



Project Summary Information

Date of Document Preparation: 10/Apr/23	
Project Name	Guangxi Beihai Lianzhou Bay Marine Ecological Restoration and Protection Project
Project Number	P000684
AIIB member	China
Sector/Subsector	Water
Alignment with AIIB's thematic priorities	Green infrastructure; Technology-enabled Infrastructure
Status of Financing	Under Preparation
Objective	To foster the development of a climate-resilient ocean economy of the Beihai Municipality through integrated marine ecosystem management.
Project Description	<p>The Lianzhou Bay is the largest estuarine delta in Guangxi Zhuang Autonomous Region (Guangxi) and vital to the economy, environment and society of the Beihai Municipality and Guangxi. The ecosystem of the Lianzhou Bay has been under increasing environmental pressure while the local economic development is outpacing the protection of the costal environment. The Bay is polluted and eutrophicated by pollutants from both terrestrial and marine sources; mangrove habitat is degrading, and biodiversity is declining; infrastructure and society are vulnerable to costal hazards. Meanwhile, climate change impacts aggravate the vulnerability of infrastructure and society to intensified natural hazards including costal floods and storm surges. These have become the limiting factors to the Beihai Municipality and Guangxi for further economic development, particularly to the government's ambition towards an upgraded ocean economic development.</p> <p>Component 1 – Near-shore marine pollution management and environmental improvement (Cost USD272 million). This component will support interventions to manage the pollution of the Lianzhou Bay in an integrated manner – from source to sea. Two major activities to be financed in this component are: (i) clean-up of the polluted sediments of the Bay area through dredging and disposal; (ii) management of the source of pollution from the land side through upgrading the urban stormwater and sewerage systems, interception and treatment of polluted discharges.</p>

	<p>Component 2 – Mangrove rehabilitation and afforestation (Cost USD50 million). This component will consist of two types of activities: (i) rehabilitation and protection of the degraded mangrove habitats; and (ii) restoration and plantation of new mangroves to rebuild the mangrove forest. These interventions will recover the degraded marine wetlands and ecosystems, improve biodiversity and ecological services, protect the coastal areas from natural hazards, and establish a “blue carbon” storage for climate resilience.</p> <p>Component 3 – Integrated coastline management (Cost USD153 million). This component will finance (i) restoration and stabilization of coastline interfacing the Lianzhou Bay and the urban districts of Beihai; (ii) construction and upgrading of sea dikes. The first sub-component is to restore the degraded coastline through beach nourishment, restoration of coastal wetlands, landscaping, and improvement of wastewater management network along the coast to reduce pollution to the Bay system through interception of stormwater and wastewater discharges. The dikes will use both the traditional engineering method and nature-based solutions, including restoration and conservation of floodplains, salt marshes and mangroves.</p> <p>Component 4 – Smart monitoring and early warning systems (Cost USD8 million). This component will develop an online monitoring system for mangrove development and protection, and an early warning system to prevent coastal disasters and support emergency response. Digital technologies, including sensor-based, web-based and Global Positioning System (GPS)-based information collection and transfer, Geographical Information System (GIS)-based modeling, will be applied for real-time monitoring and forecasting to support decision making in emergency and disaster management.</p> <p>Component 5 – Capacity building, knowledge dissemination and project management support (Cost USD8 million). This component focuses on capacity building and knowledge sharing in the following areas: (i) the Project related studies on a) mangrove blue carbon sequestration and biodiversity, b) benefits of NBS for climate resilience and the Project sustainability; (ii) methodology and capacity development, based on the study results, to monitor and evaluate the project achievements and impact; (iii) knowledge dissemination through awareness raising, designed trainings, organized events nationally and internationally; and (iv) project management support to build up the capacity of the project management office and project implementation unit for project implementation.</p>
Expected Results	<p>The Project is expected to achieve the following outcomes in the project area:</p> <ul style="list-style-type: none"> (i) Reduction of pollution load through integrated land and marine pollution management; (ii) Reduction of Greenhouse Gas (GHG) emission through nature-based carbon sequestration; (iii) Increased ecosystem services through restoration of mangrove forests and estuary wetlands; (iv) Increased local recreational services and tourism;

