



Draft Design and Monitoring Framework

Project Number: 40031
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India: Rajasthan Urban Sector Development Investment Program

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 FOR THE FACILITY

Design Summary	Performance Indicators/Targets	Data Sources/Reporting Mechanisms	Risks/ Assumptions
<p>Impacts</p> <p>Increased economic growth and reduced poverty, and sustained improvement in the urban environment and quality of life in the initially identified urban local bodies (ULBs) in Rajasthan (the Investment Program ULBs).</p>	<p>By the end of the Investment Program implementation period plus three years 2017:</p> <ul style="list-style-type: none"> • Increase in per capita real income in the Investment Program ULBs by 10%; • Urban infrastructure services reaching an additional 20% population in the Investment Program ULBs; • number of tourists in the Investment Program ULBs increased by 10%; • number of sanitation related diseases in Investment Program ULBs decreased by 20%; • percentage of population below poverty line (BPL) in Investment Program ULBs held constant or declining. 	<ul style="list-style-type: none"> • State and local government statistics; Household consumer expenditure and employment surveys; • Census data; • Records from the Department of Tourism and Department of Health of Government of Rajasthan (GoR); • Sample surveys of BPL; • Investment Program completion report and Project completion reports 	<p>Assumptions (A)</p> <p>A: Macroeconomic stability.</p> <p>A: Continued political support for development in Rajasthan.</p> <p>Risks (R)</p> <p>R: Sustained drought and other natural disasters in Rajasthan.</p> <p>R: Lack of commitment from GoR and local (ULB) governments to urban reforms.</p>
<p>Outcomes</p> <p>Increased access to sustainable urban infrastructure and services for 1.6 million people in the Investment Program ULBs by the end of the Investment Program (2014)</p> <p>Improved capacities of, and sustainable management of urban services by the Investment Program ULBs by the end of the Investment Program (2014)</p>	<p>By the end of the Investment Program implementation period plus three years 2017:</p> <p>Water supply:</p> <ul style="list-style-type: none"> • 1.4 million people in the Investment Program ULBs (90% of the total population) provided with treated piped water supply of at least 100 litres per capita per day (lpcd); • unaccounted for water reduced to around 20% in all Investment Program ULBs; <p>Sanitation:</p> <ul style="list-style-type: none"> • total and appropriate sanitation provided for 1.6 million people in the Investment Program ULBs; • all ULBs with population density 150hh/hectare and water supply of 135 lpcd are provided with sewerage facilities including STPs; • reduction in the volume of wastewater discharged to water bodies; <p>Solid waste management:</p> <ul style="list-style-type: none"> • all Investment Program ULBs have access to appropriate sanitary landfill facilities and ULBs have capacity and facilities to collect municipal waste. <p>Urban drainage:</p> <ul style="list-style-type: none"> • drainage outfalls provided in all Investment Program ULBs to reduce risks of flooding; • all core areas of the Investment Program ULBs provided with roadside drains. <p>Urban roads and transport:</p>	<ul style="list-style-type: none"> • State and local government statistics and reports; • Census data; • Sample surveys of BPL; • IPPMS and IPMU progress reports; • ADB review mission reports; • NGO reports; • Baseline surveys; 	<p>Assumptions (A)</p> <p>A: Political will to increase tariffs and implement service charges or property taxes in order to achieve cost recovery.</p> <p>A: Overall capacity of the Investment Program ULBs for urban governance and service delivery is improved to effectively operate and manage urban infrastructure and services.</p> <p>A: Adequate funding is mobilized for operations, maintenance and replacement of newly provided facilities.</p> <p>Risks (R)</p> <p>R: ULBs do not have sufficient revenue to properly manage and maintain the existing and newly acquired assets.</p> <p>R: Slow actions by GoR and the Investment Program ULBs to undertake urban institutional and financial reforms.</p> <p>R: Lower than expected willingness to pay for services.</p> <p>R: Lack of sufficient skilled</p>

