

# PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC33685

<b>Project Name</b>	Poyang Lake Basin Town Water Environment Management Project (P153604)
<b>Region</b>	EAST ASIA AND PACIFIC
<b>Country</b>	China
<b>Sector(s)</b>	Wastewater Collection and Transportation (40%), Solid waste management (20%), Wastewater Treatment and Disposal (20%), Animal production (20%)
<b>Theme(s)</b>	Rural services and infrastructure (30%), Pollution management and environmental health (30%), Water resource management (30%), Participation and civic engagement (10%)
<b>Lending Instrument</b>	Investment Project Financing
<b>Project ID</b>	P153604
<b>Borrower(s)</b>	People's Republic of China
<b>Implementing Agency</b>	Jiangxi Provincial Development and Reform Commission
<b>Environmental Category</b>	A-Full Assessment
<b>Date PID Prepared/Updated</b>	27-Dec-2015
<b>Date PID Approved/ Disclosed</b>	10-Jan-2016
<b>Estimated Date of Appraisal Completion</b>	02-Nov-2016
<b>Estimated Date of Board Approval</b>	31-Mar-2017
<b>Concept Review Decision</b>	Track II - The review did authorize the preparation to continue

## I. Introduction and Context

### Country Context

China's rapid urbanization over the past three decades has facilitated impressive economic and social gains. The country became the second largest economy in the world in 2010, with over half of its population now living in cities. About 500 million people have been pulled out of poverty in the process. Further transition is projected to add another 300 million to China's urban population by 2030 and continue boosting the economic growth. Unfortunately, China's economic gains came at a significant cost to its environment, with serious implications on health and quality of life, as environmental depletion and degradation were overlooked during China's impressive economic growth period. The cost of environmental degradation and resource depletion in China is estimated

to approach 10 percent of GDP, of which water pollution accounts for 2.1 percent, based on China 2030 Study estimates. The Government of China has recognized that it cannot continue on this road and has put in place plans to ensure the environmental sustainability of its economic development pathways.

### **Sectoral and Institutional Context**

The Chinese water sector suffers from both water quantity and quality challenges. In terms of water quantity, with 20 percent of the world's population but only 7 percent of its freshwater, water scarcity is a major problem for sustainable urban development in China. Moreover, there is also a strong disparity in spatial distribution of its water resources, as only 19 percent of China's water resources are available to 40 percent of the population in the north, where most of the major grain production is located, and in the west. In terms of water quality, due to environmentally unsustainable development trajectory pursued over the last three decades, a significant portion of China's freshwater sources are polluted. According to 2010 data, about 40 percent of rivers in China were seriously polluted and unfit for drinking water. Similarly, the groundwater quality in more than half of 200 cities surveyed was classified as 'bad' (in 40.3 percent of cities) or 'extremely bad' (14.7 percent). Similar figures are reported for the quality of other water bodies in the country, including lakes.

Poyang Lake is the largest freshwater lake in China with a maximum surface area reaching 5,050 km<sup>2</sup> and a storage capacity - 30 billion m<sup>3</sup>. The basin area of the lake is about 162,200 km<sup>2</sup> covering over 97 percent of the land area of Jiangxi Province. The lake plays many vital functions, such as hydro-morphologic, environmental, social, cultural and economic; the livelihood of more than 40 million people is closely linked to the water and environment of Poyang Lake. Poyang Lake connects to Yangtze River in the middle reach at Hukou, Jiujiang County. The dynamics of the lake water movement is governed by both the stages of the Yangtze River and the discharges from its five major tributaries (Gan, Xin, Fu, Rao and Xin Rivers). While the annual water level in the Poyang Lake has remained stable in the recent years, the area of the lake fluctuates dramatically between the wet and dry seasons. In normal years, the average lake area is about 3,200 km<sup>2</sup>. The fluctuations are also affected by severe climate events, e.g., in early 2002, due to serious drought, the area of the lake reached a low of 200 km<sup>2</sup>.

