World Bank-financed Project

# World Bank-financed Jiangxi Integrated Rural and Urban Water Supply and Wastewater Management Project Beneficiary Participation Handbook

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## ABBREVIATIONS

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ity
Office
lan

# Units

Currency unit	=	Yuan (RMB)
US\$1.00	=	RMB6.33
1 hectare	=	15 mu

## 1. Overview

#### **1.1 Introduction to the Project**

China has a large population, in which agricultural population accounts for 50.32% (6<sup>th</sup> national census). However, safe drinking water is not available to a large population of China. The Chinese government proposed water resources reform and development as a priority in 2011 for the first time, and state leaders also lay particular stress on the importance of drinking water safety, especially in rural areas. Wastewater management is closely associated with drinking water safety, because if rural wastewater is not collected and treated effectively, the water environment will be polluted directly. For this reason, it is proposed in the 13<sup>th</sup> Five-year Plan (2016-2020) of China that the issues of rural drinking water safety and water pollution control are addressed by improving infrastructure and management.

The 13<sup>th</sup> Five-year Plan of Jiangxi Province proposes to build a strong modern agricultural province. Since drinking water safety and a healthy water environment are prerequisites to sustainable agriculture, the plan also proposes rural water supply and wastewater management as priorities, and province-level poverty alleviation measures. The plan proposes that tap water supply will cover about 90% of the province's agricultural population, county-level wastewater treatment rate will reach 85%, and substantial improvement in wastewater treatment (current water quality is below Class V or worse) in rural areas below the county level will be realized by 2020. In order to help fulfill this goal, the Jiangxi Provincial Government has applied for a loan with the World Bank to implement the Jiangxi Integrated Rural and Urban Water Supply and Wastewater Management Project (hereinafter, the "Project").

7 counties (districts) have been identified for the Project based on: 1) the urgency of the realistic demand for urban and rural water supply and wastewater treatment; 2) the willingness of the local government to participate in the Project, and its commitment to constructing the Project, offering counterpart funds, conducting operation and maintenance at the operation stage, and providing financial subsidies for rural water price; and 3) the cooperative relationship with Jiangxi Water Resources Investment Group. These 7 counties (districts) are Yongxin County, Ji'an City; Linchuan District, Dongxiang District, Jinxi County and Nanfeng County, Fuzhou City; Xiushui County, Jiujiang City; and Leping City, Jingdezhen City. The Rural Wastewater Management component is located in Zhajin Town, Xiushui County

#### **1.2 Purpose of preparing this Handbook**

The Project involves administrative organizations at the county / district and township levels, and village autonomous organizations. Project beneficiaries participate through existing organizations and activities at the township and village levels, such as village committee, village congress and village group meeting. Township and village officials, and group heads should lead and mobilize local residents to learn more about and participate in the Project.

The Project will be implemented in 4 stages, namely 1) preparation stage, including information disclosure, publicity and mobilization, organizational training, and establishment of village-level supervision committees<sup>1</sup>; 2) design stage, including project design and LA; ) construction stage, including construction information disclosure and participation in construction; and 4) operation

<sup>&</sup>lt;sup>1</sup> **Village-level supervision committee** is established to protect the rights and interests of beneficiaries, promote their participation, and assist in project management and supervision. It is composed of 3 or above village officials and/or villager representatives, including at least one woman (e.g., village women's head), and is responsible for the participatory maintenance, management and supervision of the Project.

stage, including appointment of maintenance staff, and system operation and maintenance. In addition, an effective M&E and grievance redress mechanism will be established after project completion to collect comments and suggestions from the APs, and report and handle grievances and appeals arising from project implementation timely. Through participation through the above stages, local residents will further know, accept and participate in the Project, thereby ensuring successful construction and the effective realization of the expected project benefits, reducing social risks, and improving project sustainability.

Therefore, this Handbook is prepared for the following purpose: 1) Guide the project staff to conduct project preparation, design, implementation, and operation and maintenance, improve local residents' enthusiasm for project participation, and maximize the Project's social benefits; 2) Drive local residents (especially women, poor people and other vulnerable groups) to participate in all project activities, including information disclosure, publicity and mobilization, project design, land use, construction, and operation and maintenance through township and village organizations, thereby giving full play to their self-organizing and self-managing capacity, ensuring their involvement and motivation, make them gradually realize the importance of integrated water supply and rural wastewater treatment, and ensure project sustainability.

The Beneficiary Participation Plan is prepared to:

1) Guide project beneficiaries to participate in project preparation, design, implementation, and operation and maintenance, improve their participation level, and maximize the Project's social benefits;

2) Drive local residents (especially women, poor people and other vulnerable groups) to participate in all project activities, including information disclosure, publicity and mobilization, project design, land use, construction, and operation and maintenance through township and village organizations, thereby giving full play to their self-organizing and self-managing capacity, ensuring their involvement and motivation, make them gradually realize the importance of integrated water supply and rural wastewater treatment, and ensure project sustainability.

#### 1.3 Scope of beneficiaries

This Handbook applies to all organizations and individuals related to project publicity and mobilization, project training, village selection, land use, project design, construction, and system operation and maintenance in the project townships and villages in the 7 project counties (districts) including township officials, village committees, village groups, residents, village-level supervision committees, and system operation and maintenance staff.

Beneficiaries include residents, women, poor people, vulnerable groups, etc. in the project townships and villages in the 7 project counties (districts), as shown in Table 1-1:

County (district)	Beneficiaries
Xiushui County	Residents / villagers in the county town, Zhajin, Ma'ao, Shankou, Gangkou, Daqiao
	and Xigang Towns
Nanfeng County	Residents / villagers in the county town, Shishan, Qiawan and Laixi Towns
Yongxin County	Residents / villagers in the county town, Caifeng, Lianzhou and Yange Xiangs,
Tongxin County	Gaoqiaolou, Huaizhong, Shiqaio, Longyuankou and Wenzhu Towns
Linchuan District	Residents / villagers in the county town, and surrounding townships
lipvi Coupty	Residents / villagers in the county town, Shuangtang Market Town, Heshi Town,
Jinxi County	Huangtong Xiang and Chenfangji Xiang
Dongxiang	Residents / villagers in the county town, Bogan and Dengjia Xiangs, Xiaohuang,

Table 1-1 Scope of	project beneficiaries
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District	Weishangqiao, Xiaogang and Gangshangji Towns, Hongxing Farm
Loning City	Residents / villagers in the county town, Jiedu, Hougang, Mingkou, Gaojia, Hongyan,
Leping City	Zhongbu, Zhenqiao, Lilin, Yongshan, Lingang, Shiligang and Wukou Towns

Source: Feasibility Study Report

Specifically, direct beneficiaries of the Project are 2,992,357 urban and rural residents in the 534 villages in 47 townships and one farm (Hongxing) in the 7 counties (districts) served by Integrated Rural and Urban Water Supply, and urban and rural residents within the range of Rural Wastewater Management (Zhajin Town, Xiushui County). See Table 1-2.

