

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets / Indicators	Data Sources / Reporting Mechanisms	Assumptions and Risks
<p>Impact Sustained socioeconomic growth and improved living standards in the border areas of north XUAR (Altay Administrative District, Boertala Mongolian Autonomous Prefecture and Yili Kazak Autonomous Prefecture)</p>	<p>By 2016 (baseline year 2005) Public satisfaction with the living environment reached 95%.</p> <p>Wastewater collection and treatment increased from 65% to 75%.</p> <p>Per capita GDP of Yili Kazak Autonomous Prefecture increased from \$1,176 to \$1,900, and that of Boertala Mongolian Autonomous Prefecture increased from \$1,636 to \$3,000.</p> <p>For the whole of XUAR, annual number of tourists increased from 14.98 million to 32 million, and annual earnings of tourism increased from \$1.8 billion to \$3.5 billion.</p>	<p>Social opinion surveys.</p> <p>Monitoring data from wastewater treatment plant.</p> <p>Annual statistics reports.</p> <p>Tourism administration departments' annual operation statistics.</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • 11th FYP and all the 3 city/area Master Plans are effectively implemented. • All applicable city/area, national and local environmental laws are effectively enforced. • The good socioeconomic development of XUAR will continue after the 11th FYP. <p>Risks</p> <ul style="list-style-type: none"> • Urban growth including influx of migrants exerts pressure on urban infrastructure.
<p>Outcome Improved municipal infrastructure and a better living and ecological environment in Alashankou Land Port, Kanas Scenic Region and Yining City</p>	<p>Yining City By 2013 (baseline year 2005) Increased employment with the creation of 1,600 jobs for local people, including at least 20% for women. Unemployment reduced from 8% to less than 5%.</p> <p>Journey time between home and places of work and other activities shortened by 33%.</p> <p>Wastewater collection and treatment increased from 65% to 80%.</p> <p>Public transport routes increased from 14 to 24; public transport fleet from 356 to 496.</p> <p>Annual number of tourists increased from 1.8 million to 2.9 million; annual earnings of tourism from \$34 million to \$115 million.</p> <p>Alashankou Land Port By 2013 (baseline year 2005) Increased employment with the creation of 1,600 jobs.</p> <p>Annual freight traffic of land port increased from 11.2 million tons to 34 million tons.</p>	<p>Municipal administration records.</p> <p>Records of Environmental Protection Bureaus.</p> <p>Traffic police records.</p> <p>Records of Municipal Labour and Social Security Bureaus.</p> <p>Internal and external monitoring survey reports from Yining City and Kanas Scenic Region Resettlement Plans and Ethnic Minority Development Plans.</p> <p>Social economic statistics.</p> <p>Socio-economic surveys undertaken as part of PPMS.</p> <p>Social opinion surveys.</p> <p>Records of public transport companies.</p> <p>Tourism administration departments' annual</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Infrastructure facilities are properly operated and maintained. • Green space is properly maintained • Environmental Protection Bureaus of Alashankou, Kanas and Yining continue to enforce environmental standards. • Customers are willing to pay increased tariffs. <p>Risks</p> <ul style="list-style-type: none"> • Traffic growth is under- / over-estimated. • Estimated water, heating and power demands and wastes generated are incorrectly estimated • IAs do not hire or properly manage suitable external monitoring agencies so socio-economic data are not collected.

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	<p>Built-up area increased from 10.9 km² to 18 km²; green space expanded from 23.63% to 33%.</p> <p>Wastewater treatment increased from 0 to 80%.</p> <p>Kanas Scenic Region By 2013 (baseline year 2005) Residents' satisfaction of the environment increased from 30% to 60%; and tourists' satisfaction from 40% to 70%.</p> <p>Employment increased from 1,700 jobs to 3,200 jobs; at least 1/2 of the new jobs are for local people and 20% for women. Unemployment reduced from 7% to less than 5%.</p> <p>Number of poor people decreased from 900 to 400.</p> <p>Wastewater collection increased from 20% to 65%.</p> <p>Collection and treatment of domestic garbage increased from 15% to 60%.</p> <p>Potable water coverage of the 3 project villages increased from 20% to 70%.</p> <p>Annual number of tourist trips increased from 360,000 to 840,000; annual earnings of tourism from \$73.2 million to \$170 million.</p>	<p>operation statistics.</p> <p>Other relevant statistics and records.</p>	
<p>Output Component 1: Yining City Roads and Municipal Services</p> <p>1.1 4 new main roads and 33 upgraded block local roads opened to traffic and related municipal services operational</p> <p>1.2 Newly built and procured environmental sanitation facilities and equipment operational</p>	<p>By 2013</p> <p>13.23 km of main roads and 132.61 km of upgraded local roads opened to traffic.</p> <p>Water supply, wastewater treatment, heating, telecommunication and other municipal services along the roads operational.</p> <p>45 public toilets, 50 garbage collection stations, 1,500 dustbins, 2,250 garbage collection containers, 12 garbage carrying trucks, 4 street cleaning trucks and 2 snow clearing trucks</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</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Governments and relevant authorities of Alashankou, Kanas and Yining offer strong support. • Effective stakeholder participation and ownership is developed. • EA supports the city PMOs and IAs on capacity development for project implementation and operation. • Different specialist disciplines are well coordinated.

