective, the allocation of subsidies to the affected households, and participate in the social security of landless farmers ③ All the collectives shall master the funds and adjust the land within the village ④ The resettlement allowance will be granted to the affected families, and the land compensation fees will be paid to the collective development enterprises, and the land adjustment shall not be made⑤others | 52% | 0 | 0 | 39% | 0 |
| After the land acquisition, are you willing to take part in the social security of the landless farmers? | ①Yes ②No | 94% | 6% | 0 | 0 | 0 |
| If you want to, and you need to pay part of the cost of protection, you are willing to pay the cost is: | ①Less 5000yuan ②5001-10000yuan ③10001-20000yuan ④above2000yuan | 44% | 39% | 17% | 0 | 0 |
| If not, the main reason is that: | ① The cost of my own investment is too high②The level of protection is too low ③After a long time to enjoy ④others | 17% | 0 | 8% | 0 | 0 |

10.1.2Public Participation at the Implementation Stage

With the progress of project preparation and implementation, the implementing agency will conduct further public participation. See table 28.

Table 28Public Participation Plan

| Purpose | Mode | Time | Agencies | Participa nts | Topics |
|--|---|----------------|---|------------------|---|
| Safeguard the rights and interests of resettlement | Villager council | September 2017 | Affected villages | Affected farmers | Following the principle of voluntariness, 3-5 representatives were elected to form the institutions for the protection of the rights and interests of resettlement, including women and the elderly |
| Land acquisition announcement | Village bulletin board and Villager council | October 2017 | Chun'an PMO,the design agency, Land Bureau, Township and village cadres | Affected farmers | Announcement land acquisition area, compensation standard and resettlement way, etc. |
| The impact of resettlement review | Field investigation | February 2018 | Chun'an PMO,the design agency, Land Bureau, Township and village cadres | Affected farmers | 1) confirm the final impact quantity 2) list of occupied land and loss assets of resettlement 3) prepare the basic contract of compensation agreement |
| Public land compensation and RAP | Village bulletin board and Villager council | December 2017 | Chun'an PMO,the design agency, Land Bureau, Township and village cadresThe farmers support the project team; the bank responsible for the funding | Affected farmers | Compensation fees and payment methods; issuing information manuals; introducing the contents of the project; starting time; compensation standards and so on |
| The complaint procedures | Villager counci | December 2017 | County PMO; Land Bureau; township government; village committee | Affected farmers | Introduction of complaint and complaint procedure |

| Purpose | Mode | Time | Agencies | Participa nts | Topics |
|---|-----------------------------------|------------------------------------|---|------------------|--|
| Determine the income recovery plan and its implementation | Villager counci(many times) | Before implementatio n | Chun'an PMO,the design agency, Land Bureau, Township and village cadres | Affected farmers | Discuss the final income recovery scheme and compensation fund use plan |
| Training program | Villager counci | November 2017 ~ May 2018 | Implementing agency, the Bureau of labor insurance, the township and village cadres | Affected farmers | Discussing training needs |
| Monitor | Villager counci | February 2018 ~2019 February | resettlement external monitoring institutions, township and village cadres | Affected farmers | 1) the progress and impacts of resettlement 2) payment of compensation 3) information disclosure 4) recovery of production and living, relocation of housing restoration |

10.2 Impact assessment state

In the design and preparation stage of the project, the public participation has received good results:

Yejia water plant and supporting pipe network project

Background: The original proposed site is located in the Anchuan village. During the construction, the original water supply facilities of the village will be affected which will bring difficulties for local peoples' drinking water supply.

Participation Process

After the design plan has been determined, the requisition of land will be publicized and the disputes will be reflected within the prescribed time limit.

Government agencies hold meetings of the APs, informing the participants of the government's policy and compensation standards for resettlement compensation. And negotiate with the affected person about the resettlement compensation scheme and the cost.

The results of the meeting: The Chun'an farmers do not agree with the original design plan, asked the government to determine alternative Chun'an plant location.

According to the geological conditions and technical feasibility conditions, Wei Ping town government and village secretary Chun'an consultations again and determine the new site. The new site is located

in the YeJia village, and the water can also supply to the Chun'an village.

Participation results:

Avoid social conflicts caused by site selection.

Fully respect the views of the farmers and obtain their recognition and support, which is conducive to the development of the project.

The formation of a transparent and fair treatment scheme for land acquisition events can be extended to the use of other events.



Figure 4YeJia water-work new site

10.3 Grievance Procedure

During the preparation and implementation process of RAP, public participation is encouraged. But some unforeseen problems may occur during the whole process. In order to solve the problem effectively, ensure the successful implementation of the project construction and LA. The PMO has established a transparent and effective complaint and grievance procedure. The following grievance procedure will be followed.

