



Draft Design and Monitoring Framework

Project Number: 40643
January 2009

PRC: Xinjiang Urban Transport and Environmental Improvement 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 Sustainable socioeconomic growth and improved living standards in five cities of Xinjiang Uygur Autonomous Region (Xinjiang)</p>	<p>By 2017 (baseline year 2006) Increased disposable income of urban households and suburban farmers and herdsmen by 40% (sex disaggregated)</p> <p>Reduced proportion of poor population by 30% (sex disaggregated)</p>	<p>Annual social economic statistics reports</p> <p>Records of environmental protection bureaus</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • 11 FYP and all five city Master Plans are effectively implemented • The good socioeconomic development of Xinjiang will continue after the 11 FYP • All applicable national, regional, and city environmental laws are effectively enforced
<p>Outcome Improved urban road infrastructure, traffic management, and environmental sanitation in the cities of Altay, Changji, Hami, Kuitun, and Turpan</p>	<p>Altay City By 2014 (baseline year 2006) Amount of collected and transported wastes increased by 10%</p> <p>Number of traffic accidents per 10,000 vehicles reduced by 25%</p> <p>Running time of urban public transport and residents travel time shortened from 15 minutes to 5 minutes and from 40 minutes to 15 minutes respectively</p> <p>Incidence of environmental-related diseases reduced by 10%</p> <p>Changji City By 2014 (baseline year 2006) Urban road density increased by 0.9%</p> <p>Public transport operation rate increased by 0.6%</p> <p>Treatment of municipal waste increased by 10%</p>	<p>Municipality records/statistics</p> <p>Police records/statistics</p> <p>Records of public transport companies</p>	<p>Assumption</p> <ul style="list-style-type: none"> • Urban road infrastructure and associated facilities are properly operated and maintained <p>Risks</p> <ul style="list-style-type: none"> • Traffic growth is under/overestimated • The road network and adjacent infrastructure are inadequately maintained due to lack of budget allocation for operation and maintenance

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	<p>Traffic accidents per 10,000 vehicles reduced by 3%</p> <p>Incidence of environmental-related diseases reduced by 10%</p> <p>Hami City By 2014 (baseline year 2006) Road network density increased by 0.7%</p> <p>Volume of municipal waste recycling increased by 6.1%</p> <p>Number of traffic accidents per 10,000 vehicles reduced by 14.8%</p> <p>Incidence of environmental-related diseases reduced by 10%</p> <p>Kuitun City By 2014 (baseline year 2006) Number of public transport routes increased by 18.2%</p> <p>Amount of collected and transported wastes increased by 103.8%</p> <p>Number of traffic accidents per 10,000 vehicles reduced by 6.5%</p> <p>Delay of public transport reduced from 5–6% to 1%</p> <p>Incidence of environmental-related diseases reduced by 10%</p> <p>Turpan City By 2014 (baseline year 2006) Number of traffic accidents per 10,000 vehicles reduced by 50%</p> <p>Amount of collected and transported wastes increased</p>		

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	by 100% Public transport running time reduced by 8 minutes Incidence of environmental-related diseases reduced by 10%		
<p>Output Component 1: Altay Roads and Environmental Improvement</p> <p>1.1 Constructed 3 new roads, upgraded 16 existing roads, and constructed 5 new bridges</p> <p>1.2 Built and procured new environmental sanitation facilities and equipment</p> <p>Component 2: Changji Roads and Environmental Improvement</p> <p>2.1 Constructed 9 new roads and 1 new bridge</p> <p>2.2 Built and procured new environmental sanitation facilities and equipment</p>	<p>By 2014</p> <p>1.59 km of new roads, 26.43 km of upgraded roads, and 281 m of bridges opened to traffic</p> <p>10 public toilets, 20 garbage collection stations, 654 dustbins, and 102 refuse collection points; purchase 1 garbage compaction truck, 1 rear loader garbage truck, 1 street cleaning truck, 2 snow removing trucks, 1 grapple garbage truck, 1 wheeled excavator, 1 wheel loader, and 2 tip trucks operational</p> <p>By 2014</p> <p>23.24 km of new roads and one bridge opened to traffic</p> <p>8 public toilets, 8 garbage collection stations, 394 dustbins, and 33 refuse collection points; purchase 5 garbage compaction trucks, 5 garbage collection vehicles, 3 street cleaning trucks, 2 snow removing trucks, 1 wheeled excavator, 1 aerial work vehicle, 1 10t crane, 1 tip truck, 2 sprinkling vehicles and 1 pesticide spraying vehicle operational</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>Information from final accounts of works</p>	<p>Assumption</p> <ul style="list-style-type: none"> • The works of the adjacent underground infrastructure are properly constructed, operated, and maintained <p>Risks</p> <ul style="list-style-type: none"> • Delayed provision of counterpart funding • Low institutional capacity in terms of project technical, financial, and environmental management • Failure of the PMOs, IAs, and operation and maintenance organizations to monitor environmental impact and implement the environmental management plan during the project construction and operation • Delayed construction due to short construction period

