China, People's Republic of: Hai River Estuary Area Pollution Control and Ecosystem Rehabilitation Project

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<tr>
<th>Project Name</th>
<th>Hai River Estuary Area Pollution Control and Ecosystem Rehabilitation Project</th>
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<tr>
<td>Project Number</td>
<td>43054-013</td>
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<tr>
<td>Country</td>
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<td>Project Status</td>
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<td>Project Type / Modality of Assistance</td>
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<tr>
<td>Source of Funding / Amount</td>
<td>Loan 2829-PRC: Hai River Estuary Area Pollution Control and Ecosystem Rehabilitation Project</td>
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<td>TA 7985-PRC: Capacity Development for Green Growth Demonstration</td>
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<td>Water and other urban infrastructure and services - Urban flood protection - Urban policy, institutional and capacity development - Urban sewerage</td>
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<td>Gender Equity and Mainstreaming</td>
<td>Some gender elements</td>
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<tr>
<td>Description</td>
<td>The project will support the Tianjin municipal government (TMG) to implement green growth demonstration activities in the coastal areas surrounding the Hai River estuary that will contribute to a recycling economy. The proposal for Asian Development Bank (ADB) financing includes (i) wastewater management and pollution control, including the establishment of a wastewater treatment plant (WWTP) and water reuse facilities along the south bank of the Hai River estuary; (ii) clean-up and reuse of contaminated sediment in the Hai River estuary area; (iii) ecosystem rehabilitation in the Hai River estuary area; (iv) establishment of an environmental monitoring and emergency response center (EMERC) in the Harbor Economic Area (HEA), formerly called the Harbor Industrial Park; and (v) prevention of storm-surge disasters. A project preparatory technical assistance was provided [ADB. 2009. Technical Assistance to the People's Republic of China for the Hai River Pollution Control and Ecosystem Rehabilitation. Manila (TA 7312-PRC, $700,000, approved on 14 July)].</td>
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Tianjin municipality, the sixth largest city and one of four special municipalities in the PRC with a provincial status, has a total area of 11,760 square kilometers (km²) and a population of 11.6 million. It is located in the lowest reach of the Hai River basin. Of the nine major rivers in the basin, seven flow through Tianjin to the Bohai Sea. The central government identifies the Tianjin Binhai New Area (TBNA), established in January 2010 and administered by Tianjin municipality, as the third economic growth focal point of the country, after Shenzhen in the 1980s and the Shanghai Pudong area in the 1990s. With a planned area of 2,720 km² and population of 1.4 million, this new development area is proposed to become a center of finance, business, and industry in the northern PRC in the near future. TBNA contributed more than 50% of TMG’s gross domestic product in 2009. The HEA, a land reclamation area in the tidal-flat portion of Bohai Bay, south of the Hai River estuary, is one of the functional areas in TBNA. The development of this state demonstration zone for the recycling economy began in 2003 and is due to be completed by 2018. The area will accommodate large domestic and international companies, including petrochemical industries, shipyards, offshore oil engineering bases, heavy equipment manufacturing, technological research, and development institutes; and will provide for residential areas and corresponding public utilities. It will also accommodate industries that will be moved from existing residential areas. The initial 2005 master plan for HEA development covered three phases, with a total area of about 80 km². Land reclamation under phase I (about 20 km²) is complete; industries are still being established. Phase I includes the ADB-supported integrated gasification combined-cycle power plant, which is more efficient than other coal technologies and emits less greenhouse gases and only a fraction of sulfur dioxide and nitrogen oxide pollutants. Land reclamation under phases II and III is ongoing; about 30 km² of the total 60 km² are completed. In 2010, the Tianjin Harbor Economic Area Administrative Commission (HEAAC) approved the revised master plan, which (i) restructures the plan for phases II and III areas to accommodate cleaner, nonpolluting industries; and (ii) extends the HEA to 200 km² to encompass the adjacent Harbor Manufacturing Park. Future impacts of climate change on the HEA are of concern for TMG, which is taking measures to ensure adequate resilience.