Poyang Lake is also a wetland of national and global importance, which provides a key habitat for half a million migratory birds. It is a house for over 95% of world's white crane, 60% of world's white-napped cranes, 55% of world's hooded crane, 60% of world's white storks, and 96% of world's swan goose population. Poyang Lake is also a species gene pool with 156 kinds of aquatic plants, 136 planktons, 230 kinds of benthic animals, 58 kinds of fishes, 89 kinds of water birds, etc. It also plays a significant role in the seasonal flow regulation of the Yangtze River. The average amount of lake water entering the Yangtze River is about 150 billion m<sup>3</sup>, amounting to 15.6% of the mean annual runoff of the river.

The water quality of the Lake has been comparatively good (with 83% falling under Class I ~ III, 13% under Class IV, and 4% under Class V). However, research results of the World Bank supported TCC5 project and the available monitoring data of Ministry of Environmental Protection show a concerning trend of water quality deterioration, with chemical oxygen demand (COD) and ammonia-nitrogen (NH<sub>3</sub>-N) gradually increasing and dissolved oxygen (DO) gradually decreasing. The existing data on COD discharge collected by the local governments in the lake basin show that domestic wastewater (about 60%) and solid waste disposal (about 30%) produce the major water

pollution. While industrial pollution remains an issue, discharges from industries are gradually decreasing. Site visit also found uncontrolled solid waste disposal and insufficient treatment, and improper fish feeding and improper habit of farm land fertilizing also lead to severe water pollution. By provincial environmental statistics, only 79% of domestic wastewater is treated in urban areas of Jiangxi province, which is much lower than the national average of 85%. Similarly, solid waste collection and treatment rate in the province is 69% compared to the national average of 80%.

Conclusions from recent studies and discussions with Provincial governments identify the following key causes for increase of pollution levels in the waterbodies feeding into Poyang Lake: (a) lack of basin wide integrated water/environment management; (b) weak water quality and pollution source pollution monitoring and disclosure system; (c) lack of public awareness and incentives in the communities on environmental protection; (d) weak enforcement of regulations related to disposal of untreated industrial and domestic wastewater directly into water bodies; (e) lack of investment in infrastructure for wastewater collection and treatment systems in urban and rural areas as well as for solid waste management in the small cities and towns and rural areas; and (f) lack of use of good practices on proper domestic solid waste disposal and agriculture practices.

Government of China and Jiangxi Provincial government recognize the needs to protect the Lake. Series of measures have been triggered at national, provincial, and county levels to protect the value the Poyang Lake as a unique resource and a national heritage, and to control the lake's pollution and to restore the vital water quality and its associated functions. The Government of China issued the Poyang Lake Ecological Economic Zone Development Plan (PLEDP) in 2009 focusing on ecological development of Poyang Lake. Under the PLEDP, there is an implementation plan and 18 specific sector plans, including water environment management, water resources, five river management plan, etc. In 2014, Jiangxi government also issued a plan for establishment of ecological and civilization demonstration areas, stating actions and targets for industrial, domestic wastewater and solid waste management. Based on the plan, by 2020, COD would be decreased by 5% compared to the 2015 baseline, wastewater treatment ratio would reach 90% and urban solid waste treatment ratio - 85%. The PLEDP together with other relevant sector plans foresee significant increase in size of population and economic activity by 2020, with the focus on tourism industry. This, together with unresolved improvements in infrastructure, is expected to result in big pressure on water quality in the lake basin.

Following the series government plans, the government of Jiangxi has been conducting six major ecological environment protection group projects: (a) Poyang Lake wetland and biodiversity protection projects; (b) Poyang Lake-rim green belt projects; (c) pollution prevention and control projects including wastewater, solid waste and non-point agricultural pollution control; (d) blue sky action demonstration projects; (e) circular economy, energy conservation, and emission reduction projects; and (f) ecological cultural projects.

