

Resettlement Plan

November 2016

PRC: Guizhou High Efficiency Water Utilization
Demonstration in Rocky Desertification Area Project

Resettlement Plan for Nayong County

Prepared by the Guizhou provincial government for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 23 November 2016)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1451
\$1.00	=	CNY6.8883

ABBREVIATIONS

AAOV	–	average annual output value
ACWF	–	All China Women's Federation
AH	–	Affected households
ADB	–	Asian Development Bank
AHH	–	affected household
AP	–	affected person
CFRD	–	Concrete-Faced Rockfill dam
DMS	–	detailed measurement survey
EMA	–	external monitoring agency
EMDP	–	detailed ethnic minority development plan
GPG	–	Guizhou provincial government
GWIGC	–	Guizhou Water Investment Group Cp. Ltd.
LAR	–	land acquisition and resettlement
M&E	–	monitoring and evaluation
MLS	–	minimum living security
PMO	–	project management office
PPMO	–	provincial project management office
PPTA	–	project preparatory technical assistance
PRC	–	People's Republic of China
PWPR	–	Preparatory works for Pingqiao Reservoir
RP	–	Resettlement plan

NOTE

In this report, "\$" refers to US dollars.

This resettlement plan is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

**ADB Loan: Guizhou High Efficiency Water Utilization Demonstration
in Rocky Desertification Area Project**

Resettlement Plan for Nayong County

(Final Draft for ADB Approval)

Nayong County People's Government

November 2016

LIST OF ACRONYMS AND MEASURES

AAOV	Annual Average Output Value
ACWF	All China Women's Federation
ADB	Asian Development Bank
AHs	Affected Households
APs	Affected Persons
CFRD	Concrete-Faced Rockfill Dam
DMS	Detailed Measurement Survey
EMA	External Monitoring Agency
FSR	Feasibility Study Report
GDRC	Guizhou Development and Reform Commission
GPG	Guizhou Provincial Government
GRO	Guizhou Resettlement Office for Water Resources and Hydropower Engineering
HD	House Demolishment
HHs	Households
HCGECLGISDI	Hydro China Guiyang Engineering Corp. Limited Guiyang Investigation and Survey Design Institute
IA	Implementing Agency
LA	Land Acquisition
LAR	Land Acquisition and Resettlement
LO	Land Occupation
M&E	Monitoring and Evaluation
MLG	Minimum Living Guarantee
NCG	Nayong County Government
NDRC	National Development and Reform Commission
NLRAB	Nayong Land and Resources Administration Bureau
NPMO	Nayong Project Management Office
NRO	Nayong Resettlement Office
No.	Number
PLA	Permanent Land Acquisition
PLG	Project Leading Group
PMO	Project Management Office
PPTA	Project Preparatory Technical Assistance
PRC	Peoples Republic of China
RC	Resident Committee
RIB	Resettlement Information Booklet
RO	Resettlement Office
RP	Resettlement Plan
SCO	Street Committee Office
SPS	Safeguard Policy Statement
TLO	Temporary Land Occupation
TOR	Terms of Reference
US\$	United States Dollar
kg	Kilograms
kW	Kilowatts
km ²	Square Kilometer
m ²	Square Meter
%	Percentage
L	Liter
mu	Chinese area measure for land, 1 mu = 1/15 ha (1 ha = 15 mu)
CNY	Chinese currency Yuan
V	Voltage

TABLE OF CONTENT

COMMITMENT LETTER OF THE RESETTLEMENT PLAN

EXECUTIVE SUMMARY.....	1
E1. Project Introduction	1
E2. Impact Scope of Land Acquisition and Resettlement.....	1
E3. Laws, Regulations, Policies and Rights	2
E4. Public Participation and Grievance.....	2
E5. Resettlement and Livelihood Restoration	3
E6. Institution Setting.....	3
E7. Resettlement Budget and Implementation Schedule	3
E8. Monitoring and Evaluation	4
I. INTRODUCTION.....	5
1.1 Background	5
1.2 Contents of the Project	6
1.3 Scope of the Impacts for Pingshan Reservoir Component.....	7
1.4 Measures to Reduce Impacts of Land Acquisition and Resettlement.....	13
1.5 Project Institution.....	13
1.6 Budget and Implementation Plan of Resettlement	14
1.7 Design Process of Land Acquisition and Resettlement Plan for Nayong Pingshan Reservoir.....	14
II. ANALYSIS OF PROJECT IMPACT.....	17
2.1 Definition of the Project Impact	17
2.2 Project Scope	17
2.3 Physical Investigation for Acquisition of Construction Land	19
2.4 Socio-economic Surveys	23
2.5 Acquisition of Collective-Owned Land.....	23
2.6 Production Resettlement Population.....	25
2.7 Decrease of Cultivated Land Due to Acquisition of Collective Land	27
2.8 Temporary Land Occupation	33
2.9 Residence Building Affected by the Project	33
2.10 Affected Ground Attachments and Various Auxiliaries	37
2.11 Population Affected by the Project	37
III. SOCIO-ECONOMIC SURVEY	39
3.1 Socio-economic Development in Nayong County	39
3.2 Social Insurances Situation of Nayong County	41
3.3 Education in Nayong County	41
3.4 Health System in Nayong County	42
3.5 Socio-economic Situation of the Project Area	42
3.6 Gender Analysis	50
IV. LEGAL FRAMEWORK AND POLICY	51
4.1 Overview	51
4.2 Policies and Regulations	51
4.3 Summary of Laws, Regulations and Policies	53

4.4 Cut-off Date	59
4.5 Compensation Standard	59
4.6 Entitlement Matric.....	72
V. PUBLIC PARTICIPATION AND CONSULTATION	76
5.1 Public Participation and Consultation Activities during the Project Preparation Phase.....	76
5.2 Measures to Improve Public Participation and Consultation	80
5.3 Information Disclosure	80
5.4 Public Participation Plan duirng RP Implementation	81
VI. RESETTLEMENT AND REHABILITATION PLAN	83
6.1 Objectives and Principles of Resettlement and Rehabilitation.....	83
6.2 Calculation of Resettlement Needs and Selection of Destinations of the Resettlers ..	86
6.3 Rehabilitation Plan for Households Affected by House Demolition	90
6.4 Rehabilitation Plan for Production Measures and Livelihood of Farmers Affected by Land Acquisition.....	93
6.5 Other Income Restoration Measures	107
6.6 Enhance Production Skills Training and Non-Agricultural Employment of the Resettlers	107
6.7 Projection of Production and Living Standards for Rural Resettlement Population in the Reservoir Inundated Areas	108
6.8 Restoraion of Temporary Land Occupation	110
6.9 Recovery of Infrastructure and Ground Attachments	110
6.10 Infrastructure of the Resettlement Areas	110
6.11 Post Resettlement Assistance for the APs.....	112
6.12 Measures of Vulnerable Groups	112
6.13 Measures of Woman Development.....	112
VII. RESETTLEMENT BUDGET AND SCHEDULE.....	114
7.1 Composition of the Resettlement Funds	114
7.2 Cost Estimates of the Resettlement Funds	116
7.3 Allocation, Management and Monitoring of Resettlement Fund	118
7.4 Resettlement Schedule.....	119
VIII. RESETTLEMENT ORGANIZATION INSTITUTION	123
8.1 Organizational Structure	123
8.2 Responsibilities of Each Institution	123
8.3 Persons and Facilities of Resettlement Agencies at All Levels	124
8.4 Measures to Strengthen the Institutional Capacity	125
IX. COMPLAINTS AND GRIEVANCE	126
9.1 Approach of Grievance and Complain Collection.....	126
9.2 Complaints and Grievance Procedures	126
9.3 Principle of Dealing with Complaints.....	127
9.4 Content and Approach of Complaints	127
9.5 Feedback Recording and Tracking of Complaint and Appeal	128
9.6 Contact for Complaint and Appeal Expression.....	128
9.7 Cost of Solving the Complaint and Appeal.....	129

X. RESETTLEMENT MONITORING	130
10.1 Internal Monitoring.....	130
10.2 External Monitoring.....	131
 ATTACHMENT I RESETTLEMENT INFORMATION BOOKLET.....	134
ATTACHMENT II EXTERNAL MONITORING AND EVALUATION OUTLINE	147

COMMITMENT LETTER OF THE RESETTLEMENT PLAN

Dear Asian Development Bank:

The *Resettlement Plan for Nayong County Pingshan Reservoir and Water Transfer Facility Component* of ADB financed Guizhou High Efficiency Water Utilization Demonstration in Rocky Desertification Area Project has been approved and complies with ADB's Safeguard Policy Statement, as well as complies with requirements of the relevant laws, regulations and policies of People's Republic of China. The Resettlement Plan includes additional measures, implementation and monitoring arrangements in order to better accomplish resettlement work. The implementation of land acquisition and resettlement activities for *Pingshan Reservoir and Water Transfer Facility Component* will be strictly in accordance with this "Resettlement Plan for Nayong County".

Nayong County Government (NCG) hereby affirms the contents of this Resettlement Plan and ensures that the resettlement funds will be made available as stipulated in the RP. NCG has discussed the resettlement plan with relevant units and has obtained their concurrence. Nayong Resettlement Office under NCG has been authorized as the responsible agency to manage the implementation of the resettlement activities for Nayong Pingshan Reservoir and Water Transfer Facility Component. Nayong County Government has authorized the Nayong County Reservoir and Ecology Resettlement Office for the implementation of the RP.

The land acquisition and resettlement of the Nayong Pingshan Reservoir and Water Transfer Facility Component is prepared based on *Nayong Pingshan Reservoir Project Construction Land Acquisition and Resettlement Planning Report*, and has been approved by Guizhou Provincial Government based on the DMS, and the preliminary design, which will be updated based on Resettlement Implementation Plan, and the RP will be submitted to ADB for review and approval before the actual implementation of land acquisition and resettlement.

Nayong County Government 

Nayong County Reservoir and Ecology Resettlement Office



November 2016

EXECUTIVE SUMMARY

E1. Project Introduction

1. The Guizhou High Efficiency Water Utilization Demonstration in Rocky Desertification Area Project (the overall Project) consists of five components: Pingqiao Reservoir Component and Water Transfer Facility Component, Pingshan Reservoir and Water Transfer Facility Component, Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Anlong County, Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Nayong County, and Policy Reform, Capacity Development and Knowledge Sharing.

E2. Impact Scope of Land Acquisition and Resettlement

2. The Pingshan Reservoir and Water Transfer Facility Component will involve permanent land acquisition of 1,806.4 mu in total, including 56.71 mu state-owned land and 1,749.69 mu collectively-owned land, of which 548.56 mu are cultivated land. The impact will be significant as a total of 25 villages in Zongling, Yongxi, Shuguang and Yangchang Townships will be affected involving 282 households and 901 persons to be affected by permanent and temporary cultivated land acquisition; and a total of 11,449.5 m² of houses will be demolished with 447 people in 95 rural households to be affected, including 221 females, who will also be affected by both land acquisition and house demolition. The Project also needs 700.62 mu temporary collectively-owned land occupation, and 50 people to be affected by temporary land occupation, which is included in the number of people affected by land acquisition. Of the total affected households and population, 29 households and 100 persons belong to vulnerable groups, including 10 households and 21 persons living under minimum living guarantee (MLG) and 19 households and 79 persons' main housing area is less than 25 m² of brick-concrete structure. The scope of the Project impact is presented in **Table E-1**.

3. In addition, a total of 620.8 mu of cultivated land need to be adjusted through land use right transfer (LURT) in the resettlement areas to allocate to relocated persons, and 40.23 mu of land will be acquired for hosting the 447 relocated population in the resettlement areas at the base year. For the households who choose scattered resettlement, most of them will use their own contracted land for house construction, and for the proposed centralized resettlement site of Dongfengyakou Group, no household or people will be affected as it is state-owned land.

4. The Restoration of Environment, Ecology, and Land Productivity in Rocky Desertification Area Component will not involve land acquisition and resettlement based on PPTA due diligence. Therefore, the resettlement plan is specifically cover the Pingshan Reservoir and Water Transfer Facility Component.

Table E-1: Project Impacted Scope

Name of Sub-Project	Permanent Land Acquisition			TO of Land	HD m ²	HD (No.)		LA (No.)		Subtotal (No.)	
	Collective-owned	State-owned	Subtotal	Collective-Owned ¹		AHs	APs	AHs	APs	AHs	APs
	mu	mu	mu	mu							
Pingshan Reservoir Inundated Area	644.39	56.23	700.62	715.19	9,245.37	74	337	224	717	224	717
Dam Site Engineering Construction Area	803.65	0.48	804.13	0.00	2,204.09	21	110	51	162	51	162
Water Supply and Irrigation Engineering Area	301.65	0	301.65	0.00		0	0	7	22	7	22
Subtotal	1,749.69	56.71	1,806.40	715.19	11,449.46	95	447	282	901	282	901

Note: ¹ A total of 15 households and 50 people will be affected by temporary land occupation, and all of them will also be affected by permanent land acquisition.

E3. Laws, Regulations, Policies and Rights

5. The target of the resettlement is to avoid or minimize involuntary resettlement where feasible by developing and comparing a series of design alternatives, and providing adequate compensation and entitlements to allow those affected to at least maintain their pre-project standard of living, with the prospect of improvement. The compensation of the permanent land acquisition is based on (i) the Land Administration Law of PRC, amended in 2004, Rural Land Contract Law of People's Republic of China (March 1st, 2003), State Council Decision to Deepen Reform and Strictly Enforce Land Administration (October 21st, 2004), Instruction on Updating Land Acquisition Compensation and Resettlement Policy (November 3rd, 2004), Regulation on Land Acquisition Compensation and Resettlement for the Construction of Large- and Medium-Size Hydropower Works (2006), Opinions of the State Council on "Improvement of Post-Resettlement Support Policies for Reservoir-Induced Resettlement (2006). Meanwhile, the Project will also adopt relevant policies on land acquisition and resettlement of Guizhou Province and Nayong County of Bijie Prefecture. The resettlement plans were prepared to comply with ADB's SPS, 2009.

6. Based on the consultations with local governments and those affected, and general practice in the project counties, the resettlement principles of the Nayong RP are: (i) land acquisition and involuntary resettlement will be avoided or minimized where feasible by developing and comparing a series of design alternatives; (ii) compensation and entitlements provided must be adequate to allow those affected to at least maintain their pre-project standard of living, with the prospect of improvement; (iii) land temporarily occupied and the period for disruption are to be kept to a minimum; (iv) all the people affected, legal and illegal, are to be taken into consideration and accounted for compensation; (v) resettlement plan should be prepared and implemented in accordance with state land rehabilitation policy, national economic and social development plans; (vi) all those affected will be adequately informed about eligibility, compensation rates and standards, livelihood and income restoration plans, and project timing; (vii) resettlement plan will be coordinated with such things as regional development, economic development and environmental protection; (viii) practical and feasible measures will be formulated to restore the affected items; (ix) a preferential policy and assistance will be provided to vulnerable groups in such things as employment; and (x) close monitoring and timely actions will be carried out to identify and resolve any problems.

E4. Public Participation and Grievance

7. During the Project preparation stage, a series of consultations were conducted with the affected people, the village committee, the project resettlement offices at all levels, as well as other Project stakeholders (approximately 1,225 people). Through physical index measurement, socio-economic survey and public participation and consultation, the affected people have participated in land requisition compensation and resettlement plan preparation, their concerns and comments have been incorporated into the Resettlement Plan for Nayong County. Further consultation will be carried out in the detailed design phase of the Project and the program implementation process. Grievance redress mechanisms have been established for the affected people, and grievance channels include: (i) village committee/resident committee; (ii) township (town) government/street committee; (iii) Nayong PMO and the project implementing agency (Pingshan Reservoir Management Office); (iv) Nayong County Land and Resources Administration Bureau or Nayong County Resettlement Office; (v) external monitoring agency or ADB.

8. The resettlement information booklets will be distributed to the affected people and villages, and the draft "*Resettlement Plan for Nayong County*" will be uploaded onto the ADB website.

E5. Resettlement and Livelihood Restoration

9. For people losing land, various livelihood rehabilitation strategies will be implemented to restore the livelihood and income of land loss farmers, including replacement land, cash compensation, pension and social insurance, employment opportunity generation, development of cultivation and livestock breeding, development of private-operated businesses, skill training, etc.. A post-resettlement support fund will be provided to the relocated people at CNY 600 per resettler per year for 20 years after their resettlement. For people losing housing, they will receive “cash compensation” or “cash plus house plot” in the resettlement sites. With cash compensation, the resettled residents could re-construct their houses in the resettlement sites or purchase houses in other places they prefer. It has been planned to adjust 620.80 mu of land from the resettlement areas to host the resettled households, which will cause impacts to host villages. However, the villagers in the host communities are willing to give out part of their land to the relocated families and they would like to get cash compensation to open their own businesses or to invest in high value crops or go out to other cities or provinces for employment.

10. For vulnerable groups, attention and assistance will be given to their special needs and expectations. The Pingshan Reservoir Management Office will supervise implementation to ensure these vulnerable persons receive adequate compensation, livelihood and income restoration, housing arrangement, special fund, and minimum living guarantee (MLG), and assistance to restore their living conditions and incomes.

E6. Institutional Setting

11. Nayong County PMO will take the supervision responsibilities for the implementation of the resettlement plan, including the preparation and implementation management of the resettlement plan, progress reports and internal monitoring of resettlement plan, and coordinating with external monitoring agency. Nayong County Reservoir and Ecology Resettlement Office (Nayong County RO) will be responsible for the actual implementation and management of the resettlement plan, including the confirmation of affected land and houses, consultation with the affected people, disbursing of compensation funds, and implementation of the resettlement measures for the affected people, etc..

12. Township (town) governments and village committees/resident committees will actively participate in the implementation of the *Resettlement Plan*. In order to guarantee the smooth implementation of the Project, Nayong County PMO will organize training by inviting professional resettlement officers/specialists from training institutions with strong experiences in LAR implementation or study tour to other cities / provinces with good and successful implementation of land acquisition and resettlement.

E7. Resettlement Budget and Implementation Schedule

13. All costs of the resettlement have been included in the total budget of the resettlement plan as part of the Project budget. In accordance with the price of October 2016, the total resettlement budget of the Pingshan Reservoir and Water Transfer Facility Component is CNY 77.2358 million.

14. Pingshan Reservoir and Water Transfer Facility Component will start pre-construction works in December 2016 and will start dam construction in April 2017 and complete in April 2021. The process for land acquisition and demolish compensation, and compensation for Pingshan Reservoir and Water Transfer Facility Component will start in November 2016 and provide lands in the dam site area for construction contractors to

commence in April 2017. All resettlement measures will be completed and the resettlement target will be achieved before December 2020.

E8. Monitoring and Evaluation

15. The *Resettlement Plan for Nayong County* also includes a detailed plan for internal and external monitoring and evaluation. During resettlement implementation, Nayong County Project Management Office will submit an internal monitoring report to ADB semiannually. Guizhou Project Management Office will hire an experienced organization as an independent external monitoring agency to conduct external monitoring and evaluation (M&E) and prepare external M&E reports for the implementation of the resettlement plan. Prior to the implementation of the resettlement plan, external monitoring agency will complete a comprehensive baseline survey and submit the first monitoring report in March 2017. After that, the agency will submit a monitoring report to ADB semiannually until the completion of the resettlement, and submit a monitoring report to ADB annually within two years after the resettlement completion.

I. INTRODUCTION

1.1 Background

16. The overall Project consists of five components: Pingqiao Reservoir and Water Transfer Facility Component, Pingshan Reservoir and Water Transfer Facility Component, Restoration of Environment, Ecology, and Land Productivity in Rocky Desertification Area Component in Anlong County, Restoration of Environment, Ecology, and Land Productivity in Rocky Desertification Area Component in Nayong County, and Policy Reform, Capacity Development and Knowledge Sharing. The total investment of the overall Project is CNY 2.1241 billion, with US\$ 150 million from the Asian Development Bank (hereinafter called the "ADB"). Of the total Investment of the overall Project at CNY 2.1241 billion, the total investment of Pingshan Reservoir and Water Transfer Facility Component (thereafter called the Project) is CNY 802.16 million or 37.8% of the total overall Project investment. The construction period of Pingshan Reservoir and Water Transfer Facility Component is from 2017 to 2021. The implementation of the overall Project will increase irrigation by 46.98 million m³/year and the town water supply by 44.71 m³/year, solve the town and rural drinking water for 362.9 thousand people, and develop irrigation area by 138,877 mu. The Pingshan Reservoir and Water Transfer Facility Component in Nayong County will increase town water supply by 4.74 million m³/year and irrigation by 11.26 million m³/year, solving the town and rural drinking water of 70,400 people, and develop 59,330 mu irrigation area.

17. Pingshan Reservoir is located in Nayong County, Bijie City of Guizhou Province, dam site construction consists of a concrete-faced rockfill dam (CFRD), right bank spillway tunnel and right bank-run water intake tower within the reservoir. Reservoir's normal water storage level's elevation is 1,685 m, maximum flood level is 1,686.88 m, the total capacity is 14.63 million m³, dead storage capacity is 1.85 million m³, regulated storage capacity is 11.87 million m³, maximum dam height is 94 m, and engineering grade is Class III. The engineering scale belongs to medium-scale project. Pingshan water supply and irrigation system (sub-component) mainly consist of water intake, waist rocky tunnel, regulating pool, south main pipe, west main pipe, 12 branch pipes, and terminal regulating pool. The total length of the water transmission lines is 40.28 km.

18. According to the Project schedule, Pingshan Reservoir and Water Transfer Facility Component will start pre-construction in December 2016, start main construction in April 2017 and complete in April 2021.

19. The implementation of the Project will also bring several benefits. It will increase the farmers' income through improving agricultural infrastructure in the project areas, thereby reduce the poverty; it can also improve the condition of regional soil and water contained in air, and reduce the environmental deterioration of groundwater, environmental geological disasters and disease problems caused by the over exploitation of groundwater, and reduce the ecological environment treatment costs. It is conducive to steadily keep soil and water conservation, maintain the outcomes of soil and water conservation, and reduce the costs of soil erosion retreatment.

20. Pingshan Reservoir Inundation and Irrigation Command Area Map is presented in **Figure 1-1**.

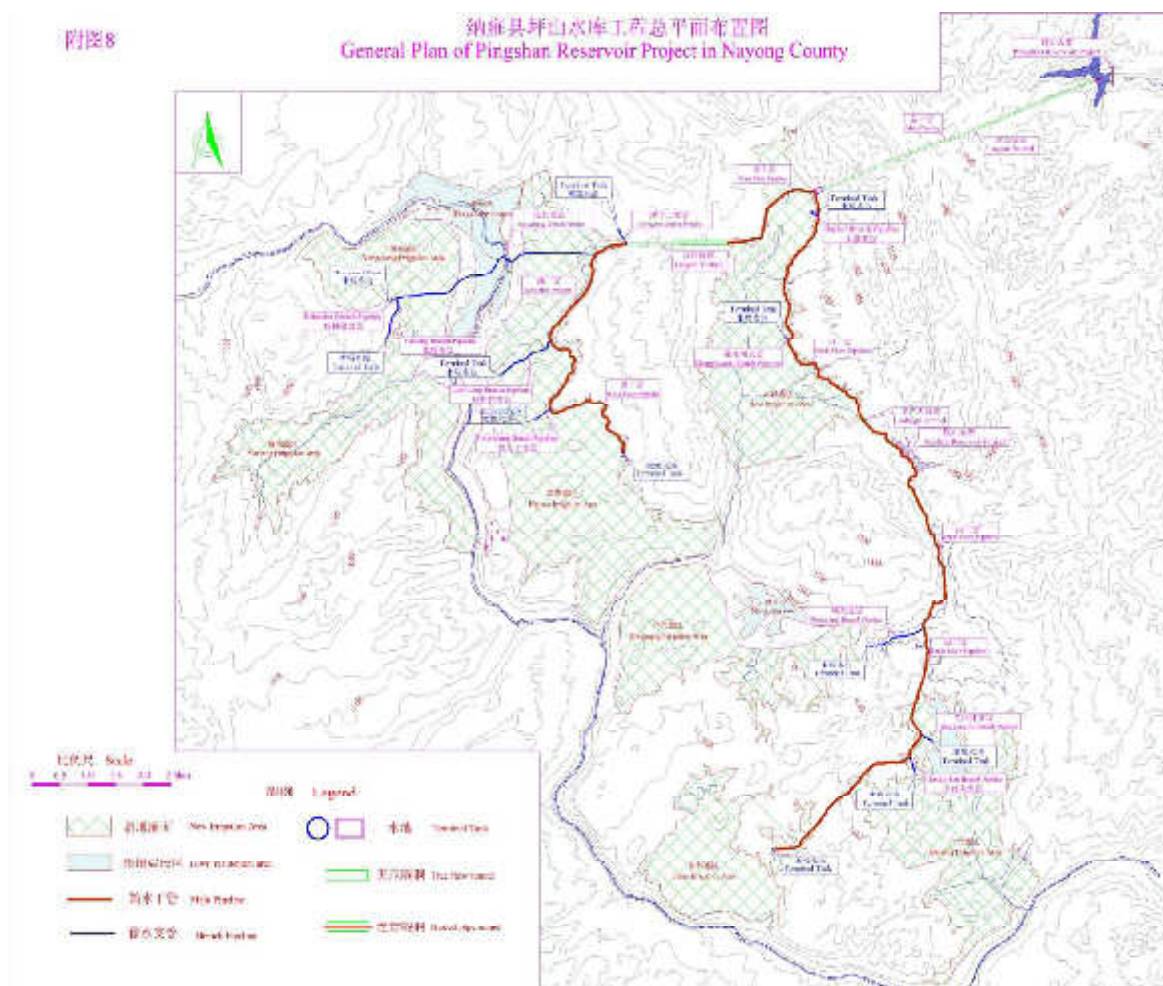


Figure 1-1: Map of Pingshan Reservoir Inundation and Irrigation Command Areas

1.2 Contents of the Project

21. Pingshan Reservoir will be located at the east longitude 105°15'~105°18', north latitude 26°39'~26°41' in Nayong County, Mahuangqing Zongling Township Nayong County, Bijie Maio and Buyi Prefecture of Guizhou Province. The distance is about 7 km from Zongling Township, and 19 km from Nayong County. The proposed dam site engineering consists of CFRD, right bank spillway tunnel and right bank-run water intake tower within the reservoir. Pingshan reservoir maximum flood level is 1,686.88 m, the total capacity is 14.69 million m³, maximum dam height is 98 m; normal storage level is 1,685 m, the storage capacity corresponding to the normal storage level is 13.71 million m³; dead water level is 1,642 m, dead storage capacity is 1.85 million m³, regulating storage capacity is 11.87 million m³, with many years of regulating capacity. The Project grade is Class III, belongs to medium-scale project.

22. The major task of the reservoir development is to provide irrigation water, drinking water for human and livestock to Yangchang township, Baixing township and Shuguang township. Completion of the Project can ensure the irrigation for 53,900 mu cultivated land, including 3,500 mu paddy lands, 40,400 mu dryland. The irrigation water capacity is 12.59

million m³ (P = 80%); and provide 4.65 million m³ drinking water to urban and rural residents and livestock, which meet the water demand for a large number of urban population within the three townships during the urbanization process, meanwhile, improve the drinking water safety issues in rural areas.

23. The construction contents of Pingshan Reservoir and Water Transfer Facility Component in Nayong County is presented in **Table 1-1**.

Table 1-1: Nayong County Construction Contents

Project Name	Project Content	Quantity	Implementation Unit
Pingshan Reservoir and Water Transfer Facility Component	Newly build 1 medium-sized Reservoir, and construct associated pipe network, irrigation, human drinking water upgrading facilities.	One concrete face rock-fill dam (height: 94.0 m; water storage capacity: maximum water storage capacity: 14,690,000 m ³ ; flood control capacity: 980,000 m ³ ; reservoir area: 0.46 km ² ; catchment area: 34.30 km ²) Water transfer facilities (canals and pipes: 40.5 km; regulation pond: 1; terminal tanks: 13) Water supply (11,260,000 m ³ /year for irrigation for 3,594.7 ha new and 360.6 ha existing irrigation areas; and 4,740,000 m ³ /year for domestic use through 3 water treatment plants)	Nayong Pingshan Reservoir Management Office
Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component	Use Pingshan reservoir as the water supply source, implementation of sustainable farming measures for irrigated measures and un-irrigated areas	69.1 ha pilot area including 2 parallel systems Each system: (Pingshan Reservoir and water transfer systems) - 1.0 km pipe - high efficiency solar pump (for one system only) – remote control gate - water storage tank - electronic magnetism bulb for remote control – 0.75 km pipe - integrated "fertigation" (fertilization and irrigation) system - 4.0 km pipes for field irrigation - farmlands Demand-based remote water allocation system remotely controls the gates and bulbs. 3.3 ha pilot area including 5 small water storage tanks, 1.0 km canals, and farmlands	Nayong Pingshan Reservoir Management Office

1.3 Scope of the Impacts for Pingshan Reservoir Component

24. The Pingshan Reservoir and Water Transfer Facility Component will involve permanent land acquisition of 1,806.4 mu in total, including 56.71 mu state-owned land and 1,749.69 mu collectively-owned land, of which 548.56 mu are cultivated land, and the impact is significant. A total of 25 villages in Zongling, Yongxi, Shuguang and Yangchang Townships will be affected, the cultivated land acquisition will involve 282 households and 901 persons to be affected. A total of 11,449.5 m² of houses will be demolished with 447 people in 95 rural households to be affected, including 221 females; which will also be affected by both land

acquisition. The Project also needs 700.62 mu temporary collectively-owned land occupation. Of the total affected households and population, 29 households and 100 persons belong to vulnerable groups, including 10 households and 21 persons living under minimum living guarantee (MLG) and 19 households and 79 persons' main housing area is less than 25 m² of brick-concrete structure. The scope of the Project impact is presented in **Table 1-2**.

25. In addition, a total of 620.8 mu of cultivated land need to be adjusted through land use right transfer (LURT) in the resettlement areas to allocate to relocated persons, and 40.23 mu of land will be acquired for hosting the 447 relocated population in the resettlement areas at the base year.

26. To relocate the affected families and rehabilitate their livelihood and income, backward resettlement within the same village groups, scattered resettlement within the same township, scattered resettlement out of township and within the same county, and centralized resettlement site of Dongfengyakou will be adopted by the Project. As a result, the host communities will adjust and allocate their land to the relocated families, therefore will be also affected.

27. The Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Nayong County will plant 69.1 ha of fruit trees under the sub-component of Sustainable Farming Measures for Irrigated Areas and 3.3 ha of non-fruit trees under the sub-component of Sustainable Farming Measures for Un-Irrigated Areas. Please refer to **Table 1-1** for the details.

28. As the Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Nayong County only involves: i) mountain closures and afforestation in the slope re-vegetation area (1,086 mu) with land still owned by farmers for continuous farming; ii) temporary land occupation in the agricultural field for water supply and channel pipe paving when there are no crops on lands; and iii) small water storage tanks on the collective-owned waste slope. There is no land acquisition and resettlement will be involved based on the PPTA due diligence.

Table 1-2: LAR Impact of Pingshan Reservoir and Water Transfer Facility Component

No.	Item	Unit	Reservoir Inundation Zone	Dam Site Construction Area				Expanded Resettlement Physical Index (due to safety, etc.)	Total
				Overlapping Portion of Dam Site Engineering Construction Area	Dam Site Engineering Construction Area	Irrigation Engineering Construction Area	Subtotal		
I.	Acquired Land Area	mu	700.62	26.22	777.91	301.65	1,105.78		1,806.40
1	Land area	mu	644.39	26.22	777.43	301.65	1,105.30		1,749.69
2	Water area	mu	56.23	0	0.48	0	0.48		56.71
II.	Affected administrative units and population								
1	Township (town)	No.	2	1	3	3	5	1	8
2	Village	No.	3	1	5	17	21	1	25
3	Group	No.	9	3	8	48	54	2	65
4	Population	No.	214	0	110	0	110	127	447
(1)	Agricultural population	No.	214	0	110	0	110	127	447
III.	Land to Be Acquired	mu	700.62	26.22	777.91	301.65	1,105.78		1,806.40
(I)	Land acquisition	mu	700.62	26.22	342.16	22.21	390.59		1,091.21
1	Cultivated land	mu	485.40	22.03	30.25	10.88	63.16		548.56
(1)	Dryland	mu	485.40	22.03	30.25	10.88	63.16		548.56
①	General dryland	mu	55.79	1.66	4.44	10.88	16.98		72.77
②	>25°dryland	mu	429.61	20.37	25.81	0	46.18		475.79
2	Woodland	mu	109.25	2.27	301.37	11.33	314.97		424.22
(1)	Woodland (economic)	mu	39.63	0	75.85	0	75.85		115.48
(2)	Woodland (commercial)	mu	8.91	0	183.40	5.33	188.73		197.64
(3)	Shrub land	mu	60.71	2.27	42.12	6	50.39		111.10
3	Grassland	mu	30.85	1.55	4.30	0	5.85		36.70
(1)	Other grassland	mu	30.85	1.55	4.30	0	5.85		36.70
4	Residential land	mu	15.61	0	3.54	0	3.54		19.15
(1)	Rural homestead	mu	15.61	0	3.54	0	3.54		19.15
5	Transportation land	mu	3.28	0.37	2.22	0	2.59		5.87
(1)	Country road	mu	3.28	0.37	2.22	0	2.59		5.87

No.	Item	Unit	Reservoir Inundation Zone	Dam Site Construction Area				Expanded Resettlement Physical Index (due to safety, etc.)	Total
				Overlapping Portion of Dam Site Engineering Construction Area	Dam Site Engineering Construction Area	Irrigation Engineering Construction Area	Subtotal		
6	Water and water conservancy facilities land	mu	56.23	0	0.48	0	0.48		56.71
(1)	River water surface	mu	56.23	0	0.48	0	0.48		56.71
(II)	Land acquisition	mu	0	0	435.75	279.44	715.19		715.19
1	Cultivated land	mu	0	0	171.53	171.85	343.38		343.38
(1)	Paddy land	mu	0	0	0	1.31	1.31		1.31
(2)	Dryland	mu	0	0	171.53	170.54	342.07		342.07
①	General dryland	mu	0	0	0.39	170.54	170.93		170.93
②	>25°dryland	mu	0	0	171.14	0	171.14		171.14
2	Garden	mu	0	0	0	0.18	0.18		0.18
(1)	Orchard land	mu	0	0	0	0.18	0.18		0.18
3	Woodland	mu	0	0	250.82	104.14	354.96		354.96
(1)	Woodland (economic)	mu	0	0	11.83	0.21	12.04		12.04
(2)	Woodland (commercial)	mu	0	0	13.04	30.18	43.22		43.22
(3)	Shrub land	mu	0	0	225.95	73.75	299.70		299.70
4	Grassland	mu	0	0	3.08	2.05	5.13		5.13
(1)	Other grassland	mu	0	0	3.08	2.05	5.13		5.13
5	Residential land	mu	0	0	0.86	0	0.86		0.86
(1)	Rural homestead	mu	0	0	0.86	0	0.86		0.86
6	Transportation land	mu	0	0	5.74	1.22	6.96		6.96
(1)	Road land	mu	0	0	0	1.22	1.22		1.22
(2)	Country road	mu	0	0	5.74	0	5.74		5.74
7	Other land	mu	0	0	3.72	0	3.72		3.72
(1)	Bare land	mu	0	0	3.72	0	3.72		3.72
IV	House Demolition	m ²	6,020.84	0	2,204.09	0	2,204.09	3,224.53	11,449.5
(I)	Main house	m ²	4,310.95	0	1,632.09	0	1,632.09	2,329.18	8,272.22
1	Brick-concrete structure	m ²	1,207.05	0	841.09	0	841.09	802.64	2,850.78
2	Brick-wood structure	m ²	1,806.28	0	535.55	0	535.55	918.21	3,260.04

No.	Item	Unit	Reservoir Inundation Zone	Dam Site Construction Area				Expanded Resettlement Physical Index (due to safety, etc.)	Total
				Overlapping Portion of Dam Site Engineering Construction Area	Dam Site Engineering Construction Area	Irrigation Engineering Construction Area	Subtotal		
3	Wood structure	m ²	1,297.62	0	255.45	0	255.45	608.33	2,161.40
(II)	Side house	m ²	309.20	0	75.53	0	75.53	151.13	535.86
1	Brick-concrete structure	m ²	182.82	0	75.53	0	75.53	101.60	359.95
2	Brick-wood structure	m ²	126.38	0	0	0	0	49.53	175.91
(III)	Miscellaneous houses	m ²	1,400.69	0	496.47	0	496.47	744.22	2,641.38
V	Auxiliaries and others		0	0	0	0	0		0
1	Sunning ground	m ²	329.46	0	119.78	0	119.78	176.53	625.77
2	Water pond	m ³	25.625	0	5	0	5	11.43	42.055
3	Toilet	No.	25	0	10	0	10	14	49
4	TV receiver	Set	6	0	2	0	2	3	11
5	Grave	No.	18	0	9	0	9	0	27
6	Grass trimmer	No.	1	0	0	0	0	0	1
7	Rice milling machine	No.	9	0	0	0	0	4	13
8	Cellar	No.	0	0	2	0	2	1	3
VI	Scattered trees	No./grove	3,332	0	1,382	3,292	4,674	3,138	11,144
(I)	Fruit trees	No.	668	0	192	604	796	574	2,038
1	Trees with fruits	No.	643	0	178	435	613	493	1,749
2	Trees without fruits	No.	25	0	14	169	183	81	289
(II)	Economic trees	No.	587	0	302	654	956	605	2,148
1	Matured trees	No.	580	0	278	555	833	554	1,967
2	Sapling trees	No.	7	0	24	99	123	51	181
(III)	Commercial trees	No.	2,073	0	873	1,978	2,851	1,930	6,854
1	Scattered trees	No.	1,812	0	716	1,597	2,313	1,617	5,742
2	Sapling trees	No.	261	0	157	381	538	314	1,113
(IV)	Bamboo	Grove	4	0	15	56	71	29	104
VII	Special facilities		0	0	0	0	0		0

No.	Item	Unit	Reservoir Inundation Zone	Dam Site Construction Area				Expanded Resettlement Physical Index (due to safety, etc.)	Total
				Overlapping Portion of Dam Site Engineering Construction Area	Dam Site Engineering Construction Area	Irrigation Engineering Construction Area	Subtotal		
(I)	Transport engineering		0	0	0	0	0		0
1	Tractor road	km	0	0	1.12	0	1.12		1.12
2	Pedestrian sidewalk	km	2.19	0	0	0	0		2.19
3	Road broken engineering	No.	0	0	0	27	27		27
(II)	Transformer engineering facilities		0	0	0	0	0		0
1	10KV transmission line	km	0	0	0.25	0	0.25		0.25
2	Low-voltage transmission line	km	2	0	0.25	0	0.25		2.25

1.4 Measures to Reduce Impacts of Land Acquisition and Resettlement

29. Whether the Nayong Part of the Project is in the planning or implementation process, resettlement is regarded as a key component of the Project. The impacts of land acquisition and resettlement of the Project are minimized while comprehensively considering construction cost, social impacts, environmental impacts, and other factors.