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<p>Component 2: Alashankou Land Port Municipal Infrastructure and Environmental Improvement</p> <p>2.1 13 new roads and 6 upgraded roads opened to traffic</p> <p>2.2 New water treatment plant and associated facilities operational</p> <p>2.3 New WWTP and associated sewer network operational</p> <p>2.4 New heating supply works operational</p> <p>2.5 New environmental sanitation and solid waste treatment facilities operational</p> <p>2.6 Ecological protection works completed</p> <p>Component 3: Kanas Scenic Region Infrastructure and Environmental Improvement</p> <p>3.1 New village roads and parking spaces opened to traffic</p> <p>3.2 New water supply system operational</p> <p>3.3 New sewage treatment system operational</p>	<p>operational</p> <p>By 2013</p> <p>22.63 km of new roads and 6.67 km of upgraded roads opened to traffic</p> <p>60,000 m³/day water treatment plant, 18.87 km of raw water pipeline, and 24.98 km of water distribution pipeline operational</p> <p>21,000 m³/d WWTP, effluent storage tank, and 34.17 km of sewer network operational</p> <p>Heating pipelines of 2 x 14.5 km and 11 heating stations operational</p> <p>30 public toilets, 511 garbage collection points, 1,500 dustbins, 18 garbage trucks and 1 solid waste landfill site of 70 t/d capacity operational</p> <p>Urban landscaping of 3.4 million m²; irrigation of natural desert woodland of 13.33 million m² using treated effluent, including drip irrigation pipes; ecological protective forests of 16.74 million m² planted</p> <p>By 2013</p> <p>Internal roads of 24.28 km and 4 parking spaces opened to traffic</p> <p>1 water supply system of 300 m³/d for Tiereketi Village, water distribution pipeline of 7.5 km and household connection pipelines of 4.9 km operational</p> <p>1 sewage treatment system of 200 m³/d for Tiereketi Village, wastewater collection pipeline of 5.8 km and household connection pipelines of 4.85 km</p>	<p>acceptance records.</p> <p>Information from final accounts of works.</p>	<ul style="list-style-type: none"> • Land acquisition and resettlement policies are effectively implemented; there is acceptance and cooperation from the stakeholders on the implementation process. • The design is up-to-date and reasonable. • Construction contractors achieve good quality and progress. • Engineering supervision companies and quality inspection departments discharge their duties well. <p>Risks</p> <ul style="list-style-type: none"> • Local geological conditions affect construction activities. • Construction interfaces is poorly coordinated. • Funding is delayed. • Exceptional weather affects the annual effective construction period.

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<p>3.4 New environmental sanitation and solid waste treatment facilities operational</p> <p>3.5 Vegetation recovery completed</p> <p>For all 3 components: Institutional management capacity improved</p>	<p>operational</p> <p>33 public toilets, 13 garbage trucks, 18 garbage collection stations, 1,746 dustbins, and 1 solid waste landfill site of 23.42 t/d capacity operational</p> <p>Vegetation recovery of 620,000 m² completed</p> <p>By 2013 Xinjiang PMO and the 3 project city PMOs and IAs:</p> <p>Refine PPMS established in 2008</p> <p>A 5-year (2008-2013) training plan for project management, O&M, financial management and institutional development implemented</p> <p>Organization structure and financial management systems enhanced</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>Activities</p> <p>Component 1: Yining City Roads and Municipal Services</p> <p><u>1.1 Yining City Roads</u> Activity (1) Design the facilities, acquire land and procure the works by 2008 Activity (2) Construct 4 main roads of 13.23 km and 33 local roads of 132.61 km with municipal services by 2012</p> <p><u>1.2 Yining City Environmental Sanitation</u> Activity (3) Procure 45 public toilets, 50 garbage collection stations, 1,500 dustbins, 2,250 garbage collection containers, 12 garbage carrying trucks, 4 street cleaning trucks and 2 snow clearing trucks by 2012</p> <p>Component 2: Alashankou Land Port Municipal Infrastructure and Environmental Protection</p> <p><u>2.1 Alashankou Land Port Roads</u> Activity (4) Design the facilities, acquire land and procure the works by 2008 Activity (5) Construct 19 roads of 29.3 km with municipal services by 2011</p> <p><u>2.2 Alashankou Land Port Water Supply</u> Activity (6) Design the facilities, acquire land and procure the works by 2008 Activity (7) Construct a 60,000 m³/d water treatment plant by 2012 Activity (8) Construct 18.87 km of inlet pipeline by 2012 Activity (9) Construct 24.98 km of water supply pipeline by 2012</p> <p><u>2.3 Alashankou Land Port Wastewater Treatment</u> Activity (10) Design the facilities, acquire land and procure the works by 2008 Activity (11) Construct a 21,000 m³/d wastewater treatment plant including effluent storage tank by 2012 Activity (12) Construct 34.17 km of sewer network by 2012</p> <p><u>2.4 Alashankou Land Port Heating Supply Works</u> Activity (13) Design the facilities, acquire land and procure the works by 2008 Activity (14) Construct heating pipelines of 2 x 14.5 km by 2010 Activity (15) Construct 11 heating stations by 2010</p> <p><u>2.5 Alashankou Land Port Environmental Sanitation and Solid Waste Treatment</u> Activity (16) Design the facilities, acquire land and procure the works by 2008 Activity (17) Procure 30 public toilets, 511 garbage collection points, 1,500 dustbins, and</p>		<p>Inputs</p> <p>ADB</p> <ul style="list-style-type: none"> • Provide \$105 million loan with timely disbursement based on the construction schedule of the works: Civil: \$60.9 million Materials: \$17.9 million Equipment: \$6.6 million Consulting services: \$1.5 million Financial charges during implementation: \$18.1 million • Provide \$150,000 grant from the Gender and Development Cooperation Fund for the Kanas Women's Enterprise Development Project <p>Government and IA</p> <ul style="list-style-type: none"> • Provide about \$85.9 million equivalent (CNY 640 million) in counterpart funds with timely disbursement based on the 	