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Component 3: Hami Roads and Environmental Improvement 3.1 Upgraded 3 existing roads</p> <p>3.2 Built and procured new environmental sanitation facilities and equipment</p> <p>Component 4: Kuitun Roads and Environmental Improvement 4.1 Upgraded 13 existing roads and constructed 2 new bridges</p> <p>4.2 Built and procured new environmental sanitation facilities and equipment</p> <p>Component 5: Turpan Roads and Environmental Improvement 5.1 Constructed 6 new roads and upgraded 8 existing roads</p> <p>5.2 Built and procured new environmental sanitation facilities and equipment</p> <p>For all 5 components: Improved institutional management capacity</p>	<p>By 2014 9.02 km of upgraded roads opened to traffic</p> <p>182 dustbins and 2 street cleaning trucks and 1 high pressure cleaning vehicle operational</p> <p>By 2014 23.6 km of upgraded roads and 2 bridges opened to traffic</p> <p>11 public toilets, 21 garbage collection stations , 480 dustbins, 105 garbage containers, and 3 rest stations for environmental sanitation workers; purchase 4 garbage compaction trucks, 2 street cleaning truck, 2 snow removing trucks, 2 sprinkling vehicles operational</p> <p>By 2014 11.89 km of new roads and 10.87 km of upgraded roads opened to traffic</p> <p>11 public toilets, 26 garbage collection stations , 502 dustbins, and 130 garbage containers; purchase 5 garbage compaction trucks, 4 street cleaning trucks, and 2 sprinkling vehicles operational</p> <p>By 2014 Xinjiang PMO and the five project city PMOs and IAs: Project facilities management</p>	<p>ADB review missions</p> <p>Monitoring reports on institutional</p>	

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	<p>improved</p> <p>Traffic management improved</p> <p>Traffic planning improved</p> <p>City planning improved</p> <p>Financial management improved</p> <p>Landscaping management improved</p> <p>Capacity of road maintenance enhanced</p>	<p>development including number of staff trained, areas of training, and strengthened organizations and procedures</p>	

