SFG2699 REV

The World Bank Financial Assistance Project

Jingxi Farm Produce Distribution System Development Project

Environmental Management Plan (EMP)

(Draft for Approval)

Construction Unit: Jiangxi Provincial Rural Social Affairs Development Bureau under Agricultural Department of Jiangxi Province

Evaluation Institute: NO. 270 Research Institute of Jiangxi Nuclear Industry

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Responsibility list

Project Name: The World Bank Financial Assistance Project---- Jiangxi Agricultural Products Distribution System Project

Client: Jiangxi Provincial Rural Social Affairs Bureau under griculture Department of Jiangxi Province

Project Category: Environmental Impact Statement (EIA category B)

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1 Project Description

1.1 Project Origin

The government at all levels pays high attention to the rural issues concerning "agriculture, rural society and farmers" and regards the issues of agriculture as the priority among priorities. Speeding up the agricultural products' circulation system construction is an important step to solve the issues of agriculture. Strengthening the agricultural products' circulation system construction is not only an effective way to adjust the agricultural industrial structure, but also a practical need to increase farmers' income. Building and improving the circulation channels of agriculture products and strengthening the infrastructure and information construction of agricultural products' circulation system can promote the sales of agricultural products and solve the problem of "sales fault", which increases the farmers' income. All parties have reached an agreement on the strengthening of the agricultural products' circulation system construction:

With the rapid development of agricultural economy in our province, the relatively backward construction of agricultural products' circulation system has become the main factor restricting our provincial agricultural development. On this basis, the Bureau of Finance has decided to use the World Bank Loans to carry out the agricultural products' circulation system construction project in 8 counties (districts) of 7 municipalities within Jiangxi Province, namely, Taihe County in Ji'an, Huichang County and Longnan County in Ganzhou, Jiujiang economic development zone and Pengze County in Jiujiang, Anyuan District in Pingxiang, Jing'an County in Yichun and Yushan County in Shangrao.

1.2 Project Contents

The construction location of Jiangxi agricultural products' circulation system construction project financed by the World Bank loans (hereinafter referred to as Jiangxi agricultural products' circulation system construction project) is distributed in 8 counties (districts) of 7 municipalities within Jiangxi Province, namely, Taihe County in Ji'an, Huichang County and Longnan County in Ganzhou, Jiujiang economic development zone and Pengze County in Jiujiang, Anyuan District in Pingxiang, Jing'an County in Yichun and Yushan County in Shangrao. The construction of this project consists of the following 4 subprojects, namely, A. improving production logistics (after harvesting and initial processing), B. improving distribution logistics (distribution center and distribution platform), C. supporting services of agricultural products' logistics system and D. project management, monitoring and evaluation.

The total cost of the project is 1.4218515 billion yuan ($222.1643 million U.S dollars according to the dollar-yuan exchange rate of 1:6.4, the same below), among which the construction investment is 1.3654515 billion yuan ($213.3518 million U.S dollars and see table 1.2-1 for details about the construction content and investment situation of each subproject), accounting for 96.03% of the total project investment; interests incurred during construction reach 44.8 million

yuan ($7 million U.S dollars), accounting for 3.38%; front-end fees and commitment fees are 7.84 million yuan ($1.225 million U.S dollars), accounting for 0.59% of the total project investment. The project's construction period is 5 years. This project aims to strengthen the information service of circulation system, improve the circulation organizational degree, enhance the participants' ability in the agricultural products' circulation, reduce the loss of agricultural products' circulation, expand the benefit group of circulation system and realize the continuous growth of farmers' income by strengthening the demonstration construction of agricultural products' circulation infrastructure. The specific geographical location of the proposed subproject can be seen in Figure 1.2-1.

Table 1.2-1 List of Construction Content and Investment of Jiangxi Agricultural Products' Project Financed by the World Bank Loans

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
Anyuan District	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 28 farmers' specialized cooperative organizations and family farms (support 14 newly established cooperatives and 14 existing cooperatives); ②Provide technical supporting services; ③Support the brand construction of agricultural products; ④Support the development of 360 e-commerce of agricultural products; ⑤Support 26 farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers; ⑥Support the construction of 6 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; Improve the cooperatives' capability construction and it plans to train 15450 people for one time (including 4635 rural females).	3037.00	Undetermined
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. Establish 600 square meters of rooms for security and environmental sanitation management; 19200 square meters of market trade storefronts; 12000 square meters of market trade sheds; 2000 square meters of trading comprehensive building; road and ground hardening within the area cover 13800 square meters; outdoor facilities for water supply and drainage, electricity and fire control 53333.6 square meters; outdoor facilities for greening and environmental protection 10666.72 square meters; 50 air conditioners, 100 computers and peripheral equipment, 100 sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of agricultural products and 2 weighbridges; 2. The facilities and equipment for the distribution cold chain, storage and transportation of agricultural products include: 3000 square meters of processing workshop for agricultural products, 1600 square meters of storage house for agricultural products at room temperature; 2 lines of equipment for processing, sorting and packaging, 1 set of equipment for keeping fresh in cold storage at low temperature, 1 set of equipment for warehouse's dispatch, transfer and measurement, 5 forklift trucks and 3 goods elevators used for warehouses and 9 transportation vehicles; 3. The electronic information system of agricultural products' distribution	13377.34	Celei Village, Wupo Town, Anyuan District, construction land and the land has been leveled.

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
		includes 1 set of electronic information system construction of trading center and 2 pieces of large-scale electronic screens.		
	Subproject C. Supporting services of agricultural products' logistics system	①Study and formulate a development plan for the construction of agricultural products' circulation system at the county level; ②Enhance the ability construction of circulation system of agricultural products. The total number of this activity plans to train is 1800 (including 540 rural females).	56.00	/
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1386.00	/
Huichang County	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 40 farmers' specialized cooperative organizations (support the establishment of 20 farmers' specialized cooperative organizations and the improvement of 20 farmers' specialized cooperative organizations); ②Provide technical supporting services, including the technical support on finance, law works, commerce and planning and design and hire 1 expert respectively on finance, law works, technology, planning and design and coordination and promotion of the cooperatives; ③Support the brand construction of agricultural products; ④Support the development of 240 e-commerce of agricultural products; ⑤Support 25 farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 25 administrative villages, accounting for 10.33% of 242 administrative villages in the whole county); ⑥Improve the cooperatives' capability construction and it plans to train 10600 people for one time (including 3180 rural females); ⑦Support the construction of 14 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; arrange a loan of 39.62 million yuan by way of sub-loans.	4414.00	Undetermined

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. Establish modern distribution platforms of agricultural products, including 2 gates, 500 meters of walls; 16000 square meters of market trade storefronts; 3600 square meters of market trade sheds; 2000 square meters of trading comprehensive building; road and ground hardening within the area cover 8350 square meters; outdoor facilities for water supply and drainage, electricity and fire control 28000.1 square meters; outdoor facilities for greening and environmental protection 5600.03 square meters; 50 air conditioners, 100 computers and peripheral equipment, 100 sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of agricultural products and 1 weighbridge; 2. Establish the facilities and equipment for the distribution cold chain, storage and transportation of agricultural products, including 2500 square meters of storage house for agricultural products at low temperature; 1 set of equipment for keeping fresh in cold storage at low temperature, 1 set of equipment for warehouse's dispatch, transfer and measurement, 2 forklift trucks, 1 goods elevators used for warehouses and 6 transportation vehicles;	6667.27	Taiwanese Industrial Zone, Mazhou Town, Huichang County, construction land and the land has been leveled.
	Subproject C. Supporting services of agricultural products' logistics system	① Study and formulate a development plan for the construction of agricultural products' circulation system at the county level; ②Enhance the ability construction of circulation system of agricultural products. The total number of this activity plans to train is 1400 (including 420 rural females).	48.00	/
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1000.00	/
Longnan County	Subproject A. Improving production logistics (after harvesting and	①Support the establishment and improvement of 40 farmers' specialized cooperative organizations (support the establishment of 20 farmers' specialized cooperative organizations and the improvement of 20 farmers' specialized cooperative organizations); ②Provide technical supporting services;	3998.00	Undetermined

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	initial processing)	③Support the brand construction of agricultural products; ④Support the development of 150 e-commerce of agricultural products; ⑤Support farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 75 administrative villages, accounting for 100% of the administrative villages in Jing'an County); ⑥Improve the cooperatives' capability construction and it plans to train 11100 people for one time (including 3700 rural females); ⑦Support the construction of 10 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; arrange a loan of 22.39 million yuan by way of sub-loans.		
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. Establish 600 square meters of rooms for security and environmental sanitation management; 19200 square meters of market trade storefronts; 12000 square meters of market trade sheds; 2000 square meters of trading comprehensive building; road and ground hardening within the area cover 22000 square meters; outdoor facilities for water supply and drainage, electricity and fire control 70000.35 square meters; outdoor facilities for greening and environmental protection 14000.07 square meters; 50 air conditioners, 100 computers and peripheral equipment, 100 sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of agricultural products and 2 weighbridges; 2. Establish the facilities and equipment for the distribution cold chain, storage and transportation of agricultural products, including 3000 square meters of processing workshop for agricultural products, 10000 square meters of storage house for agricultural products at room temperature; 2 lines of equipment for processing, sorting and packaging, 1 set of equipment for keeping fresh in cold storage at low temperature, 1 set of equipment for warehouse's dispatch, transfer and measurement, 5 forklift trucks and 3 goods elevators used for warehouses and 11 transportation vehicles;	12515.55	Fukang Industrial Zone, Longnan County, construction land and the land has been leveled.
	Subproject C. Supporting services of agricultural	①Cooperate with PPMO to study and formulate a development plan for the construction of agricultural products' circulation system in Jiangxi; ②Enhance the ability construction of circulation system of agricultural	70.00	/

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	products' logistics system	products. The total number of this activity plans to train is 1400 (including 420 rural females).		
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1385.00	/
Taihe County	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 28 farmers' specialized cooperative organizations (support the establishment of 14 farmers' specialized cooperative organizations and family farms and the improvement of 14 farmers' specialized cooperative organizations and family farms); ②Provide technical supporting services, including the technical support on finance, law works, commerce and planning and design; ③Support the brand construction of agricultural products; ④Support the development of 210 e-commerce of agricultural products; ⑤Support 50 farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 50 administrative villages, accounting for 17.18% of 291 administrative villages in the whole county); ⑥Improve the cooperatives' capability construction and it plans to train 10850 people for one time (including 3255 rural females); ⑦Support the construction of 20 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; arrange a loan of 22.05 million yuan by way of sub-loans.	2683.00	Undetermined
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. Establish 600 square meters of rooms for security and environmental sanitation management, 800 meters of walls; 41000 square meters of trading comprehensive building; 2000 square meters of decoration engineering in comprehensive service zone; road and ground hardening within the area cover 16000 square meters; outdoor facilities for water supply and drainage, electricity and fire control 53333.6 square meters; outdoor facilities for greening and environmental protection 10666.72 square meters; 50 air conditioners, 100 computers and peripheral equipment, 100	12609.94	Taihe Industrial Zone, construction land and the land has been leveled.

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
		sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of agricultural products and 1 weighbridge; 2. Establish the facilities and equipment for the distribution cold chain, storage and transportation of agricultural products, 2 lines of equipment for processing, sorting and packaging; 1 set of equipment for keeping fresh in cold storage at low temperature, 1 set of equipment for warehouse's dispatch, transfer and measurement, 5 forklift trucks and 10 transportation vehicles.		
	Subproject C. Supporting services of agricultural products' logistics system	① Study and formulate a development plan for the construction of agricultural products' circulation system at the county level; ②Enhance the ability construction of circulation system of agricultural products. The total number of this activity plans to train is 1400 (including 420 rural females).	48.00	/
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1499.00	/
Jing'an County	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 40 farmers' specialized cooperative organizations (support the establishment of 20 farmers' specialized cooperative organizations and the improvement of 20 farmers' specialized cooperative organizations); ②Provide technical supporting services,; ③Support the brand construction of agricultural products; ④Support the development of 150 e-commerce of agricultural products; ⑤Support farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 75 administrative villages, accounting for 100% of the administrative villages in the Jing'an County); ⑥Improve the cooperatives' capability construction and it plans to train 11100 people for one time (including 3700 rural females);	2698.00	Undetermined

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
		⑦Support the construction of 10 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; arrange a loan of 22.39 million yuan by way of sub-loans.		
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. Establish 600 square meters of rooms for security and environmental sanitation management, 1100 meters of walls; 8000 square meters of market trade storefronts; 6000 square meters of market trade sheds; 2000 square meters of trading comprehensive building; road within the area cover 23106.94 square meters; outdoor facilities for water supply and drainage, electricity and fire control 68133.67 square meters; outdoor facilities for greening and environmental protection 13626.73 square meters; office equipment include 88 air conditioners, 175 computers and peripheral equipment, 175 sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of agricultural products (market link) and 2 weighbridges; 2. Establish the facilities and equipment for the distribution cold chain, storage and transportation of agricultural products, including 2000 square meters of processing workshop for agricultural products, 12000 square meters of storage house for agricultural products at room temperature; 3000 square meters of storage house for agricultural products at low temperature; 2 lines of equipment for processing, sorting and packaging; 3000 square meters of equipment for keeping fresh in cold storage at low temperature, 1 set of equipment for warehouse's dispatch, transfer and measurement and 11 transportation vehicles; 3. The electronic information system of agricultural products' distribution includes 1 set of electronic information system construction of trading center and 2 pieces of large-scale electronic screens.	10318.15	Green Lightening Industrial Base in Jing'an County, construction land and the land has been leveled.
	Subproject C. Supporting services of agricultural products' logistics system	①Cooperate with PPMO to study and formulate a development plan for the construction of agricultural products' circulation system in Jiangxi; ②Enhance the ability construction of circulation system of agricultural products. The total number of this activity plans to train is 1400 (including 420 rural females).	48.00	/
	Subproject D.	①Project management includes pre-project costs, the improvement of	1155.00	/

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	Project management, monitoring and evaluation	project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.		
Jiujiang	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 28 farmers' specialized cooperative organizations (support the establishment of 14 farmers' specialized cooperative organizations and the improvement of 14 farmers' specialized cooperative organizations); ②Provide technical supporting services, including the technical support on finance, law works, commerce and planning and design and hire 1 expert respectively on finance, law works, technology, planning and design and coordination and promotion of the cooperatives; ③Support the brand construction of agricultural products; ④Support the development of 120 e-commerce of agricultural products; ⑤Support 15 farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 30 administrative villages, accounting for 68.18% of the administrative villages in the economic zone); ⑥Improve the cooperatives' capability construction and it plans to train 8600 people for one time (including 2580 rural females); ⑦Support the construction of 8 facilities and equipment for the initial processing in the producing area, storage and transportation of aquatic products; arrange a loan of 12.65 million yuan by way of sub-loans.	1603.00	Undetermined
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. The distribution platform of aquatic products includes 15700 square meters of market trade storefronts, 3225.6 square meters of storage pond in the trade sheds; 2 gates, 600 square meters of rooms for charge and settlement, security and environmental sanitation tools; 1000 linear meters of walls; 2000 square meters of comprehensive service building, 9600 square meters of underground parking, road and ground hardening within the area cover 16080 square meters; outdoor facilities for water supply and drainage, electricity and fire control 49114.65 square meters; outdoor facilities for greening and environmental protection 9823 square meters;	19313.56	Xigang District in Jiujiang, construction land and the land has been leveled.

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
		office equipment include 50 air conditioners, 100 computers and peripheral equipment, 100 sets of tables, chairs and cabinets; there is a set of equipment at the monitoring station for the quality and safety of aquatic products and 2 weighbridges; 2. The facilities and equipment for the distribution cold chain, storage and transportation of aquatic products include 3000 square meters of processing workshop (sterile), 400 square meters of workshop for oxygen production and storage; 12000 square meters of storage house for agricultural products at room temperature; 3000 square meters of storage house for aquatic products at room temperature; 10000 square meters of fresh-keeping storage house for aquatic products at low temperature; 1 set of equipment for processing, sorting and packaging; 10000 square meters of equipment for keeping fresh in cold storage at low temperature; 1 ice-making and ice crushing machine, 1 set of equipment for oxygen production, pouring and storage; 1 set of equipment for warehouse's dispatch, transfer and measurement, 4 forklift trucks, 2 goods elevators used for warehouses and 13 transportation vehicles; 3. The electronic information system of aquatic products' distribution includes 1 set of electronic information system construction of trading center and 2 pieces of large-scale electronic screens.		
	Subproject C. Supporting services of agricultural products' logistics system	①Improve the relevant standardization level of the development program and circulation of the aquatic products in the area; ②Enhance the ability construction of circulation system of aquatic products. The total number of this activity plans to train is 1400 (including 420 rural females).	28.00	/
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1537.00	/
Pengze	Subproject A.	①Support the establishment and improvement of 120 farmers' specialized	1507.00	Undetermined

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
County	Improving production logistics (after harvesting and initial processing)	cooperative organizations (support the establishment of 60 farmers' specialized cooperative organizations and the improvement of 60 farmers' specialized cooperative organizations); ②Provide technical supporting services, including the technical support on finance, law works, commerce and planning and design and hire 1 expert respectively on finance, law works, technology and planning and design; ③Support farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 60 administrative villages, accounting for 42.55% of the administrative villages in Pengze County); ④Improve the cooperatives' capability construction and it plans to train 13550 people for one time (including 4065 rural females); ⑤Support the construction of 4 facilities and equipment for the initial processing in the producing area, storage and transportation of cotton; arrange a loan of 10.66 million yuan by way of sub-loans.		
	Subproject B. Improving distribution logistics (distribution center and distribution platform)	1. The modern cotton distribution platform includes a 3-meter high and 1500 linear meters brick wall; 500 square meters of rooms for security and sanitation management; a big gate; 36000 square meters of cotton standardized warehouse, 4800 square meters of parking and unloading shed, 600 square meters of comprehensive service building; road and ground hardening within the area cover 21600.11 square meters; outdoor facilities for water supply and drainage, electricity and fire control 90000.45 square meters; outdoor facilities for greening and environmental protection 18000.09 square meters;18 sets of infrared alarm system for the standard cotton warehouses; a batch of office equipment (15 air conditioners, 30 computers and peripheral equipment, 30 sets of tables, chairs and cabinets); there is a set of equipment at the monitoring station for the quality and safety of cotton and 1 weighbridge; 2. The facilities and equipment for the distribution cold chain, storage and transportation of cotton include 6 forklift trucks for goods storage, delivery and transfer and 10 transportation vehicles; 3. The electronic information system of cotton' s distribution includes 1 set of electronic information system construction of trading center and 2 pieces	10855.4	Peng Huwan Industrial Zone in Pengze County, construction land and the land has been leveled.

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
		of large-scale electronic screens.		
	Subproject C. Supporting services of agricultural products' logistics system	①Study and formulate the construction and development plan of regional cotton circulation system; ②Develop an integrated and demonstrative cotton circulation system information system; ③Enhance the ability construction of circulation system of cotton. The total number of this activity plans to train is 650 (including 195 rural females).	13.00	/
	Subproject D. Project management, monitoring and evaluation	①Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1368.00	/
Yushan County	Subproject A. Improving production logistics (after harvesting and initial processing)	①Support the establishment and improvement of 68 farmers' specialized cooperative organizations (support the establishment of 34 farmers' specialized cooperative organizations and the improvement of 34 farmers' specialized cooperative organizations); ②Provide technical supporting services, including the technical support on finance, law works, commerce and planning and design and hire 1 expert respectively on finance, law works, technology and planning and design; ③Support the brand construction of agricultural products; ④Support the development of 108 e-commerce of agricultural products; ⑤Support farmers' professional cooperatives and farmers to establish information agencies beneficial to the farmers (covering 90 administrative villages, accounting for 44.55% of administrative villages in Yushan County); ⑥Improve the cooperatives' capability construction and it plans to train 11000 people for one time (including 3300 rural females); ⑦Support the construction of 38 facilities and equipment for the initial processing in the producing area, storage and transportation of agricultural products; arrange a loan of 31.39 million yuan by way of sub-loans.	3657.00	Undetermined
	Subproject B. Improving distribution	1. Establish a modern and professional distribution platform of fruits and vegetables, including 2 gates, 60 square meters of rooms for charge and settlement, security and environmental sanitation tools; 309 meters of walls,	6637.32	The distribution platform of fruits and vegetables is selected

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	logistics (distribution center and distribution platform)	2000 square meters of market trade storefronts; 2000 square meters of comprehensive service building, 9600 square meters of underground parking, ground hardening within the area cover 4046.4 square meters; outdoor facilities for water supply and drainage, electricity and fire control 16860.08 square meters; outdoor facilities for greening and environmental protection 3372.02 square meters; a batch of office equipment (50 air conditioners, 100 computers and peripheral equipment, 100 sets of tables, chairs and cabinets); 2. The facilities and equipment for the distribution cold chain, storage and transportation of agricultural products include 1 set of equipment at the monitoring station for the quality and safety of agricultural products, 1 weighbridge; 2 forklift trucks used for warehouses and 7 transportation vehicles. The electronic information system of agricultural products' distribution includes 1 set of electronic information system construction of trading center and 2 pieces of large-scale electronic screens.		to be located in the suburb of Yushan County (Wencheng Village, Bingxi Town), the transfer site of logistics is selected to be located to the south of Sanqing West Road, the farmer's market of Shuangming Town is selected to be located in the center of the town and the farmers' market of Zhang Village in the town center, construction land and the land has been leveled.
	Subproject C. Supporting services of agricultural products' logistics system	①Cooperate with PPMO to study and formulate a development plan for the construction of agricultural products' circulation system in Jiangxi; ②Study and formulate a development plan for the construction of agricultural products' circulation system at the county level; ③ Improve the relevant standardization level of agricultural products' circulation; ④ Develop an integrated and demonstrative information system of agricultural products' circulation system; ⑤Enhance the ability construction of circulation system of agricultural products. The total number of this activity plans to train is 1400 (including 420 rural females).	48.00	/
	Subproject D. Project management, monitoring and	① Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	1072.00	/

Project Location	Project Category	Project Content and Construction Scale	Total Investment (10000 yuan)	Site
	evaluation			
Provincial Level	Subproject C. Supporting services of agricultural products' logistics system	①PPMO studies and formulates a development plan for the construction of agricultural products' circulation system in Jiangxi; ② Improve the relevant standardization level of agricultural products' circulation.	190	
	Subproject D. Project management, monitoring and evaluation	① Project management includes pre-project costs, the improvement of project implementation abilities, project technical supporting service and project management fees; ②Monitoring and evaluation.	900	
Total	/	/	136545.15	/

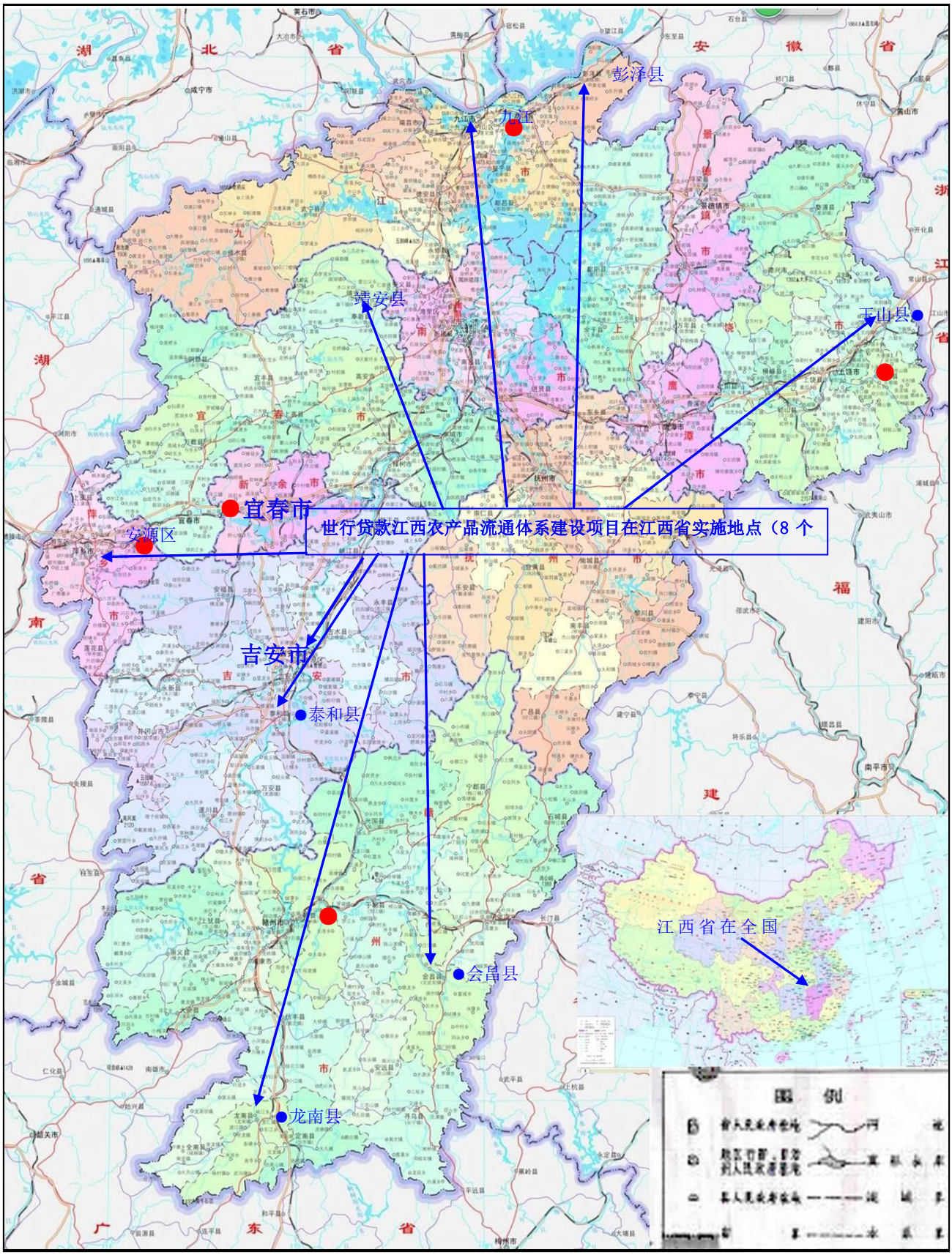


Figure 1.2-1 The Geographical Location of the Project

1.3 Distribution of Sensitive Spots around the Project

By investigating the project site and visiting the relevant units, the project site of 8 counties (cities and districts) is not involved in the problems such as grave removal and immigrants' resettlement. The current situation is that they are all construction land (mainly the existing industrial zone) and the land has been leveled. There are environmental sensitive areas (eg. graves) like ecologically sensitive and vulnerable areas, areas in need of special protection and areas with social concern. The scale of the pollution sources of each project and their impact scope are not huge and strict prevention and mitigation measures are conducted during the whole process of the project aiming at the possible pollution effect. Therefore, the possible adverse environmental impacts in the circulation system construction of Jiangxi agricultural products are controllable. This project belongs to the category B of the World Bank loans. The environmental sensitive spots in the surroundings of each trading market can be seen in table 1.3-1.