Stage 1: If the APs are dissatisfied with the RAP, the APs can express their opinions to the ""Farmers' Group of supporting Zhejiang Qiandao Lake and Xi'an River Basin Water Resources and Ecological Environment Protection Project"" group and the group will make timely feedback within 2 weeks;

Stage2: If APs were no satisfied with outcomes, they can put forward an oral or written complaint to the village committee; if it is an oral complaint, it will be handled and kept as written record by the village committee. Village committee will solve it in two weeks.

Stage3: If APs still fell dissatisfied with the decision of the stage 2, they can put forward grievance to county PMO after receiving the decision. And county PMO will solved it in two weeks.

Stage4: If APs still fell dissatisfied with the decision of the county PMO, they can put forward grievance to district People's government after getting the decision.

Stage5: If APs still fell dissatisfied with the decision of the county PMO, they can put forward grievance to city project IA after receiving the decision, or they can go to the civil court according to the Civil Procedure Law.

APs can put forward grievance in any terms, including compensation rates and so on. Grievance procedure and channel mentioned above will be told to APs by manners such as meeting, notices and issuing of information booklet to ensure APs fully understand their right of grievance and how to conduct it. At the same time, multi-media will be used to make the APs know what they need to know, and the opinion and suggestions from all terms will be arranged to information advocacy, then researched and handled in time by resettlement agency at all levels. All agencies will accept complain and grievance of APs at free, reasonable fee because of these activities will be paid by contingencies of the total budget. During the whole construction process, the grievance procedure will be effectively to ensure APs can use it to solve relevant problems.

11.Entitlements Matrix

| Num ber | Social Project impacts | Name of Component | Affecte d degree | Affected population | Legal Framework and Policies of Resettlement | Compensation Rates for Resettlement Impacts of the Project |
|------------|---|--|----------------------------|--|---|---|
| 1 | Permanen t Acquisiti on of Collective Land | Rural drinking water safety promotion | 39.4 mu | 71 households with 272persons | Comprehensive compensation paid to rural collective economic organizations of land acquisition and the farmers, for the development of production and living resettlement of farmers; to obtain ground attachments compensation; access to training and employment opportunities, take measures to reduce its operating income; to meet the conditions of participation can enjoy the oldage insurance for Landless Farmers | Comprehensive compensation for arable land and construction land: PinMen Township, ,ZhongZhou Town, WangFu Township 4000yuan/mu, Comprehensive compensation for forest land and unused land: 19000 yuan / mu; ; |
| 2 | Temporar y Land Occupatio n | Rural drinking water safety promotion Comprehensive management of small watershed | 910.31 mu 58.4 mu | 1514househ olds with 6413persons | Comprehensive compensation paid to rural collective economic organizations of the APs, for the development of production and living resettlement of the APs Comprehensive compensation paid to rural collective economic organizations of the APs, for the development of production and living resettlement of the APs | Crop compensation fee: 1000 yuan/mu of arable land in general; construction projects completed by the unit to be restored according to the original standard, the original size |

| Num ber | Social Project impacts | Name of Component | Affecte d degree | Affected population | Legal Framework and Policies of Resettlement | Compensation Rates for Resettlement Impacts of the Project |
|------------|---|---|------------------|---------------------|---|--|
| | | Embankment reinforcement and river improvement | 402.98 mu | | Comprehensive compensation paid to rural collective economic organizations of the APs, for the development of production and living resettlement of the APs | |
| 3 | Affected Infrastruc ture and Ground Attachme nts | All Component | | | The affected infrastructure and the ground attachment will be compensated by the project unit in accordance with the reset price to the property right unit; the property right unit will be restored or rebuilt, or the project unit will be rebuilt according to the original standard and the original scale | At full replacement price |
| 4 | Affected females | All involved | | | | |
| 5 | Grievances and appeals | Compensation rates, payment and resettlement measures | | All APs | Free; all costs so reasonably incurred will be disbursed from the contingencies | |

12. Monitoring and Evaluation

In order to ensure the smooth implementation of RAP, realize resettlement targets, the project will monitor, including the internal monitoring and external monitoring, the implementation of resettlement actions according to the requirements of OP4.12-Involuntary Resettlement and Guidelines for M&E issued by WB.

Internal Monitoring will be conducted by the Chun'an PMO and Jian'de PMO, to ensure the LA activities can comply with the resettlement principles and plans listed in the RAP. The purpose of internal monitoring is to make the resettlement agencies to maintain good functions in the process of implementation of RAP.

Chun'an PMO and Jian'de PMO will engage an Independent External Resettlement Monitor. The objectives of external monitoring are:

Verifying resettlement implementation

Evaluating the effectiveness, impacts and sustainability of LA, compensation and resettlement activities;

Determining if such activities meet the safeguard policies and requirements in the RAP; and

Draw on experience and lessons for future safeguard policy making and project planning.

