



China, People's Republic of: Hubei Huanggang Urban Environment Improvement Project

Project Name	Hubei Huanggang Urban Environment Improvement Project
Project Number	46050-002
Country	China, People's Republic of
Project Status	Active
Project Type / Modality of Assistance	Loan
Source of Funding / Amount	Loan 3168-PRC: Hubei Huanggang Urban Environment Improvement Project Ordinary capital resources US\$ 100.00 million
Strategic Agendas	Inclusive economic growth
Drivers of Change	Governance and capacity development
Sector / Subsector	Agriculture, natural resources and rural development - Water-based natural resources management Public sector management - Public administration Water and other urban infrastructure and services - Urban solid waste management
Gender Equity and Mainstreaming	Effective gender mainstreaming

Description	<p>The project aims to promote environmentally sustainable and socially inclusive urbanization in Huanggang, Hubei Province by improving the urban environment. The project will improve the lakes and rivers' water quality, flood-retention capacity, and aesthetic value contributing to economic prosperity and enhanced livability in the lakeside urban area employment opportunities.</p> <p>Huanggang is located on the north bank of the middle reach of the Yangtze River in eastern Hubei Province, 78 kilometers (km) from the provincial capital, Wuhan. Building on a rural-based economy, Huanggang is one of the poorest municipalities in the province and has a relatively low urbanization rate of 35.7%. The Huanggang municipal government (HMG) in its Twelfth Five-Year Plan, 2011_2015 targets to transform its economic structure and facilitate urbanization with expanded secondary and tertiary industries. Huanggang is well positioned to take advantage of national and regional development plans due to its proximity to Wuhan; good connectivity with neighboring cities and provinces; and rich historic, cultural, and human resources. Huanggang has the potential to play a strategic role in facilitating socioeconomic development in the central region of the PRC. This is envisaged under the national plan. Furthermore, Huanggang is part of the Wuhan 1+8 megacity cluster, which the PRC government endorsed as a pilot for balanced regional development in the province.</p> <p>Huanggang is on a floodplain, with many lakes and rivers. Protecting the water environment and controlling water pollution in the middle and lower reaches of the Yangtze River, the largest of the seven river basins in the PRC and also the source of a high amount of wastewater, is a key government strategy. One of the urban development constraints of Huanggang is the deteriorating water quality in lakes and rivers, which are silted and blocked with polluted sediments, hindering natural hydraulic circulation, further degrading the water environment and ecology, weakening resilience to floods and droughts, and adversely affecting public health and safety. Huanggang's three major urban lakes Baitan, Chiye, and Yiai are severely polluted with organic matter and nutrients. Much of the surface water quality is currently measured as class V or worse. Realizing the importance of improving water quality for the city's sustainable development, HMG has made plans and increased investments to control pollution at the source and to improve the environment. To date, HMG investment has focused on improving water quality in Yiai Lake in the existing urban area, leaving other lakes and rivers unattended.</p> <p>Limited urban space also constrains the development potential of Huanggang. The existing central urban area in Huangzhou District is dense and inadequate for increasing economic activities. Limited urban space and inadequate urban infrastructure has slowed economic development and delayed the urbanization process, resulting in Huanggang becoming sidelined from mainstream developments in the province. To address this constraint, the approved Huanggang Municipal Urban Master Plan, 20122030 provides for eastward urban expansion by developing the New Eastern District (NED) with adequate urban space, infrastructure, and services; and an environment-friendly and socioeconomically inclusive setting to support sustainable urban development and rural_urban transition.</p> <p>Baitan and Chiye lakes and seven associated rivers are in the center of NED, where HMG's pollution control interventions have not yet reached. Nutrient-laden sediments from agricultural and fish farming have reached levels that affect the lakes' water quality and hydraulic retention capacity. The seven rivers are blocked due to sediments from erosion of unlined banks reducing their drainage capacity. The increased urban development will create more impervious surfaces, resulting in an increase in surface water runoff. HMG is currently improving point source pollution control in NED. The project will complement these interventions, focusing primarily on nonpoint source pollution control. It will adopt an integrated approach to water quality and retention capacity enhancements of the lakes and associated rivers by removing contaminated sediments, constructing wetlands, stabilizing lakes and rivers embankments, and improving hydraulic recirculation. As a result, water quality of Baitan and Chiye lakes will improve from class V to class IV, flood protection will increase, and the lakeside aesthetic and amenity value and health benefit will significantly rise.</p> <p>As part of the project's capacity development component, a water quality monitoring and forecasting system for the upstream Xingfu River catchment and Baitan and Chiye lakes will be developed and used by the Huanggang environment protection authorities for systematic and continuing water quality management. The system, which will be based on the hydraulic and water quality model developed during project preparation, has great replication potential. It can be disseminated as a good practice in sustainable pollution control and ecological preservation applicable to polluted and blocked urban lakes in small and medium-sized cities along the Yangtze River, and elsewhere in the PRC.</p>
Project Rationale and Linkage to Country/Regional Strategy	<p>The project is not a stand-alone investment but plays an integral part of the Huanggang Municipal Urban Master Plan by significantly improving water quality in Baitan and Chiye lakes. The capacity building and institutional strengthening component will add value to the implementation of the master plan. Project design incorporates lessons from Yiai Lake rehabilitation, a recent locally funded initiative, and other Asian Development Bank (ADB)-supported lake and river restoration projects in the PRC. The project design incorporates best international practices: (i) the need to take an integrated approach to water system rehabilitation, and (ii) the importance of using simulation techniques to predict likely outcomes. The project will complement past and ongoing projects that are contributing to reducing pollution in the Yangtze River. Since the drinking water intakes of several cities are downstream from the Yangtze River, the project also contributes to the protection of the vital drinking water source. The project supports environmentally sustainable and inclusive economic growth that is a priority of ADB's Strategy 2020. The project aligns with ADB's country partnership strategy, 2011_2015 for the PRC; ADB Urban Operational Plan, 2012_2020; the Green Cities initiative; and ADB Water Operational Plan, 2011_2020, which encourages integrated water resources management particularly in river basins. It will support economically and socially inclusive urbanization and rural_urban transition in Huanggang and contribute to balanced regional development in the PRC and in Hubei Province, thereby supporting the PRC's Twelfth Five-Year Plan, 2011_2015. The project builds on ADB's experience from urban projects in Hubei Province and in the PRC.</p>
Impact	Socially inclusive and environmentally sustainable urbanization in Huanggang