Table 1.3-1 List of Sensitive Spots around the Project

Project Name	NO	Name	Location	Evaluation Scope
Comprehensive trading center construction project of agricultural products in Anyuan District	1	Datian	500m north	About 180 people
	2	Datian Village	450m south west	About 200 people
	3	Foot of the mountain	580m west	About 200 people
Comprehensive trade market construction project of agricultural products in Huichang County	1	Xiaoyu Pond	50m northeast	About 30 households，90 people
	2	Zaohe Ping	450m north	About 10 households，30 people
	3	Shang Dam	190m southeast	About 6 households，20 people
	8	Dalu Back	380m northwest	About 35 people
	11	Chenguang Village	750m northeast	About 60 people
	12	Shuixi Dam	800m northwest	About 230 people
	13	Xiabao Village	100m north	About 50 people
	14	Xiabao	300m southeast	About 85 people
	15	Yuantang Mian	350m northwest	About 110 people
Cotton trading center construction project in Pengze County	1	Ruolong Tao	500m southeast	22 households, 89 people
	2	Xie's Family	600m south	18 households, 70 people
Modern comprehensive trading center	1	Lengbei Xiang's Family	About 75m north	10 households, 45 people

construction project of agricultural products in Jing'an County	2	Shalin Chen's Family	About 245m west	5 households, 15 people
	3	Honggang Village	About 510m west	18 households, 75 people
	4	Miao Gongtou	About 609m south	3 households, 10 people
Aquatic products' market construction project of Poyang Lake in Jiujiang Economic Development Zone	1	Jiujiang County branch of Jiujiang Port	150m northeast	30 people
	2	Sai Chenghu Park	150m southwest	/
	3	Shuiyun Fengqing housing estate	300m southwest	800 households，2400 people
	4	Minqiang Jinyu Lanwan	500m southeast	600 households，1800 people
Trading center construction project of agricultural products in Longnan County	1	Wei Jiaotou	258m southwest	About 30 households, 100 people
	2	Dawen Village	500m southwest	About 1000 households, 360 people
	3	Changpai Village	443m southwest	About 20 households, 100 people
	4	Dongjiang Middle School	644m south	About 600 people
Comprehensive trading center construction project of agricultural products in Taihe County	1	Shixia Village	231m south	About 120 households, 600 people
	2	Xiaxi Village	538m southeast	About 200 households, 800 people
	3	Qiaotou Village	405m southwest	About 70 households, 300 people
Wholesale construction project of fruits and vegetables in Yushan County	The distribution platform of fruits and vegetables is located in Wencheng Village, Bingxi Town.			
	1	Wencheng Village, Bingxi Town	300m east	About 170 people
	5	Jinsha Stream	50m south	River
	The transfer site of logistics is located in the county.			
	1	Yushan County	Surrounding 20～1000m	About 3550 people
	2	Jinsha Stream	50m south	River
	The wholesale market of Shuangming Town is located in Shuangming Town.			

	1	Shuangming Town	Surrounding 20～1000m	About 3600 people
	2	Xu village	300m east	About 1000 people
	The wholesale market of Zhangcun is located in town center.			
	1	Zhangcun Town	Surrounding 20～1000m	About 2250 people
	2	Zhangcun Village	300m south	About 450 people
	3	Shangzhang Village	500m west	About 200 people
	5	Kouqianshan Village	550m south	About 30 people

2 Environmental Policies and Standards

The project must conform to the relevant policies and standards of China and the World Bank. Details are as follows:

2.1 Compilation Basis

2.1.1 Relevant Laws and Regulations for Environmental Protection in China

2.1.1.1 Relevant State Laws and Regulations

（1）Environmental Protection Law of the People's Republic of China (2015.1.1)

（2）The Environment Impact Assessment Act of the People's Republic of China（2016.9.1）

（3）Water Pollution Prevention and Control Law of the People's Republic of China (2008. 6.1)

（4）Air Pollution Prevention and Control Law of the People's Republic of China (2000.9.1)

（5）Law on the Prevention and Control of Environmental Pollution by Solid Wastes of the People's Republic of China (2015.5.24)

（6）Environmental Noise Pollution Prevention and Control Law of the People's Republic of China (1997.3.1)

（7）Cleaning Production Promotion Law of the People's Republic of China (2012.7.1)

（8）Circulation Economy Promotion Law of the People's Republic of China (2009.1.1)

（7）Soil and Water Conservation Law of the People's Republic of China（implemented on Mar. 1st, 2011）

（8）Water Law of the People's Republic of China（implemented on Oct. 1st, 2002）

（9）Regulations on Administration for Environmental Protection of Construction Projects（implemented on Nov. 29, 1998）

（10）Wildlife Protection Law of the People's Republic of China（implemented on Aug. 28, 2004）

（11）Act of the Preservation of Cultural Relics of the People's Republic of China（implemented on Dec. 19, 2007）

（12）Flood Control Act of the People's Republic of China（implemented on Aug. 29, 1997）

（13）Law on Land Management of the People's Republic of China（implemented on Aug. 28, 2004）

（14）Regulations on the Nature Protection Regions of the People's Republic of China（implemented on Oct. 9, 1994）

（15）Regulations on the Protection of Wild Plants of the People's Republic of China（implemented on Sept. 30, 1996）

（16）National Program of Ecological and Environmental Protection (implemented on April 10, 2001)

（17）Classification Management Directory on Construction Project Environmental Impact Assessment（June 1st, 2015）

（19）Temporary Act of Environmental Impact Assessment of Public Participation (Announcement No. 28 of 2006 issued by SEPA, Feb. 14, 2006)

（20）Construction Site Environment and Sanitation Standards (Announcement No. 66 of 2004 of Construction Standards)

2.1.1.2 Relevant Local Laws and Regulations

（1）Regulations on the Prevention and Control of Environmental Pollution of Jiangxi Province (2009.1.1)

（2）Regulations on Environmental Protection of Construction Projects of Jiangxi Province (July 1st, 2001)

（3）Notice on Further Strengthening the Public Participation in the Supervision and Management of Construction Project' Environmental Impact Assessment (2014.7.1)

（4）Implementation Measures of the Law of Land Administration of the People's Republic of China of Jiangxi Province (Nov. 22, 2001)

（5）Planning Outline of Modern Agricultural System Construction of Jiangxi Province (2012-2020) (Jan. 4, 2013)

（6）Special Planning of Ecological Construction and Environmental Protection in the "12th Five-Year Plan" of Jiangxi Province, 2011

2.1.3 Technical Specification and Guideline

（1）Technical Guidelines for Environment Impact Appraisal -- General Program（HJ 2.1-2011）

（2）Technical Guidelines for Environment Impact Appraisal -- Ecological Impact（HJ19-2011）

（3）Technical Guidelines for Environment Impact Appraisal -- Surface Water Environment（HJ/T2.3-93）

（4）Technical Guidelines for Environment Impact Appraisal – Atmospheric Environment（HJ/T2.2-2008）

（5）Technical Guidelines for Environment Impact Appraisal -- Acoustic Environment（HJ2.4-2009）

（6）Technical Guidelines for Environment Impact Appraisal -- Underground Water Environment（HJ 610-2016）

2.2 Evaluation Standards

Table 2.2-1 Regional Evaluation Standards of This Project

Working Standards		Jiujiang Economic Development Zone	Pengze County in Jiujiang	Taihe County in Ji'an	Huichang County in Ganzhou	Longnan County in Ganzhou	Anyuan District in Pingxiang	Jing'an County in Yichun	Yushang County in Shangrao
Environmental Quality Standards	*Environmental Quality Standards for Surface Water*（*GB3838-2002*）	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ
	Quality Standards for Ground Water（*GB/T14848-1993*）	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ	Ⅲ
	Ambient Air Quality Standards（*GB3095-2012*）	Second grade	Second grade	Second grade	Second grade	Second grade	Second grade	Second grade	Second grade
	Environmental Quality Standards for Noise（*GB3096-2008*）	Category 3	Category 3	Category 3	Category 3	Category 3	Category 2	Category 3	Category 2
Standards for Discharge of Pollutants	Before wastewater enter the local centralized sewage treatment plant, the wastewater discharge performs the primary standards of table 4 of *Integrated Wastewater Discharge Standards*（*GB8978-1996*）. After wastewater can enter the local centralized sewage treatment plant, the wastewater discharge performs the third grade standards of table 4 of *Integrated Wastewater Discharge Standards*（*GB8978-1996*） and the tail water discharge of the centralized sewage treatment plant performs the primary B standards of table 1 of *Discharge Standards of Pollutants for Municipal Wastewater Treatment Plant.*								

<table>
<tr><td></td><td colspan="9">Standards of table 2 of The Integrated Emission Standards of Air Pollutants（GB12697-1996） and perform the standards of Emission Standards for Odor Pollutants (GB14554-93）.</td></tr>
<tr><td></td><td colspan="9">The standards for the Environment Noise of Construction Site（GB 12523-2011）</td></tr>
<tr><td></td><td>The standards for the Environment Noise of Industrial Enterprises（GB 12348-2008）</td><td>Category 3</td><td>Category 3</td><td>Category 3</td><td>Category 3</td><td>Category 3</td><td>Category 2</td><td>Category 3</td><td>Category 2</td></tr>
<tr><td></td><td colspan="9">General industrial solid waste performs The Standards for Pollution Control on the Storage and Disposal of General Industrial Solid Waste（GB18599-2001） and its requirements of Modification list and hazardous wastes perform The Standards for Pollution Control on the Storage of Hazardous Wastes (GB18597-2001) and its requirements of Modification list in 2013.</td></tr>
</table>

2.3 Security Policies of the World Bank

The World Bank's security policy and the guidelines on environment, health and safety involved in this project can be seen in table 2.3-1.

Table 2.3-1 The World Bank's Business Policy

The World Bank's Business Policy		Involved or Not	The associated illustration of impact assessment on the World Bank's business policy involved in this project
OP4.01	Environmental Assessment	√	The project construction (construction impact) and its operation period (wastewater, odor, solid waste, noise, transportation, etc.) will have an impact on surrounding environment and the environmental impact assessment needs to be conducted.
OP4.04	Natural Habitats	X	This project is located in the area which has already been intervened by human activities. After investigation, no natural habitats in the project area are confirmed to be affected by the project.
OP4.09	Pest Management	√	This project supports the association to conduct the certification of pollution-free, green, organic products. It will reduce the use of pesticides in the project area, so this policy is involved.
OP4.10	Indigenous Peoples	X	The project construction site is not in minority areas and Ethnic Minority Development Plan is not needed.
OP4.11	Physical Cultural Resources	X	The investigation confirms that there are no physical cultural resources within the scope of the project impact.
OP4.12	Involuntary Resettlement	√	No resettlement is required in project construction areas.
OP4.36	Forests	X	This project will not have any impact on the health and quality of forests or affect the masses' interests with forest ownership and their dependencies with the forests. So the forest policy will not be concerned.
OP4.37	Safety of Dams	X	The project content will not involve dams.
OP7.50	Projects on International Waterways	X	The proposed project will be located within China and does not refer to international waterways.
OP7.60	Projects in Disputed Areas	X	The project will be located within Jiangxi province and there exist no disputed areas.
BP17.50	Information Disclosure	√	This environmental assessment will carry out at least 2 information disclosure and public consultation work.
-	IFC EHS Guidelines	√	

3 The Project's Environmental Impact and Its Environmental Protection Measures

The potential main environmental impact and measures of the project are summarized in table 3.1-1.

Table 3.1-1 The Potential Main Environmental Impact and Measures of the Project

Project Category	Potential Environmental Impact	Environmental Protection Measures
Subproject A. Improving production logistics (after harvesting and initial processing)	①The project supports the cooperatives to conduct the certification of safety, green and organic products and will reduce the application amount of pesticides in project areas; ②The initial processing activities of agricultural products in the producing area may bring about some impacts on the environment (such as wastewater, waste residue, waste gas, noise, etc.).	The specific construction content of the initial processing of agricultural products in the producing area will be determined during project implementation. These uncertain activities must meet the relevant requirements of *Environmental and Social Management Framework.*
Subproject B. Improving distribution logistics (distribution center and distribution platform)	①Common construction impact created by the construction of trade markets; ②The environmental impact of market trade operation (wastewater, garbage, noise, traffic, safety, etc.); ③Waste produced by the quality and safety monitoring of agricultural products; ④Social impact of the project.	①The design of fire control facilities and traffic safety must be in accordance with the national provisions, specifications and standards; ②The design scheme includes the required facilities for traffic safety, fire control and collection and disposal of wastewater and garbage; ③The construction activities follow *Construction Environment Management Regulation* (see appendix); ④Put forward the measures during operation period; ⑤Put forward the measures for social impact management.
Subproject C. Supporting services of agricultural products' logistics system	No environmental impact	/
Subproject D. Project management, monitoring and evaluation	No environmental impact	/

The specific analysis is as follows:

3.1 Environmental Impact Analysis and Mitigation Measures During Construction Period

Prior to commencing civil works, the contractors are to submit site-specific EMP(s) (based on the ESMP) which includes specific management plans for: (i) work activities; (ii) traffic management; (iii) occupational health and safety; (iv) environmental management; and (v) social management. No civil works will commence until the site specific EMP has been approved by the supervision engineer/company.

All the projects are located in the industrial zone or construction development land. They do not involve basic farmland and have no need to build roads. The project site has already basically realized "three exchanges". The impact produced in construction period is mainly civil construction. During the civil construction, excavation, soil storage, cement mixing, material transportation and pipeline laying need to be completed, so it's necessary to use construction machines with high intensity of noise. At the same time, flying dust and cement dust will be produced in the process of excavation and transportation (wastewater, waste soil, noise, flying dust, construction vehicles, etc.). But due to the small scale of each market construction, the construction time is short and the construction impact can be reduced to the acceptable level through good physical environment management.

3.1.1 Ambient Air

（1）Impact Analysis

During the construction period, the project's impact on ambient air is relatively concentrated. The ambient air pollution mainly comes from the flying dust and waste gas produced by construction.

Site excavation, trimming, transportation, loading and unloading of pipes as well as site construction will all create flying dust. By analogy investigation, the size of flying dust has certain relationship with wind force and weather. The most unfavorable impact period of flying dust is in windy day. Such impact is more apparent in dry season and its impact scope could be extended to 50 ~ 150 m.

The construction waste gas mainly refers to the waste gas produced by construction fuel machines, such as the waste gas discharged by wheel loaders, dump trucks and excavators as well as the tail gas discharged by transportation vehicles. The main pollutants created by fuel machines are NO_X、CO and hydrocarbons (HC), etc. The discharge amount of these pollutants s small, which generally have a certain impact on constructors and small impact on regional environment.

（2）Prevention and Control Measures

①The construction unit should cover the special funds for controlling the flying dust pollution

during construction in the engineering budget. The construction unit must ensure that this special fund is used for its specified purpose only.

②The construction unit shall set up closure facilities (above 2.5 meters) around the construction site according to the regulations to conduct the enclosure or isolation of the construction areas. Effective measures like wet method operation should be taken when doing field operation and loading and unloading production to prevent dust pollution. When encountering dry excavation works that are easy to produce dust, spraying should be supplemented to reduce dust and shorten the operation time as far as possible. On windy day with the level 4 or above wind, excavation should be stopped and dust screen should be covered where the project is under construction.

③Reasonable arrangement. During construction, the used building materials that are easy to generate dust such as cement, lime, gravel, coating and paving materials should be piled up in the middle of the site, away from sensitive environmental site in order to reduce the impact of dust on residents. Measures such as sealed storage, the establishment of enclosure or walls and coverage with dust cloth should be taken during the storage period.

④Using commercial concrete and pre-mixed mortar. Mixing, lime digestion or lime soil mixing should not be done on the spot. Finished or semi-finished stones and wooden products should be used as far as possible. Fabricated construction should be implemented to reduce the dust caused by cutting.

⑤Transportation vehicles use enclosed car hoppers as far as possible and try to prevent the materials from leakage. If there are no enclosed car hoppers, the loading height of materials, waste and muck shall not exceed the upper hedge of the vehicles' ledge. The car hoppers should be covered with tarpaulin to ensure the materials, muck and waste should not appear. The vehicles should be in transportation in accordance with the approved routes and time to ensure the cleanness of transportation vehicles.

3.1.2 Water Environment

（1）Impact Analysis

The wastewater during construction mainly includes industrial wastewater and domestic sewage.

The industrial wastewater mainly consists of concrete curing wastewater and sand and gravel washing wastewater. Although the amount of wastewater in this part is small, it contains a certain amount of oil and sediment. If they are arbitrarily discharged without proper disposal, they will result in certain pollution on soil, surface water and groundwater. Especially in case of rainy days, they will produce a greater impact on the surface water environment.

The accommodation of project constructors relies on the nearby villages and there is barely any domestic wastewater discharge.

（2）Prevention and Control Measures

①The concrete curing wastewater and sand and gravel washing wastewater in the

construction site should be collected via gutter channels in a uniformed way. After being mixed and diluted, they will enter the temporary sedimentation tank for disposal. The size of the temporary sedimentation tank should follow the standards which ensures that the wastewater stays for more than 12 hours. After disposal, the wastewater is all used for cleaning on the construction site, cleaning of building materials, concrete curing and re-cleaning of sand and gravel.

②Set up temporary dry pail latrine on the construction site and clear the faces regularly for agricultural fertilizer use according to the actual living conditions.

③Strengthen the construction management and strictly control the construction machines' leakage. Complete the drainage system and water conservation measures of temporary excavation areas to prevent the impact of water loss and soil erosion on the water environment caused by soil storage.

④Each construction unit must implement various treatment measures for industrial wastewater and domestic sewage to ensure that wastewater can be treated and disposed properly.

⑤Strengthen the education of environmental protection of constructors and improve their environmental awareness. Constructors shall not throw or dump waste and sewage.

3.1.3 Acoustic Environment

（1）Impact Analysis

The noise during the construction period mainly includes the noise on the construction site and the traffic noise in the transportation of materials. Thereinto, the noise on the construction site mainly refers to the noise of construction machines, the collision noise of the loading and unloading of materials as well as constructors' domestic noise. As the construction noise is made by various construction machines and transport vehicles and the operation of general equipment is intermittent, the noise created during construction has the characteristics of intermittency and transience. In different stages during the construction period, the noise source will have different levels of impact on the acoustic environment in the project area. Most of the project areas are located in the farmlands and their surroundings, which are far from the villages. There are no other sensitive spots of acoustic environment. By strengthening management, corresponding measures for the prevention and control of the environment can be taken to reduce its impact to a minimum.

（2）Prevention and Control Measures

①Select the advanced and reliable low-noise equipment when selecting the equipment.

②Reasonably arrange construction time and no construction at lunch breaks and night. Limit construction at night and inform nearby villagers when doing strong noise works.

③Reasonably arrange project period and avoid the simultaneous operation of many large and high-noise machines on the same construction site at the same time. The construction should catch the schedule and shorten the impact time of noise.

④For the machines and equipment which generate high noise, basic damping or the

establishment of damping bearing and the bandaging of damping materials should be done.

⑤The noise of transportation vehicles may cause certain impact on the sensitive spots of acoustic environment along the line. Therefore, the construction unit should reasonably arrange the transportation time and try to compress the quantity of cars and traffic density in the construction area. Take measures to conduct speed limit and no horn for construction machines like vehicles.

⑥Suggest the construction unit to reasonably arrange constructors and reduce the operation time of high noise mechanical operators. Earflaps can be equipped for constructors in order to reduce the impact on the constructors.

⑦Regular effective maintenance and repair should be done for all mechanical equipment to make the equipment in a good state to achieve the purpose of noise reduction and equipment's service life extension.

⑧Make strict requirements in management aspects such as the intensity of construction, mechanical and vehicle operators and operating procedures.

3.1.4 Solid Waste

（1）Impact Analysis

The solid waste during construction mainly comes from the construction waste, foundation excavation, waste soil (residue) after backfilling as well as the domestic waste produced by constructors during the construction process.

The construction waste refers to any material generated and discarded in the removal and construction activities of roadbed or channels. Its composition is complicated and mainly includes the waste gravel, tiles, waste concrete, scrap metal and packing materials, etc. The domestic waste mainly includes plastics and waste paper, etc. If the construction waste generated during the construction period do not be disposed timely, it will not only affect the landscape, but also generate dust in windy and dry days. If the domestic waste produced by constructors can not be treated timely, it will breed mosquitoes, produce foul smell and spread disease when the weather is suitable, which will have adverse impact on the surrounding environment.

（2）Prevention and Control Measures

①The pickup of construction waste shall be done in enclosed vehicles and random scatters are prohibited. Construction waste shall be in accordance with the relevant provisions of the garbage classification management and it should be recycled for use as far as possible and cleaned and consumed in time.

②After being collected via trash bag established on the construction site, the domestic waste will be transported to the landfill of the villages and towns for disposal.

③On one hand, waste soil (residue) can be used for land leveling and backfilling. On the other hand, it can be used for the bedding of roadbed nearby. The waste disposal area will not be set up alone to reduce the occupation of land.

④Poisonous and harmful substances shall not be burned on the construction site. The disposal

of poisonous and harmful substances should be disposed in accordance with the relevant regulations.

3.1.5 Ecological Environment

（1）Impact Analysis

The ecological impact of project construction is mainly manifested in the surface excavation, construction materials and the transportation and storage of production equipment. The surface disturbance will have a certain impact on local water loss and soil erosion. Water loss and soil erosion refers to the process of dispersion, transfer and deposition of soil under the effect of precipitation erosion force. There are many factors affecting water loss and soil erosion, mainly including rainfall, soil, vegetation, landform and project construction, etc. In terms of this project, the main factors affecting water loss and soil erosion during construction are rainfall and project construction.

The project management needs to improve in the process of excavation and backfilling. Reduce scatters as far as possible to prevent water loss and soil erosion. The main adverse environmental impact of water loss and soil erosion is mainly manifested in the following aspects:

①Destroy the original water and soil conservation facilities and land vegetation, strip and disturb the soil, increase the soil erosion accordingly, reduce the erosion resistance and intensify the terrain cutting, which results in the increasing degree of soil erosion and water loss and soil erosion.

②Affect the landscape effect within the area.

③Bring adverse impact and hazard loss for the local residents' life and the safe operation of the project.

（2）Prevention and Control Measures

①Reasonably arrange the construction time and try to avoid the rainy season and flood season. If it can not be avoided, construction protection and drainage works should be done well in rainy season to make sure the smooth drainage during construction and prevent the phenomenon of water soaking the working face.

②The excavation project should be protected timely. Transportation follows the digging and tamping follows the backfilling to reduce the exposure time of loose ground. Make sure that protect one section while constructing one section in order to reduce new water loss and soil erosion.

③Reasonably optimize the layout of construction site and minimize the scope of construction activities to reduce the damage degree of project construction to the vegetation. Construction machines and constructors must operate according to the planned construction planimetric position and channels during construction and they can not occupy the land illegally. The construction machines, soil and stone and other building materials can not be placed illegally to prevent the the destruction of vegetation and the intensify of water loss and soil erosion.

④The outsourcing building materials required for the construction, such as brick, stone, sand, cement, wood, etc., should be transported following the usage to reduce the land use or vegetation

damage as far as possible. After the completion of the project, timely clean and afforest the construction site and restore the vegetation which has been destroyed to the largest degree.

⑤Try to minimize the damage of farmland vegetation in the project area and make efforts to protect the surface vegetation surrounding the construction area in strict accordance with the design and construction. After the completion of the project, the temporary sites should be implemented an ecological restoration and carried out land reclamation and replanting of crops and vegetation immediately.

3.1.6 Social Impact

（1）Impact Analysis

During the construction period, it will have a short-term impact on the social environment along the line, which mainly includes:

①The construction occupies the road and increases the existing road load, which affects the traveling of nearby residents.

②The construction vehicles continuously pass through the densely populated areas such as villages and schools, which may cause local traffic accidents.

③The uncivilized behaviour of some constructors will affect the local residents.

④The project under construction may affect local villagers' security.

The above impacts can be avoided largely or eliminated completely by the reasonable arrangement of construction plan and civilized construction. Therefore, the construction unit should formulate the sound construction plan and make strict requirements for constructors to reduce the social impact brought about by the construction.

