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GOVERNMENT OF INDIA
MINISTRY OF FINANCE
DEPARTMENT OF ECONOMIC AFFAIRS

North Block, New Delhi

Dated, the 18th February, 2014

Dear Mr. Miranda,

Karnataka Integrated Urban Water Management Investment Program {KIUWMIP}
- Periodic Financing Request (PFR) - 1

This has reference to Framework Financing Agreement (FFA) for the Karnataka Integrated Urban Water Management Investment Program dated 18th February, 2014, between Asian Development Bank (ADB) and INDIA. Expressions defined in the FFA shall have the same meanings herein.

Pursuant to the provisions of the FFA, INDIA requests ADB to process this Periodic Financing Request (PFR) for a tranche in the form of a loan from its Ordinary Capital Resources (OCR), and a US\$1.8 million Grant from the Urban Financing Partnership Facility administered by ADB. The proposed financing amounts, terms, conditions, and financing plan are specified in Attachment-A hereto. Descriptions of the investment project for which financing is hereby requested are also set out in Attachment hereto.

Yours sincerely,

(Sheyphali B. Sharan)

Mr. J. Miranda,
Director General,
South Asia Department, Manila,
Philippines



D.O. No. KUIDFC/ KIUWMIP /154/2012-13

February 15, 2014

Dear Sri Nilaya Mitash,

Sub: ADB assisted "Karnataka Integrated Urban Water Management Investment Programme" (KIUWMIP) – Proposal for Tranche-1 under Multi-Tranche Financing Facility.

Ref: Framework Financing Agreement for the Programme.

This is with reference to the ADB assisted "Karnataka Integrated Urban Water Management Investment Programme" (KIUWMIP) being taken up with the financial assistance of the Asian Development Bank. The programme is proposed to be implemented with three major components. The bulk of investment pertains to expanding water supply and sewerage infrastructure in the selected towns. The second component pertains to enabling Urban Local Bodies to implement reforms in governance with focus on water and sanitation. The third component aims to strengthen the role of KUIDFC as a Special Purpose Vehicle and a financial intermediary to enable higher investments and sustainable growth in Urban Sector.

The first tranche aims to cover IWRM functions and investments for the ULBs of Davanagere, Harihar and Byadagi in the Upper Tunga Bhadra river basin at an estimated cost of \$115 million. KUIDFC has taken approval for advance contracting and retroactive financing for Tranche - 1 sub-projects. The Sewerage works in 2 ULBs are already tendered. ADB has given it's concurrence to the bidding document for construction of sewage treatment plant (STP). KUIDFC is taking necessary action for inviting bids for the same.

Meanwhile, ADB fielded an Advance Action Review Mission during 20-24 January 2014 and conducted field visits and reviewed the preparedness. The Aide Memoire of the Mission provided by ADB has been confirmed. I am forwarding herewith the Periodic Financing Request (PFR) for Tranche - 1 for submission to ADB. The information provided in the PFR will be discussed and finalised during loan negotiations. I would request you to recommend to ADB for sanction of Tranche - 1 of KIUWMIP.

With best wishes,

Yours sincerely,



Sri Nilaya Mitash, IAS.,
Joint Secretary (MI),
Department of Economic Affairs,
Ministry of Finance,
North Block,
New Delhi - 110 001.

Encl: as above.

Attachment

Project Description The project in Tranche 1 (Project 1) under the Karnataka Integrated Urban Water Management Investment Program will apply a project lending approach. Subprojects under Project 1 conform to selection criteria approved under the Framework Financing Agreement (FFA), including technical, environmental, social, institutional, economic and financial criteria. Project 1 supports improvements in urban water and sanitation infrastructure in 3 ULBs: Byadagi, Davangere and Harihar; institutional development, municipal management and project implementation capacity across the State. Project 1 outputs proposed for financing under the requested PFR are:

- (i) Output 1: Expanded and upgraded UWSS infrastructure in 3 towns.
- (ii) Output 2: Improved water resource planning, monitoring and service delivery.
- (iii) Output 3: Strengthened capacity.

The Design and Monitoring Framework for this tranche is in Annex 1. Additional details are in Annex 2.

Cost Estimates and Financing Plan The total cost of Project 1 is estimated at \$117 million, inclusive of taxes, duties, and interest and other charges on the loan during construction. The detailed cost estimates and financing plan are in Annex 3.

(\$ million)

Project/ component	GOK and ULBs	ADB	Cofinancier (UFPF)	Total
Output 1	22.81	74.43	1.80	99.04
Output 2	5.90	0.57	0.00	6.47
Output 3	11.49	0.00	0.00	11.49
Total	40.20	75.00	1.80	117.00

Loan Amount and Grant Terms

The request is for a loan of \$75 million from the Ordinary Capital Resources of the Asian Development Bank (ADB) provided under ADB's London interbank offered rate (LIBOR)-based lending facility, with a 25 year term including a grace period of 5 years, an interest rate determined in accordance with ADB's LIBOR-based lending facility, and such other terms and conditions as agreed in the FFA, and further supplemented under the Loan and Project Agreements.