Table 1-3: Measures to Reduce LAR Impacts

Scheme I (mu)	Scheme II (mu)	Final Selected Scheme (mu)	Prioritized Scheme
1,891.865	1,806.4	1,806.4	Scheme prioritized after adjustment

1.4.1 Measures in Project Planning and Design Stage

30. Minimized land acquisition as possible. Cultivated land acquisition minimized when land acquisition is unavoidable for the Pingshan Reservoir Component. The cultivated land acquisition of the Project accounts for 30.37% of total project land acquisition, and non-cultivated land acquisition accounts for 69.63% of total project land acquisition.

1.4.2 Measures during Project Construction Period

31. The following measures will be taken to minimize the inconvenience to the affected people during project construction:

- (i) Complete the excavation, pipe, backfilling work as much as possible in a short period of time when cladding slotted pipe laying network. Brutal construction is prohibited, to prevent the destruction of the original pipeline, set the necessary warning signs, warning lights and guiding signs, to facilitate the passage of people and vehicles. Timely clean-up the site and open traffic after the completion of the construction work.
- (ii) Timely remove the spoil digged out during the Project construction.
- (iii) Project construction unit should promptly contact the local sanitation department, timely clean domestic waste in the construction site, in order to keep the construction areas clean.

1.5 Project Institutions

32. Nayong County PMO will undertake overall supervision responsibilities of the resettlement plan implementation, including the preparation and implementation management of the resettlement plan, progress reports and internal monitoring of resettlement plan. Guizhou PMO will hire external monitoring agency. Nayong County Resettlement Office will be responsible for the actual implementation of the resettlement plan, including the confirmation of affected land and houses, the consultation of affected people, financing and payment of compensation funds, implementation of resettlement measures of affected people. Township (town) governments and village committees resident committees will actively participate in the implementation of Resettlement Plan for Nayong County.

1.6 Budget and Implementation Plan of Resettlement

33. Land acquisition and resettlement costs are part of the project budget and details are in Section 7. In accordance with the price of October 2016, the total budget of resettlement is CNY 77.2358 million (about 3.6% of the total investment CNY 2.1241 billion of the overall Project).

34. Pingshan Reservoir and Water Transfer Facility Component will start pre-construction works in December 2016 and complete in April 2021. Land acquisition and resettlement, and compensation will start in November-December 2016 and provide construction conditions in March-April 2017. The Project will complete all resettlement measures and achieve the resettlement target before December 2020.

35. Land acquisition and resettlement of Pingshan Reservoir Component in *Resettlement Plan for Nayong County* is prepared based on resettlement implementation plan (prepared on the basis of DMS). This RP will be updated before the construction starts, including updated compensation rates approved by then.

1.7 Design Process and Preparation of Land Acquisition and Resettlement Plan

36. The NDRC formulated and State Council approved <<*Comprehensive Planning of Water Conservancy Construction, Ecological Construction and Rocky Desertification Treatment in Guizhou*>> and <<*Report of Key Water Source Project Construction Planning in Five Southwest Provinces (Prefecture, Municipality) Directly Under the Central Government*>> in 2011, to solve urban and rural drinking water safety and irrigation problem in Nayong County for 292,500 people. Anlong Pingshan Reservoir is listed as a key Project. Guizhou Province Development and Reform Commission and Department of Water Resources (Qianfagainongjing [2011] No. 248) listed it as one of medium-sized water impoundment Projects in 2011.

37. Entrusted by Nayong County Water Conservancy Bureau of Guizhou Province, Hydro China Guiyang Engineering Corporation Limited Guiyang Investigation and Survey Design Institute (HCGECLGISDI) has undertaken the planning work of construction land acquisition and resettlement for Nayong County Pingshan Reservoir.

38. According to the requirements of work, HCGECLGISDI prepared the *TOR of Land Acquisition and Resettlement Plan for the Pingshan Reservoir in Nayong County of Guizhou Province* (hereinafter called the “TOR”) and the *Physical Index Investigation Rules of Construction Land Acquisition and Resettlement Plan for the Pingshan Reservoir in Nayong County of Guizhou Province* (hereinafter called the “Investigation Rules”) in June, 2012. NCG Office held TOR and Investigation Rules consultation meeting in Nayong County on 26th July, 2012 and offered consulting opinions. Based on the consulting opinion, HCGECLGISDI conducted modification of the TOR and Investigation Rules, and used them as the basis for guiding physical index investigation and resettlement planning in next stage.

39. NCG issued *Notice of Prohibition of New Construction Project and New Resettlers in Pingshan Reservoir Inundation Area and Construction Area* (Qianfubanhuan [2012] No.7) on May 10, 2012.

40. NCG organized and held Pingshan Reservoir physical index investigation inception and training session on July 31st, 2012, with participations of the main leaders and staff of construction land acquisition area such as Nayong County Resettlement Bureau, Land and Resources Administration Bureau, Forestry Bureau, Water Conservancy Bureau, Zongling Township and Yongxi Township. Conference was conducted to study and discuss the TOR

and *Investigation Rules*, unified ideological understanding and working methods, deployed resettlement plan and physical index investigation. NCG set up a leading group, and established physical investigation team formed by the staff from County Water Conservancy Bureau, Resettlement Bureau, Land and Resources Administration Bureau, Forestry Bureau, Zongling Township, Yongxi Township and HCGECLGISDI.

41. Before land acquisition resettlement planning was carried out, NCG organized county level staff who participated in resettlement planning and physical index investigation, including those staff who will involve in the physical index investigation from townships, villages and groups. Meanwhile, an on-site mobilization meeting based on village groups was held, and communication and explanation of relevant laws and regulations, policy documents and work procedures on physical index investigation were held. Questions and answers were raised by the on-site participants.

42. On-site physical index investigation started on July 31st, 2012, ended on September 27th, 2012. HCGECLGISDI organized technical staff to the land acquisition areas, led the physical and resettlement planning and completed physical index investigation and resettlement planning work in the reservoir area, construction area and irrigation construction area under the cooperation of investigators from joint investigation team. On September 11th, 2012, GPG Office issued *Notice on the Prohibition of Newly Added Construction Projects and New Migrants in Nayong County Pingshan Reservoir Inundated Area and Construction Area* (Qianfubanhuan [2012] No. 148 of GPG letters), HCGECLGISDI and relevant departments visited further into the construction area and reviewed physical index investigation results. After re-review and re-check, compared with the results of physical index survey, there was no new physical index in construction area after the "Construction Cease Order" issued. The physical index investigation results between July and September, 2012 is standards. Physical index investigation results were accepted by the heads of household, the villager groups, townships, authorities of land and resources, forestry and special administration department and NCG. The comments on rural resettlement plan and special reconstruction plan were solicited from the local government and relevant departments.

43. Resettlement planning and physical index investigation were carried out simultaneously. For resettlement planning, NCG, township government involved, relevant county departments and HCGECLGISDI formed a joint working group. HCGECLGISDI was responsible for technical aspects, and under the cooperation of NCG and its relevant departments to complete the tasks. For specific planning work, NCG mobilized competitive technical staff with rich experiences from County Resettlement Bureau, Water Conservancy Bureau, Land and Resources Administration Bureau, Forest Bureau and Electricity Bureau, and carried out resettlement and special facilities reconstruction planning together with HCGECLGISDI's professionals. Staff of joint investigation team had deep visits into resettlement areas and asked for resettlers' opinions on resettlement plan, and carried out the investigation on the willingness of resettlement destination. According to the results of the willingness investigation, the majority of the resettlers' expressed their willingness to move out of the reservoir area and engage in agricultural production in the resettlement areas. NCG issued confirmation of the opinion of the resettlement plan in January 2013.

44. Based on physical index investigation results and resettlement planning, HCGECLGISDI prepared the *Draft Planning TOR of Land Acquisition and Resettlement for Nayong Pingshan Reservoir* (referred as "*Planning TOR*" hereafter) for comments, and held a Planning TOR comments meeting in NCG meeting room on March 2nd, 2013, HCGECLGISDI modified the Planning TOR based on the suggestions of the meeting and prepared the review and approval version of the *Planning TOR*. On May 10th, 2013, Guizhou Water and Hydropower Engineering Projects Resettlement Bureau reviewed the *Planning TOR*, HCGECLGISDI modified the *Planning TOR* based on the review comments after the meeting and prepared the Final Draft *Planning TOR* for approval.

45. According to the approved physical index and unit price of compensation standard from the approved *Planning TOR*, construction land acquisition and resettlement compensation investment estimation was prepared. On the basis of the resettlement standard, method and environmental capacity defined by the *Planning TOR*, the proposed resettlement methods and destination, and reconstruction of special facilities plans were proposed. Upon the completion of the above work, HCGECLGISDI prepared the draft *Planning Report of Land Acquisition and Resettlement for Nayong County Pingshan Reservoir* for examination. On May 10th, 2013, Guizhou Water and Hydropower Engineering Projects Resettlement Bureau conducted review of the Planning Report, HCGECLGISDI modified the *Planning Report* based on the review comments and prepared the Draft Final *Planning Report* for approval.

46. NCG with the help of PPTA consultants prepared this (or ADB version) overall RP for the Pingshan Reservoir and Water Transfer Facility Component in Nayong County in October 2016.

II ANALYSIS OF PROJECT IMPACT

2.1 Definition of the Project Impacts

47. The physical impact scope of the Project is determined by the Project design unit, HCGECLGISDI.

48. The definition of the Project impact is as follows:

- (i) Permanent acquisition of state-owned land: an area located in the project areas with all kinds of cultivated land and non-farmland owned by the government or institution that needs to be permanently acquired, including the barren hills and previously acquired collective land.
- (ii) Permanent acquisition of collective land: an area located in the project areas with all kinds of cultivated land and non-cultivated land that needs to be permanently acquired. Cultivated land includes irrigated land, dryland, etc.. Non-cultivated land includes waste slopes, homestead, un-used land, etc..
- (iii) Temporary land occupation: various types of land need to be temporarily occupied during the Project construction, and can be restored to the original condition after construction.
- (iv) Demolition of structures: all structures located within the Project area, including brick-concrete, brick-wood, wood structure housing and other structure types.
- (v) Ground attachments to the land located within the project areas, mainly simple facilities and trees for production and living.
- (vi) Affected households: households with land, structures or ground attachments located in the project areas or are directly affected.
- (vii) Affected villages: villages with land, structures or ground attachments located in the project areas or are directly affected.
- (viii) Affected unit: unit that its land and/or structures to be affected by the Project.
- (ix) Project affected population: people whose households are affected by the Project.
- (x) Affected labor force: labor force engaged in agricultural production on the acquired land.
- (xi) Vulnerable groups: vulnerable groups refer to the residents who become vulnerable and lack the ability to respond to the changes in the society and become disadvantaged groups in the society due to disability, poverty and other reasons. Vulnerable groups mainly include the following types: poor families and elderly families.

2.2 Project Scope

49. This section identifies and confirms the flood control standard for different reservoir inundated objects in combination with the actual situation of reservoir inundated objects. Please see the **Table 2-1**.

Table 2-1: Designed Flood Standards of Different Inundated Objects

No.	Inundated Objects	Flood Standard (% of Frequency)	Recurrence Period
1	Cultivated land and garden	20	5
2	Woodland, grassland, and other lands	normal water storage level	
3	Rural residential area	5	20
4	Special facilities		
4.1	Pedestrian sidewalk	5	20
4.2	Low-voltage transmission line	5	20

50. The land acquisition for the Pingshan Reservoir includes reservoir inundated area and impacted area, dam site construction area (including the scope of permanent land acquisition and temporary land occupation) and water supply and irrigation engineering area (including scope of the permanent land acquisition and temporary land occupation). The detailed impact scopes are described below.

51. **Reservoir influenced area:** The reservoir influenced area refers to instable bank area (landslide, bank collapse, bank rebuilding, etc.), immersion and karst backward flow area identified by the geological survey. For these residential areas around the reservoir and in islet that would lose their production and living conditions after reservoir filling, and measures should be taken, are included in the reservoir influenced area. According to the geological information provided during the FSR stage, collapse and slide would happen in some areas of reservoir bank after reservoir filling, but immersion and karst backward flow would not happen. Collapse and slide happens in partial area is in small scope and the quantity is not big. Based on site investigation and survey with geological experts, collapse and slide happens in partial areas does not involve main indexes, such as cultivated land, population and houses, and the scope of collapse and slide is small..

52. **Land acquisition scope of dam site engineering construction area:** The land acquisition of dam site engineering construction is based on the needs of engineering construction acquisition of land and structures, identified and confirmed by construction land area map and coordinate, and the land is divided into permanent land acquisition and temporary land occupation, according to construction land use.

53. The scope of permanent land acquisition mainly refers to the operation sites of IA, land use for dam, entrance and exit of diversion tunnel, construction entry roads and advanced land acquisition for construction; the scope of temporary land occupation mainly refers to slag disposal fields, stockyards, camp sites for construction companies, temporary roads and shortcuts, etc.

54. **Scope of overlapping area for reservoir and dam site engineering construction:** According to Pingshan Reservoir engineering construction map, there is an overlapping area of the construction area and reservoir inundated area at the upstream of the dam, which is advanced reservoir inundated area of dam site engineering construction area (overlapping area). The physical index of this section should be included in the scope of dam site engineering construction area.

55. **Land acquisition scope of irrigation engineering construction area:** The scope of irrigation engineering construction area is determined by the water transmission engineering and its general layout scheme at current stage. Meanwhile, based on the nature of land use, divide the land into permanent land acquisition and temporary land occupation.

56. Based on the dam site engineering layout scheme during current stage, irrigation water adopts the way of non-pressure tunnels plus pressurized pipelines transmission.

Pipelines include main pipes and branch pipes, the main water pipe is also used for downstream irrigation and adopts gravity flow pipes. All water transmission is through pipes. There will be regulating pool at exit of water pipes and then regulating pool distributes water to branch pipes in cultivated land. Considering ecological flow in front of emptying cavity and working gate, bury linked steel pipes outside of the pier to lead water out. According to calculation, the diameter of ecological pipe is 0.3 m, elevation of entrance is 1,643.00 m, and designed ecological flow rate is 0.075 m³/s.

57. The proposed water transmission layout of Pingshan Reservoir locates in the right bank of the reservoir; it consists of water-intake, non-pressure tunnel, water pipes, water outlet, etc. The water-intake tower is linked to non-pressure tunnel and the tunnel is linked to pressurized pipelines through stilling basin, all water transmission are through pipes and adopt gravity flow pipes, pipe water flow rate is 1.744 m³/s, water supply and irrigation uses ball mill cast iron pipes or shallow-buried pipes, the diameter of pipes is 900~300 mm, pipe thickness is 12.6~7.2 mm, the total length is 33.22 km, scope of land acquisition is controlled within 4 m. The structure includes non-pressure tunnel flow, exposed pipes, shallow-buried pipes, the inside size of non-pressure tunnel is 1.7m×2.3m. The total length of shallow-buried pipes is 27,490 m, the total length of non-pressure tunnel is 2,026 m, and the length of pressurized exposed pipes is 3,701 m. The shallow-buried pipes, entrances and exits of non-pressure tunnels and pressurized exposed pipes are all included in land acquisition scope.

2.3 Physical Index Investigation for Acquisition of Construction Land

2.3.1 Organization

58. According to the requirements of the *Regulations on Land Acquisition, Compensation and Resettlement for Large- and Medium-Water Conservation and Power Construction Projects* (State Council Decree No.471), the physical index investigation publicity work is led by Nayong Water Conservancy Bureau; organized by Nayong County Government, the HCGECLGISDI took responsibility for technical aspects, supervised and guided by Municipal Government and Municipal Resettlement Bureau and related departments. Nayong County Government, Nayong Water Conservancy Bureau, Resettlement Bureau and HCGECLGISDI have set up a physical index investigation leading group, and the physical index investigation group is composed of Land Resource and Forest bureaus, townships involved in land acquisition, village cadres, resettlers' representative and HCGECLGISDI. According to the *TOR* and *Detailed Rules of Investigation*, conduct a comprehensive physical index investigation for the construction land acquisition and disclosed for publicity with the principle of openness, justice and fairness.

2.3.2 Policy Dissemination

59. In order to ensure the smooth implementation and the social stability of the construction land acquisition area, and make the resettlers understand the physical index investigation method, principal, resettlement, production resettlement and relevant policies, based on the *"Detailed Rules of Investigation"*, *"TOR"* and the relevant provisions of the Resettlement Regulation, the Nayong County Government, Nayong Water Conservancy Bureau, Resettlement Office, and Yongxi Township, Zongling Township, Shuguang Township, Yangchang Township, Baixing Township and HCGECLGISDI disseminated the relevant policies to the resettlers and went into construction land acquisition area many times, and held the mobilization on physical index investigation, conducted detailed introduction to the resettlers on the relevant policies and regulations of physical index investigation, presented the relevant National and Provincial resettlement policies to the resettlers, ensure the resettlers have a certain degree of understanding and master the resettlers policies, and cooperate with the work of physical index investigation actively and effectively.

60. Meanwhile, the Nayong County Government issued the “*Notice on Prohibition of Adding New Construction Projects and Immigrates into Inundated Area and Construction Area of Pingshan Reservoir Project*, (Nafutonggao (2012) No.7) on 10 May, 2012.

2.3.3 Investigation Content

61. The content of the Pingshan Reservoir Project land acquisition investigation includes two parts: physical index investigation and socio-economic surveys.

62. The content of physical investigation of Pingshan Reservoir Project land acquisition includes two parts: rural and special projects. Rural part includes the township, administrative village, resettlement group and farmer household which are mainly engaged in large-scale agriculture (crop plantation, forestry, animal husbandry, and fishery). The special projects part includes road, bridge, water conservancy facilities, transmission and distribution facilities, cultural relics, mineral resources and other special facilities.

63. According to the “*Detailed Rules*”, the field of investigation content of construction land acquisition includes:

- (i) Conduct comprehensively investigation on the various physical indexes within the dam site engineering construction reservoir area, dam site engineering construction area and irrigation project construction area, and distinguish the inundation area, dam site engineering construction area and irrigation project construction area (permanent and temporary), etc. According to the identified reservoir inundation treatment scope and the construction land acquisition scope, to investigate the various substances in the construction land acquisition area, determination of resettlement line, cultivated land (garden) land acquisition line and forest and grass land acquisition line. Buried the permanent mark in the dam site engineering reservoir area, and buried temporary mark in the dam site engineering construction area and irrigation project construction area. Use the full station instrument to conduct the blocks mapping by the scale of 1:1000. Conduct computer calculation, statistics and summary by taking household as a unit in accordance with the administrative jurisdiction within the dam site engineering reservoir area, and conduct computer calculation, statistics and summary by taking village groups as a unit in accordance with the administrative jurisdiction within the dam site engineering construction area and irrigation project construction area.
- (ii) Conduct a comprehensive investigation of population, houses, auxiliaries, homestead, and scattered trees, and in charge of door-to-door investigation and make cards by taking village groups as a unit.
- (iii) All kinds of major projects, conduct the field investigation according to professional categories.
- (iv) Identify the scope and physical index of the inundated area for advanced acquisition before construction.
- (v) In order to fully respect the willingness of the resettlers and provide the basis for resettlement work in next stage, make the resettlement plan more scientific and reasonable. While conducting the physical index investigation, carry out the preferred destination investigation of resettlement. The investigation content included the resettlement destination and manners, took the household as a unit, and signed by the resettlers.
- (vi) Conduct the investigation of the reserved cultivated land resource in the reservoir area, in order to calculate the expanding population accurately. The specific method is taking the inundated village group as unit, to conduct the investigation of cultivated land upper the inundated lines in inundated villages.

Mainly take the method of the field investigation with Nayong County Current Land Use Map, to identify the slope cultivated land scale is greater than 25° for upper the inundated lines.

- (vii) Collect the social and economic data of Nayong County in the land acquisition area, land statistics tables of the villages, population and cultivated land statistics table of village group. Organize the investigation of transferable cultivated land in the county.

2.3.4 Survey Method

(i) Land Survey

64. The land survey is using the full station instrument to conduct the mapping by the scale of 1:1000, identified the land boundary by the affected households, village or group cadres, township (town) and county cadres, identified the land type on-site by the staff of local land and resource department, forest department, Nayong County Water Conservancy Bureau and HCGECLGISDI, conducted field measurement by the investigation group. Conducted the household-to-household investigation by taking the affected households as a unit in the dam site engineering reservoir area; conducted the investigation on the land to be acquired by taking the affected group as a unit in the dam site engineering construction area and irrigation engineering construction area, conducted the boundary measurement on its own land by the affected household (group) as a unit, and conducted computer calculation, statistics and summary (the unit of land area is “mu”) of the shrub land of village group and other lands within the construction land acquisition area in accordance with the administrative jurisdiction, accept the APs’ supervision on the acreage of land to be acquired, after three publicity and verification of the accuracy, the land to be acquired will be signed (sealed) by the head of the household. The measured results should be accepted by households in the village, the villager group, village, township (town), and county by level, and also accepted by county land and resource department, and forestry department.

(ii) Population and House Survey

65. Conducted the population and house survey of the resettlers within the living areas according to the requirements of “Detailed Investigation”. When investigating, investigator and local cadres should be on-site. According to the determined scope, combined with the household registration, conducted door-to-door investigation and registration. For the private property of the resettlers, taking household as a unit, organized by the local government, HCGECLGISDI conducted the technical checks; accepted the APs’ supervision on the publicity of the investigation results, and prepared statistical record after checking it correctly.

66. The number of the APs are consistent with the number of the household registration of the residents, and divided into agricultural and non-agricultural population in accordance with the registration, and refers to the number of resident population from township (town) police station and the birth record from the registration of family planning working station to verify the identification.

(iii) People Identified as Resettlers

67. Born, growing, living and working in the reservoir area or the land acquisition area for a long-term, the farmers, residents, substitute teachers, teachers, volunteer soldiers with household registration temporarily transferred out, primary and secondary school students, temporary workers, contract workers, prisoners and non-registered extra birth.

68. People who live for a long-term in the reservoir area or land acquisition area, but the household registration is not in the area, would be included as the resettlers when the town or above departments provide the certificate.

69. The person retired or laid-off, and household registration transferred back to their original place.

70. The disabled labor force, or the elder over 60 years old, person without people to raise outside the reservoir come to live on their relatives or friends in the reservoir or land acquisition area, would be included in the resettler population when the original and present township and above government provide the certificate.

71. In view of the distribution of high school and college students, whose work has not been solved, and the household registration transferred back to their original place, would be included in the resettler population; In-school college students (except the military university and school students) temporarily included in the resettler population, but should be separately listed with explanation.

(iv) People Not as Resettlers

72. The on-the-job staff, military officers who were born and grown up in the reservoir area or the land acquisition area, but the household registration is not local, and both husband and wife have jobs, if they have house property in the reservoir area and land acquisition area, only register their property but not as resettlers.

73. People (no matter whether the household registration transferred out) in the reservoir area or land acquisition area moved out due to marriage, if they have house property in the reservoir area and land acquisition area, only register their property but not as resettlers.

74. Person without land and house property in the reservoir area and land acquisition area, and rented house to do business, are not included in the resettler population.

75. People living outside of the reservoir area and land acquisition area but with household registration, namely outside population through other channels, transferred their household registration to the reservoir area and land acquisition area, but not live and access to living material in the reservoir area and land acquisition area, the population cannot be included in the resettlers.

76. Person who has passed away without the cancellation of household registration in the investigation scope shouldn't been counted in.

77. The population distribution, should be consistent with the main houses they live. Household without house or a household with more than two houses, should be determined by actual living house elevation and the number of people.

78. House is classified according to the building structure, structural categories are mainly according to the regulation of Standard House Property Measurement Specification of PRC (GB/T 17986.1-2000), combined with the feature of land acquisition area. The house is divided into public house and private house according to the housing property right. The public house is the village collective owned, town and above administrative enterprises and institutions owned. Private house is the farmer and resident owned. From the structure classification, mainly on the basis of house bearing objects and roofing materials, generally divided into the following 11 categories: reinforced concrete structure, brick-concrete structure, stone-concrete structure, brick-wood structure (include brick wall and tile roof, brick wall and thatched roof, stone wall and tile roof, stone wall and thatched roof), wood structure (include

wood wall and tile roof, wood wall and thatched roof), mud structure (include mud wall and tile roof, soil wall and thatched roof).

2.3.5 Physical Identification Method

79. **Physical publicity program:** the local government organized three publicities, the first publicity published physical index investigation results for 7 days, if there is objection to the results of the investigation, property owner should submit a written paper to the village committee during publicity period, after the person in charge in the village committee signed opinions, then submit it to physical index investigation group for re-check. The second publicity published physical index investigation results for 7 days after finished re-check, if there is objection to the results of the investigation, property owner should submit a written paper to the village committee during publicity period, after the village committee responsible person signed opinions, submit to physical index investigation group for re-check. The third publicity published all re-checked physical investigation results for 7 days, and it is the final publicity. The indicators should be in accordance with the re-check result, shall not be changed.

80. The physical index investigation statistical results should be confirmed stage by stage, including: the farmers' private index, is signed or sealed for approval by head of household; collective index is sealed of approval by ownership units; the village group statistical index, is signed or sealed for approval by the village group or village cadres; the village statistical index, by the village or town cadres to sign or seal the approval; the township statistical index, signed by the representative of township or county investigation, and the County People's Government check and seal the approval. For the major project by the special administrative department to seal, the land types and amount need to get the approval of county-level land and resource bureau and forestry bureau, and the confirmation document of final result is issued by the Nayong County Government.

2.4 Socio-economic Surveys

81. (i) Literature search

- a. Socio-economic statistics of Nayong County and townships and villages in project area;
- b. Relevant resettlement laws and regulations of PRC, Guizhou Province, Bijie City and Nayong County.

82. (ii) Survey of socio-economic background information

- a. The basic situation of affected households and vulnerable groups within the scope of the Project;
- b. Public opinions and recommendations;
- c. Basic situation of affected villages within the scope of the Project: population, labor force, industrial structure, cultivated land, etc.

2.5 Acquisition of Collective-Owned Land

2.5.1 Physical Survey Result of Construction Land Acquisition for Pingshan Reservoir Engineering Component

83. Land acquisition of the Pingshan reservoir construction affects 5 townships (town), 25 villages and 59 villager groups in Nayong County. The land acquisition for the construction

land acquisition totals at 1,806.40 mu (1,749.69 mu of land area, 56.71 mu of water area), of which acquired farmland is 548.56 mu, 424.22 mu of forestland, 36.70 mu of grassland, 19.15 mu of residential homestead, 5.87 mu of transportation land, 56.71 mu of water and water conservancy facility land.

84. Construction land acquisition affected major special facilities: 1.12 km of tractor road, 2.19 km pedestrian sidewalk, 27 spots road broken engineering, 0.25 km 10KV electric transmission line, and 2.25 km low-voltage transmission lines.

2.5.2 Physical Survey Result in Reservoir Inundated Area

85. Dam site engineering construction reservoir area includes 2 townships (town), 3 villages, 9 villager groups in Nayong County. Dam site engineering construction reservoir area includes 700.62 mu of land acquisition area (excluding the overlapping portion)--- 644.39 mu of land area, 56.23 mu of water area--, the details are as follows:

- i) **Land:** 485.40 mu of cultivated land (all dryland), 109.25 mu forestland (39.63 mu economic forest, 8.91 mu commercial forest, 60.71 mu shrub land), 30.85 mu grassland (all other grassland), 15.61 mu of residential homestead (all rural homestead), 3.28 mu transportation land (all rural roads), 56.23 mu of water and water conservancy facility land.
- ii) **Population and Structures:** Directly involved 214 people to be relocated (all of them are agricultural population). A total of 6,020.84 m² of various types of house demolition, and 3,332 all kinds of scattered trees.
- iii) **Major Special Facilities:** 2.19 km pedestrian sidewalk, and 2 km low-voltage transmission line.
- iv) **Cultural Relics:** According to the proof of Nayong County Cultural Sports Radio and Television Tourism Bureau, there is no cultural relic included in the national, provincial, prefectural and county-level protection within the construction area.
- v) **Mineral Resources under Construction Land:** Involving 3 national mineral sites, 1 mine exploration right, and 1 mining right.

2.5.3 Dam Site Construction Area Physical Index (Including Overlapping Portion)

86. Dam site engineering construction area (including overlapping portion) covers 3 townships (town), 5 villages, and 8 village groups. Land acquisition area totals 804.13 mu (including 803.65 mu land area and 0.48 mu water area), of which cultivated land acquisition is 52.28 mu (all dryland), 303.64 mu of forestland (75.85 mu of economic forest, 183.40 mu of commercial forest, and 44.39 mu of shrub land), 5.85 mu of grassland (all other grassland), 3.54 mu of residential land, 2.59 mu of transportation land, 0.48 mu of water and water conservancy facility land; Demolition of various houses is 2,204.09 m²; all kinds of scattered trees are 1,382 groves; tractor road is 1.12 km, 10KV transmission line is 0.25km, and low-voltage transmission line is 0.25 km.

2.5.4 Advanced Physical Index Acquisition in Dam Site Engineering Construction Area

87. According to Pingshan reservoir construction layout map and coordinate of land acquisition, the layout of concrete mixing system and dam construction camp is in the reservoir area, which is part of advanced physical index acquisition in the construction area (overlapping portion). Since the physical index in overlapping portion of the reservoir area will be acquired by the dam site engineering construction area in advance, the physical index will be included in dam site engineering construction area, and the relevant cost should be included in the compensation for land acquisition and investment estimation of dam site engineering construction area. Indicators are as follows:

88. One (1) township (town), 1 village and 3 villager groups are involved in the overlapping portion of Nayong County. Overlapping portion includes 26.22 mu of land, of which 22.03 mu of land acquisition (all dryland), 2.27 mu of forestland (all shrub land), 1.55 mu of grassland (all other grassland), 0.37 mu of transportation land (all rural roads), and no other indicators will be involved.

2.5.5 Physical Index in Irrigation Engineering Construction Area

89. Three (3) townships (town), 17 villages and 48 village groups are involved in irrigation engineering construction area of Nayong County. A total of 301.65 mu of land will be acquired (all land area), of which 10.88 mu of land acquisition (all dryland), 11.33 mu of forestland (5.33 mu of commercial forest, and 6.00 mu of shrub land).

2.5.6 Expanded Demolition Physical Index

90. During this stage, Pingshan Reservoir expanded demolition physical index of resettlement is calculated based on directly relocated resettler at average. By calculating, the expanded demolition physical index of resettlement include: expanded demolition population of relocation is 127, the demolition of various structures is 3,224.53 m², and scattered trees are 3,138.

2.6 Production Resettlement Population

91. Production resettlement population is people who need production resettlement due to the land acquisition, and calculated and confirmed based on the degree of land acquisition impact on its main production materials. The production resettlement population at this stage is calculated based on unit by village groups, the production resettlement population for the year of planned level in each village group is mainly determined by the cultivated land area of the village group per capita and cultivated land acquired by Pingshan Reservoir engineering construction.

92. Production resettlement population in Pingshan Reservoir Component adopts the sample plot method, calculation method is:

$$R = S_b \text{ Impact of land acquisition} / (S_b \text{ Before acquisition} / R \text{ basic standard})$$

93. Calculation of Production Resettlement Population for Pingshan Reservoir Component is shown in **Table 2-2**.

Table 2-2: Calculation of Production Resettlement Population for Pingshan Reservoir Component

	Township (Town)	Village	Group	Basic Information			Land Acquisition	Production Resettlement Population	
				Existing Population	Existing Farmland and Orchard Land	Farmland and Orchard Land Per Capita	Farmland and Orchard Land	Base Year	Planned Level Year
				No.	mu	mu	mu	No.	No.
Reservoir Area	Zongling	Yaoyan	Youzhafang	138	265.63	1.92	124.95	65	67
			Baiyanjiao	101	220.68	2.18	35.41	16	17
			Mahuangqing	167	314.67	1.88	8.75	5	5
			Longqing	210	322.85	1.54	21.01	14	15
	Yongxi ¹	Pingqing	Yanjiaozhai	193	263.64	1.37	5.23	4	4
		Naodi	Youzhafang	147	206.90	1.41	195.34	139	144
			Heitang	153	148.28	0.97	81.84	84	87
			Zhaizi	181	149.43	0.83	11.36	14	15
			Datun	140	112.07	0.80	1.51	2	2
Subtotal				1,430	2,004.15	1.40	485.4	343	356
Dam Site Construction Area	Zongling ¹	Yaoyan	Youzhafang	138	265.63	1.92	21.80	11	11
			Baiyanjiao	101	220.68	2.18	25.37	12	12
			Mahuangqing	167	314.67	1.88	5.11	3	3
Subtotal				406	800.98	1.97	52.28	26	26
Irrigation Engineering Construction Area	Shuguang	Bayi	Xiaoying	269	222.73	0.83	0.97	1	1
		Hexi	Zhangjiayuan	280	514.95	1.84	0.05	0	0
			Wangjiaying	398	692.05	1.74	0.55	0	0
		Lianhe	Xinying	175	242.89	1.39	1.14	1	1
		Wusan	Songlinpo	180	422.16	2.35	3.16	1	1
		Yutang	Daluokeng	208	327.00	1.57	0.43	0	0
	Yangchang	Guolugou	No. 1	340	421.00	1.24	2.94	2	2
			No. 10	325	380.00	1.17	1.21	1	1
		Tiaohuapo	No. 4	232	306.00	1.32	0.43	0	0
Subtotal				2,407	3,528.78	1.47	10.88	6	6
TOTAL				4,243	6,333.91	4.84	548.56	375	388

Note: The overlapping of Zonglin is caused by the different engineering components.

2.7 Decrease of Cultivated Land due to Collective Land Acquisition

94. The situation of village's land, rural households and population affected by cultivated land acquisition is shown in **Table 2-3**. The proportion of the total land acquisition loss is 8.66% at the average village level, with lowest loss rate at 0.01% for Zhangjiayuan Village Group and highest loss rate at 94.41% for Youzhafang Village Group. The proportion of average lowest income loss rate is 0.01% for Zhangjiayuan Village Group and highest loss rate is 94.41% for Youzhafang Village Group (see **Table 2-4**).