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	<ul style="list-style-type: none"> • Improved traffic flow within the Investment Program ULBs and travel times between zones maintained at present levels or reduced in all the Investment Program ULBs; <p>Slum Improvements:</p> <ul style="list-style-type: none"> • about 0.21 million poor living in notified slums of the Investment Program ULBs provided with improved basic urban services and living conditions; <p>Support infrastructure for Cultural Heritage</p> <ul style="list-style-type: none"> • infrastructure services provided for identified heritage and tourism related monuments in the Investment Program ULBs; <p>Improved institutional capacity:</p> <ul style="list-style-type: none"> • Investment Program ULBs meet O&M costs of all urban services and have sound financial management practices; • Investment Program ULBs have adequate revenues from their own sources such as local taxes and levies to meet all of their own expenses; • ownership of urban assets and responsibilities for urban services, as per the 74th Amendment Act to the Constitution of India, lies with the Investment Program ULBs; and • Investment Program ULBs have adequately trained and skilled human resources to operate and maintain the urban facilities and services. 		<p>staff to operate and manage urban services in the Investment Program ULBs.</p> <p>R:Environmental regulations not strictly enforced.</p>
<p>Outputs Implemented Investment Program for water supply</p>	<p>Water Supply:</p> <ul style="list-style-type: none"> • Existing System Rehabilitation and UFW Reduction Investment Program implemented in all Investment Program ULBs, which include, replacement of excessively leaking carrier mains; repair and replacement of distribution mains; repair and replacement of leaking house connections older than 10 years; installation/ replacement of consumer water meters in 100% of the existing connections; refurbishment/replacement of old pumping machinery; installation of bulk meters at all supply points; rehabilitation of existing water treatment plants; augmentation of storage capacities; and provision of chlorination facilities; • source augmentation and new treatment plants in Alwar, Jaisalmer, Baran-Chabra, Barmer, Rajasmand, Dhaulpur, Karauli, Churu, Nagaur, Sawai Madhopur, and Sikar; • New distribution pipelines installed to increase piped water supply coverage to 	<ul style="list-style-type: none"> • IPMU quarterly progress reports; • Budgets and annual work plans; • Mid-term review reports for each loan • Mid-term review report for the Investment Program; • IPPMS reports; • ADB review mission reports; • Disbursement records; • Subproject completion and commissioning certificates 	<p>Assumptions (A)</p> <p>A: Required land acquisition and compensations completed in time.</p> <p>A: Public awareness campaigns are successful in connections to the new facilities.</p> <p>A: Poor will be connected and be able to afford both the connection and the service.</p> <p>A: Adequate staff trained and placed for STP and WTP operation and maintenance.</p> <p>Risks</p> <p>R: Groundwater depletion issues not addressed properly causing unsustainable extraction of groundwater.</p>