A \$1.8 million grant from the Urban Financing Partnership Facility, administered by ADB, has been requested to finance the output based toilet program.

Period of Loan Utilization

Project 1 is expected to be completed by 31 March 2019. No disbursements from the loan and grant accounts will be requested or made later than 30 September 2019.

Advance Contracting	Advance contracting is requested for goods, civil works and services.
Retroactive Financing	Retroactive financing is requested for the eligible expenditures associated with procurement of civil works and equipment, not exceeding the amount of 20% of the loan amount, incurred before loan effectiveness, but not earlier than 12 months before the signing of the loan and project agreements.
Implementation Arrangements	The Executing Agency (EA) will be the Government of the State of Karnataka acting through the Karnataka Urban Infrastructure Finance and Development Corporation (KUIDFC). A central project management unit (CPMU) and a regional project management unit (RPMU) will be established to assist KUIDFC. The Integrated Water Resources Management (IWRM) Steering Committee and the State-level Empowered Committee, will provide oversight, policy direction and strategic guidance to the EA. The implementing agencies will be: ULBs (with assistance from KUIDFC) for implementing Output 1 and municipal-level improvements under Output 2.1. A PIU will be established in each ULB to assist the ULB. KUIDFC will implement outputs 2.3, 2. 3, 3.1 and 3.3 and will responsible for the establishment and management of the ULB Incentive Fund (UIF) for Improved Water Sector Planning and Monitoring under Output 2.1. The Karnataka Municipal Reform Cell (KMRC) will implement output 2.2 and the State Institute for Urban Development will implement output 3.2.
Procurement and Consulting Services	All goods and services to be financed under Project 1 will be procured in accordance with ADB's Procurement Guidelines (2013, as amended from time to time). The procurement plan is attached as Annex 4. All consulting services under Project 1 will be financed by GOK and the ULBs. Terms of reference for the engagement of advisors under this tranche are attached as Annex 5.
Confirmation of Continuing Validity of and Adherence to Provisions of FFA	India confirms that the understandings set out in the FFA will be adhered to.

Readiness of the Project for Implementation

KUIDFC has established a core Central Project Management Unit. Detailed designs for all major procurement packages are under preparation. Two packages (Harihar sewerage and Davanagere sewerage) have been tendered. RFPs for 2 major consultancy packages have been issued and proposals are under evaluation. A summary of advance actions is in Annex 6.

Summaries of feasibility studies, engineering designs and economic and financial assessments can be found in <http://www.adb.org/projects/documents/karnataka-integrated-sustainable-water-resources-management-investment-program-tacr>

Safeguards

The resettlement plans for the water supply and sewerage subprojects in 3 towns can be found in <http://www.adb.org/projects/43253-024/documents>

The initial environmental examinations for the water supply and sewerage subprojects in 3 towns are in <http://www.adb.org/projects/43253-024/documents>