Identify issues or potential issues and recommend time-bound recommendations to allow the Chun'an PMO, Jian'de PMO and relevant agencies to take action or improve resettlement implementation

Independent external resettlement monitoring will be conducted by the external monitor to check all resettlement activities such as LA, compensation and livelihood restoration; to track the resettlement activity and evaluate whether the resettlement activities comply with national laws, regulations and OP4.12; to track whether APs' living and livelihood level improving or at least maintain the level before the project. External Resettlement Monitor will put forward suggestions to relevant agencies about the problems found during the monitoring, and to ensure the problems can be resolved in time.

12.1 Internal Monitoring

Chun'an PMO will establish an internal resettlement monitoring mechanism to check and manage resettlement activities. They will establish database for LA and resettlement, and uses it to make up RAP and monitor all resettlement and units affected by LA, proceed internal monitoring to the whole process of resettlement preparation and implementation.

12.1.1Implementing Procedure

During the implementation process, Chun'an PMO and PIUs collect and record information about resettlement and affected units according to the monitoring samples, deliver record of activities to PMO of the PPMO and keep continuous implementing monitoring. The PPMO will check implementing situation timely.

12.1.2 Monitoring Content

Payment, usage and in place of compensation funds for LA, implementing progress and quality of production development project for resettlement;

Investigation, coordination and suggestions for main problems in resettlement and IA during LA and resettlement implementing process;

Recovery situation of resettlement HHs' income level;

Recovery situation of vulnerable groups;

Payment, usage and in place of compensation funds for resettlement and LA units;

Degree of participation and negotiation during the LA and resettlement process;

Training for resettlement and its effect;

Work organization, training, schedule and efficiency of local resettlement office.

12.1.3 Internal Monitoring Report

Internal monitoring reports will be directed by the Chun'an PMO every three months and then submit to the PPMO. The PPMO will Prepare relevant data and information, and submit an internal monitoring report to WB at the end of every year.

12.2External Monitoring

12.2.1Independent Monitoring Agency

PMO will engage an Independent Resettlement Monitor to put forward external

monitoring. The independent monitoring and evaluation unit regularly monitors the resettlement activities, and puts forward advisory opinions. It takes tracking monitoring to the resettlement' living and livelihood level, and provides M&E report to the all PMO and the WB.

12.2.2Methodology and Scope of External Monitoring

Conduct baseline investigation needed by independent M&E to resettlement and villages affected by LA, gain baseline information for the living and livelihood level (living, production operation and income level) of resettlement and affected units.

Build M&E information system

Build M&E information system, establish database according to the classification of all kinds of data involving M&E, and provide computer aid to analysis and follow up monitoring.

M&E investigation

Local social-economy investigation: investigate the social-economy situation in project area; Resettlement IA monitoring: investigate the work ability and efficiency of resettlement IA; Typical temporary LA resettlement monitoring: compensation arrival rate, livelihood resettlement, rate of income change, employment rate, and degree of satisfaction to resettlement; Communal facilities: monitor the compensation; proceed of recovery and rebuild of the capacity of the communal facilities.; Communication and information disclosure: engaged in the Prepare of RAP and participate in the activities during the implantation process, monitor the effect of participation and the information public situation; Grievance: monitor the operating mechanism and efficiency of the grievance.

Report of external Monitoring

Dec. 2017, Determining M&E agency

Mar. 2018, preparing M&E outline and questionnaires, establishing monitoring mechanism, determining tasks and choosing monitoring sites.

May 2018, submitting No.1 M&E report (baseline report).

Dec 2018, submitting No.2 M&E report.

Jun 2019, submitting No.3 M&E report.

Dec 2019, submitting No.4 M&E report.

Jun 2020, submitting No.5 M&E report.

Dec 2021, resettlement completion report.

12.2.3 Monitoring Indicators

Social-economy indicator: per capita income, GDP and employment rate

Agency indicator: personnel consist, personnel quality, regulatory framework, facility,

finishing rate of affairs handling

Resettlement affected by LA: compensation arrival rate, livelihood resettlement, rate of income change, employment rate, and degree of satisfaction to resettlement.

Infrastructure: compensation arrival rate.