Activities	Inputs
<p>Component 1: Altay Roads and Environmental Improvement</p> <p>Activity (1) By 2009, design the facilities, acquire land, and procure the works.</p> <p>Activity (2) By 2014, construct/upgrade 19 municipal roads with a total of 28.02 km, including 3 proposed new roads and 16 roads to be upgraded; construct 5 new bridges; construct associated road facilities; and purchase road maintenance equipment.</p> <p>Activity (3) By 2014, construct 10 public toilets and 20 garbage collection stations; install 654 dustbins and 102 refuse collection points; and procure 1 garbage compaction truck, 1 rear loader garbage truck, 1 street sweeper truck, 2 snow removing trucks, 1 grapple garbage truck, 1 excavator, 1 wheel loader, and 2 tip trucks.</p> <p>Component 2: Changji Roads and Environmental Improvement</p> <p>Activity (4) By 2009, design the facilities, acquire land, and procure the works.</p> <p>Activity (5) By 2014, construct 9 new municipal roads with a total length of 23.24 km, including one bridge; construct associated road facilities; and purchase road maintenance equipment.</p> <p>Activity (6) By 2014, construct 8 public toilets and 8 garbage collection station; install 394 dustbins and 33 refuse collection points; and purchase 5 garbage compaction trucks, 5 garbage collection vehicles, 4 street cleaning trucks, 2 snow removing trucks, 1 wheeled excavator, 1 aerial work vehicle, 1 10t crane, 1 tip truck, 1 sprinkling vehicle and 1 pesticide spraying vehicle.</p> <p>Component 3: Hami Roads and Environmental Improvement</p> <p>Activity (7) By 2009, design the facilities, acquire land, and procure the works.</p> <p>Activity (8) By 2014, upgrade 3 municipal roads, with a total length of 9.02 km; construct associated road facilities; purchase road maintenance and greening equipment.</p> <p>Activity (9) By 2014, procure 182 dustbins, 2 street sweepers, and 1 street high pressure cleaning truck.</p> <p>Component 4: Kuitun Roads and Environmental Improvement</p> <p>Activity (10) By 2009, design the facilities, acquire land, and procure the works.</p> <p>Activity (11) By 2014, upgrade 13 municipal roads, with a total length of 23.6 km,</p>	<p>• ADB</p> <p>Provide \$100 million loan with timely disbursement based on the construction schedule of the works</p> <p>• Government and IA</p> <p>Provide about \$87.2 million equivalent in counterpart funds with timely disbursement based on the construction schedule of the works:</p> <p>Altay Municipal Government: \$17.3 million</p> <p>Changji Municipal Government: \$25.7 million</p> <p>Hami Municipal Government: \$10.1 million</p>

Activities	Inputs
<p>including 2 trunk roads, 5 secondary roads, 9 branch roads, and construct 2 bridges; construct associated road facilities; and purchase road maintenance equipment.</p> <p>Activity (12) By 2014, construct 11 public toilets, and 21 garbage collection stations; install 480 dustbins, 105 garbage containers, and 3 rest stations for environmental sanitation workers; and procure 4 garbage compaction trucks, 2 street sweeper trucks, 2 snow removing trucks, and 2 sprinkling vehicles.</p> <p>Component 5: Turpan Roads and Environmental Improvement</p> <p>Activity (13) By 2009, design the facilities, acquire land, and procure the works.</p> <p>Activity (14) By 2014, construct/upgrade 14 municipal roads, with a total length of 22.76 km, including 5 trunk roads, 7 secondary roads, and 2 branch roads; construct associated road facilities; purchase road maintenance equipment; and construct 2 open culverts.</p> <p>Activity (15) By 2014, construct 11 public toilets and 26 garbage collection stations; install 502 dustbins and 130 garbage containers; and procure 5 garbage compaction trucks, 4 street sweeper trucks, and 2 sprinkling vehicles.</p> <p>Institutional Capacity Building for Project Management</p> <p>Activity (16) Complete organizational arrangements for Xinjiang PMO to be able to implement the Project by 2009.</p> <p>Activity (17) Complete necessary organizational arrangements for IAs (hiring staff; setting up accounting systems; and improving financial, administrative, and human resource policies and procedures) by 2009.</p> <p>Activity (18) Develop plans, budgets, and procedures for loan implementation and project control in Xinjiang PMO by 2010.</p> <p>Activity (19) Complete Xinjiang PMO and IA staff training (training in ADB procedures, procurement, traffic management, road maintenance, pollution control, environmental monitoring, and financial management) by 2014.</p> <p>Activity (20) Xinjiang PMO and IAs refine the PPMS and establish targets and procedures no later than 6 months after loan effectiveness.</p>	<p>Kuitun Municipal Government: \$15.3 million</p> <p>Turpan Municipal Government: \$18.8 million</p>

ADB = Asian Development Bank, FYP = Five-Year Plan, IA = implementing agency, km = kilometer, m = meter, m² = square meter, PMO = project management office, PPMS = project performance management system.