ANNEX 1 - DESIGN AND MONITORING FRAMEWORK FOR KIUWMIP TRANCHE 1

Design Summary	Performance Targets and Indicators with Baselines ^a	Data Sources and Reporting Mechanisms	Assumptions and Risks
Impact Improved sustainable water security in the Upper Tunga Bhadra subbasin	By 2023 - Surface water quality indicators reduced or maintained at acceptable standard of ≤ 30 mg/l BOD level and total coliforms $< 5,000$ MPN/100 ml coliform count in critical watersheds. - Enhanced access to drinking water and sanitation by an additional 52,000 and 60,000 households, respectively. - Reported annual incidence of waterborne diseases decreased by at least 10% in Byadgi, Davangere, and Harihara (from 13, 33 and 36 per 1000 population, respectively)	- Central and State Pollution Control Board and KUIDFC reports - ULB statistics and census data - Program ULBs hospital reports, socioeconomic surveys pre project and post completion	Assumptions No extreme natural calamities within the benefit monitoring period (2023). Risks Water resources may deteriorate because of upstream activities and/or pollution.
Outcome Improved water resources planning, monitoring and service delivery in three towns of the Upper Tunga Bhadra subbasin	By 2021 - Improved water use efficiency through NRW reduction from average 40% (in 2012) to less than 25% in Byadgi, Davangere, and Harihara. - Improved beneficiary perception of WSS service quality in four project towns. - National wastewater effluent quality discharge/reuse standards met in Byadgi, Davangere, and Harihara (Baseline, 2013: Davangere Zone 1, non-compliant; Harihar, partially compliant; Byadgi did not have operational STPs in 2013).	- KUIDFC and KMRC annual reports and ULB statistics - Tranche beneficiary perception surveys conducted prior to and on scheme completion - KSPCB and ULB reports	Assumptions - IWRM/ULB reforms implemented on schedule. - No significant change in hydrological regime and basin water availability.
Outputs 1. Expanded and upgraded UWSS infrastructure in three towns of the Upper Tunga Bhadra subbasin	By end 2019 1.1 Inefficient water supply systems rehabilitated and upgraded - Additional households served with new piped, metered water connections in target ULBs including the poor, females and socially excluded HH (Target: additional 52,000 HH; baseline: 52,000 HH) - Average hours of water supply extended from 1 hour daily (average) to continuous 24x7 supply in project 1 ULBs - Water supplied meets national standards (Target: 95% of tests; baseline: non-compliant). - Water production and treatment capacity increased (additional 15,000 m³/day; baseline: 108,000 m³/day) - Length of piped network added (1,050 km) (baseline: 609 km) 1.2 Wastewater networks, treatment and effluent reuse infrastructure expanded - Households additionally served with sewers in target ULBs including the poor, females and socially excluded households (Target: 96,000 HH; baseline: 36,000 HH) - Wastewater capacity increased (48,000 m³/day; baseline: 54,000 m³/day) - Sewers extended (365 km) (baseline:	- PPMS, KUIDFC and ULB reports - ULB reports - ULB reports - PPMS, KUIDFC and ULB reports - PPMS, KUIDFC and ULB reports - PPMS, KUIDFC and ULB reports - PPMS, KUIDFC and ULB reports - PPMS, KUIDFC and ULB reports	Assumptions - Beneficiaries are willing to connect to water supply and sewerage networks. Risks - Open defecation persists. - Lack of consensus on effluent allocation limit efficacy and reuse opportunities.

Design Summary	Performance Targets and Indicators with Baselines ^a	Data Sources and Reporting Mechanisms	Assumptions and Risks
	500km) • 50% effluent recycled for agricultural or industrial purposes • Output-based toilet and connection program for poor and vulnerable households (Target: 5,000 new toilets reaching pop. 30,000, including FHH) • Community water groups in 4 towns, with equal participation of women, formed to promote water conservation, hygiene, and sanitation	ULB reports • PPMS and NGO reports • NGO reports • NGO reports	
2. Improved water resources planning, monitoring and service delivery in Karnataka	By end 2019 2.1 ULB Incentive Fund (UIF) for Improved Water Sector Planning, Monitoring and use established • Water audits for four new ULBs developed. • Water asset mapping and condition assessments for two new ULBs conducted. • Customer databases in four ULBs updated. 2.2 State and ULB Reform Program implemented • ULB IT-based modules developed and piloted in four project towns. • State guidelines on public stand posts. • Water supply contracts with private sector participation mainstreamed (three project towns). 2.3 Improved communication and citizen participation • Social and behavioral change programs conducted across four ULBs conducted for community members, including women, men and adolescent girls. • IEC leaflets disseminated to spread awareness on gender equality, health, hygiene and sanitation prepared.	• PPMS and ULB reports • PPMS and ULB reports • PPMS and ULB reports • KMRC web page and promotional materials. • UDD circular instruction • PPMS, project contractual documents • PPMS and NGO reports • IEC materials	Assumptions State continues commitment to implementing the institutional and financial reforms required to improve service delivery and water management. Acceptability of private operator by local community. Willingness among ULBs to work together.
3. Strengthened capacity	By end 2019 3.1 Improved financial intermediation capacity • Business and financial strategy and plans developed, including capital adequacy, asset quality, liquidity, and profitability programs. • Credit and risk management policies, operating systems, and procedures developed. • Procedures to assess and monitor the economic, social, gender equality, and environmental impact of subprojects approved. 3.2 Improved ULB administrative capacity building • Capacity development programs developed and tested with water sector staff of target ULBs in Tranche 1 towns. • Women participation in training programs (Target: >33%). 3.3 Project management system operational • Project 1 implemented on time and on	• PPMS, KUIDFC annual reports • PPMS, KUIDFC annual reports • PPMS, KUIDFC annual reports • PPMS and training materials • PPMS and PPMS • PPMS and TPRM	Assumptions Strong IWRM leadership. State commitment to transform KUIDFC into a fully functional financial intermediary.