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<p>18 garbage trucks by 2011 Activity (18) Construct a solid waste landfill site of 70 t/d capacity by 2011 2.6 <u>Alashankou Land Port Ecological Protection Works</u> Activity (19) Design the facilities, acquire land and procure the works by 2008 Activity (20) Carry out urban landscaping of 3.4 million m²; irrigate natural desert woodland of 13.33 million m² by treated effluent, including drip irrigation pipes; plant ecological protective forests of 16.74 million m³, by 2013</p>		<p>construction schedule of the works Altay Prefecture Government: \$10.4 million Boertala Mongolian Autonomous Prefecture Government: \$36.3 million Yining Municipal Government: \$39.2 million</p>	
<p>Component 3: Kanas Scenic Region Infrastructure and Environmental Protection</p>			
<p>3.1 <u>Kanas Scenic Region Roads</u></p>			
<p>Activity (21) Design the facilities, acquire land and procure the works by 2008</p>			
<p>Activity (22) Construct village roads of 24.28 km by 2012</p>			
<p>Activity (23) Construct four parking spaces by 2012</p>			
<p>3.2 <u>Kanas Scenic Region Water Supply</u></p>			
<p>Activity (24) Design the facilities, acquire land and procure the works by 2008</p>			
<p>Activity (25) Construct 1 water supply system of 300 m³/d for Tiereketi Village by 2010</p>			
<p>Activity (26) Construct water supply pipelines of 7.5 km and household connection pipelines of 4.9 km for Tiereketi Village by 2010</p>			
<p>3.3 <u>Kanas Scenic Region Wastewater Treatment</u></p>			
<p>Activity (27) Design the facilities, acquire land and procure the works by 2008</p>			
<p>Activity (28) Construct 1 sewage treatment system of 200 m³/d for Tiereketi Village by 2011</p>			
<p>Activity (29) Construct sewer pipelines of 5.8 km and household connection pipelines of 4.85 km for Tiereketi Village by 2011</p>			
<p>3.4 <u>Kanas Scenic Region Environmental Sanitation and Solid Waste Treatment</u></p>			
<p>Activity (30) Design the facilities, acquire land and procure the works by 2008</p>			
<p>Activity (31) Procure 33 public toilets, 13 garbage trucks, 18 garbage collection stations, and 1,746 dustbins by 2012</p>			
<p>Activity (32) Construct a solid waste landfill site of 23.42 t/d by 2012</p>			
<p>3.5 <u>Kanas Scenic Region Vegetation Recovery</u></p>			
<p>Activity (33) Carry out vegetation recovery of 620,000 m² by 2013</p>			
<p>Institutional Capacity Building for Project Management</p>			
<p>Activity (34) Complete organizational arrangements for XUAR PMO to be able to implement the Project by 2008</p>			
<p>Activity (35) Complete necessary organizational arrangements for IAs (hiring staff; setting up accounting systems; and improving financial, administrative, and human resource policies and procedures) by 2008</p>			
<p>Activity (36) Develop plans, budgets, and procedures for loan implementation and project control in XUAR PMO by 2009</p>			
<p>Activity (37) Complete XUAR PMO and IA staff training (training in ADB procedures, procurement, traffic management, road maintenance, water supply, pollution control, solid waste treatment, environmental monitoring, and financial management) by 2013</p>			
<p>Activity (38) XUAR PMO and IAs refine the PPMS and establish targets and procedures no later than 6 months after loan effectiveness</p>			

ADB = Asian Development Bank, EA = executing agency, FYP = Five-year Plan, GDP = gross domestic product, IA = implementing agency, km = kilometer, km² = square kilometer, m² = square meter, m³/d = cubic meter per day, PMO = project management office, PPMS = project performance management system, O&M = operation and maintenance, t/d = tons per day, WWTP = wastewater treatment plant, XUAR = Xinjiang Uygur Autonomous Region.