Appendix 1: Review of resettlement for pipeline extension project

| Water- work | The time of construction | certificat e for the use of state- owned land | Compen sation policy | The affected people | The affected villages | Any pro ble ms left behi nd | Remarks |
|----------------------------|--------------------------|--|----------------------------|---------------------|-----------------------|---|--|
| FenKou Water- work | 1996 | | | | | | the data has not yet been reported to the Land Bureau |
| LinQi Water- work | 2016.1 | Chun'an state- owned land (2003)No .029 | Not involve | Not involve | Not involve | Not invo lve | State-owned land |
| QiaoBe i Water- work | 2017 | Not involve | Not involve | Not involve | Not involve | Not invo lve | State-owned land, Originally belonged to Chun'an County Development Corporation's state- owned forest, ye Qi forest farm, but the state-owned land construction procedures have not been completed, so the Land Bureau has not filed, there is no state-owned land use permit. |
| LangCh uan Wate r- work | 2013 | (2000) 170 | Not involve | Not involve | Not involve | Not invo lve | State-owned land |
| JieShou Water- | 2013 | Not involve | Not involve | Not involve | Not involve | Not invo | JieShou Water-work was originally a new |

| work | | | | | | lve | industrial zone planning and construction for Chun'an County Industrial Zone, but because of policy reasons have not been completed, so the data has not yet been reported to the Land Bureau |
|--------------------------------|------|-----------------|----------------|----------------|----------------|--------------------|---|
| PingSh an Water- work | 2004 | (2006) 224 | Not involve | Not involve | Not involve | Not invo lve | State-owned land |
| JiangJia Water- work | 2006 | | Not involve | Not involve | Not involve | Not invo lve | State-owned land, Certificateless number, ground date (0405011) |

Appendix 2 Resettlement Information Booklet

The World Bank Zhejiang Qiandao Lake and Xin' an River Basin Water Resources and Ecological Environment Protection Project

Zhejiang Qiandao Lake and Xin'an River Basin Water Resources and Ecological Environment Protection Project'S Resettlement Information Booklet

Chun'an county PMO

February 2018

1 Basic Information of the Project

1.1 Basic information of the RAP

World Bank financed Xin'an River--Qiandao Lake Environmental Comprehensive Management Project, involves Chun'an County and Jiande City respectively. The total investment of the project is about 300 million yuan including the 150 million yuan of World Bank loan. The project involves 23 towns of Chun'an County, and total five subprojects. They are: (1) Chun'an County rural drinking water safety promotion project, (2) Chun'an County comprehensive management of small watershed project, (3) Chun'an County embankment reinforcement and river improvement project, (4) Chun'an County agricultural non-point source pollution control project, (5) Chun'an County forest ecological restoration project.

According to the resettlement impacts survey, the project impacts involve the permanent land requisition, temporary land occupation, and ground attachment. Among them, Chun'an County rural drinking water safety promotion project involves permanent land requisition and temporary land occupation; comprehensive management of small watershed, embankment reinforcement and river improvement project involve temporary land occupation; agricultural non-point source pollution control and forest ecological restoration projects do not cause any resettlement.

1.2 Project impacts

Using the World Bank loan, the total affected population of this project includes 1585 households with 6685 persons. Total 1034 households with 4461 persons (permanent land requisition affecting 71 households with 272 persons; while temporary land occupation affecting 963 households with 4189 persons) are impacted by the subproject of Chun'an County rural drinking water safety promotion. Total 56 households including 172 persons are impacted by the subproject of comprehensive management of small watershed, and total 495 households with 2052 persons are impacted by the subprojects of embankment reinforcement and river improvement.

(1) The permanent acquisition of collectively-owned land affects 12 administrative

villages in six towns / sub districts, covering about 39.4 mu of collective land, and affecting 71 households with 272 persons. For the affected collective land, there are 0.9 acres of arable land, 19.57 acres of woodland, 18.05 acres of garden, and other 0.87 mu lands respectively. Only 0.03%-2.82% of cultivated land in these 12 administrative villages is occupied by the project. For the detailed data see table 1.

Table 1 Collective land requisition for permanent collection of projects

| | | Land expropriation (MU) | | | | | | | Demograph ic impact | |
|----------------------|--|--------------------------------|------------------|--------------------|----------------------------|--------------------|-----------|------|---------------------|------------|
| Serial numb er | Entry name | Cul tiva ted lan d | woo dla nd | Gar den plot | Su rf ac e of th e w at er | Unu sed land | Oth er | Subt | Hous ehol d | Peo ple |
| 1 | Chun'an County rural drinking water safety promotion project | 0.9 | 19.5 | 18.0 | 0 | 0 | 0.8 | 39.4 | 71 | 272 |
| 2 | Chun'an County | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | comprehensive | | | | | | | | | |
|------|------------------|------|------|------|---|---|-----|------------------|-----|-----|
| | management | | | | | | | | | |
| | of small | | | | | | | | | |
| | watershed | | | | | | | | | |
| | project | | | | | | | | | |
| | Chun'an | | | | | | | | | |
| | County | | | | | | | | | |
| | embankment | | | | | | | | | |
| 3 | reinforcement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | and river | | | | | | | | | |
| | improvement | | | | | | | | | |
| | project | | | | | | | | | |
| Dron | portion (9/) | 2.28 | 49.6 | 45.8 | 0 | 0 | 2.2 | 100% | 0 | 0 |
| riop | Proportion (%) | | 7% | 1% | U | U | 1% | 100/0 | 0 | U |
| | Total | | 19.5 | 18.0 | 0 | 0 | 0.8 | 39.4 | 71 | 272 |
| | Total | 0.9 | 7 | 5 | U | 0 | 7 | J7. 4 | / 1 | 212 |