（2）Prevention and Control Measures

①Formulate the traffic control plan in advance and publish the announcement. Reasonably set the combination of the similar intersections along the main project and pipeline construction as well as temporary bypass channels to shorten the closed construction period of main intersections to the maximum.

②Shortcuts are set aside in the connection between the enterprises, wholesale markets, farmland and residential areas along the both sides of the pipeline and other road network to dredge the pedestrians and vehicles and prevent traffic congestion. Or inform the relevant units to change their course in advance through other means and set up clear sign of temporary bypass route at main intersections.

③During the construction in the villages and towns, on duty houses should be established in construction sections to solve the traffic jam and ensure the safety of pedestrians.

④If a strong vibration construction is in need near the villages, monitor the adobe residential houses near the construction site in order to prevent accidents.

⑤Reasonably arrange the construction time and no construction at lunch breaks and nights. Limit the construction at night and inform the nearby villagers when doing strong noise construction.

⑥Hang signs to remind the local villagers of dangerous areas, equipment and materials.

3.2 Environmental Impact and Its Environmental Protection Measures During Operation Period

3.2.1 Waste Gas

（1）Environmental Impact

Waste gas mainly refer to the tail gas produced by the running motor vehicles, the fishy odor in the aquatic section in the market, the decaying smell of fruits and vegetables as well as the smell of garbage station (foul gas), which is all discharged into the surrounding environment randomly. In addition, there is a small amount of oil smoke in the canteen.

The logistics distribution vehicles will generate automobile exhaust pollution when they move in the project areas and in and out of the parking lot at an idle and slow speed. This kind of tail gas include the tail gas of the exhaust tailpipe, air leakage of crankcase and the gas leakage of the fuel systems such as the fuel tank and carburetor, whose main harmful ingredients are CO, HC, NOx, etc. The parking space of this project is the open space with fast diffusion and not easy to accumulate. So the automobile exhaust has a small impact on the surrounding environment.

Odor comes from two parts, one is the fishy odor in the aquatic section in the wholesale market, the other is the foul gas produced by the decaying garbage and leachate in the domestic waste collection station. They are all discharged randomly. The waste transfer station is only used for the temporary centralized storage of garbage in the market and will not dispose the garbage. It is not a long-term storage point, which has little effect on the environment.

The canteen uses electricity or natural gas as fuel, which belong to the clean energy, which has small impact on the environment. But it will generate a small amount of lampblack with the concentration of 4 ~ 6 mg/m3. The canteen lampblack will be discharged at the top of the canteen after being treated by lampblack purifier, which achieves the standards and requirements of *Emission Standards of Cooking Fume (trial) (GB18483-2001)* and has little impact on the surrounding environment.

(2)Mitigation Measures

①Improve the vehicle management system in the market; reasonably plan the direction of traffic flow within the market and maintain regional traffic flow; forbid the random parking of vehicles within the area, especially no parking on the sidewalk; limit the speed of the vehicles within the area, etc.

②Improve air quality in the market by the combination of strengthening the natural ventilation and indoor ventilation.

③To control the influence of odor on the surrounding environment, there is only one inlet and outlet at garbage collection stations. The rest faces and other functional rooms adopt the cultivation covered by soil and green belts are set up. Tall shrubs or trees are suggested to be planted, which can make use of the greening to cover the foul gas when beautifying the environment at the same time in order to reduce the bad impact of odor outside the market.

④Suggest that regular air deodorization should be conducted to the collection stations by using deodorants to further eliminate odor in the air, especially in summer.

⑤Install lampblack purifier in the canteen and the processed lampblack will be discharged at the top of the canteen.

3.2.2 Water Environment

（1）Impact Analysis

Wastewater mainly includes the cleaning wastewater generated in the initial processing of fruits and vegetables, aquaculture wastewater in the aquatic sections, wastewater produced by butching and cleaning fish, cleaning wastewater of the trade market ground, small amount of wastewater in products' inspection as well as the employees' wastewater.

According to the analogy survey, the main pollutants of wastewater are COD, BOD, SS and oil, which have good biodegradability. Considering that the market cleaning wastewater contains certain impurities, such as vegetable leaves, fruit peels, fish skin and viscera, this part of impurities will block the pipeline when entering into the septic tank. Sedimentation tank is required in the aquatic sections. The fish scales and viscera in the wastewater will be preprocessed in the sedimentation tank and then be treated with other wastewater.

Before the wastewater can get into the local centralized sewage treatment plants, the produced wastewater meets the first grade standards of table 4 of *Integrated Wastewater Discharge Standards (GB8978-1996)* and is discharged into the nearby pollutant-holding water body. The amount of wastewater of the trade market of agricultural products is 12 ~ 34 m3 / d with small water quantity. In the case of discharge up to the standards, it has small impact on pollutant-holding water body. The specific content can be seen in appendix 5: environmental mitigation measures during the operation of trade market.

After wastewater can get into the local centralized sewage treatment plants, the produced wastewater meets the third grade standards of table 4 of *Integrated Wastewater Discharge Standards (GB8978-1996)* after preprocessing and is discharged into the local centralized sewage treatment plant. The wastewater has good biodegradability with small water quantity, which will not have significant impact on the processing efficiency of centralized sewage treatment plant. The tail water treatment of the centralized sewage treatment plant meets the first grade B standards of table 1 of *Discharge Standards of Pollutants for Municipal Wastewater Treatment Plant* and is discharged into the nearby pollutant-holding water body. The specific content can be seen in appendix 5: environmental mitigation measures during the operation of trade market.

（2）Control Measures

When the wastewater can get into the local centralized sewage treatment plants, the produced wastewater can be discharged after it is processed in the sewage treatment station built by their own and meets the standards. The specific treatment process is as follows:

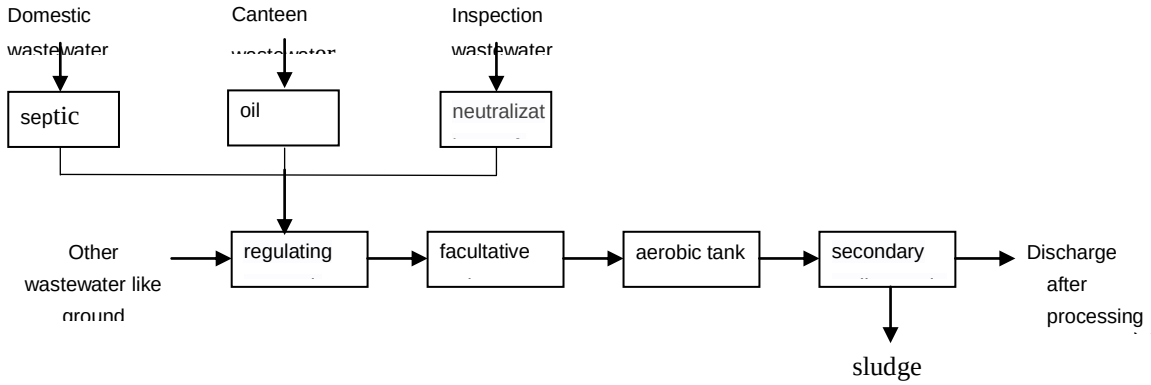


Figure 3.2-1 Treatment process of sewage treatment plants

After the wastewater can get into the local centralized sewage treatment plants and the wastewater is preprocessed by category, it can enter the municipal pipe network directly and discharged into the centralized sewage treatment plants for disposal. The current situation of the local centralized sewage treatment plant in each county can be seen in table 3.4-1.

3.2.3 Acoustic Environment

（1）Environmental Impact Analysis

The noise sources of this project mainly refer to the equipment noise from water pump, fan, air conditioner external unit, the commercial noise inside the market and the traffic noise of logistics transportation vehicles. The intensity of the noise source is not big and it can meet the category 2 and 3 standards of *The standards for the Environment Noise of Industrial Enterprises（GB 12348-2008）* after sound insulation and distance attenuation. As the project is far from the sensitive spots (above 50 meters), it has small impact on the environment.

（2）Mitigation Measures

①Strengthen the guidance and management of the market and limit the commercial noise sources of the market, particularly limit the usage of loudspeakers to solicit business. The design of sound insulation is applied in the walls, doors and windows around the market and the roof of the market to minimize the impact of such noise.

②The noise of water pump room and fan room is strong and measures of shockproof and sound insulation should be done during the installation of equipment. According to the properties of gravity and vibration features of the equipment, use suitable reinforced concrete pedestal or vibration isolation pad, vibration dampers and vibration isolation hooks. The noise equipment is forbidden to be used in the open air without any noise elimination and sound insulation measures.

②Strengthen the vehicle management system of the market, maintain the traffic flow within the area and no horns, etc.

3.2.4 Solid Waste

（1）Environmental Impact

The produced solid waste mainly includes the waste packing materials, decaying fruits and vegetables, the waste generated in butching fish and poultry, waste acid, waste alkali and reagent bottles produced in the test process, the sludge of wastewater treatment stations or septic tanks and the employees' domestic garbage.

①The impact of solid waste on water environment

The domestic garbage emits bad smell and is easy to become the breeding ground of flies and mice, which affects the surrounding environment. The main pollutants in waste leachate are BOD, COD and colibacillus. If they are not well managed, the garbage leachate can enter the Ganjiang River under the washing of rain, causing pollution to the water quality.

②The impact of solid waste on landscape

The lighter components of the garbage thrown randomly are easy to be blown up by the wind and fall into a low-lying land or shelter place finally. For example, they may be blown to the nearby drainage canals and it's difficult to clean them up. The random storage of domestic garbage will cause the dirty environment of the city and destroy people's good feelings of the landscape.

In short, the solid waste produced by the project may cause an adverse environmental impact on the environment, so high attention must be paid to the environmental impact of solid waste and strengthen the management. As long as taking strict and effective management measures, the solid waste will not do harm to the environment.

（**2**）Mitigation Measures

①The waste acid, waste alkali and reagent bottles produced in the test process belong to hazardous waste and they should be entrusted to be disposed by enterprise with qualification.

②The waste packing materials should be collected according to their classification and recycled by material recycling departments.

③Use the domestic garbage bags to pack the decaying fruits and vegetables and domestic garbage. Promote the garbage's classified collection, namely, set up three types of garbage collection containers according to the recyclable, the non-recyclable and harmful materials. They will be piled up in the garbage collection stations temporarily and then shipped to the local garbage filling place to make sure the daily disposal.

④The sludge produced in the sewage treatment stations or septic tanks should be entrusted to be cleaned up and disposed on a regular basis by the sanitation department.

The amount of solid waste produced by the trade market in each county and its specific mitigation measures can be seen in appendix 5: environmental mitigation measures during the operation of trade market

3.2.5 Environmental Risk

（1）The use of pesticides

This project does not include the implantation activities and will not cause the increasing use

of pesticides. The processing of navel oranges only requires the picking out, cleaning, packaging and cold storage and does not involve the use of pesticides. The processing method of vegetables is consistent with that of navel oranges and does not involve the use of pesticides, either. The processing of aquatic products is divided into sorting (grade), cold storage and outward transportation and does not involve the use of pesticides. The processing of cotton is relatively simple and does not involve the use of pesticides.

（2）The use of refrigerants

The agricultural products' circulation system construction project of all counties (cities and districts) except Pengze County all involves cold chain fresh keeping storehouse system, which involves the use of liquid ammonia. The volume of liquid ammonia storage tank of the agricultural products' circulation system construction project of all counties are all 40 m3. The main environmental risk of this project is the natural leakage loss and accident leakage of liquid ammonia. The main factors of liquid ammonia leakage include:

①Piping system leakage (including pipes, valves, connecting flange, pumping seal and other equipment and parts).

②Storage tank leakage.

②Natural factors, such as earthquake, lightning, etc.

Risk emergency measures:

①Leakage emergency treatment

Rapidly withdraw the personnel in the leakage pollution area to the windward places and immediately isolate 150 meters. Strictly limit the access and cut off the fire source. Suggest the emergency personnel to wear self positive pressure respirators and protective clothes. Cut off the leakage source as possible. Carry out reasonable ventilation to accelerate the diffusion. Spray the vaporous water containing hydrochloric acid for neutralization, dilution and dissolution in the leakage areas with high concentration. Construct causeways or dig holes to store the produced large amount of wastewater. If possible, use exhaust fan to transport the residual gas or gas leakage to the water tower or fuming cupboard connected with the tower. It's better to set spraying facilities of diluted acid in the storage tank areas. The aleak container should be properly treated and used again after repair and inspection. The assessment requires that accident pools should be set up in the factory to collect the liquid waste in order to collect the accident wastewater timely and create diversion trenches at the same time.

②Prevention measures

Respiratory protection: when the air concentration exceeds the standards, recommend wearing filtered gas mask (half mask). When rescuing in emergency circumstances, wearing air breathing apparatus is necessary.

Eye protection: wear chemical safety goggles.

Body protection: wear anti-static overalls.

Hand protection: wear rubber gloves.

Other: no smoking, eating or water drinking on the work site. After the completion of work, change clothes after showering. Maintain good health habits.

③First aid measures

Skin contact: immediately take off the contaminated clothes and apply 2% boric acid liquid or plenty of flowing liquid water to flush thoroughly. Go to a doctor.

Eye contact: immediately turn up the eyelid and thoroughly flush with plenty of flowing liquid water or normal saline for at least 15 minutes. Go to a doctor.

Inhalation: quickly remove from the scene to fresh air. Keep respiratory tract unobstructed. Add oxygen if it is difficult to breath. Conduct the artificial respiration immediately if breath stops. Go to a doctor.

Fire fighting methods: firefighters must wear the fire protective clothes. Cut off the gas source. If the gas source can not be cut off immediately, it is not allowed to put out the burning gas. Spray water to cool the container and remove the container from fire scene to the empty place. The fire extinguishing agents include vaporous water, water-resistant foam, carbon dioxide and sandy soil.

（3）Other risk analysis

1）Security

With the expansion and development of the market, there is an increase in the security problem of farmer's market, such as theft, robbery, fights and other security cases. The market shall establish safety propaganda, security protection, crisis intervention and other working mechanisms.

2）Traffic

The trade market brings an increase in the traffic flow. The transportation of vehicles will have a certain impact on the traveling of surrounding residents. The analogy analysis is carried out for the traffic problems of trade markets of the same size. The traffic flow of the project in 8 counties (cities and districts) will increase 25 to 30 (time)/day.

By strengthening the traffic safety management, conduct the traffic safety education for employees, enforce and implement the safety laws and regulations on road traffic safety, the laws and regulations on the local government’s road traffic safety management as well as the publicity and education training plan regulated by the superior department of traffic safety management, improve the traffic participants’ awareness of laws and regulations on road traffic safety. Use the transportation vehicles with carports to prevent the impact of materials on the traveling security of surrounding residents and control the speed of vehicles near the residential area.

3) Fire

There may exist many risks such as fire during the operation of trade market. Each trade market must plan and construct a fire troop. Improve the fire control management system of farmer's market and properly maintain the fire facilities. Set up various systems (including emergency plans) and carry out the supervision on its implementation.

The specific facilities of each subproject can be seen in appendix 5: environmental mitigation

measures during the operation of trade market.

3.3 Social Impact and Management Measures

3.3.1 Social Impact

PMO of Jiangxi agricultural products' circulation system construction project supported by the World Bank loans hires the expert from the immigration center of Hehai university to investigate and evaluate the possible social impact of this project and has finished the compilation of *social assessment report*. After fully understanding the relevant laws, regulations and policies at all levels and discussing with the main stakeholders such as the affected residents/villagers, relevant administrative departments and enterprises by the proposed project area in each county and city of Jiangxi province, the social assessment team identify the main social risks which are relevant with the design and implementation of the project and may have an impact on the project construction and the realization of the development goal according to the field investigation and data statistical analysis. And they put forward the following mitigation or avoidance action plan and suggestions correspondingly.

（1）Improve the agricultural products' circulation facilities and supporting infrastructure construction and accelerate the farmers' adaptability for to new facilities

The improvement of the agricultural products' circulation facilities and supporting infrastructure construction is helpful to improve the farmers' production and living conditions. For this purpose, it is suggested that:

①By holding the villagers' congress or village group meetings, discuss the required infrastructure facilities for the development of villagers' production and agricultural products' circulation by the participation method like problem tree to determine the proposed specific project construction.

②Strengthen the construction of agricultural products' circulation facilities and supporting facilities. The specific content includes: A. Establish the required facilities for agricultural products' circulation such as trading center of agricultural products, storehouses at room temperature and fresh-keeping storehouses at low temperature to enhance the absorptive capacity of the market; B. Build the brand in the supporting cooperatives to form the brand effect; C. Establish the system for the inspection of the quality and safety of agricultural products and traceability to strengthen the management of the quality and safety of agricultural products.

③Because the construction of agricultural products' circulation infrastructure is certain to lead to the changes of farmers in the production tools, production technology and living habits, in order to ensure the safety of the farmers' production and living conditions, the corresponding security education and technical education should be timely followed up to prevent the appearance and deterioration of various bad consequences.

④The facilities and equipment involving the industrial value chain such as storage, processing and sales should be transferred to the collective ownership of cooperatives, who will be responsible for the supervision, management and maintenance.

（2）Strengthen the technical training and improve farmers' self development ability

The construction of this project requires the strengthening of the relevant training, including production technology training, market management, the establishment of cooperatives as well as management training, which is beneficial to improve farmers' subject consciousness and self development ability. Therefore, it is suggested that:

①Formulate the program on information disclosure, propaganda and training throughout the early stage, middle stage and late stage of the project, especially the the community mobilization propaganda in the early preparation of the project.

②Combining the developed industry of the project villages with the villagers' willingness and demands, carry out the training in the market value chain links such as planting and breeding technology, the processing, storage, sales and security testing of agricultural products as well as the traceability system in order to develop farmers' subject consciousness and market awareness: A. Carry out various and multi-layered technical training, such as the conduction of training courses, the provision of training materials, on-the-spot guidance, meetings and discussions as well as visits, to strengthen the communication between technicians and farmers. Organize them to go to the farmers' in the village and the field to carry out practical technical training so as to improve their technical level; B. The project's training time should avoid the time in busy season and females' housework time and take full consideration to the timetable throughout the year; C. The training place should be selected to be the nearby place where villagers gather and get easy access to and take special care of some farmers in remote areas; D. The training content should be in accordance with the urgency degree of farmers' to various training demands. Conduct the technical training relevant to the industrial development and the operation and management of the cooperatives according to the characteristics and demands of farming activities as far as possible; E. The training methods should vary from region to region and from person to person. Try to use the local language and oral straightaway expression, supplemented by video, posters, brochures and other methods; F. Spot check the condition of the propaganda and training regularly or irregularly with 2 times per year at the early stage of the project and one time per year at the rest stages.

③Arouse the enthusiasm of farmers to participate in the project, including: A. By various propaganda and participation methods such as holding the villagers' congress, village group meetings and meetings of party members, elect the members of the cooperatives' council and board of supervisors democratically. On the basis of villagers' knowing the facts and being voluntary, create the members of cooperatives, especially considering the demands and thoughts of females and the poor; B. Establish the joint-stock cooperative with farmers' extensive participation and democratic management and focus on solving the problem of insufficient funds when the poor participate in the cooperatives.

④On the basis of respecting the will of the vulnerable groups, such as females, the elderly and the poor, the information propaganda of the project and cooperatives should ensure that 80% of

the households will know the information. The participation of villagers in the project training should guarantee 30% females and 30% of the poor.

⑤Cultivate a batch of agricultural technical backbones and being well-off typical and concentrate on their training in a variety of forms in order to play a demonstration role.

（3）Increase farmers' employment opportunities and promote the increase of farmers' income in the project area

Through the direct and indirect employment opportunities created by the project construction, farmers can improve their production and living conditions and increase their household incomes, especially the vulnerable group such as the poor farmers can increase their income through the employment opportunities of the project. Therefore, it is suggested that:

①By training, visits, education and other various methods, increase farmers' human capital in the project area and improve their comprehensive quality and labor skills, creating conditions for the farmers with willingness and ability to find a job.

②Organize the villagers to participate in the infrastructure construction of the project. On the basis of fully respecting the will of the villagers, 30% of the employment opportunities will be provided to the vulnerable group such as the poor and females for priority.

（4）Raise farmers' subject consciousness and the degree of organization

Through the standardized cooperative construction and training, the degree of farmers' organization can be enhanced. Therefore, it is suggested that:

① Arouse the village organization ability of the project village and give play to the organizational ability and benefits of the primary-level organizations. By holding the villagers' congress and organizing the skills training, improve the cohesion of the villagers to propaganda and mobilize the organized production.

②By conducting the production base or a demonstrative household demonstration guide, organize the masses of farmers to participate in the industrial development.

③The cooperatives is the important carrier to improve the farmers' subject consciousness and organized production, which require: A. Establish the stock cooperative with farmers sharing the interests and responsibilities to make sure the vulnerable group such as the poor and females to participate in the cooperatives; B. Carry out training on technology and management for the cooperative members in order to strengthen the construction of organization; C. Establish an open, transparent and compact mechanism for benefit sharing to improve farmers' sense of belonging and identity to the cooperatives.

④Actively foster the subject of market circulation and give aid to cultivate the agricultural products' circulation enterprises, processing enterprises, agricultural products' dealers and other intermediary organizations. Play a demonstrative role and enliven the circulation of agricultural products.

（5）Ensure farmers' benefit equity and sustainable development

Increasing the opportunities of farmers' benefit equity to truly make the villagers gain benefits

is the key to consolidate the benefit combination of cooperatives and facilitate the sustainable development of farmers. Therefore, it is suggested that:

①Hold the cooperative members' meetings. By full discussion and consultation of the cooperative members, discuss and formulate the cooperatives' benefit distribution mechanism and make the public known. Explicit the proportion and sequence of each benefit distribution to ensure the farmers' benefit equity.

②Improve cooperatives' internal organizational structure and appoint specialists to be responsible for the management and use of cooperatives' funds. Publish the funds' using condition and benefit distribution results. Establish and keep records on the files of the cooperatives' finance and accept the members' supervision and questions.

③In the cooperatives supported by the project, on the basis of fully respecting the will of the villagers, make sure that the percentage of females and poor farmers' participation in the cooperatives is no less than 30%.

④Determine the proportion of public accumulation in the benefit distribution, such as the withdrawn and retained accumulation funds, public welfare funds, relief funds, risk funds and development funds in advance of the cooperatives and then ascertain the specific ways of benefit distribution.

⑤The annual situation of the cooperatives' operating earning and its distribution will be recorded on the "three-funded" regulation platform of the rural collective and accept their supervision.

⑥Establish and improve the complaint channels and mechanisms which are easy to operate.

6）Establish risk awareness and improve farmers' ability to resist market risk

The key of the changes of farmers' way of production and operation and the improvement of their ability to resist market risk is to establish their own cooperatives and foster the relevant circulation subjects to join farmers together voluntarily for the development of competitive industries. Therefore, it is suggested that:

①Make a comprehensive evaluation of the present situation and demands of the supporting facilities of the market in project areas according to the on-demand construction of farm track, irrigation and other facilities. Avoid the repeated use of funds and improve the infrastructure conditions of the industrial development.

②Adjust measures to local conditions and determine the leading products and main services of the cooperatives according to the competitive industries in the project areas.

③Establish a risk sharing mechanism of the competitive industries and the cooperatives. Determine the sharing proportion of farmers and cooperatives in the face of risk to make sure the normal operation of the cooperatives.

④Strengthen the relevant training on the development of the links such as production, sales and circulation and improve farmers' market consciousness and management ability, such as regular training on the administrative staff's organization and management ability, standardized

production, efficient agricultural technology, the processing, storage, test, information management and marketing of agricultural products, etc.

⑤Build up the required supporting facilities and systems for the market development of the industries such as the agricultural products' processing factories, storage facilities, testing facilities, information release platform of the market, traceability system and transportation tools targetedly.

⑥Under the premise of technical and capital feasibility, carry out the construction of seed breeding bases and conduct the standardized construction of unified seedlings, unified cultivation, unified field management, unified sales or unified processing.

7）Improve marketing services and enhance the efficiency of circulation

The marketing services are the software of the market infrastructure. The equal position of the software facilities and hardware facilities is helpful to improve the efficiency of circulation. Therefore, it is suggested that:

①Improve the market information services and strengthen the construction of information system. The specific contents include: A. The content of the market information should be concerned with the supply and demand, quality and prices of agricultural products according to farmers' requirements on various kinds of information as well as the characteristics and needs of the farming activities; B. In terms of information acquisition, try to select the convenient ways farmers are able to use, such as mobile phone, TV and radio, etc.; C. The information should try to be expressed in a comprehensible way; D. The information presentation must be timely, convenient and practical; E. Carry out targeted training on market information according to the demands of farmers.

②Improve the inspection services on the quality and safety of agricultural products. Deal with or destroy the agricultural products which do not meet the standards of quality and safety.

③Provide transportation services and provide convenient vehicle rental services for the distribution of agricultural products.

④In the agricultural products' trading center constructed by the project and make sure a certain proportion of free stalls are provided for the vulnerable group in project areas.

3.3.2 Actions to avoid or reduce market risk

1）Avoid market risk

The characteristics of the market economy lead to the appearance of risk in the agricultural products' circulation in order to avoid the risks brought about by the market changes. Therefore, it is suggested that:

①Establish an effective, sensitive and rapid information system of agricultural products and strengthen the analysis and prediction of market demands and price trend. It mainly includes: A. Timely predict the long-term trend of agricultural products' changes and deliver the information to the farmers through television, radio, short message and bulletin boards. B. Provide the effective supply and demand information and price information of agricultural products in a timely, accurate and comprehensive way. Establish a multi-level matching network information system with the

mutual communication among each area to form a supporting socialized information service system before, during and after production; C. Timely deliver the information on the decision and demands of production and operation and offer decision-making consultation to farmers while providing information.

