

INTEGRATED SAFEGUARDS DATA SHEET

CONCEPT STAGE

Report No.: ISDSC15213

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I. BASIC INFORMATION

A. Basic Project Data

Country:	China	Project ID:	P153604
Project Name:	Poyang Lake Basin Town Water Environment Management Project (P153604)		
Task Team Leader(s):	Ximing Zhang, Solvita Klapare		
Estimated Appraisal Date:	15-Sep-2016	Estimated Board Date:	31-Mar-2017
Managing Unit:	GWA02	Lending Instrument:	Investment Project Financing
Sector(s):	Wastewater Collection and Transportation (40%), Solid waste management (20%), Wastewater Treatment and Disposal (20%), Animal production (20%)		
Theme(s):	Rural services and infrastructure (30%), Pollution management and environmental health (30%), Water resource management (30%), Participation and civic engagement (10%)		
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	
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

B. Project Objectives

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.

C. Project 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?? 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 ongoing 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.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Jiangxi consists of 100 counties (county level cities and districts), and over 97% of them are located in the Poyang Lake Basin. After discussions with Jiangxi PDRC, PFB, PPMO and relevant county governments, it was agreed that the project county should locate in the Poyang Lake core area, middle reaches and source area. The project includes 7 counties, Located in the subtropical monsoon climate zone, the project area features moderate climate, sufficient sunshine and rainfall, distinctive seasons and a long frost-free period. The average annual rainfall is about 1,700 mm, about 60% of the rainfall is in April-June.

E. Borrowers Institutional Capacity for Safeguard Policies

Project preparation and implementation have been delegated to the Project Management Office which is housed in the Foreign Investment Management Office of Jiangxi Provincial Development and Reform Commission. This Office has been managing several World Bank- and ADB-financed projects in the past 20 years, and accumulated rich experiences in project management. This Office is also the provincial PMO of ongoing Bank financed Jiangxi Poyang Lake Basin and Ecological Economic Zone Small Town Development Project. It is fully resourced and staffed (project coordinator, full-time translator and technical specialists for finance, procurement and water resources and safeguards).

At the county level, all seven project counties have established the Project Leading Groups (PLGs) and PMOs. The PLGs are headed by county Mayor or standing vice Mayor, and formed by various government line agencies. PMOs are established in county Development and Reform Commission, Foreign Investment Management Office, or Poyang Lake Basin Management Office. Poyang and Yugan Counties have experience of managing World Bank-financed projects. The rest of other five

counties have no such experience. The Bank will provide training to county PMOs on safeguards policies. Experienced safeguards consultants will be hired to assist with the preparation and implementation of safeguards instruments.

F. Environmental and Social Safeguards Specialists on the Team

Feng Ji (GEN02)

Songling Yao (GSU02)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The project is proposed as a Category A project, and triggers OP4.01 Environmental Assessment. The project is expected to bring overall environmental benefits, leading to the reduction of pollution loads discharged into Poyang Lake and contributing to the improvement of public health and living environment in the selected seven counties. The project itself is a set of mitigation measures to address the existing environmental problems in Poyang Lake Basin area. But the project would also bring some adverse impacts: (a) general construction impacts, (b) potential dredging in lake/pond (i.e. Pipa in Yugan County, and Zhoujiiazui in Duchang County), and the disposal of dredged sediments; and (c) adverse impacts (e.g., odor, waste, increased traffic volume) associated with the operation of solid waste collection and transfer facilities and sewage treatment facilities.</p> <p>Wastewater and solid waste to be collected under the project would be disposed of at the existing County WWTP/sanitary landfills or facilities under construction. Dredging is one potential proposal, for which further study would be conducted during project preparation and in the project implementation given that monitoring and evaluation for this kind of activity takes time. The project will not directly address the industrial waste/pollution, but rely on non-structural measures such as capacity building for monitoring and regulatory enforcement.</p> <p>Risks include leakage of sewer networks, impacts of potential dredging on the selected lakes/ponds, and inadequate maintenance of the sanitary facilities to be financed under the project. Adverse impacts identified will be managed with good construction management practices, project design and mitigation</p>