(2) **Temporarily occupies an area** This project occupies 1371.69 mu land temporarily, all of which are rural collective land. Among them, the rural drinking water safety improvement project occupies an area of 910.31 acres temporarily, and the small watershed comprehensive treatment project occupies an area of 58.4 acres temporarily, and the dike reinforcement and river reinforcement occupies 402.98 mu of land. The temporary occupation of collective land affects 22 villages and towns (sub-districts) in 127 townships and communities in Chun'an County, with impacting total 1514 households and 6413 persons. The main reasons for leading to lots of affected population are that: network extension (721.87km), the comprehensive management of

small watershed (105.3km), and dike reinforcement and river management (227km) are all linear projects, while their distances are very long; local farmers have less land per capita, and their lands have been divided into some small pieces. For the detailed data see table 2.

Table 2Temporary cover area of project

| | Tem | porary cov | Temporary occupation influence | | |
|---|-----------------------------|---------------------|--------------------------------|---------------|--------|
| Entry name | State- owne d land | collectiv e land | Subtot | Househo ld | People |
| Chun'an County rural drinking water safety promotion project | 0 | 910.31 | 910.31 | 963 | 4189 |
| Chun'an County comprehensive management of small watershed project | 0 | 58.4 | 58.4 | 56 | 172 |
| Chun'an County embankment reinforcement and river improvement project | 0 | 402.98 | 402.98 | 495 | 2052 |
| Total | 0 | 1371.69 | 1371.6 9 | 1514 | 6413 |

(3) **Peground appendages**. The ground appendages of this project include: Tomb 13; Camellia oleifera 29.81 mu; hickory 253; osmanthus tree 1982. See table 3for details.

Table 3 The project affects ground appendages

| Influenc e type | Compa ny | Chun'an County rural drinking water safety promotion project | Chun'a n County compre hensive manage ment of small watersh ed project | Chun'an County embankme nt reinforcem ent and river improveme nt project | Total |
|-------------------------------|----------------|---|---|--|-------|
| Grave | individu al | 13 | 0 | 0 | 13 |
| Tea tree | Mu | 29.81 | 0 | 0 | 29.81 |
| Pecan | Tree | 253 | 0 | 0 | 253 |
| Persimm on tree | Tree | 6 | 0 | 0 | 6 |
| Sweet scented osmanth us tree | Tree | 1982 | 0 | 0 | 1982 |

2 Legal and policy framework

2.1 Resettlement policy framework

The resettlement implementation of this project comply with the RAP. Any policy-changes in the process of the resettlement implementation, will be approved by World Bank. More details of the policy framework please see the Table.4

Table. 4 An overview of the resettlement policy framework

| | Policies | Time in Force |
|---------|--|----------------|
| | Land Administration Law of the People's Republic of China | 2004-8-28 |
| | Regulations on the Implementation of the Land Administration Law of the PRC (Decree No.256 of the State Council) | 1998-12- 27 |
| | Regulations Regarding on the Administration of Urban Housing Removal (Decree No.305 of the State Council) | 2001-11-1 |
| | Decisions for Further Reform and Strengthen Land | 2004-10- |
| Nationa | Administration of State Council ([2004] No. 28) | 21 |
| 1 Level | Guidelines on Improving Compensation and Resettlement Systems for Land Acquisition (MLR [2004] No.238) | 2004-11-3 |
| | Notice of the State Council on Strengthening Land Adjustment and Control (SC [2006] No.31) | 2006-8-31 |
| | Provisional regulations on the land occupation tax of the | |
| | People's Republic of China (Decree No.511 of the State Council) | |
| | Planning and design of land requisition for water conservancy and hydropower projects (SL290-2009) | 2009-11 |
| | | |
| Zhejian | Measures of Zhejiang Province for the Implementation of the Land Administration Law of the PRC | 2000-6-1 |