②Formulate scientific and reasonable protective price of agricultural products and strengthen the system construction of protective price of agricultural products.

③Cultivate and promote good varieties of crops and improve the ability of crops to resist natural disasters, plant diseases and insect pests.

④Speed up the construction of the infrastructure and its supporting facilities in the circulation of agricultural products and enhance the transportation ability. Strengthen the cooperation with distributors and broaden the sales market, leading to the development of this industry driving other industries.

⑤Gradually establish and improve the regulation funds for agricultural products' market risk.

⑥Strengthen the investment in science and technology and study and develop good varieties. Prolong the industrial chain and control the quantity, production scale and breed structure of agricultural products.

⑦Develop intermediary organizations and expand the broker team of the agricultural products' market. Improve farmers' organizational degree, especially the role of the cooperatives.

⑧The industrial selection must adjust measures to local conditions and prolong the industrial chain according to the industrial characteristics.

⑨Strengthen market knowledge training and make sure of the timely grasp of market information so as to deal with market risk.

2）Reduce the risk in the management, operation and maintenance of the facilities in agricultural products' circulation

After the project is put into operation, the poor management of its operation will lead to the market chaos and the failure of reaching the expected objectives. In order to avoid the phenomenon that the completed public infrastructure is in the charge of nobody and can not be maintained timely, ensure that the project runs smoothly and continuously creates effects, so it is suggested that:

①The responsibilities for the property rights, operation and management of the built facilities in the agricultural products' circulation will be included in the project implementation manual explicitly.

②Formulate public infrastructure operation and management provisions on the village level.

③In accordance with the principle of "who benefits, who manages and who maintains", strengthen the supervision and management ability at the county, township and village levels.

④Build up a professional operation management team and invite the outstanding team with market operation management experience to be responsible for the project operation and management market and establish a supervision team to carry out the supervision.

⑤In the project selection, plan the layout when closely combining the local government's industry to avoid the repetition of construction.

⑥The project administrative staff should to constantly improve their management level, learn the advanced technology and introduce the high-end management talents.

3）Reduce the risk of land expropriation and land management

In order to avoid or reduce the relevant risk of land expropriation and land management in the project, the suggested measures are as follows:

①In the process of project implementation, try to reduce or avoid the land requisition and demolishing. If it is inevitable, it is necessary to carry out the land requisition and demolishing activities strictly according to *Resettlement Policy Framework.*

②Make sure of following the principle of farmers' voluntary participation in the project and gaining fair land management and ownership arrangement in the cooperatives supported by the project.

③Ensure that farmers have the right to voluntarily choose whether to join the production base or not without being affected by the adjacent production bases.

④Adopt a clear written contract way and promote the short-term and transparent land lease methods, rather than select long-term land leases. By doing this, the poor farmers are free to choose to get out of the cooperatives, especially in the case of the immigrant family members coming back to the village.

⑤During the project implementation, in the cases when the cooperatives need to establish a production base by integrating land, the World Bank/PPMO should review all the land lease and management programs in advance together.

⑥Confirm that the ownership arrangement which requires farmers to provide or transfer land to the cooperatives as shares will no be supported by the project.

Social Action Schedule of Jiangxi Agricultural Products' Circulation System Construction Project

Action Suggestions	Target Population	Implementation Organization	Year	Specific Actions	Capital Source	Monitoring Index
A- Measures to increase the social benefits of the project						
1. Improve the construction of the facilities and supporting infrastructure in agricultural products' circulation and accelerate farmers' adaptability to new facilities	55 villages and towns in 6 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	①By holding the villagers' congress or village group meetings, discuss the required infrastructure facilities for the development of villagers' production and agricultural products' circulation by the participation method like problem tree to determine the proposed specific project construction. ② Strengthen the construction of agricultural products' circulation facilities and supporting facilities. The specific content includes: A. Establish the required facilities for agricultural products' circulation such as trading center of agricultural products, storehouses at room temperature and fresh-keeping storehouses at low temperature to enhance the absorptive capacity of the market; B. Build the brand in the supporting cooperatives to form the brand effect; C. Establish the system for the inspection of the quality and safety of agricultural products and traceability to strengthen the management of the quality and safety of agricultural products. ③ Because the construction of agricultural products' circulation infrastructure is certain to lead to the changes of farmers in the production tools, production technology and living habits, in order to ensure the safety of the farmers' production and living conditions, the corresponding security education and technical education should be timely followed up to prevent the appearance and deterioration of various bad consequences.	The project's public infrastructure and service funds	① The demands, investigation process and results of the agricultural products' circulation facilities in the project villages. ②The responsible subjects of the property ownership and operation and maintenance of the public ③ The safety education of agricultural products' circulation facilities and the frequency and population of educational technical training. ④The construction situation, property ownership and the operation and management subjects of the facilities in the

				④ The facilities and equipment involving the industrial value chain such as storage, processing and sales should be transferred to the collective ownership of cooperatives, who will be responsible for the supervision, management and maintenance.		market.
2. Strengthen the technical training and improve farmers' self development ability	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	① Formulate the program on information disclosure, propaganda and training throughout the early stage, middle stage and late stage of the project, especially the the community mobilization propaganda in the early preparation of the project. ② Combining the developed industry of the project villages with the villagers' willingness and demands, carry out the training in the market value chain links such as planting and breeding technology, the processing, storage, sales and security testing of agricultural products as well as the traceability system in order to develop farmers' subject consciousness and market awareness: A. Carry out various and multi-layered technical training, such as the conduction of training courses, the provision of training materials, on-the-spot guidance, meetings and discussions as well as visits, to strengthen the communication between technicians and farmers. Organize them to go to the farmers' in the village and the field to carry out practical technical training so as to improve their technical level; B. The project's training time should avoid the time in busy season and females' housework time and take full consideration to the timetable throughout the year; C. The training place should be selected to be the nearby place where villagers gather and get easy access to and take special care of some	Project training funds	① Materials for information disclosure, propaganda and education plans. ②Records on the form, frequency, population, contents and the language of the training. ③Farmers' awareness and participation situation in the cooperatives as well as the demands and suggestion of females and poor farmers. ④Farmers' selection on the training time, place and ways as well as their evaluation on the training effects. ⑤The sustability of training to

				farmers in remote areas; D. The training content should be in accordance with the urgency degree of farmers' to various training demands. Conduct the technical training relevant to the industrial development and the operation and management of the cooperatives according to the characteristics and demands of farming activities as far as possible; E. The training methods should vary from region to region and from person to person. Try to use the local language and oral straightaway expression, supplemented by video, posters, brochures and other methods; F. Spot check the condition of the propaganda and training regularly or irregularly with 2 times per year at the early stage of the project and one time per year at the rest stages. ③ Arouse the enthusiasm of farmers to participate in the project, including: A. By various propaganda and participation methods such as holding the villagers' congress, village group meetings and meetings of party members, elect the members of the cooperatives' council and board of supervisors democratically. On the basis of villagers' knowing the facts and being voluntary, create the members of cooperatives, especially considering the demands and thoughts of females and the poor; B. Establish the joint-stock cooperative with farmers' extensive participation and democratic management and focus on solving the problem of insufficient funds when the poor participate in the cooperatives. ④ On the basis of respecting the will of the vulnerable groups, such as females, the elderly and the poor, the information propaganda of the project and cooperatives should ensure that 80% of the households will know the information. The		farmers' production and living. ⑥The number of females and poor farmers participating in the training. ⑦The number and proportion of agricultural technical backbones and being well-off typical in the participation of training as well as the effects and evaluation.

				participation of villagers in the project training should guarantee 30% females and 30% of the poor. ⑤ Cultivate a batch of agricultural technical backbones and being well-off typical and concentrate on their training in a variety of forms in order to play a demonstration role.		
3. Increase farmers' employment opportunities and promote the increase of farmers' income in the project area	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	①By training, visits, education and other various methods, increase farmers' human capital in the project area and improve their comprehensive quality and labor skills, creating conditions for the farmers with willingness and ability to find a job. ② Organize the villagers to participate in the infrastructure construction of the project. On the basis of fully respecting the will of the villagers, 30% of the employment opportunities will be provided to the vulnerable group such as the poor and females for priority.	Training funds	①Records on the frequency, population, contents and structure of farmers' participation in the training on agricultural scientific technology and other employment. ②The number of farmer households participating in the project to provide employment positions and the population and proportion of poor farmers and females.
4. Raise farmers' subject consciousness and the degree of organization	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices,	2017-2022	① Arouse the village organization ability of the project village and give play to the organizational ability and benefits of the primary-level organizations. By holding the villagers' congress and organizing the skills training, improve the cohesion of the villagers to propaganda and mobilize the organized production.	Construction funds of the project cooperatives	①Records on the villagers' congress and skills training in the project village. ②The admission of farmers in the

	million, among which the poor reach 178600 and females 699100.	Village/Town government and village committee, etc.		② By conducting the production base or a demonstrative household demonstration guide, organize the masses of farmers to participate in the industrial development. ③The cooperatives is the important carrier to improve the farmers' subject consciousness and organized production, which require: A. Establish the stock cooperative with farmers sharing the interests and responsibilities to make sure the vulnerable group such as the poor and females to participate in the cooperatives; B. Carry out training on technology and management for the cooperative members in order to strengthen the construction of organization; C. Establish an open, transparent and compact mechanism for benefit sharing to improve farmers' sense of belonging and identity to the cooperatives. ④Actively foster the subject of market circulation and give aid to cultivate the agricultural products' circulation enterprises, processing enterprises, agricultural products ' dealers and other intermediary organizations. Play a demonstrative role and enliven the circulation of agricultural products.		cooperatives and the situation of benefit distribution. ③The number of farmer households participating in the cooperatives and the population and proportion of poor farmers. ④Records on the frequency, population and contents of the cooperatives' training. ⑤The situation of the demonstrative construction of the cooperatives. ⑥The number of intermediary organizations and the evaluation of their leading role.
5. Ensure farmers' benefit equity and sustainable development	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village	2017-2022	①Hold the cooperative members' meetings. By full discussion and consultation of the cooperative members, discuss and formulate the cooperatives' benefit distribution mechanism and make the public known. Explicit the proportion and sequence of each benefit distribution to ensure the farmers' benefit equity. ②Improve cooperatives' internal organizational structure and appoint specialists to be		①Records on the cooperative members ' meetings. ②The information disclosure, sharing and public participation of

	and females 699100.	committee, etc.		responsible for the management and use of cooperatives' funds. Publish the funds' using condition and benefit distribution results. Establish and keep records on the files of the cooperatives' finance and accept the members' supervision and questions. ③In the cooperatives supported by the project, on the basis of fully respecting the will of the villagers, make sure that the percentage of females and poor farmers' participation in the cooperatives is no less than 30%. ④ Determine the proportion of public accumulation in the benefit distribution, such as the withdrawn and retained accumulation funds, public welfare funds, relief funds, risk funds and development funds in advance of the cooperatives and then ascertain the specific ways of benefit distribution. ⑤The annual situation of the cooperatives' operating earning and its distribution will be recorded on the "three-funded" regulation platform of the rural collective and accept their supervision. ⑥Establish and improve the complaint channels and mechanisms which are easy to operate.		the industrial development. ③The situation of caring and giving aid to poor farmers, females and other vulnerable groups as well as the population and proportion of this group in the participation of the cooperatives. ④The specific details, announcement, results, files, supervision feedback records and the awareness of members of the benefit distribution system. ⑤The information improvement situation of the cooperatives on the "three-funded" regulation platform of the rural collective. ⑥Results and records of complaints.
6. Establish risk	55 villages and towns in 8	PMO, Agricultural	2017-2022	① Make a comprehensive evaluation of the	Project funds	①The proportion of the finished

awareness and improve farmers' ability to resist market risk	cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.		present situation and demands of the supporting facilities of the market in project areas according to the on-demand construction of farm track, irrigation and other facilities. Avoid the repeated use of funds and improve the infrastructure conditions of the industrial development. ② Adjust measures to local conditions and determine the leading products and main services of the cooperatives according to the competitive industries in the project areas. ③ Establish a risk sharing mechanism of the competitive industries and the cooperatives. Determine the sharing proportion of farmers and cooperatives in the face of risk to make sure the normal operation of the cooperatives. ④ Strengthen the relevant training on the development of the links such as production, sales and circulation and improve farmers' market consciousness and management ability, such as regular training on the administrative staff's organization and management ability, standardized production, efficient agricultural technology, the processing, storage, test, information management and marketing of agricultural products, etc. ⑤Build up the required supporting facilities and systems for the market development of the industries such as the agricultural products' processing factories, storage facilities, testing facilities, information release platform of the market, traceability system and transportation tools targetedly. ⑥ Under the premise of technical and capital feasibility, carry out the construction of seed breeding bases and conduct the standardized construction of unified seedlings, unified		investment in the total investment amount in the construction of the supporting facilities of the market. ②The scale of infrastructure such as new or improved roads, drinking and irrigation facilities of people and animals. ③The situation of the cooperatives' products and services.; ④The situation of farmers' admission to the cooperatives. ⑤The number of farmer households participating in the cooperatives and the population and proportion of poor farmers. ⑥Records on the frequency, population and contents of the training. ⑦The situation of

				cultivation, unified field management, unified sales or unified processing.		the supporting facilities for the market development of relevant industries and system construction. ⑧The standardized production situation of relevant industries of the cooperatives.
7. Improve marketing services and enhance the efficiency of circulation	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	①Improve the market information services and strengthen the construction of information system. The specific contents include: A. The content of the market information should be concerned with the supply and demand, quality and prices of agricultural products according to farmers' requirements on various kinds of information as well as the characteristics and needs of the farming activities; B. In terms of information acquisition, try to select the convenient ways farmers are able to use, such as mobile phone, TV and radio, etc.; C. The information should try to be expressed in a comprehensible way; D. The information presentation must be timely, convenient and practical; E. Carry out targeted training on market information according to the demands of farmers. ②Improve the inspection services on the quality and safety of agricultural products. Deal with or destroy the agricultural products which do not meet the standards of quality and safety. ③Provide transportation services and provide convenient vehicle rental services for the	Project funds	①The awareness and the usage of farmers to market services. ②The satisfaction of farmers to market services. ③Materials such as the plan and work summary of market service work. ④The number and usage of free stalls.

				distribution of agricultural products. ④In the agricultural products' trading center constructed by the project and make sure a certain proportion of free stalls are provided for the vulnerable group in project areas.		
B- Measures to reduce the social risk of the project						
1.Avoid market risk	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	①Establish an effective, sensitive and rapid information system of agricultural products and strengthen the analysis and prediction of market demands and price trend. It mainly includes: A. Timely predict the long-term trend of agricultural products' changes and deliver the information to the farmers through television, radio, short message and bulletin boards. B. Provide the effective supply and demand information and price information of agricultural products in a timely, accurate and comprehensive way. Establish a multi-level matching network information system with the mutual communication among each area to form a supporting socialized information service system before, during and after production; C. Timely deliver the information on the decision and demands of production and operation and offer decision-making consultation to farmers while providing information. ② Formulate scientific and reasonable protective price of agricultural products and strengthen the system construction of protective price of agricultural products. ③ Cultivate and promote good varieties of crops and improve the ability of crops to resist natural disasters, plant diseases and insect pests. ④ Speed up the construction of the	Project funds	①The industrial information propaganda, information disclosure and sharing situation. ②Records on training on industrial technology knowledge and market knowledge. ③The public participation activities aiming at the industrial development and the conclusion. ④The proportion of the finished investment in the total investment amount in infrastructure construction. ⑤The situation of the supporting facilities for the market development of

				infrastructure and its supporting facilities in the circulation of agricultural products and enhance the transportation ability. Strengthen the cooperation with distributors and broaden the sales market, leading to the development of this industry driving other industries. ⑤ Gradually establish and improve the regulation funds for agricultural products' market risk. ⑥Strengthen the investment in science and technology and study and develop good varieties. Prolong the industrial chain and control the quantity, production scale and breed structure of agricultural products. ⑦ Develop intermediary organizations and expand the broker team of the agricultural products' market. Improve farmers' organizational degree, especially the role of the cooperatives. ⑧ The industrial selection must adjust measures to local conditions and prolong the industrial chain according to the industrial characteristics. ⑨Strengthen market knowledge training and make sure of the timely grasp of market information so as to deal with market risk.		relevant industries and system construction. ⑥The standardized production situation of relevant industries of the cooperatives.
2. Reduce the risk in the management, operation and maintenance of the facilities in agricultural products' circulation	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government	2017-2022	①The responsibilities for the property rights, operation and management of the built facilities in the agricultural products' circulation will be included in the project implementation manual explicitly. ②Formulate public infrastructure operation and management provisions on the village level. ③In accordance with the principle of "who benefits, who manages and who maintains",	Project villages/self-funded by the cooperatives	①The situation of the determination of the property rights, operation and management responsibilities of rural infrastructure facilities. ②The operation of public

	and females 699100.	and village committee, etc.		strengthen the supervision and management ability at the county, township and village levels. ④In the project selection, plan the layout when closely combining the local government's industry to avoid the repetition of construction. ⑤The project administrative staff should to constantly improve their management level, learn the advanced technology and introduce the high-end management talents.		infrastructure facilities and the result of management provisions. ③The regulation and executive situation of operation manuals.
3. Reduce the risk of land expropriation and land management	55 villages and towns in 8 cities in Jiangxi province. The total population of the project area is 1.4762 million, among which the poor reach 178600 and females 699100.	PMO, Agricultural Bureau, Poverty Relief Office, relevant Industrial Offices, Village/Town government and village committee, etc.	2017-2022	①In the process of project implementation, try to reduce or avoid the land requisition and demolishing. If it is inevitable, it is necessary to carry out the land requisition and demolishing activities strictly according to Resettlement Policy Framework. ② Make sure of following the principle of farmers' voluntary participation in the project and gaining fair land management and ownership arrangement in the cooperatives supported by the project. ③ Ensure that farmers have the right to voluntarily choose whether to join the production base or not without being affected by the adjacent production bases. ④ Adopt a clear written contract way and promote the short-term and transparent land lease methods, rather than select long-term land leases. By doing this, the poor farmers are free to choose to get out of the cooperatives, especially in the case of the immigrant family members coming back to the village. ⑤ During the project implementation, in the cases when the cooperatives need to establish a production base by integrating land, the World Bank/PPMO should review all the land	Project funds (domestic funds)	①The situation of land requisition and demolishing. ②The executive condition the activities related to the land management of the cooperatives/ enterprises (land lease and land pooling).

				lease and management programs in advance together. ⑥ Confirm that the ownership arrangement which requires farmers to provide or transfer land to the cooperatives as shares will no be supported by the project.		

3.4 Due Diligence

The situation of the sewage treatment stations related to the project is shown in table 3.4-1 and the the situation of refuse landfill related to the project is shown in table 3.4-2.

Table 3.4-1 The Situation of the Sewage Treatment Stations Related to the Project

NO.	Project Name	Project Location	Whether to take access to the centralized sewage treatment plants	The situation of the sewage treatment plants related to the project								Whether to conform to the regulations or not	Whether to have remaining environmental problems or not
				Name	Completed year	Treatment Scale (t/a)	Technology	Whether to run normally or not	Whether to adopt market wastewater or not	Whether to achieve the environmental assessment reply or not	Whether to have passed the environmental completion acceptance		
1	Comprehensive trading center construction project of the agricultural products in Anyuan District	Celei Village, Wupo Town, Anyuan District	N	/	/	/	/	/	/	/	/	/	/
2	Comprehensive trading market construction project of the agricultural products in Huichang County	Taiwanese Industrial Zone, Mazhou Town, Huichang County	Y	Sewage treatment plant of Taiwanese Industrial Zone, Mazhou Town	2009.12	10000	Purification	Y	Y	Y	Y	Y	N
3	Cotton trading center construction project in Pengze County	Peng Huwan Industrial Zone in Pengze County	N	/	/	/	/	/	/	/	/	/	/
4	Comprehensive trading center construction project of the agricultural products in Jing'an County	Green Lightening Industrial Base in Jing'an County	Y	Industrial wastewater treatment plant in Jing'an County, Jiangxi province	2014.11	10000	Oxidation ditch	Y	Y	Y	Y	Y	N
5	Jiujiang aquatic products' market construction project of Poyang Lake in Jiujiang Economic	Xigang District in Jiujiang	Y	Hewen Lake Sewage treatment plant in Jiujiang	2007	100000	CAST+ultraviolet disinfection	Y	Y	Y	Y	Y	N

NO.	Project Name	Project Location	Whether to take access to the centralized sewage treatment plants	The situation of the sewage treatment plants related to the project									
				Name	Completed year	Treatment Scale (t/a)	Technology	Whether to run normally or not	Whether to adopt market wastewater or not	Whether to achieve the environmental assessment reply or not	Whether to have passed the environmental completion acceptance	Whether to conform to the regulations or not	Whether to have remaining environmental problems or not
	Development Zone												
6	Trading center construction project of the agricultural products in Longnan County	Fukang Industrial Zone, Longnan County	N	/	/	/	/	/	/	/	/	/	/
7	Comprehensive trading center construction project of the agricultural products in Taihe County	Taihe Industrial Zone	Y	Taihe Industrial Zone sewage treatment plant	Under construction	30000	Oxidation ditch process	/	/	/	/	Y	N
8	The wholesale market construction project of the fruits and vegetables in Yushan County	Yushan County and Bingxi Town	Y	Sewage treatment plant in Yushan County	2009.9	20000	Oxidation ditch	Y	Y	Y	Y	Y	N
		Shuangming Town and Zhang Village	N	/	/	/	/	/	/	/	/	/	/

Table 3.4-2 The Situation of the Refuse Landfill Related to the Project

NO.	Project Name	Project Location	The situation of the refuse landfill related to the project								
			Name	Completed year	Treatment Scale (t/a)	Whether to run normally or not	Whether to have capacity to adopt market garbage	Whether to achieve the environmental assessment reply or not	Whether to have passed the environmental completion acceptance	Whether to conform to the regulations or not	Whether to have remaining environmental problems or not
1	Comprehensive trading center construction project of the agricultural products in Anyuan District	Celei Village, Wupo Town, Anyuan District	Domestic waste treatment plant in Pingxiang (power generation by incineration process)	2015.11	700	Pilot operation	Y	Y	N	Y	N
2	Comprehensive trading market construction project of the agricultural products in Huichang County	Taiwanese Industrial Zone, Mazhou Town, Huichang County	Domestic waste treatment plant in Huichang County	Expanded in 2010	130	Y	Y	Y	Y	Y	N
3	Cotton trading center construction project in Pengze County	Peng Huwan Industrial Zone in Pengze County	Domestic waste treatment plant in Pengze County	2015	70	Y	Y	Y	Y	Y	N
4	Comprehensive trading center construction project of the agricultural products in Jing'an County	Green Lightening Industrial Base in Jing'an County	Domestic waste treatment plant in Jing'an County	2014.10	120	Y	Y	Y	In progress	Y	N
5	Jiujiang aquatic products' market construction project of Poyang Lake in Jiujiang Economic Development Zone	Xigang District in Jiujiang	Domestic waste treatment plant in Jiujiang	2010.12	300	Y	Y	Y	Y	Y	N
6	Trading center construction project of the agricultural products in Longnan County	Fukang Industrial Zone, Longnan County	Domestic waste treatment plant in Longnan County	2012.12	150	Y	Y	Y	Y	Y	N
7	Comprehensive trading center construction	Taihe Industrial Zone	Domestic waste treatment plant in Taihe County	2012.4	181	Y	Y	Y	Y	Y	N

NO.	Project Name	Project Location	The situation of the refuse landfill related to the project								
			Name	Completed year	Treatment Scale (t/a)	Whether to run normally or not	Whether to have capacity to adopt market garbage	Whether to achieve the environmental assessment reply or not	Whether to have passed the environmental completion acceptance	Whether to conform to the regulations or not	Whether to have remaining environmental problems or not
	project of the agricultural products in Taihe County										
8	The wholesale market construction project of the fruits and vegetables in Yushan County	Yushan County and Bingxi Town	Domestic waste treatment plant in Yushan County	2009.1	800	Y	Y	Y	Y	Y	N

4. Monitoring plan

4.1 Environmental monitoring

4.1.1 Monitoring Objectives

Environmental protection monitoring includes construction period and operation period, with its purpose of comprehensively and timely mastering the pollution dynamic of the proposed project, understanding the change scope of environmental quality in the area where the project is constructed, its influence range and the environmental quality dynamic in the operation period, reporting information to the competent department timely and providing scientific basis for the environmental management of the project.

4.1.2 Monitoring Implementation

According to the predicted results about the environmental influence, the sensitive spots with relatively obvious pollution are taken as the monitoring points. As per the pollution condition in the construction and operation period, the monitoring contents are chosen to be the surface water environment, groundwater environment and soil environment which are greatly influenced relatively. The monitoring factors are determined as per the pollution characteristic factors in the engineering analysis. The monitoring analysis method adopted is that of the corresponding project regulated in the *Environmental Monitoring Code* issued by the National environmental protection bureau. The evaluation criterion adopts the national standard confirmed by environmental assessment. The monitoring organization is the local environmental monitor station or socialized environmental monitoring institutions with monitoring qualification. The responsible organization is the PMOs of various provinces and the supervisory organization is the environmental protection agencies of various project counties.

4.1.3 Monitoring plan

This project will create a certain influence on the environment in both its construction and operation periods. In order to control the pollution and protect environment effectively, it should master the service condition of environmental protection disposal facilities and production devices at any time so as to prevent the occurrence of pollution accidents. The suggested environmental monitoring plan is as shown in table 4.1-1.