Table 2-3: Land, Household and Population to Be Affected by Permanent Land Acquisition

Township (Town)	Village	Group	Total Cultivated Land	Total HHs	Total per	Average Cultivated Land Per HH	Average Cultivated Land Per Capita	Acquisition of Cultivated Land	AHs	APs	Average Cultivated LA of AHs	Average Cultivated LA Per Capita	% of LA in the Village	Production Resettlement Population (Base Year)
			mu	HH	No.	mu/HH	mu/Person	mu	HH	No.	mu/HH	mu/People		No.
Zongling ¹	Yaoyan	Youzhafang	265.63	43	138	6.16	1.92	124.95	43	138	2.90	0.91	47.04%	65
		Baiyanjiao	220.68	32	101	6.99	2.18	35.41	28	91	1.25	0.39	16.05%	16
		Mahuangqing	314.67	52	167	6.03	1.88	8.75	10	33	0.84	0.26	2.78%	5
		Longqing	322.85	66	210	4.92	1.54	21.01	26	84	0.80	0.25	6.51%	14
	Pingqing	Yanjiaozhai	263.64	60	193	4.37	1.37	5.23	6	19	0.87	0.27	1.98%	4
Yongxi	Naodi	Youzhafang	206.9	46	147	4.50	1.41	195.34	46	147	4.25	1.33	94.41%	139
		Heitang	148.28	48	153	3.10	0.97	81.84	33	107	2.45	0.76	55.19%	84
		Zhaizi	149.43	57	181	2.64	0.83	11.36	28	91	0.40	0.13	7.60%	14
		Datun	112.07	44	140	2.56	0.80	1.51	2	7	0.69	0.22	1.35%	2
Subtotal			2004.15	447	1430	4.48	1.40	485.4	224	717	2.17	0.68	24.22%	343
Zongling ¹	Yaoyan	Youzhafang	265.63	43	138	6.16	1.92	21.80	26	83	0.84	0.26	8.21%	11
		Baiyanjiao	220.68	32	101	6.99	2.18	25.37	19	61	1.34	0.42	11.50%	12
		Mahuangqing	314.67	968	167	0.32	1.88	5.11	6	19	0.88	0.27	1.62%	3
Subtotal			800.98	1,043	406	0.77	1.97	52.28	51	162	1.03	0.32	6.53%	26
Shuguang	Bayi	Xiaoying	222.73	84	269	2.65	0.83	0.97	1	2	1.28	0.40	0.44%	1
	Hexi	Zhangjiayuan	514.95	88	280	5.89	1.84	0.05	1	3	0.06	0.02	0.01%	0
		Wangjiaying	692.05	124	398	5.56	1.74	0.55	1	4	0.49	0.15	0.08%	0
	Lianhe	Xinying	242.89	55	175	4.44	1.39	1.14	0	2	2.32	0.72	0.47%	1
	Wusan	Songlinpo	422.16	56	180	7.51	2.35	3.16	1	2	6.24	1.95	0.75%	1
	Yutang	Dalaokeng	327	65	208	5.03	1.57	0.43	1	2	0.74	0.23	0.13%	0
Yangchang	Guolugou	No. 1	421	106	340	3.96	1.24	2.94	1	3	3.07	0.96	0.70%	2
		No. 10	380	102	325	3.74	1.17	1.21	1	3	1.32	0.41	0.32%	1
	Tiaohuapo	No. 4	306	73	232	4.22	1.32	0.43	1	2	0.66	0.21	0.14%	0
Subtotal/Average			3,528.78	752	2,407	4.69	1.47	10.88	7	22	1.61	0.50	0.31%	6
TOTAL/Average			6,333.91	2,242	4,243	2.82	1.49	548.56	282	901	1.95	0.61	8.66%	375

Note: The overlapping of Zonglin is caused by the different engineering components.

Table 2-4: Analysis of Land Income Lost Degree on Average for Village Groups

Village	Group	Per Capita Income	Per Capita Agricultural Income	% of Agricultural Income	AHs	APs	Cultivated Land Before Acquisition	LA	Per HH Income Loss	Per Capita Income Loss	Average Per Capita Income Loss Rate
		CNY	CNY		No.	No.	mu	mu	CNY	CNY	
Yaoyan	Youzhafang	4,409	2,886	65%	43	138	265.63	124.95	1,738	543	12.32%
	Baiyanjiao	4,409	2,886	65%	28	91	220.68	35.41	748	234	5.30%
	Mahuangqing	4,409	2,886	65%	10	33	314.67	8.75	503	157	3.57%
	Longqing	4,409	2,886	65%	26	84	322.85	21.01	480	150	3.40%
Pingqing	Yanjiaozhai	4,409	2,886	65%	6	19	263.64	5.23	520	163	3.69%
Naodi	Youzhafang	4,426	3,033	69%	46	147	206.9	195.34	2,551	797	18.01%
	Heitang	4,426	3,033	69%	33	107	148.28	81.84	1,467	458	10.36%
	Zhaizi	4,426	3,033	69%	28	91	149.43	11.36	241	75	1.70%
	Datun	4,426	3,033	69%	2	7	112.07	1.51	414	129	2.92%
Subtotal					224	717	2,004.00	485.00	8,664	0	
Yaoyan	Youzhafang	4,409	2,886	65%	26	83	265.63	21.80	506	158	3.58%
	Baiyanjiao	4,409	2,886	65%	19	61	220.68	25.37	804	251	5.70%
	Mahuangqing	4,409	2,886	65%	6	19	314.67	5.11	528	165	3.74%
Subtotal					51	162	801.00	52.00	1,837	574	
Bayi	Xiaoying	4,409	3,022	69%	1	2	222.73	0.97	769	240	5.45%
Hexi	Wangjiayuan	4,409	3,022	69%	1	3	514.95	0.05	38	12	0.27%
	Wangjiaying	4,409	3,022	69%	1	4	692.05	0.55	295	92	2.09%
Lianhe	Xinying	4,409	3,022	69%	0	2	242.89	1.14	1,390	434	9.85%
Wusan	Songlinpo	4,409	3,022	69%	1	2	422.16	3.16	3,745	1,170	26.55%
Yutang	Dalaokeng	4,409	3,022	69%	1	2	327.00	0.43	441	138	3.13%
Guolugou	No. 1	4,426	2,898	65%	1	3	421.00	2.94	1,845	576	13.02%
	No. 10	4,426	2,898	65%	1	3	380.00	1.21	794	248	5.61%
Tiaohuapo	No. 4	4,426	2,898	65%	1	2	306.00	0.43	395	124	2.79%
Subtotal					7	22	3,528.78	10.88	9,712	3,035	
TOTAL					282	901	6,333.91	548.56	20,213	3,609	

95. The permanent land acquisition impact for Pingshan Reservoir Area is relatively significant, and the LAR impact for Irrigation Area is relatively small. Of which 129 households have the impact less than 25%, accounting for 45.7% of the total households; 87 households have the impact from 25% to 50%, accounting for 30.9% of the total households; 66 households have the impact from 50% to 75%, accounting for 23.4% of the total households; and no household has the impact over 75%. See **Table 2-5** below:

Table 2-5: Analysis of Land Lost Degree in Affected Households

	<25%	25%-50%	50%-75%	>75%	Total
	HHs	HHs	HHs	HHs	HHs
No.	129	87	66	0	282
%	45.7%	30.9%	23.4%	0.0%	100.0%

Table 2-6: Analysis of Land Lost Degree in Affected Households by Village Group

Township	Village	Group	Less than 25%	25%-50%	50%-75%	More than 75%	Subtotal
				HHs	HHs	HHs	HHs
Zongling	Yaoyan	Youzhafang	15	18	10	0	43
		Baiyanjiao	18	10		0	28
		Mahuangqing	8	2		0	10
		Longqing	18	8		0	26
	Pingjing	Yanjiaozhai	4	2		0	6
Yongxi	Naodi	Youzhafang	23	10	13	0	46
		Heitang	3	12	18	0	33
		Zhaizi	5	10	13	0	28
		Datun	2				2
Subtotal			98	72	54	0	224
Zongling	Yaoyan	Youzhafang	13	7	6		26
		Baiyanjiao	6	7	6		19
		Mahuangqing	5	1			6
Subtotal			24	15	12	0	51
Shuguang	Bayi	Xiaoying	1				1
	Hexi	Zhangjiayuan	1				1
		Wangjiaying	1				1
	Lianhe	Xinying	0				0
	Wusan	Songlinpo	1				1
	Yutang	Daluokeng	1				1
Yangchang	Guolugou	Group 1	1				1
		Group 10	1				1
	Tiaohuapo	Group 4	1				1
Subtotal			7	0	0	0	7
TOTAL			129	87	66	0	282

2.8 Temporary Land Occupation

96. The Pingshan Reservoir and Water Transfer Facility Component will temporarily occupy a total of 700.62 mu land. The number of people to be affected by temporary land occupation is included in the number of people affected by land acquisition. The occupation period is within 2 years. Temporary land occupation is shown in **Table 2-7**.

Table 2-7: Temporary Land Occupation

	Temporary Occupation	mu	700.62
1	Cultivated land	mu	343.38
(1)	Paddy fields	mu	1.31
(2)	Dry land	mu	342.07
①	General dry land	mu	170.93
②	>250 dry land	mu	171.14
2	Garden plot	mu	0.18
(1)	Orchard	mu	0.18
3	Forestland	mu	354.96
(1)	Economic forest	mu	12.04
(2)	Forest land	mu	43.22
(3)	Shrubwood	mu	299.7
4	Grassland	mu	5.13
(1)	Other grassland	mu	5.13
5	Residential land	mu	0.86
(1)	Rural residential land	mu	0.86
6	Land for transportation	mu	6.96
(1)	Highway land	mu	1.22
(2)	Country road	mu	5.74
7	Other land	mu	3.72
(1)	Barren land	mu	3.72

2.9 Residential Building Affected by the Project

97. The project needs relocation of 95 households, with house and building demolition area of 11,449.5 m², and a total of 95 households or 447 persons will be affected. The details are presented in **Table 2-8**.

Table 2-8: Demolition of Farmers' Residential Houses

		Reservoir Inundated Zone	Dam Site Construction Area	Expanded Resettlement	Subtotal
Township (Town)	No.	2	5	1	8
Village	No.	3	21	1	25
Group	No.	9	54	2	65
Population	No.	214	110	127	447
Agricultural Population	No.	214	110	127	447
House Demolition	m ²	6,021	2,204	3,224.53	11,449.5
Main Room	m ²	4,311	1,632	2,329.18	8,272.22
Brick-concrete Structure	m ²	1,207	841	802.64	2,850.78
Brick-wood Structure	m ²	1,806	536	918.21	3,260.04
Timber structure	m ²	1,298	255	608.33	2,161.4
Side house	m ²	309	76	151.13	535.86

		Reservoir Inundated Zone	Dam Site Construction Area	Expanded Resettlement	Subtotal
Brick-concrete structure	m ²	183	76	101.6	359.95
Brick-wood structure	m ²	126	0	49.53	175.91
Miscellaneous house	m ²	1,401	496	744.22	2,641.38

Table 2-9: Demolition of Farmers' Residential Houses by Village Groups

Village	Group	Directly Relocated Popu.	Of which, Expanded Popu. of Relocation	Subtotal	Relocated HHs	Main Houses				Side Houses				TOTAL
						Brick-Concrete House	Brick-Wood House	Wood House	Subtotal	Brick-Concrete House	Brick-Wood House	Subtotal	Misc. House	
		No.	No.	No.	No.	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m ²	
Yaoyan	Youzhafang	75	0	75	18	585.5	323.4	573.6	1,482.5	40.9	0.0	40.9	357.6	1881.0
	Baiyanjiao	30	0	30	7	74.7	282.9	195.1	552.6	0.0	86.4	86.4	139.4	778.4
Naodi	Youzhafang	139	39	139	24	390.6	659.2	461.5	1511.3	71.2	40.0	111.2	579.9	2,202.5
	Dayuan	9	0	9	2	0.0	148.3	11.7	160.0	32.5	0.0	32.5	0.0	192.5
	Heitang	84	84	84	23	175.9	392.4	55.8	624.1	38.3	0.0	38.3	323.8	986.1
		337	123	337	74	1,226.7	1,806.3	1,297.6	4,330.6	182.8	126.4	309.2	1,400.7	6,040.4
Yaoyan	Baiyanjiao	8	0	8	2	70.5	78.8	0.0	149.3	0.0	0.0	0.0	60.4	209.7
Naodi	Dayuan	91	0	91	17	494.5	370.2	249.7	1,114.3	24.8	0.0	24.8	392.6	1,531.7
Yuetai	Banpo	11	0	11	2	256.5	86.6	5.8	348.8	50.7	0.0	50.7	43.5	443.0
		110	0	110	21	821.5	535.6	255.5	1,612.5	75.5	0.0	75.5	496.5	2,184.5
		447	123	447	95	2,048.1	2,341.8	1,553.1	5,943.0	258.4	126.4	384.7	1,897.2	8,224.9
	Expanded Relocation	0	0	0	0	802.6	918.2	608.3	2,329.2	101.6	49.5	151.1	744.2	3,224.5
Total		0				2,850.8	3,260.0	2,161.4	8,272.2	360.0	175.9	535.9	2,641.4	11,449.5

98. The Project will affect 282 households, of which 187 households will only involve land acquisition without house demolition, accounting for 66.6%, 95 households will be affected by both land acquisition and house demolition, accounting for 34.4%.

Table 2-10: Impacts of LAR by Category

Category	Unit	No. of Households	%
Only Land Acquisition without House Demolition	Household	187	66.6%
Both Land Acquisition and House Demolition	Household	95	34.4%
Total		282	100.0%

2.10 Affected Ground Attachments and Various Auxiliaries

99. Ground attachments to be affected by land acquisition are shown in **Table 1-2**.

100. There are various auxiliaries before and behind the houses. Various affected auxiliaries are shown in **Table 1-2**.

2.11 Affected Vulnerable Population and Ethnic Minorities

2.11.1 Affected Vulnerable Population

101. Types of vulnerable groups affected by the Project mainly include the following:

- (i) Poor Families: families living under the line of minimum living guarantee (MLG), the MLG is CNY 3,060 per capita per year.
- (ii) Single-parent families: refers to families headed by single parent with children.
- (iii) Persons with disabilities: refers to people who lose or are not normal in mental, physical or human body structure, some kinds of tissue, and functions, fully or partially lost the normal way to engage in certain activities.
- (iv) Families with other special hardship.
- (v) According to the survey, in the land acquisition scope affect people, after an initial analysis, 29 households, 100 persons belonging to vulnerable groups, among them, 10 households, 21 persons belonging to minimum living guarantee households, and 19 households and 79 persons belonging to elderly households. All of them will be affected physically or economically by land acquisition and house demolition.

2.11.2 Affected Ethnic Minorities

102. According to the survey, 901 people will be affected by LAR, of which 249 persons 27.64% are ethnic minorities, and all of them are Chuanqing (see **Table 2-12**). Their agricultural and animal husbandry patterns and practices are the same as the Han. They enjoy the same employment opportunities and same pay for the same work as the Han. In addition, they enjoy more preferential policies for their children's schooling and family planning. Although the ethnic minorities still speak their own languages, all of them can also speak Chinese mandarin and socially integrated as a result of long-time intermarriage. For the living habit, they have no difference with Han except the holidays with their specific minority characters and clothing. An ethnic minority and social development plan (EMSDP) has been prepared to ensure EMs as well as other vulnerable groups (the poor and women) will benefit from the project.

Table 2-12: Affected Ethnic Minorities

Township	Village	Village Group	EMs (No.)
Zongling	Yaoyan	Youzhanfang	44
		Baiyanjiao	29
		Mahuangqing	11
		Longqing	27
	Pingjing	Yanjiaozhai	2
Yongxi	Naodi	Youzhafang	35
		Heitang	26
		Zhaizi	22
Zongling		Datun	2
Subtotal			197
Zongling	Yaoyan	Youzhafang	26

Township	Village	Village Group	EMs (No.)
		Baiyanjiao	19
		Mahuangqing	6
	Subtotal		52
Shuguang	Bayi	Xiaoying	0
	Hexi	Zhangjiayuan	0
		Wangjiaying	0
	Lianhe	Xinying	0
	Sanwu	Songlinpo	0
	Yutang	Daluokeng	0
Yanchang	Guolugou	Group No. 1	0
		Group No. 10	0
	Tiaohuapo	Group No. 4	0
	Subtotal		0
	Total		249

2.11.3 Affected Women

103. According to the sample survey, 436 of 901 permanently affected people by land acquisition are women, accounting for 48.40%. As members of their families, they will be affected by the Project land acquisition and relocation. Gender analysis in details is shown in Chapter IV of this RP. The Project has also developed a gender action plan, details are in poverty and social impact assessment report of the Project.

III SOCIO-ECONOMIC SURVEY

3.1 Socio-economic Development in Nayong County

104. **Geographical Conditions:** Nayong County locates in the south of Bijie District, the northwest of Guizhou Province, at east longitude 104°55'40" to 105°38'04", and north latitude 26°30'16" to 27°05'54". The length of east-west is 56 km, and the width of north-south is 48 km, with a total area of 2,448 km². The highest elevation is 2,476 m and the lowest elevation is 1,050 m. The southeast of Nayong County is adjacent to Jinzhi and Liuzhi, the southwest is adjacent to the Shuicheng, the northwest is adjacent to Bijie and Hezhang, and the northeast is adjacent to the Dafang.

105. **Climate:** Nayong County has a mild climate where there is no harsh winter and hot summer. The average annual temperature is 13.7°C, the average sunshine hour is 1,367.8 hours, the average annual rainfall is 1,399.5 mm, and frost-free period is 229 days, which belongs to subtropical monsoon climate. It is suitable for the growth of crops, such as corn, rice, potato, tobacco, and orange. Also suitable for traditional Chinese herbal medicine such as eucommia bark, ginkgo, cortex phellodendri, gastrodia elata, pinellia, and goldthread.

106. **Mineral Resources:** Nayong County is rich in resources, has good development prosperity, has already proven that there are underground resources including coal, lead and zinc, marble, pyrite, fluorite, dolomite, limestone and more than 20 kinds of mineral deposits. Among them, the anthracite coal reserves are 12.3 billion tons, ranks fourth, accounting for 14.4% of the Province's reserves, allowable exploitation is 6.8 billion tons, good coal quality, belongs to low sulfur, low ash and high quality anthracite fever; Lead and zinc geological reserves are 100,000 tons, with high grade quality and easy mining; the marble reserves are 6.8626 billion m³, it can be exploited layer by layer, formed panel by itself, the flat level black marble is called "Namoyu" by the experts. In addition, spindrift and other dozen varieties can be made into board, ground tile, and arts and crafts. Iron ore reserves are 1.03 million tons, and pyrite deposit is 740,000 tons.

107. **Tourism Resources:** Nayong County is a region with extensive karst. Blind valley, underground river and peak forest can be seen everywhere. "First Drifting of Wujiang" of Zongxi River is the major tourist attractions, called "Small Three Gorges", there also have many historical sites, such as the spectacular Diaoshuiyan (Hanging Water Rock) Falls, Guoshihe Reservoir with green waves and fragrant cuckoo, Taoyuan Cave, Pengjia Cave, Xuanwei Cave, Bailong Cave and other bizarre cave landscapes, and Wanshou Bridge, Shexiang Imperial Palace, Houerguan of ancient battlefield, and the Qiangganyan passed by Red Army, etc.

108. **Ethnical Diversity:** According to the statistics, Nayong County has 250,000 of officially listed ethnical minority populations accounting for 25.5% of total population of the county. Nayong County has colorful folk customs, such as the Miao's "Tiaohuapo", Yi's "Cuoziwu", Buyi's "Double Sixth Festival" and Chuanqing "Daqinjia", all of them are full of rich local characters, especially the Miao's Lusheng dancing "Gunshanzhu" – with ancient dance, vigorous and amazing, combined with playing, dancing, and acrobatics art as a whole, had distinctive national and local characteristics. It has repeatedly received performances praise from abroad, was acclaimed Guizhou's plateau bright pearl, one of the representative masterpieces of the province's first non-material cultural heritage.

109. Nayong county has a total land area of 2,448 km², the county has the jurisdiction of 26 townships (street administration offices), 427 administration villages and 2,914 natural

villages. In 2015, Nayong County achieved CNY 17.118 billion of GDP, with an increase of 15.13% over last year, of which the second industrial output value accounted for 50.85% of the total output value.

Table 3-1: The GDP Composition of Nayong County in 2015

	Absolute Value (CNY 10,000)		Increase	Composition (GDP as 100%)	
	2015	2014	%	2015	2014
GDP	1,711,862	1,486,885	15.13%	100.00%	100.00%
Primary industry	261,287	219,829	18.86%	15.26%	14.78%
Secondary industry	870,449	792,472	9.84%	50.85%	53.30%
Tertiary industry	580,126	474,585	22.24%	33.89%	31.92%

Source: Statistical Bulletin of Nayong County in 2015.

110. The total population of Nayong County is 1,043,820 people in 2015, including 830,467 of agriculture populations, accounting for 79.56% of the total population and 213,353 of non-agriculture populations, accounting for 25.69% of the total populations. There are 94,358.9 ha of farmland, grain sowing area reached 76,286 ha, and grain output reached 263,200 ha in 2015.

Table 3-2: Basic Socio-Economic Situation of Nayong County in 2015

No.	Main Indicator	Unit	Quantity
1	Area of land	km ²	2,448
2	Total population	No.	104,3820
2.1	Agricultural population	No.	830,467
2.2	Non-agricultural population	No.	213,353
3	Cultivated land area	ha	94,358.9
4	Grain sowing area	ha	76,286
5	Food production	t	263,200
6	Gross product	CNY 1,000	1,711,862
6.1	Primary industry	CNY 1,000	261,287
6.2	Secondary industry	CNY 1,000	870,449
6.3	Tertiary industry	CNY 1,000	580,126
7	Per Capita GDP	CNY	25,425
8	Expenditure of urban residents	CNY	13,448.85
9	Expenditure of rural residents	CNY	6,539.22
10	Per capita disposable income of urban residents	CNY	22,312.01
11	Per capita disposable income of rural residents	CNY	6,566

Source: Leading Cadres Handbook of Nayong County in 2015.

111. **Living of the Residents:** In 2015, the per capita disposable income of the urban residents is CNY 22,312.01, with increase of 9.4%; the per capita living expenditure was CNY 13,448.85, with increase of 6.63% over the last year. The per capita disposable income of rural residents is CNY 6,566, with increase of 11.79% over the last year; the per capita living expenditure of rural residents is CNY 6,539.22, with increase of 9.34% over the last year. At the end of 2015, the per capita housing area of rural residents was 33.4 m², increased 9.48% over the last year; and the per capita housing area of urban residents was 42.05 m², with increase of 17.78% over the last year.

Table 3-3: Living Situation of the Residents in Nayong County (2015)

Index	Unit	Rural Resident	Urban Resident
I. Per Capita Disposable Income	CNY	6,566	22,312.01
(I) Wages	CNY	2,648.42	11,066.13
(II) Household operations net income	CNY	2,665.75	5,811.88
(III) Property income	CNY	16.6	1,827.45
(IV) Transfer net income	CNY	1,235.39	3,606.55
II. Living Expenditure	CNY	6,539.22	13,448.85
(I) Food	CNY	2,391.64	3,889.96
(II) Clothing	CNY	420.54	1,415.44
(III) Housing	CNY	1,094.87	2,734.37
(IV) Household equipment services	CNY	334.55	656.87
(V) Transportation and communication	CNY	494.45	1,073.97
(VI) Culture, education, entertainment products and services	CNY	966.44	1,729.01
(VII) Medical care	CNY	350.1	392.12
(VIII) Other	CNY	109.15	350.22

Source: Leading Cadres Handbook of Nayong County in 2015, Hundred Households Sampling Survey.

3.2 Social Insurance Situation of Nayong County

112. By the end of 2015, there are 0.3016 million urban and rural residents and 15,400 enterprise employees have enjoyed the basic insurance, 24,200 people enjoyed basic medical insurance, 32,900 people enjoyed the employment injury insurance, including 24,000 rural people, 15,300 people enjoyed unemployment insurance, and 23,000 people for maternity insurance. The number of urban residents under the minimum livelihood guarantee (MLG) is 23,246 people, and the number of rural residents under the MLG is 49,769 people.

Table 3-4: Social Insurance Situation of Nayong County in 2015

Index	Unit	Nayong County
Basic Insurance for Urban and Rural Residents	Person	301,600
Basic Insurance for Enterprise Employees	Person	15,400
Basic Medical Insurance for Urban Workers	Person	24,200
Employment Injury Insurance	Person	32,900
Unemployed Insurance	Person	15,300
Maternity Insurance	Person	23,000
No. of Urban Residents under the MLG	Person	23,246
No. of Rural Residents under the MLG	Person	49,769

Source: Statistical Bulletin of Nayong County in 2015.

3.3 Education in Nayong County

113. In 2015, there are 315 schools in Nayong County, including 40 ordinary secondary schools, 276 primary schools. The primary school enrollment rate reached 99.82%. The total students are 195,630. The specific education situation is shown in **Table 3-5**.

Table 3-5: Education Situation of Nayong County in 2015

Index	Unit	2015	2014	Increased (%)
No. of Ordinary Secondary Schools	No.	40	40	0.00%
No. of Ordinary Secondary School Students	Person	68,457	67,792	0.98%
No. of Ordinary Secondary School Teaching Staffs	Person	3,472	3,476	-0.12%
No. of Ordinary Secondary School Teachers	Person	3,238	3,242	-0.12%
No. of Primary Schools	No.	276	284	-2.82%
No. of Primary School Students	Person	97,472	100,189	-2.71%
No. of Primary School Teaching Staff	Person	4,658	4,589	1.50%
No. of Primary School Teachers	Person	4,346	4,283	1.47%
No. of Children in Kindergarten (including pre-school)	Person	29,701	28,440	4.43%
Primary School Enrollment Rate	%	99.82	99.6	0.22%
Total No. of Primary and Secondary Schools	No.	316	324	-2.47%
Total No. of Students	Person	195,630	196,421	-0.40%

Source: Statistical Bulletin of Nayong County in 2015.

3.4 Health System in Nayong County

114. There are 500 health institutions, 2,844 beds, 2,149 health personnel, 550 practicing doctors, and 322 practicing assistants in Nayong County. Among them, there is 1 county-level hospital, with 295 beds, 181 health personnel, 61 practicing doctors, and 9 practicing assistants. The number of farmers who participate in the rural cooperative medical service is 771,249, with participation rate of 96.82%. The total benefit is 834,671 person-times, the reported rate of four EPI vaccines reached more than 95%, and the health service capabilities continue to improve.

3.5 Socio-economic Situation of the Project Area

115. **(i) Affected Townships:** There are 5 townships (street administration offices) affected by the Project in Nayong County. The total administrative area of the affected township is 545.57 km², the total population is 301,375 people. The direct beneficiary population is 50,463 people, accounting for 16.74% of the total population in the affected township.

Table 3-6: Basic Situation of the Affected Township in Nayong County

Township/Street Committee	Administrative Area (km ²)	Total Popu.	No. of Direct Beneficiary Popu.	% of Direct Beneficiary Popu.
Zongling	110.55	36,427	3,014	8.27%
Yongxi (Including Wenchang Street Committee)	142.31	97,496	6,638	6.81%
Shuguang	97.85	51,833	16,584	32.00%
Yangchang	109.77	65,969	14,714	22.30%
Baixing	85.09	49,650	9,513	19.16%
Total	545.57	301,375	50,463	16.74%

Source: Social Survey of Project Area in August 2016.

116. **(ii) Project Affected Villages:** There are 18 villages affected by the Project in Nayong County, and the total administrative area of the affected villages is 84.77 km². The whole villages have a total of 13,731 households and 50,463 people. The total farmland is

24,917.4 mu, and the per capita farmland is 0.49 mu. The per capita housing area is 13.89 m², which is lower than the housing area per capita of the rural residents at 33.4 m² of Nayong County. The specific situation of the project village is presented in **Table 3-7**.

117. **(iii) Public Health:** There are 22 health institutions in the project affected villages, with average at 1.24 per village.

118. **(iv) Education:** There are 14 schools in the project affected villages, with average at 0.78 per village. The primary schools or below account for 45.79%, junior high schools account for 33.99%, high schools account for 15.39%, technical schools or secondary vocational schools account for 3.24%, colleges or universities account for 1.49%, and above universities only account for 0.11%. The number of people who below the high school education account for 79.78%, and the number of high schools and higher account for only 20.22%.

119. **(v) Income and expenditure:** The per capita annual income of the local villagers is CNY 5,134.11 and the per capita annual expenditure is CNY 4,813.07. The per capita annual disposable income of rural residents in Nayong County is CNY 6,566, and the per capita annual expenditure is CNY 6,539.22. The villager's income and expenditure in the project affected villages are lower than the average level of the county.

Table 3-7: Basic Situation of Project Village in Nayong County

Village	Area of Admin. Division (km ²)	Farmland (mu)	Total HHs	Total Popu.	No. of Hospital or Clinic	No. of School	Primary School or Below	Junior High School	High School	Technical School or Secondary Vocational School	College or University /	Above Univ.	Housing Area Per Capita (m ²)	Annual Income Per Capita (CNY)	Annual Expenditure Per Capita (CNY)
Yaoyan	1.26	679	341	1,327	1	1	796	322	133	66	7	3	14	6,428.31	5,832.85
Pingjing	1.68	920	422	1687	1	1	1,084	337	169	84	8	5	13	6,565.08	5,962.47
Naodi (Now is the Datun Community)	11.00	1,157	1,478	6,638	2	1	3,915	1,732	657	187	115	32	15	5,673.32	5,314.37
Bayi	3.26	695	328	1,223	1	0	487	502	127	25	80	2	15	4,513.49	4,536.66
Hexi	6.00	785	378	1,717	1	0	473	778	393	27	42	4	16	5,470.90	5,443.99
Lianhe	5.60	1,161	580	2,854	1	0	1,374	749	596	84	48	3	12	5,800.00	6,480.94
Wusan	3.70	960	530	2,180	1	0	1,090	625	425	15	25	0	11	3,966.40	3,888.57
Yutang	3.00	600	308	1,235	1	1	512	528	130	20	45	0	13	5,197.35	2,592.38
Yuetai (Has been incorporated into Chahe Village)	4.00	442.4	504	1,780	1	1	720	684	348	20	8	0	11	5,607.67	5,573.61
Guolugou	4.85	2,000	1,242	3,774	2	1	1,346	1,613	780	10	25	0	15	5,470.90	4,925.52
Tiaohuapo	5.81	2,160	776	2,462	0	1	1,400	600	435	15	12	0	12	3,829.63	4,147.80
Shuchang	3.40	1,996	1,228	5,595	4	2	1,967	1,948	1,184	401	92	3	13	6,154.76	5,184.75
Ziku	6.47	1,700	1,699	4,687	3	2	2,586	1,661	260	90	90	0	12	4,787.04	4,407.04
Zigong (Has been incorporated into Guolugou Village)	2.76	804	384	1,180	0	0	643	362	136	0	39	0	15	4,103.17	4,147.80
Xiaozhai	6.58	1,361	820	2,611	0	0	1,208	1,062	313	17	11	0	12	4,650.26	4,536.66
Laojie	5.20	3,257	1,070	3,327	1	1	1,266	1,128	641	256	36	0	20	4,513.49	4,536.66
Yakou	5.20	2,916	860	2,860	1	1	981	1,383	400	57	35	4	15	5,060.58	4,536.66
Zuojiao	5.00	1,324	783	3,326	1	1	1,257	1,138	638	259	33	1	16	4,621.60	4,586.50
Total	84.77	24,917.4	13,731	50,463	22	14	23,105	17,152	7,765	1,633	751	57			
Average		0.49			1.22	0.78							13.89	5,134.11	4,813.07
Ratio							45.79%	33.99%	15.39%	3.24%	1.49%	0.11%			

Source: Social Survey of Project Area in August 2016

120. Between March and August 2016, the PPTA Consultants have conducted the socioeconomic survey and public consultation activities in each affected village of the Project. Discussion has also been covered the following aspects: (i) knowledge about the Project; (ii) degree of their support to the Project; (iii) major agricultural crops and economic tree plantation; (iv) status of land transfer; (v) knowledge of compensation standards; and (vi) expectation on the Project.

121. The results indicate that almost of all consulted people are aware of the Project, and all of them fully support the Project. They expect that the Project construction can start early as possible to resolve the local water shortage problems. The major agricultural crops are corn, potato and wheat. The economic fruit forests include American Broun's Plum and walnut. The consultation result in the project area is shown in **Table 3-8**.

Table 3-8: Nayong County Participation

Subproject	Administrative Unit		Content
	Township	Village	
Pingshan Reservoir Component	Zongling	Yaoyan	<ul style="list-style-type: none"> - Knowledgeable about the Project; - Hope to start the project construction as soon as possible; - Drought is frequent and low production from the land; - If water is available, it is good for economic crops and trees to increase the land productivity and income.
	Zongling	Pingqing	<ul style="list-style-type: none"> - Support the project construction; - Lack of water for drinking and irrigation; - Low or no harvest during the dry year.
	Yongxi Road (Wenchang Road)	Naodi (now is the Datun Community)	<ul style="list-style-type: none"> - Fully support the Project; - The Project can solve the water problem; - The Project will increase land productivity and generate more income for farmers.
	Shuguang	Bayi	<ul style="list-style-type: none"> - The whole village has 1,223 persons; - 4 production teams; - 50% of the total population are EMs, and all of them are Chuanqing People; - Per capita income is CNY 3,300, 595 mu of farmland, agricultural income accounting for 90%; - Many people go to Zhejiang and Jiangsu for working; - Support the project construction; - Establish cooperation center to solve poverty problem; - Mainly plant corn, potato and wheat.
		Hexi	<ul style="list-style-type: none"> - Less water resources, and all land is dryland; - Mainly plant corn, potato and wheat; - Plant economic fruit forests, including 600 mu of walnut; - Support the project construction; - 300 persons go out for seasonable labor jobs.
		Lianhe	<ul style="list-style-type: none"> - The whole village has 13 villager groups; - Mainly plant corn, potato and wheat; - Plant some economic fruit fruits, such as American Broun's Plum and walnut; - Many people go out for seasonable labor jobs; - Support the project construction.
		Wusan	<ul style="list-style-type: none"> - Knowledgeable about the Project; - Mainly plant corn, potato and wheat; - Plant American Broun's plum and walnut; - Without objection for closed forest of rocky desertification treatment; - Support the project construction.

Subproject	Administrative Unit		Content
	Township	Village	
		Yutang	<ul style="list-style-type: none"> - The whole village has 1,560 persons, 5 production teams, 80% of Han, and 20% of Chuanqing; - Per capita income is CNY 3,700, of which 80% from agriculture; - Learned about the project construction; - Support the project construction.
		Yuetai (Has been incorporated into Chachong Village)	<ul style="list-style-type: none"> - The whole village has 9 groups; - Mainly plant corn, potato and wheat; - Can develop breeding industry; - Plant some economic fruit such as honeysuckle; - Support the project construction.
	Yangchang	Guolugou	<ul style="list-style-type: none"> - Undeveloped rural economy, water shortage, undeveloped transport infrastructure; - Mainly plant corn and potato; - This project can solve water-using problem; - Support the project construction; - Especially need to solve transport and water-using problems in Gantian and Guanzhai Village.
		Tiaohuapo	<ul style="list-style-type: none"> - Knowledgeable about this project construction; - Definitely support the project construction; - People look forward for this project construction very much; - If there has water, can develop economic fruit forest, breeding industry; - Do a good project, make people live better, and speed up the project construction; - Support the project construction.
High Efficiency Water-saving Agricultural Demonstration Park	Shuguang	Shuchang	<ul style="list-style-type: none"> - The whole village has 5,868 persons, 19 production teams, of which 80% are Han, others are Chuanqing; - Per capita income is CNY 4,500; - 1,986 mu of farmland; - Agriculture income accounting for 95%; - Others are working income; - There is no problem about closed forest, planting economic fruit forest and terracing of sloping land in the area of the Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component.
Rocky Desertification Treatment Component	Yangchang	Ziku	<ul style="list-style-type: none"> - Knowledgeable about the project; - Definitely support the project; - This village lacks water for many years, and hopes to solve water supply problem ASAP; - Can plant American Broun's Plum and Agated Red Cherry, etc.; - Many people go out for seasonable labor jobs; - Hope to speed up the project construction.
		Tiaohuapo	<ul style="list-style-type: none"> - Fully support the project construction; - Lacks of water for drinking and irrigation, and hopes to solve water supply problem ASAP; - Can plant American Broun's Plum and Agated Red Cherry, etc.; - Many people go out for seasonable labor jobs.

Subproject	Administrative Unit		Content
	Township	Village	
		Zigong (Has been incorporated into Guolugou Village)	<ul style="list-style-type: none"> - Knowledgeable about the project construction; - Due to water shortage, planting industry is affected; - Once water problem is solved, economic fruit forest and breeding industry can be developed; - Ethnic minorities account for 80%; - Support the project construction.
		Xiaozhai	<ul style="list-style-type: none"> - Knowledgeable about this project construction for many years; - Village development plan is to develop economic fruit forest; - Water-shortage is the important reason of limiting planting industry; - Support the project construction.
	Shuguang	Shuchang	<ul style="list-style-type: none"> - Knowledgeable about this project construction; - Fully support the project construction; - Water shortage is the serious problem to constrain the agriculture development.
		Wusan	<ul style="list-style-type: none"> - Project construction will promote the local economic development and increase the income of the local villagers; - Fully support the project construction; - Water availability will increase the land productivity.
	Baixing	Laojie	<ul style="list-style-type: none"> - Ethnic minorities accounting for 1/3 of the whole village population; - Now plant 187 mu of American Broun's Plum and walnut, without fruit now; - Estimated income is CNY 10,000 per mu per year; - Support water conservancy engineering construction; - No other suggestions.
		Yakou	<ul style="list-style-type: none"> - Plant economic fruit forest, such as American Broun's Plum, cherry, walnut, etc.; - Last year returned 1,900 mu of farmland to forests, present without fruit; - Many people go out for seasonable; - Support the project construction.
	Shuguang		<ul style="list-style-type: none"> - Mainly plant corn, potato and wheat; - Poverty population of the whole township is 8,000 persons; - 20,000 persons of EMs (including Chunaqing); - Per capita income is CNY 2,968; - The whole township supports this project construction.
	Yangchang		<ul style="list-style-type: none"> - Project construction is good for economic development of the township; - Total population of the township is 62,300 persons, of which 37,000 persons are EMs; - Agriculture mainly includes planting industry, breeding industry, and tourism; - The township develops the Wawutiankeng Engeco-tourism Development Project; - Invest CNY 0.15 billion; - 1,500 mu of established Agated Red Cherry Base, and will increase 2,500 mu this year, totaling 4,000 mu; - Invest CNY 500 per mu per year, with output at CNY 7,000 per mu per year; - Sign contract with famers, Agricultural Property Company in charge for selling;

Subproject	Administrative Unit		Content
	Township	Village	
			<ul style="list-style-type: none"> - Plant soapberry (a kind of raw material for washing supplies), already planted 2,000 mu and prepare to reach 10,000 mu; - Invest CNY 500 per mu per year with estimated income of CNY 12,000 per mu per year; - Support the project construction.
	Baixing		<ul style="list-style-type: none"> - Villages support the project construction.