Rapid economic development in the Hai River basin and the Bohai Bay coastal areas of Tianjin municipality has resulted in the degradation and scarcity of natural and environmental resources. Impacts include (i) highly polluted waterways because of untreated wastewater discharges; (ii) silted canals with highly contaminated sediments, including heavy metals and persistent organic pollutants; and (iii) serious degradation of the Bohai Sea ecosystems. The government has been addressing the serious water pollution problems in the Hai River basin and Bohai Bay by (i) promoting an integrated approach to water management in river basins and coastal development zones; (ii) reducing pollution sources, particularly industrial and urban point sources; and (iii) continuing institutional and financial management reforms to facilitate sustainable environmental management. Many development partners, including ADB, the Global Environment Facility, the United Nations, the World Bank, and international nongovernment organizations, provide assistance to help control pollution in the Hai River basin. These efforts have primarily focused on controlling upstream pollution sources and constructing WWTPs, which have resulted in significant improvements for the urban areas in Tianjin municipality. To reduce upstream pollution, TMG recently developed a 3-year action plan (2010-2012), which aims to (i) reduce sewage overflow to rivers in urban areas; and (ii) improve the wastewater collection and treatment ratio from 82% in 2008 to 90% by 2012. The action plan sets a target of 30% for the water reuse ratio. Both are significantly higher than for other cities in the PRC. The Bohai Gulf also suffers from frequent and serious storm surges year-round. Storm surges have caused serious damage to Tianjin and increase the risks of pollution accidents.

Implementation of related ADB-financed projects demonstrates that the introduction and strengthening of green growth approaches are critical for sustainable development of Tianjin’s coastal areas. Rapid economic development often overshadows the need to integrate adequate environmental management practices and risk mitigation measures into development activities. The project integrates the lessons and complements achievements under related ADB-financed projects, including the Tianjin Wastewater Treatment Project, the Hebei Province Wastewater Management Project, and the Shandong Hai River Basin Pollution Control Project; and the World Bank-financed Hai Basin Integrated Water and Environment Management Project. Lessons include (i) the need to promote innovative technology and standards for project components, including sound solutions for sludge treatment; (ii) the importance of providing realistic projections for wastewater flows; and (iii) the need to address financial and institutional arrangements for proper operation and maintenance (O&M). Activities are needed to (i) demonstrate practical green growth interventions that can be easily replicated; and (ii) establish adequate emergency and disaster risk management; and (iv) adapt to potential climate change impacts and sea-level rise. Climate change impacts have already resulted in an increase in the incidence of storm surges, subsequent economic damage, and increased exposure to environmental accidents and disasters.

The project supports ADB’s strategic priorities in the country partnership strategy (2008-2010) and the country operations business plan (2011-2013) for the PRC. It aims to promote inclusive growth and environmental sustainability. The project has a strong link with ADB’s emerging water operational plan, which focuses on wastewater management and reuse, pollution control, and river rehabilitation. It also supports the PRC’s sustainable development agenda for a harmonious society, as outlined in the PRC’s Twelfth Five-Year Plan (2011-2015). Climate change and environmental sustainability are key considerations, including greater preparedness for extreme weather events, reduction of heavy metal and wastewater pollution, and conservation of water and natural resources.

Impact

Sustained green growth of the Bohai Bay coastal areas of the Tianjin municipality

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<th>Project Outcome</th>
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<tr>
<td>Description of Outcome</td>
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<td>Progress Toward Outcome</td>
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<tr>
<th>Implementation Progress</th>
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<tr>
<td>Description of Project Outputs</td>
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<td>Status of Implementation Progress (Outputs, Activities, and Issues)</td>
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<tr>
<th>Geographical Location</th>
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<td>Hai He, Tianjin Shi</td>
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<th>Safeguard Categories</th>
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<td>Environment</td>
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<td>Involuntary Resettlement</td>
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<td>Indigenous Peoples</td>
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<tr>
<th>Summary of Environmental and Social Aspects</th>
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<td>Environmental Aspects</td>
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The project does not involve land acquisition and displacement of people. Therefore, it was categorized as "C" regarding involuntary resettlement and no resettlement plans need to be prepared according to the Safeguard Policy Statement. No further actions are required by the executing and implementing agencies.

Indigenous Peoples

Following ADB's Safeguard Policy Statement (SPS, 2009), the project was categorized as "C" regarding ethnic minorities and no further actions are required by the executing and implementing agencies.

Stakeholder Communication, Participation, and Consultation

During Project Design

Various public consultations were conducted in the course of the preparation of the feasibility study reports and EIAs. During the feasibility study, the respective municipality governments were consulted to assist in site and process selections. During EIAs and project preparatory technical assistance, public consultations with various groups of stakeholders were conducted. The main focus of public consultations was to assess the environmental impacts of the proposed subcomponents on nearby communities and mitigation measures. These activities were carried out in accordance with MEP Interim Guidelines on Public Participation in Environmental Impact Assessment (2006), and ADB Environmental Assessment Guideline (2003).