		<p>measures to be specified in the Environmental Management Plans (EMPs).</p> <p>EA instrument will include:</p> <ul style="list-style-type: none"> ? An EA Executive Summary for the project; ? Environmental Assessment (EA) and EMP will be prepared for each county. As part of the EA, a due diligence for existing disposal facilities (e.g. WWTP, waste treatment facilities) or facilities under construction will be conducted to check if they are in compliance with relevant national EA regulations. ? A stand-alone Environmental and Social Management Plan (EMP) for each county will includes: (a) Environmental Code of Practices (ECOPs) for civil work contractors to be included into the bidding documents and civil work contracts; (b) mitigation measures for specific environmental issues identified in the EA. Mitigation measures for social impacts identified from a separate SA will be integrated into the EMP particularly social impacts outside OP 4.12. ? Given that details of some activities are not determined during project preparation (e.g. potential dredging in lake/pond), an Environmental and Social Management Framework (ESMF) will be prepared to set out the principles, rules, guidelines and procedures to assess the environmental and social impacts of these activities.
Natural Habitats OP/BP 4.04	Yes	Poyang Lake is an important natural habitat for migratory birds. It is not expected that the project would have the potential to cause significant conversion or degradation of natural habitats. Given that the project would reduce pollution loads discharged into Poyang Lake, the largest freshwater lake in China and benefit this natural habitat, Natural Habitats (OP4.04) is triggered.
Forests OP/BP 4.36	No	The project will not have impacts on the health and quality of forests, nor affect the rights and welfare of people and their level of dependence upon or interaction with forests, nor aim to bring about changes in the management, protection, or utilization of natural forest or plantations.
Pest Management OP 4.09	No	The project will not include any procurement of pesticides or pesticide application equipment; nor introduce any new pest management practices, or expand/alter existing pest management practices; nor

		lead to substantially increased pesticide use and subsequent environmental and health risks.
Physical Cultural Resources OP/BP 4.11	TBD	Given that project activities such as provision of sewers and storm water pipeline will be in urban area of the selected seven counties, PCRs may be affected by the project. A field survey will be undertaken by experienced PCR consultants together with the EA consulting team. Whether OP4.11 is triggered or not is subject to the subsequent survey and Environmental Assessment.
Indigenous Peoples OP/BP 4.10	No	Screening on ethnic minority was conducted by the TT in the pre-identification mission and identification mission. The screening, including consultation with the seven project counties and the Provincial Minority Department, concluded that there is no minority village/community in or collectively attached to project areas. Other ongoing World Bank financed projects in the same area in the province verified that no minority is found around the Poyang Lake. So the project will not trigger the OP 4.10, Indigenous People.
Involuntary Resettlement OP/ BP 4.12	Yes	<p>The project will permanently and temporarily acquire some land for construction of infrastructure and facilities related to storm water disposal, wastewater collection and treatment, and solid waste collection and treatment, ecological restoration of some small lakes and river sections, etc., the OP 4.12, therefore, will be triggered. A Resettlement Plan (RP) will be prepared for all the activities including ancillary facilities to be identified in each county, which will be integrated into a comprehensive RP. At the same time, some resettlement related impacts on installation of sewer and rainwater pipes, construction of pump stations, solid waste collection points, etc., could be not clearly identified at preparation stages, so a Resettlement Policy Framework (RPF) will be developed also.</p> <p>A full social assessment, especially on social waste and wastewater collection, will be conducted around the project areas to: i) investigate social economic baselines of the project areas; ii) understand participation willingness of targeted beneficiaries; iii) investigate gender issues and identify appropriate actions to address such issues; and iv) identify most appropriate implementation arrangements and specific mechanism where needed for proposed</p>

		project activities. Results of the SA should be fully incorporated into project design, as well as EMPs, ESMF and RPs.
Safety of Dams OP/BP 4.37	No	The project will not finance construction or rehabilitation of any dams as defined under this policy, and there are no dams impact on the safety and operation of the project financed facilities.
Projects on International Waterways OP/BP 7.50	No	There are no international waterways in the project area.
Projects in Disputed Areas OP/BP 7.60	No	The project area is not in disputed area.

III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 30-Apr-2016

B. Time frame for launching and completing the safeguard-related studies that may be needed.
The specific studies and their timing¹ should be specified in the PAD-stage ISDS:

Preparation follow up mission is scheduled in late March, 2016, and Appraisal is planned in September, 2016.

IV. APPROVALS

Task Team Leader(s):	Name: Ximing Zhang, Solvita Klapare	
<i>Approved By:</i>		
Safeguards Advisor:	Name: Peter Leonard (SA)	Date: 21-Jan-2016
Practice Manager/ Manager:	Name: Ousmane Dione (PMGR)	Date: 22-Jan-2016

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.