	Table 1-2 Summary of direct beneficialies									
No.	Indicator	Total	Yongxin County	Linchuan District	Dongxiang District	Nanfeng County	Jinxi County	Leping City	Xiushui County	
1	Direct beneficiary population	2992357	319684	326700	447900	247969	257795	859600	532709	
	Female population	1497052	163740	171500	214067	127008	135342	402300	283095	
	Poor population	40132	4889	1566	6968	2315	3994	14901	5499	
	Urban population	1623426	180000	240000	287100	200000	150000	273800	292526	
	Rural population	1347131	139684	86700	160800	47969	107795	564000	240183	
2	Additional water supply capacity (m <sup>3</sup> /d)	248000	50000	50000	40000	0	3000	55000	50000	
	Urban (m <sup>3</sup> /d)	240000	50000	50000	40000	0	0	50000	50000	
	Rural (m <sup>3</sup> /d)	8000	0	0	0	0	3000	5000	0	

Table 1-2 Summary of direct beneficiaries

Source: Feasibility Study Report

# 1.4 Current situation of local women

## 1) Local female population

At the end of 2015, Jiangxi had a resident population of 45.656 million, an increase of 234,700 or 5.2% from 2014, including 23.437 million males and 22.219 million females, with a gender ration of 105.5.

The 7 project counties (districts) have a population of 4.611 million, including 2.173 million females, accounting for 47.1%, with a gender ratio of 112.2, higher than the provincial average by 6.6. Among the 7 project counties (districts), Jinxi County has the highest proportion of female population of 48.1%, and Leping City has the lowest proportion of 46.4%; Leping City has the highest gender ratio of 115.7, and Jinxi County has the lowest ratio of 107.8. See Table 1-3.

Table 1-3 Basic Information of local women (2015)									
Division	HHs (0,000)	Population (0,000)	Males (0,000)	Females (0,000)	Percentage of females	Gender ratio (female = 100)			
Jiangxi Province	1266.9	4565.6	2343.7	2221.9	48.7%	105.5			
Project area	142.1	461.1	243.8	217.3	47.1%	112.2			
<b>Dongxiang District</b>	11.5	43.8	23.1	20.7	47.3%	111.4			
Jinxi County	10.3	31.8	16.5	15.3	48.1%	107.8			
Leping City	27.5	93.2	50	43.2	46.4%	115.7			
Linchuan District	40.7	121.1	64.6	56.5	46.7%	114.3			
Nanfeng County	9.9	31.6	16.6	15	47.5%	110.7			
Xiushui County	23.6	87.1	45.5	41.6	47.8%	109.4			
Yongxin County	18.6	52.5	27.5	25	47.6%	110			

Table 1-3 Basic information of local women (2015)

Source: Statistical Yearbook 2015 of Jiangxi Province, Data of the 6<sup>th</sup> National Census of Jiangxi Province, Data of the 6<sup>th</sup> National Census of Dongxiang District, Statistical Yearbook 2016 of Leping City, Statistical Yearbook 2016 of Linchuan District, Statistical Yearbook 2014 of Nanfeng County, Statistical

Yearbook 2016 of Xiushui County, Statistical Yearbook 2015 of Yongxin County

#### 2) Basic information of employees of local water supply companies (including women)

There are 18 water supply companies in the 7 project counties (districts), all being state-owned, with a total workforce of 1,048, with an average educational level of secondary technical school / senior high school, an average monthly pay of 2,411.7 yuan, and an average age of 38.15 years. They are mostly middle-aged and young employees, including 434 female employees, accounting for 41.4%. The female employees deal with meter reading, charge collection, management, testing, purification, operation and pump handling mainly. See Table 1-4.

Table 1-4 Statistics of employees of local water supply companies									
County (district)	Township	Company	Nature	Work force	Females	Ave. age	Ave. educational level	Ave. pay (yuan/ month)	Main types of work of female employees
Xiushui County	County town	Xiushui County Runquan Water Supply Co., Ltd.	State- owned	88	26	35	Secondary technical school	2800	Meter reading, charge collection, management
Nanfeng County	County town	Nanfeng County Water Supply Company	State- owned	101	55	44	Senior high school	3000	Meter reading, charge collection, purification, operation
Dongxiang District	County town	Jixing Waterworks, No.2 Waterworks	State- owned	84	35	37	Senior high school	3400	Office, testing, meter reading, charge collection
Linchuan District	County town	Linchuan District Xiushui County Runquan Water Supply Co., Ltd.	State- owned	185	77	40	Senior high school	3000	All types of work except installation
Jinxi County	Xiugu Town	Jinxi County No.2 Water Supply Company	State- owned	204	113	40	Junior high school	2800	Meter reading, testing
Yongxin County	County town	Yongxin County Xiushui County Runquan Water Supply Co., Ltd.	State- owned	118	54	40	Senior high school	3000	Pump handling, meter reading, charge collection
Leping City	Hougang Town	Leping City Runquan Water Supply Co., Ltd.	State- owned	197	65	35	Senior high school	3000	Meter reading, operation, finance
	Lingang Town	Lingang Waterworks of the Leping Runquan Rural Branch	State- owned	6	1	32	Senior high school	2000	Operation
	Wukou Town	Wukou Waterworks of the Leping Runquan Rural Branch	State- owned	6	1	47	Junior high school	2000	Operation
	Gaojia Town	Xingfu Waterworks of the Leping Runquan Rural Branch	State- owned	10	/	31	Senior high school	2000	/
	Luci Xiang	Dongfanghong Waterworks of the Leping Runquan Rural Branch	State- owned	6	1	38	Junior high school	2000	Operation
	Yongshan Town	Yongshan Waterworks	State- owned	9	2	36	Senior high school	2000	Operation
	Zhenqiao Town	Zhenqiao Waterworks	State- owned	9	1	33	Junior high school	2000	Operation
	Nangang Town	Nangang Waterworks	State- owned	7	/	47	Junior high school	2000	1
	Lilin Town	Lilin Waterworks	State-	7	1	- 35	Junior high	2000	Operation

Table 1-4 Statistics of employees of local water supply companies

			owned				school		
	Zhongbu Town	Zhongbu Waterworks	State- owned	7	1	37	Senior high school	2000	Operation
	Shuangtian Town	Shuangtian Waterworks	State- owned	4	1	41.5	Secondary technical school	2000	Operation
Тс	otal	18 (8 county towns, 10 townships)	State- owned	1048	434	38.15	Ι	2411.7	Ι

#### 3) The Project's impacts on women

To learn local women's development, the task force conducted a questionnaire survey, with 146 female respondents, accounting for 45.2% of all samples. It can be seen that local women's social status is lower than that of men, women's overall educational level is low and lower than that of men, and women's participation level in and influence over public affairs are weaker than those of men.

At the preparation stage, the Jiangxi and local PMOs, design agency, and task force learned local women's needs and suggestions by means of FGD, interview, etc. Their needs for the Project are as follows: Their demand for wastewater treatment is stronger; their support for tap water supply is slightly weaker than that of men; they expect more employment and income growth opportunities from the Project; they have strong demand for public participation.

The Project's impacts on women include positive and negative impacts. The main positive impacts are increasing women's job opportunities and income, encouraging women's participation, and promoting women's development, reducing women's labor intensity and reducing waterborne diseases. The main negative impacts are as follows: Women's participation level in the Project is low, and their needs are likely to be ignored; women's rights in receiving compensation and getting employed can hardly be protected; women's agricultural income is reduced due to LA; increased water and wastewater treatment charges will increase women's financial burden.