3.6 Gender Analysis

122. In the Project affected area, women's rights and status are equal with men. Women play a very important role in economic development activities. Now there are more men as migrant seasonable labor to urban areas of other cities and provinces. More women are left behind engaged in agriculture activities and household work. Women's major housework is farming at home and master their own economic situation, the survey shows they concern and pay attention to resettlement and livelihood restoration. This Project will give affected men and women equal training and employment opportunities, women will be considered first if jobs are suitable for their employment. Therefore, from employment and economic development point of view, the status of women will be improved.

123. **Gender difference in age.** For the people between 18 and 50 years old, the proportion of men is 52.41%, higher than women at 47.59%proportion. Men consist of the major labor force in the Project affected areas.

124. **In view of the resettlement aspects.** Compared to men, women are more concerned about the loss of income, and the separation between children and relatives. The construction of centralized resettlement areas does not require relocation of affected people to other places, so the women's concern is addressed by nearby concentrated resettlement. Concerns on resettlement of different genders are shown in **Table 3-9**.

Table 3-9: Gender Analysis

Concerns	Male		Female	
	Primary	Secondary	Primary	Secondary
1. Fair compensation	✓		✓	
2. Timely compensation	✓		✓	
3. Employment creation	✓			✓
4. Land return for farming		✓		✓
5. Income loss		✓	✓	
6. Future employment	✓		✓	
7. Children's education	✓		✓	
8. Assistance during rehabilitation period	✓		✓	
9. Separation with children and relatives		✓	✓	

125. In terms of the impact of the house demolition, the residents will get better living conditions than prior-to demolition. As women are undertaking most of the house work, improvement of the environment and living conditions will reduce the burden of their workload, and enhance their quality of life.

126. During the design phase, the needs of women will receive special attention in order to enable them to gain more benefit from the Project. Public facilities or services such as vocational training, housing and other resettlement design will consider the needs of women.

127. Through the survey on opinions of affected villages and villagers by the Project, we can see that most of the villagers understand the Project and think they can benefit from it.

IV LEGAL FRAMEWORK AND POLICIES

4.1 Overview

128. The "Resettlement Plan for Nayong County" has been prepared and will be implemented in according to the relevant laws of People's Republic of China and regulations of Guizhou Province and in accordance with the requirements of ADB's "Safeguard Policy Statement" (2009). Compensation standards and rehabilitation measures of "Resettlement Plan for Nayong County" are adopted for implementation of land acquisition and resettlement process to achieve relevant legal and policy requirements.

4.2 Policies and Regulations

4.2.1 Relevant Laws and Regulations Issued by the Central Government

129. "Resettlement Plan for Nayong County" complies with relevant laws and regulations of People's Republic of China and the central government, including

- (i) "Land Administration Law of the PRC", implemented from 1 January, 1999, enforcement and revision on 28 August, 2004;
- (ii) "Law of the PRC on Contracted Land in Rural Areas", implemented from 1 March, 2003;
- (iii) "State Council Decision to Deepen Reform and Strictly Enforce Land Administration, issued by State Council", on 21 October, 2004 by the State Council;
- (iv) "Guidance on Improving Land Acquisition Compensation and Resettlement System" (Guituzifa [2004] No. 238, 3 November, 2004);
- (v) "Notification on Strengthening the Land Adjustment Problems" State Council issued on 31 August, 2006;
- (vi) "Real Right Law of the People's Republic of China", implemented from 1 October, 2007;
- (vii) "Regulation of the People's Republic of China on the Disclosure of Government Information", implemented from 1 May, 2008;
- (viii) "Large- and Medium-sized Water Conservancy and Hydropower Project Construction Land Compensation and Resettlement Regulations" (State Council Order No. 471, 2006);
- (ix) Comments of the State Council on Further Improving the Post-Stage Support for Relocated People of Large and Medium Reservoir Construction Projects (Ref. GF[2006]17, effected from May 17 of 2006);
- (x) "People's Republic of China on Implementing Rules of Cultivated Land Occupation Tax Regulations" (State Council Order No. 511);
- (xi) "People's Republic of China on Implementing Rules of Cultivated Land Occupation Tax Provisional Regulation" (Ministry of Finance, State Administration of Taxation Order No. 49);
- (xii) "(Notification on the Adjustment of Forest Vegetation Restoration Fee Collection Standards to Guide Conservation and Intensive Use of Forest Land" (Caishui [2015] No. 122);
- (xiii) "State Council Decision on Improving Large- and Medium-sized Reservoirs Resettlement Support Policy Advice" (Guofa [2006] No. 17);

- (xiv) "Water Conservancy and Hydropower Project Construction Land Acquisition and Resettlement Plan, Design and Specification" (SL290-2009);
- (xv) "Standardization for Sterilization Techniques" (in order to ensure water quality, sterilization is required for reservoirs before reservoir inundation).

4.2.2 Relevant Regulations and Policies of the Bijie City, Guizhou Province, and Policies and Regulation Promulgated by the Relevant Departments

130. The relevant regulations and policies of the Bijie City, Guizhou Province, and policies and regulation promulgated by the relevant departments are as follows:

- (i) "Guizhou Province Land Management Regulations";
- (ii) "Guizhou Province Forest Land Management Regulations";
- (iii) "Guizhou People's Government on the Decision to Modify (Guizhou Province Occupation of Forest Land Compensation Fee Management Approach) (Provincial Government Order No. 124) ";
- (iv) "Guizhou Provincial People's Government Informed Related Issues to Imposing Tax on Land Occupation Collection Management" (Qianfufa [2010] No. 19);
- (v) "Guizhou People's Government in Reply to Guizhou Province's Land Unified Annual Output Value Standard and the Integrated Price Results in the Land Area" (Qianfufan (2009) No. 255);
- (vi) "Land and Resources Department, the Provincial Department of Finance Views on Strengthening and Improving the Province's Land Development and Consolidation of Work and Balance of Cultivated Land" (Qianfubafa (2007) No. 101);
- (vii) "Guizhou People's Government on Further Strengthening the Comments of Resettlers" (Qianfufa (2010) No. 12);
- (viii) "Interim Measures on the Issuance of the Resettlers Preliminary Work of Large- and Medium-sized Hydropower Engineering Project in Guizhou Province" (qianyifa [2011]No. 45);
- (ix) "Notification of Temporary Methods on the Issuance of the Preliminary Work Management of the Resettlement for Large- and Medium-sized Hydropower Engineering Project in Guizhou Province" (Qianyifa (2011) No. 45);
- (x) "Nayong County, Bijie Miao and Buyi Prefecture on the Adjustment of Approval of Land for Unified Annual Output Value Standard and Comprehensive Land Compensation Standard in the Land Acquisition Area" (Bishufu (2011) No. 87); and,
- (xi) "Physical Index Survey Results and the Resettlement Plan Design Results of Pingshan Reservoir Engineering Feasibility Study Phase in the Engineering Construction Land Acquisition Area".

4.2.3 Relevant Quota/Regulations

131. Relevant Regulations

- (i) "Preliminary (Estimated) Cost Structure and Standards of Guizhou Province Water Resources and Hydropower Engineering";
- (ii) "Guizhou Province Architecture and Municipal Engineering Pricing Quota";
- (iii) Other relevant regulations and quotas.

4.2.4 ADB Resettlement Policy on Involuntary Resettlement

132. The Preparation of "*Resettlement Plan for Nayong County*" and the implementation of resettlement activities will also be conducted in accordance with requirements of ADB's "*Safeguard Policy Statement*" in June (2009). Implementation of resettlement activities will be strictly in accordance with the determined policy of "*Resettlement Plan for Nayong County*" to be conducted; if there is some changes, NCG will further consult with the affected people during the implementation process, and to submit the updated version of "*Resettlement Plan for Nayong County*", in order to get the approval from the Asian development Bank.

4.3 Summary of Laws, Regulations and Policies

4.3.1 Summary of National and Provincial Laws and Regulations

4.3.1.1 Provision of Land Ownership and Use Rights

133. The People's Republic of China practices the socialist public ownership of land, namely, the ownership by the whole people and the collective ownership by the working people. Land in urban areas of a city shall be owned by the State. Land in rural areas and suburban areas of a city shall be owned by a farmer collective, except for those which belong to the State as provided for by law; homestead, and private plots of cropland and hilly land are owned by a farmer collective (*Land Administration Law of the PRC*, Article 2 and Article 8).

134. In order to meet the demands of public interests, it is allowed to acquire lands owned collectively, premises owned by entities and individuals or other real estates according to the statutory power limit and procedures. When requisitioning land owned collectively, it is required to, in accordance with law and in full amount, pay land compensation fees, resettlement subsidies, compensations for the standing crops, arrange for social insurance fees for the farmers for their land requisitioned, guarantee their livelihood and protect their legal rights and interests. When requisitioning the premises owned by entities and individuals or other real estates, it is required to compensate for demolition and relocation in accordance with law and protect the legal rights and interests of the owners of the requisitioned real estates; when requisitioning the individuals' residential houses, it is required to guarantee the housing conditions of the owners of the requisitioned houses (*Real Right Law of the People's Republic of China*, Article 42).

135. The rural land contract, women and men enjoy the equal rights. Contract shall protect the legitimate rights and interests of women, any organization or individual shall not be deprived of women's land contract and management rights, contractee shall not take back the contracted land; the contract period, the contractee shall not readjust the contracted land ("*Law of the PRC on Contracted Land in Rural Areas*", Article 6, 26, 27).

4.3.1.2 Provisions on Land Acquisition Compensation Standards

136. Land expropriated shall be compensated for on the basis of its original purpose of use. Compensation for expropriated cultivated land shall include compensation for land, resettlement subsidies and compensation for attachments and young crops on the expropriated land. Land compensation for expropriated cultivated

land shall be six to ten times the average annual output value (AAOV) of the expropriated land, calculated on the basis of three years before the expropriation. Resettlement subsidies for expropriated cultivated land shall be calculated according to the agricultural population that needs to be resettled. The agricultural population that needs to be resettled shall be calculated by dividing the area of expropriated cultivated land by the average area of the original cultivated land per person for the unit of the land which is expropriated. The standard of resettlement subsidies to be divided among members of the agricultural population that needs to be resettled shall be four to six times the average annual output value of the expropriated cultivated land calculated on the basis of three years before such expropriation. However, the maximum resettlement subsidies for each hectare of the expropriated cultivated land shall not exceed fifteen times its average annual output value calculated on the basis of two years before such expropriation (*Land Administration Law of the PRC*, Article 47).

137. People's Government at the county level and above shall adopt practical measures to ensure that the farmers whose land is acquired shall not be made worse off. It should be ensured that land compensation fees, resettlement subsidies and compensation for ground attachments and standing crops shall be provided in accordance to applicable laws and regulation in full and in time. If the land compensation fees and resettlement subsidies as stipulated by law still cannot be able to maintain the original standards of the land-losing farmers and are not adequate to cover the social insurance costs of the landless farmers, the provincial government shall approve an increase in the resettlement subsidies. If the sum of the land compensation fees and resettlement subsidies has reached the legal upper limit but still cannot maintain the original living standards of the farmers, the local government can provide additional subsidies with the use of revenues from the sales for the use of state land. The provincial government shall formulate and publicize the standard annual output or regional land prices for land acquisition in the cities and counties under the provincial jurisdiction. Land acquisition compensation shall be kept identical for identical quality of land in same locality. The full costs of land acquisition for national key development projects shall be included in the overall project budget (*State Council Decision to Deepen Reform and Strictly Enforce Land Administration*, issued by State Council, Article 12).

4.3.1.3 Provisions for Resettlement of Land-losing Farmers

138. People's Governments at the county level and above shall formulate concrete measures to guarantee the long-term livelihood of the farmers whose land is taken. The farmers shall be given stocks for land-taking projects that have stable revenues. In a prescribed urban zone, the local government shall place the farmers who are made landless because of land acquisition in the urban employment system, and set up a social insurance system for them. If the acquisition of collective land takes place outside the prescribed urban area, the local government shall set aside essential cultivated land within the administrative area or assign suitable jobs. Resettlement in distant areas should be considered for farmers who can no longer have adequate land to continue farming (*State Council Decision to Deepen Reform and Strictly Enforce Land Administration*, issued by State Council, Article 13).

139. Land-losing farmers can choose from these resettlement approaches: (i) Resettlement of agricultural production in expropriation of farmers' collective land outside of the urban planning area. Farmers shall return the contracted land voluntarily, and arrangements are made for contracted land circulation and development of additional cultivated land through making use of rural collective land and contracting farmers, so the land-losing farmers have the necessary cultivated

land and continue to engage in agricultural production. (ii) Resettlement by new employment. Actively create conditions to provide free labor skills training for land-losing farmers, arrange corresponding work. Under the same conditions, the land use unit shall give priority to the land-losing farmers' employment. Expropriation of the farmers' collective land within the urban planning area, should incorporate the land-losing farmers (they lost their land because of the land acquisition) into urban employment system, and establish a social security system. (iii) Benefit-sharing compensation resettlement. For the long-term stable income project land, under the premise of farmers' voluntary decision, the land-losing rural collective economic organizations can become a shareholder with the land compensation and resettlement fees, after consultation with land use units, or use the approved construction land use rights as shares. Rural collective economic organizations and farmers will share the interests with preferred through contract. (iv) Off-site relocation and resettlement, the region cannot provide the basic production and living conditions for the farmers that lost their land because of the land acquisition. Under the premise of full consultation with the affected rural collective economic organizations and farmers opinions, implement the off-site relocation and resettlement ("*Guidance on Improving Land Acquisition Compensation and Resettlement System*", Article 2) with the government unified organization.

4.3.1.4 Information Disclosure Requirements for Land Acquisition

140. Protect the farmers' collective land ownership and land contract management rights during the land acquisition process, safeguard the interests of farmers. Before the approval of land acquisition, the land-losing farmers should be informed about the land use, location, compensation standard, and resettlement approach; the findings of present situation of proposed land acquisition should be confirmed by the land-losing rural collective economic organizations and farmers; if necessary, land and resources department should organize the hearing in accordance with relevant provisions. Relevant materials informed and confirmed by the land-losing farmers is an essential material for approval. To speed up the coordination and decision mechanism and to establish and improve the compensation and resettlement disputes, maintain land-losing farmers and land users legitimate rights and interests. The approved land acquisition, except in special circumstances, should be publicized ("*Regulation of the People's Republic of China on the Disclosure of Government Information*", Article 14).

141. An administrative organ shall disclose government information in a timely and accurate manner. Where any administrative organ finds out any false or incomplete information that has affected or may affect social stability or has disturbed or may disturb social management order, it shall disclose the corresponding accurate government information within its scope of duties to clarify ("*Regulation for the People's Republic of China on the Disclosure of Government Information*", Article 6).

142. The administrative organs should voluntarily disclose government information in a general public manner, by the official gazette, government websites, press conferences and press, radio, television ("*Rule of Government Information Publicity*", Article 15).

143. Governments at all levels should set up government information sites in the National Archives, public libraries, and equipped with the appropriate facilities, equipment, access to government information for citizens, legal persons or other organizations to provide convenience. Administrative organ may set up public reading room as needed for demanding materials, information bulletin boards, electronic information screens and other places, facilities, and public government information.

The administrative organ shall voluntarily provide government information disclosed (*Rule of Government Information Publicity*, Article 16) to the National Archives and public libraries.

4.3.2 Guizhou Province's Relevant Regulations and Policies on Land Reclamation

144. For the approved non-agricultural construction acquisition of cultivated land, the cultivated land acquiring units and individuals should be responsible for the quantity of acquired cultivated land and a considerable quality of cultivated land. In case no conditions for reclamation or the reclaimed land does not meet the requirements, pay land reclamation fees by the following provisions, earmarked for the reclamation of new land: Acquisition of other cultivated land, pay 1 times reclamation fees of cultivated land for expropriation of the land without conditions for reclamation; If reclaimed land does not meet the requirements, should pay compensation for expropriation of the land from 0.5 times to 1 times reclamation fee of cultivated land. The reclamation fees of cultivated land should be included in the total investment of construction project.

4.3.3 ADB Relevant Policy on Involuntary Resettlement

(i) Involuntary Resettlement Policy of ADB

145. The "Safeguard Policy Statement" of ADB in June 2009 provides system basis and operating instructions on involuntary resettlement for ADB loan project. The other relevant ADB policies are:

"Accountability Mechanism Policy", February 2012.

"Public Communications Policy", 2011.

146. The objectives of the ADB involuntary resettlement safeguard policy requirements are set out in SPS and summarized as the follows:

- a) Avoid the involuntary resettlement as much as possible.
- b) If the resettlement cannot be avoided, conduct the research on the feasibility project, and maximum to reduce the scope of involuntary resettlement;
- c) Ensure the living standard of resettlement to restore to the level before the project implementation;
- d) Improve the living standard of affected poor population and other vulnerable groups.

147. The principles of involuntary resettlement safeguard policies of the Asian Development Bank include:

- a) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- b) Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and

evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.

- c) Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.
- d) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- e) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- f) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- g) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.
- h) Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- i) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
- j) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.

- k) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
- l) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

4.3.4 ADB Involuntary Resettlement Policies Compared with the PRC's Land Acquisition and Relocation Policies

148. Overall, ADB's involuntary resettlement policies and PRC's land acquisition and relocation policies have highly degree of similarity, which is mainly reflected in:

- a) Emphasize to avoid or reduce the resettlement as much as possible during the project planning and design process;
- b) Emphasize to restore and improve the living standards of the affected population as soon as possible;
- c) Stress the resettlement policy should be open and transparent;
- d) Stress the public informed and APs participation during the resettlement process;
- e) The preparation and implementation of the resettlement compensation standards should be identified and carried out legally.

149. However, there is still a degree of variation in several aspects between PRC's policies on land acquisition and relocation and involuntary resettlement policies of the Asian Development Bank, which is mainly reflected in:

- a) Asian Development Bank pay more attention to work before the resettlement implementation, require to prepare a comprehensive and practical "Resettlement Plan";
- b) ADB's involuntary resettlement policy requires to give compensation to all affected people at replacement value during the resettlement process, including those who do not have legal ownership of the land. PRC's land acquisition and relocation policies adopted differentiated compensation policy for buildings without certificates;
- c) Asian Development Bank policy gives more emphasis on paying special attention ethnic minorities and vulnerable groups during the land acquisition and resettlement process;
- d) For RP preparation, ADB policy requires that the APs should be fully informed and closely consulted, although it is also required in domestic policies, during actual practice, usually consultation and information disclosure are not well implemented;
- e) The Land Administration Law of PRC provides a grievance procedure, but generally in actual practice, effective grievance system has not been established. ADB policy requires safe measures to protect the rights of the APs and actual methods to solve the disputes of the APs. Therefore, this requires a complete "step-by-step" management, supervision and subsequent actions to be taken to resolve the issues and disputes of the RPs;
- f) Asian Development Bank policy gives more emphasis on the process of resettlement monitoring and supervision;

- g) The production resettlement is much more important for reservoir resettlement. The effectiveness for the rehabilitation measures of APs' long-term production and livelihood should be taken into consideration;
- h) In PRC, the reservoir resettlement has its specific professional specifications, and the design unit should conduct following the professional specifications for design;
- i) Guizhou Province has specific reservoir resettlement administration bureau to conduct the implementation of compensation and resettlement of resettlers particularly, which has rich practical experiences.

150. Based on the above analysis, during the resettlement plan preparation process, full consideration is given to the relevant policy requirements of the Asian Development Bank, and the following measures have been adopted to meet the requirements of the Asian Development Bank:

- a) Prepare a detailed resettlement plan during the project preparation process, based on the socioeconomic survey, consultation and the physical index survey; and conduct monitoring on the implementation of resettlement plan;
- b) Conduct adequate consultations with and information disclosure to APs and implement fully grievance redress;
- c) Pay special attention to vulnerable groups during the process of resettlement implementation;
- d) Give appropriate compensation to the building without certificates based on its value;
- e) Establish internal and external resettlement monitoring systems;
- f) In combination of the resettlement implementation experiences of ADB projects and the characteristics of reservoir resettlement, perform a good job and implement relevant tasks meeting ADB requirements.

151. Through the above measures, the resettlement policies of the Asian Development Bank and PRC's land acquisition and relocation policies are effectively complied to ensure the smooth implementation of the Project resettlement activities.

4.4 Cut-Off Date

152. For Pingshan Reservoir and Water Transfer Facility Component of resettlement population announcement, the cut-off date was 10 May, 2012.

153. The village committee/resident committee has announced relevant regulations for the construction of Nayong Pingshan Reservoir and Water Transfer Facility Component to the villagers in the Project affected area. After the cut-off date, any new buildings and auxiliaries without the approval of the relevant authorities will not be taken into account for compensation. After investigation of the affected area, there are no new buildings built after the cut-off date.

4.5 Compensation Standard

4.5.1 Land Compensation Standard

154. The land acquisition compensation standards for Pingshan Reservoir and Water Transfer Facility Component will be implemented in accordance with the

relevant laws and regulations of the People's Republic of China, Guizhou People's Government, Bijie Prefecture People's Government, Nayong County Government and ADB policy. The compensation standards of permanent land acquisition and temporary land occupation are shown in **Table 4.1**.

Table 4-1: Compensation Standard of Collective Land Acquisition

Type of Land	Output Value Per Mu	Compensation	Resettlement Subsidies	Compensation	Allowance	Forest Compensation	Total
	CNY/mu	Multiplier	Multiplier	CNY/mu	CNY/mu	CNY/mu	CNY/mu
Dryland	1,200	10	6	12,000	7,200		19,200
Economic forest	1,200	4	6	4,800	7,200	2,080	14,080
Forest land	1,200	4	6	4,800	7,200	1,260	13,260
Shrub land	1,200	4	6	4,800	7,200	200	12,200
Other grassland	1,200	4		4,800	0		4,800

155. Using 3% investment return as no risk return analysis, no risk return analysis of compensation amounts for various lands is higher than the net output of lands, see **Table 4-2**. It indicates that the compensation standard meets ADB's replacement cost standard.

Table 4-2: No Risk Return Analysis of Land Compensation

Land Type	Compensation Standard	No Risk Return	Net Production Value	Difference
	CNY/mu	CNY/mu/Year	CNY/mu/Year	CNY/mu/Year
Dryland	19,200	576.0	400	176.0
Economic forest	14,080	422.4	390	32.4
Forest land	13,260	397.8	380	17.8
Shrub land	12,200	366.0	170	196.0
Other grassland	4,800	144.0	100	44.0

156. In addition, the collective land acquisition will also require the Project owner to pay various taxes as follows: (i) land reclamation fee; (ii) new construction land use fees; (iii) cultivated land acquisition tax. Please see the **Table 4-3**.

Table 4-3: Other Costs Standard of Land Acquisition

Name	Standard	
	CNY/m ²	CNY/mu
Land reclamation fee	9.60	6,400
Cultivated land acquisition tax	10	6,667
Forest vegetation restoration fee	3 - 6	2,000 - 4,000

4.5.2 Compensation Standard for House Demolition

157. The house demolition compensation will be paid by replacement value.

Table 4-4: House Demolition Compensation Guidelines Standard

Type	Unit	Brick-concrete Structure	Brick-wood Structure	Timber Structure
Main house	CNY/m ²	818	577	441
Side house	CNY/m ²	613	432	
Miscellaneous house	CNY/m ²	238		

158. The houses at replacement costs are presented in **Table 4-5** and **Table 4-6**. APs are allowed to salvage the old housing materials without any deduction of compensation. The village infrastructure at new resettlement areas will be constructed by the local government in unified form.

Table 4-5: Unit Price Analysis of Brick-Concrete Structure Houses (Private-owned)

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
I	Bill of quantity by subproject				53,549.3	
	Earth and rock engineering				5,108.63	
1	Land leveling	m ²	142.09	0.71	100.91	labor + machinery cost
2	Digging foundation earthwork (Artificial digging trench, foundation pit within 2 m depth, three and four types of soil)	m ³	250.99	15.15	3,801.39	labor + machinery cost
3	Earthwork transport and backfill	m ³	146.26	8.25	1,206.33	labor + machinery cost
	Masonry Engineering				4,608.58	
4	Solid brick wall	m ³	19.98	230.76	4,608.58	labor + machinery cost
	Concrete and reinforced-concrete engineering				33,012.66	
5	Strip foundation C ₂₅	m ³	60.78	211.53	12,849.18	labor + machinery cost
6	Cushion layer C ₁₀	m ³	16.73	169.23	2,829.93	labor + machinery cost
7	Structural column C ₂₅	m ³	2.69	251	673.85	labor + machinery cost
8	Foundation beam C ₂₅	m ³	4.82	218.04	1,050.05	labor + machinery cost
9	Ring beam C ₂₅	m ³	4.82	244.4	1,177.01	labor + machinery cost
10	Non beam plate C ₂₅	m ³	21.32	215.92	4,599.69	labor + machinery cost
11	Gutter, eaves boards C ₂₅	m ³				
12	Straight stair C ₂₅	m ²				
13	Cast-in-place reinforced concrete circular reinforced within Φ10	t	0.72	4982.33	3,567.93	labor + machinery cost
14	Cast-in-place reinforced concrete reinforced within Φ16	t	1.23	5096.62	6,265.01	labor + machinery cost
	Flooring engineering				872.31	
15	Cement mortar floors, 25 mm	m ²	106.56	8.19	872.31	labor + machinery cost
	Wall cylinder engineering				6,186.83	
16	Wall plastering					
17	Cement lime mortar of inner walls 16+5mm	m ²	187.14	15.64	2,923.69	labor + machinery cost
18	Exterior wall tiles	m ²	25.59	127.59	3,263.13	labor + machinery cost
	Ceiling engineering				683	
19	Ceiling plaster lime mortar plaster cast-in-situ+12mm	m ²	106.58	6.41	683	labor + machinery cost
	Doors and windows project				3,077.29	

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
20	Veneer wood door	m ²	11.63	85.3	991.23	labor + machinery cost
21	Aluminum alloy push-pull window	m ²	13.84	150.77	2,086.06	labor + machinery cost
II	List of measures				16,887.02	
2.1	First measure				4,336.92	
2.1.1	Safe and civilized construction	No.	1	2,466.05	2,466.05	
2.1.1.1	Environmental protection	No.	1			
2.1.1.2	Civilized construction	No.	1	456.31	456.31	
2.1.1.3	Safe construction	No.	1	912.62	912.62	
2.1.1.4	Temporary facilities	No.	1	1,097.12	1,097.12	
2.1.2	Night construction	No.	1	136.9	136.9	
2.1.3	Rehandling	No.	1	182.52	182.52	
2.1.4	Acceleration costs	No.	1	912.62	912.62	
2.1.5	Drainage and precipitation of construction	No.	1	319.41	319.41	
2.1.6	Completed engineering equipment protection	No.	1			
2.1.7	In and out of sites of large machinery, and installation and dismantling	No.	1			
2.1.8	Winter rainy season construction	No.	1	319.41	319.41	
2.1.9	Measures of special engineering	No.	1			
2.1.10	Temporary protection facilities of ground and underground facilities, and buildings	No.	1			
2.2	Second measure	No.			12,550.1	
2.2.1	Concrete, reinforced-concrete formwork and support	No.	1	12,550.1	12,550.1	
2.2.2	Scaffold	No.	1			
2.2.3	Completed engineering equipment protection	No.	1			
2.2.4	Drainage and precipitation of construction	No.	1			
2.2.5	Vertical transportation machinery	No.	1			
III	Fee and taxes				17,151.11	
1	Fees				5,128.5	
1.1	Project pollution discharge cost	No.	1			

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
1.2	Social insurance cost (pension, unemployment insurance, and medical insurance)	No.	1		4,406.35	labor + machinery cost
1.3	Industrial injury insurance	No.	1			
1.4	Housing provident fund	No.	1		640.81	labor + machinery cost
1.5	Dangerous operations accident injury insurance	No.	1		81.34	labor + machinery cost
2	Policy adjustment	No.			9,390.08	
2.1	Labor cost adjustment and increase	No.	1		9,390.08	labor cost x coefficient of adjustment and increase
3	Taxes	CNY			2,820.31	
IV	Total Price of Housing	CNY			87,775.21	
V	House Area	m ²			108	
VI	Unit Price of Houses	CNY/m ²			817.73	

Table 4-6: Unit Price Analysis of Wood-Brick Houses (Private-Owned)

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
I	Bill of Quantity by Subproject				76,505.32	
	Earth and rock engineering				2,558.53	
1	Land leveling	m ²	203.52	0.71	144.52	labor + machinery cost
2	Digging foundation earthwork (Artificial digging trench, foundation pit within 2 m depth, three and four types of soil)	m ³	126.62	15.15	1,917.78	labor + machinery cost
3	Earth transport and backfill	m ³	60.2	8.25	496.23	
	Masonry Engineering				5,362.88	
4	Brick foundation	m ³				labor + machinery cost
5	Solid brick wall	m ³	23.25	230.76	5,362.88	
	Concrete and reinforced concrete engineering				11,305.76	labor + machinery cost
6	Strip foundation C ₂₅	m ³	58.43	193.61	11,305.76	labor + machinery cost
7	Cushion layer C ₁₀	m ³	13.33			labor + machinery cost
	Timber structure engineering				50,811.70	labor + machinery cost
8	Wood frame		13.69	2,343.88	32,062.86	labor + machinery cost
9	Wood board	m ²	93.39	170.27	15,892.47	labor + machinery cost
10	Wood stair	m ²	13.22	216.26	2,856.37	labor + machinery cost
	Roof				367.28	labor + machinery cost
11	Tile roof	m ²	138.93	2.65	367.28	labor + machinery cost
	Wall cylinder engineering				2,550.88	labor + machinery cost
12	Inner wall cement mortar 13 + 5 mm	m ²	333.30	7.66	2,550.88	
	Door and windows project				3,548.29	
13	Veneer wood door	m ²	15.50	85.30	1,321.63	labor + machinery cost
14	Aluminum alloy push-pull window	m ²	14.76	150.77	2,226.66	labor + machinery cost
II	List of Measures				6,839.94	
2.1	First measure				2,768.71	
2.1.1	Safe and civilized construction	No.	1	1,654.00	1,654.00	
2.1.1.1	Environmental protection	No.	1			
2.1.1.2	Civilized construction	No.	1	306.05	306.05	

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
2.1.1.3	Safe construction	No.	1	612.10	612.10	
2.1.1.4	Temporary facilities	No.	1	735.85	735.85	
2.1.2	Night construction	No.	1	91.81	91.81	
2.1.3	Rehandling	No.	1	122.42	122.42	
2.1.4	Acceleration costs	No.	1	612.10	612.10	
2.1.5	Drainage and precipitation construction	No.	1	214.24	214.24	
2.1.6	Completed engineering equipment protection	No.	1			
2.1.7	In and out of sites for large machinery, and installation and dismantling	No.	1			
2.1.8	Winter rainy season construction	No.	1	214.24	214.24	
2.1.9	Measures of special engineering	No.	1			
2.1.10	Temporary protection facilities of ground and underground facilities, and buildings	No.	1			
2.2	Second measure				4,071.23	
2.2.1	Concrete, reinforced-concrete framework and support	No.	1	4,071.23	4,071.23	
2.2.2	Scaffold	No.	1			
2.2.3	Completed engineering equipment protection	No.	1			
2.2.4	Drainage and precipitation construction	No.	1			
2.2.5	Vertical transportation machinery	No.	1			
III	Fees and Taxes				13,011.34	
1	Fees				3,439.73	
1.1	Project pollution discharge cost	No.	1			
1.2	Social insurance cost (pension, unemployment insurance, and medical insurance)	No.	1		2,955.37	labor + machinery cost
1.3	Industrial injury insurance	No.	1			
1.4	Housing provident fund	No.	1		429.80	labor + machinery cost
1.5	Dangerous operations accident injury insurance	No.	1		54.56	labor + machinery cost
2	Policy adjustment				6,576.61	
2.1	Labor cost adjustment and increase	No.	1		6,576.61	labor cost x coefficient of

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
						adjustment and increase
3	Taxes	CNY			3,102.68	
IV	Total Price of Housing	CNY			96,464.28	
V	House Area	m ²			168.00	
VI	Unit Price of Houses	CNY/m ²			576.19	

Table 4-7: Unit Price Analysis of Wood Structure Houses (Private-Owned)

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
No.	Name of List				59,283.93	
I	Bill of Quantity by Subproject				231.36	
	Earth and rock engineering	m ²	80.90	0.71	57.45	labor + machinery cost
1	Land leveling	m ³	11.52	15.10	173.92	labor + machinery cost
	Concrete and reinforced-concrete engineering				1,208.15	
3	Strip foundation C ₂₅	m ³	6.24	193.61	1,208.15	
	Wood structure engineering				55,204.29	labor + machinery cost
4	Wood house frame	m ³	6.74	2343.88	15,779.26	
5	Wood stake	m ³	2.15	1465.95	3,154.47	labor + machinery cost
6	Wood board	m ²	50.14	170.27	8,531.59	labor + machinery cost
7	Wood wall	m ²	163.01	170.27	27,738.98	labor + machinery cost
	Ceiling engineering				240.97	labor + machinery cost
8	Tile roofing	m ²	91.15	2.65	240.97	labor + machinery cost
	Doors and windows project				2,399.16	labor + machinery cost
9	Veneer wood door	m ²	7.17	85.30	611	labor + machinery cost
10	Aluminum alloy push-pull window	m ²	11.86	150.77	1,788.16	labor + machinery cost
II	List of Measures				1,374.89	
2.1	First measure				939.84	
2.1.1	Safe and civilized construction	No.	1	561.45	561.45	
2.1.1.1	Environmental protection	No.	1			
2.1.1.2	Civilized construction	No.	1	103.89	103.89	
2.1.1.3	Safe construction	No.	1	207.78	207.78	
2.1.1.4	Temporary facilities	No.	1	249.78	249.78	
2.1.2	Night construction	No.	1	31.17	31.17	
2.1.3	Rehandling	No.	1	41.55	41.55	
2.1.4	Acceleration costs	No.	1	207.78	207.78	
2.1.5	Drainage and precipitation of construction	No.	1	72.72	72.72	
2.1.6	Completed engineering equipment protection	No.	1			

No.	Name of List	Unit	Engineering Quantities	Comprehensive Unit Price	Comprehensive Price	Calculation Basis
2.1.7	In and out of sites of large machinery, and installation and dismantling	No.	1			
2.1.8	Winter rainy season construction	No.	1	72.72	72.72	
2.1.9	Measures of special engineering	No.	1			
2.1.10	Temporary protection facilities of ground and underground facilities, and buildings	No.	1			
2.2	Second measure				435.05	
2.2.1	Concrete, reinforced-concrete formwork and support	No.	1	435.05	435.05	
2.2.2	Scaffold	No.	1			
2.2.3	Completed engineering equipment protection	No.	1			
2.2.4	Drainage and precipitation of construction	No.	1			
2.2.5	Vertical transportation machinery	No.	1			
III	Fee and Taxes				5,548.17	
1	Fees				1,167.63	
1.1	Project pollution discharge cost	No.	1			
1.2	Social insurance cost (pension, unemployment insurance, and medical insurance)	No.	1		1,003.21	labor + machinery cost
1.3	Industrial injury insurance	No.	1			
1.4	Housing provident fund	No.	1		145.90	labor + machinery cost
1.5	Dangerous operations accident injury insurance	No.	1		18.52	labor + machinery cost
2	Policy adjustment				2,325.92	
2.1	Labor cost adjustment and increase	No.	1		2,325.92	labor cost x coefficient of adjustment and increase
3	Taxes	CNY			2,131.87	
IV	Total Price of Housing	CNY			66,284.24	
V	House Area	m ²			151.00	
VI	Unit Price of Houses	CNY/m ²			440.97	

4.5.3 Temporary Land Compensation Standard

159. If the cultivated land is temporarily used, compensation should be provided to the affected people. The principle of compensation is based on the annual output value for one season per mu. Compensation period is 2 years. Land restoration costs will be included in the civil engineering cost. **Table 4-8** provides the land compensation of temporary land occupation.

Table 4-8: Compensation of Temporary Land Occupation at Lump Sum Rates

Item	Unit	Paddy Field	Dry Land	Forest Land
Reclamation	CNY/mu	10,850	10,000	7,200
Production Recovery	CNY/mu	1,200	1,200	1,200
Compensation	CNY/mu	Annual output value	Year	Max. 3 years

4.5.4 Compensation Standards of Standing Crops and Ground Attachments

160. Compensation standards of ground attachments are shown in **Table 4-9**. Compensation standard for different diameters of trees is presented in **Table 4-10**. Please refer to other policies in **Table 4-11**.