Table 4.1-1: The project monitoring plans (single sub-project)of various sub-project counties (city, district)

Monitoring period	Environmental elements	Layout of monitoring points (quantity)	Monitoring items	Monitoring frequency	Unit price (yuan/period)	Annual fees (yuan/year)	Stage fees (yuan)	Monitoring organization	Responsible organization	Supervisory organization
Construction period	Ambient air	1 monitoring point is set: the construction site of distribution platforms of agricultural products in various sub-project counties (city, district)	TSP	4 periods/year, 1 day/period, once/day; if it is found to exceed the standard, monitoring frequencies need to be increased.	3000	12000	12000	Qualified environmental monitor station	proprietor	Environmental protection agencies of various sub-project counties
	Water quality	1 monitoring point is set: wastewater collection pool on the construction site.	PH value, dissolved oxygen,$COD_{Cr,}$ $BOD_{5,}$ NH_3-N, total coliform group, SS	2 periods/year, 1 day/period, once/day; if it is found to exceed the standard, monitoring frequencies need to be increased.	3000	6000	6000			
	Noise	1 monitoring point is set: the construction site of distribution platforms of agricultural products in various sub-project counties (city, district)	L_{eq}dB（A）	4 periods/year, 1 day/period, twice/day (once at day and night separately); if it is found to exceed the standard, monitoring frequencies need to be increased.	1500	6000	6000			
	Subtotal (yuan)						24000			
Operation period	Noise	1 monitoring point is set: the construction site of distribution platforms of agricultural products in various sub-project counties (city, district)	L_{eq}dB（A）	2 periods/year, 1 day/period, twice/day (once at day and night separately); if it is found to exceed the standard, monitoring frequencies need to be increased.	1500	3000	9000		Proprietor	Environmental protection agencies of various sub-project counties
	Exhaust gas	1 monitoring point is set: the down-the-wind residential area at the construction site of distribution platforms of agricultural products in various sub-project counties (city, district)	Malodorous gas (ammonia gas and H_2S)	2 periods/year, 1 day/period, once/day; if it is found to exceed the standard, monitoring frequencies need to be increased.	6000	12000	36000			

	Water quality	1 monitoring point is set:the wastewater discharge site at the trading places of various sub-projects	PH value, dissolved oxygen,$COD_{Cr,}$ $BOD_{5,}$ NH_3-N, total coliform group, SS	2 periods/year, 1 day/period, once/day; if it is found to exceed the standard, monitoring frequencies need to be increased.	6000	12000	36000			
	Subtotal (yuan)						81000			
Total (yuan)							105000			

4.2 Environmental Supervision Program

The environmental supervision in the construction period indicates the environmental protection measures carried out in the construction period of the project. About the environmental supervision work in the construction period, the development organziaiton should entrust the qualified construction supervision organization to carry out which is required to be equipped with full-time environmental protection supervising engineer to be responsible for the environmental management and supervision. The environmental supervision unit should establish environmental supervision group to carry out the specific work such as environmental supervision and audit. The environmental supervision group should put forward the environmental supervision work plan according to the supervision contents regulated in *Environmental Management Plan* and actual conditions of the project construction and then submit it to the corresponding environmental management department and development organziaiton.

4.2.1 Scope of the environmental supervision

（1）Scope of environmental supervision

The construction area of the project and that directly influenced by the engineering, including the construction sites and roads of the main work and temporary work;

Supervision contents: ecological protection, greening, contaminants prevention and various aspects of environmental protection work such as social environment etc.;

（2）Works scope

Construction sites and construction items etc. as well as the area that causes environmental pollution to the surroundings within the above construction scope;

（3）Supervision stage

The environmental supervision stage of this project contains construction preparation stage, construction stage and project checking & accepting and defects liability period these three stages.

4.2.2 The specific working method of environmental supervision

Environmental supervision is the economically independent third party beyond the proprietor and contractor, which conducts work independently and justly in strict accordance with the contract terms and related environmental protection laws and regulations. Environmental supervision work is an important component of engineering supervision, which is not only closely related with engineering supervision, but also has particularity and relative independent-ability. The specific environmental supervision working method is as below:

(1) Review whether the environmental protection measures in the preliminary design and construction drawing design of the project satisfy the standard put forward in the approved environmental impact statement.

(2) Assist the development organziaiton organizing the construction and design of engineering and the environmental protection training of administrative staffs.

(3) Examine and verify related environmental protection clauses in bidding documents and engineering contract.

(4)Review and approve the specific construction site management plan submitted by the civil work contractors. Put forward environmental protection-related improvement suggestions aiming at the construction organization design, construction technical scheme and construction schedule plan that are proposed by contractor, and examine the environmental protection index of the devices of the construction organization.

(5) Conduct supervision on the construction quality of the environmental protection engineering and measures that are used to protect ecological, water, air and acoustic environment and reduce the environmental influence caused by engineering, and conduct intermediate acceptance and sign according to the standard.

(6) Conduct daily supervision on the construction site and systematically record the environmental influence caused by engineering construction, the effect of environmental protection measures and the construction quality of environmental protection engineering.

(7) Record the environmental problems found in the supervision on the spot and orally inform or form a memo to ask the contractor to rectify and reform within a limited time.

(8) It’s required to monitor the pollution sources that may cause a larger influence on the environment of the construction site, and suggest the proprietor employing professional staffs or qualified monitoring unit to conduct monitoring when necessary, and then ask the contractor to dispose of the environmental problems targetedly according to the monitoring results. As for the significant environmental problems that are required to be solved by the contractor, they will be issued with a “rectification notice” after negotiation with the proprietor.

(9) Timely report the unexpected problems regarding the environmental protection design and construction to the environmental supervision leading group and put forward solutions.

(10) Responsible for drafting working plan and summary for the environmental supervision on engineering.

4.2.3 Environmental supervision scheme on engineering

According to the construction characteristics of this engineering, the environmental supervision should conduct dynamic management as per the construction progress. The working manner of environmental supervision should be daily inspection tour-oriented and assisted by necessary environmental monitoring so as to adjust the environmental monitoring strength timely. Overall-process supervision should be conducted on the major polluting processes to guarantee that the construction behaviors of various contractors conform to the regulations stipulated in relative environmental protection laws, regulations and environmental protection clauses in the contract.

(1) Construction preparation stage

Examine the implementation condition of the environmental protection clauses in the construction contract and inspect the environmental protection measures in the construction organization design, and conduct on-site check, optimization and review etc. together with development organization, design unit, engineering supervision unit and construction unit. The supervision scheme is as shown in table 4.2-1.

Table 4.2-1: Key points of environmental supervision in the construction preparation stage

Construction activities	Key points of supervision	Supervision methods	Means
Construction bidding and tendering	Compiling the working plan for the environmental supervision on engineering		
	Re-check the environmental protection clauses in the construction contract	Re-check of documents	
	Re-check the sensitive points of the on-site environment and protection target in the construction section	Inspection tour	On-site record
	Examine the environmental protection measures in the construction organization design of the contractor	Examination of documents	
	Examine and approve the environmental management plan of the contractor in the construction period	Examination of documents	
	Examine the construction scheme and corresponding environmental protection measures in the start application of the subdivisional work.	Examination of documents	

(2) Construction stage

The environmental supervision in the construction process should be conducted combining with the process of engineering construction, and the supervision scheme is as

shown in table 4.2-2.

Table 4.2-2: The major environmental supervision contents in the construction period

Environmental elements	Supervision object	Major supervision contents	Major supervision modes	The disposal methods for standard-exceeding or rules-breaking phenomena
Water environment	Various construction sites	1. Whether the selection of construction sites is reasonable, strengthen management and maintenance of construction machines, and waste water and work garbage etc. are prohibited from entering into rivers. 2. Reasonable disposal of domestic sewage.	Inspect various temporarily occupied land for construction	Inform the development organization and construction unit to take remedial actions
Ambient air	Transportation and piling up of building materials; 2. Stock dump of surface soil.	1. Transportation vehicle conducts closed transportation to the covers of materials and the materials handling sites are equipped with dust suppression measures and are watered regularly. 2. Surface soil-pile site is at least 300m from the residential area. 3. Air quality monitoring in the construction period.	Ambient air monitoring and inspection of various construction scenes and temporary construction sites in the construction period	Inform the development organization and construction unit to take remedial actions
Acoustic environment	1. Haul roads for construction; 2. Construction sites	1. Reasonably arrange for the construction time. 2. Choose low-noise equipment. 3. Temporary enclosure is set at the sensitive points. 4. Acoustic environment quality monitoring in the construction period.	Acoustic environment monitoring and inspection of various construction scenes and temporary construction sites in the construction period	Inform the development organization and construction unit to take remedial actions
Solid waste	Various construction sites	1. Topsoil stripping utilization. 2. Domestic rubbish disposal. 3. Building rubbish disposal.	Acoustic environment monitoring and inspection of various construction scenes and temporary construction sites in the construction period	Inform the development organization and construction unit to take remedial actions
Social environment	Major construction sites	1. Take the measures such as avoiding the local transportation peak period etc. to reduce impact on the local	Inspect various construction sites in the construction period to get to	Inform the development organization and construction unit to

		traffic.	know the opinions of surrounding residents on the project construction	take remedial actions
Ecological environment	Temporarily occupied land	1. The ecological restoration of temporarily occupied land. 2. The reasonability of the site selection for borrow area and waste slag factory. 3. Whether the spoil disposal is reasonable. 4. Whether the site selection of construction roads and construction camps is reasonable.	Clarify the locations of the temporarily occupied land in various construction sections before construction period, conduct inspection tour during the construction period and examine the restoration condition of temporarily-occupied land for construction after the construction ends	Inform the development organization and construction unit to take remedial actions

(3) Project checking and accepting and defects liability period

The main work in this stage is the summary of data related with environmental protection check and acceptance after completion of works and the construction of environmental protection engineering etc. as well as supervision on the restoration and maintenance of temporarily occupied lands like construction sites etc. in the defects liability period stage.

5. Institutional Arrangements

The organization and coordination of the environmental management of Jiangxi agricultural products circulation system construction project supported by the World Bank loan is responsible by the rural social undertakings development bureau of Jiangxi agricultural department ("provincial project management office (PPMO) for short). 8 county (city, district) project management offices ("CPMO") are responsible for implementation of specific organization and coordination, and the detailed arrangement and responsibilities of environmental management organizations are as shown in table 5.1-1.

Table 5.1: Table for the arrangement and responsibilities of the environmental management organizations of Jiangxi agricultural products circulation system construction project

Stage	Project stakeholders	Environmental management responsibilities
Design and preparation	Proprietor and/PPMO，county PMOs	Designate staff for environmental management; Project bidding and submittal for approval work, EIA report, and management plan approval; responsible for employing design and construction supervision units, and getting the measures of environmental management plan included into the bidding document and construction contract.
	Design unit and EIA unit	The design unit is responsible for project survey and design, EIA unit responsible for earlier-stage environmental impact assessment work and the design unit modifies the environmental protection measures according to EIA report.
	County-level Planning Bureau, Bureau of Housing and Urban, Land and Resources Bureau, Water Conservancy Bureau and Road transport Bureau	Supervise and inspect whether the design of construction works is reasonable, bidding, tendering and approval, engineering supervision, quality and construction safety construction.
	Environmental protection agency	Responsible for examining and approving EIA documents
Construction period	Proprietor and PPMO, county PMOs	Supervise the implementation of mitigation measures in the construction period of *Environmental Management Plan*; Conduct training and publicity about mitigation measures in the construction period of *Environmental Management Plan.* *Designate staff for environmental management*
	PPMO	Hire environmental consultant to monitor the EMP implementation Responsible for regularly (once every six months) reporting the implementation conditions of *Environmental Management Plan* to the World Bank.
	County-level Planning Bureau, Bureau of Housing and Urban, Water Conservancy Bureau and Road transport Bureau.	Supervise the implementation of various measures, civilized construction and safe production in the construction period of infrastructure.
	Contractor, construction team, supervision unit	Specifically implementing the mitigation measures in the construction period of *Environmental Management Plan.* *Designate staff for environmental management on site*.
	Peasant household/village collective	The village committee actively coordinates and well maintains the legal interest of villagers and conducts supervision on the construction
	Environmental protection agency	Guide, supervise and urge the implementation of mitigation measures in the construction period of *Environmental Management Plan.*
Operation period	Trading market proprietor and operation unit	Specifically implementing the mitigation measures in the operation period of *Environmental Management Plan* and well carrying out the work such as environmental protection, fire control and traffic management etc. in the operation period. Responsible for organizing related environmental monitoring.

		Regularly reporting (once every six months) the implementation condition of *Environmental Management Plan* to the World Bank under the organization of PPMO.
	Environmental protection agency	Guide, supervise and urge the implementation of mitigation measures in the *Environmental Management Plan.*
	Water Conservancy Bureau and Road transport Bureau and National Highway Authority	Guide, supervise and urge the implementation of mitigation measures in the *Environmental Management Plan.*

6 Capacity Enhancement and Training

6.1 Training purpose

The purpose of environmental management training is to guarantee the smooth and effective implementation of environmental management work to make related staffs familiar with the contents and procedures of environmental management, improve the environmental management ability of environmental management staffs and guarantee the effective implementation of various environmental protection measures.

6.2 Training objects

The training objects are all staffs of environmental management offices at various levels (province, city and county (city, district)), project proprietors, all environmental supervision staffs and representatives of the environmental monitoring organization and main contractors etc. Before the project construction starts, all the construction units, management units and supervisors are required to participate in training on environment, health and safety compulsorily.

6.3 Training contents

(1) The mastery and application of World Bank's environmental policies and domestic environmental protection laws and regulations and environmental standards;

(2) The environmental clauses in the World Bank loan agreement;

(3) The *Environmental Management Plan* of the project;

(4) The responsibilities and mutual relations of environmental management staffs, environmental supervision staffs, environmental monitoring staffs and contractors;

(6) The compilation of environmental management work report, environmental supervision work report, environmental monitoring report and monthly report of contractors.

6.4 Training plan

The training funds in the construction period of the environmental management plan of Jiangxi agricultural products circulation system construction project plan to be listed into the project budget and the training funds in the operation period listed into the operation and maintenance costs. The specific capacity building and training plan as well as training staffs and fees needed for this project are as shown in table 6.4-1.

Table 6.4-1: Environmental training plan

Training topic	Training object	Budget (10,000yuan)
Construction period		
Environmental protection laws and regulations, environmental policies and *Environmental management plan.*	Various CPMOs, project proprietors and construction unit	3.5
Implementing environmental management plan,	Construction unit, construction supervision and project proprietor	15
Crisis management measures	Project proprietor and construction unit	0.5
Occupation health and safety.	workers	2
Subtotal for the construction period		**21**
Operation period		
Environmental monitoring and inspection report	Project proprietor	1.5
Environmental protection, fire control, traffic facility maintenance, rules and regulations for environmental safety, contingency plan	Project proprietor	2.5
Training for improvement of agricultural produce quality	Cooperative farmers	11
Subtotal for the operation period		**15**
Total		**36**

7 Public Appeal and Feedback Mechanism

7.1 Public Appeal

In the project preparation, implementation and operation period, the villagers in the project areas can appeal and complain if they encounter some problems or are unsatisified with the project, and the mechanism is as below:

Stage 1: The PMOs at various levels should specially assign persons to deal with the appeals and complaints of villagers in the project areas; before the implementation of the project, the specially-assigned persons by PMOs at various levels who are responsible for dealing with people's complaints and their contact address, phone number, fax and e-mail address should be publicized to the project villages; if there is any change about the specially-assigned persons, the related information should be renewed in various ways and then inform relative parties.

Stage 2: The villagers in the project areas should reflect conditions to the village committee through letter, phone and email etc. and then the village committee handles and records them in written form, and replies and solves them within 15 working days.

Stage 3: If the villagers in the project areas are not satisfied with the disposal results provided in stage 2, they can further lodge a complaint to the complaint office of CPMO and then that of PPMO after receiving the disposal results, and various management organizations should make the handling decision within 15 working days. Various organizations should receive the complaints and appeals of villagers for free and the reasonable expenses arising thereof will be paid from the unexpected expenses of the project. The phone number and business address of the staffs that are responsible for dealing with complaints can be publicized through the website, poster and broadcast etc.

Complaints acceptance adopts bottom-to-top responsibility system and when various levels of PMOs receive the complaint, they should register it completely in detail and then record the complaint acceptance process, disposal results and related data; in principle, the PMOs should complete disposing of the complaint and provide the results to the complainants within 15 working days and then get them publicized in related villages. The responsible person of the complaint should strictly keep it secret and is not allowed to tell the information of the complainant to the person who is complained.

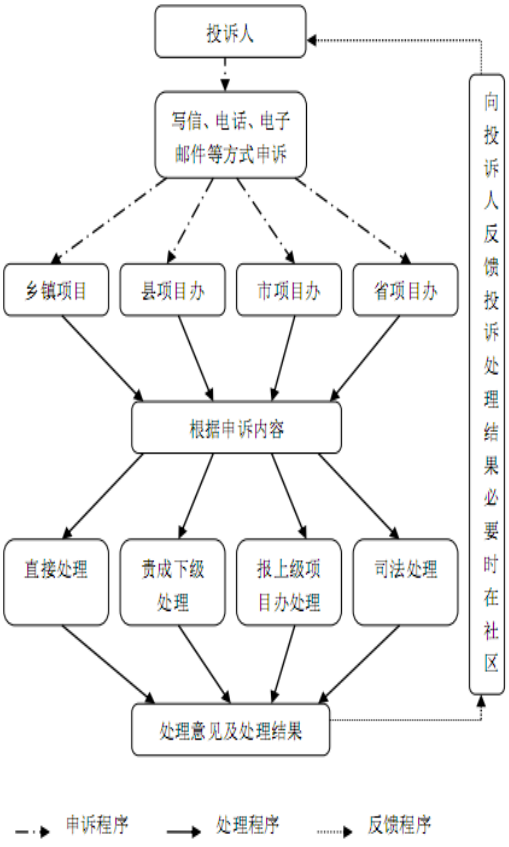
In the construction period or operation period of the project, the public can put forward opinions to the construction unit or development organization through letter, phone, fax or e-mail etc. or they can also state their opinions through the environmental protection agency

and complaint letter and request handling office of various project counties (city, district).

during construction, civil work contractors should have the procedure to address grievance/complaints on the construction activities, and conduct regular community consultations with project affected people at least once a year. Any environmental and social issues associated with the project raised are to be actively followed up by the civil work contractors.

The EIA unit, construction unit or development organization should immediately organize visit and investigation together with relative departments like design department after they receive the environmental protection-related complaints or rectification notice of administrative department, and then conduct rectification according to actual conditions and get the rectification scheme publicized so as to solve the environmental protection disputes.

The complaint mechanism of this project is as shown in figure 7-1 in detail.



投诉人

Complainants

写信，电话，电子邮件等方式申诉

Complain through letter, phone or e-mail etc.

乡镇项目办　　县项目办　　市项目办　　省项目办

Township PMO　　County-level PMO　　City-level PMO　　Provincial-level PMO

根据申诉内容

According to the complaint contents

直接处理　　下级处理　　报上级项目办处理　　司法处理

Direct handling; Delivery them to the inferior PMO to handle them; Submit them to the superior PMO to handle them; Judicial handling

处理意见及处理结果

Handling suggestions and results

向投诉人反馈投诉处理结果

Provide handling results to the complainants

申诉程序　　处理程序　　反馈程序

Complaint procedures　　handling procedures　　Feedback procedures

Figure 7-1: The complaint mechanism diagram of the proposed project

7.2 Feedback mechanism

According to the environmental monitoring report and examination of the supervision organization, the environmental management plan will conduct targeted adjustment to the mitigation measures and further improvement to the environmental management activities.

If a major deviation is found compared with the contents in the environmental management plan during examination or the alternation of the project has caused a huge adverse influence on environment or the population that is impacted by the adverse environment is greately increased, the PMO shall immediately consult the environmental organization and meanwhile the World Bank establishes an environmental assessment team to conduct an extra environmental assessment. If necessary, extra public consultation should also be conducted. The modified environmental management plan should also be reported to the implementation

organization and contractors so that they can get it implemented according to the modified contents.

8 Reporting Mechanism

In the process of project implementation, PMOs at various levels and environmental supervision unit should get the progress conditions of the project and environmental management plan and environmental monitoring results etc. recorded and reported to relative departments in time, specifically including:

(1) After completing the entrusted monitoring task, the monitoring unti should submit the monitoring report to the county project implementation and environmental supervision engineers in time.

(2) The environmental supervision engineers of the project get the implementation condition of the *environmental management plan* recorded in detail by week and month and then submit the weekly report and monthly report to the county (city, district) project management office, which should include the implementation condition of the environmental protection measures, the proceeding situation of environmental monitoring and monitoring data.

(3) CPMO makes detailed records about the progress of the project and the implementation condition of the *environmental management plan* on a quarterly basis and then reports them to the PPMO quarterly.

(4) PPMO submits the implementation report of the *environmental management plan* to the World Bank per six months, and the report should include the following contents:

a. The implementation scheduling of the project;

b. Under the current schedule, the implementation conditions of the *environmental management plan* specifically include:

- project status
- Institutional arrangement condition;
- The implementation condition of environmental protection measures;
- The implementation situation of the monitoring plan;
- The implementation situation of the supervision work;
- The implementation of capacity strengthening activities (e.g. environment training, worker’s occupation and safety training etc.);
- Local consultation report.

- Grievance Redress Mechanism (GRM) report: Whether there is any public complaint; if any, record the main contents of the complaint, the solution and public satisfaction index.

(5) If special rule-breaking events occur in term of environmental protection, the environmental supervision engineers and PMO will report them to the local competent administrative department in charge of environmental protection and to the superior department if necessary.

9. Cost Estimation

The budget for implementation of environmental management plan of this project has already been listed into the total investment of the project, which are as shown in table 9.1-1.

Table 9-1: Table of the environmental management budget of this project Unit: 10,000 yuan (RMB)

Subprojects	Cost for construction management[(1)]	Estimated cost for environmental facilities to be equipped							Environmental monitoring[(2)]	Training[(3)]	consultants	On-site environmental supervision	total
		gas	wastewater	noise	waste	greening	Fire-fighting and safety	Maintenance cost of facilities					
Comprehensive agricultural products trading center construction project in An'yuan district	35	20	50	8	30	40	50	20	10.5	36	32	50	381.5
Comprehensive agricultural products trading market construction project in Huichang county	34	20	20	8	25	30	50	20	10.5	36	32	50	335.5
Cotton trading center construction project in Pengze county	34	20	50	8	18	30	200	20	10.5	36	32	50	508.5
Comprehensive modern agricultural products trading center construction project in Jing'an county	40	20	22	8	26	30	50	20	10.5	36	32	50	344.5
Poyang lake aquatic products city construction project in the economic development zone, Jiujiang city	29	20	20	8	18	30	50	20	10.5	36	32	50	323.5
Agricultural products trading center construction project in	32	20	120	8	24	30	50	20	10.5	36	32	50	432.5

Longnan county													
Comprehensive agricultural products trading center construction project in Taihe county	35	20	20	8	20	30	50	20	10.5	36	32	50	331.5
Fruits and vegetables wholesaling market construction project in Yushan county	26	20	120	8	18	30	50	20	10.5	36	32	50	420.5
Total	265	160	422	64	179	250	550	160	84	288	256	400	3078

Note:(1) Estimated cost to manage construction impacts (e.g. dust, wastewater, waste, noise etc.) at construction sites. Cost will be included in civil work contracts.

(2) refer to Table 4.1-1.

(3) refer to Table 6.4-1.

10 Public Participation and Information Disclosure

Public participation in Environmental Impact Assessment(EIA) is not only a way to understand the attitudes and perspectives of people and groups on all levels of society toward construction projects, but also an opportunity for the masses to participate in EIA of the construction projects. Therefore, public participation can make the construction project environmental impact assessment more democratic and public, avoiding one-sided decision-making which will bring the difficulties and resistance for the future job. According to "Environmental Impact Assessment Law of the People's Republic of China" and the provisions of the World Bank, EIA of the construction project must adopt the attitudes and opinions of the local people.

According to the actual situation of the project and the scope of the impact of the project on the environment, it is agreed that the scope of public participation includes all project-involved areas, and the individuals and groups directly and indirectly affected by projects are surveyed.

The way of public participation in this EIA is mainly through information publication and social surveys, that is, through public announcement, let the public know about the project profile, and through interviews, questionnaires, etc. to collect all kinds of information. Commonly used methods are quantitative survey and semi-quantitative survey. Quantitative survey can obtain high accuracy of statistical data, usually using the questionnaire; semi-quantitative method of investigation can adopt many kinds of forms. Social survey can obtain a comprehensive and in-depth understanding about the project-involved areas' impact on the local environment and economy.

10.1 Information disclosure

1. Information disclosure for the first time: from June 27, 2014 to March 16, 2015, information was publicized online on people's government networks of eight project-involved counties , and notices were posted to public in the project-involved townships and the village committee. The contents of the first information publicity can be seen on website publicity page of each project-involved county, and on-site photos of some counties' notice seen in Figure 7.2-1.

2. Information disclosure for the second time: from July 22, 2014 to April 11, 2015, "World Bank loans Jiangxi agricultural circulation system construction project EIA" (Draft) is placed in the eight project-involved counties, agricultural bureaus and libraries etc. for the public to

learn more about the project, and inform the public disclosure time, place and the way to give feedback etc. Part of the announcement and on-site survey photos shown in Figures.

10.2 Visits and Public Participation Questionnaires

During the evaluation of site reconnaissance and investigation, inquiries, visits and other forms are used to listen to the opinions of local people and relevant government departments on the construction of the project and the resettlement; visiting the relevant departments to listen to the views of people's congresses and villagers' committees in the project areas; widely distributing "public participation questionnaire" to the units and villagers in the project-involved regions; collecting attitudes and opinions of the surveyed units and villagers toward project construction; the total number of the questionnaires issued to each county is no less than 60 copies.