The Gender Action Plan and Social Action Plan of the Project have been developed in consultation with the PMOs, IAs, local women's federations and other agencies concerned. See Table 9-1 in Chapter 9 "Social Action Plan and Implementation" of the Social Assessment Report.

#### 1.5 Scope of beneficiary participation

In order to ensure project beneficiaries' enthusiasm for participating in and awareness of the Project, their participation runs through all stages of the project, including project information disclosure, project design, LA, construction, system operation and maintenance, and water rate hearing.

#### 1.6 Participation process

The Project can be divided into 4 stages, namely preparation, construction, design and operation, and the participation process can be divided accordingly. See Table 1-5.

Stage	Scope of participation	Participation activities	Expected effects				
	Public awareness	Leaflet distribution, media coverage, village	The project design is optimized and				
	Demand and	congress, etc.;	completed, and project awareness				
Design	acceptance levels	Village congress, DMS, sampling survey;	and local residents' participation are				
sigi	Publicity and education	Leaflet distribution, media coverage, village	improved.				
	(project benefits)	congress, school and community publicity					
	Establishment of	Establishing village-level supervision	Village-level supervision committees				

#### Table 1-5 Procedure of beneficiary participation

		a maritima defining their defining and	are established and fur them
	village-level supervision committees	committees, defining their duties, and training them before construction; Participating in and supervising construction; Ensuring the normal operation of the Project at the operation stage	are established, and function practically.
	Ability and willingness to pay	Baseline survey, questionnaire survey, interview, FGD with villager reps.; Learning local residents' ability and willingness to pay through a baseline survey, and identifying potential issues	Local residents' ability and willingness to pay is learned, and solutions proposed for identified issues.
	Design comparison Construction site selection	Communication and consultation in design; Collection of comments on the preliminary design; Prior consultation and survey	The project design is recognized by local residents for feasibility and rationality; Construction sites are agreed on.
	Participation framework for social assessment	Disclosing the participation framework for social assessment; Disclosing the procedure and mode of implementation; Breaking down tasks under the framework	The participation framework for social assessment is communicated and implemented, and residents' awareness is further improved.
	Training on this Handbook	Training county and township officials on this Handbook; Training members of village supervision committees on their rights and obligations, project operation and maintenance, and supervision and management measures	Local officials and residents are familiar with this Handbook; Village-level supervision committees are able to act on this Handbook.
	Construction information disclosure	Villager congress, construction information disclosure	The construction agency reports construction progress, site distribution and negative impacts regularly, and safety protection is ensured; Construction notices are posted in project villages, and villager awareness is high.
0	Successful house connection	Publicity, education, coordination, guidance, quality supervision	The set water supply pipeline / sewer connection rates are reached.
Construction	LA	Determining the scope and mode of compensation through consultation with APs Entering into compensation agreements, granting compensation, and acquiring land	Compensation agreements are entered into; The acquired land is put into use; Residents receive full compensation.
5	Reduction of construction impacts	Allowing for the passage of local residents during road excavation; Taking dust and noise reduction measures; Keeping away from residential areas where possible	The impact on the traffic of local residents is minimum; The complaint rate on dust and noise reduction is low; The complaint rate on pipeline direction is low.
	Participation in project construction	Involving villagers in construction; Supervision of construction	Local laborers participate in project construction, and are trained and paid; Connection quality is supervised and documented.
	Employment of local labor (including women)	Involving local residents in construction, operation and maintenance; Participation in employment training	The percentage of local laborers is not less than 35%, including women and poor people; Local laborers participate in employment training and construction, and are paid.
	Management of migrant workers	Conducting education on public health and AIDS prevention, and including this in construction contracts; Conducting physical checkups for	Public health and AIDS prevention are ensured; No cultural conflict occurs during construction.

		construction workers;	
		Strengthen publicity on local social and	
		cultural customs for non-local workers	
	Participation in water	Participation of village-level supervision	Water supply and wastewater
	supply and wastewater	committees in routine system operation and	treatment are normal;
	management	maintenance;	Villagers use tap water voluntarily;
		Education on villagers' water use habits;	Wastewater treatment systems
		Participation in the maintenance and	operate normally;
		management of wastewater treatment	A supervision and punishment
		systems	mechanism for improper wastewater
			disposal is established in villages.
	Labor recruitment,	Participation in the selection of village-level	Village-level maintenance staff is
	training and safety	system maintenance staff;	trained on labor safety, health and
Dpe	education	Participation of workers in labor safety,	skills.
era		health and skills training and education	
Operation	Improvement of public	Holding a water conservation workshop;	Over 80% of villagers are trained on
	water conservation	Training residents on water conservation;	water conservation;
	awareness, and	Communicating the necessity of paying	Over 80% of users developed good
	payment of water	water charges	water-saving habits.
	charges		_
	Supervision of water	Establishing a routine water quality and	A routine water quality and quantity
	quality and pipeline	quantity supervision and feedback	supervision and feedback
	protection	mechanism; conducting regular and irregular	mechanism is established; issues
		inspection by village-level supervision	can be handled timely;
		committees	The sense of ownership of local
			residents is built up.
			•

**Note: Village-level supervision committee** is established to protect the rights and interests of beneficiaries, promote their participation, and assist in project management and supervision. It is composed of 3 or above village officials and/or villager representatives, including at least one woman (e.g., village women's head), and is responsible for the participatory maintenance, management and supervision of the Project.

# 2. Beneficiary Participation Plan at the Design Stage

## 2.1 Purpose of participation

Through project information disclosure and reportage (by media), local residents' project awareness and approval rate are over 80%, and the PMOs can determine the project townships and villages based on their future plans and actual needs. Afterwards, the Project will enter the design stage, when the main purpose of participation is to collect comments on and inputs into the project design from local residents for design optimization, and also prepare for the next stage.

#### 2.2 Subjects of participation

Subjects of participation at this stage include the PMOs, design agency, consulting agencies, local governments, owners, township governments, village committees, village-level supervision committees, local residents, women, vulnerable groups, etc.

#### 2.3 Scope of participation

Beneficiary participation activities at this stage mainly include:

- Public awareness
- > Project design disclosure, optimization and comparison
- Demand and acceptance levels
- Construction site selection
- Ability and willingness to pay
- Publicity and education (project benefits)

#### 2.3.1 Public awareness

Through project information disclosure, local residents' project awareness and approval rate are over 80%, laying a solid foundation for optimizing the project design, and facilitating construction and operation. The specific implementation process is as follows:

1) Project information disclosure: Project information was disclosed extensively by means of leaflet, TV, township WeChat and micro-blogging platforms, congress of township and village officials, and resident representatives, and school and community publicity.

2) Involvement of local organizations: The local PMOs, township governments and village committees conducted information disclosure and publicity on the scope of construction and the village selection criteria by means of village congress, village information disclosure, notice, brochure, banner and wall slogan.

3) Further awareness improvement through the design and consulting agencies: The feasibility study, environmental impact assessment, resettlement planning and social assessment agencies were utilized to disclose project information, collect comments and suggestions, and strengthen public participation during the fieldwork, including site selection and pipeline routing.