Table 4-9: Compensation Standards of Auxiliaries and Ground Attachments

No.	Item	Unit	Unit Price (CNY)
1	Sunning ground	m ²	32
2	Toilet	No.	100
3	Water pond	m ³	150
4	Grave	No.	400
5	Television receiver	set	100
6	Grass trimmer	No.	30
7	Rice milling machine	No.	30
8	Wine cellar	No.	300

Table 4-10: Compensation Standard of Trees

No.	Item	Unit	Unit Price (CNY)
1	Fruit tree	No.	
(1)	Tree with fruits	No.	100
(2)	Tree without fruits	No.	50
2	Economic tree	No.	
(1)	Matured tree	No.	30
(2)	Sapling	No.	10
3	Commercial tree	No.	
(1)	Matured tree	No.	10
(2)	Sapling	No.	5
4	Bamboo	grove	120

Table 4-11: Other Compensation Policies

Category	Unit	Policies
House construction subsidy		Relocated households whose main house is not brick-concrete structure with less than 20 m ² per capita, the difference portion will be compensated and monitored according to average 20 m ² of brick-wood structure per capita.
Relocation allowance	CNY/person	1,500
Culture, education and hygiene subsidy	CNY/person	500 as listed in the regulation of reservoir resettlement
House decoration fee		5% of the total housing compensation
Road relocation repair and construction cost	CNY/person	400 as listed in the regulation of reservoir resettlement
House decoration		5% of main brick-wood structure house in whole reservoir land acquisition area
Relocation insurance	CNY/person	60

4.6 Entitlement Matrix

161. Entitlement matrix was prepared in accordance with applicable policies in this chapter, please see **Table 4-12**.

Table 4-12: Entitlement Matrix

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
Collective Land Acquisition (1,749.69 mu)	Village groups	25	(i) For land re-adjustment, compensation will be paid to the host villages which give out their land to the relocated families. (ii) 100% cash compensation allocated to affected HHs who lost their land and choose cash compensation.	Dryland: CNY 19,200/mu; Economic forest: CNY 14,080/mu; Forest land: CNY 13,260/mu; Shrub land: CNY 12,200; Other grassland: CNY 4,800.
	Affected population	901 APs (282 HHs)	(1) Cash compensation: Guizhou Province announced average annual value of output standard and compensation policies. (2) adjust the cultivated land by independent land transfer mode (land re-adjustment), and compensation will be paid to the host villages which give out their land to the relocated families; (3) development of reserved land resources to develop cultivation, forest and fruit farming; (4) construction of basic cultivated land and water conservancy construction, improve the quality of the land; (5) development of family breeding business; (6) post resettlement support fund: CNY 600 per resettler per year for a total of 20 years; (7) Nayong County will organize industry and commerce, taxation, health other sectors to provide the active-site services, and the implementation of relevant tax, simplified procedures and other preferential policies and measures to help solve practical difficulties and problems of land-losing farmers in the service industry they encountered.	Nayong County Government will organize industry and commerce, taxation, health and other departments to provide door-to-door services, relevant tax exemption, simplify procedures, and other preferential policies to the APs.
Acquisition of State-owned Land (56.71 mu)	None	None	State-owned barren hills free transfer to the Project.	
House Demolition and Resettlement	Displaced HHs (11,449.46 m ² housing area)	95 HHs (447 APs)	(i) According to the destination of production arrangement plan, combined with resettlement willingness and topography, geological conditions of resettlement area, resettlers adopt centralized and scattered settlement out of their places; (ii) Compensation provided at replacement cost to the APs; (iii) The basic infrastructures of the resettlement sites will be constructed by the Government; (iv) Subsidy will be provided to the households in difficulties; (v)	Main Houses: Brick-concrete structure: CNY 818/m ² ; Brick-wood structure: CNY 577/m ² ; Timber structure: CNY 441/m ² Side Houses: Brick-concrete structure: CNY 613/m ² ; Brick-wood structure: CNY 432/m ² Miscellaneous house:

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
			Relocation allowance will be provided to relocated families; vi) Assistance will be provided during relocation process; and v) Provision of post-resettlement support fund to the relocated families.	Brick-concrete structure: CNY 238/m ² Post Resettlement Support Fund: CNY 600/capita per year for 20 years after resettlement
Temporary land Occupation (715.19 mu)	Affected households	Affected households	(i) cash compensation: crop compensation paid to the affected people; (ii) land restoration costs will be included in the civil works engineering budget.	The average annual yield of 100% compensation to the affected farmers. Compensation period is occupation period.
Standing crops and ground attachments	Owners of trees and other agricultural production facilities and auxiliaries	According to ownership to determine the villagers	Cash compensation paid to the affected people	Sunning ground: CNY 32/m ² ; Toilet: CNY 100/each; Water pond: CNY 150/m ³ ; Grave: CNY 400/each; Television receiver: CNY 100/set; Grass trimmer: CNY 30/each; Rice milling machine: CNY 30/each; Wine cellar: CNY 300/each; Fruit Tree: Tree with fruits: CNY 100/each; Tree without fruits: CNY 50/each; Economic Tree: Matured tree: CNY 30/each; Sapling tree: CNY 10/each; Commercial Tree: Matured tree: CNY 10/each; Sapling tree: CNY 5/each; Bamboo: CNY 120/grove
Vulnerable Groups	Vulnerable groups affected by land acquisition and resettlement	Vulnerable HHs	It has been determined for the vulnerable group that: (i) PMO and village committee/resident committee will mobilize and use the vulnerable group assistance reserve fund at CNY 250,000 (for vehicle rental, hiring, and other winter warmth action); (ii) Vulnerable groups will receive priority employment opportunities provided by the project construction units or other measures to restore their life; (iii) PMO and village committee will help build a new home; (iv) Relocated households whose main house is not brick-concrete structure with less than 20 m ² per capita, the difference portion will be compensated according to average 20 m ² of brick-wood structure per capita.	

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
Land Adjustment by Host Population for Resettlement Sites	HHs involved in land adjustment	HHs involved in land adjustment	(i) Consult with the residents of the host communities to adjust and allocate lands to relocated people and compensation standards; (ii) Provide assistance to the residents of the resettlement sites for non-agricultural sector employment; (iii) Provide support to the integration of the residents in host communities and the relocated people.	Resettlement groups and host groups will negotiate based on rates for collective-owned land (see above) for scattered resettlement. Concentrated resettlement site will be on state-owned land without affecting any host population.
Complaints and appeals		All affected people	Complaints and appeals for free. All expenses reasonably incurred paid by the project preparatory cost.	
Females	436 Females	436 Females	(i) Priority will be given to women for employment and training opportunities. During the Project construction phase, about 4,650 person-years positions and training opportunities will be generated, at least 30% of job positions in the project will be provided to women; (ii) Priority will be given to women for agricultural technology training at free of charge, at least 40% of women will participate in the training; and (iii) Ensure women can obtain relevant information and participate in the resettlement implementation activities.	
EMs	249 EMs	249 EMs	(i) Priority will be given to EMs for employment and training opportunities. During the Project construction phase, about 4,650 person-years positions and training opportunities will be generated, at least 40% of job positions in the project will be provided to EMs; (ii) Priority will be given to women for agricultural technology training at free of charge, at least 40% of EMs will participate in the training; and (iii) Ensure EMs can obtain relevant information and participate in the resettlement implementation activities.	

V PUBLIC PARTICIPATION AND CONSULTATION

162. Nayong County Government and the relevant local township (town) government / street committee office used the socioeconomic survey and the physical index quantity survey to seek views from the various affected people, through widely publicizing the basic information of the Project in various ways, and conducting consultations on the common concerns on this Project during the decision making process of planning, design and implementation.

5.1 Public Participation and Consultation Activities during the Project Preparatory Phase

163. Up to date, the main resettlement information disclosure and public consultation activities undertaken are shown in **Table 5-1**.

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

No.	Date	Content of Public Participation and Consultation	Participants	No. of Participants	Of which, Women	Organizer
1	June - July 2012	"TOR" and "Survey Details" Consultation Meeting	Nayong County PMO, HCGECLGISDI, Village collective and representatives of APs	25	5	NPMO
2	10 May 2012	"Notice on Prohibition of Adding New Construction Projects and Resettlement Population in Pingshan Reservoir Inundated Area and Construction Area (Nafutonggao, (2012) No.7)	Village collective and representatives of APs	300	120	NPMO
3	31 July 2012	Conference on "TOR" and "Survey Details" for the study and discussion	Nayong County PMO and HCGECLGISDI	30	5	NPMO
4	31 July 2012 - 27 September 2012	Physical index quantity survey and resettlement planning	Nayong County PMO, HCGECLGISDI, the affected villages and households village collective and affected populations representatives	300	120	NPMO

No.	Date	Content of Public Participation and Consultation	Participants	No. of Participants	Of which, Women	Organizer
5	March 2013	TOR for Nayong County Pingshan Reservoir construction land acquisition and resettlement plan	Guizhou Province Resettlement Office, Nayong County PMO, HCGECLGISDI	30	5	Guizhou Province Resettlement Office
6	2 March 2013	"TOR" consultation meetings	Guizhou Province Resettlement Office, Nayong County PMO, HCGECLGISDI	30	5	Guizhou Province Resettlement Office
7	March - May 2013	Resettlement plan	Nayong County PMO, HCGECLGISDI, affected villages and households, village collective and representatives of APs	300	120	NPMO
8	10 May 2013	Examine "TOR"	Nayong County Water Conservancy Bureau PMO, HCGECLGISDI, affected villages and households, village collective and representatives of APs	30	5	Guizhou Province Resettlement Office
9	10 May 2013	Examine the RP of Nayong County Pingshan Reservoir Engineering Construction land acquisition and resettlement	Guizhou Province Resettlement Office, Nayong County PMO, HCGECLGISDI	30	5	Guizhou Province Resettlement Office
9	Mar 2015 - Jul 2016	Project scheme analysis	PPTA Consultants and affected villages	150	30	Guizhou PMO
9	Mar – Aug 2016	All issues related with LAR, including socio-economic survey, scope of impacts, compensation and entitlement, rehabilitation, concerns, etc.	PPTA Consultants, local stakeholders and representatives of APs	150	30	Guizhou PMO
TOTAL				1,225	420	

164. Nayong County PMO and township government held house demolition and resettlement meeting between 2012 and 2016; the affected village cadres attended the meeting, also conducted the survey of "comments and opinions on projects". The issues of relocated households concerned, and information provided by the Project team are shown in **Table 5-2**. The representative of affected households fully expressed their wishes and concerns, see **Table 5-3**. The RP has adequately

responded to concerns and issues raised by various stakeholders, specifically DPs as indicated in **Table 5.2** and **Table 5.3**.

Table 5-2: Concerns of APs and Answers by the Project

No.	Questions	Answers
1	Production resettlement modes	<ul style="list-style-type: none"> - Scattered resettlement: In accordance with the wishes of individual resettlers, the relocated households contact the residential places or go to live on their relatives and friends by themselves at the county and township (town), and village, and have some cultivated land, production and living security. - Self-employment resettlement: Self-employment should be verified by the township (town) people's government of Nayong County Resettlement Office. After reviewed by Nayong County People's Government, and determined the self-employment person with self-employment conditions, thereafter, and sign the self-employment house relocation agreement.
2	Planning of residential area	<ul style="list-style-type: none"> - According to the principles and conditions of determined relocation population, screened the relocated households, held the resettlement meeting, provided discussion to the resettlers, and determined the relocated households and disclosed in public. After the disclosure of determined relocated households without objection, and sign the agreement on resettlement destination and disclosed in public.
3	Resettlement areas	<ul style="list-style-type: none"> - Provision of the resettlement areas of Dongfengyakou, Naodi Village and Yuetai Village. - Agreed and accepted by the host villagers and the relocated families - Carrying capacity of the host resettlement sites; - Type and size of residential houses; - Type and area of farmland re-adjustment; - Integration of social network in the host communities.
4	What facilities on the replacement housing?	<ul style="list-style-type: none"> - Water supply, discharge of sewerage water and power supply
5	What preferential policies the relocated households can enjoy?	<ul style="list-style-type: none"> - Provision of transitional resettlement; relocation subsidies; reward.
6	How to handle the households under the extremely difficulties	<ul style="list-style-type: none"> - For the relocated families whose brick-concrete house compensation is less than the standard of 25 m²/capita at average for their main houses, price difference will be provided as 25 m² brick-concrete house at average for their main houses.
7	Can they move to the replacement housing after the demolition?	<ul style="list-style-type: none"> - First built then demolition for resettlement sites

Table 5-3: Wishes and Concerns by Affected Households

No.	Questions	Concerns Addressed by AHs and Organizers
1	How much effects on agricultural income after expropriation of cultivated land?	<ul style="list-style-type: none"> - Significant impacts, and great concerns about the issue of land acquisition.
2	How to make the production resettlement?	<ul style="list-style-type: none"> - There are plenty of cultivated land resources that can be developed or resettlement area farmers are voluntary transfer of cultivated land; - Natural conditions and traffic conditions are relatively good, with provision of water, electricity and other facilities; - Relocation should fully respect for minority's rights, as far as possible to take care of the original production and living habits.

No.	Questions	Concerns Addressed by AHs and Organizers
3	What are the measures to minimize agricultural losses? How to increase income? What the Government can do to help restore livelihoods?	<ul style="list-style-type: none"> - Earn income by self-labor work; - Hope the Government arranges employment, and implements skills training; - Wage is low to work in the local.
4	Who pay compensation for land acquisition? Land acquisition procedures include? What land acquisition compensation claim?	<ul style="list-style-type: none"> - Nayong County Land and Resources Administration Bureau disburse the compensation payment to the township, township disburses to the village, and village pays to the APs; - Land acquisition is posted in the township, village and group. Village and township cadres and officers of land division pay visits to households; - Hope land acquisition compensation can be higher.
5	Willingness to move to resettlement areas? What advice or requirement for replacement houses? What requirements for the house demolition compensation?	<ul style="list-style-type: none"> - Willing to move to resettlement areas, the village has been expressed in a conference about their comments on the types of resettlement houses and has confirmed the types of houses they want; - Hope house compensation can be higher.
6	What demand for support of the affected people?	<ul style="list-style-type: none"> - Hope the Government provides reasonable and necessary resettlement subsidies to guarantee their living, employment arrangements for themselves and their children; - The Government should pay great concerns to make the lives of the APs become better.

Table 5-4: Results of the Consultation with Government Departments

Unit	Questions	Concerns Addressed by AHs and Organizers
Civil Affairs Bureau	Rural poverty line (MLG in rural areas)	Average net income of CNY 3,060 per capita
Human Resources and Social Security Bureau	Farmers' training	Human Resources and Social Security Office, simple and vocational training (at least 3 months), and voluntarily participate in training free of charge.
Resettlement Office	How to define resettlement	Survey
	Compensation for demolition, including content	House demolition compensation includes: (i) house structure; (ii) homestead; (iii) auxiliaries and facilities; (iv) relocation cost; (v) transitional costs; and (vi) reward.
	Handling house evaluation dispute	Verify results with the owner. If there is dispute, re-evaluate till the owner signs up.
Land and resources administration bureau	Land compensation standard	"Forward <<Guizhou People's Government on Unified Annual Output Value Standard of Land Acquisition and Reply to the Land Acquisition Area Integrated Price Results>> Letter" (Qiangutuzihan [2009] No. 624)
	Land Tax	Land taxes include: (i) land reclamation fee of CNY 6,400 /mu; (ii) cultivated land acquisition fee: cultivated land CNY 10/m ² ; (iii) forest vegetation restoration fee of not less than CNY 10/m ² ; shrub land, woodland, and immature forest ground not less than CNY 6/m ² ; suitable forest land not less than CNY 3/m ² . Forest vegetation recovery fee will be based on the approved figure for the use of woodland feasibility report.
	Announcement of construction stoppage	Nayong County Government Issued Notice of Prohibition of New Construction Project and New Resettlement Population into Pingshan Reservoir Inundated Area and Construction Area (Nafutonggao (2012) No. 7)

Table 5-5: Current Plan of Affected Households

No.	Questions	Concerns Addressed by AHs and Organizers
1	Main source of household income	- Family income is mainly based on agricultural income
2	Time of inputs for seasonal workers	- Each HH has at least one person as seasonal workers, and work 3 to 4 months each year; - Heavy work: CNY 200/day; light labor: CNY 180/day.
3	Responsibilities of women	- Women are responsible for farming and taking care of children and the elderly at home.
4	Intention after land acquisition and house demolition	- Develop cultivation industry as migrant seasonal workers
5	Resettlement housing in resettlement area	- Construct houses in the new resettlement area
6	Land adjustment	- To the new resettlements for land adjustment
7	Pension insurance	- All participated in farmers' pension plan for rural areas
8	Use of land compensation	- (i) land transfer and small business operation, small shop and small restaurant operation; (ii) for children's education; (iii) supplement household's daily living; and (iv) bank deposit.

5.2 Measures to Improve Public Participation and Consultation

165. According to the comments and recommendations of the public participation and consultation from July 2015 to August 2016, the engineering design has been improved, give full consideration and absorption during the preparation of the resettlement plan. Further improvement measures adopted are as follows:

- (i) Identify the impact scope earlier, and notify the affected population timely, so the relocation household can arrange their livelihood in advance. Meanwhile, use the forms that they loved, such as radio, television, notices, meetings, etc. to widely spread the Project information, so that they have a thorough understanding of the Project.
- (ii) Nayong County Government and relevant departments explain the relevant compensation standards, so that the APs know fairly well.
- (iii) Implement the system and financial disclosure strictly, such as disclosed compensation standards, measure quantities and assess the level, etc. after determining the compensation payment, posting announcements to accept the participation and supervision of affected populations. Land compensation paid directly to the affected people. House compensation to be deposited in a personal account for the replacement houses.
- (iv) Resettlement information booklet distributed, establish comments complaints and feedback channels, such as setting up telephone complaints, suggestion boxes. Establish consultation system. Hold consultation meetings participated by the PMO, township government and representatives of the village committees, and affected population, and negotiated problem solving countermeasures together.

5.3 Information Disclosure

166. In order to allow all affected people timely and fully understand the resettlement policy and implementation details of the Project, resettlement work will

be undertaken in open, fair and transparent. Nayong County PMO will take the following additional measures to ensure the openness of resettlement policies:

- On 15 November 2016, public announcement of the Project by TV, posters and other forms;
- Affected village cadres disclosed the village affected situation, compensation standards, resettlement measures, complaint channels and other information in the village meeting or other public places;
- In November-December, 2016, provide each of the affected families with "Resettlement Information Booklet";
- In November-December 2016, issuance of the Project "Resettlement Plan" within public libraries or other public places of each affected area, where all the affected population can get access at any time.

167. "Resettlement Information Booklet of RP for Nayong County" will be distributed to the affected people for both Pingshan Reservoir and resettlement sites after the RP gets approval from ADB and Nayong County Government. According to the ADB's Safeguard Policy Statement, "Resettlement Plan for Nayong County" will be disclosed in ADB website, after obtaining approval of Nayong County PMO and ADB. For ethnic minority households, wherever necessary, appropriate language and communication materials will be used for the purpose of disclosure of entitlements, income restoration measures and consultation with EMs during project implementation.

5.4 Public Participation Plan during RP Implementation

168. In order to address the problems and needs of the APs properly and timely regarding land acquisition and resettlement, further consultations with the APs will continue so that all issues may be addressed prior to the start of construction and the implementation of the RP. Meetings will be arranged by the NRO and Pingshan Reservoir Management Office for land acquisition and resettlement, as appropriate. Each affected household will have the opportunity to negotiate the compensation contract, which they will sign with the NRO and Nayong County Land and Resources Administration Bureau. **Table 5-6** provides the public consultation plan and process.

Table 5-6: Public Consultation Plan and Process

Purpose of Event	Form of Event	Timing	Implementing Agencies	Target Participants	Remarks
1. Provide briefings to APs on Project & RP. Solicit comments from APs.	Community meetings and focus group discussion	Jun – Sep 2016	NPMO, DIs, township government/SCO, NRO, NLRAB, and VCs/RC	All APs affected by LAR of the subprojects for Nayong Part	Meetings held with APs in each VC/RC
2. Disclosure of RIB	Public & community meetings and focus group discussions	Oct-Nov 2016	NCG, NRO, NPMO, Pingshan Reservoir Management Office, township government/SCO, NRO, NLRAB, and VC/RC	All APs affected by LAR of the subprojects for Nayong Part	Distribution of RIB to all APs to discuss concerns and suggestions on LAR programs Undertook discussions with various focus

Purpose of Event	Form of Event	Timing	Implementing Agencies	Target Participants	Remarks
					groups to solicit comments & suggestions
3. Present Draft Final RP to APs	Public & community meetings and focus group discussion	Oct-Dec 2016	NCG, NPMO, Pingshan Reservoir Management Office, township government/SCO, NRO, NLRAB, and VCs/RCs	All APs affected by LAR of the subproject for Nayong Part	Distribution of the draft final RP to APs to discuss concerns & gaps relating to LAR programs Undertake discussions with various focus groups to solicit comments & suggestions
4. Advise APs of Entitlements and Dates of Disbursement	Public meetings	Oct-NOV 2016	NPMO, Pingshan Reservoir Management Office, township government/SCO, NRO, NLRAB, and VCs/RCs	All APs affected by LAR of the subproject of Nayong Part	Household meetings to outline entitlements
5. Monitoring of APs and beneficiaries	Household interviews	Mar 2017 – December 2021	NPMO, Pingshan Reservoir Management Office, township government/SCO, NRO, NLRAB, VCs/RCs, and independent monitoring agency	Random samples	Monitoring plan

Note: AP = Affected Population; DIs = Design Institutes; NPMO = Nayong Project Management Office; NRO = Nayong Resettlement Office; NLRAB = Nayong Land and Resources Administration Bureau; RCs = Resident Committees; RIB = Resettlement Information Brochure; RP = Resettlement Plan; SCO = Street Committee Office; VCs = Village Committees.

169. For smooth and successful implementation of the resettlement plan, Nayong County RO, PMO, Pingqiao Reservoir Management Office in association with relevant organizations will ensure the APs actively participate in various land acquisition and resettlement activities through mobilization, communication, meetings and education campaign. The Project construction will cause significant impacts on local people. In order to ensure the APs could benefit from the Project, local people will be encouraged to participate in the project construction actively, and necessary consideration and assistance will be provided to local APs in the use of labors through the implementation of the measures: (i) priority will be given to the APs for the employment; (ii) the selected contractors will be sensitized to the issue of maximum benefits for the APs, including the poor, women and ethnic minorities; and (iii) the contractors will be required to adopt proactive measures, such as quota systems for the APs and vulnerable groups.

VI RESETTLEMENT AND REHABILITATION PLAN

6.1 Objectives and Principles of Resettlement and Rehabilitation

6.1.1 Objectives of Resettlement and Rehabilitation

170. The overall objective of the Project is to restore the affected farmers' livelihoods as soon as possible, and enable livelihood improvements as much as possible. Specific objectives are:

- Affected relocation households get compensation according to the replacement value, to ensure their resettlement housing area, structure and living environment and quality can reach to the level before relocation and have increase than before;
- All the affected land attachments will be compensated according to the replacement value;
- Farmers affected by land acquisition will get replacement farmland through land re-adjustment;
- Farmers affected by land acquisition will get proper compensation and resettlement, through promoting employment and improving production conditions, making their income assured and improved,
- Within 2 years of displacement, all farmers who suffered significant farmland losses permanently will have sustainable livelihood or income guarantees (i.e., for older people) that will ensure they are better off, which will be monitored,
- Ensure self-sufficiency of grain production. In the areas with less arable land resources, through the adjustment of agricultural structure, fully develop the potential of land and improve land output;
- Adopt measures to ensure that the level of production and living of the resettlers can be restored to the level before the resettlement;
- The public infrastructures, school, medical treatment, social welfare, and production and living conditions will be improved to the level before resettlement; and,
- Vulnerable groups will receive special attention and measures to ensure their livelihoods and living conditions are significantly improved.

171. Of the APs, all young people are out to county center, other cities or provinces for seasonable labor as the Project areas are isolated and there are less jobs available nearby to them. For relatively old people, all of them can enjoy pension, and can also continue to engage in agriculture. For vulnerable people, their ages ranking 50 to 60 years old at highest risks, special care and concerns will be paid to them.

6.1.2 Rehabilitation Principles of Resettlement and Production

172. The principles of resettlement and rehabilitation process during the implementation are as follows:

- (i) Land adjustment will be provided to land losing farmers, to ensure that they can have land as production materials.

(ii) The relocated families will be relocated: (i) within the same village group as backward resettlement; (ii) within the same township as scattered resettlement; and (iii) out of township and within the same county as scattered resettlement. In addition, one (1) centralized resettlement site will also be provided to the relocated families who will choose as out-migrant strategy.

(iii) The affected people will be involved in the whole resettlement process. For housing and facilities compensation standards, the choice of resettlement housing, relocation schedule, recovery time schedule, the time of compensation payment and other issues, the affected people or representative will participate in the discussion, and make an agreement through consultation. Consultation with the affected people will be made by holding the representatives' forum, villagers' consultations and other manners.

(iv) All types of compensation will be fully and directly paid to the property owners.

(v) Establishing compensation funds to be paid into a special account, to ensure that any units or individuals (including township governments/street committees and village committees/resident committees) will not hold back the compensation funds of the APs.

(vi) Compensation for housing, land, ground attachments and other assets is completely calculated at replacement value.

(vii) Calculation of full replacement cost will be based on the fair market value, transaction costs, accrued interest, transition and recovery costs, and other costs that may arise appropriate. The amount of compensation shall not be detained or deducted for depreciation, nor the burden of taxation. Payment of property owners' compensation must be disclosed according to the compensation standard calculation. All property owned by the original owner's will belong to the original owners. The value of buildings cannot be depreciated. Compensation shall not deduct the remaining material value after the demolition. Project implementation units will pay any taxes or other fees or exemption from the re-registration of land and property.

(viii) Various livelihood rehabilitation strategies will be implemented to recover the livelihood and income of land loss farmers, including replacement land, cash compensation, pension and social insurance, employment opportunity generation, development of cultivation and livestock breeding, development of private-operated business, skill training, etc.

(ix) Providing assistance and caring for vulnerable groups which consist of poor people living under MLG and disabled, including vulnerable households have a prior right to choose replacement housing, employment opportunities during the Project implementation process, and service distribution in the resettlement area.

(x) Long-term post resettlement support. A post-resettlement support fund will be established, with a standard rate set at CNY 600 per resettler per year, and which will be payable for 20 years.

(xi) Access to previous lands not inundated. All farmers who still have some land left which are not inundated, they have the rights to get access to their previous lands.

6.1.3 Basic Principle of Housing Resettlement Plan

173. Basic Principle of Housing Resettlement Plan adopted:

- a) The selection and planning of housing resettlement location combines with production resettlement, comprehensively considering the topography, geology, water source, electricity, transportation and other factors. Select place that is sunny with geological stability, good water quality, water security, accessibility and room for development, and solicit the opinions of resettlers and host villagers.
- b) The selection of resettlement site is beneficial and convenient for production, optimal land utilization, and minimize the cultivated land acquisition.
- c) Housing resettlement plan is based on the proportions of construction land in "Township Planning Standards", combined with the topography characteristics in resettlement area to conduct comprehensive analysis. Propose a general layout map for new resettlement construction.
- d) Plan and design of infrastructures, includes the plan and design of land leveling engineering in residential sites, water supply, drainage, sewage, electricity, internal roads and external transport for settlements.
- e) The elevation of new housing sites around the reservoir is higher than resettler relocation line and flood line, and keeps 10 m horizontally away from the inundation line to ensure safety. This is important for move-back households.

6.1.4 Living Standard of the Resettlers

- a) Standards of land use. According to relevant regulations of "The Township Planning Standards" (GB50188-2007), rural residential house area can't exceed 40 m² per capita, and land use of road and greening and public building per capita can't exceed 20 m². Combined the actual real level per capita of the reservoir area, the land use planning of rural construction is about 40 m² per person. According to terrain conditions, there are some differences.
- b) Water-use standard of tap water supply: According to "Township Planning Standard", combined with the actual situation in the reservoir area, the per capita water-use is 150 l/day, water quality must meet the relevant provisions of the "Hygienic Standard for Drinking Water" (GB5749-2006).
- c) Electricity standard: for resettlers scatteredly resettled, generally there is no individually configured transformer, residential electricity access existing local power supply facilities count the expansion costs if capacity expansion is needed; living electricity load is based on 4kW/household.

6.1.5 Selection of Resettlement Area

174. Most of the village groups which affected by the Pingshan Reservoir inundated area are relatively far away from Nayong County center. Water source, transportation and living conditions are ordinary. In order to ensure the production and living standards (after the resettlement) are better than the original standard, and create conditions for better resettlement production and living standards, selection of the resettlement areas have taken into account the following principles:

- (i) plenty of exploitable cultivated land resource or cultivated land of farmers to voluntarily transfer in the resettlement area.
- (ii) natural and traffic conditions are relatively good, and water supply, power supply and other facilities are easy to be accessible.
- (iii) fully respect minorities' rights during resettlement, and take care of the original production and living habits as much as possible.
- (iv) Nayong County conducted survey on cultivated land carrying capacity of the whole county, methods are: organize township (town), village and group cadres to conduct household survey on the reasons of land transfer under the jurisdiction of the administrative region, including agricultural to non-agricultural, marriage, death, and engagement in other steady income occupation, screened areas with better conditions as the resettlement area, and recommended them to the resettlers.
- (v) recommend resettlement area to the resettlers.

175. Nayong County conducted the resettlement meeting to the village groups involved in resettlement, and broadcasted the resettlement policies, introduced the cultivated land, natural resources and social resources of the resettlement area to the resettlers, along with related photos of resettlement area for resettlers to select.

6.2 Calculation of Resettlement Needs and Destinations of the Resettlers

176. Resettlement population in Pingshan Reservoir Project includes direct resettlement and expanded (indirect) resettlement, wherein direct resettlement is for those residents who live inside the construction/inundation land acquisition line during the physical index survey, and expanded resettlement is for those residents who live outside the construction/inundation land acquisition line but there is no enough land resources (cultivated garden or cultivated land resources) nearby to ensure their livelihood and production after the originally cultivated garden or land is acquired. The expanded resettlement population is also counted as production resettlement population.

6.2.1 Principles of the Resettlement Population

177. The principles for confirming resettlement population is as follows:

- a) The confirmation of resettlement population is comprehensively analyzed and determined, combined with the original standard, quality, farming conditions, traffic conditions, farming methods and other factors of the cultivated garden and land in affected villages and groups, the quantity and quality of remaining cultivated land and standard configuration (and resettlement standards) of per capita cultivated land; planning must respect willingness of the resettlers;
- b) For farmers with land acquisition whose remaining cultivated land is above the local level of per capita cultivated land or cultivated land resources standard, they are not counted as resettlement population. They could choose to adjust with the existing group or get cash compensation for other investment;
- c) Considering the remaining cultivated land resources in the reservoir area, different resettlement capacity, uncertain resettlement willingness, "contradiction between people and land" and resettlement pressure in the reservoir area, the resettlement plan adopts the method of mainly land

based resettlement, and other resettlement as supplementary; therefore, when determining resettlement population, the population of direct resettlement is directly determined, population of expanded resettlement is determined based on the specific situation;

- d) The resettlement population must be controlled according to the indicators of resettlement population within the group, and broken family and overstep resettlement are forbidden. Affected households and population list, resettlement method and destination, are publicized in village, to accept supervision of the residents; and sign a resettlement destination agreement;
 - e) Population of expanded resettlement must be relocated, and relocation within group or village is prohibited. Expanded resettlement population is not counted if the resettlers do not agree with the expanded resettlement and opt to stay in their original village with cash compensation and land adjustment;
 - f) Expanded resettlement population must be verified by the local government, to confirm implementing the plan and to determine the cultivated land resources standard (number of cultivated garden implementation, quality meet the planning requirements and can ensure the livelihoods of the resettlers) or practical livelihood safeguards (a reliable living skills, relatives, etc.), otherwise the residents are not counted as expanded resettlement population.
- g) Basic condition to determine expanded resettlement population
- i) After verification which is almost done by the local government, it is possible to implement the plan and determine the cultivated land resettlement standard so farmers have the practicable livelihood safeguard measures (such as the implementation quantity and quality of cultivated land meets the planning requirements, to protect their lives, or go and live with their relatives, and have the marketable skills, etc.);
 - ii) Given priority to the farmers who have similar situation with production resettlement and existing population;
 - iii) Under the same conditions, relocation priority is given to the households with poor house structure, and small house area;
 - iv) Land acquisition farmers cannot be counted as production resettlers if their remaining cultivated lands are above the local per capita cultivated land or above the land resources of the resettlement standard. According to the regulations, they should conduct the land adjustment and compensation for cultivated land resettlement within group;
 - v) The entire population of village groups with high loss rate of cultivated land is considered as either direct or expanded resettlers¹ who cannot be settled nearby for production resettlement;
 - vi) Conduct land adjustment and cash compensation for cultivated land resettlement within group for those people who meet the relocation conditions and do not want to relocate. They will not be considered as production resettlement.

6.2.2 Resettlement Destination

178. Based on the investigation, the residents will choose one of the following resettlement: (i) relocate backward within the same village group; (ii) relocate within the same township as scattered resettlement; and (iii) move out of township and within the same county as scattered resettlement. Some of the resettlers will choose

¹ For those if farmland loss ratio of village group is relatively high and can't be resettled nearby, they are considered as expanded resettlers.

to move to the resettlement site of Dongfengyakou Group. For the households who choose scattered resettlement, most of them will use their own contracted land for house construction, and for the proposed centralized resettlement site of Dongfengyakou Group, no household or people will be affected as it is state-owned land. Necessary agreements will be finalized before updating the resettlement plan during project implementation when households to be resettled make final decisions about the relocation site. According to the environmental carrying capacity analysis and consultations, the destination of the relocated families is presented in **Table 6-1**.

Table 6-1: Destination of Relocated Population

Subproject	Township	Village	Group	Relocated Popu.	Of which, Expanded Popu.	Subtotal	Relocated HHs	Of which, Expanded HHs	Subtotal	Resettlement Area		House Plot
				No.	No.	No.	No.	No.	No.			mu
Dam Site Construction Reservoir Area	Zongling	Yaoyan	Youzhafang	75	0	75	18	0	18	Dongfengyakou	CAB	6.7
			Baiyanjiao	30	0	30	7	0	7	Dongfengyakou	CAB	2.7
	Yongxi	Naodi	Youzhafang	139	39	139	24	8	24	Dongfengyakou	CAB	12.5
			Dayuan	9	0	9	2	0	2	Naodi Village	Dayuan	0.8
			Heitang	84	84	84	23	23	23	Dongfengyakou	CAB	7.6
Subtotal				337	123	337	74	31	74			30.3
Dam Site Construction Area	Zongling	Yaoyan	Baiyanjiao	8	0	8	2	0	2	Dongfengyakou	CAB	0.7
	Yongxi	Naodi	Dayuan	91	0	91	17	0	17	Naodi Village	Dayuan	8.2
	Shuguang	Yuetai	Banpozu	11	0	11	2	0	2	Yuetai Village	Banpozu	1.0
Subtotal				110	0	110	21	0	21			9.9
TOTAL				447	123	447	95	31	95			40.2

6.3 Resettlement Plan for Households Affected by House Demolition

6.3.1 Planning Principles and Resettlement Standard

(i) Planning Principles

- a) Selection of residential area should be closely combined with production resettlement.
- b) Considering the possible impact of flood control and reservoir embankment reconstruction, resettlement and reconstruction should be conducted in safe zone above the resettlement line.
- c) Acquisition of cultivated land and forestland should be minimum, try not to demolish old residential houses.

(ii) Resettlement Standard

179. Scattered resettlement, refer to the relevant compensation investment based on standard of reservoirs under construction during recent period in this province.

6.3.2 Basic Infrastructure Plan for Scattered Resettlers

180. The unit price of scattered basic infrastructure cost is determined comprehensively by recent integrated infrastructure unit price in Nayong County. Meanwhile, the cultural center, elders' facilities, and pre-school facilities are taken into consideration. The budget is included in the cost of basic infrastructures of the resettlement areas.

6.3.3 Increase Capacity of Schools and Medical Centers

181. Due to the pressure on local schools and medical centers caused by resettlement, increasing the capacity of schools and medical centers in the resettlement areas must be considered. Based on relevant data analysis and calculation, and the reference of increasing capacity cost standard of other projects under construction in Guizhou Province, the cost of increased capacity is CNY 500 per capita, arranged and used by the Nayong County Government.

6.3.4 Resettlement and Relocation

182. According to the proposed resettlement plan, the relocation population is up to 460 people in the year of planned level, of which 112 people choose backward resettlement within their groups, 117 people choose scattered resettlement within township, and 231 people choose scattered resettlement outside township and within the county. The specific situation of relocation is shown in **Table 6-2**.

6.3.5 Resettlement Modes

183. Resettlement is based on the principles of land resettlement first, other resettlement second. Necessary to comply with the national principle of resettlement, while respecting the wishes of the individual resettlers, and give full play to the subjective initiative of resettlement, to encourage them to live with their friends and relatives, scattered resettlement for land resettlement.

184. Scattered resettlement: In accordance with the wishes of individual individuals, resettlement households contact the residence or go to live with their relatives and friends at

the county, township (town), and village by themselves, and have some cultivated land, production and livelihood security.

185. Self-employment Resettlement: The self-employment should be verified by the township (town) people's government via Nayong County Resettlement Office, after reviewed by Nayong County Government, and determined its condition with self-employment resettlement, thereafter, sign the self-employment relocation agreement.

186. Through the analysis of the related villager groups one by one, the total relocation person is 447 people for land acquisition in 2016.