In 2013, the World Bank approved the Jiangxi Poyang Lake Basin and Ecological Economic Zone Small Town Development Project with the objective to improve key public services in participating small towns of Jiangxi Province through improvements to priority infrastructure. Though overall project implementation has been satisfactory, there are a number of challenges including the rapid urbanization rendering some of the sub-projects irrelevant/unviable, capacity constraints and issues related to O&M for wetland, solid waste and wastewater facilities. The proposed project would expand the coverage to include seven additional counties, particularly focusing on water environment management and solid waste management infrastructure while taking into account

lessons from the Small Town Development Project and incorporating in its design best international practices.

Note : Chinese surface water quality standards: Class I is good quality water which with simple purification is drinkable ( $DO > 7.5 \text{ mg/l}$ ;  $COD < 15$ ;  $BOD_5 < 3$ ;  $NH_3-N < 0.15$ ;  $P < 0.02$ ); Class II is good quality water which is slightly contaminated, drinkable after normal purification ( $DO > 6 \text{ mg/l}$ ;  $COD < 15$ ;  $BOD_5 < 3$ ;  $NH_3-N < 0.5$ ;  $P < 0.1$ ); Class III contaminated water which could be drinkable after treatment ( $DO > 5 \text{ mg/l}$ ;  $COD < 20$ ;  $BOD_5 < 4$ ;  $NH_3-N < 1$ ;  $P < 0.2$ ); Class IV water is not drinkable ( $DO > 3 \text{ mg/l}$ ;  $COD < 30$ ;  $BOD_5 < 6$ ;  $NH_3-N < 1.5$ ;  $P < 0.3$ ); and Class V is bad quality water ( $DO > 2 \text{ mg/l}$ ;  $COD < 40$ ;  $BOD_5 < 10$ ;  $NH_3-N < 2$ ;  $P < 0.4$ ).

### **Relationship to CAS**

The project is aligned with the Country Partnership Strategy (CPS) for 2013-2016, specifically the objectives set under focus area I -- "Supporting greener growth", including Enhancing Urban Environmental Services; Promoting Sustainable Agriculture Practices; and Demonstrating Sustainable Natural Resource Management. The project design is in line with the national strategic development plan of China, as envisioned in the Poyang Lake Ecological Economic Zone Development Plan (2009) and Jiangxi Province implementation plan for establishment of ecological and civilization demonstration areas (2014). The project is also in line with 12th Five-year Plans and draft 13th Five-year plan at Jiangxi provincial and county levels.

The project is expected to contribute to both China's national strategy on water security agenda and to the World Bank Group twin goals of ending extreme poverty and boosting shared prosperity. Water security has become a high priority at highest for decision makers at all levels (central and local government). The strategy focuses on applying systematic treatment and combination of structural and non-structural measures in water sector to promote ecological safety, economic security and the safety of human health and lives. The project would contribute to, through integrated and participatory approaches, sustainable water/environment management, improvement of ecological condition, promotion of social and economic environment of Poyang Lake Basin, as one of the key areas of Chinese water system.

For the contribution to the twin goals, as the poor are known to live relatively closer to degraded and polluted areas, and have less access to water and solid waste disposal infrastructure, they are expected to directly benefit from the project. The project will aim at addressing specific challenges that the poor, vulnerable and women face, as identified through social assessment. The project is also expected to boost shared prosperity, as improved water quality and local living conditions will likely result in such benefits as increase in land value, access to income earning opportunities etc.

To achieve maximum impact and to address the higher strategic objectives indicated above, the project will incorporate an "integrated" approach in the design of the activities in selected counties, and focus on enhancement of ecological and institutional sustainability of water/environment and strengthening of domestic wastewater and solid waste management system. This will involve participation of communities during project preparation and implementation as well as in designing long-term operation & maintenance mechanisms to ensure sustainability of the investments. Ultimately, successful implementation of the project will help to facilitate the improvement and restoration of water quality and ecological environment of the Poyang Lake basin. It would also contribute towards the enhancement of water regime in the Yangtze River.