#### 2.3.2 Project design disclosure, optimization and comparison

At the design stage, the local PMOs and design agency consulted with local residents as much as possible to collect comments and suggestions on the project design. This will ensure successful project construction and operation, and reduce potential issues.

Such consultation includes water source selection, pipeline routing, terminal site selection, wastewater treatment process selection, indoor pipeline transformation, operation and maintenance costs, working requirements, etc.

The main modes of consultation are interview, village congress, coordination meeting and

village disclosure.

#### 2.3.3 Demand and acceptance levels

A sampling survey was conducted on local residents' demand for and acceptance of the Project, with focus on willingness for house connection and ability to pay water charges:

1) The PMOs, township governments and village committees conducted a survey on local residents' daily water demand, water sources, water quality and quantity, drinking water safety, etc. by means of village congress, meeting of household heads, etc. to learn demand and acceptance levels preliminarily.

2) The feasibility study, environmental impact assessment, resettlement planning and social assessment agencies conducted a further survey on demand and acceptance levels, and collect attitudes and comments from local residents during public participation.

#### 2.3.4 Construction site selection

Land use for the Project mainly includes permanent land occupation for the new waterworks and wastewater treatment systems, and temporary land occupation for water supply and drainage pipelines. Since land use directly involves immediate interests of stakeholders, adequate consultation should be conducted in advance.

The following procedure should be followed for site selection:

1) Each PMO organizes the township governments or village committees to determine the location and range of the waterworks or wastewater treatment system based on the design drawings provided by the design agency, and determines the construction site through extensive informed consultation with local residents.

2) After site selection, the site will be confirmed through consultation with the APs.

#### 2.3.5 Ability and willingness to pay

Before project construction, the PMOs, design agency, consulting agencies, township governments and village-level supervision committees conducted a baseline survey in the project area to learn local residents' ability and willingness to pay by means of questionnaire survey, interview and FGD.

Practical issues that may arise during project implementation (e.g., low willingness to pay of poor people, differences in ability and willingness to pay among different age groups, and differences in ability and willingness to pay due to water source and quality differences) will be identified, and solutions proposed accordingly to improve ability and willingness to pay.

#### 2.3.6 Publicity and education (project benefits)

Before project construction, staff of the provincial and local PMOs conducted publicity and education on the project benefits for local residents together with township and village officials.

Such publicity and education was conducted by means of leaflet, TV, township WeChat and micro-blogging platforms, congress of township and village officials, and resident representatives, and school and community publicity, covering: 1) basic project information, modes of construction and water supply (uniform quality and price within the same network), and geographic coverage; 2) project benefits in improving water supply infrastructure, meeting local residents' water demand, improving water quality, reducing waterborne diseases, and ensuring drinking water safety and physical health; 3) improving the local natural environment and water quality by improving rural wastewater treatment systems, enhancing local residents' environmental protection awareness, and promoting local economic development and employment.

## 2.4 Modes of participation

The main modes of beneficiary participation at the design stage are publicity and education, public participation, and willingness survey, including project information disclosure, village congress, stakeholder discussion, informed consultation, baseline survey, survey on ability and willingness to pay, and organizational training.

ltem	Modes	Actors	Rules and measures	Budget	Indicator
Public	Leaflet	PMOs	Disseminating project information to	10,000	Public
awareness	distribution, media	Local governments	increase project awareness;	yuan per	awareness
	coverage, village	Village committees	Disclosing the scope of construction	township	and approval
	congress, etc.	Design and	and village selection criteria, and		rate are over
		consulting agencies	conducting a selection willingness		80%.
			survey;		
			Strengthening public participation		
			through the design and consulting		
	<b>A</b>	21/2	agencies		
Project design		PMOs	Conducting a project coordination	Feasibility	Feedback
disclosure,	(FGD with villager	Design agency	meeting with the design agency,	study	records of
optimization	reps.), design	Township	township governments, and village	budget	design
and	disclosure	governments,	committees;		disclosure,
comparison		Village committees,	Discussing the feasibility of the project		and site
		villager reps.	design with village committees and villager reps.;		selection results
			Disclosing the preliminary design at		results
			village bulletin boards for comments for		
			not less than two weeks		
Demand and	Village congress,	PMOs	Conducting a sampling survey on local	4,000	Demand and
acceptance	DMS, sampling	Design and	residents' demand for and acceptance	yuan per	acceptance
levels	survey	consulting agencies	of the Project;	township	levels
	,	Village committees	Strengthening communications with		
		-	local residents, and learning their		
			attitudes and comments		
Construction	Prior consultation,	PMOs	Conducting extensive informed	4,000	Consultation
site selection	survey, interview,	Design agency	consultation with local residents based	yuan per	records and
	FGD, disclosure	Township	on the design drawings;	township	results on
		governments	Determining construction sites and		construction
		Village committees	coverage		site
		Local residents		4 0 0 0	-
Ability and	Baseline survey,	PMOs Decima encode	Learning local residents' ability and	4,000	Survey
willingness to	questionnaire	Design agency	willingness to pay water charges	yuan per	results of
pay	survey, interview,	Township	through a baseline survey;	township	ability and
	FGD with villager	governments Village committees	Identifying potential issues, and proposing pertinent suggestions and		willingness to pay, and
	reps.	Local residents	measures		solutions
					developed
Publicity and	Leaflet	PMOs	Giving publicity on the scope of	8,000	Frequency,
education	distribution, media	Local governments	construction and mode of water supply;	yuan per	mode and
(project	coverage, village	Township	Communicating the benefits of water	township	venue of
benefits)	congress, school	governments	supply;		project
- /	and community	Village committees	Communicating the benefits of		information
	publicity	Local residents	wastewater treatment		disclosure

#### Table 2-1 Beneficiary participation plan at the design stage

## 2.5 Funding of participation and sources

Participation at this stage will be conducted according to the applicable rules and measures, and cover beneficiaries in the whole project area. Participation costs at this stage include publicity

costs, meeting costs, willingness survey costs, allowances for village-level supervision committees, etc.

Participation costs of the water supply component are 30,000 yuan per township x 47 townships x 1 year = 1.41 million yuan. Since the wastewater treatment is a pilot component, its participation costs are 3 times those of the water supply component, namely: 90,000 yuan per township x 1 township x 1 year = 90,000 yuan. The participation budget of this stage is 1.5 million yuan.

Such costs are included in the project budget, and from the Bank loan and domestic counterpart funds.

#### 2.6 Effects of participation

Participation at this stage is deemed effective, if after publicity and mobilization, local residents' project awareness and approval rate are over 80%, there is no objection to the sites selected, and local residents' willingness to pay is sufficient for project implementation.

# 3. Beneficiary Participation Plan at the Construction Stage

# 3.1 Purpose of participation

The purpose of beneficiary participation at the construction stage is to establish a participation framework for social assessment, realize extensive informed participation, and offer training on this Handbook to promote the effective participation of project beneficiaries. In addition, house connection will be promoted, and construction impacts, progress and risks monitored during participation.

## 3.2 Subjects of participation

Subjects of participation include PMOs, local governments, owners, construction agency, supervising agency, township governments, village-level supervision committees (including women's representatives), resident representatives, vulnerable groups, etc.