During Project Implementation

Future plans for public involvement during the construction and operation phases were developed during project preparation. These plans include public participation in (i) monitoring impacts and mitigation measures during the construction and operations stages, (ii) evaluating environmental and economic benefits and social impacts, and (iii) interviewing the public after project completion. They include several types of consultation, e.g., site visits, workshops, investigation of specific issues, interviews, and public hearings.

Business Opportunities

Consulting Services

An estimated 132 person-months of consulting services (67 international and 65 national) are required to (i) review and improve as necessary the quality of the final detailed design of project infrastructure; (ii) introduce an environmental management system; (iii) support and strengthen the institutional and operational capacity of the executing and implementing agencies; and (iv) provide training to, and strengthen the capacity of, the EMERC. Due to the specific expertise required for the capacity building of the EMERC staff, consulting firms will be engaged using the quality-based selection (QBS) method. All consultants will be recruited according to ADB’s Guidelines on the Use of Consultants (2010, as amended from time to time). The terms of reference for all consulting services are detailed in Section D of the Project Administrative Manual. Consulting services to be financed under the ADB loan will be selected in accordance with ADB’s Guidelines on the Use of Consultants by the Asian Development Bank and its Borrowers (2010, as amended from time to time). The relevant sections of ADB’s Anticorruption Policy (1998, as amended to date), will be included in all documents and contracts relating to engagement of consultants.

The executing agency has requested advance contracting and retroactive financing for contract packages covering consulting services. Advance contracting and retroactive financing will be undertaken in conformity with ADB’s Procurement Guidelines. The issuance of request for proposals under advance contracting and retroactive financing will be subject to ADB approval. The Mission explained that retroactive financing can only be applied for expenses incurred within one year prior to loan signing, up to the agreed maximum amount.

Procurement

All procurement to be financed under the ADB loan will be carried out following ADB’s Procurement Guidelines (2010, as amended from time to time). Contracts for civil works valued at over $10 million and contracts for goods and related services valued at over $1 million will be procured through international competitive bidding procedures. Contracts for civil works valued at $10 million or less, but over $100,000, and contracts for goods and related services valued at $1 million or less but over $100,000 will be procured through national competitive bidding procedures. National competitive bidding will be undertaken following the PRC Tendering and Bidding Law (1999), subject to modifications agreed with ADB. Contract packages for civil works, goods, and related services valued at $100,000 or less will be procured through shopping procedures. A procurement agency that is familiar with ADB procurement procedures was hired by HIPAC in November 2010 to undertake procurement of works, goods, and services under the project on behalf of HIPAC.

HIPAC has requested advance contracting and retroactive financing for contract packages covering civil works for constructed wetland and wetland water treatment. Advance contracting and retroactive financing will be undertaken in conformity with ADB’s Procurement Guidelines (2010, as amended from time to time). The issuance of requests for proposal and invitations to bid under contracts eligible for advance contracting and retroactive financing will be subject to ADB approval. The borrower, HIPAC, HIPCDC, and TBNA finance bureau have been advised that (i) approval of advance contracting and retroactive financing does not necessarily commit ADB to finance the project, and (ii) retroactive financing may only apply to eligible expenditures incurred prior to loan effectiveness but not earlier than 12 months before loan signing up to a maximum amount of $20 million, or 20% of the total ADB loan amount.

The relevant sections of ADB’s Anticorruption Policy (1998, as amended to date), will be included in all documents and contracts relating to engagement of consultants. Procurement plan indicating thresholds and review procedures; contract packages for goods, works, and consulting services; and national competitive bidding guidelines is provided in Section 3 of the Project Administration Manual.

Responsible ADB Officer

Xin Shen

Responsible ADB Department

East Asia Department

Responsible ADB Division

PRC Resident Mission

Executing Agencies

Harbor Economic Area Administrative Commission

HEPPMO@163.COM

No. 1 Harbor Economic Area, Tainjin Binhai new area (TBNA), 300452 Tainjin, People’s Republic of China

Timetable

| Concept Clearance | 08 Oct 2010 |
| Fact Finding | 06 Dec 2010 to 15 Dec 2010 |
| MRM | 08 Jul 2011 |
| Approval | 13 Dec 2011 |
| Last Review Mission | - |
| Last PDS Update | 26 Mar 2019 |

Loan 2829-PRC

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<tr>
<th>Financing Plan</th>
<th>Loan Utilization</th>
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<td>Total (Amount in US$ million)</td>
<td>Date</td>
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TA 7985-PRC

Milestones

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Financing Plan/TA Utilization

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