| | Policies | Time in Force | | | |
|---------|---|--------------------|--|--|--|
| g | Regulations on the Management of Urban Housing | 2007-3-29 | | | |
| Provinc | Demolition in Zhejiang Province | 2007 3 23 | | | |
| | Urban Road Management Method in Zhejiang Province | 2002-10-1 | | | |
| ial | (Decree No.511 of the Zhejiang People's Government) | 2002 10 1 | | | |
| Level | Notice on the Issues of Urban Road Occupying and Mining | 2007-6-1 | | | |
| | Fee (ZJF [2007] No.136) | 2007-0-1 | | | |
| | Notice on the Issuance of Rehabilitation Fee for Urban Road | 1993-11-1 | | | |
| | Excavation in Zhejiang Province (ZJC [1993] No.410) | 1775-11-1 | | | |
| | Methods of Land Reclamation in Zhejiang Province (Decree | 1993-6-9 | | | |
| | No.33 of the Zhejiang People's Government) | 1775-0-7 | | | |
| | Measures for the Transfer of State-owned Land Use Rights in | | | | |
| | Cities and Towns in Zhejiang Province (Decree No.33 of the | 1992-3-12 | | | |
| | Zhejiang People's Government) | | | | |
| | Notice of the People's Government of Zhejiang Province on | | | | |
| | the Administration of Land Occupation Tax Collection and | 2008-5-30 | | | |
| | Administration (ZZ [2008] No.38) | | | | |
| | Notice of the People's Government of Zhejiang Province on | | | | |
| | Adjusting the Collection Standard of Land Reclamation Fee | 2008-6-11 | | | |
| | (ZZF [2008] No.39) | | | | |
| | Notice of the People's Government of Zhejiang Province on | | | | |
| | Adjusting the Minimum Protection Standard of Land | 2009-1-1 | | | |
| | Expropriation (ZZF [2009] No.17) | | | | |
| | The Implementation Opinions of the People's Government of | | | | |
| | Zhejiang Province on Establishing the Social Insurance | 2010-1-1 | | | |
| | System for Urban and Rural Residents (ZZF [2009] No.62) | | | | |
| | Methods of the People's Government of Zhejiang Province on | | | | |
| | the Compensation and Farmers Basic Livelihood Safeguard | Safeguard 2010-1-1 | | | |
| | (Decree No.264 of the Zhejiang People's Government) | | | | |
| | Regulations on the Budget of Design of Zhejiang Water | 2010-10 | | | |
| | Conservancy and Hydropower Projects (2010) | 2010-10 | | | |

| | Policies | Time in | |
|---------|---|----------|--|
| | | Torce | |
| | Measures of Improving the Social Security System of Land Expropriated Peasants (CZF [2014] No. 144) | 2014-11 | |
| Chun'an | Measures of the Implementation of the Compensation and Resettlement of Acquiring Collectively-owned Lands (CZF [2015] No.162) | 2015-12 | |
| County | Measures of the Compensation of Acquiring the Houses on Collectively-owned Lands (CZF [2015] No.163) | 2015-12 | |
| | Notice of the Update Results of Basic Land Price in Chun'an County (CZF [2016] No.10) | 2016-11 | |
| | | | |
| World | Operational Policy OP4.12 on Involuntary Resettlement and Appendixes | 2002-1-1 | |
| Bank | Bank Procedure BP4.12 on Involuntary Resettlement and Appendixes | 2002-1-1 | |

2.2 Compensation deadline

The deadline for the definition of compensation eligibility is July 22, 2016 (the date of the WB identification mission leaving Hangzhou). The compensation deadline will be announced after the feasibility study is passed. Any new cultivated land, newly constructed houses or settled in affected areas will not be accept after the expiration date of compensation eligibility. Any building or planted tree built for extra compensation is not included.

2.3 Determination of compensation standards for project migration

2.3.1 LA of rural compensation standards

LA compensation is based on the "Land Administration Law of the People's Republic of China", "Guiding opinions on improving Land Administration and Resettlement Compensation", "Land Administration Law of the People's Republic of China"

implemented by Zhejiang province, "notice to update the basic data of benchmark land of Chun'an county" (Chun'an, 2016 No. 10) and Chun'an county "on the re-released notice of Chun'an county Land Administration area comprehensive price" and many other relevant policies and regulations.

The detailed compensation standards for the compensation of permanent LA of rural collective land in this project are shown in table5.