## 3.3 Scope of participation

Beneficiary participation activities at this stage mainly include:

- > Participation framework for social assessment: extensive informed participation
- > Training on this Handbook: covering the whole project area
- Successful house connection
- > LA
- Reduction of construction impacts
- > Participation in construction: supervision teams—connection and installation quality
- Employment of local labor (including women)
- > Management of migrant workers, and prevention of AIDS and other social risks

## 3.3.1 Participation framework for social assessment

In order to realize extensive informed participation, and protect beneficiaries' rights and interests, the PMOs should break down the participation framework for social assessment into the project villages.

1) Information disclosure: The participation framework for social assessment will be disclosed at township and village bulletin boards for not less than 30 working days.

2) Public opinion creation and guidance: The key points of the participation framework for social assessment will be communicated to local PMOs staff, township and village officials, and residents by means to TV, broadcast, newspaper, leaflet, website, new media (WeChat / micro-blogging) and on-site publicity so that they know how to implement the framework, and participate effectively in project construction and supervision.

3) Framework breakdown: The tasks of the framework will be broken down to staff members of township governments and agencies concerned under the coordination of PMOs, and the supervision of village-level supervision committees.

## 3.3.2 Training on this Handbook

In order to promote the effective participation of project beneficiaries at the construction and operation stages, and implement the Project more effectively, training on this Handbook should be offered in all the 534 villages in the project area. This is done in the following ways mainly:

1) Training organized by provincial PMO: The provincial PMO will offer training on this Handbook to the local PMOs, township officials, construction agency, etc.

2) Training organized by local PMOs: The local PMOs will offer training on this Handbook to

all village officials, members of village-level supervision committees and representatives of local residents, covering implementation rules and steps.

3) Members of village-level supervision committees will be trained on their rights and obligations.

#### 3.3.3 Construction information disclosure

Construction information should be disclosed by the construction agency before construction by means of village-level supervision committee meeting, village congress, village meeting, posting, banner and broadcast.

Information disclosure mainly includes:

- Construction schedule;
- Construction site layout;
- Negative impacts of construction;
- Precautions during construction;
- Contact information of the construction agency

The construction notice should be disclosed at village bulletin boards for not less than two weeks with the assistance of village committees.

#### 3.3.4 Successful house connection

Publicity and education on the project benefits will be conducted to ensure successful house connection, which is essential to the realization of the project benefits.

1) The PMOs, township governments and village committees should strengthen publicity on the Project to guide villagers to use tap water and treatment systems voluntarily;

2) Coordination on the house connection of water supply and drainage pipelines will be conducted with village committees and village-level supervision committees, which will solve issues arising from construction with the construction and supervising agencies through coordination.

3) Optimize the design of water supply and drainage pipelines in consultation with villagers to minimize the damage to interior decoration; for any inevitable damage, conduct functional restoration or offer compensation properly.

4) Local residents and village-level supervision committees will supervise house connection and installation quality.

In addition, before house connection and indoor pipeline reconstruction, the construction agency should consult construction timing with villagers to minimize construction impacts on production and living activities. 3-5% of pipelines may be served for those working outside for subsequent connection.

#### 3.3.5 LA

LA at this stage is for terminal facilities mainly. The land acquired at this stage will be consolidated and used for construction purposes.

Land use for the Project mainly includes permanent land occupation for the new waterworks and wastewater treatment systems, and temporary land occupation for water supply and drainage pipelines, involving state-owned land and collective land. For the occupation of collective land, adequate consultation should be conducted with stakeholders, and compensation granted according to local policies. For temporary land occupation, ground attachments will be compensated for, including young crops and trees.

Land used for the Project should be collective unused land and collective construction land where possible. If collective farmland will be used, the local PMOs should handle land use formalities according to the Land Administration Law of the PRC, village committees should conduct coordination and communication, and villagers should assist in agreement execution and land cleanup.

The basic procedure of LA is as follows:

①The local PMO coordinates the township government or village committee to determine the location range of the waterworks or wastewater treatment system based on the design drawings provided by the design agency, and determines the construction site through consultation with local residents.

②After site determination, the village committee will determine the scope and mode of compensation in consultation with land contractors;

③After the local PMO and village committee have completed land use formalities, the village committee will enter into compensation agreements with the APs, and grant compensation as agreed on;

(4) The local PMO obtains land after completing land use formalities, and keep relevant documents on record.

## 3.3.6 Reduction of construction impacts

Some negative impacts will arise during construction. Village-level supervision committees should assist the construction agency and PMOs in developing plans and take effective measures to reduce such negative impacts.

- Village-level supervision committees and village committees will ask the construction agency to minimize construction impacts, and allow for the passage of local residents during road excavation;
- > Sprinkle access roads regularly to prevent flying dust;
- For potential noise pollution during construction, assist the construction agency in installing sound barriers and setting up isolation belts during construction, and ensure that construction is conducted in non-resting hours;
- > Lay pipelines along flat terrains, and avoid living areas where possible;
- Assist the PMOs, and LA and HD management offices in identifying impacts of temporary land occupation, notify APs in advance, grant full compensation under prevailing policies, and establish a proper response mechanism for potential and sudden issues.

# 3.3.7 Participation in construction: supervision teams—connection and installation quality

At the construction, local residents may participate in construction by providing compensated services to the construction agency and supervising construction.

1) Offering compensated services: During construction, some jobs will be available to local residents (in which not less than 30% should be women) through consultation between the construction agency and village committees as follows:

- Jobs available during construction and duties;
- Selection criteria for employees, and priority for poor people, women and other vulnerable groups;
- > Remuneration, and skills and safety training for employees.

2) Construction supervision: During construction, village-level supervision committees will supervise house connection and installation, and sources of materials to ensure connection and installation quality, and solve issues arising from construction with the construction and supervising

agencies through coordination.

House connection and installation will be managed by household files. A household file includes a group of photos before and after construction, a schematic construction drawing, the household head's signature, and inspection information. House connection and installation will be inspected by the local PMO and supervising agency together.

#### 3.3.8 Employment of local labor (including women)

Local residents' participation in construction, and subsequent operation and maintenance is a main form of public participation during project implementation, and a good opportunity to improve their environmental awareness, and sense of responsibility, and increase their income.

At the construction and operation stages, the agencies concerned will make some unskilled jobs (catering, cleaning, maintenance, handling, safety supervision, etc.) to local laborers (especially women and poor people willing to do such jobs), including:

- > Not less than 35% of workers should be local laborers, including women and the poor;
- Make unskilled jobs first available to vulnerable groups (including women);
- Grant pays not less than the local minimum wage standard; grant a certain subsidy for environmental supervision jobs;
- Water supply companies and maintenance agencies should employ local laborers where possible, such as meter reading, coordination, operation and maintenance, and charge collection;
- > Offer employment training to local laborers.

#### 3.3.9 Management of migrant workers, and prevention of AIDS and other social risks

During construction, labor from other provinces, cities and counties will enter the 7 counties (districts). The inflow of migrant workers will lead to social and health risks, such as the dissemination of epidemic and infectious diseases (e.g., AIDS, influenza). Publicity on safety and health should be strengthened to prevent such risks, including:

- Strengthen publicity and education on public health and AIDS prevention, and include education on public health and AIDS prevention in construction contracts for effective performance;
- > Establish a physical checkup mechanism for construction staff;
- > Conduct diversified publicity on AIDS prevention (brochure, poster, album, etc.)
- > Conduct publicity on local social and cultural customs to reduce potential conflicts.