Project Outcome

Description of Outcome	Improved urban environment in Huanggang
Progress Toward Outcome	Project implementation is ongoing, with strong support and commitment from the EA and PMO. Contract awards were completed for 6 consulting services and 3 civil works packages. The BER for HGQ-C1.12: Civil Works and Vegetated Buffer Strips, Chushui River was submitted to ADB in Feb 2017 and is being reviewed. Two ADB missions were undertaken, i.e., inception mission (Nov 2015) and review mission (Aug 2016); and the second review mission is scheduled in late May 2017.

Implementation Progress

Description of Project Outputs	1a. Lake enhancement with environment facilities operating 1b. Rivers enhanced with environment facilities operating 2. Solid waste collection and transfer facilities operating and public awareness of solid waste and environmental protection increased 3. Institutional capacity in project implementation and water quality monitor is developed and strengthened
Status of Implementation Progress (Outputs, Activities, and Issues)	All project outputs are in progress.
Geographical Location	Huanggang, Hubei Province, PRC

Safeguard Categories

Environment	A
Involuntary Resettlement	A
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	<p>The project is environment category A, reflecting the urban lake and river enhancement with significant earthwork and sediment dredging. An environmental impact assessment, including an environmental management plan (EMP), was drafted and disclosed on the ADB website on 20 January 2014. The project will generate environmental benefits: (i) about 1,920 tons of total nitrogen and 486 tons of total phosphorus will be removed from the project lakes through dredging; (ii) the constructed wetlands will remove 171 tons of chemical oxygen demand, 49 tons of total nitrogen, and 1.1 tons of total phosphorus each year from the project lakes and subsequently the Yangtze River; and (iii) the wetlands will provide breeding, feeding, nesting, and resting habitats for wildlife including migratory water birds. The environmental impact assessment confirms that the climate change risk to project activities is low. Precipitation in the project area is unlikely to change and average runoff will slightly decrease. The project's resilience to predicted increases in climate variability (precipitation and runoff) will be strengthened through improved hydraulic retention and carrying capacity of urban lakes and rivers. This was confirmed through hydraulic modeling of the Baitan Lake water level under a climate change scenario with increased precipitation intensity. Project construction has potential impacts on the environment. Dust and noise generated by construction activities will be a nuisance to nearby residents. Discharge of supernatant water from the dredged sediment disposal sites could potentially pollute nearby water bodies. Dredging will stir up the sediment, releasing suspended solids and nutrients into the water column affecting water quality and ecology. No significant impact is expected during operation. HMG is increasing existing wastewater and solid waste collection and treatment capacity within NED to accommodate future needs and ensure adequate point source pollution control. The impact of the sluice gates on fish migration will not be significant. The solid waste transfer station and the project associated water diversion pumping stations may induce minor noise and odor impacts. All impacts are expected to be prevented or minimized to an acceptable level through effective implementation of the EMP. HP MO and HUCIC will assume overall responsibility for implementing, supervising, monitoring, and reporting on the EMP and will appoint full-time staff to coordinate and monitor EMP implementation. Environment and wetland experts and an ornithologist will support the work. HP MO engaged an external environment monitor. Affected persons and stakeholders were consulted during the environmental impact assessment. The EMP includes a grievance redress mechanism, which was discussed and agreed upon with HP MO and HUCIC.</p>
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Involuntary Resettlement	The project is resettlement category A. It will affect eight villages or communities in the project area. A total of 9,477.7 mu of land will be occupied permanently, including 798.6 mu of collective land and 8,679.1 mu of state-owned land. A total of 77.5 mu of land will be occupied temporarily and a total of 4,736.5 square meters (m2) of residential housing and 11,038 m2 of nonresidential building will be demolished. Land acquisition will affect 318 households, entities, and/or stores with 1,140 persons physically displaced, and 42 households with 184 persons temporarily affected, totaling 360 households with 1,324 persons affected. A resettlement plan and a due diligence report were prepared in line with ADB's Safeguard Policy Statement (2009) and endorsed by HMG. The plan was disclosed to the affected persons and uploaded on the ADB website on 17 March 2014. Compensation for lost assets and resettlement allowances will be paid to those affected. Livelihood rehabilitation arrangements in accordance with the resettlement plan should be made prior to the commencement of the related civil works. HPMO and HUCIC will assume responsibility for planning, implementing, financing, and reporting on land acquisition and resettlement. A grievance redress mechanism was established. An external resettlement and social monitor was engaged to conduct semiannual monitoring and evaluation of resettlement implementation.
Indigenous Peoples	The project is indigenous peoples category C. In Huangzhou District, ethnic minorities represent about 0.25% of the total registered population. The main ethnic minorities in the district are Hui, Miao, Tujia, and Zhuang who are integrated into urban communities. The project area does not have any concentration of ethnic minorities and the project will not have any negative effect on any ethnic minority people. No ethnic minorities are affected by land acquisition and resettlement.