Design Summary	Performance Targets and Indicators with Baselines ^a	Data Sources and Reporting Mechanisms	Assumptions and Risks
	budget - Workshops focusing on social and gender issues organized for KUIDFC, ULBs, PMU, PIU women and men staff - Project MIS contains gender and social inclusion focused indicators. Sex-disaggregated data collected, analyzed, and key findings.	reviews - PPMS, trainer records - PPMS	
Activities 1. Output 1: UWSS infrastructure expanded 1.1 Prepare detailed designs and bid document (July 2013 – June 2014 for Tranche 1; June-October 2015 for Tranche 2). 1.2 Award civil work contracts (June - December 2014 Tranche 1; January-July 2016 Tranche 2). 1.3 Construct and commission UWSS systems (2014–2019 for Tranche 1). 2. Output 2: Improved water resources planning, monitoring and service delivery 2.1 Design (2014), evaluate (2015) and implement proposals (July 2015-April 2016) of pool incentive fund for service delivery reforms. 2.2 Design and encode reform-related IT modules (Tranche 1, May 2014-July), roll them out and train ULBs (Tranche 1 towns July 2015-July 2017). 2.3 Award of PPP contracts (June-April 2015 Tranche 1). 2.4 Draft (by December 2014), consult (by June 2015) and approve (by December 2014) the State Guidelines on stand posts. 2.5 Recruit communications consultant/NGO (July 2014) and launch communications campaign (October 2014). 2.6 Identify and design of managerial innovations in 2014, pilot implementation of identified innovations in 2015-2019 (for Tranche 1). 3. Output 3: Strengthened capacity 3.1 Prepare ULB specific assessments and training modules (by end 2015) and deliver for Tranche 1 ULB administration (by mid 2018). 3.2 Establish central (September - December 2013) and regional (July 2014) PMU offices with core staff, engage and mobilize consultants and contractors, regional PMU and PIU offices before loan signing in 2014. 3.3 Establish PMU operations including capacity building of its staff to manage the project (2014-2019). 3.4 Monitor, report, and evaluate project progress, including surveys (2014-2019). 3.5 Recruit KUIDFC financial intermediation consultant (December 2014), deliver studies (August 2016)			Indicative Inputs Project 1 ADB: \$76.8 million OCR: \$75.0 million UFPF: \$1.8 million GOK: \$40.2 million

ADB = Asian Development Bank, BOD = biological oxygen demand, FHH = female headed household, IEC = information and education campaign, HH = household, IT = information technology, IWRM = Integrated Water Resources Management, km = kilometer, KMRC = Karnataka Municipal Reform Cell, KSPCB = Karnataka State Pollution Control Board, KUIDFC = Karnataka Urban Infrastructure Development and Finance Corporation, m³ = cubic meter, MIS = , MPN = most probable number, NGO = nongovernment organization, NRW = nonrevenue water, O&M = operation and maintenance, OBA = output based assistance, OCR = ordinary capital resources, PIU = project implementation unit, PMU = project management unit, PPMS = project performance monitoring system, QPR = quarterly progress report, SPV = special purpose vehicle, STP = sewage treatment plant, TPRM = Tripartite Portfolio Review Meeting, UIF = ULB Incentive Fund, ULB = urban local body, UWSS = urban water supply and sanitation, WSS = water supply and sanitation.

ANNEX 2: DETAILED PROJECT DESCRIPTION

1. Project 1 of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP) (the Project) supports improvements in urban infrastructure and services in the following 3 ULBs: Byadagi, Davangere and Harihar, and institutional development, improved municipal management and project implementation capacity across the State. The Project has the following components:

Output 1.1: Water Supply Infrastructure

2. This output comprises rehabilitation and expansion of potable water supply systems in the 3 ULBs: Byadagi, Davangere and Harihar. The following will be the specific outputs under this component:

- (i) Rehabilitation and expansion of water treatment plants (WTPs) – 13 MLD capacity in Harihar, 14 MLD capacity in Davanagere;
- (ii) Construction of new WTPs – 15 MLD capacity in Harihar;
- (iii) Rehabilitation and expansion of storage reservoirs – 2 reservoirs in Harihar, 11 reservoirs in Davanagere and 1 reservoir in Byadgi;
- (iv) Construction of new transmission mains – 11 Km in Harihar and 35 Km in Davanagere;
- (v) Construction of new distribution network – 157 km in Harihar, 800 Km in Davanagere and 100 Km in Byadgi km; and
- (vi) Procurement and installation of 120 bulk meters and around 82,000 household meters for all 3 ULBs.

Output 1.2: Sanitation Infrastructure

3. This output comprises expansion of sewerage systems in the following 3ULBs. The following will be the specific outputs under this component:

- (i) Construction of new sewer network – 72 Km in Harihar, 214 Km in Davanagere and 79 Km in Byadgi;
- (ii) Construction of new lift stations – 4 lift stations in Harihar;
- (iii) Construction of new sewage treatment plants (STPs) – 5 MLD capacity in Byadagi, 20MLD capacity in District 1 and 1a and 5 MLD capacity in District 3 in Davangere and 18 MLD capacity in Harihar; and
- (iv) Provision of 5,087 toilets across the 3 ULBs .