## 3.4 Modes of participation

Item	Modes	Actors	Rules and measures	Budget	Indicator
Participation	Information	PMOs, township	Disclosing the participation framework	10,000 yuan	Disclosure venue
framework	disclosure, public	governments	for social assessment;	per township	and publicity time
for social	opinion creation	Village	Disclosing the procedure and mode of	per annum	of participation
assessment	and guidance,	committees	implementation;		framework;
	framework	Village-level	Breaking down tasks under the		public awareness
	finalization	supervision	framework		
		committees,			
		residents			
Training on	Participation	PMOs	Training county and township officials	20,000 yuan	Frequency of
participation	handbook training	Township	on the handbook;	per township	training;
handbook	by level and batch	governments	Training village and group officials on	per annum	Implementation
		Village	the handbook;		of this Handbook

#### Table 3-1 Beneficiary participation plan at the construction stage

		committees Village-level supervision committees Local residents	Training members of village-level supervision committees on their rights and obligations; Training on operation and maintenance; Supervision and management measures		by village-level supervision committees
Construction information disclosure	Villager congress, construction information disclosure	PMOs Construction agency Village committees	Regular reporting of construction progress, site distribution and negative impacts, and safety protection by the construction agency Posting construction notices with the assistance of village committees for comments for not less than two weeks	Internal budgets of construction agency	Venue of construction information disclosure; Time and mode of publicity
Successful house connection	Publicity, education, coordination, guidance, quality supervision	PMOs Construction agency Village-level supervision committees Local residents	Guiding villagers to get connected voluntarily; Making water supply and drainage connection arrangements properly; Consulting local residents on indoor pipeline modification; Supervising connection and installation quality	10,000 yuan per township per annum	House connection rate; Feedback records and solutions
LA	Execution of compensation agreements, payment of funds, land handover	PMOs Land and resources bureau Township governments Village committees APs	Determining sites of waterworks and wastewater treatment plants; Obtaining land use formalities; Entering into compensation agreements with AHs, and granting compensation accordingly; Completing land use formalities and obtaining land	RAP budget	Execution of agreements; LA formalities; Payment of compensation
Reduction of construction impacts	Improving relevant programs, and developing effective mitigation measures	PMOs Construction agency Village-level supervision committees	Allowing for the passage of local residents during road excavation; Taking dust and noise reduction measures; Keeping away from residential areas where possible; Identifying impacts of temporary land occupation	5,000 yuan per township per annum; internal budgets of construction agency	Passage during construction; Noise and dust reduction measures; Pipeline routing and complaints
Participation in construction	Offering compensated services, and supervising house connection and installation quality	PMOs Construction agency Village-level supervision committees Villagers	Recruiting workers from local residents and training them; Supervising connection and installation quality, and giving feedback (by village-level supervision committees)	10,000 yuan per township per annum	Local labor force and frequency of training; Records of connection quality supervision
Employment of local labor (incl. women)	Local residents' participation in construction, operation and maintenance	PMOs Construction agency Village-level supervision committees Local residents	Not less than 35% of workers being local laborers, including women and poor population Making unskilled jobs first available to vulnerable groups (including women), and granting pays not less than the local minimum wage standard; Offering employment training to local laborers	Internal budgets of construction agency	Percentage of local laborers ≥35%; Number of female and poor laborers; Venue and frequency of training
Managemen t of migrant workers	Expanding safety and health publicity, regulating worker education and	PMOs Construction agency Health bureau Village-level	Conducting education on public health and AIDS prevention, and including this in construction contracts; Conducting physical checkups for	5,000 yuan per township per annum; internal budgets of	Modes and frequency of public health education; Physical checkup

management supervision committees Local residents	construction workers; Strengthen publicity on local social and cultural customs for non-local workers to reduce potential conflicts	construction agency	records; Frequency and records of education on local culture
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#### 3.5 Funding of participation and sources

Participation costs at this stage include the participation framework for social assessment, training on this Handbook, house connection publicity, reduction of construction impacts, participation in project construction, management of migrant workers, construction information disclosure, reduction of construction impacts, employment of local labor (including women), management of migrant workers, and land compensation.

Participation costs of the water supply component are 60,000 yuan per township x 47 townships x 3 years = 8.46 million yuan. Since the wastewater treatment is a pilot component, its participation costs are 3 times those of the water supply component, namely: 180,000 yuan per township x 1 township x 3 years = 540,000 yuan. The participation budget of this stage is 9 million yuan.

Such costs are included in the project budget, and from the Bank loan and domestic counterpart funds.

#### 3.6 Effects of participation

At the construction stage, the effectiveness of beneficiary participation can be reflected in the implementation of the participation framework for social assessment, training on this Handbook, publicity and training on successful house connection, reduction of construction impacts, management of migrant workers, construction information disclosure, LA, etc. Participation at this stage is deemed effective if these indicators meet practical needs of beneficiary participation, and are sufficient for construction progress and quality. In addition, this can also be reflected in public participation rate, and the percentage of women and vulnerable groups. Participation at this stage is deemed effective if public participation rate is 80%, and not less than 30% of those participating in construction and supervision are women and vulnerable groups.

# 4. Beneficiary Participation Plan at the Operation Stage

## 4.1 Purpose of participation

The purpose of beneficiary participation at the operation stage is to build up their sense of ownership, involve them in the project operation and maintenance, improve their water conservation awareness, and reduce system operation risks.

## 4.2 Subjects of participation

Village-level supervision committees, local residents, women, vulnerable groups, etc.

#### 4.3 Scope of participation

Beneficiary participation activities at this stage mainly include:

- Participation in water supply and wastewater management, and development of new water use habits;
- Labor recruitment, training and education;
- Water conservation awareness and skills training;
- > Supervision of water quality and pipeline protection

#### 4.3.1 Participation in water supply and wastewater management

At this stage, beneficiaries will participate in the operation and maintenance of water supply and wastewater treatment systems, and village-level supervision committees will assist in routine operation and maintenance.

1) Participation in water supply and wastewater management: Village-level supervision committees will participate in water supply and wastewater management in the following ways: A) Check water supply pipelines for leakage, blocking, abnormal water quality, etc., and drainage pipelines for leakage, blocking and operating abnormities through routine tour inspection; B) Report abnormities timely; C) Conduct grill cleanup and dredging for blocking.

2) Change of water use habits: A) Village-level supervision committees will explain the mode of tap water supply, and differences between well water and tap water in mode of supply, quality and quantity to local residents, thereby guiding them to use safe and stable tap water voluntarily; B) Guide local residents to install water supply pipelines while retaining their former water sources.

3) Maintenance of wastewater treatment systems: A) Village-level supervision committees, village committees and resident representatives will maintain existing drainage pipelines through regular tour inspection and effective feedback; B) Establish a supervision and punishment mechanism for improper wastewater disposal in villages.

#### 4.3.2 Labor recruitment, training and safety education

Some system maintenance staff will be recruited during system trial operation and operation, and labor safety and skills training offered to promote their effective participation, and their protection of their rights and interests.