	<p>(v) Increased protection standard to natural disasters through integration of green and grey infrastructure;</p> <p>(vi) Increased resilience through establishment of smart ecological monitoring and early warning systems.</p>
Environmental and Social Category	A
Environmental and Social Information	<p>Environmental and Social Policy. The Project is being prepared consistent with the AIIB's Environmental and Social Policy (ESP), including the ESS 1 (Environmental and Social Assessment and Management) and ESS 2 (Involuntary Resettlement), and Environmental and Social Exclusion List. Application of ESS3 (Indigenous Peoples), though not anticipated, will be confirmed during the Project preparation.</p> <p>An Environmental and Social Impact Assessment (ESIA), including an Environmental and Social Management Plan (ESMP), and a Resettlement Plan (RP), consistent with AIIB's ESP, will be prepared by the project implementation unit (PIU). The environmental and social (E&S) documents in English and Chinese languages will be timely disclosed in an appropriate manner to Project-Affected People (PAPs) and identified stakeholders and made available for download at the government website and AIIB website.</p> <p>Environmental and Climate Aspects. The Project will potentially contribute to carbon sequestration and improvement of ecosystem services through mangrove rehabilitation and afforestation, wetland conservation and/or restoration through integrated coastline management, and pollution control in the bay area through point source management. The major adverse impacts of the Project during construction may include loss of biodiversity and ecosystem functions, sea water contamination due to dredging, and secondary pollution from dredging sludge if the final disposal were not well selected and managed. A Biodiversity Study will be carried out to establish the baseline in the Project area, to assess the adverse impacts and to prepare a Biodiversity Management Plan. Other expected impacts, generally localized, will include dust and emissions from construction vehicles, construction noise, disturbance to the traffic, soil erosion, and wastewater and solid wastes generated during construction. The mitigations for addressing the adverse impacts will be included in the ESIA and ESMP. The potential risks to community health and safety and Occupational Health and Safety (OHS) will also be assessed in the ESIA.</p> <p>The Project region could face increased risks of climate hazards like increased intensity of precipitation, coastal flooding, typhoon and storm surges, and sea level rise due to climate change. Greenhouse gas (GHG) emissions accounting will be carried out and GHG reductions will be calculated. A Climate Change Risk Assessment (CCRA) will also be conducted and the opportunities for climate adaptation will be identified.</p>

	<p>Social Aspects. The Project will contribute to the social upliftment of the people of Beihai by the restoration of the marine ecosystem of the Lianzhou Bay area. Meanwhile, the preliminary social screening indicates that significant amount of various types of land will be affected and will involve resettlements. Site visits confirmed that the infrastructure development activities will have either physical and/or economic displacement with the upgrading of sea dikes having the most impact on land acquisition and involuntary resettlement. A Resettlement Plan including an entitlement matrix will be prepared. An approximate budget and implementation schedule for resettlement and rehabilitation will be worked out in compliance with AIIB's ESP.</p> <p>Grievance Redress Mechanism (GRM). The Project will require two separate GRMs to be implemented as the project-level GRM, one for internal parties, i.e., construction and operation and maintenance (O&M) personnel, workers and sub-contractors' staff; and the other for external parties, i.e., the PAPs. The multi-tier GRMs, which can also make anonymous complaints eligible, will be included in a Stakeholder Engagement Plan (SEP). The information of the project-level GRM and the Project-affected People's Mechanism (PPM) of AIIB will be timely disclosed, at least in Chinese language, in an appropriate manner.</p>		
Cost and Financing Plan	Project total Cost	USD491 million	
	AIIB loan	USD300.0 million	
	Counterpart funding	USD191.0 million	
Borrower/Investee Company/Counter party/Guaranteed entity	People's Republic of China		
Implementing Entity	Government of Beihai Municipality, Guangxi Autonomous Region		
Estimated date of loan closing (SBF)	September 2028		
Contact Points:	AIIB	Borrower – Ministry of Finance	Implementation Organization – Project Management Office of Beihai Municipality
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Date of Concept Decision	Apr. 5, 2023		
Estimated Date of Appraisal Decision	September 2023		
Estimated Date of Financing Approval	December 2023		

Independent Accountability Mechanism	<p>The Project-affected People’s Mechanism (PPM) has been established by the Bank to provide an opportunity for the independent and impartial review of submissions from PAP who believe they have been or are likely to be adversely affected by the Bank’s failure to implement its ESP in case when their concerns cannot be addressed satisfactorily through the Project-level GRMs or the processes of the Bank’s Management. Information on the PPM is available at https://www.aiib.org/en/policies-strategies/operational-policies/policy-on-the-project-affected-mechanism.html.</p>
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