



Draft Design and Monitoring Framework

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People's Republic of China: Liaoning Small Cities and Towns Development Demonstration Sector Project

A design and monitoring framework is an active document, progressively updated and revised as necessary, particularly following any changes in project design and implementation. In accordance with ADB's public communications policy (2005), it is disclosed before appraisal of the project or program. This draft framework may change during processing of the project or program, and the revised version will be disclosed as an appendix to the report and recommendation of the President.

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Improved living conditions and increased employment generation in small cities and towns in Liaoning Province</p>	<p>By 2018 (baseline year 2007), in the subproject small cities and towns in Liaoning Province</p> <p>Per capita annual disposable income of urban households increased by 84%</p> <p>Unemployment reduced to and maintained at no more than 5%</p> <p>Days of air quality equal to or above Grade II in county-level cities and counties increased to 240 per year</p> <p>Surface water quality in county-level cities and counties increased from Class V to Class IV¹</p>	<p>Annual socioeconomic surveys undertaken as part of the PPMS</p> <p>City/county records/statistics</p> <p>Annual social economic statistics reports</p> <p>ADB project performance audit reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • 11 FYP and all small city and town master plans are effectively implemented • Good socioeconomic development of Liaoning Province will continue after the 11 FYP • Government updates and coordinates sector policies • All applicable environmental laws are effectively enforced • Other small cities and towns will replicate approaches developed by the Project on the formulation of planning strategies and implementation of programs <p>Risks</p> <ul style="list-style-type: none"> • Global financial, food and/or fuel crises affect economy • IAs do not hire or properly manage suitable external monitoring agencies, so that socioeconomic data are not collected • Development pressures outpace planned infrastructure development
<p>Outcome</p> <p>Improved urban infrastructure and municipal services in about eight small cities and towns in Liaoning Province</p>	<p>By 2015 (baseline year 2007), in the subproject cities and towns (specific indicators provided for 3 core subproject cities and towns—Donggang, Kazuo and Linghai)</p> <p>Road components Damage rate of roads decreased: - Donggang by 5% - Others to be determined</p>	<p>ADB project completion report</p> <p>Operating and financial reports of water supply and wastewater companies</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Government commitment and support for the infrastructure development continues • Infrastructure facilities built are properly operated and maintained • Customers are willing to pay increased tariffs • There are adequate resources to sustain growth

¹ PRC GB3838-2002 classifies surface water quality into five categories. Class V is polluted and Class IV is for industrial water supply and recreational waters in which there is no direct human contact with the water.

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	<p>Water supply components Water supply coverage of the subproject area increased: - Kazuo from 30% to 90% - Linghai from 93% to 98% - Others to be determined</p> <p>Ratio of unaccounted-for water decreased: - Kazuo by 50% - Linghai by 50% - Others to be determined</p> <p>Days of disruption of water supply each year decreased: - Kazuo by 60% - Others to be determined</p> <p>Drainage components Length of stormwater drainage network increased: - Donggang: by 25% - Others to be determined</p> <p>Wastewater components Wastewater collection and treatment increased: - Donggang from 50% to 90% - Linghai from 60% to 90% - Others to be determined</p> <p>Solid waste components Rate of sanitary treatment increased to be determined</p> <p>Heating components Percentage of population with access to heating increased to be determined</p>	<p>Public health department audits on water quality</p> <p>City/county records/statistics</p> <p>Records of environmental protection bureaus</p> <p>Air quality data to be collected as part of PPMS</p> <p>Public health department statistics</p> <p>Flood records</p>	<p>Risks</p> <ul style="list-style-type: none"> • Actual growth and population increases are far from the estimates • Actual utility demands and wastes generated are far from the estimates
<p>Output</p> <p>Subproject 1: Donggang City</p> <p>1.1 One new trunk road, two upgraded trunk roads, and a bridge opened to traffic and associated services operational</p> <p>1.2 New stormwater and wastewater pipe network, culvert and pumping stations operational</p> <p>1.3 New river improvement and area upgrading works</p>	<p>By 2015</p> <p>3.2 km of a new trunk road, 4.7 km of 2 upgraded trunk roads, and a 172 m long bridge opened to traffic. Associated services along the roads operational</p> <p>7.3 km of stormwater pipes, 8.1 km of wastewater pipes, 740 m of 2.6 m x 2 m box culverts, 4 stormwater pumping stations, and 2 wastewater pumping stations operational</p> <p>2.4 km of embankment dikes and 1.1 million m² of landscaped area (including</p>	<p>Regular IA reports on contract expenditure and works progress</p> <p>Monitoring of project implementation and progress by ADB review missions</p> <p>Works construction records</p> <p>Works supervision records</p> <p>Works completion and acceptance records</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Project financing is provided on time • Relevant authorities offer strong support to the city and town PMOs and IAs on capacity development for project implementation and operation • Effective stakeholder participation and ownership is developed • Different specialist disciplines are well coordinated • Land acquisition and resettlement policies are effectively implemented; there is acceptance and cooperation from the