1) Labor recruitment: System maintenance staff will be selected by the township government, village committee and village-level supervision committee from eligible local residents: A) The township government, village committee and village-level supervision committee release recruitment information; B) The township government, village committee and village-level supervision committee determine the final list of recruited employees based on requirements and eligibility (educational level, age, availability, etc.), and disclose it in the project area; C) The local PMO approve the list and put it on record.

2) Labor safety and skills training: A) Village-level supervision committees will assist local water supply and wastewater treatment companies, and contractors in labor safety training for employees, covering labor law, labor safety, clothing and labor protection, rights and obligations, etc.; B) Training on expertise and skills of operation and maintenance will be offered, covering operating regulations, key precautions and practical skills; C) Education on the sense of responsibility for employees will be strengthened.

3) Labor health publicity and education: A) An annual labor health education plan will be developed for employees; B) Labor health training and workshops will be conducted for employees to make them familiar with labor safety rules, precautions, and protection of rights and interests; C) Labor health education materials (leaflet, manual, tapes, DVD, etc.) will be distributed to villages, and village-level supervision committees will collect and keep relevant records; D) A labor health education bulletin board will be set up at each village health center, and updated at least every two months.

# 4.3.3 Improvement of public water conservation awareness, and payment of water charges

1) Conduct water conservation awareness training for local residents to improve their water conservation awareness and skills: A) Offer water conservation awareness training with the assistance of village committees; B) Give publicity on China's water crisis and specific measures of water conservation by means of bulletin board, TV, broadcast and new media (WeChat / micro-blogging) to involve more people in water conservation; C) Train residents on how to save water, such as water reuse and avoidance of water waste; D) Issue a brochure on water conservation, including the importance of water resources, impacts of water shortage, relationship between water and daily life, and water law.

2) Make local residents more willing to pay water charges and promote timely payment: A) Give publicity on tap water as a special commodity in rural areas mainly; B) Establish a water rate hearing system to involve rural residents in water rate fixation; C) Open multiple payment channels for water charges, including business offices of township water supply companies, community supermarkets, Alipay and mobile banking, so that rural residents can pay water charges conveniently.

#### 4.3.4 Supervision of water quality and pipeline protection

1) Establish a routine supervision and feedback mechanism on water quality and quantity using water supply hotlines of water supply companies and online platforms to handle and report water quality abnormities and threats timely, and reward reporters accordingly.

2) Village-level supervision committees will conduct regular and irregular tour inspection and testing on water supply and wastewater treatment systems to prevent damages. In addition, local residents' sense of ownership will be strengthened to make them participate in system operation and maintenance voluntarily.

#### 4.4 Modes of participation

ltem	Modes	Actors	Rules and measures	Budget	Indicator
Participation	Village-level	PMOs	Conducting inspection and reporting on	8,000	Inspection,
in water	supervision	Village	water supply and wastewater	yuan per	reporting and
supply and	committees'	committees	management;	township	cleanup records;

#### Table 4-1 Beneficiary participation plan at the operation stage

wastewater management	participation in habit education, and system maintenance and management	Village-level supervision committees Residents	Guiding villagers to use safe and stable tap water; Inspecting the operation of wastewater treatment systems regularly, and giving effective feedback; Reporting identified issues timely, and establishing a supervision and punishment mechanism for improper wastewater disposal in villages	per annum	Tap water use rate; Establishment of supervision and punishment mechanism
Labor recruitment, training and safety education	Selection of village maintenance staff, labor safety, health and skills training and education	PMOs Water supply company Village committees Village-level supervision committees Residents	Selecting village-level maintenance staff (by township governments and village-level supervision committees); Providing labor safety and skills training to recruited system operation and maintenance staff; Developing an annual work plan for labor and health knowledge publicity and education, and organizing training and workshops for recruited laborers	6,000 yuan per township per annum	Village-level system maintenance staff and composition; Records of labor safety and skills training, and labor health publicity and education
Improvement of public water conservation awareness, and payment of water charges	Training and publicity on water conservation awareness, and water charge payment	Water supply company Village committees Village-level supervision committees Residents	Holding a water conservation workshop for local residents to help them develop good water-saving habits; Communicating the necessity of paying water charges, and establishing a water rate public hearing system, and offering multiple convenient payment modes	10,000 yuan per township per annum	Participation rate of water conservation awareness training >80%; >80% of users developing good water-saving habits
Supervision of water quality, pipeline protection	Establishing a routine water quality and quantity supervision and feedback mechanism	Water supply company Village committees Village-level supervision committees Residents	Establishing a routine water quality and quantity supervision and feedback mechanism, and handling feedback timely to motivate villagers; Conducting regular and irregular inspection on local water supply and sewer networks to build up the sense of ownership of local residents	6,000 yuan per township per annum	Routine water quality and quantity supervision, feedback and ward records; Inspection records and sense of ownership

#### 4.5 Funding of participation and sources

Participation costs at this stage include labor costs of water supply and wastewater management, and system operation and maintenance staff, labor recruitment, training and safety education, labor costs, publicity and education costs for improvement of public water conservation awareness and payment of water charges, labor costs and rewards for village-level supervision committees and residents for supervision of water quality and pipeline protection. In addition, allowances for village-level supervision committees may be disbursed from water charges paid by local residents.

Participation costs of the water supply component are 30,000 yuan per township x 47 townships x 2 years = 2.82 million yuan. Since the wastewater treatment is a pilot component, its participation costs are 3 times those of the water supply component, namely: 90,000 yuan per township x 1 township x 2 years = 180,000 yuan. The participation budget of this stage is 3 million yuan.

Such costs are included in the project budget, and from the Bank loan and domestic counterpart funds.

#### 4.6 Effects of participation

Local water supply and wastewater treatment systems operate normally, and problems are solved timely; village-level supervision committees guide villagers to use tap water voluntarily; a supervision and punishment mechanism for improper wastewater disposal is established in villages. Recruited system operation and maintenance staff is trained on labor safety, skills and health.

Over 80% of local residents attend water conservation awareness training, and their water conservation awareness is improved; over 80% of users develop good water-saving habits. A routine water quality and quantity supervision and feedback mechanism is established, and local residents' sense of ownership for water supply and wastewater treatment is built up.

# 5. Grievance Redress and M&E

# 5.1 Grievance Redress

During the preparation and implementation of the Project, residents are a direct stakeholder and also direct participants. Since some unforeseeable issues may occur, a transparent and effective grievance redress mechanism should be established to ensure that residents participate actively and extensively. See Figure 5-1.

Local residents may file grievances and appeals with village committees, township governments, PMOs or competent authorities, which have dedicated staff or departments for handling and feedback.