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Implemented Investment Program for environmental sanitation	<p>90% of all households in the Investment Programs ULBs;</p> <ul style="list-style-type: none"> District water quality testing laboratory in Jhalawar; <p>Sewerage and Sanitation:</p> <ul style="list-style-type: none"> Sewerage system - outfall, trunk sewers, and tertiary networks and household connection in priority areas as identified- and sewage treatment plants (STPs) constructed in Alwar (STP capacity 20 MLD), Jaisalmer (10 MLD), Baran (12 MLD), Chabra (4 MLD), Bharatpur (20MLD), Bundi (10 MLD), Chittorgarh (10 MLD), Dhaulpur (10 MLD), Karuli (8MLD), Churu (15 MLD), Nagaur (10MLD), Sawai Madhopur (13MLD), Sikar (16 MLD); 		<p>R: Further deterioration of water supply systems may cause cost increases and scope changes.</p> <p>R: Limited knowledge of existing distribution systems may result in investment in water supply rehabilitation not achieving the projected improvements.</p> <p>R: Limited knowledge of existing household wastewater disposal may lead to lower connectivity to the sewers and increased investment requirement. Environmental clearances not completed in a timely manner.</p>
Implemented Investment Program for Urban Roads and Transport	<p>Solid Waste Management:</p> <ul style="list-style-type: none"> Household waste containers in all Investment Program ULBs; Collection and transportation containers, equipment and vehicles for municipal solid waste in all the Investment Program ULBs; Construction of engineered municipal sanitary landfill and composting plants as per Gol's Municipal Solid Waste Management Rules, 2000, in all Investment Program ULBs; <p>Urban Drainage:</p> <ul style="list-style-type: none"> Comprehensive Drainage Master Plan for all Investment Program ULBs; and Roadside drains and trunk outfalls to carry storm water runoff into natural channels, and adequate tools and resources to maintain the drains as per the master plans. <p>Urban Roads and Transport:</p> <ul style="list-style-type: none"> Comprehensive Traffic Management Plans prepared for all Investment Program ULBs; Identified major entry and exit roads resurfaced in the Investment Program ULBs to decongest the city/town centers; and Identified transport infrastructure - Road Over Bridge (RoB)s or Road Under Bridge (RuB)s built in Alwar, Baran and Chabra, Bharatpur, Bundi, Chittorgarh, Churu, Nagaur, Sawai Madhopur, and Sikar - completed in the Investment Program ULBs. 		<p>Assumptions (A)</p> <p>(A) Public awareness campaign will be effective to encourage household for waste segregation and payment of service fees.</p> <p>(A) Poor will connect and afford the connection and the service.</p> <p>(A) Environmental regulations for acceptable practices implemented.</p> <p>(A) Resettlement and environmental clearance completed in a timely manner.</p> <p>(A) Adequate funds for provided for operation and maintenance.</p> <p>Risks (R)</p> <p>(R) Households not willing to pay for the services.</p>
Implemented Investment Program for Social Infrastructure	<ul style="list-style-type: none"> Major entry and exit roads, basic urban infrastructure and amenities (e.g. water and sanitation, roads, streetlights, drainage, community hall, rain water harvesting 		<p>Assumptions (A)</p> <p>(A) Public awareness campaigns are effective.</p> <p>(A) Beneficiaries,</p>

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	structures etc) developed for 0.21 million population living in identified slums in the Investment Program ULBs.		particularly renters, continue to live in improved slums. Risks (R) (R) Public awareness is less than effective.
Implemented Investment Program for support infrastructure for cultural heritage	<ul style="list-style-type: none"> Heritage conservation plans prepared for the identified sites and monuments in the Investment Program ULBs; Identified supporting infrastructure around the monuments and facilities for tourists developed in the Investment Program ULBs; 		
<p>Implemented Investment Program for Capacity Development</p> <p>Implementation and management of the Investment Program</p>	<ul style="list-style-type: none"> Infrastructure base maps completed for all the Investment Program ULBs; Identified governance and institutional management training provided to the Investment Program ULB officials; Double entry accounting system introduced, financial management systems computerized and asset management systems improved in the Investment Program ULBs; Hand-over of assets and responsibilities of sewerage systems (from PHED to the Investment Program ULBs) completed; Sustainable user charge structure including improved volumetric water charges, sewerage charges and solid waste management charges implemented; GIS installed in priority areas; Municipal and departmental staff trained in operation and maintenance of services, financial management, regulation enforcement; PPP opportunities studied and tried in selected subprojects in the Investment Program ULBs; and CAPP and IEC Investment Programs implemented in the Investment Program ULBs. 	<ul style="list-style-type: none"> IPMU quarterly progress reports of the six IPIUs; Budgets and annual work plans; IPPMS reports; Review mission reports; Disbursement records; Subproject completion and commissioning certificates; Records of consultations and meetings; Financial statements of agencies and ULBs 	<p>Assumptions (A)</p> <p>(A) Political stability and continued support for the Investment Program ULBs.</p> <p>(A) Reinstatement of property taxes for financial sustainability of the ULBs.</p> <p>(A) Tariff reforms and introduction of user charges.</p> <p>(A) ULB staff are capable to manage the urban services.</p> <p>Risks (R)</p> <p>(R) Tariff reforms, property taxes and user charges not introduced due to lack of political will.</p>
Activities with milestones			Inputs (\$ Million)
<ol style="list-style-type: none"> 1. <i>Investment Program Preparation</i> <ol style="list-style-type: none"> 1.1. IPMU in Jaipur and seven IPIUs established and fully staffed by July 2007 1.2. Consultant teams (IPMC and DSC) appointed by September 2007 1.3. Tariff reforms in Investment Program ULBs to be initiated by September 2007 1.4. Land acquisition & environmental clearances for works under the 1st tranche completed by February 2008 1.5. Engineering designs and RFP preparation for subprojects under the 1st tranche of the Investment Program completed by November 2007 1.6. 			<p>ADB 300.00</p> <p>GoR 75.00</p> <p>Total 375.00</p>
<ol style="list-style-type: none"> 2. <i>Subproject Implementation (for the 1st tranche)</i> <ol style="list-style-type: none"> 2.1. Initiate CAPP and IEC by September 2007 2.2. Update construction plans and schedules – June 2008 2.3. Initiate land acquisition and resettlement if any by September 2007 2.4. Prepare bid documents – November 2007 			