Output 2: Improved water resource planning, monitoring and service delivery

4. This component will finance in Tranche 1:

- (i) A first installment for the ULB Incentive Fund;
- (ii) Preparation of 4 IT-based modules for volumetric tariff setting, water accounting and effluent discharge and improved MIS and Asset Management and testing in 3 Project 1 Towns;
- (iii) PSP approaches in water and sewerage service delivery.
- (iv) The preparation of the public communication and awareness program and materials.

Output 3: Strengthened capacity

5. This component comprises the following specific outputs:

- (i) Professional services to assist KUIDFC prepare strategic documents to enhance their financial intermediation capacity;

- (ii) Project management and design and construction supervision services for Project 1;
- (iii) Training programs for developing administrative and water management capacity at ULB level in 3 Project 1 towns.

Table 1: Summary of Infrastructure Outputs per Town

Sector	Indicator	Town			Total
		Byadgi	Davanagere	Harihara	
Water	Current coverage (%)	64	44	55	54
	Target coverage (%)	>90	>90	>90	>90
	NRW Estimate (%)	29	41	31	34
	Current HH connections	2,962	42,870	6,480	52,312
	HH connections after completion of the project	4,030	87,500	13,400	104,930
	Current number of HH meters	0	0	122	122
	Final number of HH meters	5,000	65,000	12,000	82,000
	Current water treatment capacity (MLD)	0	99	9	108
	Add'l water treatment capacity (MLD)	0	0	15	15
	Current storage capacity (KL)	3,430	29,250	6,000	38,680
	Rehabilitated storage capacity (KL)	0	1,000	900	1,900
	Add'l storage capacity (KL)	900	10,000	1,800	12,700
	Current length of piped network (Km)	54	485	70	609
	New water supply distribution network (Km)	100	800	157	1,057
Sanitation	Current coverage (%)	0	35	0	12
	Target coverage (%)	>80	>80	>80	>80
	Current HH sewer connections	0	36,100	0	36,100
	HH sewer connections at the end of the project	4,000	73,700	11,500	89,200
	Existing waste water treatment capacity (MLD)	0	54	0	54
	Additional waste water treatment capacity proposed (MLD)	5	25	18	48
	Length of existing sewer network (Km)	0	410	0	410
	Length of sewer network proposed under other projects (NKUSIP/ KMRP/ UIDSSMT)	0	46	46	92
	Length of sewer network proposed under KIUWMIP (Km)	79	214	72	365
	Number of households without having access to toilets	585	7,610	1,592	9,787
	Proposed toilets under KIUWMIP	530	3,805	752	5,087
	Expected toilet coverage at the end of the project (%)	>97	>95	>91	>94

Annex 2: Summary of Feasibility Engineering Designs (Water Supply)

The primary objective of the proposed IWRM Investment programme under Water Supply (WS) component is increased Water accountability, efficiency in water usage including improved water quality to be achieved through continuous water supply (24 x 7). The fundamental activities related to increased water accountability and continuous water supply are:

- Flow Measurements (through bulk and domestic metering including establishments of DMA's).
- Rehabilitation of existing distribution networks to reduce incidence of water losses including Laying of New WS Distribution network in newly developing areas (including regularized house service connections).
- Provision of storage reservoirs including laying of clear water mains for improved service delivery.
- Adequate water treatment capacity to cater to the growing demand for potable water.

Once the above activities and accountability established for the WS network have been accomplished, the WS system will be upgraded to a 24 x 7 continuous supply systems. Summary of technical proposals contemplated for continuous water supply systems in Project 1 ULBs are outlined below:

Davangere

Davangere is the largest ULB within the Tunga-Bhadra sub-basin, and as such its demand is considerable. The city presently has 3 sources of water, the Tunga-Bhadra river, Bhadra-Harihar branch canal and Kundawada lake. The entire system shall be integrated with water zoning and interdependency of the systems as the key approach to make the supply reliable and for improved service. Bulk water supply system improvements are already in progress under NKUSIP including upgrading at Bathi water treatment plant (WTP) from 40 MLD to 60 MLD. As such, proposals for bulk water supply in the city are limited to:

- 1 Rehabilitation of existing WTP at TV Station (14 MLD) including proposals for re-use of filter backwash and improved monitoring through SCADA.
- 2 Installation of bulk meters (90 Nos.) on outlet of WTPs and on all clear water transmission mains.

Improvement of the distribution network is contemplated through water zoning and encompasses

- 3 Regularizing existing household connections including installation of an estimated 40,500 domestic meters on all existing connections.
- 4 Preparation of hydraulic model including construction of new distribution network (800 Kms).
- 5 For improved water supply, 11 elevated storage reservoirs (1,000 KL to be rehabilitated and an additional 10,000 KL to be constructed) have been contemplated for newly developing areas and existing localities, where there is a shortage of storage capacity against demand, including interconnecting them with clear water transmission mains (35 Kms).
- 6 Provision of increased connectivity including new domestic meters to an estimated 25,000 connections.