Table 5 Standards for compensation of LA of rural collective land (districts and cities)

Unit: 10000 Yuan / Mu

| | Chun'an County | | | | | | | | |
|-----------------|---------------------|-------------------------|-----------------------|------------------|--------------------|----------------|--|--|--|
| Items | Pingmen Villages | Fengshu ling Town | Zhongz hou Town | Weipin g Town | Wangfu Villages | Zitong Town | | | |
| Cultivate | | | | | | | | | |
| land, | 4.0 | 4.4 | 4.0 | 4.4 | 4.0 | 4.4 | | | |
| Constructive | | | | | | | | | |
| land | | | | | | | | | |
| forest land and | | | | | | | | | |
| unused forest | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | | | |
| land | | | | | | | | | |
| others | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | | | |

2.3.2Compensation standards of temporary occupation of collective land

The temporary occupation of collective land shall be approved by the competent department of LA of the municipal or county people's government at the site where the land is located. The land user shall sign contract with land administrative departments or the rural collective economic organization and villagers' Committee for temporary occupation of collective land, and pay compensation fees to the ownership of land.

Users of temporary land use shall use land in accordance with the temporary use of land contract and shall not build permanent buildings. When the contract is expired, the users are responsible for the restoration of the original use of the land; if cannot be restored, the users will pay compensation. The longest contract period is no more than 2 years. The provisional temporary land compensation standard is 1000 yuan / mu according to Zhejiang Province.

LA compensation is paid to Chun'an Land Bureau of Chun'an County by Qiandao Lake Construction Group Co., Ltd., and then transferred to AFs.

2.3.3Compensation standards for affected ground attachments and ground attachments

Compensation standards for affected ground attachments and ground attachments are carried out in accordance with the principle of replacement.

This detail of compensation standards for affected ground attachments and ground the detailed influence is shown in table 6.

Table 6Compensation standards for affected ground attachments and ground attachments

| Affected | | Compensation standard (Yuan/Unite) | | | | | | |
|------------------------------|-------|------------------------------------|-------|--------|-------|--------------|--|--|
| items | Unite | Extremely Large | Large | Middle | Small | Seedlin g | | |
| Hickory | Zhu | 1800 | 1440 | 1080 | 360 | 18 | | |
| Persimmon tree | Zhu | 130 | 104 | 65 | 19.5 | 5 | | |
| Sweet Scented osmanthus tree | Zhu | 338 | 208 | 143 | 78 | 6.5 | | |
| Mulberry | Mu | | | 4000 | | | | |

| Affected | | Com | pensation s | tandard (Y | /uan/Unite |) | | |
|------------------------------|-------|--------------------|--------------|-------------|---------------|--------------|--|--|
| items | Unite | Extremely Large | Large | Middle | Small | Seedlin g | | |
| (piece) | | | | | | | | |
| Bamboo | Zhu | | | 5.2 | | | | |
| Tea plantation (area) | Mu | Average | e, 4000-6000 |), Good qua | ılity, 6000-1 | 0000 | | |
| Oil tea garden | Mu | | 2 | 2000-4000 | | | | |
| Oil tea garden (odd) | cm | | | 10 | | | | |
| 380V pole | Zhu | | | 1800 | | | | |
| Grave | Ge | | 1800 | | | | | |
| Nursery garden | Zhu | | | 10000 | | | | |

3 Resettlement organization

To ensure the implementation of the project, the World Bank loan work leading group is established in Zhejiang province. Water conservancy and Hydropower Investigation and Design Institute completed preliminary research work and environmental assessment work, the resettlement plan is conducted by Hohai University. At the same time, each project from city and county level also establish the project office, who is responsible for the preparation of the resettlement program of each sub project, land acquisition and relocation, implementation management and internal monitoring, etc.. The collection and resettlement of rural collective land shall be coordinated by the Bureau of land and resources of the Chun'an County, and shall be handled by the township land authorities. Project resettlement organizations and responsibilities are shown in table 8.

Table 1Responsibilities of organizations

| Responsibility | Organization | County | Pesonnel |
|--------------------|--|------------------|-----------------|
| Full consideration | Land Bureau of Chu'An | LA office | |
| Implementation | All levels of government and Land Bureau | Wangfu Village | Cheng Honglai |
| | | Weiping Town | Zhang Weibin |
| | | Zhongzhou Town | Jiang Xiangyong |
| | | Ping Men village | Wang Daoping |
| | | Fengyeling Town | Yu Qingping |
| | | Zitong Town | Xiao Jinping |

In the implementation of the world bank loan in Zhejiang Qiandao Lake and the Xin'An river basin water resources and ecological environment protection project in Zhejiang Province, the following 5 institutions is grouped, which is responsible for the city project resettlement activities planning, management, implementation and monitoring,

respectively as follows:

Zhejiang World Bank loan leading group

Project implementation unit

Government functional departments

Project design unit

National research Centre for resettlement, Hohai University

Zhejiang world bank loan leading group is in charge of the project land acquisition, demolition and resettlement activities of the leadership, policy formulation, resettlement planning, preparation of internal monitoring report for the world bank report.

The project implementation unit shall be responsible for the resettlement investigation, the preparation of the resettlement program and the implementation of the land requisition.