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	<ul style="list-style-type: none"> 2.5. Procure equipment and materials – Water Supply, Sewerage, Solid Waste, etc – September 2008 2.6. New water supply ring main (17.5 km), 10 storage reservoirs, 17 stand-alone chlorination facilities/plants constructed in Alwar by 2012; 2.7. Approximately 47 km of water distribution pipelines rehabilitated/replaced in Alwar by 2011; 2.8. Approximately 74 bulk flow meters, 10 ultrasonic flow meters and 34,000 household water meters installed in Alwar, Jaisalmer, Jhalawar and Jhalarapatan by 2011; 2.9. Existing pumping machineries and tubewells rehabilitated in Alwar, Jaisalmer, Jhalawar and Jhalarapatan by 2011; 2.10. STPs - of capacities 20 MLD in Alwar and 10 MLD in Jaisalmer – and associated outfalls, trunk mains, laterals and household connections (minimum of 30% of the total number fo households) completed by 2012; 2.11. Outfall drains of 12.8 km completed in Jaisalmer by 2010; 2.12. New intake and supply augmentation facilities, including 58 km of transmission mains, one clear water reservoir, 10 storage rervoirs and deciated power supply line completed for Jaisalmer by 2011; 2.13. 4 Sanitary landfills (and composting plants) of ultimate 163 tons/day (Alwar), 55 tons/day (Jaisalmer), 25 tons/day (Jhalawar) and 18.5 tons/day (Jhalarapatan) constructed by 2012; 2.14. Dry well Intakes(2), clear water reservoirs (2) , overhead storage tanks (10) and rising mains (24.5km) constructed and water treatment plants rehabilitated in Jhalawar and Jhalarapatan by 2011; 2.15. Road over bridge (RoB) in Alwar completed by 2010; and 2.16. Solid waste equipment and vehicles for Alwar, Jaisalmer, Jhalawar and Jhalarapatan procured by 2009. 		
	<ul style="list-style-type: none"> 3. Capacity Development 3.1. Improvement of financial management and accounting and computerization initiated in the Investment Program ULBs by December 2007 3.2. Operational improvement of urban infrastructure services: Development of operation management Investment Programs, staff trained, and implementation is ongoing 3.3. Training of ULB and government department officials initiated by January 2008 3.4. Establishment of IPPMS by July 2008. 		

ADB = Asian Development Bank, BPL = below poverty line, CAPP = Community Awareness and Community Participation, DSC = Design and Supervision Consultants, GIS = Geographical Information Systems, GOI = Government of India, GoR = Government of Rajasthan, IEC = Information, Education and Communication, IPMC = Investment Program Management Consultants, IPMU = Investment Program Management Unit, IPIU = Investment Program Implementation Unit, IPPMS = Investment Program Performance Management System, NGO = nongovernment organization, O&M = operation and maintenance, PHED = Public Health and Engineering Department, PPP = Private Public Partnership, UFW = un-accounted for water, ULB = urban local body, WSS = water supply and sanitation, STP = sewerage treatment plant, WTP = water treatment plant.