Note : "Integrated approach" refers to a mechanism whereby structural and non-structural measures are fully utilized, as well as whereby management of environmental protection is done in a collaborative and coordinated way throughout the project cycle involving all stakeholders (from different sectors and disciplines) and based on consensus building to ensure sustainability.

## II. Proposed Development Objective(s)

### Proposed Development Objective(s) (From PCN)

The project development objective is to reduce the pollutant discharge into key selected waterways in the Poyang Lake basin and to improve management of water environment.

### Key Results (From PCN)

The proposed PDO level results indicators include: (a) Direct project beneficiaries (core sector indicator), of which female beneficiaries; (b) Nutrient load reduction (nitrogen (N) and Phosphorus (P)) achieved under the project (core sector indicator, tons/year); (c) Volume (mass) of COD pollution load reduction achieved under the project (core sector indicator, tons/year); (d) domestic solid waste reduced or recycled under the project (core sector indicator, tons/year); (e) Increased number of counties in full compliance with Provincial Water and Environmental Protection Guidelines .

Note : The guidelines broadly include elements such as citizen participatory engagement and institutional capacity to undertake regular water monitoring, reporting and enforcement.

## III. Preliminary Description

### Concept Description

#### a. Overview.

The Jiangxi Provincial Government proposes to utilize the World Bank loan in managing the water environment in the key towns of Poyang Lake Basin. Seven counties - Duchang, Poyang, Yugan, Jishui, Fengxin, Jingan, Shangli, have been selected for project planning and implementation; total population of the seven counties are about 5 million. These seven counties represent a mixed pattern of geographic distribution across the basin: three sites are in close proximity to the main Lake, one site along the mid-stream of a main river draining into the Lake, two sites adjacent to the tributary streams of a main river, and one site at the remotest distance from the Lake. The water quality of Poyang Lake is closely associated with the quality and environment of the water and land bodies in these contributing catchments, and vice versa.

The project is designed to integrate different ways of environmental protection to improve the water quality of Poyang Lake basin, including by means of wastewater treatment and solid waste management, as well non-structural measures. As such, the project will focus not only on engineering aspects but also on enhancing institutional mechanisms, improving operation and maintenance (O&M) and monitoring systems to help the selected counties in Jiangxi Province to enhance water environmental services, including wastewater collection and treatment systems, urban storm water management, river and lake environment restoration, solid waste collection and transportation system, and participatory integrated environment management system.

#### b. Proposed Project components.

The proposed project activities consist of four main components as below:

**Component 1: Strengthening Institutional Capacity for Managing Water Environment in Poyang Lake Basin (US\$15 million):** This component will finance capacity building and awareness raising activities to improve participatory wastewater and solid waste management, enforcement of environmental regulations and creating pre-conditions for sustainability of project results. The component will be structured in two key sub-components: (a) institutional capacity building and enforcement and (b) sustainable Poyang Lake basin management.

**Sub-component 1.1: Institutional Capacity Building and Enforcement (USD11 million):** This sub-component will finance activities related to: (a) strengthening of the current integrated Poyang Lake Basin management institutional architecture (River manager as leader of the party - River implementer as the mayor of the county - high level leading group for strategic orientation and guidance, and Poyang Lake water/environment financial and investment mechanism study; (b) strengthen Basin-wide water/environment management planning: (i) support an integrated vulnerability and sensitivity assessment of Poyang Lake (water quality improvement and protection- water quantity control - land uses change -biodiversity conservation- urbanization and demographic changes- tourism impact and industrialization-basin pollution, and providing comments on integrated action plan leading to series of projects with implementation sequencing and synergies in line with the long-term commitment) along with resilience and adaptation measures; (ii) promotion of integrated basin plans for the five tributaries of the Poyang Lake; (c) strengthening knowledge sharing of integrated lake management and establish Lake management advisory platform - with the continuous pressure on water resources, the lakes under environmental stress are evidenced across China; and (d) strengthening the water/environment monitoring system through upgrade/newly installation of water/environment monitoring facilities, enhancement of the integrated monitoring information system, early warning system, real-time data disclosure etc.