Table 6-2: Destination of Rural Resettlers' Production Resettlement for Nayong County Pingshan Reservoir Component

	Administrative Township (Town)	Village	Group	Relocation Population (No.)		Resettlement Mode	No. of Resettlement	Relocation Destination		
				Base Year	Year of Planned Level			Township (Town)	Village	Group
Dam Site Engineering Construction Reservoir Area	Zongling	Yaoyan	Youzhafang	75	78	Scattered Resettlement in the SameTownship	78	Zongling	Dongfengyakou	
			Baiyanjiao	30	31		31			
	Yongxi	Naodi	Youzhafang	139	144		144			
			Dayuan	9	9		9	Yongxi	Naodi	Dayuan
			Heitang	84	87		87	Zongling	Dongfengyakou	
	Subtotal				337		349		349	
Dam Site Construction Area	Zongling	Yaoyan	Baiyanjiao	8	8	Scattered Resettlement in the Same Township	8	Zongling	Dongfengyakou	
	Yongxi	Naodi	Dayuan	91	92	Resettlement within the Same Group	92	Yongxi	Naodi	Dayuan
	Shuguang	Yuetai	Banpozu	11	11		11	Shuguang	Yuetai	Banpozu
Subtotal				110	111		111			
TOTAL				447	460		460			

187. According to the production resettlement planning, combined with the resettlement willingness and topographic and geological conditions of resettlement area, most of the resettlers will choose to move to the resettlement site of Dongfengyakou. The resettlement site is shown in **Table 6-3**.

Table 6-3: Resettlement Site of Dongfengyakou

Resettlement Area	Situation of Resettlement Site
Dongfengyakou	The resettlement site of Dongfengyakou is located in the Xiaotun Village, Zongling Township, next to 307 provincial road, 15 km from the Nayong County, 1 km from the site of Zongling Township Government, 4 km from Yongxing coal mine, 3 km from the Lu Qian coal mine, with convenient transportation, domestic water supply and electricity could be included in the scope of township services, land ownership belongs to the Civil Affairs Bureau of Nayong County.

188. The affected households will be compensated for their former houses during the process of house demolition and moving into resettlement areas. A homestead will be provided to each AH for self-construction of houses.

189. For people losing housing, they will receive “cash compensation” or “cash plus house plot” in the resettlement areas. With cash compensation, the resettled residents could re-construct their houses in the resettlement areas or purchase houses in other places they prefer. All the relocated households will also receive a relocation allowance. The county resettlement offices and local government will provide necessary assistance for relocation during resettlement implementation.

6.3.6 Social Integration into Host Villages

190. Full consultation and discussion have been made for the host villages and affected villages, plus the distance between the host villages and affected villages is not far (about 1 km to 25 km) and their production and living habits are similar. In addition, both host villages and affected villages have the same ethnic minorities of Chuanqing, Miao, Buyi and Bai, and they enjoy the same social and economic status with the Han and their life and production has been integrated into the Han society. Although the ethnic minority people still speak their own languages, all the minorities can speak Chinese mandarin and socially integrated as a result of long-time intermarriage. For the living habit, they have no difference with the Han except the holidays with their specific minority characters and clothing. These will not cause any integration problem to the APs and host villagers after resettlement.

6.4 Rehabilitation Plan for Production Measures and Livelihood of Farmers Affected by Land Acquisition

6.4.1 Production Resettlement Measures

191. The main cultivated land acquired by the Project is for the reservoir area. (inundation area once the dam is constructed). Agricultural income proportion of the total income is from 65% to 68%. The main source of farmers' income after resettlement is expected to come from: (i) investment income using land compensation; (ii) participation in various non-agricultural activities (such as industry, commerce, services, etc.) or go out as migrant seasonable workers in the county town

or other cities or provinces; and (iii) restoration of farm income by using replacement farmland of host villages.

192. Target of production resettlement is to ensure that individuals' incomes are improved and sustainable after resettlement, compared to existing income levels. Through analysis of the project area along the village's geographical location, land resources ownership, income of local residents and so on, and based on the full consultation with the resettlers, it was identified that replacement farmland will be provided or all the land compensation fees will be paid to the farmers affected by land acquisition if they will not choose replacement land option but find non-agricultural employment. Guidance will be provided to the villagers engaged in the employment of secondary and tertiary industry. Improvement of land productivity of the host villages, and resettlement program to increase output of "unit of production on the land". The APs are willing to relocate to the area with better production condition and access to information, more close to markets for their agricultural products. In addition, the land productivity will be improved in the host villages, which will have positive effects on their living and production.

193. Income restoration plan will take the forms of flexible, democratic, independent, and diversified in accordance with the characteristics of each village. In order to mitigate the impact, the Project will adopt a series of measures to help and support for the resettlement by responsible land acquisition and resettlement units and relevant government departments throughout the whole livelihood restoration process. Specific measures include:

- (i) Land for land for each village is the primary rehabilitation strategy for the relocated families. After calculation, production resettlement needs a total of 620.8 mu of transferable cultivated land. The land will be re-adjusted in each village, and re-allocated to the relocated families.
- (ii) Payment of land compensation in accordance with policy, and actively guide the resettlers on rational use of resettlement compensation fund;
- (iii) Enhance production skills training and non-agricultural employment of resettlers;
- (iv) Provide income generating opportunities associated with the Project;

194. In terms of compensation for the use of funds, government at all levels and relevant institutions in the Project area will actively guide the land-losing villagers through the villagers' own funds, and make a steady income through leasing and opening shop to engage in the service industry. Nayong County Government will organize industry and commerce, taxation, health and other sectors to provide the active-site service, the implementation of relevant tax relief, simplified procedures and other preferential policies and measures, to help solve practical difficulties and problems of land-losing farmers in the service industry they encountered. To make this materialized, the preferential policies and measures will be announced through propaganda.

195. All reservoir affected households will move to the resettlement sites and obtain average per capita of 0.8 mu to 2 mu as production land. A total of 620.8 mu of land will be adjusted. The relocated people will get CNY 600/year/capita of post-resettlement support fund annually for 20 years after their relocation. The non-relocated families will get cash compensation for their land loss, then adjust industry structure and cultivate high-value agricultural crops. The production resettlement scheme is presented in **Table 6-4**. The Project will provide various resettlement measures for land-losing farmers, which cover a wide range of farmers

affected by land acquisition. The livelihood restoration measures for land-losing farmers are presented in **Table 6-5**.

Table 6-4: Production Resettlement Scheme

Subproject	Township	Village	Group	Land Impact		House Demolition		Post-Resettlement Support Popu.	Land Compensation	Post-Resettlement Support	Production Resettlement Scheme	Ave. Land Compensation Per Capita
				HHs	Popu.	HHs	Popu.	No.	CNY 10,000	CNY 10,000/Yr		CNY 10,000/ Capita
Dam Site Engineering	Zongling	Yaoyan	Youzhafang	43	138	18	75	75	239.9	4.5	Land compensation, cultivation, and seasonable labor	1.738
			Baiyanjiao	28	91	7	30	30	68.0	1.8	Land compensation, cultivation, and seasonable labor	0.748
			Mahuangqing	10	33	0	0	0	16.8	0	Land compensation, cultivation, and seasonable labor	0.503
			Longqing	26	84	0	0	0	40.3	0	Land compensation, cultivation, and seasonable labor	0.480
		Pingjing	Yanjiaozhai	6	19	0	0	0	10.0	0	Land compensation, cultivation, and seasonable labor	0.520
	Yongxii	Naodi	Youzhafang	46	147	24	139	139	375.1	8.34	Land compensation, cultivation, and seasonable labor	2.551
			Heitang	33	107	23	84	84	157.1	5.04	Land compensation, cultivation, and seasonable labor	1.467
			Zhaizi	28	91	0	0	0	21.8	0	Land compensation, cultivation, and seasonable labor	0.241
			Datun	2	7	0	0	0	2.9	0	Land compensation, cultivation, and seasonable labor	0.414
			Dayuan	0	0	2	9	9	0.0	0.54	Land compensation, cultivation, and seasonable labor	
	Subtotal			224	717	74	337	337	932.0	20.22	Land compensation, cultivation, and seasonable labor	1.299
Dam Site Engineering Construction Area	Zongling	Yaoyan	Youzhafang	26	83	0	0	0	41.9	0	Land compensation, cultivation, and seasonable labor	0.506
			Baiyanjiao	19	61	2	8	8	48.7	0.48	Land compensation, cultivation, and seasonable labor	0.804
			Mahuangqing	6	19	0	0	0	9.8	0	Land compensation, cultivation, and seasonable labor	0.528
			Dayuan	0	0	17	91	91	0.0	5.46	Land compensation, cultivation,	

Subproject	Township	Village	Group	Land Impact		House Demolition		Post-Resettlement Support Popu.	Land Compensation	Post-Resettlement Support	Production Resettlement Scheme	Ave. Land Compensation Per Capita
				HHs	Popu.	HHs	Popu.	No.	CNY 10,000	CNY 10,000/Yr		CNY 10,000/ Capita
											and seasonable labor	
	Shuguang	Yuetai	Banpo	0	0	2	11	11	0.0	0.66	Land compensation, cultivation, and seasonable labor	
	Subtotal			51	162	21	110	110	100.4	7	Land compensation, cultivation, and seasonable labor	0.620
	Shuguang	Bayi	Xiaoying	1	2	0	0	0	1.9	0	Land compensation, cultivation, and seasonable labor	0.769
		Hexi	Zhangjiayuan	1	3	0	0	0	0.1	0	Land compensation, cultivation, and seasonable labor	0.038
			Wangjiaying	1	4	0	0	0	1.1	0	Land compensation, cultivation, and seasonable labor	0.295
		Lianhe	Xinying	1	2	0	0	0	2.2	0	Land compensation, cultivation, and seasonable labor	1.042
		Wusan	Songlinpo	1	2	0	0	0	6.1	0	Land compensation, cultivation, and seasonable labor	3.745
		Yutang	Daluokeng	1	2	0	0	0	0.8	0	Land compensation, cultivation, and seasonable labor	0.441
	Yangchang	Guolugou	Group No. 1	1	3	0	0	0	5.6	0	Land compensation, cultivation, and seasonable labor	1.845
			Group No. 10	1	3	0	0	0	2.3	0	Land compensation, cultivation, and seasonable labor	0.794
		Tiaohuapo	Group No. 4	1	2	0	0	0	0.8	0	Land compensation, cultivation, and seasonable labor	0.395
	Subtotal			7	22	0	0	0	20.9	0	Land compensation, cultivation, and seasonable labor	0.941
	TOTAL			282	901	95	447	447	1,053.2	27	Land compensation, cultivation, and seasonable labor	1.168

Table 6-5: Livelihood Restoration Measures for Land-Losing Farmers

Name of Subproject	Township (Town)	Village	AHs	APs	Cash Compensation	Skills Training	Non-agricultural Employment	Microfinance	Social Insurance
			No.	No.	HH	APs	HH	HH	HH
Junction Engineering Construction Reservoir Area	Zongling	Yaoyan	43	138	43	43	43	0	43
			28	91	28	28	28	0	28
			10	33	10	10	10	0	10
			26	84	26	26	26	0	26
		Pingqing	6	19	6	6	6	0	6
	Yongxi	Naodi	46	147	46	46	46	0	46
			33	107	33	33	33	0	33
			28	91	28	28	28	0	28
			2	7	2	2	2	0	2
Subtotal			222	717	222	222	222	0	222
Junction Engineering Construction Area	Zongling	Yaoyan	26	83	26	26	26	0	26
			19	61	19	19	19	0	19
			6	19	6	6	6	0	6
Subtotal			51	163	51	51	51	0	51
Irrigation Engineering Construction Area	Shuguang	Bayi	1	2	1	1	1	0	1
		Hexi	1	3	1	1	1	0	1
			1	4	1	1	1	0	1
		Lianhe	0	2	0	0	0	0	0
		Wusan	1	2	1	1	1	0	1
	Yutang	1	2	1	1	1	0	1	
	Yangchang	Guolugou	1	3	1	1	1	0	1
			1	3	1	1	1	0	1
		Tiaohuapo	1	2	1	1	1	0	1
Subtotal			8	23	8	8	8	8	8
Total			282	901	282	901	282	282	282

196. For the villages with relatively significant land acquisition, the income rehabilitation plan is in the following sections, the income rehabilitation analysis of key villages.

6.4.2 Production Resettlement and Destination of the Resettlers

6.4.2.1 Production Resettlement

197. According to the resettlement assignment and resettlement planning objectives, conduct production resettlement plan according to actual situation of village and groups, the main strategies are: a) adjust the cultivated land by voluntary land transfer; b) develop reserved land resources for crop farming and forest and fruit industry; c) conduct farmland construction and farmland irrigation construction; and d) develop household breeding industry.

6.4.2.2 Land Readjustment Plan and Environmental Carrying Capacity

198. After calculation, production resettlement of APs needs to be arranged by the year of planned level in the Pingshan Reservoir Project Reservoir inundated area and dam site construction area. The production resettlement needs a total of 620.8 mu of transferable cultivated land, transfer unit price of cultivated land calculated by the united annual output value standard and compensation multiplier, according to "Guizhou Provincial People's Government Office Publish Notices on Land Acquisition Unified Annual Output Value Standard and the Land Area Comprehensive Land Price Published by Guizhou Provincial People's Government Office" (zhoufubanfadian [2009] No. 221).

199. Specific planning is as follows:

200. The overall goal of resettlement plan is to make the resettlement living standard reach or exceed the original level after relocation, through the method of early compensation to support later production. According to the actual situation, it can be divided into resettlement production and livelihood goals and all kinds of goals of infrastructure construction. Production and livelihood goals are mainly measured by the average cultivated land of resettlers per capita, the net income per capita, and grain possession per capita. According to the construction region, reasonably determine the planning level in production and livelihood goals. The infrastructure targets are mainly for water supply, electricity supply, traffic and culture, education, and health facilities of resettlement in accordance with the existing level and the local specific conditions to have economic and reasonable allocation.

(i) Objective of Production Life

201. Restore net income of the resettlers in real in 2016 price.

(ii) Objective of Infrastructure Facilities

202. According to the actual situation of the location and resettlement areas, the scattered and backward resettlement should consider the associated facility cost, due to the use of the infrastructure, cultural and educational facilities of the resettlement areas.

(iii) Average Cultivated Land Allocation Standard Per Capita

203. The distance of land acquisition village groups of Pingshan reservoir construction area is far away from Nayong County center, and water resources, transportation and livelihood conditions are not good, also the quality of the cultivated land is not good. According to the analysis of basic situation of affected village groups for construction land acquisition, after the deduction of cultivated land slope $> 25^\circ$, the average cultivated land ranges from 0.80 mu to 2.35 mu per capita.

204. According to environmental capacity investigation, the quality of cultivated land and natural condition in the planned and selected resettlement areas is good. Cultivation level is relatively high, the traffic is relatively convenient, and all of the cultivated land for resettlers is the transferred mature land from the resettlement areas. For the better quality of cultivated land in the resettlement areas, allocation is 0.80 ~ 1.50 mu per capita in the relatively more paddy field areas, and allocation is 1.50 ~ 2.00 mu per capita in the relatively less paddy field areas. In order to make the living level is not less than the original level, certain amount of grassland needs to be allocated for the resettlement. By referring to the average level per capita before reservoir inundation, adjust appropriate grass land resource for allocation.

205. Pingshan Reservoir engineering construction land acquisition involved 282 relocated population in 2016. The willingness survey investigated two (2) townships (town), three (3) villages, five (5) village groups and one (1) state-owned unit, the results show that the willingness of host communities/units to transfer cultivated land to the resettlers is approximately 2,600 mu, all dryland. From the perspective of individual analysis, since the transfer of cultivated land is to households and collective, who have been separated from agriculture (including collective-owned agricultural converted to non-agricultural status, death, households enjoying five-guarantees status, engaged in a stable income of other several occupations, etc), their income basically is no longer gained from cultivated land, therefore, the host farmers' production and livelihood will not be affected.

206. Based on the share of cultivated land and per-capita income in resettlement area, by referring to less than 25° cultivated land per capita before inundation, per-capita cultivated land is allocated between 0.80 to 2.00 mu, and the total cultivated land of 620.80 mu will be used for resettlers, which is much less than the 2,600 mu of transferable land available in the host communities. The transferable cultivated land can meet the needs of resettlement, and the resettlement carrying capacity is sufficient. **Table 6-6** is the environmental capacity analysis of the Pingshan Reservoir Engineering Construction Land Acquisition Area (Excluding Irrigation Engineering Construction Area).

207. From the table, it shows that the proportion of farmland acquisition is less than 10%, and the remaining farmland resources are relatively sufficient. Based on the environmental capacity analysis of farmland area in the same village, the result indicates that the capacity can meet the requirements of the production resettlement. The production resettlement population of these villages and groups can be settled by adjusting farmland within the same group. The proportion of farmland allocation for Youzhafang Group of Naodi Village, Zongling Township is 55.25%, Baiyanjiao Group is 27.54%, Youzhafang Group of Naodi Village, Yongxi Township is 94.41%, and Heitang group is 55.19%. The proportion of farmland allocation in these four village groups is relatively high. As a result, the environmental carrying capacity of farmland area in the same village can't meet the requirement of production resettlement, and the production resettlement population of these village groups needs to move out of the villages.

Table 6-6: Environmental Capacity Analysis of the Pingshan Reservoir Engineering Construction Land Allocation Area

Administrative Unit			Before Land Acquisition					Farmland Acquisition (mu)	After Land Acquisition		
Township (Town)	Village	Group	Current Popu. (No.)			Current Farmland(mu)	Average Farmland Per Capita (mu/capita)		Remaining Farmland (mu)	Average Farmland Per Capita (mu/capita)	% of Farmland Decrease
			Subtotal	Agri.	Non. Agri.	Dryland					
Zongling	Yaoyan	Youzhafang	138	138		265.63	1.92	146.75	118.88	0.86	55.25
		Baiyanjiao	101	101		220.68	2.18	60.78	159.90	1.58	27.54
		Mahuangqing	167	167		314.67	1.88	13.86	300.81	1.80	4.40
		Longjing	210	210		322.85	1.54	21.01	301.84	1.44	6.51
	Pingjing	Yanjiaozhai	193	193		263.64	1.37	5.23	258.41	1.34	1.98
Yongxi	Naodi	Youzhafang	147	147		206.90	1.41	195.34	11.56	0.08	94.41
		Heitang	153	153		148.28	0.97	81.84	66.44	0.43	55.19
		Zhaizi	185	181	4	149.43	0.83	11.36	138.07	0.76	7.60
		Datun	146	140	6	112.07	0.80	1.51	110.56	0.79	1.35
Total			1,440	1,430	10	2,004.15		537.68	1,466.47		

208. Pingshan Reservoir project construction land acquisition area involved 388 people for the production resettlement for the year of planned level, of which 50 people will be settled by adjusting cultivated land within their group, 107 people by adjusting cultivated land resettlement within the townships, and 231 people by adjusting cultivated land resettlement outside of the township and within the county. Specific rural resettlement destinations are shown in **Table 6-7**.

Table 6-7: Destination of Rural Resettlers' Production Resettlement Population for Nayong County Pingshan Reservoir Component

Name of Subproject	Admin. Township (Town)	Village	Group	Production Resettlement Population	Year of Planned Level	Method of Resettlement	Production Resettlement Population	Destination of Resettlement			Cultivated Land of Planned Resettlement	
				Base Year			No.	Township (Town)	Village	Group		
				No.	No. of Popu.						mu	
Junction Engineering Construction Reservoir Area	Zongling	Yaoyan	Youzhafang	65	67	Land Resettlement	67	Zongling	Dongfengyakou		107.2	
			Baiyanjiao	16	17		17				34	
			Mahuangqing	5	5		5		Yaoyan	Mahuangqing	9	
			Longqing	14	15		15			Longqing	21	
		Pingqing	Yanjiaozhai	4	4		4		Pingqing	Yanjiaozhai	5.2	
	Yongxi	Naodi	Youzhafang	139	144		144		Dongfengyakou		172.8	
			Heitang	84	87		87				87	
			Zhaizi	14	15		15		Yongxi	Naodi	Zhaizi	15
			Datun	2	2		2	Datun			2	
			Subtotal				343	356	0	356	0	0
	Junction Engineering Construction Area	Zongling	Yaoyan	Youzhafang	11	11	Land Resettlement	11	Zongling	Dongfengyakou		17.6
				Baiyanjiao	12	12		12				24
Mahuangqing				3	3	3		Yaoyan		Mahuangqing	5.4	
Subtotal				26	26	0	26	0	0	0	47	
Irrigation Project Construction Area	Shuguang	Bayi	Bayi	1	1	Land Resettlement	1	Bayi	Bayi	Bayi	0.8	
		Lianhe	Xinying	1	1	Land Resettlement	1	Shuguang	Lianhe	Xinying	1.39	
		Wusan	Songlinpo	1	1	Land Resettlement	1		Wusan	Songlinpo	2	
	Yangchang	Guolugou	Yizu	2	2	Land Resettlement	2	Yangchang	Guolugou	No. 1	2.4	
			Shizu	1	1	Land Resettlement	1			No. 10	1.2	
Subtotal				6	6	0	6	0	0	0	7.79	
Total				375	388	0	388	0	0	0	507.99	

6.4.3 Production Resettlement in Reservoir Inundated Area

Production Resettlement

209. The resettlers in the reservoir area have relatively low education level and are lack of practical skills, so the possibility of the resettlers to change their production is small. The resettlers' livelihood development plan is to enable resettlers to resume production as soon as possible after resettlement, and ensure the resettlers' living and work in peaceful and smooth transit. The key point of resettlement plan is based on land resources development, the main directions of resettlement plan are to improve land productivity, develop production of cultivation, and increase grain yield. Guidance will be provided to the resettlers to take advantages of various resources and adjust industrial structure, meanwhile, based on local conditions, implement the development of farming, forestry, animal husbandry and fishery, develop a diversified economy, increase the income level of the resettlers, ensure that grain is self-sufficient and income is increasing, so that, ensure coordinated development of local social and ecological benefits. The resettlers' production development plan for Pingshan Reservoir Component has a total investment of CNY 20.4157 million (including dam site engineering construction area and irrigation engineering area), and Nayong County Pingshan Reservoir rural resettlement production development plan is provided **Table 6-8**.

Table 6-8: Rural Resettlement Production Development Plan of Nayong County Pingshan Reservoir Component

No.	Item	Unit	Unit price	Nayong County	
			CNY	Quantity	Investment (CNY 10,000)
	Production resettlement population	No.		388.00	
I	Adjustment Land	mu		620.80	1,713.41
1	Dryland	mu	27,600	620.80	1,713.41
II	Pre-Production Recovery Costs	Per capita	1,000	388.00	38.80
III	Basic Infrastructure of Agricultural Land				174.28
1	Transform slope to terrace	mu	2,000	155.20	31.04
2	Transform land to cultivated land	mu	2,500	116.40	29.10
3	Tractor road	km	300,000	3.20	96.00
4	Irrigation canal	km	40,000	4.16	16.64
5	Irrigation cellar	No.	1,000	15.00	1.50
IV	Plan of Plantation Industry				49.67
1	Soil improvement	mu	120	620.80	7.45
2	Improvement of soil fertility	mu	500	620.80	31.04
3	High quality radish	mu	200	248.32	4.97
4	High quality potato	mu	250	248.32	6.21
V	Breeding Industry				65.41
1	Pig raising	No.	750	272.00	20.40
2	Cow raising	No.	1,830	116.00	21.23
3	Sheep raising	No.	365	466.00	17.01
4	Poultry farming	No.	20	1,552.00	3.10
5	Fish farming in paddy rice fields	mu	350	104.76	3.67
	Total				2,041.57

Plan of Plantation Industry

(i) Land Adjustment Plan

210. The majority of people in Pingshan Reservoir for production resettlement will carry out adjustment of cultivated land resettlement according to the proposed production resettlement planned standard, and the resettlement needs to adjust 620.80 mu of cultivated land, all of the lands are dryland. In accordance with the construction area land acquisition compensation unit price, the total investment of land adjustment is CNY17.1341 million.

(ii) Construction Plan of Production Infrastructure

211. For the living standards of the resettlers reach or exceed the previous level before resettlement in two or three years, appropriate engineering measures or bio-engineering measures should be taken to ensure high and stable grain yield, investment in strengthening the construction of water conservancy infrastructure of cultivated land is needed, part of the dryland needs to be transformed into paddy rice fields to reduce soil erosion, the terrace engineering project on 5 ~ 25° slope cultivated land will be implemented, the construction of irrigation ditches and small water cellars should be conducted, also some tractor road for the convenience of farming will be constructed. Unit prices of major infrastructures are referred to the unit prices of other construction project implementation in the province over the same period.

212. Transform 155.20 mu of slope to terrace, 116.40 mu of land to cultivated land in resettlement area, also 4.16 km of irrigation canals, 15 small water cellars, 3.20 km tractor road, and the total investment is CNY 1.7428 million.

(iii) Plan of Plantation Industry

213. Pingshan reservoir resettlement area has an average altitude of about 2,000 m, with a mountainous subtropical monsoon climate, four distinct seasons, abundant rainfall, mild climate, fertile land, more obvious monsoon climate, a long frost-free period, the maximum temperature in townships is 31 degrees, the lowest temperature is -9.2 degrees, the average temperature in January is 2.2 degrees, average temperature in July is 26 degrees, the effective temperature is 12.4 degrees; annual frost-free period is 240 days, annual rainfall is 1,247 mm, the rainfall season is mainly in the second and third quarter every year. From the view of climate, it is suitable for the growth of crops. Suitable for food crops including corn, potatoes, soybeans and other crops, industrial crops including mushrooms, agaric, radish and other native products, also including Tianma, Eucommia, and other valuable herb medicines.

214. Conduct planning for 620.80 mu soil improvement of plantation, 620.80 mu soil fertility, 248.32 mu high-quality radish planting, and 248.32 mu high-quality potatoes in resettlement area. The total investment of plantation industry is CNY 496,700.

Plan of Breeding Industry

215. With the economic development, the living standard of the local residents is improving, people's demand for meat, eggs and aquatic products grows rapidly. Besides, Pingshan Reservoir area has environmental resources and livestock varieties for development of breeding industry, livestock and poultry breeding have shared a certain proportion in agricultural output. Crop straw, forage grass and water resources in resettlement area are abundant, and there is lots of grassland, grassy hills in resettlement area which are suitable for breeding industry development. Farmers in reservoir area have rich breeding and hatching technical experience. The reservoir area has large, low-lying beaches along the reservoir side can be slightly reformed for exploitation, which is conducive to the development of fishing industry. The reservoir area has an advantaged good condition to develop aquaculture, waterfowl and aquatic plants. The breeding industry has an enormous sales

market. According to the actual situations of many years' breeding experiences and techniques in reservoir area, and considering breeding resources in reservoir area, focus will be given to the breeding development of pig, cattle, sheep, poultry, fish and other animals.

216. Breed 104.76 mu of fish farming in paddy rice fields, 272 pigs, 116 cattles, 466 sheeps, 1,552 fowls, and the total investment of the breeding industry is CNY 654,100.

Production Recovery Plan of the Resettlers

217. Considering the original production and livelihood has been disrupted after resettlement, to make the resettlers to adjust themselves for new production and will be taken into account, considering CNY 1,000 per capita, the total investment will be CNY 388,000.

Training Plan of the Resettlers

218. The resettlers in the reservoir area have low education, so it's difficult to promote and apply agricultural science and technology, and they are slow to accept new information, the production development plan can achieve the desired planning result only when the resettlers can handle certain and practical technology. Therefore, to further improve the livelihood skills of the resettlers, the project resettlement training takes the cultivated production technology and practical technical training to 388 persons as the principles. The resettlement technical training fee is about CNY 440,000 financed by the Project. Resettlement cadres must also be trained at different levels in order to better serve the resettlement of the relocated families. Training is mainly carried out for agricultural extension training courses in the reservoir area, hiring experts and technicians to teach, sending resettlers and resettlement officers to colleges and relevant training units will be provided. The training programs are shown as follows:

- (i) **Plantation Industry Training:** learning crop planting technology to improve the output and efficiency of cultivated land, learning new techniques and new technology of hybrid rice, corn, plastic mulching cultivated seeds, greenhouse vegetables, and more crop rotation on dryland.
- (ii) **Forest Tree Plantation Training:** learning technology of fruit nursery, grafting fruit trees, and preventing fruit trees from frost, pest control, fruit preservation, storage, transportation, etc., also Italian poplar cultivation techniques.
- (iii) **Aquaculture Training:** learning technology of fish farming and purchases, breeding and management of fish, fish bait and fertilizer, fish disease prevention and control.
- (iv) **Training on Secondary and Tertiary Industries:** mainly learning business and management of secondary and tertiary industry development projects in reservoir area, studying business technology and advanced production technology and techniques.
- (v) **Other Training:** mainly training for resettlement cadres on policies and regulations, professional and technical aspects related to planning and implementation, fund utilization and monitoring, planning and management.

6.5 Other Income Restoration Measures

219. The affected people can be employed to construct new resettlement sites and related infrastructures. They may provide construction-related services during the construction. For example, the affected people may provide catering service and food, cigarettes, beer, and other beverages to the construction workers and contractors. The affected people can also operate small shops and small restaurants in the resettlement areas. Start-up capital is about CNY 40,000, with annual net income of about CNY 15,000.

220. Increasing the time of doing seasonable job is another option of income restoration. The male farmers work seasonally for three months each year, income ranges from about CNY 9,000 to CNY 10,000. After land acquisition, they can work at least eight months within a year, based on salary calculation of CNY 3,000/monthly, they can make annual income of CNY 3,000* 8 months = CNY 24,000.

221. The Project construction will generate more than 4,560 person-years employment opportunity, i.e., construction workers, security guard, driver, tree planting workers, cleaning, gardening, etc. at the salary level ranges from CNY 4,000 to CNY 6,000 per month. The priority of employment opportunities will be given to the APs. The Project construction organization will provide unskilled and semi-skilled employment opportunities to the resettlers including land levelling and landscaping, etc. Although some of the work are temporary, but according to the same types of Nayong County income survey, employment opportunities of these types can generate an income of about CNY 4,000/month, the short-term source of income for local resettlers, can help them to improve the affected living standard and restore their livelihoods.

222. The compensation of land acquisition and resettlement fee obtained by the affected villagers can be used to develop private-owned businesses with the microfinance support provided by the local Government with loan ranges from CNY 5,000 to CNY 10,000 from the local banks, and they can also enter into enterprises for jobs in county town or other cities or provinces.

6.6 Enhance Production Skills Training and Non-agricultural Employment of the Resettlers

223. The Project will establish employment services mechanism and training for land-losing farmers, to provide career guidance free of charge and employment promotion, gratuitous agency procedures for labor registration and management, and provide employment skills training free of charge, the implementation of rural labor transfer training. In order to help the employment ability of the rural labor force, which accounting for 388 production resettlement people need to improve their professional skills, project units or fiscal special funds will provide funding at CNY 440,000, and joint with agriculture, science and technology, women's federation, social security and other departments, to provide training for the affected family, especially the directly affected labor force, to improve the income-generating capacity. The training includes vegetable cultivation, characterized breeding, housekeeping, landscaping, and others. Training funds will be directly allocated to training institutions such as technical training school or women's federation.

224. Training objectives: Receiving the training according to the actual needs, different natural environmental characteristics and the degree of the impact, to help them conduct livelihood restoration and improve labor skills according to their actual needs. The training can mitigate the impact of land acquisition as soon as possible, and the living standard of the affected residents will be increased to a certain level, or at least restored to the original level.

225. Training targets: those affected farmers. Where the condition is possible, each affected household at least one person can be arranged to attend the training. Based on preliminary investigation, the APs prefer to take training on vegetable cultivation, breeding, housekeeping, etc.. Training content and program are shown in **Table 6-9**.

Table 6-9: Training Plan of the Affected Farmers

No.	Skills	Target	Women	Budget
		No.	No.	CNY 10,000
1	Vegetable cultivation	113	55	12.78
2	Breeding	63	41	7.09
3	Home appliances, motorcycles and car repairs	37	14	4.25
4	Landscaping	35	14	3.97
5	Housekeeping	40	27	4.55
6	Working skills of counterparts enterprise	100	39	11.36
Total		388	190	44.00

226. For the labor force of land-losing farmers, especially 50 years old and above males and females, gradually guide them to engage in green conservation, cleaning and property management, housekeeping services and other social services industries, timely employment in the nearest places. The bidding companies applied for green conservation, road cleaning and property management in the new urban townships and districts, recruit more than 40% of the local rural workers. In addition, the relevant units of the county and township (town) will try as much as possible to make the employment positions available, open up new channels of employment, priority given to the land-losing farmers, particularly the land-losing adults above 50 years old male farmers and 40 years old and above females. For the non-agricultural employment, mainly guide them to obtain employment from enterprises in the areas close to the Project. Also land adjustment will be provided to the APs to ensure that they have land for farming.

6.7 Projection of Production and Living Standards for Rural Resettlement Population in the Reservoir Inundated Areas

6.7.1 Farmland Quality and Quantity of Land Ownership

227. The Pingshan Reservoir engineering construction will involve farmland adjustment within the village groups to maintain their original living standards. For the resettlement out of villages or townships or county, the relocated population will get land adjustment, which includes Youzhafang Group and Baiyanjiao Group of Yaoyan Village, Zongling Township; Youzhafang Group and Heitang Group of Naodi Village, Yongxi Township. The actual average farmland per capita is 1.00~2.00 mu. The average farmland per capita will be reduced slightly in comparison than before land acquisition, but before land acquisition, partial land of the villagers is slope farmland, and after resettlement, the resettlement areas have no slope farmland and all land are ready for cultivation. Most of water and heat conditions are relatively good, and the land is fertile and close to water resources with guaranteed irrigation. The resettlement areas have more convenient transportation condition in comparison with reservoir area, and more close to the main truck road and the town of the county. The quality of farmland and farming pattern, and land productivity level will exceeded the original level. The resettlers can use the compensation payment to improve the allocated land after resettlement. Through the settlement of the soil improvement and fertilization, the output of arable land will be improved.

6.7.2 Average Per Capita Grain Production Projection

228. Through various implementation of agricultural infrastructure construction, land improvement, and soil fertilization, the grain production from the farmland can increase 10 kg/mu according to the regular profit calculation. According to the calculation of 230 kg/mu of grain production from the farmland, the resettlement areas can reach the average grain production to 149,000 kg per year, with average grain production of 384 kg, which can reach to planned target.

6.7.3 Average Per Capita Income Projection of the Resettlers

229. The resettlement areas have very favorable production, natural resources, and social resources conditions. Through the implementation of cultivation and breeding projects, it can increase the income of the resettlers greatly. The income analysis has been conducted for the construction land acquisition of Yaoyan Village, Zongling Township, and Naodi Village of Yongxi Township, meanwhile, the projection and analysis of the average net income per capita of the resettlers have also been conducted. The details are presented in **Table 6-10** and **Table 6-11**.

Table 6-10: Average Net Income of the Resettlers before Relocation

Township	Village	Average Net Income Per Capita	Grain Crop	Economic Crop	Forest & Fruit Industry	Breeding Industry	Migrant Seasonable Labor	Preferential Agricultural Policies & Others
Yongxi	Naodi	44,09	1,104.87	461.81	157.77	1,161.99	1,349.91	172.65
Zongling	Yaoyan	4,426	1,199.31	509.02	184.38	1,140.55	1,216.50	176.24

**Table 6-11: Average Net Income of the Resettlers after Relocation
(Year of Planned Level)**

Township	Village	Average Net Income Per Capita	Grain Crop	Economic Crop	Forest and Fruit Industry	Breeding Industry	Migrant Seasonable Labor	Preferential Agricultural Policies and Others
Zongling		5,734	1,204.33	672.65	162.56	1,310.36	2,182.28	201.82

230. After the resettlement and through the implementation of the production plan, the resettlement areas can reach average profit of CNY 2.6376 million each year, with average net income per capita at CNY 5,734, which can reach to planned target.

6.7.3 Living Standard Projection of the Resettlers

231. The land acquisition of the Pingshan Reservoir construction involved relocated village groups are located at the relatively remote area in Nayong County. The majority of the resettlers are living in the areas far away from the town of Nayong County, where there are no public transportation vehicles. There is only a sidewalk connected with village road, and the villagers go outside by relying on feet and motorcycles, and it is very inconvenient. Their drinking water comes from spring water. During the drought days, the drinking water is hard to guarantee. The living condition of the resettlers is poor, and most of houses are brick-wood structure, with a small proportion of brick-concrete. The wood structures of main houses account for 39.4% of the total house areas, the average housing area is small, and it is common that one house with many households. The major reasons are due to: (i) The transportation condition of the inundated village groups is poor and it is difficult to transport the house construction materials for the resettlers, which causes relatively big cost for house construction; (ii) The big proportion of the resettlers' income is used for the living expenditures, and only a small proportion of their fund is used for re-production; and (iii) Their income can't

meet the requirement of housing improvement and production expansion. Therefore, the living standards of the resettlers are quite low.

232. The resettlement areas mainly have relatively better condition of transportation, and water resources and other infrastructures are relatively good. The resettlement areas are quite close to the main truck road, which will reduce the transportation cost of the construction materials and the unit price of the house construction will be reduced in comparison with the situation before relocation. By using the compensation fund after resettlement, plus the subsidy fund for the difficulties of house construction, the resettlers can construct and improve their houses. Meanwhile, after compensation, the disposable fund of the resettlers will be increased, they can use more fund for re-production and production expansion. As a result, their income and living level will be increased than before relocation, which will reach to planned target.