1. Questionnaire issued to the groups: In view of the features that implementing this project involves many environmental elements and requires professional supports, we release "public participation questionnaire" to construction units, the government, enterprises and other departments of EIA advisory evaluation areas.

2. Questionnaire for Individuals: In order to fully understand the attitudes and opinions of the public in the project-involved area, “EIA Public Participation Questionnaire on Jiangxi Agricultural Produce Circulation System Construction Project funded by the World Bank” shall be distributed to the people in the affected area. The project is described in detail in the questionnaire, and the surveyors explain the problems residents concern and not understand, and ask the respondents to complete the form independently. The "Public Participation Questionnaire" can be found in the Annex.

3. Feedback and treatment: questionnaire recovery rate should be above 90%, and take a statistical analysis on the survey results to find what the public concern then answer them.

Publicity details of each county

(1) Anyuan

1) publicity for the first time

Time: 10 work days from April 17, 2015

Website: Environmental Protection Bureau of Anyuan District http://www.ayhbj.com/shownew.asp?ID=117

Public participation survey on site

1）Publicity for second time

Time: 10 work days from April 27,2015

Website: http://www.ayhbj.com/shownew.asp?ID=118

(2)Huichang

1)publicity for the first time

Time: from August 5 to 18, 2014

Website:

http://www.huichang.gov.cn/hcgov/zwzx/gsgg/201408/t20140805_231775.html

1）Publicity for the second time

Time: Feb.2, 2015

Website:

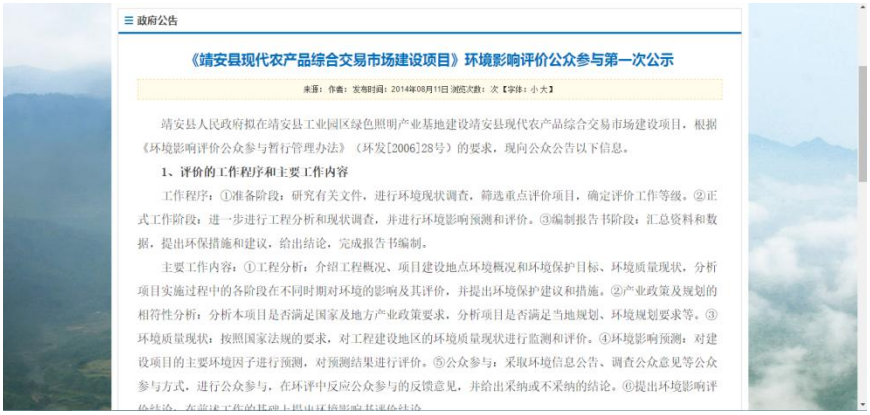
http://www.huichang.gov.cn/hcgov/zwzx/gsgg/201502/t20150202_245801.html

（3）Jing’an

1） Publicity for the first time

Time: 10 work days from Aug.8, 2014

Website: http://www.jxjaxzf.gov.cn/Item/17647.aspx



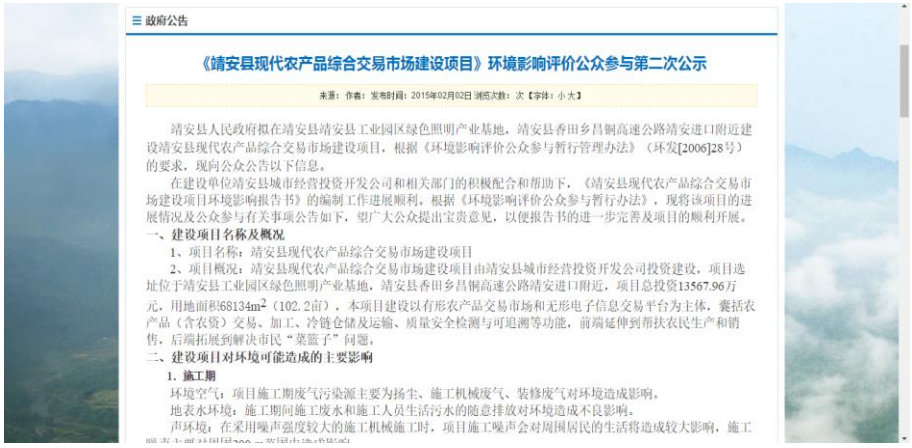
Public participation survey on site

2）Publicity for the second time

Time: Feb.2, 2015

Website:

http://www.jxjaxzf.gov.cn/Item/19317.aspx



政府公告

《靖安县现代农产品综合交易市场建设项目》环境影响评价公众参与第二次公示

来源：作者：发布时间：2015年02月02日 浏览次数：次【字体：小 大】

靖安县人民政府拟在靖安县靖安县工业园区绿色照明产业基地，靖安县香田乡昌铜高速公路靖安进口附近建设靖安县现代农产品综合交易市场建设项目，根据《环境影响评价公众参与暂行管理办法》（环发[2006]28号）的要求，现向公众公告以下信息。

在建设单位靖安县城市经营投资开发公司和相关部门的积极配合和帮助下，《靖安县现代农产品综合交易市场建设项目环境影响报告书》的编制工作进展顺利。根据《环境影响评价公众参与暂行办法》，现将该项目的进展情况及公众参与有关事项公告如下，望广大公众提出宝贵意见，以便报告书的进一步完善及项目的顺利开展。

一、建设项目名称及概况

1、项目名称：靖安县现代农产品综合交易市场建设项目

2、项目概况：靖安县现代农产品综合交易市场建设项目由靖安县城市经营投资开发公司投资建设，项目选址位于靖安县工业园区绿色照明产业基地，靖安县香田乡昌铜高速公路靖安进口附近，项目总投资13567.96万元，用地面积68134m²（102.2亩），本项目建设以有形农产品交易市场和无形电子信息交易平台为主体，囊括农产品（含农资）交易、加工、冷链仓储及运输、质量安全检测与可追溯等功能，前端延伸到帮扶农民生产和销售，后端拓展到解决市民“菜篮子”问题。

二、建设项目对环境可能造成的主要影响

1. 施工期

环境空气：项目施工期废气污染源主要为扬尘、施工机械废气、装修废气对环境造成影响。

地表水环境：施工期间施工废水和施工人员生活污水的随意排放对环境造成不良影响。

声环境：在采用噪声强度较大的施工机械施工时，项目施工噪声会对周围居民的生活将造成较大影响，施工

（4）Jiujiang

1）Publicity for the first time

2）Time: Nov.22,2016

3）Website: http://www.jjepb.cn/zwgk/xwdt/hbgg/201611/t20161122_1653395.htm

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《鄱阳湖九江水产城建设项目》环境影响评价公众参与第一次公示

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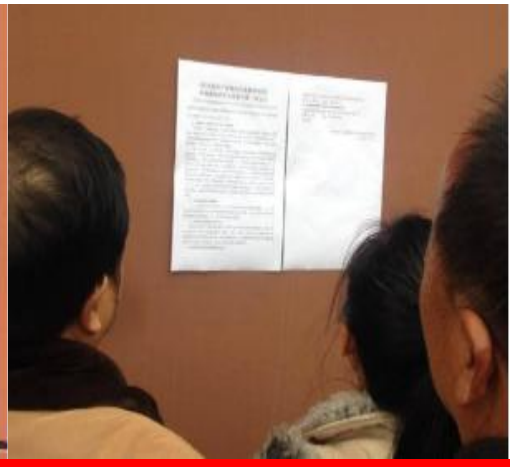
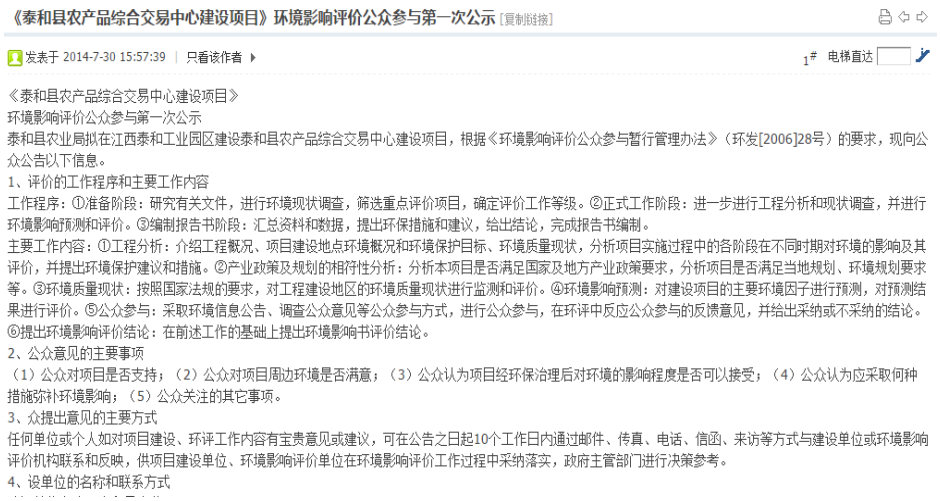
site  

6.Taihe

Time: July 30, 2014

Website：http://www.jxth.com/forum.php?mod=viewthread&tid=104717



《泰和县农产品综合交易中心建设项目》环境影响评价公众参与第一次公示 [复制链接]

发表于 2014-7-30 15:57:39 | 只看该作者 1# 电梯直达

《泰和县农产品综合交易中心建设项目》
环境影响评价公众参与第一次公示
泰和县农业局拟在江西泰和工业园区建设泰和县农产品综合交易中心建设项目，根据《环境影响评价公众参与暂行管理办法》（环发[2006]28号）的要求，现向公众公告以下信息。
1、评价的工作程序和主要工作内容
工作程序：①准备阶段：研究有关文件，进行环境现状调查，筛选重点评价项目，确定评价工作等级。②正式工作阶段：进一步进行工程分析和现状调查，并进行环境影响预测和评价。③编制报告书阶段：汇总资料和数据，提出环保措施和建议，给出结论，完成报告书编制。
主要工作内容：①工程分析：介绍工程概况、项目建设地点环境概况和环境保护目标、环境质量现状，分析项目实施过程中的各阶段在不同时期对环境的影响及其评价，并提出环境保护建议和措施。②产业政策及规划的相符性分析：分析本项目是否满足国家及地方产业政策要求，分析项目是否满足当地规划、环境规划要求等。③环境质量现状：按照国家法规的要求，对工程建设地区的环境质量现状进行监测和评价。④环境影响预测：对建设项目的主要环境因子进行预测，对预测结果进行评价。⑤公众参与：采取环境信息公告、调查公众意见等公众参与方式，进行公众参与，在环评中反应公众参与的反馈意见，并给出采纳或不采纳的结论。⑥提出环境影响评价结论：在前述工作的基础上提出环境影响书评价结论。
2、公众意见的主要事项
（1）公众对项目是否支持；（2）公众对项目周边环境是否满意；（3）公众认为项目经环保治理后对环境的影响程度是否可以接受；（4）公众认为应采取何种措施弥补环境影响；（5）公众关注的其它事项。
3、众提出意见的主要方式
任何单位或个人如对项目建设、环评工作内容有宝贵意见或建议，可在公告之日起10个工作日内通过邮件、传真、电话、信函、来访等方式与建设单位或环境影响评价机构联系和反映，供项目建设单位、环境影响评价单位在环境影响评价工作过程中采纳落实，政府主管部门进行决策参考。
4、设单位的名称和联系方式

7.Yushan

Time: April 30, 2015

Website: http://www.zgys.gov.cn/public/news.asp?articleid=26633

奋力跻身全省发展第一方阵 早日建成全省经济强县和全国旅游名城

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《玉山县农产品交易中心建设项目建设项目》环境影响评价公众参与第二次公示

发布日期：2015-4-30 阅读次数：3846 作者：佚名

玉山县市场物业管理局拟在玉山县建设玉山县农产品交易中心建设项目，根据《环境影响评价公众参与暂行管理办法》（环发[2006]28号）的要求，现向公众公告以下信息。

在建设单位玉山县市场物业管理局和相关部门的积极配合和帮助下，《玉山县农产品交易中心建设项目环境影响报告书》的编制工作进展顺利。根据《环境影响评价公众参与暂行办法》，现将该项目的进展情况及公众参与有关事项公告如下，望广大公众提

8.Pengze

1） Publicity for the first time

Time: From Nov.3 to Nov.13, 2014

Website: http://www.pengze.gov.cn/News_View.asp?NewsID=15515

Public participation survey on site

2）Publicity for the second time

Time: 10 work days from Dec.8,2014

Website :http://www.pengze.gov.cn/News_View.asp?NewsID=15516

10.3 Analysis of Survey Results

10.3.1 Survey Statistics Results of the First Public Participation

1. Composition and Proportion of the Surveyed Subjects

About two weeks after the first publicity, 1320 public opinions feedback forms were

issued for the first time, and 1320 were recovered with a recovery rate of 100%, of which there were a total of 1100 opinions feedback forms for individuals and 1,100 were recovered; there were a total of 220 opinions feedback forms for social groups and organizations, and 220 were recovered.

(1) Individuals

This public participation survey mainly involves the people in the affected area around the project. The occupation, gender, age, ethnicity and education of the surveyed subjects are shown in Table 10.3-1.

Table 10.3-1 Composition of Public Survey Objects for Environmental Impact Assessment of the Construction Project

Item	Category	Number (people)	Proportion (%)	Item	Category	Number (people)	Proportion (%)
Age	30 and below	137	12	Gender	Male	945	86
	31-40	298	27		Female	155	14
	41-50	410	37	Occupation	Farmers	863	78
	51-60	185	17		Self-employed people	31	3
	61and above	62	6		Cadre	145	13
	Blank	8	1		Others	61	6
Ethnicity	Han	1100	100	Education	Undergraduate and above	49	4
					College and secondary vocational school	184	17
					Senior high school	100	9
					Junior high school	572	52

					Primary school	187	17
					Illiteracy	8	1

As it can be seen from Table 10.3-1, the public survey involves people from all walks of life, including the farmer and cadres in the affected scope of the project. Their ages are from youth, middle-age and old-age, and their education level are from primary school to undergraduate college level. Therefore, it can be considered that this survey is representative and extensive with high randomness and credible results.

2. Survey Statistics Results

See the survey statistics results in Table 10.3-3 and Table 10.3-4.

Table 10.3-3 Summary of Public Opinions on the Proposed Project (Individuals)

Survey Contents		**Opinion Statistics**		
Serial No.	**Questions**		**Number (people)**	**Effective Questionnaire Proportion (%)**
1	Do you know that the Jiangxi Agricultural Products Circulation System Construction Project financed by the World Bank loans is carried out in your area?	Know	1085	98.64
		Not know	15	1.36
		Not remember	0	0.
		Others	0	0
2	Where did you get the information?	Government Notice	1002	91.09
		News Media	54	4.91
		Website	24	2.18
		Others	25	2.27
3	What is your degree of attention	Very much	947	86.09

Survey Contents		Opinion Statistics		
	to the project?	General	126	11.45
		Very little	36	3.27
		Not at all	1	0.09
4	What impact do you think this project will have on the local ecological environment?	Positive impact	923	83.91
		Negative impact	13	1.18
		No impact	153	13.91
		Not know	12	1.09
5	What do you think is the greatest environmental impact that this project will bring?	Atmospheric Environment	364	33.09
		Water Environment	110	10.00
		Ecological environment	466	42.36
		Acoustic environment	169	15.36
6	What impact do you think this project will have on your personal and family life?	Positive big impact	911	82.82
		General impact	144	13.09
		Small impact	40	3.64
		Negative impact	5	0.45
7	What impact do you think this project will have on local economy and society?	Positive big impact	1008	91.64
		General impact	78	7.09
		Small impact	11	1.00

Survey Contents		Opinion Statistics		
		Negative impact	0	0
8	Considering the favorable and adverse effects of the project construction, how do you think of this project?	More advantages than disadvantages, the project is feasible	1066	96.91
		Equal advantages and disadvantage, hard to choose.	18	1.64
		More disadvantages than advantages, the project is not feasible.	5	0.45
		Not know	11	1.00
9	What is your attitude towards this project?	Support	1089	99.00
		Neutral	10	0.91
		Not support	0	0
		Don’t care	1	0.09
10	What kind of survey do you want to participate in?	Questions and Answers	761	69.18
		Questionnaire Interviews	179	16.27
		Discussions	132	12.00
		Others	23	2.09
11	Which way of information disclosure do you like?	Government Notice	966	87.82
		News Media	90	8.18
		Website	38	3.45

Survey Contents		Opinion Statistics		
		Others	6	0.55
12	Other comments or suggestions on the implementation of the project:	1. To be implemented as soon as possible 2. Make Good services for livestock and epidemic prevention 3. Hope to invest and construct in my village, strong support 4. Hope to start soon, become better and better		

Table 10.3-3 Individuals Survey Statistics Results indicate that:

(1) Questionnaire on the individuals' awareness of the project: 98.64% people know the project while 1.36% people do not know the project. This shows that the publicity of this project in the implementation area is large and people's attention to such kind of project is great.

(2) On the sources of information: 91.09% of the masses' source of information is from Government Notice, this is because the project has been announced to the public on the government website of all counties in the early stage; 4.91% of the masses' sources of information is from News Media, which has something to do with the publicity of the local agricultural bureau in the local news media.

(3) In terms of the degree of attention to the project: 86.09% of the local people pay high attention to such kind of project because the facilities of the Jiangxi Agricultural Circulation System Construction Project financed by the World Bank loans will bring the local people to get rich, which is closely related to the life of local villagers, therefore, they pay high attention to the project.

(4) In terms of the impact of the project on the local ecological environment: 83.91% of the respondents believe that the implementation of the project will have a positive impact, 13.91% believe it will have no impact, and 1.18% of the respondents believe that it will have a negative impact.

(5) The biggest environmental impact on the project: 42.36% people think it will be ecological impact, 33.09% people think it will be atmospheric environmental impact, 15.36% people think it will be acoustic environmental impact and 10% people think it will be water

environmental impact.

(6) In terms of the survey of the impact of the project on personal and family life: 82.82% people think it has positive impact, 13.09% people think it has general impact, and 0.45% people think it has positive impact.

(7) The survey of the impact of the project on local economy and society: 91.64% people think it has positive impact, 7.09% people think it has general impact, and no people think it has negative impact.

(8) The survey statistic of favorable and adverse effects from the construction of the project: 96.91% people think that there are more advantages than disadvantages, which indicates that the respondents believe the project implementation will bring benefits.

(9) The survey statistic of attitudes towards the construction project: there is objection to the project.

10) On what kind of survey do people want to participate in: 69.18% people chose Questions and Answers, 16.27% chose Questionnaire Interviews, and 12% chose Discussions. This provides a direction for the second survey.

10.3.2 Survey Statistics Result of the Second Public Participation

1. Composition and Proportion of the Surveyed Subjects

About two weeks after the first publicity, 1320 public opinions feedback forms were issued for the second time, and 1320 were recovered with a recovery rate of 100%, of which there were a total of 1100 opinions feedback forms for individuals and 1,100 were recovered; there were a total of 220 opinions feedback forms for social groups and organizations, and 220 were recovered.

(1) Individuals

This public participation survey mainly involves the people in the affected area around the project. The occupation, gender, age, ethnicity and education of the surveyed subjects are shown in Table 10.3-5.

Table 10.3-5 Composition of Public Survey Objects for Environmental Impact Assessment of the Construction Project

Item	Category	Number (people)	Proportion（%）	Item	Category	Number (people)	Proportion（%）
Age	30 and below	111	10.09%	Gender	Male	985	89.55%
	31-40	331	30.09%		Female	115	10.45%

	41-50	416	37.82%	Occupation	Farmer	918	83.45%
	51-60	172	15.64%		Self-employed people	57	5.18%
	61 and above	70	6.36%		Cadre	110	10.00%
Ethnicity	Han	1100	100		Others	15	1.36%
				Education	Undergraduate and above	13	1.18%
					College and secondary vocational school	112	10.18%
					Senior high school	97	8.82%
					Junior high school	670	60.11%
					Primary school	207	18.82%
					Illiteracy	1	0.09%

As it can be seen from Table 10.3-5, the public survey involves people from all walks of life, including the farmer and cadres in the affected scope of the project. Their ages are from youth, middle-age and old-age, and their education level are from primary school to undergraduate college level. Therefore, it can be considered that the survey is representative and extensive with high randomness and credible results.

(2) Opinions feedback forms from social groups and organizations: The survey list of social groups includes 220 organizations in total, including various government departments and institutions, enterprises and public institutions as well as village committees, etc. The surveyed organizations are the same as those of the first time. The survey list is shown in Table 10.3-2.

2. See the survey statistics results in Table 10.3-6 and Table 10.3-7.

Table 10.3-6 Summary of Public Opinions on the Proposed Project (Individuals)

Survey Contents		**Opinion Statistics**		
Serial	**Questions**		**Number**	**Effective**

No.			**(people)**	**Questionnaire Proportion (%)**
1	Do you know that the Jiangxi Agricultural Products Circulation System Construction Project Financed by the World Bank Loans is carried out in your area?	Know	1094	99.45%
		Not know	5	0.46%
		Not remember	0	0
		Others	1	0.09%
2	Where did you get the information?	Government Notice	995	90.45%
		News Media	37	3.36%
		Website	10	0.91%
		Others	68	6.18%
3	What is your degree of attention to the project?	Very much	948	86.18%
		General	142	12.91%
		Very little	7	0.64%
		Not at all	3	0.27%
4	What impact do you think this project will have on the local ecological environment?	Positive impact	841	76.45%
		Negative impact	0	0
		No impact	248	22.55%
		Do not know	11	1.00%
5	What do you think is the greatest environmental impact that this project will bring?	Atmospheric Environment	410	37.27%
		Water Environment	124	11.27%
		Ecological Environment	460	41.82%
		Acoustic Environment	254	23.09%
6	What impact do you think this project will have on your personal and family life?	Big positive impact	918	83.45%
		General impact	110	10.00%
		Small impact	72	6.55%
		Negative impact	0	0
7	What impact do you think this project will have on local economy and society?	Big positive impact	942	85.65%
		General impact	111	10.09%
		Small impact	47	4.27%
		Negative impact	0	0
8	Do you think the measures proposed in this draft EIA	Very reasonable and feasible	863	78.45%

	report are feasible?	Reasonable and feasible	225	20.45%
		Not know	12	1.09%
		Unreasonable or unfeasible	0	0
9	Considering the favorable and adverse effects of the project, how do you think of it?	More advantages than disadvantages, the project is feasible	1100	100%
		Equal advantages and disadvantage, hard to choose	0	0
		More disadvantages than advantages, the project is not feasible	0	0
		Not know	0	0
10	What is your attitude towards this project?	Support very much	948	86.19%
		Support	147	13.36%
		Neutral	5	0.45%
		Not support	0	0
11	Other comments or suggestions on the implementation of the project:	Hope it can be implemented and completed as soon as possible; Increase the intensity of training; Agreed to the implementation, so that more people can benefit from it.		

Table 10.3-6 Individuals' survey results indicate that:

(1) Questionnaire survey on the individuals' awareness of the project: 99.45% people know the project and 0.46% people do not know the project. This shows that the local people have a higher awareness of the project through the publicity and participation of the project draft.

(2) On the sources of information: 90.45% people's sources of information is from Government Notice, this is because the project has been announced to the public on the government website of all counties in the early stage; 3.36% people's sources of information

is from News Media, which has something to do with the publicity of the local agricultural bureau in the local news media. Other sources are related to the public participation in the Environmental Impact Assessment and Social Impact Assessment.

(3) In terms of the degree of attention to the project, 86.18% of the local people, especially the villagers of the project implementation area, pay high attention to such kind of project, because the facilities of the Jiangxi Agricultural Circulation System Construction Project financed by the World Bank Loans will bring the local people to get rich, which is closely related to the life of local villagers, therefore, they pay high attention to the project. 12.91% people pay general attention.

(4) In terms of the impact of the project on the local ecological environment: 76.45% of the respondents believe that the implementation of the project will have a positive impact, while 22.55% believe it will have no impact. Through the disclosure and publicity of the draft of the EIA report, the masses have learned about the preliminary analysis of the local environmental impact after the implementation of the project, so that the masses can truly understand the various preventive measures of the project, thus no respondent thinks the project will have a negative impact on the local environment.

(5) The survey of the biggest environmental impact on the project: 41.82% people think the biggest environmental impact is ecological impact, 37.27% people think it is atmospheric environmental impact, 23.09% people think it is acoustic environmental impact and 11.27% people think it is water environmental impact.

(6) In terms of the survey of the impact of the project on personal and family life: 83.45% of the respondents believe that the implementation of the project will have a positive impact on their personal and family life, and the negative impact will be 0. This project is the construction project of the circulation system of agricultural products in Jiangxi, which will bring more opportunities for the local poor villagers' families to get rid of poverty after the implementation.

(7) The survey of the impact of the project on local economy and society: 85.64% of the respondents believe that the implementation of the project will have a positive impact on the local economy and society, and the negative impact will be 0. The project is mainly based on the development of local economy and society, making 85.64% of the respondents believe that it will have a positive impact on the local economy and society.

(8) Survey of the feasibility of the proposed measures for the draft EIA report: 78.45% people think it is very reasonable and feasible, and none thinks it is unreasonable or

unfeasible. Through the public announcement of the draft of the EIA, the local villagers have had a better understanding of the environmental impact and the environmental protection measures taken after the implementation, and the local villagers understand that as long as the implementation of the project is in accordance with the requirements, there will be little impact on the local environment.

(9) Survey of considering about the advantages and disadvantages of the project: 100% of the respondents believe that there are more advantages than disadvantages, so the project is feasible. This shows that after the publicity of the draft of the EIA, the local villagers have really understood the specific content of this project, how to implement it, how to control the environmental impact and so on.