Government departments are responsible for land acquisition and resettlement compensation standards, the construction land acquisition procedures, review, approval and implementation, coordination, management, supervision, arbitration.

The project design department shall be responsible for the design of the project and the determination of the specific land expropriation and removal area.

National research Centre for resettlement, Hohai University is responsible for providing technical support and compiling resettlement action plans.

To ensure the smooth implementation of resettlement plan, strengthen the communication with the Zhejiang province project office, resettlement enforcement agencies and the world bank timely and effective, the sub project office also arranged a full-time staff who is responsible for each the implementation, coordination and organization. These personnel are well-experienced since they are engaging in land acquisition and demolition related work for many years.

4 Grievance Procedure

During the preparation and implementation process of RAP, public participation is

encouraged, so great disputes may not occur. But some unforeseen problems may occur during the whole process. In order to solve the problem effectively, ensure the success implementation of the project construction and LA, The project office has established a transparent and effective complaint and grievance procedure. Basic grievance procedure is following:

Stage 1: If the APs are dissatisfied with the resettlement plan, the APs can express their opinions to the "villagers support Xin'An River Qiandao Lake environmental comprehensive treatment project" group, and the group will make timely feedback within 2 weeks;

Stage2: If APs feel dissatisfied with outcomes, they can put forward an oral or written complaint to the village committee; if it is an oral complaint, it will be handled and kept as written record by the village committee. Village committee will solve it in two weeks. Stage3: If APs still fell dissatisfied with the decision of the stage 2, they can put forward grievance to county PMO after receiving the decision. And county PMO will solved it in two weeks.

Stage4: If APs still fell dissatisfied with the decision of the county PMO, they can put forward grievance to district people's government after getting the decision.

Stage5: If APs still fell dissatisfied with the decision of the county PMO, they can put forward grievance to city project IA after receiving the decision, or they can go to the civil court according to the Civil Procedure Law.

APs can put forward grievance in any terms, including compensation rates and so on. Grievance procedure and channel mentioned above and the name, location, person in charge and telephone number of related departments will be told to APs by manners such as meeting, notices and issuing of information booklet to ensure APs fully understand their right of grievance and how to conduct it. At the same time, multi-media will be used to strengthen the publicity, and opinion and suggestions from all terms will be arranged to information advocacy, then researched and handled in time by resettlement agency at all levels. All agencies will accept complain and grievance of

APs at free, reasonable fee because of these activities will be paid by contingencies of the total budget. During the whole construction process, the grievance procedure will be effectively to ensure APs can use it to solve relevant problems.

5 Implementation schedule

According to the schedule, the projects are expected to be completed in four years from 2018 to 2023. The main resettlement work is expected to start from 2018 and end in 2020.

The basic principles of scheduling are as follows:

- (1) Land acquisition, relocation and resettlement shall be completed at least 1 months before the construction of the project, so as to enable the APs to have sufficient time to prepare the production and recovery plan.
- (2) In the process of resettlement, the APs will have the opportunity to participate in the project. The scope of LA areas shall be announced before construction, and the publicity manual for resettlement shall be issued and prepared for public participation;
- (3) All kinds of compensation fees shall be fully paid directly to the ownership of property 3 months ahead of approving of LA compensation and resettlement programs. Any units and individuals shall not use the compensation fee on behalf of APs. The compensation fee shall be fully paid with no exception.

According to the progress of the preparation and implementation of land acquisition and resettlement, the overall schedule for resettlement of sub projects shall be worked out. The actual implementation time may be adjusted due to deviations from the overall progress of the project. Detailed implementation time and contents are shown in table 9.

Table 9Sub-project LA and relocation Timetable

| Stage | Task Name | Chu'An County |
|-------------|--|-----------------|
| Preparation | Determination of LA and resettlement | Aug. 2017 |
| | Physical investigation of land requisition and removal | Spet. 2017 |
| | Preliminary survey of social economy | Oct.2017 |
| | Consultation on resettlement programs | Aug. 2017 |
| | Preparing resettlement action plan | Aug.to Oct.2017 |
| | Releasing resettlement action plan | Oct. 2017 |

| Stage | Task Name | Chu'An County |
|--------------------|--|----------------------|
| | Resettlement action plan approved | Oct. 2017 |
| Implementa tion | Collection of rural collective land related approval procedures | Mar. 2018 |
| | Hold the mobilization meeting of land requisition and removal, and announce the policy | Mar. 2018 |
| | Announcement of land requisition | Mar. 2018 |
| | Negotiate and sign an agreement for compensation and placement | Mar. 2018 |
| | facility relocation | Mar. to Jun. 2018 |
| | Construction land delivery | Jun. 2018 |
| M&E | | Dec. 2017 ~Aug. 2020 |