**Sub-component 1.2: Sustainable Poyang Lake Basin Management (USD4 million):** This sub-component will finance activities related to enhancing conditions for lake basin environmental management sustainability, including: (a) enhancement of citizen participation and information disclosure - translating the high level ownership of the Poyang protection to grassroots level could contribute to the rapid and broader success of the Poyang Lake conservation. Building on the institutional structure and ecological compensation mechanism, the citizen participation could involve labor corporations (fishermen, farmers, factory workers and industries etc.) in having a voice in Poyang Lake protection; and (b) ensuring soundness of infrastructure design and its O&M sustainability;<sup>a</sup> the project will aim to increment the quality of innovation and appropriate technology with the economics of their financing for sustainable operation and maintenance implementation; and strengthening of incentive mechanisms, i.e., the compensation scheme for ecological protection of the Poyang Lake that could be further strengthened building on proven incentive mechanisms;

**Component 2: Improvement of Lake and River Environmental Restoration and Enhancement of Domestic Wastewater Management System (US\$ 140 million).** This component will finance activities related to protection and restoration of the water environment of selected rural and urban water environments in Poyang Lake basin through collection and treatment of urban and rural wastewater; collection and safe disposal of stormwater from both rural and urban watersheds; and implementation of integrated engineering and biological as well as Low Impact Development (LID) interventions in selected rural and urban waterways. The aim of the component is to demonstrate an

integrated watershed management approach by focusing on key areas for protection, improving water quality and environmental protection caused by the municipal wastewater and aquaculture sources, and establishing ecological pollution-control zones along the course of pollutant movement.

Sub-component 2.1: Improvement of Lake and River Environmental Restoration (USD66 million): This sub-component will finance implementation of integrated engineering and biological mitigation measures and Low Impact Development (LID) in selected small lakes, rivers, and catchments in Poyang Lake basin. This will include restoration of water environment in Zhuhu Lake in Poyang county, Pipa Lake (river) in Yugan county, and ecological restoration of stream corridor of Zoujiazui River in Duchang county. Key activities will include construction of stormwater collection and diversion systems from upland watersheds, rural wastewater treatment facilities, distributed wastewater collection along lake banks, introduction of good aquaculture practices (for fishing farming and pearl culture) and water environment monitoring system.

Sub-component 2.2: Enhancement of Domestic Wastewater Management System (USD74 million): This sub-component will finance rehabilitation and expansion of urban wastewater collection and treatment systems to improve capacity of wastewater collection and treatment of selected counties. Main project activities include: construction of wastewater collection networks (including household connections); and construction and/or rehabilitation of wastewater treatment plants in Duchang, Jiang'an, and Jishui counties.

Component 3: Construction of solid waste collection and transportation system (USD75 million): This component is to improve solid waste collection and transportation system in rural and urban areas to reduce solid waste disposal to river system of Poyang Lak Basin. This component will finance setting up solid waste separation system, construction of solid waste collection stations and transportation stations, and establishment of sustainable solid waste collection and transportation system, and establishment of monitoring and management systems in Shangli, Duchang, Poyang, Yugan, and Jing'an Counties.

Component 4: Project Implementation Support (USD15 million). This component is to support the effective and efficient implementation of the project activities. This component will finance project management, project implementation supervision, project social, resettlement and environmental monitoring, domestic and international training and study tours, and relevant project management equipment and facilities. Main project activities will include procurement of office equipment, domestic and international training and study tours, procurement of project implementation supervisors, procurement of social and resettlement and environmental monitoring services, etc.

d. Gender.