Harihara

Harihara, although located on the banks of Tunga-Bhadra, faces the critical issues of water availability, largely owing to its intake being located at the downstream end of most of existing intakes catering to other urban local bodies. The improvement proposals for bulk water supply for Harihara are contemplated through:

- 1 Capacity augmentation (by 15 MLD) and rehabilitation of the existing WTP, including recycling of filter back-wash and improved monitoring through SCADA.
- 2 Provision and installation of bulk water meters (18 Nos) on the raw water and clear water transmission mains.

Distribution needs for Harihara are proposed to be attended through:

- 3 Regularization of existing household connections, including installation of an estimated 7000 domestic meters on all existing connections.
- 4 Construction of storage reservoir (of 900 KI) are contemplated for improved distribution where there is a shortage of storage capacity against demand, including interconnecting them with clear water transmission mains (11 Kms)
- 5 Preparation of hydraulic model including construction of new distribution network (157 Km).
- 6 Provision of increased connectivity including new domestic meters to an estimated 5000 connections.

Byadgi

Bulk water supply for the city is being provided through a design, construction, and commissioning contract for a 6.8 MLD Water Treatment Plant, which includes laying of transmission main. The contract has been tendered KUWS&DB. Proposals for **bulk water** in the ULB are therefore limited to:

- 1 Providing and installing bulk water meters (12 Nos.) on the clear water transmission mains.

Proposals for **improvement of the distribution system** are contemplated through:

- 2 Laying of a strategic network, connecting the GLSR to the distribution network through a ring main encircling the town. Considering the proximity of the Bettada Malappa hillock, proposals for construction of storage reservoir (of 900 KI) are contemplated for improved distribution.
- 3 Provisions for water accountability is proposed through regularization of existing household connections including installation of an estimated 3500 domestic meters in the existing network.
- 4 The existing distribution network in the town was comprehensively laid in 2007 by the KUWS&DB. Proposals are therefore limited to inter-linking this to newly developing areas through a new distribution network (of 100 Kms).
- 5 Providing new Household connections including installation of domestic meters to an estimated 1500 connections.

Annex 2: Summary of Feasibility Engineering Designs (Sewerage)

The following factors are considered to improve wastewater and sanitation services in the selected sub-project towns.

1. Extend the coverage of sewer networks to 100% of the service area with an exception where development is scattered.
2. Collect and treat sewage to the desired standards of Pollution Control Board.
3. To improve sanitation services and to extend toilet coverage for all households in the selected towns.

The following components are proposed to improve wastewater and sanitation services in Davanagare.

1. Laying 214 km of sewer network in Sewerage District 1, District 1a and District 3 in addition to the sewer network proposed under NKUSIP.
2. Construction of sewage treatment plants (STP) with a capacity of 5 MLD for District 3 and 20 MLD for District 1 and 1a in addition to the 20 MLD STP proposed under NKUSIP.
3. 3805 individual HH toilets, 43 community toilets.

The following components are proposed to improve wastewater and sanitation services in Harihar.

1. Laying 72 km of sewer network in North Sewerage District 1(NSD1), North Sewerage District 3 (NSD3) and South Sewerage District 3 (SSD2) in addition to the network proposed under KMRP.
2. Construction of 18 MLD STP.
3. Four sewage lift stations.
4. 752 individual HH toilets; 80 community toilets.

The following components are proposed to improve wastewater and sanitation services in Byadgi.

1. Laying 79 km of new sewer network for the entire town.
2. Construction of 5 MLD STP ;
3. 530 individual HH toilets; 107 community toilets.

ANNEX 3: DETAILED COSTS AND FINANCING FOR PROJECT 1

A. Program Investment Costs

1. The investment program is estimated to cost \$227.0 million inclusive of taxes duties, interest and other charges on the loan during construction. Tranche 1 for Project 1 is estimated to cost \$117.0 million.

Table 1: Program Investment Costs
(\$ million)

Item	Total Investment Costs	Project 1 Costs ^a
A. Base Cost^b		
1. Output 1: Expanded efficient UWSS infrastructure	152.0	75.4
2. Output 2: Improved water resource planning, monitoring and service delivery	13.5	5.8
3. Output 3: Strengthened capacity	17.0	9.7
Subtotal (A)	182.5	90.9
B. Contingencies^c	32.5	20.0
C. Financing Charges During Implementation^d	12.0	6.1
Total (A+B+C)	227.0	117.0

UWSS = urban water supply and sanitation

^a Includes taxes and duties of \$12.2 million to be financed from government resources.

^b In early-2014 prices.

^c Physical contingencies computed at 7.9% for civil works and 5% for equipment. Price contingencies computed at 2% on foreign exchange costs and 8.65% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.6%, including 0.1% of maturity premium (including decrease in rebate of 0.1%). Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates

2. To meet the total project investment costs, the government has requested ADB to finance \$150 million or 66.1% of the total costs of the Investment Program, to be financed from ADB's ordinary capital resources at the London interbank offered rate (LIBOR).