(10) The survey statistic of attitudes towards the construction project: there is objection to the project.

Table 10.3-7 Summary of Public Opinions on the Proposed Project (Organizations)

Survey Contents		**Opinion Statistics**		
Serial No.	**Questions**		**Number**	**Effective Questionnaire Proportion (%)**
1	Does your organization know that the Jiangxi Agricultural Products Circulation System Construction Project Financed by the World Bank Loans is carried out in your area?	Know	220	100%
		Not know	0	0
		Not remember	0	0
		Others	0	0
2	Where did your organization get the information?	Government Notice	211	96%
		News Media	12	5%
		Website	7	3%
		Others	8	4%
3	What is the degree of attention paid by your organization to this	Very much	210	95%
		General	10	5%

	project?	Very little	0	0
		Not at all	0	0
4	What impact does your organization think this project will have on the local ecological environment?	Positive impact	198	90%
		Negative impact	0	0
		No impact	22	10%
		Not know	0	0
5	What does your organization think is the greatest environmental impact that this project will bring?	Atmospheric Environment	72	33%
		Water Environment	27	12%
		Ecological Environment	81	37%
		Acoustic Environment	76	35%
6	What impact does your organization think this project will have on your organization?	Big positive impact	191	87%
		General impact	23	10%
		Small impact	6	3%
		Negative impact	0	0
7	What impact does your organization think this project will have on local economy and society?	Big positive impact	208	95%
		General impact	6	3%
		Small impact	6	3%
		Negative impact	0	0
8	Does your organization think the measures proposed in this draft EIA report are feasible?	Very reasonable and feasible	192	87%
		Reasonable and feasible	28	13%
		Not know	0	0

		Unreasonable or unfeasible	0	0
9	Considering the favorable and adverse effects of the project, how does your organization think of it?	More advantages than disadvantages, the project is feasible.	220	100%
		Equal advantages and disadvantage, hard to choose.	0	0
		More disadvantages than advantages, the project is not feasible.	0	0
		Not know	0	0
10	What is your organization's attitude towards this project?	Support	205	93%
		Neutral	15	7%
		Not support	0	0
		Doesn't care	0	0
11	Other comments or suggestions on the implementation of the project:	None		

Table 10.3-7 Organizations' survey results indicate that:

(1) Questionnaire survey on the organizations' awareness of the project: 100% know the project. This shows that organizations' attention to such projects is very high due to the intensive publicity of the project in the implementation area.

(2) On the sources of information: 96% of the surveyed organizations got the information from Government Notice, this is because the project has been announced to the public on the government website of all counties; 5% got the information from News Media and 3% got the information from Website, which has something to do with the publicity of the local agricultural bureau in various local news media.

(3) In terms of the degree of attention to the project, 95% of the local organizations pay

high attention to such kind of project, none is unconcerned about it.

(4) In terms of the impact of the project on the local ecological environment: 90% of the surveyed organizations believe that the implementation of the project will have a positive impact, and no one believe it will have negative impact. Through the publicity of the draft of the EIA report, the local organizations have learned the main contents of the project and the preliminary measures to be taken will have no impact on the local ecological environment after the implementation of the project.

(5) The greatest environmental impact that the organization thinks this project will bring: 37% of the surveyed organizations think the biggest environmental impact is ecological impact, followed by acoustic environmental impact and atmospheric environmental impact.

(6) Impact of the project on the organization: 87% of the organizations believe that it will have positive impact, 10% believe that it will have general impact, and no one believes that it will have negative impact.

(7) The survey of the impact of the project on local economy and society: 95% of the organizations believe that it will have positive impact, 3% believe that it will have general impact, and no one believes that it will have negative impact.

(8) Survey of the feasibility of the proposed measures for the draft EIA report: 87% of the organizations think it is very reasonable and feasible, and no one thinks it is unreasonable or unfeasible.

(9) The survey statistics of favorable and adverse effects from the construction of the project: 100% of the organizations think that there are more advantages than disadvantages, which indicates that the respondents believe the project implementation will bring benefits.

(10) The survey statistic of attitudes towards the construction project: there is objection to the project.

10.3.3 Public Participation Symposium

From July 2015 to April 2016, the EIA Preparation Organization carried out the research work on 1,200 people in 25 villages of 21 towns in 8 project counties (cities and districts), issued the Draft EIA Report to the relevant personnel for reviewing and adopted the multi-stage random sampling method for sampling. At the same time when the Public Participation Questionnaire was issued, the EIA had held a symposium for public participation and consultation in two villages randomly selected from the project counties. The villagers' enthusiasm for public participation was very high and all the villagers expressed their ideas and suggestions for the implementation of the project. The main

results of the discussion are as follows: All the villagers support the implementation of the project, welcome the agricultural products circulation system construction project to be settled in their villages, voluntarily actively participate in the implementation of the project, hope that the project will be implemented as soon as possible so as to promote local agricultural development and promote the local to get rich; Hope to strengthen the rural infrastructure construction, to strengthen the allocation of tractor-plowing equipment, to increase production technology training for villagers, to improve the level of agricultural production technology, to increase the income of farmers, to improve the production and living environment for the rural poor, and to promote the development of industry and the adjustment of agricultural structure in the project area, etc.

10.4 Public Participation Conclusion

From the questionnaire survey statistics, it can be seen that the public support for the construction of the project is up to 100% and there is no objection to the implementation of the project, indicating that the public's attitude towards the construction of the project is positive. During the period of information release, no objections were received from the masses or the organizations. The majority of villagers and cadres believe that the implementation of the project will greatly improve the production and living environment of the rural poor in the project counties, and will promote the development of industry and the adjustment of agricultural structure in the project area. The implementation of the project can promote the development of the secondary industry and the tertiary industry of the project area, create a large number of employment opportunities, and promote regional economic development and the rural poor to get rid of poverty. They hope that the project will be implemented as soon as possible. Therefore, it can be seen that the local people are actively supporting the construction of this project.

For details of public consultation, please refer to Table 10.4-1. The table is mainly a list of the generalization and summarization of the environmental problems raised by the participating consultants.

10.5 Information Disclosure

10.5.1 Disclosure in the Department of Agriculture

(1) Disclosure time: November 21, 2016

(2) Website：http://www.jxagri.gov.cn/News.shtml?p5=315562

Information Disclosure of Environmental Impact Assessment of Jiangxi Agricultural Products Circulation System Construction Project Financed by the World Bank Loans

10.5.1 Disclosure in the Newspaper

(1) Disclosure time: November 22, 2016

(2) Newspaper: Information Daily

世界银行贷款江西农产品流通体系建设项目环境影响评价信息公示

世界银行贷款江西农产品流通体系建设项目《环境管理计划》、《环境安全保障框架》文件初稿已基本完成，依据《中华人民共和国环境影响评价法》和《环境影响评价公众参与暂行办法》（环发2006[28号]）和世界银行安全保障政策《环境评价》（OP4.01）的相关规定，现对《环境管理计划》、《环境安全保障框架》初稿进行信息公开。公众可通过登入江西省农业厅官网http://www.jxagri.gov.cn/Index.shtml厅网站查看项目文件初稿，并提出关于该项目建设及环评工作的意见看法。

公示单位：核工业二七零研究所

Information Disclosure of Environmental Impact Assessment of Jiangxi Agricultural Products Circulation System Construction Project Financed by the World Bank Loans

Table 10.4-1 List of Public Consultations

Time	Place	Materials provided during the consultation	Participating Consultants	Questions Proposed	How to Respond (for example, whether the relevant measures have been included in the design or EIA)
2014.6~2015.7	Government website of the eight counties (cities, districts) and township village committee	Project Overview, EIA Work Key Points	Nearby residents and online interested people		Have been included in the EIA
2014.12~2015.5	PMO Meeting Room of the eight counties (cities, districts) in the project area	EIA Work Outline	2 staff from County the Environmental Protection Bureau, 2 staff from the Bureau of Commerce, 2 staff from the Bureau of Industry and Commerce, 2 staff from the City Administration Bureau, and 50 villager representatives	Waste water and noise measures during construction period must be proposed in the EIA	Have been included in the EIA
2015.7~2016.4	Government website of the eight counties (cities, districts) and township village committee	Project Draft EIA Report	Nearby residents and Online Interested People		Have been included in the EIA
2014.6~2016.4	Project surrounding village committee of the eight counties (cities, districts)	Public Participation Questionnaire	Nearby resident, County Environmental Protection Bureau, Bureau of Commerce, Bureau of		Have been included in the EIA

			Industry and Commerce		
2015.12 ~2016.4	PMO Meeting Room of the eight counties (cities, districts) of the project area	Draft EIA Document	1 staff from the County Environmental Protection Bureau, 1 staff from the Bureau of Commerce, 1 staff from the Bureau of Industry and Commerce, 1 staff from City Administration Bureau, and 100 villager representatives	The villager representatives proposed: The noise of the trading market during the operation must not disturb the people; Staff from various organizations proposed: Waste water and waste gas measures during the project construction period must be specific	Have been included in the EIA
2016.11.21	Website of Department of Agriculture of Jiangxi Province	Full Text of the EIA Document	Online interested people		

Appendix 1: Main Environmental Standards

Table 1-1: Sewage discharge standard (GB8978-1996) Unit: mg/l (excluding that of PH)

Items		**PH**	**SS**	**COD_{Cr}**	**BOD_5**	**Ammonia nitrogen**	**Animal and vegetable oil**
Integrated Wastewater Discharge Standard (GB8978-1996)	Grade 1	6～9	70	100	30	15	10
	Grade 3	6～9	400	500	300	-	100

Table 1-2: The Integrated Emission Standard of Air Pollutants

Pollutants	Maximum acceptable emission concentration: mg/m^3	Maximum acceptable emission rate: kg/h		Unorganized emissions monitoring concentration limit	
		Emission pipe height: m	Grade 2	Monitory points	Concentration: mg/m^3
Particulate matters	120	60	85	Maximum ambient concentration	1.0
Nitrogen oxide	240	90	40		0.12
NMHC	120	40	100		4.0

Table 1-6: Emission standard of odor pollutants（GB14554-93）

Pollutants	Unit	Standard
Ammonia	mg/m^3	1.0
Sulfuretted hydrogen	mg/m^3	0.03

Table 1-4: Environmental noise emission standard in building construction sites (GB12523-2011)

Standard value LAeq(dB)	
Daytime	Night time
70	55

Table 14: Environmental noise emission standard in industrial enterprises boundary（GB12348-2008）

Time interval	Evaluation standard dB(A)	
	Day time	Night time
Grade 2	60	50
Grade 3	65	55

Other standards

(1) Major agricultural products preliminary processing facilities construction of the project;

Good Manufacturing Practices of tea processing enterprises

Standard technique regulations of tea

General Good Manufacturing Practices for cut vegetables processing

Standards and technical regulations of green vegetables

Enforcement manual of the production, processing and storage standards of agricultural products

Management measures of the nuisance free agricultural products

(2) Infrastructure and support services as well as training and capacity building sub-project

Unified Standard for Reliability Design of Building Structures（GB50068-2001）

Building seismic fortification classification standards（GB50223-2008）

Architectural structure load standards（GB500009-2001）Edition 2006

Code for seismic design of building（GB50011-2001）Edition 2008

Code for design of building foundation（GB50007-2002）

Code for building foundation treatment technology（JGJ79-2002）

Code of design of concrete structures（GB50010-2002）

Design code for steel structures（GB50017-2003）

Codes of Technique of Door-type Steel Support Structure for Light Houses（CECS102-2002）

Technical code for building pile foundation（JGJ94-2008）

Code for design of masonry structures（GB5000.-2001）

Code of design of concrete structures (GB50010-2002)

Construction standards of farmer's markets (commerce department)

Code for fire protection design of buildings (GB50016-2014）

Code for the total plane design of industrial enterprises（GB50187-2012）

Appendix 2: General Environmental Management Specification for Construction Activities

1 Review

First, the construction company and construction workers should implement the mitigation measures proposed in this Specifications, so as to prevent inconvenience and impact on the lives of local people during the project implementation process, and reduce the environmental impact in the period of project construction and operation;

Second, remedies which can not be effectively implemented in the course of construction shall be implemented upon completion of the project:

1. Timely restoration of vegetation landscape shall be conducted in all the affected areas, such as tree planting and forestation, etc;

2. Debris and mud left by the construction shall be cleaned up so as to ensure smooth water system and water flow;

3. Leftover gravel waste shall be removed from the construction sites and the remaining construction materials shall be properly disposed.

2 Code of Conduct for Construction Workers and Environmental Standards

This section provides guidance on the behavior of construction workers in accordance with national and local regulations. Before construction, the construction company shall draw up a construction plan for the project and clarify the implementation rules following this Code in the plan. The construction of the project can be promoted only after the plan has been approved by the engineer responsible for the project.

2.1 Forbidden Acts:

The following acts are forbidden in the project construction site or surrounding venue:

1) Logging for any reason beyond the scope of project construction;

2) Hunting, fishing, catching wild animals and picking plants;

3) Using unapproved toxic materials, including lead-containing paint, asbestos, etc;

4) Affecting other art buildings and buildings of historical value;

5) Housing fires;

6) After-drinking construction.

2.2 Transportation

The selection of the route leading to the construction site shall be approved by the responsible engineer of the project. Select the appropriate means of transport according to the regional road level of the location and limit the load in order to prevent damage to local traffic roads and bridges. The construction company shall be responsible for repairing the damage caused to the local traffic road and bridge due to overloading, with the consent of the project responsible engineer.

The construction company shall not use vehicles with serious exhaust emissions and noisy vehicles. In the completed areas, noise reduction devices shall be installed and the normal operation of the devices shall be ensured.

Throughout the contract execution period, the construction company may, with the consent of the responsible engineer, take necessary traffic control measures.

2.3 Construction Workers and Construction Camps

The construction company should recruit local workers as far as possible and provide appropriate training.

The construction company shall construct temporary septic tanks for the workers living on the construction site, and shall focus on the treatment to avoid affecting the nearby rivers.

The construction company shall establish a system and method for the storage of construction materials and the generation and disposal of solid wastes.

The construction company shall arrange unified dining out for construction workers, or adopt meal delivery system.

The construction company shall ensure that the construction site and the material stacking site are in suitable locations, and are not within 500 meters of residential area, and shall ensure that the location of the asphalt manufacturing site is not more than 1000m away from the residential area. At the same time, the arrangement program shall be subject to the consent of the responsible engineer of the project.

The construction company shall excavate trenches around the construction site and set up sedimentation tanks or oil sumps at the exit.

The construction production and living quarters shall be arranged independently according to the sub-projects, and the sub-projects shall be arranged according to the actual conditions of the project in the place with higher position.

2.4 Waste Management and Soil Erosion

Solid waste, sanitation facilities and hazardous waste can be effectively controlled

through the implementation of the following measures:

2.4.1 Waste Management

1. Reduce the amount of waste required to be disposed of and removed;

2. Identify and classify the waste generated. If hazardous waste is generated, it must be stored, collected, transported and disposed of in accordance with appropriate procedures.

3. Identify and classify the treatment areas and clearly indicate the materials and substances allowed to be stored.

4. Construction waste (including excavated land) shall be transported to a designated site for storage and disposal (the site should be more than 300m away from rivers, lakes or wetlands). The solid waste recycling and separation classification system shall be set up at the designated disposal site to dispose of the rubbish and surplus building materials generated during the construction process.

2.4.2 Soil and Water Loss Control:

1. Minimize the use of damaged land, reinforce the damaged area that has been used as soon as possible, control drainage follow through the area, and carry out in situ treatment of sediment. Set up soil erosion control barriers around the excavation, pit well and road surface.

2. Protect the leaf layer of topsoil and its organic matter, and backfill to the damaged area so as to promote the growth of native plants. Cover the eroded and infertile area with the local grass and vegetation, or harden the soil surface of the area.

3. Make erosion control measures before the advent of the rainy season so as to better carry out the next construction. The appropriate erosion measures shall be made upon the completion of the engineering in each construction site.

4. Set up deposition control facilities in all construction sites so as to slow down runoff velocity, change the flow direction and deposit sediment before the vegetation restoration. These deposition control facilities include material piles, stone paths, settling ponds, straw bales, shrub fences and sludge slag piles, etc.

5. Prevent water from flowing into the construction site or interfering with the construction site through the laying of ditches, retaining roads, fresh grass fence, stacking stones and other measures.

6. Maintain and continue to use erosion control measures until the vegetation is fully restored.

7. If necessary, sprinkle water to the dirt road, excavation area, filler and soil areas to

reduce wind erosion.

2.4.3 Protection Areas:

Identify and classify equipment protection areas (more that 15m away from rivers, lakes and wetlands). Ensure that all equipments are used only within the defined protection areas. All spills should be handled in accordance with standard environmental procedures or guidelines.

2.5 Earthworks, Excavation and Fill Slope Engineering

Make reasonable arrangements for the construction of earthworks, especially during the rainy season. During the construction, solidness of the excavation and fill slope should be maintained at any time and the disturbance to the area outside the construction restricted area should be minimized. Especially in the rainy season, continuous construction should be carried out so as to complete the digging and filling works of the same section as soon as possible. Avoid the construction interruption due to rain and other reasons as far as possible, as it could result in erosion of the slope.

In order to protect the excavation and fill slope from erosion, cut-off ditches and drainage ditches shall be built at the top and bottom of the slope according to the drawings, and turf or other plants shall be planted. The cut-off ditches shall be built above the excavated slope to reduce erosion of slope from water runoff.

Excavated earth and rock and other materials that can not be used shall be transported to the designated site for treatment after obtaining the consent of the responsible engineer of the project.

The treatment site should not be located where landslides are likely to occur, nor should it affect other agricultural or private lands, while avoiding the stack from washing into surface water body by rainwater. Drainage ditches shall be set up around the stacking site under the direction of the engineer in charge of the project.

2.6 Set-up of Temporary Soil Mounding Site

1. Identify and classify the selection of temporary soil mounding site to ensure that the distance from the sensitive area (such as high steep slopes, easily eroded soil, areas where drainage can flow directly into the sensitive water body) is more than 15m.

2. Construction areas that have been built with drainage ditches should avoid soil material from washing into the blocked channel.

3. Once the work is completed, all construction waste residues should be removed from the construction site.

2.7 Construction Waste and Transportation

The construction company shall establish and implement the daily procedures for the disposal of waste in the construction sites and provide sufficient facilities for the disposal of construction waste.

Rubble gravel generated from removal of old buildings may be appropriately recycled and re-used as construction materials for other projects (such as the laying of roadbeds). These wastes shall be recycled and re-used after being identified and evaluated in the construction site, and approved by the project engineer. The construction company shall ensure the following three points:

1. No construction in the designated forest area;

2. No impact on natural water bodies;

3. No impact on endangered or rare plant communities

4. The construction company must not treat any waste in any environmentally sensitive area.

During the construction, residue or sludge piled the ground adjacent to the construction site shall be immediately removed. And the ground shall be restored to original appearance and obtain the approval of the project engineer.

Transportation arrangements shall be planned under the guidance of the project engineer in the whole construction period, including the preparation period, maintenance period, residue removal and cleaning period. And measures for handling emergencies shall be considered.

2.8 Safety Problems in Construction

It is the construction company's responsibility to protect the construction site and everyone around it, and avoid impact on their personal and property safety. It is the responsibility of the construction company to comply with national and local safety regulations and to take any necessary measures to avoid accidents, including the following 10 items:

1. Carefully and clearly set up pedestrian safety signs at the entrances and exits of the construction transportation roads and the construction sites;

2. Set up a sufficient number of traffic warning signs (including paint, frame, markers, etc.), road signs and protective railings to ensure pedestrian safety during construction;

3. Carry out safety training for construction workers prior to commencement of construction;

4. Provide personal protective equipment and clothing (goggles, gloves, masks, dust covers, helmets, etc.) to construction workers and require mandatory use;

5. There shall be a safety information bulletin board in each construction site;

6. Require all workers to be aware of various material and safety information, explain clearly to the construction staff the risks posed to them and their families from the use of various materials, especially to pregnant families or families planning pregnancies, and encourage workers to share relevant information;

7. Ensure that asbestos-containing materials or other toxic materials are handled by trained workers;

8. In case of heavy rain or other emergencies, construction shall be suspended;

9. Electrical equipment and mechanical equipment should be able to withstand a certain level of seismic impact.

2.9 Noise and Dust Control

To control the damage and dust, the construction company shall ensure the following points:

1. The speed of all construction vehicles on the road outside the site shall not exceed 25 km/h;

2. The speed of vehicles in the construction site shall not exceed 15 km/h;

3. Maintain the noise of machinery and equipment below 90 decibels as far as possible;

4. More stringent measures must be implemented in sensitive areas (including residential areas, hospitals, etc.) to prevent the generation of harsh noise;

5. Minimize production of dust and particulate matter so as to avoid the impacts on surrounding residents' living and commercial behaviors, and vulnerable groups shall be particularly protected (such as children, the elderly, etc.);

6. During the construction, working hours of all types of construction machinery must be reasonably arranged. A large number of high-noise equipments working at the same time shall be avoided as much as possible. Avoid the noise-sensitive time for the surrounding environment, high-noise equipments shall work as far as possible in the day, reduce night transport, and no night (22: 00 ~ 6: 00) construction. For construction activities that must be carried out at night, the approval of the relevant local environmental protection authorities shall be required.

7. Phased removal of plants to prevent large areas of exposure to wind;

8. Reduce the dust by sprinkling water appropriately in construction sites such as roads,

excavation areas, spoil grounds and other sites that may produce much dust;

9. Take correct measures to reduce the influence of noise and vibration caused by the construction on the surrounding environment of the construction site.

2.10 Removal of the existing waste dumps

During the period of the removal of the existing waste dumps, the construction unit shall take adequate measures to protect the workers and the public. These measures include:

1. Keep the cleanness in the transportation process to avoid road and atmospheric pollution caused by the overload of vehicles.

2. Provide protective equipment for all the workers, such as safety glasses, masks, safety helmets and safety shoes.

2.11 Removal of the existing buildings

During the period of the removal of the existing buildings, the construction unit shall take adequate measures to protect the workers and the public from the damage by the falling broken stones and slag gravels. These measures include:

1. Set aside a specific place for the dropping of waste or discharge chute to make the waste dump safely.

2. Control the process of sawing, digging, grinding, sanding and cutting to guide the falling of waste rocks in a reasonable anchoring way.

3. Keep the cleanness in the transportation process to avoid road and atmospheric pollution caused by the overload of vehicles.

4. Temporary dropping protection measures should be taken on the edge of working scaffolding, such as handrails and toe boards to prevent the falling of the waste.

5. When carrying out blasting work in the place where people gather or near other buildings, the personnel in all blasting impact regions should be evacuated to minimize the influence of slungshot and splashings by way of blasting mat or other deflection methods.

6. Provide protective equipment for all the workers, such as safety glasses, edge shields, masks, safety helmets and safety shoes.

2.12 Pipeline and road engineering

1. Take corresponding protective measures when the earthwork is piled up on the side of the road temporarily. Pay attention to the reasonable allocation of construction time during the construction period and avoid the concentration period of time of rainfall to shorten the exposure time as far as possible.

2. In order to prevent the water loss and soil erosion or rainwash caused by the construction entering into the excavated pipelines and affecting the project construction, straw bags of soil must be used for blocking and protection near the side of earth excavation to prevent the collapse of soil mass. In rainy season or windy day, colored striped cloth will be used to temporarily cover the surface soil.

3. Carry out section construction in pipeline and road engineering and complete the

excavation and backfilling as soon as possible.

4. Pay particular attention to set up temporary shortcut close to the construction of the public facilities. The materials' transportation should avoid rush traffic hour and relieve the pressure of urban traffic. When doing the construction near the villages, try to set up the special construction road to reduce the use of rural roads and avoid the damage of large-scale equipment and vehicles to the road.

5. Before the construction, inform the public of the project's construction time and road sections in advance and place warning signs and relevant signs. Illustrate the project content and construction time, ask for the public's understanding due to the inconvenience brought about by the construction and make announcement on the contacts and complaint hotline, etc.

2.14 Social impact

In order to reduce the adverse impact of construction on the social life, the construction unit should do the following points:

1. Inform the public of the information on the construction plans, environmental impact, construction shortcuts, temporary bus route, blasting and demolition timely.

2. Limit the construction at night. When the construction must be carried out at night, ensure that the night work should be arranged reasonably and meticulously. Inform the masses in the affected communities in advance in order to take necessary precautions.

3. If the construction leads to the failure of normal operation of public facilities (such as water pipes, electricity, telephone and bus routes) , inform the public by way of announcement in construction sites, bus stations and the affected areas at least five days in advance.

2.15 The handling when cultural relics and remains are found in the construction

In excavation and construction process, if historical sites, relics, cemeteries or personal graveyards are found, the following procedures should be followed:

1. Stop the construction activities in the location where they are found.

2. Describe and mark the location and areas.

3. Protect the scene in order to prevent the cultural relics from being damaged. When the removable cultural relics or sensitive fossil remains are found, protection personnel should be arranged to ensure the safety of the cultural relics until the relevant departments of the local government or the state administrative department of cultural relics take over them.

4. After the cultural relics are found, inform the patrolling supervising engineer within 24 hours, who will contact the relevant departments of the local government or the state administrative department of cultural relics.

5. Before the decision on the subsequent working procedures, the relevant departments of the local government or the state administrative department of cultural relics will protect and preserve the spot or the cultural relics. The experts of the state administrative department of cultural relics will issue the preliminary assessment report according to the the relevant assessment criteria on cultural heritage and they will analyze the value and importance of this

discovery from the aspects of aesthetics, history, science, society and economic prices respectively.