There is strong evidence that gender inequalities contribute to poverty and reduce human well-being, and that gender issues are an important dimension of the fight against poverty. In water supply operations specifically, there has long been an understanding of importance of incorporating a gender perspective, because women and girls are most often the primary users, providers and managers of water in their households and are the guardians of household hygiene. Limited access to water and poor water quality have direct impact on household welfare and health. If a water system falls into disrepair, women are the ones forced to travel long distances over many hours to meet their families' water needs. Therefore, women and girls benefit most when services are improved. Given women's household roles and responsibilities, they are also more likely to impact

decisions related to ways to collect and dispose the domestic waste. Finally, women can greatly contribute to oversight of a well-functioning community enforcement of environmental regulations and also such aspects as decisions related to water and solid waste collection fee levels.

Worldwide good performance on gender mainstreaming in projects requires: (a) carrying out a gender analysis as part of the project's social assessment; (b) introducing relevant design elements; and (c) tracking project performance through the inclusion of gender disaggregated indicators. The project will conduct a standalone social assessment, in which a close attention to gender aspects will be paid. This will include investigating on and consulting with female beneficiaries in the project areas in order to clearly identify their needs and concerns, as well as possible project impacts, and explore both mitigation measures of such impacts and opportunities for women targeted activities to achieve project objectives. The project design will particularly emphasize female participation in project activities, capacity building and M&E activities. Specific indicator(s) related to women's participation will be included in the Results Framework and will be closely monitored during project implementation.

e. Lessons learned from Jiangxi Poyang Lake Basin and Ecological Economic Zone Small Town Project

There are valuable lessons of Jiangxi Poyang Lake Basin and Ecological Zone Small Town Project implementation that will be taken into account during further design of the proposed project. The on-going project faces challenges in terms of institutional capacity and inter-departmental coordination, issue that is also observed in other provinces in China. Collaboration in controlling and reducing substances at their source is the most effective way of keeping pollutants out of the lake. This requires clarity of responsibilities of each authority, as well as full collaboration to meet the joint objective. While industrial pollution control is under the responsibility of provincial Environmental Protection Department (EPD), agricultural land and aquaculture pollution control is managed by the provincial Agriculture Department (AD).

To address these problems, it is critical that county Government maintains ownership of the proposed sub-projects, even with the change of the county leadership to ensure continued focus on initially agreed project activities and development objectives. Similarly, continuity and retention of project staff at the county level (including PMOs, PLGs and Expert Groups) is important to ensure good capacity developed under the project is maintained. Finally, the project will also raise awareness among communities and farmers.

Equally important is to considerably strengthen institutional coordination mechanisms, not just for project purposes, but also for future management of the Lake. It would be important to assign a function of responsibility to review development proposals in the basin with a view on their implications on the Lake water quality to one of the institutions that is currently managing Poyang Lake, or to establish a Poyang Lake Management Commission. The institution would also be responsible to spearhead the improvement/ restoration of the Lake water quality over the long run. This entity could include representatives of relevant provincial and county governments, as well as concerned citizens and academic or research agencies.

f. Global Lessons Learned and World Bank's Value Added

World Bank participation has the added benefit of introducing and replicating, where possible,



international best practices in the management of water body pollution control and environmental/ecological improvement. Lessons learned from World Bank-financed pollution control and ecological restoration projects (such as Danube Water Program; Iran Northern Cities Water Supply and Sanitation Project to reduce pollutant loads to the Caspian Sea; Lake Victoria Environmental Protection Project; Aral Sea Restoration Project; Integrated Water Management in Metropolitan Sao Paulo Project) as well as lessons from other countries' experiences (such as the Great Lakes and Chesapeake Bay restoration programs in the US) are being used to inform the key concept of the project, and include: (a) investments in infrastructure upgrading needs to be matched consistently with required institutional support for appropriate maintenance and management competencies, to ensure sustainability of investment; (b) the needs within the basin exceed the current scale of investments and therefore (i) investments need to be modelled, targeted and monitored to establish the most cost-effective interventions to improve basin health and green resilient growth that supports livelihood and maintains the sustainability of economic development; (ii) capacity and investments need to be leveraged from a variety of public and private partners; (c) problems related to water quality management, pollution control and urban upgrading are complex and require multi-sectoral and integrated approaches; (d) both the institutional and environmental objectives associated with addressing such complex issues should be treated as long-term program goals rather than short-to medium-term project objectives; (e) integrated approaches to water quality management can enhance additional benefits and contribute to poverty alleviation; (f) participatory approach, though time-consuming, is essential for sustainability of project results as it ensures consensus building between all stakeholders in reaching agreement on project design and achieving institutional and policy reform and public support; and (g) ex-post monitoring of activities to collect evidence of costs and benefits help to enhance chances for successful replication.