8. The government has submitted a Periodic Financing Request for Tranche 1. The cost of Project 1 under Tranche 1 is estimated at \$117.0 million equivalent, including taxes and duties of \$12.2 million equivalent to be financed by the government. The government has requested a loan of \$75 million from ADB's ordinary capital resources. The loan will have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year, and such other terms and conditions to be set forth in the draft loan and project agreements. The government will make the loan proceeds available to the State promptly and on terms and conditions acceptable to ADB. The government has opted for a straight-line repayment option, the average loan maturity is 15.25 years and the maturity premium payable to ADB is 0.1% per annum. The State and the ULBs will contribute \$40.2 million. Urban Financing Partnership Facility will provide grant cofinancing in the amount of \$1.8 million, to be used for the implementation of the output-based toilet program. ADB will administer the grant.

9. Tranche 2 is expected in 2016.

Table 2: Financing Plan

Source	Investment Program		Tranche 1	
	Amount (\$ million)	Share (%)	Amount (\$ million)	Share (%)
Asian Development Bank				
Ordinary capital resources (loan)	150.0	66.1	75.0	64.1
Co financiers				
Urban Environmental Infrastructure Fund ¹ under UFPF ²	2.0	0.9	1.8	1.5
AFD ³ , KfW ³	TBD	TBD	-	-
Government	75.0	33.0	40.2	34.4
Total	227.0	100.0	117.0	100.0

n.a.=not applicable, TBD = to be determined, under review, UFPF = urban financing partnership facility.

Notes: 1. Contributor: The Government of Sweden

2. Fully administer by ADB

3. Parallel cofinancing

Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan and Grant Proceeds for Tranche 1

Allocation and Withdrawal of ADB Loan Proceeds				
Category				ADB
Number	Item	Amount Allocated \$		Percentage and Basis for Withdrawal from the Loan Account
		Category		
1	Civil Works	59,407,000	79%	percent of total expenditure claimed
2	Equipment	513,000	89%	percent of total expenditure claimed*
3	Unallocated	15,080,000		
	Total	75,000,000		

* Exclusive of taxes and duties imposed within the territory of the Borrower.

Allocation and Withdrawal of UEIF-UFPF Grant Proceeds				
Category				UFPF
Number	Item	Amount Allocated \$		Percentage and Basis for Withdrawal from the Grant Account
		Category		
1	Toilet construction through OBA	1,800,000.0	100%	percent of total expenditure claimed*
	Total	1,800,000.0		

* Exclusive of taxes and duties imposed within the territory of the Borrower.

C. Detailed Cost Estimates by Expenditure Category

Table 3: Project Costs by Expenditure Category
(\$, million)

Items		Gross	Net	Tax
A.	Investment Costs			
1	Civil Works	74.78	66.77	8.01
2	Equipment	0.57	0.51	0.06
3	Land Acquisition and Resettlement	0.66	0.66	-
4	Capacity Development	9.62	8.46	1.15
	a. Project Management and Design Supervision	7.37	6.50	0.87
	b. GIS, MIS, Water Audit and Reforms	1.65	1.45	0.20
	c. Public Communication	0.59	0.51	0.08
5	ULB Training	0.30	0.30	-
	Subtotal (A)	85.93	76.70	9.23
B.	Recurrent Costs *			
	Incremental Administrative Costs	2.00	2.00	-
	Subtotal (B)	2.00	2.00	-
	Total Base Cost	87.72	78.70	9.23
C.	Contingencies			
1	Physical Contingencies	5.02	4.28	0.73
2	Price Contingencies	15.01	12.81	2.20
	Subtotal (C)	20.03	17.10	2.93
D.	Financing Charges During Implementation			
	Interest and Commitment Charges	6.04	6.04	-
	Subtotal (D)	6.04	6.04	-
E.	ULB Incentive Fund			
	Incentive Fund for ULBs	3.00	3.00	-
	Subtotal (E)	3.00	3.00	-
	Total Project Cost (A+B+C+D+E)	117.00	104.84	12.16
	% Total Project Cost	100.0%	89.6%	10.4%

* Including bank charges, local transport and insurance.

** Total may not add correctly due to rounding off.

Source: ADB estimates.