6.8 Restoration of Temporary Land Occupation

233. The Pingshan Reservoir and Water Transfer Facility Component will temporarily occupy a total of 700.62 mu of land. The occupation period is within 1 year. The compensation rates for the temporary land are presented in **Section 4.5.3**. In addition, the green crops, trees on the cultivated land and forest land will be directly compensated to the APs at one time. After the usage of land, the construction agency will restore the temporarily occupied land according to their original purpose. For the cultivated land, the construction agency needs to mature it before returning it to the APs. All temporarily occupied land will be restored and given back to the APs after land leveling and land cleaning. To reduce the impact of land acquisition on young crops, construction will usually commence after harvesting or before sowing, and will be notified to the affected households in advance to reduce their losses.

6.9 Recovery of Infrastructure and Ground Attachments

234. The reservoir will inundate 1.12 km tractor road, 2.19 km pedestrian sidewalk, 27 road broken engineering, 0.25 km 10 kV transmission line, 2.25 km low-voltage transmission line, and other ground attachments. These infrastructures and facilities will be rebuilt to recover their original functions.

6.10 Infrastructure of the Resettlement Areas

235. The infrastructure construction of the resettlement sites are summarized in **Table 6-12**.

Table 6-12: Infrastructures of the Resettlement Sites

Village	Group	Water	Electricity	Road	Culture, Education and Health	Distance to Original Place (km)
Civil Affair Bureau	Dongfengyakou	Diverted from Shatie Plant	Nearby Transformer Station	Along the road, there are connection between mud and stone road and village main truck road	Zongling Township	5
Naodi	Dayuan	Well	Nearby Transformer Station	Mud road	County Town Center	Within the same group
Yuetai	Banpo	Well	Nearby Transformer Station	Mud road	County Town Center	Within the same group

6.11 Post Resettlement Assistance for the APs

236. As Pingshan Reservoir is a middle-sized reservoir, according to the Regulations on Land Acquisition Compensation and Resettlement for Large- and Medium-Sized Water Resources and Hydropower Construction Projects, and the Opinions of the State Council on Improving the Post-resettlement Support for Affected Persons in Large- and Medium-Sized Reservoir Construction Projects (SC [2006] No.17), the eligible persons will be subject to post-resettlement support. The post-resettlement support will further promote the socioeconomic development of the reservoir area and the resettlement area, enable the APs to quickly restore their production level and standard of living, as well as ensure their sustainable development. The post resettlement support funds are from a state special fund, which will be additional and beyond the project budget, at a rate of CNY 600/year per capita and with a support period of 20 years after the relocation of the APs. The post support funds and plans will be formulated by the local governments separately. Affected people resettled or having per capita land below 0.3 mu will enjoy the post resettlement support fund.

6.12 Measures of Vulnerable Groups

237. During the whole relocation progress, the Project authorities will pay special attention to the resettlement of vulnerable groups. The vulnerable group in affected households totals 29 household and 100 people, of which 10 households and 21 persons are living under MLG, and 19 households and 79 persons are main housing area less than 25 m² of brick-concrete structure. According to the "Provisional Method of the Minimum Living Guarantee for the Rural Residents in the South Prefecture of Guizhou" (implemented on 1 June 2005), the families under MLG line enjoy MLG fund, and the civil affairs department provides the subsidy difference, with CNY 149/capita/month. Special assistance will be provided to them by the Resettlement Office and local government.

238. During the relocation process, special care will be given to these peoples follows:

239. The households with main housing area less than 25 m² of brick-concrete structure per capita, allowance difference will be subsidized to ensure an average 25 m² brick-concrete structure of main houses per capita.

240. The Project has set up a special fund CNY 250,000 of vulnerable groups' assistance fund, to help and take care of the vulnerable groups and other difficulty families for the warmth in winter and so on.

6.13 Measures of Woman Development

241. The women have the same public participation opportunities to express their attitudes, worries and concerns on the land acquisition and relocation and other related problems. Overall, the situation is as follows: women have relatively better status in the Project areas. Key family issues are decided by both husband and wife. If men are at home, they usually attend the major meetings of the villages, but women have influences on men who attend the meetings. Women are playing an increasingly larger and important role at home and agricultural production because of higher male out migration to the urban areas. In general, women's work time is 1.2 times that of men. The income earned by women is dominated by agriculture. The land ownership, like other areas of China, when the daughter gets married, her land can't be brought to the place of her husband, but remained at her mother's place. She can only share the land owned by her husband's family. In terms of education, boys and girls have equal education opportunity. As long as the children study hard, the parents always try to support their kids to schools.

242. According to the survey, women have the same concerns with their male counterpart: (a) The compensation standards should be calculated in accordance with the land output and resettlement costs; (b) A new homestead should be built near the road, convenient for farming, doing business and schooling; (c) According to the request of affected farmers, compensation funds should be directly disbursed to the affected households; (d) The area of new homestead should be larger, to facilitate the development of livestock breeding; (e) Housing demolition and construction should be done during the slack season, easy for reasonable arrangement of labors.

243. For gender differences, women have different needs from men: (a) women request training for cultivation, breeding and other aspects; (b) most participants are males in village management, and women also expect to participate in the village management.

244. Nayong County PMO has solicited the opinions and wishes of women on the resettlement and income recovery during the preparation of the Resettlement Plan for Nayong County. Their opinions and wishes have been included in the Resettlement Plan.

245. The Project will encourage women to participate in the implementation of the "Resettlement Plan for Nayong County", and the Project will encourage women to participate in the implementation of the "Resettlement Plan of Nayong County", and they will play an important role in the implementation of the income recovery measures proposed in the Resettlement Plan. Meanwhile, the resettlement offices will be equipped with a female staff, in order to better communicate with women and ensure the participation of women. Employment opportunities will be provided to women during the Project construction. Meanwhile the Gender Action Plan and Ethnic Minority and Social Development Plan will specify the opportunities for women to participate in the Project and benefit from the Project.

246. Women affected by the Project are mostly stay at home for farming or taking care of the family. After losing the land, they will have the same right to receive training and employment as men. If the employment position is suitable for women, priority will be given to them for the employment. If a woman can earn CNY 1,500 per month, the annual income is $\text{CNY } 1,500 \times 12 = \text{CNY } 18,000$, which is 10 times average annual output value of cultivated land per mu (CNY 1,760 per mu).

247. Nayong County Human Resources and Social Security Bureau affiliated training institutions specifically set up weaving, beauty salon, catering service, room service, housekeeping service and other regular training courses, so that women have a certain professional skills, to facilitate their individual business development or employment in the service industry. They can carry out individual business in their own yard. The start-up capital is about CNY 50,000, the annual net income is expected to CNY 20,000. At present, the county is to start and promote the family and community pension business, believe that they can play a role in this area.

VII RESETTLEMENT BUDGET AND SCHEDULE

7.1 Composition of the Resettlement Funds

248. The land acquisition and resettlement cost for Pingshan Reservoir and Water Transfer Facility Component mainly includes six parts, namely: land acquisition compensation fee, house demolition compensation fee, auxiliaries and ground attachments compensation fee, management fee, other fees and contingency. The total of compensation resettlement fee of the Project land acquisition and relocation is CNY 77.2359 million. The budget is presented in **Table 7-1** and the annual investment plan is in **Table 7-2**.

249. In addition, a total of CNY 6.705 million will be invested for the land acquisition and basic infrastructure construction of the Dongfengyakou Resettlement Site by the Project and Guizhou Provincial Government. For land re-adjustment payment, it will come from the land acquisition compensation, and for the house re-construction, the costs will be covered by the compensation fund of house demolition. Livelihood developments such as land improvements will come from the APs and local government, and the livelihood training and special measures for women and vulnerable groups will come from the land acquisition and resettlement cost.

250. The Guizhou People's Government is responsible for financing of the resettlement funds of the Pingshan Reservoir Project. Resettlement fund will be paid in accordance with the ownership of various types of affected items. The land compensation fee in cash is paid to the farmer household whose land is acquired and who will not take the land re-adjustment scheme. For those who will take land-re-adjustment, land compensation will be paid to the host communities to give out their land to the relocated families.

251. In order to ensure the compensation funds can be paid to the affected people (AP) and units in a timely manner the project will: on the one hand, give full play to the internal monitoring of implementation agency, the external monitoring of the independent agency and the audit function of the national audit institutions; on the other hand, minimize the intermediate delays, pay the resettlement funds to the individuals and units by the simple and easy channels.

252. Also, reservoir projects have provisions for post-resettlement support funds at a total of CNY 270 thousand each year, which will be financed by the central government fund.

Table 7-1: Cost Estimate of LAR for Pingshan Reservoir and Water Transfer Facility Component (Units: CNY 10,000)

No.	Item	Reservoir Inundated Area	Dam Site Engineering Construction Area	Irrigation Project Area	Total
I	Part of rural compensation fees	2,710.87	1,561.76	435.14	4,707.77
II	Professional project processing compensation fees	54.52	34.00	27.00	115.52
III	The cost of cleaning the reservoir bottom	9.69			9.69
IV	Other cost	376.61	220.57	59.30	656.48
1	Preliminary work fees	69.38	39.89	11.55	120.82
2	Survey and design fees	83.25	47.87	13.86	144.98
3	Implement management fees	83.25	47.87	13.86	144.98
4	Implement organization costs	80.00	50.00	10.00	140.00
5	Technical training fess	13.55	7.81	2.18	23.54
6	Supervision examination assessment fees	41.63	23.94	6.93	72.50
7	Consulting service fees	5.55	3.19	0.92	9.66
V	Basic service fees	378.20	217.96	62.57	658.73
VI	Taxes fees	882.17	656.04	37.19	1,575.40
VII	The Static Total Investment	4,412.06	2,690.33	621.20	7,723.59

Table 7-2: Annual Investment Plan of LAR for Pingshan Reservoir and Water Transfer Facility Component (Units: CNY10,000)

No.	Item	2017	2018	2019	2020	Subtotal
I	Part of Rural Compensation Fees	780.88	1,594.14	1,030.83	1,301.92	4,707.77
II	Special Facilities Treatment Compensation Fees		50.36	29.86	35.31	115.53
III	Cost of Cleaning the Reservoir Bottom				9.69	9.69
IV	Other Cost	132.34	201.21	130.77	192.15	656.47
V	Basic Service Fees	108.98	222.44	144.75	182.57	658.74
VI	Taxes	1,575.40				1,575.40
VIII	Static Total Investment	2,597.60	2,068.15	1,336.20	1,721.63	7,723.58

7.2 Cost Estimates of the Resettlement Areas

253. To host the relocated families, a total of 40.23 mu of land will be acquired for the construction of the resettlement areas. The cost estimates of land acquisition and infrastructure construction for the resettlement areas are presented in **Table 7-3**.

Table 7-3: Investment of the Resettlement Areas

Village	Group	Resettlement		Land Acquisition		Earthwork	Road	Water and Drainage	Electricity	Culture, Education and Health	Total
		HHs	Popu.	mu	CNY 10,000	CNY 10,000	CNY 10,000	CNY 10,000	CNY 10,000	CNY 10,000	CNY 10,000
Civil Affairs Bureau	Dongfengyakou	74	336	30.24	73.92	168.0	67.2	84.00	94.08	16.80	504.0
Naodi	Dayuan	19	100	9.00	22.00	50.0	20.0	25.00	28.00	5.00	150.0
Yuetai	Banpo	2	11	0.99	2.42	5.5	2.2	2.75	3.08	0.55	16.5
Total		95	447	40.23	98.34	223.5	89.4	111.75	125.16	22.35	670.5

7.3 Allocation, Management and Monitoring of Resettlement Fund

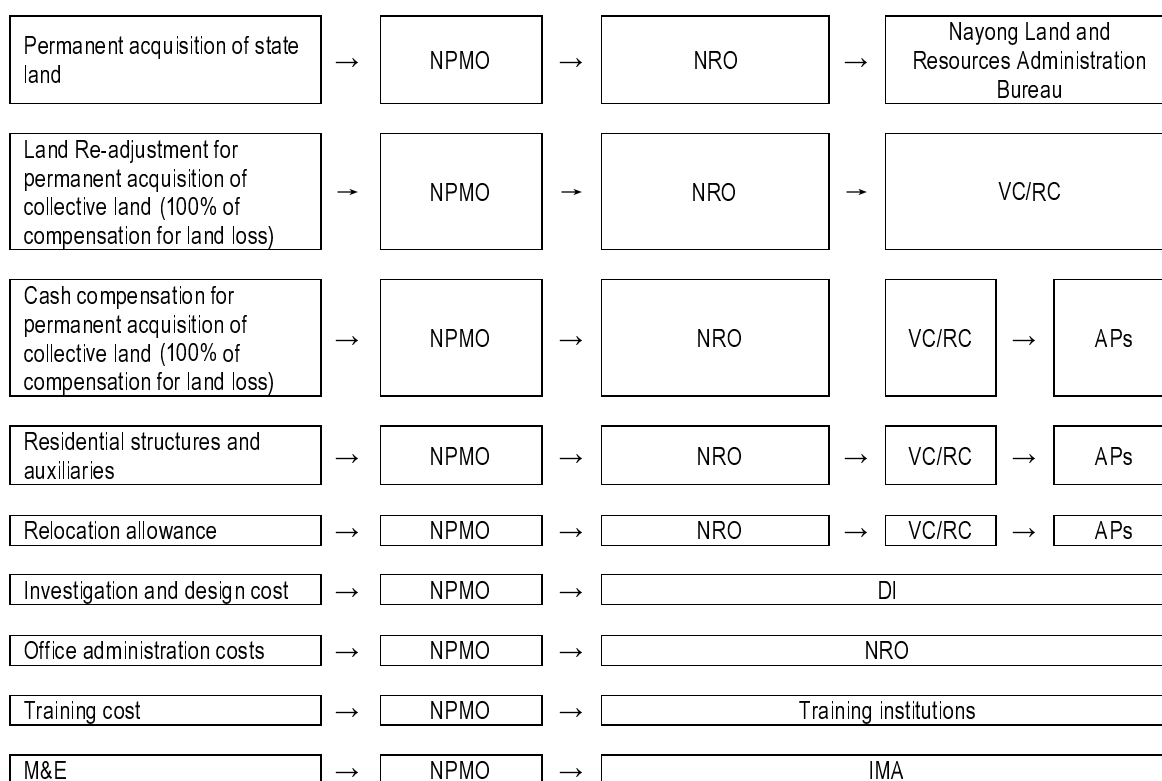
7.3.1 Allocation of Resettlement Funds

254. The allocation of the Project resettlement funds will follow the principles below:

- (i) All fees related to the land acquisition and demolition will be included in Project overall budget estimate, the land acquisition and demolition will be reviewed by the implementation agency, submit to the Nayong County PMO and apply for the payment, the compensation funds will be paid to the affected townships and villages by the Nayong County Resettlement Office through the special account.
- (ii) Compensation for housing demolition and all kinds of subsidies in the form of bank deposits will be paid to the affected households.
- (iii) Land compensation fees will be paid after the signing of land acquisition compensation contracts and before land hand over.

255. The flow of fund of land acquisition and resettlement is as follows:

Table 7-4: Flow of Fund



7.3.2 Management and Monitoring of Resettlement Funds

256. Resettlement funds must be strictly disbursed in accordance with relevant national laws and regulations and the policies and “Resettlement Plan for Nayong County” for the land acquisition and resettlement, shall not be less than the compensation standards and scope in the Resettlement Plan.

257. Nayong County Resettlement Office reports to Nayong County PMO monthly on the monthly land requisition and resettlement progress. Village/community and township/street committee resettlement working group is responsible for reviewing payment statement, to be signed and approved by the principal responsible person, and reported Nayong County Resettlement Office to apply for disbursement of funds.

258. Land and house compensation, auxiliary compensation, relocation compensation fee including indoor facilities, moving allowance, transition allowance, relocation award and others will be checked and approved by the Nayong County PMO.

259. Guizhou PMO will employ professional consulting company to conduct the regular internal check for resettlement funds used in the resettlement offices.

260. Nayong finance and audit bureaus have the right to monitor and audit the use of special funds.

261. The external resettlement monitoring agency will conduct the special tracking monitoring for the compensation funds of the affected families during the external monitoring.

7.4 Resettlement Schedule

262. The civil engineering of subprojects proposed to start in December 2016. The resettlement plan will be submitted to ADB for approval before the contract award. In order to ensure that the AP and units can be properly resettled, the land acquisition and resettlement will be completed before the start of civil engineering in respective lands. The schedule of the resettlement activities is presented in **Table 7-5**.

Table 7-5: Schedule of Resettlement Activities

No.	Resettlers Task	Unit	Target	Responsible Unit	Date of Start	Date of Completion	Remark
1	RP Preparation and Information Disclosure						
1.1	Overall RP preparation and finalization	No. of RP	1	Dis and PPTA	Jun 2010	20 Oct 2016	
1.2	Resettlement information booklet for the RP	village	25	Nayong PMO and Pingshan Reservoir Management Office		30 Nov 2016	
1.4	Publicize RP on ADB website			Nayong PMO, ADB		30 Dec 2016	
2	Approval of Resettlement Budget and Update of Resettlement Plan						
2.1	Approval of resettlement plan and budget	CNY million	77.2358	Development and Reform Commission of Guizhou Province	21 Oct 2013	30 Nov 2016	
2.2	Detailed measurement survey	village	25	HCGECLGISDI	1 Sep 2015	31 Jul 2016	
3	Land Acquisition Announcement						
3.1	Publicize the final version of resettlement plan	village	25	Nayong County PMO, Pingshan Reservoir Management Office	31 Oct 2016	30 Dec 2016	
3.2	Land acquisition announcement	village	25	Nayong County Government	31 Oct 2016	30 Nov 2016	
4	Compensation Agreement						
4.1	Sign land compensation agreement and pay compensation	No. of person	901	Nayong County Resettlement Office	30 Oct 2016	31 Dec 2018	
4.2	Sign demolition agreement and pay compensation	HH	95	Nayong County Resettlement office affected HHs	30 Nov 2016	31 Dec 2018	
4.3	Demolition of houses	HH	95	Nayong County Resettlement office affected HHs	30 Nov 2016	31 Dec 2020	
5	Compensation Disbursement						
5.1	Disbursement to the Land and Resources Administration Bureau		Compensation fee	Nayong County Resettlement Office	1 Nov 2016	31 Jan 2019	
5.2	Disbursement to the affected households		Compensation fee	Township (town) government	20 Nov 2016	31 Mar 2020	
5.3	Commencement of post-resettlement funds (HH payments and or investments in development schemes)				31 Dec 2017	31 Dec 2020 and after	
6	Construction of Resettlement Sites						
6.1	Acquisition of resettlement sites (at least housing area)	HH	95	Nayong County Resettlement office affected HHs	31 Dec 2016	28 Feb 2017	
6.2	Provision of roads and services at resettlement sites	HH	95	Nayong County Resettlement office affected HHs	31 Mar 2017	31 Mar 2018	
6.3	Resettlement house construction and completion	HH	95	Nayong County Resettlement office affected HHs	1 Mar 2017	31 Dec 2018	

No.	Resettlers Task	Unit	Target	Responsible Unit	Date of Start	Date of Completion	Remark
6.4	Move into new houses	HH	95	Nayong County Resettlement office affected HHs	1 Jan 2018	31 Dec 2020	
6	Livelihood Restoration Measures						
6.1	Adjustment of replacement farmland (and compensate host people to restore their income losses)				1 Dec 2016	31 Dec 2019	
6.2	Farmland improvement investments (levelling, irrigation systems, fertilizer, planting)	mu			1 Jun 2017	31 Mar 2021	
6.3	Livestock breeding	APs			1 Jun 2017	31 Mar 2021	
6.4	Employment arrangement of non-farm occupations	APs		Nayong County PMO, Township, village, affected HHs	1 Jun 2017	31 Mar 2021	
6.5	Implementation of training programs	APs		Nayong County PMO, Township, village, affected HHs	1 Jun 2017	31 Mar 2021	
6.6	Employment of APs in the Project construction	APs		Nayong County PMO, Township, village, affected HHs	31 Dec 2016	31 Mar 2021	
6.7	Assistance provision to women and the vulnerable groups		Affected vulnerable group	Nayong County PMO	31 Dec 2016	31 Mar 2021	
8	Public Participation and Consultation			Nayong County PMO, Pingshan Reservoir Management Office / NRO, and relevant organizations	Jun 2010	31 Mar 2021	
10	Appeals and Grievance			Nayong County PMO	30 Jun 2016	31 Mar 2021	
7	Resettlement Institutional Capacity Building						
7.1	Training to Nayong County PMO, Pingshan Reservoir Management Office, NRO, Land and Resources Administration Bureau and other relevant agencies	No.	50	Nayong County PMO	30 Jun 2016	31 Dec 2018	
7.2	Training to county, township and village personnel	No.	388 people, including 190 women	Nayong County PMO	30 Jun 2016	31 Dec 2018	
8	Monitoring and Evaluation						
8.1	Baseline survey	village	25	External monitoring and evaluation institution	31 Mar 2017	30 Jun 2017	
8.2	Establish internal monitoring mechanisms			Nayong County PMO	1 Oct 2016	30 Oct 2016	
8.3	Engagement of external monitoring unit	No.	1	Nayong County PMO	1 Dec 2016	31 Mar 2021	

No.	Resettlers Task	Unit	Target	Responsible Unit	Date of Start	Date of Completion	Remark
8.4	Internal monitoring reports		Semi-annual report	Nayong County PMO	31 Mar 2017	30 Mar 2021	
8.5	External monitoring reports		Semi-annual report	External monitoring and evaluation institution	31 Mar 2017		Report 1
					31 Aug 2017		Report 2
					31 Mar 2018		Report 3
					31 Aug 2018		Report 4
					31 Mar 2019		Report 5
8.6	External evaluation report		Annual report	External monitoring and evaluation institution	31 Mar 2020		Report 1
					31 Mar 2021		Report 2
8.7	Resettlers completion report		One report	Nayong County PMO	31 Mar 2021		
12	Start of Civil Works Construction						
12.1	Pre-construction civil works at dam site				31 Dec 2016	31 Mar 2017	
12.2	Main construction contracts for dam and water intake				1 Apr 2017	31 May 2020	
12.3	Reservoir impoundment				1 Mar 2021	31 Mar 2021	

VIII RESETTLEMENT ORGANIZATION INSTITUTION

8.1 Organizational Structure

263. The project leading group is established within the Nayong County Government (NCG) with the NPMO as the secretariat leading and communicating with the other stakeholders. The resettlement activities will be coordinated and supervised by the Nayong County PMO and Pingshan Reservoir Management Office (the implementing agency), and implemented by the Nayong County Resettlement Office.

8.2 Responsibilities of Each Institution

Table 8-1: Responsibilities of Each Institution

Institutions	Responsibilities
PLG	<ul style="list-style-type: none"> - Lead, organize, coordinate and formulate policies for the project. - Review the implementation of the RP. - Conduct internal supervision and inspection. - Make decision for major problems during land acquisition and resettlement process.
NPMO and Pingshan Reservoir Management Office	<ul style="list-style-type: none"> - Perform the overall coordination and organize the project activities. - Coordinate the preparation and implementation of the LAR program. - Organize and supervise the measurement survey and socioeconomic survey. - Organize and coordinate the preparation of RP. - Provide assistance to women and other vulnerable groups. - Serve as a liaison between ADB and NCG and various stakeholders. - Apply for Land Use Planning Certificate and Land Use Construction Certificate to NLRAB. - Apply for house demolition certificate. - Disburse land acquisition and resettlement fund and supervise the usage. - Direct, coordinate and supervise the implementation schedule of the RP. - Organize and implement internal monitoring, coordinate independent external supervision agency, coordinate internal and external monitoring activities. - Report the schedule of land acquisition and resettlement, fund usage and implementation status periodically to ADB. - Provide assistance to women and other vulnerable groups. - Coordinate the handling of the conflicts and problems during the resettlement implementation. - Report the land acquisition and structure demolition to PLG.
NRO	<ul style="list-style-type: none"> - Organize the measurement survey and DMS. - Conduct measurement surveys and DMS of land acquisition and house demolition. - Implement the relocation. - Formulate the resettlement implementation schedule. - Sign the land acquisition and house demolition agreement with the affected households in association with local government. - Supervise the implementation of RP. - Manage the information of land acquisition and resettlement. - Provide assistance to women and other vulnerable groups. - Train the resettlement staff. - Coordinate the handling of conflicts and problems during the RP implementation. - Settle the disputes and grievances through coordination and arbitration. - Handle the illegal action during the land acquisition and relocation process. - Report the land acquisition and house demolition to NPMO.
NLRAB	<ul style="list-style-type: none"> - Implement the relevant national policies of land acquisition. - Participate in the examination of compensation standards for land acquisition and ground attachments. - Process and approve land acquisition. - Participate in measurement and socioeconomic surveys, and DMS. - Participate in the preparation of Resettlement Plan.

Institutions	Responsibilities
	<ul style="list-style-type: none"> - Issue Land Use Planning Certificate and Land Use Construction Certificate. - Issue Public Notice of Land Acquisition. - Guide, coordinate, and supervise the implementation activities of land acquisition and resettlement. - Coordinate the handling of conflicts and problems during the RP implementation.
Township Government / Street Committee	<ul style="list-style-type: none"> - Carry out and implement the regulations and policies related to house demolition. - Review the relevant documents of house demolition plan and resettlement and compensation plan, issue the house demolition certificate. - Register and manage house relocation file. - Coordinate, supervise and inspect the house demolition activities and handle conflicts during demolition. - Cooperate with the NRO to train and examine the resettlement officers.
VCs / RCs	<ul style="list-style-type: none"> - Participate in measurement and socioeconomic surveys and formulation of the resettlement and rehabilitation plan. - Participate in the preparation of the RP. - Organize the public consultation; and publicize policies of land acquisition and resettlement. - Consult the compensation payment and distribution. - Organize the production and income restoration activities in resident communities. - Report comments and suggestions of APs to the organizations at upper level. - Provide assistance to women and other vulnerable groups.
Dis	<ul style="list-style-type: none"> - Minimize the project impacts through optimizing engineering design. - Identify the scope of land acquisition and resettlement impacts. - Conduct measurement survey and socioeconomic surveys, and DMS. - Assist to prepare the Resettlement Plan. - Provide technical consulting of data collection and processing to the NPMO.
Independent Monitoring Agency (IMA)	<ul style="list-style-type: none"> - Provide technical consulting of land acquisition and resettlement. - Act as an IMA, provide periodic monitoring for the implementation of the resettlement plan, and provide independent evaluation report to the NPMO, Pingshan Reservoir Management Office, NRO and ADB.

8.3 Persons and Facilities of Resettlement Agencies at All Levels

264. Nayong County Project Management Office has a strong capacity of organization and coordination and experience on the resettlement work, can skillfully use the computer. The Township/Street Committee Resettlement Working Station also is composed by the higher quality and rich of experience personnel. The persons of resettlement agencies at all levels are shown in **Table 8-2**.

Table 8-2: Staff Arrangements of Resettlement Agency at All Levels

Relocation and Resettlement Agencies	Number of Staff	Staff and Qualifications	Date of Work and Operation
Nayong County PMO	2 (1 woman)	Leader with more than 5 years' experience in resettlement work, university education or above	March 2015 to the completion of the resettlement work
Nayong County Resettlement Office	8 (1 woman)	Long-time engaged in similar work, with college education or above	April 2015 to the completion of the resettlement work
Nayong County Land and Resources Administration Bureau	8 (1 woman)	Long-time engaged in similar work, with college education or above	March 2015 to the completion of the resettlement work
Zongling Township Resettlement Working Group	5 (1 woman)	Long-time engaged in similar work, with college education or above	March 2015 to the completion of the resettlement work
Yongxi Township Resettlement Working Group	5 (1 woman)	Long-time engaged in similar work, with college education or above	March 2015 to the completion of the resettlement work
Shuguang Township Resettlement Working Group	5 (1 woman)	Long-time engaged in similar work, with college education or above	March 2015 to the completion of the resettlement work

External Monitoring and Evaluation Agency	Three + (at least 1 woman)	Long-time engaged in similar work, with university education or above	May 2016 to the completion of the resettlement work
---	----------------------------	---	---

8.4 Measures to Strengthen the Institutional Capacity

265. What the implementing lack is a full understanding of ADB's involuntary resettlement policy requirements. Therefore, Guizhou PMO has provided a series of training for the resettlement agencies at all levels, including (i) ADB involuntary resettlement policies; (ii) national land acquisition and demolition compensation policies; (iii) good practice in Guizhou and China. The PPTA Consultants have provided the relevant organizations for RP preparation and implementation in accordance with ADB's SPS (2009). The additional trainings will combine study tour with seminars, and will begin in December 2016. Guizhou PMO will also request ADB to help staff training. The training funds have been included in the budgets of the resettlement plan.

IX Complaints and Grievance

266. Nayong County People's Government will establish a high level transparency, simple grievance and complain collection and resolving program, to objectively, fairly and efficiently deal with the dissatisfaction for the issues of the resettlers and ensure resettlement work to be implemented smoothly.

9.1 Approach of Grievance and Complain Collection

267. The channels for the collection of the problems and the AP's complaints during the settlement work include:

- (i) Report to township/street committee and village/community resettlement office, including the complaints of the resettlers, progress, work measures, and existing problems.
- (ii) Construction unit fax the construction log to the Project owner every day, mainly through the construction unit to report the construction impact by the resettlers.
- (iii) Construction site inspection identified LAR coordination problems by the construction unit.
- (iv) Relevant information reported by external monitoring agency.
- (v) Letters and visits from the APs.
- (vi) Dispatch agency of construction unit - report of working station.
- (vii) Relevant topics and issues reflected by the audit, discipline inspection and other departments during the work check.
- (viii) Resettlement expenditure collected from the detailed fund disbursement statement of the bank.
- (ix) Internal monitoring and investigation of special facilities.

9.2 Complaints and Grievance Procedures

268. The complaints and grievance procedures in the resettlement implementation are as follows, and the APs can participate in every stage.

Stage 1:

269. AP made a verbal or written dissatisfaction to the village committee/resident committee. If it is verbal dissatisfaction, the village committee/street committee must make a written record, the village committee/resident committee to make a clear answer within 2 weeks.

Stage 2:

270. If the AP is not satisfied with the response of the stage 1, the AP can complaint to the township/street committee resettlement working groups, the township government/street committee must make a clear answer within 2 weeks.

Stage 3:

271. The complained person can appeal to the Nayong PMO and Pingshan Reservoir Management Office (subproject implementation agency) within one month after receive the

decision from stage 2. The Pingshan Reservoir Management Office makes the decision to deal with the appeal within 3 weeks.

Stage 4:

272. If the AP is still dissatisfied for the reply from the Nayong PMO or Pingshan Reservoir Management Office, they can appeal to the Nayong County Resettlement Office alternatively and at any time, the AP can appeal to the civil division of 1 month they received the reply, the Nayong County Resettlement Office will make a reply within 4 weeks. If they could not reach a deal, then can be resolved by administrative arbitration.

273. Alternatively and at any time, the AP can appeal to the civil division of a people's court according to the civil procedural law after receiving the decision from Nayong County Resettlement Office and below. The AP will be informed of the result via written notice.

274. The AP also can express dissatisfaction to the external monitoring agency, and the external monitoring agency report to the Nayong County PMO. The AP also can submit the complaints application to ADB team to solve the problem. If the problem is still not resolved, and the AP think that the ADB didn't perform corresponding policy and caused the AP to get hurt, the AP can submit the appeal according to the ADB accountability mechanism².

9.3 Principle of Dealing with Complaints

275. Resettlement offices at all levels must conduct field investigations for the complaints from the resettlers, fully solicit the resettlers' opinions, repeated consultations in patience, according to the national regulations and the RP's principles and regulations, put forward opinions in an objective and fair manner. For the problem that could not be resolved, it must be timely passed to the resettlement office at higher level, and assist the investigation. If in the previous stage, the decision-making agency did not respond to the appeal within the specified date, the complainant has the right to appeal.

276. In the process of resettlement, women may have their own special complaints and appeals, so the Nayong PMO plans to employ at least 1 woman they speak local languages/dialects for every resettlement working group to deal with women's appeal. Local government and non-governmental organizations such as the Civil Affairs Bureau, the Women's Federation will also supervise the resettlement activities, to protect the rights and interests of APs, especially women.

9.4 Content and Way of Complaints

9.4.1 Content of the Complaint Reply

277. Content of the complaint reply include:

- (i) Brief introduction of complain.
- (ii) Result of the investigation.
- (iii) National relevant provisions, and the principles and standards of the resettlement plan.
- (iv) Handling suggestion and specific basis.

² ADB. Accountability Mechanism. <http://www.adb.org/site/accountability-mechanism/main>

9.4.2 Approach of the Complaint Reply

278. Approach of the complaint reply include:

- (i) Complaints about the individual cases, should take the approach of written material directly to complainant.
- (ii) Complaints with more problems, through villagers' conference or send the documents to inform the village the AP located.
- (iii) No matter what kind of reply approach is adopted, the reply must be sent to the resettlement office which the complainants belong to.

9.5 Feedback Recording and Tracking of Complaint and Appeal

279. During the implementation of the RP, the township and village resettlement working group should do a good job about record and register and manage the data of complaints and processing the data including follow-up to ensure the corrective actions are implemented and effective, and report to Pingshan Reservoir Management Office in the form of written material once a month. The Pingshan Reservoir Management Office summarizes and reports to the Nayong County PMO once a month. The Nayong County PMO will conduct regular inspection of the complaint handling registration.

9.6 Contact for Complaints and Appeals

280. The township/street committee and village/community resettlement working group arrange the responsible person to collect and receive the AP's complaint and appeal. The name, office address and contact number of the person in charge is shown in **Table 9-1**. If the local grievance mechanism can't satisfy the AP's complaint, the complaint can also directly go to the Nayong County PMO. Nayong County PMO will be responsible for handling complaints or send person to investigate and deal.

Table 9-1: Complaint and Appeal Institutions and Personnel Information to Receive Affected People

Unit	Contacts	Address	Phone Number
Nayong County PMO	Li Xi	Nayong Pingshan Reservoir Management Office	0857-3521680
Nayong County Resettlement Office	Huang Jisong	Nayong County Resettlement Office	0857-3521885
Nayong County Land and Resources Administration Bureau	Zhang Jing	Nayong County Land and Resources Administration Bureau	0857-3521283
Zongling Township Resettlement Working Station	Liu Jie	Zongling Township Government	0857-3690105
Yongxi Township Resettlement Working Station	Li Qixing	Yongxi Township Government	0857-3532790
Shuguang Township Resettlement Working Station	Wang Zhengjun	Shugang Township Government	0857-3705001
Yangchang Township Resettlement Working Station	Zenggang	Yangchang Township Government	0857-3630789
Baixing Township Resettlement Working Station	Liu Jin	Baixing Township Government	0857-3700068

Unit	Contacts	Address	Phone Number
External Monitoring and Evaluation Agency	To be engaged		

9.7 Cost of Solving the Complaint and Appeal

281. During the implementation, the cost of solving the complaint and appeal will be included in the management budget of “Resettlement Plan for Nayong County”.

X Resettlement Monitoring and Evaluation

282. Resettlement monitoring and evaluation is based on the "Resettlement Plan for Nayong County", to conduct ongoing investigation, inspection, supervision and evaluation for the implementation of resettlement activities. Resettlement monitoring is composed of two parts, internal monitoring and external monitoring.

10.1 Internal Monitoring

10.1.1 Internal Monitoring Purpose

283. The purpose of internal monitoring is to ensure the performance of the duties during the resettlement process, to complete the target to recover the living standard of the APs. Each subproject implementation unit (Resettlement Implementation Agency) should conduct internal monitoring and evaluation.

10.1.2 Internal Monitoring Procedure

284. During the implementation of the RP, Pingshan Reservoir Management Office reports to the Nayong County PMO quarterly, the Nayong County PMO submits the internal monitoring record and progress report to ADB every half a year.

10.1.3 Internal Monitoring Content

285. Internal monitoring will cover the following contents:

- (i) Organization setting, personnel division and capacity building;
- (ii) Implementation situation of relocation policies and compensation standards;
- (iii) Implementation progress of land acquisition and house demolition, and resettlement activities;
- (iv) Budget and implementation situation of resettlement;
- (v) Land acquisition and production resettlement (including vulnerable groups);
- (vi) House demolition and livelihood rehabilitation (including vulnerable groups);
- (vii) Complaints, appeals, public participation, consultation, information disclosure and external monitoring, etc.;
- (viii) Resolving relevant problems in the MOU of ADB mission;
- (ix) Existing problems and solution measures.

10.1.4 Internal Monitoring Agency and Personnel Arrangement

286. Personnel involved in the monitoring implementation agency are shown in **Table 10-1**.

Table 10-1: Personnel of Internal Monitoring Implementation Agency

Placement Agencies	Regular Staff	Total Staff during Peak Season
Nayong County PMO	2	3
Nayong County Resettlement Office	4	8
Nayong County Land and Resources Administration Bureau	8	12
Each Village Committee/Resident Committee (Group/Community)	39	52

10.2 External Monitoring

287. According to the relevant requirements of ADB, the Guizhou PMO will entrust an independent external monitoring agency to track monitoring and evaluation of the resettlement and livelihood recovery activities, to ensure the implementation in accordance with the "*Resettlement Plan for Nayong County*". External monitoring includes the person living standard baseline investigation of the APs and routine monitoring and evaluation.

10.2.1 Living Standard Survey of the Affected People

288. The external monitoring agency will conduct a baseline survey on the affected villages and households. Baseline survey will investigate production and living standards of the APs. The baseline survey should use the census method.

289. For living standard survey of affected household, the main content includes: family population, production and operation, housing construction area, annual household income, employment structure, household annual expenditure, traffic conditions, water supply, power supply conditions, living environment, subjective assessment on the production and living status, etc.