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<p>completed</p> <p>Subproject 2: Kazuo Mongolian Autonomous County 1.1 New water supply system and associated facilities operational</p> <p>Subproject 3: Linghai City 1.1 Two upgraded trunk roads, five upgraded secondary roads and one upgraded branch road opened to traffic and associated services operational</p> <p>Subsequent subproject cities and towns Urban infrastructure and services improved and operational</p> <p>For all subprojects Institutional management capacity improved</p>	<p>lakes within) completed.</p> <p>By 2015</p> <p>Water intake including a 26,000 m³/d lifting pumping station and a primary sedimentation tank, 18 km of water transmission pipes, 26,000 m³/d intermediate pumping station, 25,000 m³/d water treatment plant, and 58.5 km of water distribution pipes operational</p> <p>By 2015</p> <p>7.0 km of 2 upgraded trunk roads, 10.5 km of 8 upgraded secondary roads, and 0.7 km of 1 upgraded branch road opened to traffic. Road maintenance equipment procured. Greening, water supply, drainage, and other associated services along the roads operational</p> <p>By 2015</p> <p>To be determined</p> <p>By 2015</p> <p>Liaoning PMO and the subproject city and town PMOs and IAs:</p> <p>Strengthen financial management and corporate governance in water and wastewater agencies/companies in any subproject city and town with a water supply or wastewater component</p> <p>A 6-year (2009–2015) training plan for project management, O&M, financial management and institutional development implemented</p> <p>Organization structure and financial management systems improved</p>	<p>Information from final accounts of works</p> <p>ADB review missions</p> <p>Monitoring reports on institutional development including number of staff trained, areas of training, and strengthened organizations and procedures</p>	<p>stakeholders on the implementation process</p> <ul style="list-style-type: none"> • Project design and construction are implemented effectively <p>Risks</p> <ul style="list-style-type: none"> • Recruitment of loan implementation consultant is delayed • Local geological conditions affect construction activities • Exceptional weather affects the annual effective construction period • Costs are much higher than foreseen <p>Assumptions</p> <ul style="list-style-type: none"> • The services by the loan implementation consultant are good • Staff trained apply in their work what they have learned and do not leave their posts

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<p>Activities with Milestones</p> <p>Subproject 1: Donggang City</p> <p>1.1 Roads and Bridge and Associated Services</p> <p>Activity (1) Design the facilities, acquire land, and procure the works by 2012.</p> <p>Activity (2) Construct 3.2 km of a new trunk road and 4.7 km of 2 upgraded trunk roads with associated services along the roads by 2013.</p> <p>Activity (3) Construct a 172 m long bridge by 2012.</p> <p>1.2 Wastewater and Drainage</p> <p>Activity (4) Design the facilities, acquire land, and procure the works by 2011.</p> <p>Activity (5) Construct 7.3 km of stormwater pipes, 8.1 km of wastewater pipes, 740 m of 2.6 m x 2 m box culverts, 4 stormwater pumping stations, and 2 wastewater pumping stations by 2012.</p> <p>1.3 River Improvement and Area Upgrading</p> <p>Activity (6) Design the facilities, acquire land, and procure the works by 2011.</p> <p>Activity (7) Construct 2.4 km of embankment dikes by 2011.</p> <p>Activity (8) Construct 1.1 million m² of landscaped area (including lakes within) by 2014.</p> <p>Subproject 2: Kazuo Mongolian Autonomous County</p> <p>2.1 Water Supply</p> <p>Activity (9) Design the facilities, acquire land, and procure the works by 2011.</p> <p>Activity (10) Construct water intake including 26,000 m³/d lifting pumping station and primary sedimentation tank by 2011.</p> <p>Activity (11) Construct 18 km of water transmission pipes and 26,000 m³/d intermediate pumping station by 2011.</p> <p>Activity (12) Construct 25,000 m³/d water treatment plant by 2012.</p> <p>Activity (13) Construct 58.5 km of water distribution pipes by 2012.</p> <p>Subproject 3: Linghai City</p> <p>3.1 Roads and Associated Services</p> <p>Activity (14) Design the facilities, acquire land, and procure the works by 2012.</p> <p>Activity (15) Construct 7.0 km of 2 upgraded trunk roads, 10.5 km of 8 upgraded secondary roads, and 0.7 km of 1 upgraded branch road with associated services; and procure road maintenance equipment by 2014.</p> <p>Other Subprojects</p> <p>Activity (16) Design the facilities, acquire land, and procure the works by 2014.</p> <p>Activity (17) Construct urban infrastructure and municipal services by 2015.</p> <p>Institutional Capacity Building for Project Management</p> <p>Activity (18) Strengthen financial management and corporate governance in water and wastewater agencies/companies in any subproject city and town with a water supply or wastewater component by 2014.</p> <p>Activity (19) Complete necessary organizational arrangements for IAs (hiring staff, setting up accounting systems, and improving financial, administrative, and human resource policies and procedures) by 2010.</p> <p>Activity (20) Develop plans, budgets, and procedures for loan implementation and project control in Liaoning PMO by 2010.</p> <p>Activity (21) Complete Liaoning PMO and IA staff training (training in ADB procedures, procurement, traffic management, road maintenance, water supply, pollution control, environmental monitoring, and financial management) by 2015.</p> <p>Activity (22) Liaoning PMO and IAs refine the PPMS and establish targets and procedures no later than 6 months after loan effectiveness.</p>		<p>Inputs</p> <p>ADB</p> <ul style="list-style-type: none"> • \$100 million loan with timely disbursement • based on the construction schedule of the works • \$0.25 million grant from Water Financing Partnership Facility for strengthening operational and financial sustainability of service utilities <p>Government and IAs</p> <p>\$136.2 million equivalent in counterpart funds with timely disbursement based on the construction schedule of the works</p>	

ADB=Asian Development Bank, FY=Five-Year Plan, IA=implementing agency, km=kilometer, m=meter, m²=square meter, m³/d=cubic meter per day, mg/m³=milligram per cubic meter, O&M=operation and maintenance, PMO=project management office, PPMS=project performance management system.