6. The relevant departments of the local government or the state administrative department of cultural relics will decide how to deal with this discovery, including how to modify the construction scheme (for example, when finding the irremovable cultural relics of great cultural and archaeological importance), how to preserve, repair and make use of cultural relics sites, etc.

7. The relevant departments of the local government will inform the construction project managers of the decision on handing the discovered cultural relics through written materials.

8. In order to protect the safety of cultural relics and remains, the construction work can be recovered with the approval of the local government or the state administrative department of cultural relics

2.16 Hazardous waste

If the construction site may produce hazardous waste or suspected hazardous waste, the construction unit needs to draw up a hazardous waste management plan. This plan should be approved by the project engineer, which is applicable to all staff involved in the operation and transportation work. The clearance and disposal of hazardous waste in the construction site should be handled by the personnel who are trained specially according to the national and provincial provisions or the internationally accepted procedures.

2.17 Health services and education on AIDS

The construction unit should provide basic first aid services and emergency rescue facilities for the workers, including the medical equipment and operating modes applicable to the individuals. The injured workers should achieve the degree of being treated before they are sent to the hospital.

The construction unit is responsible for drafting a prevention program to defend the spread of disease, especially the HIV/AIDS, preventing the spread between workers.

The construction unit should include a health plan outline in the construction plan and put forward proposals on the health of the construction workers, which needs the approval of project engineers before the project starts.

Appendix 3: Specific Protection Measures

Table: Environmental protection regulations and mitigation/prevention measures in infrastructure construction stage

Stage	Major adverse influence		Mitigation/prevention measures	Executor	Supervisor
Design period	The influence of project's site selection, occupied land and construction work on the surrounding sensitive points of the project		The design of fire-fight equipment and traffic safety should conform to the national regulations, codes and standards; The design scheme should contain the traffic safety, fire-fighting, waste water and garbage collection/disposal facilities that conform to requirements; All building materials for the infrastructure construction project should be purchased, and no stock ground or borrow area will be newly established; all the excavated cubic meter of earth and stone will be back-filled and no spoil ground will be built; besides, the project construction won't occupy basic farmlands, fertile land and soil or forest land and won't destroy the vegetarian.	Designer	PMO Development organization
Construction period	Ecological environment	The construction activities in the construction process such as excavation of cubic meter of earth and stone, land leveling	1. Scientifically arrange the construction sites, reasonably choose the construction period and try to avoid excavating cubic meter of earth and stone during the rainy days or season; Reasonably choose the construction procedures, namely, the excavated soil and stones are filled back or put into use in time and try to shorten the stacking time of temporary soil and stone materials; 0-30cm's mellow soil layer of the surface soil should be stripped or collected for the temporary use of cultivated land or forest land, which should be timely reclaimed after the construction ends; the earth material should try to be transported and laid as per use and reduce the possibility of loosening the soil. 2. Soil drainage ditches should be set around the site combining with the geographic and	Construction unit and the development, implementation and management units of the project	County environmental protection agency, Bureau of Housing and Urban, Forestry Bureau, Urban Administration Bureau and

		and stacking of spoil and rejected stone will destroy the vegetation and give rise to water and soil loss etc.	geomorphic conditions of the construction plant and soil grit chambers are set at the outlet of the drainage ditches to make the water catchment slow down in the grit chambers and precipitate the sediment. 3. Get the soil and water conservation and surface protection combined and the construction measures and vegetation measures combined; give play to the fast-action property and security effect of engineering measures; vegetation measures are the auxiliary measures of water conservation, which play a role in maintaining the water and soil conservation stably for a long term and meanwhile afforest and beautify the ambient environment of the project area. 4. Adopt scientific and reasonable water and soil conservation measures in the construction period and try to reduce occupying the land; tear down the temporary facilities in time after the construction ends. 5. Environmental protection publicity and education.		Agricultural Bureau
	Ambient air	Dusts caused by aggregate processing, concrete blending and material transportation, exhaust gas emission of transport vehicles, flying dust on the	1. Adopt advanced construction technologies and low-dust blasting technique; conduct wet crushing on the sanding system and concrete system; be equipped with dust collection device; control the vehicle speed, vehicle exhaust and coal combustion exhaust; water the roads in the construction areas in time; the construction team uses clean energies such as liquefied gas and electricity etc., and strengthens the greening of the construction areas and labor protection of constructors to reduce the influence on the ambient air. 2. During the construction period of the project, car washing platform should be set at the inside of the passageway of material and muck transport vehicles and the facility should conform to the following requirements: anti-overflowing base should be set around the car washing platform to prevent the waste water flowing over the construction site; set wastewater collection pit and grit chamber. When the vehicles drive away from the construction site, their tyres and bodies should be washed on the car washing platform and sludge shouldn’t be adhered on the surface of them.	Construction unit and the development, implementation and management units of the project	County environmental protection agency and Bureau of Housing and Urban

		roads, and residential energy resources for the construction team will create certain influence on the ambient air.	The height of the materials and mucks loaded in the vehicles shouldn't surpass the upper edge of the ledge of the vehicles and the car hoppers are covered with tarpaulin or airtight hoppers are adopted.		
	Solid waste	Waste slags of the engineering, building debris and household refuse etc.	**1. Cubic meter of earth and stone** (1) In the early stage of the construction period, the sites should be excavated and the project construction should make full use of the natural fall of the terrain and try to avoid high fill and deep cut. (2) The excavated cubic meter of earth can be used for land leveling in the post stage and the cubic meter of stone can be used in the irrigation and side ditches to avoid their random stacking in farmlands and further impacting the normal operation of agricultural production, water conservancy and irrigation ditches. (3) Reasonably arrange the temporary stacking site of cubic meter of earth and stone and try to get it far away from the surrounding (especially the down wind direction) sensitive points of the environment (peasant households); besides, get the temporarily stacked cubic meter of earth and stone compacted and grinded and covered with felt and set retaining wall and drainage facilities around the mounds to reduce the flying dust and water and soil erosion caused by the stacking of cubic meter of earth and stone to the maximum limit.	Construction unit and the development, implementation and management units of the project	County environmental protection agency, Bureau of Housing and Urban, Urban Administration Bureau and Sanitary Bureau

			(4) Set soil drainage ditches around the temporary muck stocking area and grit chambers at the outlet of the drainage ditches to make the water catchment slow down in the grit chamber and the sediment precipitated. **2. Building waste residue** (1) Conduct comprehensive classification and recycle to the recyclable wastes (scrap iron, steel scrap and material packaging bags are sold to the salvage station and crushed bricks are used as substrate materials of the roads). (2) The wastes that can't be recycled should be transported to the designated stacking site of building waste in time and they should be sealed during the process of transportation to avoid spattering. (3) Waterproof and anti-wind measures etc. should be provided for the temporary stacking. The household refuse of the constructors: A household refuse pond is set in the construction area which will be cleaned, collected and classified by specially-assigned persons and then regularly transported to the nearby household refuse landfill site for unified disposal.		
	Water environment	Production waste water	1. Wastewater of the artificial aggregate system: grit chamber+ flocculating settling pool and the disposed water is used for concrete blending and anti-dust watering for the construction, which won't be discharged out. 2. Washing waste water of the concrete system: settling pond+add flocculant for disposal+impounding reservoir; the waste water will flow into the impounding reservoir automatically after being precipitated for over 6 hours and then be used for concrete blending and anti-dust watering for the construction, which won't be discharged out. 3. Waste water of the foundation trench: grit chamber+ flocculating settling pool and the disposed water is used for concrete curing and blending and anti-dust watering for the	Construction unit of various sub-project counties (city, district) and the development, implementati	County Environmental protection Bureau and Water management department

			construction, which won't be discharged out. 4. The construction team uses latrine pit and the domestic sewage is used as agricultural fertilizer after being disinfected in the septic-tank.	on and management units of the project	
		Groundwater pollution	1. Strengthen observing the surrounding ground surface and building settlement; once any abnormal condition is discovered, pumping drainage of underground water and construction should be immediately stopped. 2. The working sites should be kept clean during the process of construction to avoid waste water and pollutants entering into the excavated grooves and forming sewage permeation. 3. If oil plants need to be stored on site, anti-seepage treatment should be made for the warehouse and measures should be adopted for both storage and usage to prevent oil plants from running out, dripping or leaking etc. and then polluting the water body. 4. The household refuse temporary storage room should adopt anti-seepage and anti-loss measures as per requirements to prevent percolate from infiltrating and then polluting the groundwater. 5. The foundation construction of the sites should choose to be conducted in non-flood season so that it can reduce the influence of the shallower groundwater depth on the construction.		
	Acoustic environment	The noise created by the construction activities such as construction machines, transport vehicles and	1. Set horn-blowing control warning boards at the sensitive road sections to acoustic environment, use low-noise devices, control the noise point source, route of transmission, traffic noise and blasting noise, provide anti-noise earplugs for the constructors and reasonably arrange for the construction time etc. 2. According to the regulations of *Environmental noise emission standard in building construction sites*（GB12523-2011）, it should reasonably arrange for the construction time, try not to conduct construction or arrange for low-noise construction work at night time, the construction machines such as pile driver etc. should stop working at night (22:00—6:00) and	Construction unit and the development, implementation and management units of the project	County Environmental protection Bureau and Bureau of Housing and Urban

		dinas processing system will create certain influence on the acoustic environment of the nearby villages and constructors.	try not to conduct construction or arrange for low-noise construction work during night time at the sites that are nearby the sensitive points and meanwhile adopt noise attenuating measures to minimize the influence caused by the construction noise to the residents; If continuous construction needs to be conducted in special condition, it must get the approval of relative departments and communicate with the residents in advance.		
	The influence on the social life such as the travel of common people, children's attending school and working in farmlands etc.		**Influence on traffic:** 1. The vehicles that often enter into the construction sites should drive as per the regulated route, the vehicles should be washed clean before entering into the village roads and the materials that are easy to scatter or leak should be sealed and transported to effectively prevent flowing dust pollution. 2. The vehicles are prohibited from overload or running with mud so as to prevent them polluting the roads and reentrainment polluting the environment. 3. Dispatch persons to direct the traffic at the one-way traffic roads and sites nearby the construction plant to prevent traffic jam. Meanwhile, arrange traffic inspectors to direct the transport vehicles to drive safely. 4. Before the construction, publicize related construction information on the mass media, inform the public of the construction road sections that may form traffic jam in advance and then provide corresponding solutions (like limited-time traffic etc.). 5. The construction party should set warning boards such as "construction ahead", "drive	Construction unit and the development, implementation and management units of the project	Road Transport Bureau, Education Bureau, Bureau of Culture, Urban Management Bureau and Sanitary Bureau

		slowly" and "detour" etc. at the construction road sections to remind the moving vehicles to drive carefully and provide convenience for the travel of residents. 6. In order to provide convenience for the moving vehicles at night and reduce the probability of accidents, it should set warning floodlights at the construction road sections to guide the vehicles to pass through. **Influence on the landscape**: After the main work is completed, auxiliary engineering should be conducted as soon as possible such as site clearing, greening and road reinstatement etc. to make them coordinated and unified with the environment.		

Appendix 4: Risk Emergency Plan for Liquid Ammonia Storage in Fresh-keeping Storehouse

In all other counties (cities, districts) except Pengze County, agricultural circulation system construction projects are involved in cold chain preservation system, which requires the use of liquid ammonia. The project construction units (cities, districts) should be directed to develop liquid chlorine accident emergency rescue plans in accordance with liquid ammonia, develop plans for training programs, and organize regularly major hazard disposal site emergency response drills. Emergency rescue plan content as follows.

A Content List of Emergency Plan

projects	measures, contents and requirements	responsible party
Emergency Planning Area	Hazard Objectives: The storage tank area and the environmental protection targetof each project	Project owner / security department
Emergency organizations, staff	factory, regional emergency organization, staff	Project owner / security department
conditions for emergency plan grading response	specify the level of the plan and the grading response procedures	Project owner / security department
Emergency rescue support	Emergency facilities, equipment and appliance (self-supporting positive pressure breathing apparatus, anti-virus clothing) and so on	Project owner / security department
Alarm, communication methods	specify alarm and communication methods (telephone report), notification methods and traffic protection, traffic control under emergency conditions.	Project owner / security /transportation department
Emergency environmental monitoring, rescue, assistance and control measures	The professional team responsible for reconnaissance and monitoring the accident site, evaluating accident nature, parameters and consequences to provide decision-making basis for the commanding department.	Project owner / security department
Emergency detection, protective measures, leakage clean-up measures and equipment	Accident site, adjacent areas, fire-control areas, pollution control and removal measures and the corresponding equipment.	Project owner / environmental protection/security department
Emergent evacuation of staff, emergent dose control, evacuation planning,	Accident site, the vicinity of the factory, accident-affected personnel and the public requirements on the toxic dose of emergency control, evacuation planning and ambulance support, medical care and public health	Project owner / environmental protection/security department
Accident Emergency Rescue Closure Procedures and Restoration Measures	After the emergency situation is solved, the accident site aftermath will be handled, accident alert will be released at the nearby areas and the recovery measures will be taken	Project owner / environmental protection/security department
Emergency training plan	After emergency plans being formulated, arrange people for training and exercises regularly	Project owner / security department
Public education and information dissemination	Public education, training, and dissemination of information at the vicinity of the plant	Project owner

Appendix 5: Environmental Mitigation Measures During Market Transaction

No	Name of the sub-projects	Main environmental influence		Mitigation/prevention measures	Implementation party	Supervision party
1	Comprehensive modernized agricultural products trading market construction project in Huichang county	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	①. Perfect the vehicle management system in the market; keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.	Market operation and management parties	Local governmental departments such as Environmental Protection Department, Fire-fighting Department and Transport Agency etc.
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 1800m3/a.	The domestic waste water and product testing waste water, after pre-treatment through septic-tank and neutralization pond separately, will be discharged into the sewage treatment plant in Taiwan-investment Industrial zone located at Mazhou town to be treated through the municipal pipe together with fruit and vegetable washing water and ground washing water after they satisfy the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) (the sewage treatment condition is as shown in table 3.4-1). The waste water of this project is relatively less, so the Taiwan-investment Industrial zone located at Mazhou town has enough capacity to contain it.		
		Solid waste	The solid wastes generated by household refuse, rot fruits and vegetables and discarded packages: about 59t/a. The waste acid and alkali and reagent bottles generated in the process of test and sludge generated by the septic-tank	①.The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④ The market operation and management party entrusts the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the		

				market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		Traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		Fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		Public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
2	Comprehensive agricultural products trading center construction project in Anyuan district	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	①.Perfect the vehicle management system in the market; Keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 3600m3/a.	The waste water of the project can't be discharged into the centralized sewage treatment plant to be treated and it needs to self-build a separate sewage treatment station, with the treatment scale of 15m3/d and the specific treatment process as shown in figure 3.2-1. The generated waste water is discharged out when they satisfy the grade 1 standard in table 4 of *Integrated wastewater discharge standard* (GB8978-1996) after being treated in the self-built sewage treatment station. The water volume is relatively smaller, so it has a little influence on the pollutant-holding water body. In the long term, if the waste water can enter into the centralized sewage treatment plant, it will be discharged into the municipal pipe when it satisfies the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) via pre-treatment.		

		Solid waste	The solid wastes generated by household refuse, rot fruits and vegetables and discarded packages: about 38t/a. The waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a, and sludge generated by the septic-tank	①The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④ The market operation and management party entrusts the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		

3	Comprehensive modern agricultural products trading center construction project in Jing'an county	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	① Perfect the vehicle management system in the market; keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 4800m^3/a.	The domestic waste water and product testing waste water, after pre-treatment through septic-tank and neutralization pond separately, will be discharged into Jing'an county industrial sewage treatment plant to be treated through the municipal pipe together with fruit and vegetable washing water and ground washing water after they satisfy the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) (the sewage treatment condition is as shown in table 3.4-1). The waste water in this project is relatively less, so Jing'an county industrial sewage treatment plan has enough capacity to contain it.		
		Solid waste	The solid wastes generated by household refuse, rot fruits and vegetables and discarded packages: about 50t/a. The waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a, and sludge generated by the septic-tank	①. The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④ The market operation and management party should entrust the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the		

				vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
4	Poyang lake aquatic products city construction project in Jiujiang city	Air	Fishlike smell of the aquatic products, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	①.Perfect the vehicle management system in the market; keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 3300m^3/a.	The domestic waste water and product testing waste water, after pre-treatment through septic-tank and neutralization pond separately, will be discharged into Jiujiang Hewen sewage treatment plant to be treated through the municipal pipe together with fruit and vegetable washing water and ground washing water after they satisfy the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) (the sewage treatment condition is as shown in table 3.4-1). The waste water in this project is relatively less, so Jiujiang Hewen sewage treatment plant has enough capacity to contain it.		
		Solid waste	The wastes generated by discarded packages and fish and household refuse etc.: about 41t/a, the waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a and the sludge generated by the septic-tank	①.The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ②Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and the wastes generated by fish etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④The		

				market operation and management party should entrust the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
5	Agricultural products trading market construction project in Longnan county, Jiangxi province	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	①.Perfect the vehicle management system in the market; Keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points.④suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		

		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 2100m^3/a	The waste water of the project can't be discharged into the centralized sewage treatment plant to be treated and it needs to self-build a separate sewage treatment station, with the treatment scale of 12m^3/d and the specific treatment process as shown in figure 3.2-1. The generated waste water is discharged out when they satisfy the grade 1 standard in table 4 of *Integrated wastewater discharge standard* (GB8978-1996) after being treated in the self-built sewage treatment station. The water volume is relatively smaller, so it has a little influence on the pollutant-holding water body. In the long term, if the waste water can enter into the centralized sewage treatment plant, it will be discharged into the municipal pipe when it satisfies the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) via pre-treatment.		
		Solid waste	The rot fruits and vegetables, discarded packages and household refuse: about 46 t/a. The waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a, and sludge generated by the septic-tank etc.	①.The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④The market operation and management party should entrust the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		

		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
6	Comprehensive agricultural products trading center construction project in Taihe	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	①.Perfect the vehicle management system in the market; Keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 3600m^3/a	The domestic waste water and product testing waste water, after pre-treatment through septic-tank and neutralization pond separately, will be discharged into the sewage treatment plant in Taihe county industrial zone to be treated through the municipal pipe together with fruit and vegetable washing water and ground washing water after they satisfy the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) (the sewage treatment condition is as shown in table 3.4-1). The waste water of this project is relatively less, so the sewage treatment plant in Taihe county industrial zone has enough capacity to contain it.		
		Solid waste	The rot fruits and vegetables, discarded packages and household refuse: about 39 t/a. The waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a, and sludge generated by the septic-tank etc.	①.The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④The market operation and management party should entrust the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		

		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
7	Fruits and vegetables wholesaling market construction project in Yushan county	Air	Stink of rot fruits and vegetables, automobile exhaust, odor generated by garbage, lampblack and exhaust gas etc.	① Perfect the vehicle management system in the market; Keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ② Improve the air quality of the market through strengthening natural ventilation and indoor air exhausting. ③ Strengthen the greening around the refuse collection points. ④ suggest deodorizing the air in the refuse collection points regularly with deodorant. ⑤ install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	Domestic waste water, washing water of fruits and vegetables, ground washing water and little product testing waste water, with the quantity of waste water of about 3000m^3/a	Yushan county and Bingxi town: the sewage amount of this project is about 1800m^3/a; The domestic waste water and product testing waste water, after pre-treatment through the neutralization pond etc., will be discharged into Yushan county sewage treatment plant to be treated through the municipal pipe together with fruit and vegetable washing water and ground washing water after they satisfy the grade 3 standard of *Integrated wastewater discharge*		

				standard (GB8978-1996) (the sewage treatment condition is as shown in table 3.4-1). The waste water of this project is relatively less, so Yushan county sewage treatment plant has enough capacity to contain it.		
				Shuangming town and Zhangcun town: The waste water of the project can't be discharged into the centralized sewage treatment plant to be treated (the waste water of the project generated in Shuangming town is about 700m^3/a and that in Zhangcun town is about 500m^3/a) and it needs to self-build a sewage treatment station separately, with their treatment scale of 5m^3/d respectively and the specific treatment process as shown in figure 3.2-1. The generated waste water is discharged out when they satisfy the grade 1 standard in table 4 of *Integrated wastewater discharge standard* (GB8978-1996) after being treated in the self-built sewage treatment station. The water volume is relatively smaller, so it has a little influence on the pollutant-holding water body. In the long term, if the waste water can enter into the centralized sewage treatment plant, it will be discharged into the municipal pipe when it satisfies the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) via pre-treatment.		
		Solid waste	The rot fruits and vegetables, discarded packages and household refuse: about 36 t/a. The waste acid and alkali and reagent bottles generated in the process of test: about 0.1t/a, and sludge generated by the septic-tank etc.	①The waste acid and alkali and reagent bottles generated in the process of test belong to hazardous wastes and the market operation and management party entrusts the qualified unit to get them treated. ② Discarded packages should be classified and collected and then recycled by materials collecting point. ③ Carry out bagging collection about the household refuse and rot fruits and vegetables etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ④ The market operation and management party entrusts the sanitation department to clean and dispose of the sludge generated by the septic-tank regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		

		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		
8	Poyang Lake cotton trading center construction project in Jiangxi province	Air	The dust created from the preliminary processing of cotton, automobile exhaust, lampblack and exhaust gas etc.	① The dust collection efficiency of the cotton processing workshop reaches over 90% through collection by gas-collecting hood and bag dust collector and the discharged dust can satisfy the standard; ② Improve the air quality of the market through strengthening natural ventilation and indoor air exhausting.③ Strengthen the greening around the refuse collection points; Perfect the vehicle management system in the market; keep an unblocked traffic flow within the area; prohibit random parking of vehicles and limit their speed within the area etc. ④ Install lampblack purifier in the canteen and the disposed lampblack is discharged through the roof of the canteen.		
		Water	It is mainly the domestic waste water, with its amount of about 6600m^3/a	The waste water of the project can't be discharged into the centralized sewage treatment plant to be treated and it needs to self-build a separate sewage treatment station, with the treatment scale of 20m^3/d and the specific treatment process as shown in figure 3.2-1 (excluding the pre-treatment of other waste water). The generated waste water is discharged out when they satisfy the grade 1 standard in table 4 of *Integrated wastewater discharge standard* (GB8978-1996) after being treated in the self-built sewage treatment station. The water volume is relatively smaller, so it has a little influence on the pollutant-holding water body. In the long term, if the waste water can enter into the centralized sewage treatment plant, it will be discharged into the municipal pipe when it satisfies the grade 3 standard of *Integrated wastewater discharge standard* (GB8978-1996) via pre-treatment.		

		Solid waste	The discarded packages, household refuse and sludge generated by the sewage treatment station: about 22t/a.	① Discarded packages should be classified and collected and then recycled by materials collecting point. ② Carry out bagging collection about the household refuse etc. and popularize separate waste collection, namely, waste collection containers are set according to recyclable, unrecyclable and hazardous substances, which will be stacked in the waste collection points temporarily and then transported to the local waste landfill site to be treated on the same day. ③ The market operation and management party entrusts the sanitation department to clean and dispose of the sludge generated by the sewage treatment station regularly.		
		Noise	The equipment noise, commercial noise and traffic noise created by logistics transportation vehicles	①.It should strengthen the market guidance and management and limit the commercial noise source of the market, especially the tweeters to solicit business. ② The noise of the water pump room and ventilator room is a little higher, so anti-vibration and sound insulation measures should be adopted when the equipment is installed, and the noise equipment is strictly prohibited to be used outdoor. ③ Strengthen the management system about the vehicles passing in and out of the market, keep the traffic flow unblocked and prohibit vehicles from whistling etc.		
		The influence on the traffic management		The construction of the project will increase the traffic flow and create certain influence on the travel safety of the surrounding residents. Via analogy analysis on the traffic problem of the trading market with the equal scale, the traffic flow of the project increases 25~30 vehicles (time)/day. It is required to adopt the vehicles with sheds to prevent materials from scattering and creating some influence on the travel safety of the surrounding residents, and the speed of the vehicles should be controlled nearby the residential areas.		
		The influence on the fire safety		Attach importance to the fire prevention, conduct fire troop construction and planning continuously, perfect the fire control management system of the farmer's markets, properly maintain fire-fighting equipment, establish various systems (including emergency incident plan) and urge them to be implemented.		
		The influence on the public security		With the expansion and development of the market, the security problems have been increased continuously, among which steal, rob and fight are the major problems. The security management staffs of the farmer's markets should strengthen the long-term mechanism construction of basic public security work and gradually establish high-efficient, unified and sensitive working systems like handy service for the public, public administration, safety protection, crisis intervention and early warning study and judgment etc.		

Attached maps: The Geographical Location Map of the Project in Each District

Attached map 1-1: The geographic position map of the comprehensive agricultural products trading center construction project in Anyuan district

Attached map 1-2: The geographic position map of the agricultural products trading center construction project in Longnan County

Attached map 1-3: The geographic position map of the comprehensive agricultural products trading center construction project in Huichang County

Attached map 1-4: The geographic position map of the comprehensive agricultural products trading center construction project in Taihe County (Construction site of the project: Taihe county industrial park)

Attached map 1-5: The geographic position map of the comprehensive agricultural products trading center construction project in Jing'an County (Construction site of the project: Green lighting industrial base in Jing'an county industrial park)

Attached map 1-6: The geographic position map of Poyang lake aquatic products city construction project in Jiujiang city (Construction site of the project: The harbor district at the west of Jiujiang economic development zone)

Attached map 1-7: The geographic position map of cotton trading center construction project in Pengze County

Attached map 1-8: The geographic position map of the fruits and vegetables wholesaling market construction project in Yushan County