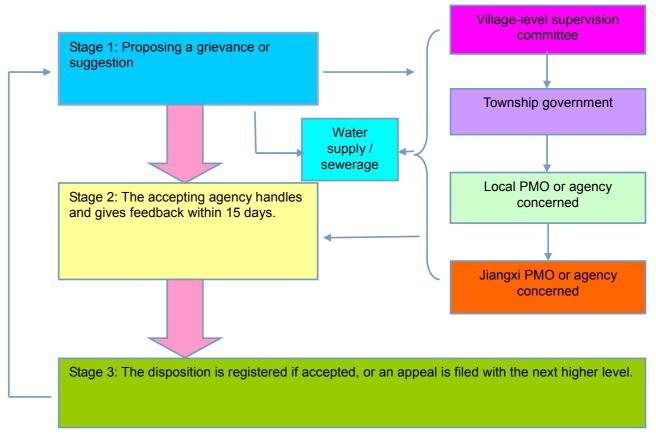


Figure 5-1 Grievance Redress Flowchart

## 5.2 M&E

To ensure that the Project is implemented as planned, an M&E mechanism has been established for the Project, including internal supervision and external M&E.

Internal supervision is conducted by the PMO on project implementation progress, the implementation of the Social Action Plan, progress of information disclosure and public participation, fund use, the implementation of rules and regulations, etc. An internal supervision report will be submitted semiannually.

The PMO will appoint an independent M&E agency to conduct external M&E on the implementation of the Social Action Plan. The external M&E agency will conduct regular M&E, give advice, and submit M&E reports to the Bank semiannually.

# Appendix 1: Public Opinion Questionnaire

# Public Opinion Questionnaire of the Project

Hello! Since there is serious water pollution in rural areas of Jiangxi Province, threatening the safety of drinking water, the Jiangxi Provincial Government has applied for a loan with the World Bank to implement the Jiangxi Integrated Rural and Urban Water Supply and Wastewater Management Project, which aims to improve the rural living environment and rural residents' physical health.
implove the rural living environment and rural residents physical health.
lionavi DMC
Jiangxi PMC Address: Group, Village / Community, Town / Xiang/ Sub-district, County
County-level City / District
Head of household: registered population:; resident population:
Part 1
1.1 Which serious pollution problems exist in your village? (Multiple choices allowed)
1) Solid waste; 2) air; 3) wastewater; 4) noise; 5) dust; 6) other, specify
1.2 Which aspects of your village need improvement? (Multiple choices allowed)
1) Road; 2) water supply; 3) power supply; 4) domestic wastewater treatment; 5) solid waste
treatment; 6) river; 7) school; 8) hospital; 9) other, specify
Part 2
2.1 How is domestic wastewater disposed of?
1) Pouring out of the collection pipe (skip to 2.2); 2) pouring into the sewer; 3) pouring into the toilet; 4
pouring into the ditch / river / lake; 5) draining out of the door; 6) other, specify
2.1.1 Are you willing to be connected to the sewer network?
1) Yes; 2) no; 3) don't know
2.2 Is your family's domestic wastewater treated?
1) Yes; 2) no; 3) don't know
2.3 Are you satisfied with the existing wastewater treatment system?
1) Satisfied; 2) neither, nor; 3) dissatisfied; 4) don't know
2.4 Which member of your family disposes of domestic wastewater most often?
1) Young woman; 2) young man; 3) old woman; 4) old man; 5) child
2.5 Does your family pay wastewater treatment charges?
1) Yes; 2) no; 3) don't know (skip to 2.6 if 2 or 3)
2.5.1 If yes, yuan per month
2.6 For improved wastewater collection and treatment services, are you willing to pay yuan/month
(2, 5, 10, 15, 20)?
1) Yes; 2) no (skip to 2.6.2 if 2) 2.6.1 Why are you willing to pay?
1) It's reasonable; 2) It's not much; 3) I desire this service; 4) other, specify
2.6.2 Why are you unwilling to get this service?
1) I cannot afford it; 2) It's just worth so much; 3) I don't want to pay for it; 4) It should be borne by the
government; 5) other, specify
2.7 Are you willing to pay for sewer house collection?
1) Yes; 2) no
Part 3
3.1 Your family's main domestic water source is
1) Tap water; 2) well water; 3) river / lake; 4) bottled water; 5) other, specify
3.1.1 Is tap water paid for? 1) Yes; 2) no; 3) don't know
3.1.2 If yes, yuan/m <sup>3</sup> and yuan per month
3.2 What do you think of the quality of tap water?
1) Good; 2) ordinary; 3) bad; 4) don't know
3.3 Are you willing to pay water charges of yuan/month for routine maintenance (2, 5, 10, 15, 20)
1) Yes; 2) no
3.3.1 Why are you willing to pay?
1) It's reasonable; 2) It's not much; 3) I desire this service; 4) other, specify
3.3.2 Why are you unwilling to get this service?
1) I cannot afford it; 2) It's just worth so much; 3) I don't want to pay for it; 4) It should be borne by the
government; 5) other, specify

3.4 Are you willing to pay for tap water house collection?	
1) Yes; 2) no	
Part 4	
4.1 Have you heard of the Project?	
1) Yes; 2) no	
4.2 How did you know it?	
1) TV, broadcast, newspaper, Web; 2) government notice; 3) village com	imittee; 4) others; 5) other,
specify	
4.3 Is the Project important for your family?	11
1) Very important; 2) important; 3) a bit important; 4) unimportant; 5) don	i t care
4.4 Do you support the Project?	
1) Yes; 2) no; 3) don't care	
4.5 Are you willing to do jobs generated by the Project?	
<ol> <li>Yes; 2) no; 3) don't know</li> <li>4.6 Do you think local villagers will benefit directly from the Project?</li> </ol>	
1) Yes; 2) no; 3) not clear (skip to 4.7 if 2 or 3)	
4.6.1 If yes, should local villagers participate in the routine operation an	nd maintenance of wastewater
treatment systems?	
1) Yes; 2) no; 3) not clear	
4.7 Are you willing to do operation and maintenance jobs?	
1) Yes; 2) no; 3) don't know	
4.8 Are you willing to change your habits after project completion?	
1. Very willing; 2) willing; 3) not quite willing; 4) unwilling; 5) don't care	
4.9 Which member of your family will attend meetings related to the Project?	
1) Young woman; 2) young man; 3) old woman; 4) old man; 5) child; 6) v	whoever is free
Part 5	
5.1 Your age: years	
5.2 Your gender: 1) male; 2) female	
5.3 Type of your registered residence:1) agricultural; 2) nonagricult	tural
5.4 Are you the head of your household? 1) Yes; 2) No	
5.5 Your educational level:	
1) Illiterate; 2) primary school; 3) junior high school; 4) Senior high schoo	ol / secondary technical
school; 5) junior college or above	
5.6 Your occupation:	
1) Civil servant; 2) worker of public institution; 3) enterprise employee; 4)	
6) laid-off worker; 7) retiree; 8) student; 9) farmer; 10) migrant worker; 11) oth	ner, specify
5.7 Your family's average monthly income in 2016	1 10 000
1) 1,000 yuan or less; 2) 1,001-3,000 yuan; 3) 3,001-6,000 yuan; 4) 6,00	01-10,000 yuan; 5)
10,001-20,000 yuan; 6) 20,001-30,000 yuan; 7) 30,001 or above	
5.8 Your family's average monthly expenditure in 2016 1) 1,000 yuan or less; 2) 1,001-3,000 yuan; 3) 3,001-6,000 yuan; 4) 6,000	110000 (1000)
	1-10,000 yuan, 5)
10,001-20,000 yuan; 6) 20,001-30,000 yuan; 7) 30,001 or above 5.9 Is your family an MLS household?	
1) Yes; 2) no	
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