Stakeholder Communication, Participation, and Consultation

During Project Design	<p>Meaningful public consultations on environment, health and safety issues have been conducted during preparation of the planning and project environmental impact reports and environmental impact assessment (EIA). Information disclosure and consultation included: internet disclosure; informal communication with key stakeholders which include residents, local authorities and sector specific institutions and authorities; questionnaire surveys; interviews; and discussion forums attended by affected people and other concerned stakeholders. Plans for public involvement during construction and operation stages have been developed during project preparation. These plans include public participation in (i) monitoring impacts and mitigation measures during the construction and operation stages through informal interviews and disclosure of monitoring reports; and (ii) interviewing the public at project completion stage.</p> <p>All of the affected persons and municipal governments have been involved in the project impact and social-economic survey. Through meetings, interviews, focus group discussions, public consultation workshops, and community consultation meetings, local representatives have participated in the planning and concerns have been integrated into the resettlement plan. Before implementation, HPMO and HUCIC will further discuss and consult with the representatives of the affected persons the impacts and detailed compensation plan to ensure affected persons' interests are protected and to provide employment opportunities for the affected persons' livelihoods as a result of project implementation. HPMO and HUCIC will disclose the draft resettlement plan in offices and to affected people in the local language. The resettlement plan will be posted on the ADB website. Resettlement information booklets will be distributed to affected households. This booklet contains information such as the affected project area, proposed land acquisition and relocation implementation progress and procedure, compensation standards for land acquisition, relocation assistance and livelihood restoration strategy. The implementing agency will establish project resettlement unit for supervision of implementation, continued public consultation, monitoring of progress, and response to grievances. The grievance redress mechanism has been established and explanations will be included in the resettlement information booklets.</p> <p>Consultations with communities will take place at different points in the preparation and implementation of the GAP and SAP within the project, and will be designed not only to inform people about the project or specific activities related to its preparation and implementation, but also to enable people in the community to ask questions, make suggestions, state preferences, and express concerns. Special attention will be made for the participation of women and any other vulnerable groups, such as the poor. GAP and SAP indicators will be monitored and reported semiannually and verified by external resettlement and social monitor</p>
During Project Implementation	Public involvement during construction stage include public participation in (i) monitoring impacts and mitigation measures through informal interviews and disclosure of monitoring reports; and (ii) interviewing the public at project completion stage. The implementing agency will establish project resettlement unit for supervision of implementation, continued public consultation, monitoring of progress, and response to grievances.

Business Opportunities

Consulting Services	The PMO and HUCIC have been/will be assisted by project implementation consultants for project management and institutional capacity building. Consulting services have been/will be engaged in accordance with ADB's Guidelines on the Use of Consultants (2010, as amended from time to time).
Procurement	All procurement of goods and works have been/will be undertaken in accordance with ADB's Procurement Guidelines (2010, as amended from time to time).

Responsible Staff

Responsible ADB Officer	Maruyama, Hinako
Responsible ADB Department	East Asia Department
Responsible ADB Division	Urban and Social Sectors Division, EARD

Timetable

Concept Clearance	04 Sep 2012
Fact Finding	09 Dec 2013 to 19 Dec 2013
MRM	02 Apr 2014
Approval	30 Sep 2014
Last Review Mission	-
Last PDS Update	31 Mar 2017

Loan 3168-PRC

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
30 Sep 2014	06 Feb 2015	06 May 2015	30 Jun 2020	-	-

Financing Plan			Loan Utilization			
	Total (Amount in US\$ million)		Date	ADB	Others	Net Percentage
Project Cost	252.60		Cumulative Contract Awards			
ADB	100.00		30 Sep 2014	7.15	0.00	7%
Counterpart	152.60		Cumulative Disbursements			
Cofinancing	0.00		30 Sep 2014	7.75	0.00	8%

Project Page	https://www.adb.org/projects/46050-002/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=46050-002
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