10.2.2 Routine Monitoring and Evaluation

290. During the implementation of the RP, external monitoring agency will conduct monitoring and evaluation twice a year. The main monitoring indicators of external monitoring agency includes:

- (i) Whether the compensation for housing and other land attachments determined is in compliance with the principle of replacement value;
- (ii) Whether the fund is paid in full and on time;
- (iii) Construction and distribution of resettlement housing;
- (iv) Whether it is reasonable for the relocation time;
- (v) Whether paid transitional fees and relocation costs;
- (vi) Whether physical compensation is discounted/depreciated;
- (vii) Whether the new resettlement area has the completed water, electricity, roads and other infrastructures; who are responsible for providing these conditions.
- (viii) Whether the new resettlement area has completed water, electricity, roads and other infrastructures; who is responsible for providing these conditions;
- (ix) Whether the compensation standard of all kinds of land acquisition is based on the RP;
- (x) Whether the replacement land is adjusted and allocated to the APs;
- (xi) Whether the land compensation cost allocation procedure can ensure the affected village get money;
- (xii) Whether the amount of land acquisition, compensation standard, compensation amount is transparent in the village, and in what form, in particular for the APs that move-out;
- (xiii) Which special preferential policies will be given to the vulnerable groups during the resettlement;
- (xiv) Whether the vulnerable groups can get the help during the house demolition;
- (xv) Whether the special needs of women are considered in the resettlement measures;
- (xvi) Whether the AP get the training, the number of training (of which the number of women), quantity of employment (of which the number of women), the evaluation for the compensation fee, resettlement and income recovery plan (of which the women's attitudes).

- (xvii) Implementation progress and effect of livelihood restoration measures for the APs whose land has been acquired.
- (xviii) Whether income levels of APs and host people have been restored in a timely manner.
- (xix) Whether the post-resettlement support has been provided.
- (xx) Whether the reservoir environmental protection zone causes additional impacts on people near the reservoir.

291. The external monitoring agency will participate in some public consultation and consultation meetings to assess the results of public participation. External monitoring agency will irregularly visit the affected villages, the township government and the complaint handling agency, and propose appropriate solutions and recommendations.

10.2.3 Follow-up Survey of the Affected People

292. For the affected household, the external monitoring agency will conduct follow-up survey in six months after the resettlement. Follow-up survey should as far as possible to achieve the living standard survey object tracking. Follow-up survey is similar to the living standard survey, through structured questionnaire survey, to reflect resettlement effect on the livelihood and production of investigation subjects, to evaluate the resettlement effect.

10.2.4 External Monitoring and Evaluation Reporting System

293. External monitoring report should be submitted to the Nayong County PMO and ADB according to the schedule (See **Table 10-2**), the reporting period is presented in **Table 10-2** according to the following requirements:

- (i) Conduct the survey of the AP's living standards and the status, submit the Resettlement Baseline Report before the implementation of resettlement.
- (ii) Submit the monitoring and evaluation report on August 31 and March 31 each year respectively, until the completion of land acquisition and relocation activities.
- (iii) Conduct annual evaluation twice, and submit the report to show that the resettlement work has recovered the AP's livelihood, income and living standards.
- (iv) Further monitoring and evaluation should be continued if there is remaining issues or the income has not been recovered.

Table 10-2: External Monitoring and Evaluation Report

Item	Report of Monitoring and Evaluation	Date
1	Baseline socioeconomic survey and report	31 March 2017
2	First monitoring report	31 March 2017
3	Second monitoring report	31 August 2017
4	Third monitoring report	31 March 2018
5	Fourth monitoring report	31 August 2018
6	Fifth monitoring report	31 March 2019
7	Six monitoring report	31 August 2019
8	Seventh monitoring report	31 March 2020
9	Eighth monitoring report	31 August 2020
10	Resettlement completion report	31 March 2021
11	First annual evaluation report	31 March 2022
12	Second annual evaluation report	31 March 2023

294. The report of the external monitoring agency will be submitted to Nayong County PMO and ADB in both Chinese and English. Routine monitoring report content should at least include the following: (i) the report monitoring object; (ii) the resettlement work progress; (iii) the monitoring findings by the external monitoring agency; (iv) the main problems; and (v) the basic evaluation opinions and suggestions of external monitoring. These reports will be uploaded to ADB website and will be made available to affected persons in a timely manner. The external monitor will seek feedback from APs on these reports.

Attachment I: Resettlement Information Booklet

(Pingshan Reservoir and Resettlement Areas)

1. Objective of Resettlement Information Booklet

The main purpose of resettlement information booklet is to provide a brief introduction on the Project, especially the principle of compensation, resettlement benefits, compensation fees and flow of funds, time paid to the project affected individual / collective. This is part of information dissemination activities, the purpose is to disclose the policies and procedures on the land acquisition, demolition, compensation, funds payment, complaint handling and appeal procedures. The Project implementation unit will distribute the information booklet to the APs. The booklet will be distributed to each affected village in both the affected reservoir area and resettlement areas.

2. Basic Project Information and LAR Impacts

The Guizhou High Efficiency Water Utilization Demonstration in Rocky Desertification Area Project (the overall Project) consists of five components: Pingqiao Reservoir Component and Water Transfer Facility Component, Pingshan Reservoir and Water Transfer Facility Component, Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Anlong County, Restoration of Environment, Ecology and Land Productivity in Rocky Desertification Area Component in Nayong County, and Policy Reform, Capacity Development and Knowledge Sharing.

The Pingshan Reservoir and Water Transfer Facility Component will involve permanent land acquisition of 1,806.4 mu in total, including 56.71 mu state-owned land and 1,749.69 mu collectively-owned land, of which 548.56 mu are cultivated land, and the impact is significant. A total of 25 villages in Zongling, Yongxi, Shuguang and Yangchang Townships will be affected, the cultivated land acquisition will involve 282 households and 901 persons to be affected. A total of 11,449.5 m² of houses will be demolished with 447 people in 95 rural households to be affected, including 221 females; who will also be affected by land. The Project also needs 700.62 mu temporary collectively-owned land occupation, and the number of people to be affected by temporary land occupation is included in the number of people affected by land acquisition. Of the total affected households and population, 29 households and 100 persons belong to vulnerable groups, including 10 households and 21 persons living under minimum living guarantee (MLG) and 19 households and 79 persons' main housing area is less than 25 m² of brick-concrete structure. The scope of the Project impact is presented in **Table 1**.

In addition, a total of 620.8 mu of cultivated land need to be adjusted through land use right transfer (LURT) in the resettlement areas to allocate to relocated persons, and 40.23 mu of land will be acquired for hosting the 447 relocated population in the resettlement areas at the base year.

Table E-1: Project Impacted Scope

Name of Sub-Project	Permanent Land Acquisition			TO of Land	HD m ²	HD (No.)		LA (No.)		Subtotal (No.)	
	Collective-owned	State-owned	Subtotal	Collective-Owned ¹		AHs	APs	AHs	APs	AHs	APs
	mu	mu	mu	mu							
Pingshan Reservoir Inundated Area	644.39	56.23	700.62	715.19	9,245.37	74	337	224	717	224	717
Dam Site Engineering Construction Area	803.65	0.48	804.13	0.00	2,204.09	21	110	51	162	51	162
Water Supply and Irrigation Engineering Area	301.65	0	301.65	0.00		0	0	7	22	7	22
Subtotal	1,749.69	56.71	1,806.40	715.19	11,449.46	95	447	282	901	282	901

Note: ¹ A total of 15 households and 50 people will be affected by temporary land occupation, and all of them will also be affected by permanent land acquisition.

3. Implementation Time of the Overall Project

The Guizhou High Efficiency Water Utilization Demonstration in Rocky Desertification Area Project will start the construction in December 2016, and complete in March 2021.

4. Implementation Institution

Nayong County PMO will take the supervision responsibilities for the implementation of the resettlement plan, including the preparation and implementation management of the resettlement plan, progress reports and internal monitoring of resettlement plan, hiring external monitoring agency. Nayong County Resettlement Office will be responsible for the actual implementation and management of the resettlement plan, including the confirmation of affected land and houses, consultation with the affected people, disbursing of compensation funds, and implementation of the resettlement measures for the affected people, etc.

Township (town) government/street committee office and village committees/resident committees will actively participate in the implementation of the *Resettlement Plan*. In order to guarantee the smooth implementation of the Project, Nayong County PMO will organize training by inviting professional resettlement officers/specialists from training institutions with strong experiences in LAR implementation or study tour to other cities / provinces with good and successful implementation on land compensation and resettlement, the person in charge of resettlement will be responsible for the training activities. *Resettlement Plan for Nayong County* also includes training programs to strengthen the ability of resettlement offices' staff at all levels.

5. Compensation of Land Acquisition and Demolition

The compensation standard of land acquisition will be implemented in accordance with the relevant laws and regulations of PRC, Guizhou Province People's Government, Bijie Miao and Buyi Minority Prefecture Government, Nayong County People's Government and the ADB policies. The compensation standards of land acquisition are shown **Table 2**.

Table 2: Land Acquisition Compensation Standard

Land Type	Output Value Per Mu	Compensation	Resettlement Subsidies	Compensation	Allowance	Forest Compensation	Total
	CNY/mu	Multiplier	Multiplier	CNY/mu	CNY/mu	CNY/mu	CNY/mu
Dryland	1,200	10	6	12,000	7200		19,200
Economic forest	1,200	4	6	4,800	7200	2,080	14,080
Forest land	1,200	4	6	4,800	7200	1,260	13,260
Shrub land	1,200	4	6	4,800	7200	200	12,200
Other grassland	1,200	4		4,800	0		4,800

The final compensation standards of housing demolition will be determined according to the market price of the house at replacement value. House compensation standards are shown **Table 3**.

Table 3: Housing Demolition Compensation Standard

Item	Unit	Brick-concrete Structure	Brick-wood Structure	Timber Structure
Main house	CNY/m ²	818	577	441
Side house	CNY/m ²	613	432	
Miscellaneous house	CNY/m ²	238		

Compensation period for temporary land occupation is 1 year. Land restoration costs will be included in the civil engineering cost. **Table 4** provides the land compensation of temporary land occupation.

Table 4: Compensation of Temporary Land Occupation at Lump Sum Rates

Item	Unit	Paddy Field	Dry Land	Forest Land
Reclamation	CNY/mu	10,850	10,000	7,200
Production Recovery	CNY/mu	1,200	1,200	1,200
Compensation	CNY/mu	Annual output value	Year	Max. 2 years

The ground attachments and auxiliaries will be compensated at replacement value. Compensation standards of ground attachments are shown in **Table 5**. Compensation standard for different diameters of trees is presented in **Table 6**. Other policies are presented in **Table 7**.

Table 5: Compensation Standards of Auxiliaries and Ground Attachments

No.	Item	Unit	Unit Price (CNY)
1	Sunning ground	m ²	32
2	Toilet	No.	100
3	Water pond	m ³	150
4	Grave	No.	400
5	Television receiver	set	100
6	Grass trimmer	No.	30
7	Rice milling machine	No.	30
8	Wine cellar	No.	300

Table 6: Compensation Standard of Trees

No.	Item	Unit	Unit Price (CNY)
1	Fruit tree	No.	
(1)	Tree with fruits	No.	100
(2)	Tree without fruits	No.	50
2	Economic tree	No.	
(1)	Matured tree	No.	30
(2)	Sapling	No.	10
3	Commercial tree	No.	
(1)	Matured tree	No.	10
(2)	Sapling	No.	5
4	Bamboo	grove	120

Table 7: Other Compensation Policies

Category	Unit	Policies
House construction subsidy		Relocated households whose main house is not brick-concrete structure with less than 20 m ² per capita, the difference portion will be compensated and monitored according to average 20 m ² of brick-wood structure per capita.
Relocation allowance	CNY/person	1,500
Culture, education and hygiene subsidy	CNY/person	500 as listed in the regulation of reservoir resettlement
House decoration fee		5% of the total housing compensation
Road relocation repair and construction cost	CNY/person	400 as listed in the regulation of reservoir resettlement
House decoration		5% of main brick-wood structure house in whole reservoir land acquisition area
Relocation insurance	CNY/person	60

6. Entitlement Matrix

Entitlement matrix was prepared in accordance with the applicable policies and regulation, please see **Table 8**.

Table 8: Entitlement Matrix

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
Collective Land Acquisition (1,749.69 mu)	Village groups	25	(i) For land re-adjustment, compensation will be paid to the host villages which give out their land to the relocated families. (ii) 100% cash compensation allocated to affected HHs who lost their land and choose cash compensation.	Dryland: CNY 19,200/mu; Economic forest: CNY 14,080/mu; Forest land: CNY 13,260/mu; Shrub land: CNY 12,200; Other grassland: CNY 4,800.
	Affected population	901 APs (282 HHs)	(1) Cash compensation: Guizhou Province announced average annual value of output standard and compensation policies. (2) adjust the cultivated land by independent land transfer mode (land re-adjustment), and compensation will be paid to the host villages which give out their land to the relocated families; (3) development of reserved land resources to develop cultivation, forest and fruit farming; (4) construction of basic cultivated land and water conservancy construction, improve the quality of the land; (5) development of family breeding business; (6) post resettlement support fund: CNY 600 per resettler per year for a total of 20 years; (7) Nayong County will organize industry and commerce, taxation, health other sectors to provide the active-site services, and the implementation of relevant tax, simplified procedures and other preferential policies and measures to help solve practical difficulties and problems of land-losing farmers in the service industry they encountered.	Nayong County Government will organize industry and commerce, taxation, health and other departments to provide door-to-door services, relevant tax exemption, simplify procedures, and other preferential policies to the APs.
Acquisition of State-owned Land (56.71 mu)	None	None	State-owned barren hills free transfer to the Project.	
House Demolition and Resettlement	Displaced HHs (11,449.46 m ² housing area)	95 HHs (447 APs)	(i) According to the destination of production arrangement plan, combined with resettlement willingness and topography, geological conditions of resettlement area, resettlers adopt centralized and scattered settlement out of their places; (ii) Compensation provided at replacement cost to the APs; (iii) The basic infrastructures of the resettlement sites will be constructed by the Government; (iv) Subsidy will be provided to the households in difficulties; (v)	Main Houses: Brick-concrete structure: CNY 818/m ² ; Brick-wood structure: CNY 577/m ² ; Timber structure: CNY 441/m ² Side Houses: Brick-concrete structure: CNY 613/m ² ; Brick-wood structure: CNY 432/m ² Miscellaneous house:

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
			Relocation allowance will be provided to relocated families; vi) Assistance will be provided during relocation process; and v) Provision of post-resettlement support fund to the relocated families.	Brick-concrete structure: CNY 238/m ² Post Resettlement Support Fund: CNY 600/capita per year for 20 years after resettlement
Temporary land Occupation (715.19 mu)	Affected households	Affected households	(i) cash compensation: crop compensation paid to the affected people; (ii) land restoration costs will be included in the civil works engineering budget.	The average annual yield of 100% compensation to the affected farmers. Compensation period is occupation period.
Standing crops and ground attachments	Owners of trees and other agricultural production facilities and auxiliaries	According to ownership to determine the villagers	Cash compensation paid to the affected people	Sunning ground: CNY 32/m ² ; Toilet: CNY 100/each; Water pond: CNY 150/m ³ ; Grave: CNY 400/each; Television receiver: CNY 100/set; Grass trimmer: CNY 30/each; Rice milling machine: CNY 30/each; Wine cellar: CNY 300/each; Fruit Tree: Tree with fruits: CNY 100/each; Tree without fruits: CNY 50/each; Economic Tree: Matured tree: CNY 30/each; Sapling tree: CNY 10/each; Commercial Tree: Matured tree: CNY 10/each; Sapling tree: CNY 5/each; Bamboo: CNY 120/grove
Vulnerable Groups	Vulnerable groups affected by land acquisition and resettlement	Vulnerable HHs	It has been determined for the vulnerable group that: (i) PMO and village committee/resident committee will mobilize and use the vulnerable group assistance reserve fund at CNY 250,000 (for vehicle rental, hiring, and other winter warmth action); (ii) Vulnerable groups will receive priority employment opportunities provided by the project construction units or other measures to restore their life; (iii) PMO and village committee will help build a new home; (iv) Relocated households whose main house is not brick-concrete structure with less than 20 m ² per capita, the difference portion will be compensated according to average 20 m ² of brick-wood structure per capita.	

Type of Impact	Degree of Impact	Persons with Rights to Get Entitlement	Compensation and Resettlement Policies	Compensation Standard
Land Adjustment by Host Population for Resettlement Sites	HHs involved in land adjustment	HHs involved in land adjustment	(i) Consult with the residents of the host communities to adjust and allocate lands to relocated people and compensation standards; (ii) Provide assistance to the residents of the resettlement sites for non-agricultural sector employment; (iii) Provide support to the integration of the residents in host communities and the relocated people.	Resettlement groups and host groups will negotiate based on rates for collective-owned land (see above) for scattered resettlement. Concentrated resettlement site will be on state-owned land without affecting any host population.
Complaints and appeals		All affected people	Complaints and appeals for free. All expenses reasonably incurred paid by the project preparatory cost.	
Females	436 Females	436 Females	(i) Priority will be given to women for employment and training opportunities. During the Project construction phase, about 4,650 person-years positions and training opportunities will be generated, at least 30% of job positions in the project will be provided to women; (ii) Priority will be given to women for agricultural technology training at free of charge, at least 40% of women will participate in the training; and (iii) Ensure women can obtain relevant information and participate in the resettlement implementation activities.	
EMs	249 EMs	249 EMs	(i) Priority will be given to EMs for employment and training opportunities. During the Project construction phase, about 4,650 person-years positions and training opportunities will be generated, at least 40% of job positions in the project will be provided to EMs; (ii) Priority will be given to women for agricultural technology training at free of charge, at least 40% of EMs will participate in the training; and (iii) Ensure EMs can obtain relevant information and participate in the resettlement implementation activities.	

7. Cut-off Date

The cut-off date for Pingshan Reservoir and Water Transfer facility Component is 10 May, 2012.

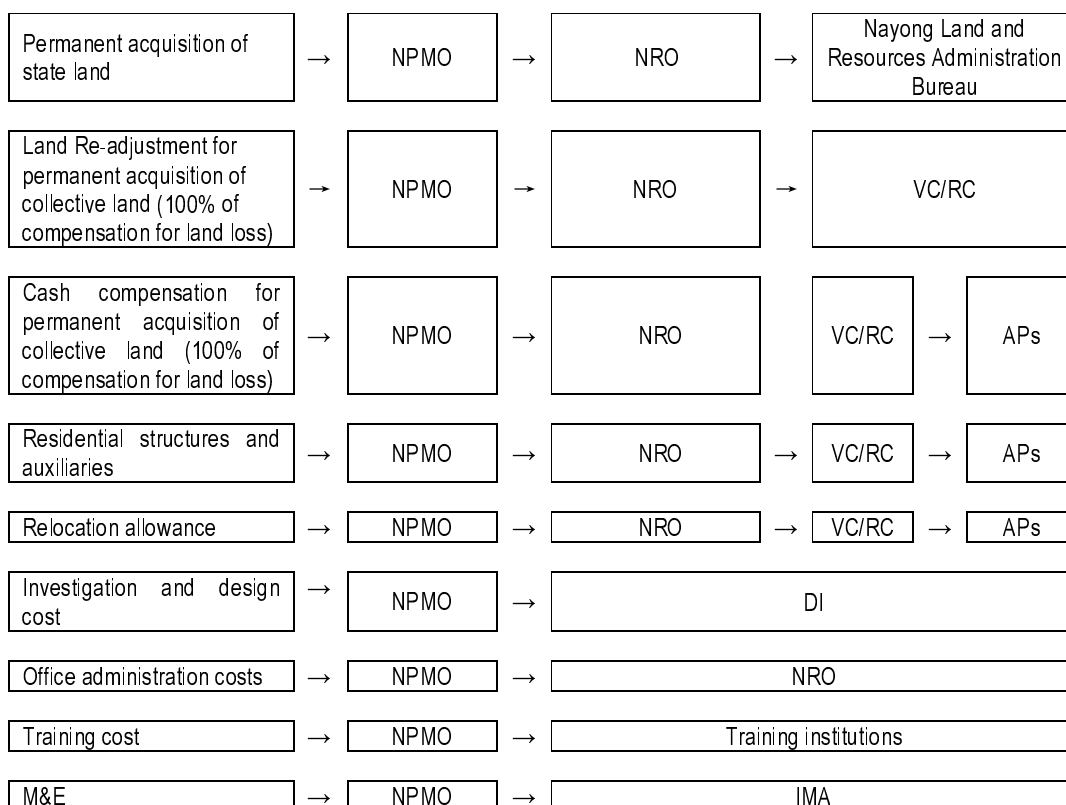
8. Payment of Compensation Fee

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

The amount of compensation shall not be detained, depreciation and tax shall not be borne by the APs. The compensation payments of the property owner must be calculated by the public compensation standard. All the property in the original buildings is owned by the owner. Building value shall not be depreciation by age limit. The compensation shall not be detained of the rest material value after demolition. Any taxes or other fee of re-registration of land and property will be absolution or be paid by the project implementation unit.

The flow of fund of LAR disbursement is in **Table 9**.

Table 9: Flow of Fund



9. Resettlement and Livelihood Rehabilitation Plan

The residents will choose the following resettlement: (i) relocate backward within the same village group; (ii) relocate within the same township as scattered resettlement; and (iii) move out of township and within the same county as scattered resettlement. Most of the resettlers will choose to move to the resettlement site of Dongfengyakou Group. The host resettlement communities agreed to accept the relocated families from the reservoir inundation area. According to the environmental carrying capacity analysis and consultations, the destination of the relocated families is presented in **Table 10**.

Table 10: Destination of Relocated Population

Subproject	Township	Village	Group	Relocated Popu.	Of which, Expanded Popu.	Subtotal	Relocated HHs	Of which, Expanded HHs	Subtotal	Resettlement Area		House Plot
				No.	No.	No.	No.	No.	No.			mu
Dam Site Construction Reservoir Area	Zongling	Yaoyan	Youzhafang	75	0	75	18	0	18	Dongfengyakou	CAB	6.7
			Baiyanjiao	30	0	30	7	0	7	Dongfengyakou	CAB	2.7
	Yongxi	Naodi	Youzhafang	139	39	139	24	8	24	Dongfengyakou	CAB	12.5
			Dayuan	9	0	9	2	0	2	Naodi Village	Dayuan	0.8
			Heitang	84	84	84	23	23	23	Dongfengyakou	CAB	7.6
Subtotal				337	123	337	74	31	74			30.3
Dam Site Construction Area	Zongling	Yaoyan	Baiyanjiao	8	0	8	2	0	2	Dongfengyakou	CAB	0.7
	Yongxi	Naodi	Dayuan	91	0	91	17	0	17	Naodi Village	Dayuan	8.2
	Shuguang	Yuetai	Banpozu	11	0	11	2	0	2	Yuetai Village	Banpozu	1.0
Subtotal				110	0	110	21	0	21			9.9
TOTAL				447	123	447	95	31	95			40.2

The livelihood and income rehabilitation measures include replacement land, cash compensation, pension and social insurance, employment opportunity generation, development of cultivation and livestock breeding, development of private-operated business, skills training, etc.. A post-resettlement support fund will be provided to the relocated people at CNY 600 per resettler per year for 20 years. For people losing housing, they will receive “cash compensation” or “cash plus house plot” in the resettlement areas. With cash compensation, the resettled residents could re-construct their houses in the resettlement areas or purchase houses in other places they prefer. All the relocated households will also receive a relocation allowance. The county resettlement offices and local government will provide necessary assistance for relocation during resettlement implementation.

For vulnerable groups, attention and assistance will be given to their special needs and expectations. The county PIU will supervise implementation to ensure these vulnerable persons receive adequate compensation, livelihood and income restoration, housing arrangement, special fund, and MLG, and assistance to restore their living conditions and incomes.

10. LAR Cost Estimates and Implementation Schedule

The land acquisition and resettlement cost for Pingshan Reservoir and Water Transfer Facility Component is CNY 77.2359 million. A total of CNY 6.705 million will be invested for the land acquisition and basic infrastructure construction of the resettlement areas in the host communities by the Project and Guizhou Provincial Government, of which CNY 983.4 thousand for the compensation of land acquisition for housing site.

Pingshan Reservoir and Water Transfer Facility Component will start pre-construction works in December 2016 and will start dam construction in April 2017 and complete in April 2021. Land acquisition and house demolition, and compensation will start in November 2016 and provide lands in the damsite area for construction contractors to commence in April 2017.

11. Appeal and Grievance

In order to ensure that the interests and property of the relevant units and persons are not violated and destroyed, their opinions and complaints should be reported in accordance with the following stages:

Stage 1:

AP made a verbal or written dissatisfaction to the village committee/resident committee. If it is verbal dissatisfaction, the village committee/resident committee must make a written record, and the village committee/resident committee to make a clear answer within 2 weeks.

Stage 2:

If the answer of the stage 1 is not satisfied with the complaint, the complained person can complain to the township/street committee resettlement working groups, the township government/street committee must make a clear answer within 2 weeks.

Stage 3:

The complained person can appeal to the subproject implementation agency within one month after receive the decision, the subproject implementation agency make the decision to deal with the appeal within 3 weeks.

Stage 4:

If the AP is still dissatisfied for the reply from the Nayong PMO or Pingshan Reservoir Management Office, they can appeal to the Nayong County Resettlement Office with 1 month they received the reply, the Nayong County Resettlement Office will make a reply within 4 weeks. If they could not reach a deal, then can be resolved by administrative arbitration.

The AP can directly appeal to the local court of civil proceedings according to the Administrative Procedure Law of the People's Republic of China at any time.

The AP can choose through the legal procedures directly and do not choose the channel of appeal. The AP also can express dissatisfaction to the external monitoring agency, and the external monitoring agency report to the Nayong County PMO. The AP also can submit the complaints application to ADB team to solve the problem. If the problem is still not resolved, and the AP think that the ADB didn't perform corresponding policy and caused the AP to get hurt, the AP can submit the appeal according the ADB responsibility mechanism.

The township/street committee and village/community resettlement working group arrange the responsible person to collect and receive the AP's complaint and appeal. The name, office address and contact number of the person in charge are shown in **Table 11**. If the local grievance mechanism can't be satisfied with the AP, the complaint and appeal can also directly go to the Nayong County PMO. Nayong County PMO will be responsible for handling complaints or send person to investigate and deal.

Table 11: Complain and Appeal Institutions and Personnel Information to Receive Affected People

Unit	Contacts	Address	Phone Number
Nayong County PMO	Li Xi	Nayong Pingshan Reservoir Management Office	0857-3521680
Nayong County Resettlement Office	Huang Jisong	Nayong County Resettlement Office	0857-3521885
Nayong County Land and Resources Administration Bureau	Zhang Jing	Nayong County Land and Resources Administration Bureau	0857-3521283
Zongling Township Resettlement Working Station	Liu Jie	Zongling Township Government	0857-3690105
Yongxi Township Resettlement Working Station	Li Qixing	Yongxi Township Government	0857-3532790
Shuguang Township Resettlement Working Station	Wang Zhengjun	Shugang Township Government	0857-3705001
Yangchang Township Resettlement Working Station	Zenggang	Yangchang Township Government	0857-3630789
Baixing Township Resettlement Working Station	Liu Jin	Baixing Township Government	0857-3700068
External Monitoring and Evaluation Agency	To be engaged		

During the implementation, the cost of solving the complaint and appeal will be included in the management budget of "Resettlement Plan for Nayong County".

Attachment II TOR of External Monitoring and Evaluation

A. Introduction

This sets out the indicative terms of reference for independent external monitoring and evaluation (M&E) of land acquisition and resettlement (LAR) needed to ensure that the Guizhou High Efficiency Water Utilization Demonstration in Rocky Desertification Area Project will be implemented in conformity with the People's Republic of China (PRC) laws and regulations and the Asian Development Bank's (ADB's) Safeguard Policy Statement (2009), including involuntary resettlement. The direct client is the project management office (PMO). The PMO is under Guizhou Provincial Water Resources Bureau and physically located in Guizhou Water Resources Investment Co., Ltd. owned by the Guizhou provincial government (executing agency of the project) by 100%. The external M&E will be conducted for LAR for two subprojects: (i) the construction of Pingqiao Reservoir and Water Transfer Facilities Component in Anlong County (by Pingqiao Reservoir Co., Ltd.); and (ii) the construction of Pingshan Reservoir and Water Transfer Facilities Component in Nayong County (by Pingshan Reservoir Management Office). Pingshan Reservoir Management Office belongs to Nayong County Water Resources Bureau and Pingqiao Reservoir Co., Ltd. belongs to Anlong County Water Resources Bureau. A project implementation unit (PIU) is under Nayong County Water Resources Bureau and physically located in Pingshan Reservoir Management Office. Another PIU is under Anlong County Water Resources Bureau and physically located in Pingqiao Reservoir Co., Ltd.

B. Implementation Arrangements

The external resettlement M&E will be carried out by a team of specialists through a competent independent external monitoring agency (EMA). The M&E will be financed by ADB, and the team of specialists will be recruited by the PMO according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) through consultants' qualifications selection. The PMO, PIUs, Pingqiao Reservoir Co., Ltd., and Pingshan Reservoir Management Office will provide assistance to the EMA, particularly in the aspects of field survey, staffing, and logistics.

D. Reporting Requirements

The EMA will submit to ADB and PMO semiannual external resettlement M&E reports during the implementation of LAR for the project, and annual external resettlement M&E reports for 2 years after the completion of the LAR for the whole project (for each report, a soft copy of the English version to ADB and soft copies of the English and Chinese versions to each of the PMO and PIUs), not later than 30 days after the completion of the field investigations.

The EMA will take full responsibility about the contents and quality of the reports; and if necessary, must revise reports upon the comments of ADB. Format of the reports will be proposed by the EMA in the technical proposal. The EMA may seek guidance from ADB's Involuntary Resettlement Safeguards: A Planning and Implementation Good Practice Sourcebook (Draft Working Document) and from examples of reports on ADB website.

E. Scope of Services and Consultants' Inputs

According to ADB's requirements, the implementation of the resettlement plans should—besides internal monitoring undertaken by the PMO and PIUs—be monitored by the EMA. The EMA to be selected will monitor the implementation of the resettlement plans; and report progress semiannually during the implementation of LAR for the project, and annually

for two years after the completion of the LAR for the whole project.

The general objective of the external resettlement M&E is to assess the compliance with principles, policies, and requirements mentioned in the resettlement plans, including (i) to determine and assess whether or not the compensation payment, support, and resettlement for the affected persons as well as the process of community consultation, information disclosure, and resolution of complaints and grievances are being carried out in compliance with principles, requirements, and procedures according to the resettlement plans; (ii) to review whether or not the resettlement plans' objectives, especially those that improve or at least restore affected persons' living standards are adequately implemented and achieved; and (iii) to review shortcomings in the implementation of the resettlement plans, and develop recommended solutions for discussion with the PMO, PIUs, Pingqiao Reservoir Co., Ltd., and Pingshan Reservoir Management Office.

To carry out the M&E, the EMA will address the following tasks.

- (i) **Periodic M&E.** For each subproject, during the implementation of LAR, the EMA will semiannually monitor and evaluate the implementation of the resettlement plan.
- (ii) **Post resettlement M&E.** For each subproject, for two years after the completion of the implementation of the resettlement plan, the EMA will annually carry out post resettlement M&E to evaluate the results of the LAR implementation and impact of the LAR on the affected persons.
- (iii) Participate with the PMO in ADB's review missions, as required.

Monitoring indicators. There are various monitoring indicators on the implementation of the resettlement plans. Once selected, the EMA will have to present in detail the monitoring indicators to the PMO and ADB for approval. Below are main monitoring indicators that need to be focused during the monitoring.

- (i) For compliance of compensation payment and support provision
 - (a) In case of land-for-land compensation, whether the replaced land is equal in area and location as well as production, living conditions in comparing with the affected land; in case of cash-for-affected land, whether the replacement cost principle is ensured.
 - (b) Whether compensation for affected structures is equal to materials and labor replacement cost according to standards and specification of the work; whether reused materials are not deducted or discounted; and whether assets are depreciated based on age.
 - (c) Whether compensation for trees and/or crops takes into account market rates.
 - (d) Whether compensation is fully paid to affected persons; either through single installment or multiple installments.
 - (e) Whether other assistance as specified in the resettlement plans is provided to affected persons, as required.
- (ii) For compliance of information disclosure and community consultation
 - (a) Whether project documents (resettlement information booklet and relevant documents) are disseminated to communities.
 - (b) Whether information (results of detailed measurement survey, prices application, disbursement of payment) is promulgated at public places, and whether the process was effective.

- (c) Whether the affected persons are fully consulted about issues of land recovery, policies on compensation, resettlement, livelihood restoration, and access to a grievance redress mechanism.
 - (d) Whether the concerns and recommendations of the affected persons are resolved during the implementation of the resettlement plans; as well as the manner by which they have been addressed.
- (iii) For relocation plan and implementation
 - (a) Resettlement methods, participation in relocation planning, announcement of relocation plan, and support to relocated households.
- (iv) For compliance of LAR implementation for the relocated affected persons
 - (a) Housing and living conditions in resettlement sites (such as road, domestic power, water distribution and/or drainage system); and restoration of community, education, and health services.
 - (b) Whether replacement housing was provided in a complete and timely manner.
 - (c) Any issues related to transitional housing and/or period.
 - (d) Whether the new location has had any impact on the affected persons' livelihoods.
- (v) For compliance of income restoration and support to livelihood stabilization
 - (a) Whether support to income restoration is adequately provided, and efficiency of the income restoration support (e.g., training, credit assistance).
 - (b) Post resettlement life and production stabilization. How affected persons stabilize their life and production.
 - (c) Problems that affected persons are facing during the income restoration and life stabilization.
 - (d) Compensation and restoration of temporary land occupation.
- (vi) For compliance of the satisfaction of the affected persons
 - (a) Satisfaction of the determination of losses and compensation valuation.
 - (b) Satisfaction of compensation payment and other assistance.
 - (c) Satisfaction of information disclosure, consultation.
 - (d) Satisfaction on life stabilization and income restoration support activities.
 - (e) Satisfaction of resettlement site, relocation site, completeness of facilities.
- (vii) For compliance of grievance redress mechanism of the affected persons
 - (a) Degree of the efficiency of the grievance redress mechanism (time, efficiency of resolution).
 - (b) Results of complaint resolution at various levels.
 - (c) Satisfaction of the grievance redress mechanism.

Methodology of M&E. The EMA will apply both qualitative and quantitative methods during monitoring, including the following.

- (i) Quantitative methods
 - (a) Conduct baseline survey (prior to start of LAR) covering a representative sample of affected persons, focusing more on those seriously affected and vulnerable affected persons.

- (b) Conduct semiannual and annual questionnaire survey during project implementation for 50% of severely affected households and 20% of all other affected households.
 - (c) Use the existing statistical data at local levels, and data from district and/or county resettlement bureaus.
 - (d) Survey affected businesses and workers.
 - (e) Conduct final M&E of LAR implementation (prior to project completion) by conducting a sample survey on 50% of severely affected households and 20% of all other affected households.
- (ii) Qualitative methods
 - (a) Review project documents (feasibility study reports, resettlement plans), ADB relevant policies, laws and regulations of the PRC, Guizhou Province, Anlong County, and Nayong County.
 - (b) Consult and discuss with different stakeholders, including Guizhou provincial government, Anlong county government, and Nayong county government including, and social organizations through consultation meetings, in-depth interviews, and group discussions.
 - (c) Undertake focus group discussions, in-depth interviews with the target affected persons; and/or groups such as severely affected households, relocated households, vulnerable households, and women's groups.
- (iii) Site visits
 - (a) Conduct site visits to original housing areas and resettlement sites, as well as project construction sites to check whether resettlement sites are constructed with complete infrastructure and identify potential impacts on local people during civil works construction.

All information and data collected will be processed, analyzed, and included in the baseline or subsequent M&E reports. The EMA must store the processed data to serve for the next M&E. These data will belong to (and will be the asset of) the PMO and will be made available to ADB and the PMO upon request. All documentation will be transferred to the PMO at the completion of the contract.

Qualification required and detailed tasks of personnel. The EMA should be a registered social organization (research institution, design institute, consulting institution and/or firm, university, or nongovernment organizations) without direct administrative subordination relations with the Guizhou provincial government, Anlong county government, and Nayong county government. The EMA should have 5 or more qualified technical staff members. Professional staff members of the EMA should have degrees in economics, sociology and/or anthropology, or a relevant field of social sciences; are familiar with ADB's or World Bank's resettlement policies and procedures; have previous experience in M&E of LAR for projects funded by ADB or World Bank. The EMA should also have experience in undertaking similar projects in the PRC.

The EMA will establish a M&E team. The main duties of the team are to (i) carry out the M&E on the implementation of the resettlement plans to ensure it is in compliance with the resettlement plans; (ii) advise PMO, PIUs, Pingqiao Reservoir Co. Ltd., and Pingshan Reservoir Management Office on the implementation of the resettlement plans to ensure policies and procedures are complied with; and (iii) provide information and data, monitoring results, and observations that the team leader will aggregate into the external M&E reports.

All team members must be fluent in English as well as Chinese, and reports submitted to ADB will be in English. For each of the members, (i) possession of a related degree, qualification, and/or memberships of related academic societies; and/or past participation in related training

courses; (ii) experience in similar positions for projects; and (iii) experience in working with international organizations and/or international consultants will be highly evaluated.