Specific best practices that will be examined for application of proposed project activities include: (a) strengthening of the current institutional architecture - River manager as leader of the party - River implementer as the mayor of the county - high level leading group for strategic orientation and guidance (the Great Lakes National Program Office (GLNPO in the USA); the Office of the Prime Minister Program for the Lake Balaton (Hungary); and the creation of the Commission and Secretariat of the Lake Balaton from above mentioned office); (b) strengthening of incentive mechanisms (direct and indirect payment fee mechanism in Biwa Lake (Japan); environmental fee on net revenue from chemical factories around Lake Toba (Indonesia); fee grid for water consumption in Lake Constance (Germany-Switzerland and Austria) and; the revolving polluter-payer fee/subsidy mechanism of the Seine Normandy River Basin Agency (France)); (c) citizen participation and information disclosure - (Women Association for the Lake Balaton which pioneered the lake's protection in earlier 1990; the Lake Naivasha (home of Kenya's flowers export) Riparian Association (LNRA) and Lake Naivasha Growers Group (LNGG)); (d) ensuring soundness of infrastructure design and its O&M sustainability (the Chesapeake Bay restoration program (USA); Lake Champlain basin program (USA/Canada); the Lake Balaton water quality and tourism program; and Danube Water Program); (e) integrated action plan to maximize impact of interventions (the Great Lakes restoration program; the lake Ponchartrain restoration plan (Louisiana); the Lake Balaton program).

Note: Proposed project activities have been selected based on the following criteria: (a) cost effectiveness - each sub-project should have economic/financial return; (b) sub-projects should not cause any negative social and environmental impacts that cannot be mitigated through proper design and contract execution; (c) sub-projects must be in compliance with government development plans; (d) all land used for construction purposes shall conform to general land utilization plans of the

cities and / or townships and their annual land use plans; (e) proposed interventions should solve existing problems systematically rather than only solve part of the problem; and (f) sub-projects should have demonstration value.

#### IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04	x		
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11			x
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

#### V. Financing (in USD Million)

Total Project Cost:	263.80	Total Bank Financing:	150.00
Financing Gap:	0.00		
Financing Source		Amount	
Borrower		113.80	
International Bank for Reconstruction and Development		150.00	
Total		263.80	

#### VI. Contact point

##### World Bank

Contact: Ximing Zhang  
 Title: Sr Water Resources Spec.  
 Tel: 5788+7692  
 Email: xzhang4@worldbank.org

Contact: Solvita Klapare  
 Title: Senior Environmental Economist  
 Tel: 5788+7631 /  
 Email: sklapare@worldbank.org

##### Borrower/Client/Recipient

Name: People's Republic of China  
 Contact: Licheng Yao  
 Title: Director, International Department, Ministry of Finance  
 Tel: 86 10 68552064  
 Email: yaolicheng@sina.com

**Implementing Agencies**

Name: Jiangxi Provincial Development and Reform Commission  
Contact: Jinhua Li  
Title: Director  
Tel: 0791-88858928  
Email: jaffo@163.com

**VII. For more information contact:**

The InfoShop  
The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 458-4500  
Fax: (202) 522-1500  
Web: <http://www.worldbank.org/infoshop>