D. Detailed Cost Estimates by Financier for Tranche 1

Table 4: Detailed Cost Estimates by Financier (\$, million)

Item	OCR		UFPF-UEIF		Government		Total Costs
	\$	%	\$	%	Tax	Total	
A. Investment Costs							
1 Civil Works							
a. Civil Works	59.41	79.4%	1.80	2.4%	8.01	5.56	74.78
b. Output Based Toilet Program	59.41	79.4%	0.00	0.0%	8.01	5.56	72.98
2 Equipment	0.00	0.0%	1.80	100.0%	0.00	0.00	1.80
3 Land Acquisition and Resettlement	0.51	89.3%	0.00	0.0%	0.06	0.00	0.57
4 Capacity Development	0.00	0.0%	0.00	0.0%	0.00	0.66	0.66
a. Project Management and Design Supervision	0.00	0.0%	0.00	0.0%	1.15	8.46	9.62
b. GIS, MIS, Water Audit and Reforms	0.00	0.0%	0.00	0.0%	0.87	6.50	7.37
c. Public Communication	0.00	0.0%	0.00	0.0%	0.20	1.45	1.65
5 ULB Training	0.00	0.0%	0.00	0.0%	0.08	0.51	0.59
Subtotal (A)	59.92	69.7%	1.80	2.1%	9.23	14.98	85.93
B. Recurrent Costs							
Incremental Administrative Costs	0.00	0.0%	0.00	0.0%	0.00	2.00	2.00
Subtotal (B)	0.00	0.0%	0.00	0.0%	0.00	2.00	2.00
Total Base Cost	59.92	68.1%	1.80	2.0%	9.23	16.98	87.93
C. Contingencies							
1 Physical Contingencies	3.84	76.6%	0.00	0.0%	0.73	0.44	5.02
2 Price Contingencies	11.24	74.9%	0.00	0.0%	2.20	1.58	15.01
Subtotal (C)	15.08	75.3%	0.00	0.0%	2.93	2.02	20.03
D. Financing Charges During Implementation							
Interest and Commitment Charges	0.00	0.0%	0.00	0.0%	0.00	6.04	6.04
Subtotal (D)	0.00	0.0%	0.00	0.0%	0.00	6.04	6.04
E. ULB Incentive Fund							
Incentive Fund for ULBs	0.00	0.0%	0.00	0.0%	0.00	3.00	3.00
Subtotal (E)	0.00	0.0%	0.00	0.0%	0.00	3.00	3.00
Total Project Cost (A+B+C+D+E)	75.00	64.1%	1.80	1.5%	12.16	28.04	117.00

* Total may not add correctly due to rounding off; ** UEIF-UFPF = Urban Environmental Infrastructure Fund under the Urban Financing Partnership Facility
Source: ADB estimates. Contributor: The Government of Sweden. Administered by ADB.

E. Detailed Cost Estimates by Outputs/Components for Tranche 1

Table 5: Detailed Cost Estimates by Outputs (\$, million)

Items	Output 1		Output 2		Output 3		Total Costs
	\$	%	\$	%	\$	%	
A. Investment Costs							
1 Civil Works	74.78	100.0%	0.00	0.0%	0.00	0.0%	74.78
2 Equipment	0.00	0.0%	0.57	100.0%	0.00	0.0%	0.57
3 Land Acquisition and Resettlement	0.66	100.0%	0.00	0.0%	0.00	0.0%	0.66
4 Capacity Development	0.00	0.0%	2.24	23.3%	7.37	76.7%	9.62
a. Project Management and Design Supervision	0.00	0.0%	0.00	0.0%	7.37	100.0%	7.37
b. GIS, MIS, Water Audit and Reforms	0.00	0.0%	1.65	100.0%	0.00	0.0%	1.65
c. Public Communication	0.00	0.0%	0.59	100.0%	0.00	0.0%	0.59
5 ULB Training	0.00	0.0%	0.00	0.0%	0.30	100.0%	0.30
Subtotal (A)	75.44	87.8%	2.82	3.3%	7.67	8.9%	85.93
B. Recurrent Costs							
Incremental Administrative Costs	0.00	0.0%	0.00	0.0%	2.00	100.0%	2.00
Subtotal (B)	0.00	0.0%	0.00	0.0%	2.00	100.0%	2.00
Total Base Cost	75.24	85.8%	2.82	3.2%	9.67	11.0%	87.93
C. Contingencies							
1 Physical Contingencies	4.99	99.5%	0.03	0.5%	0.00	0.0%	5.02
2 Price Contingencies	13.37	89.1%	0.44	2.9%	1.20	8.0%	15.01
Subtotal (C)	18.36	91.7%	0.47	2.3%	1.20	6.0%	20.03
D. Financing Charges During Implementation							
Interest and Commitment Charges	5.24	86.7%	0.19	3.1%	0.62	10.2%	6.04
Subtotal (D)	5.24	86.7%	0.19	3.1%	0.62	10.2%	6.04
E. ULB Incentive Fund							
Subtotal (E)	0.00	0.0%	3.00	100.0%	0.00	0.0%	3.00
Total Project Cost (A+B+C+D+E)	99.04	84.6%	6.47	5.5%	11.49	9.8%	117.00

* Total may not add correctly due to rounding off.

Source: ADB estimates.

F. Detailed Cost Estimates by Year for Tranche 1

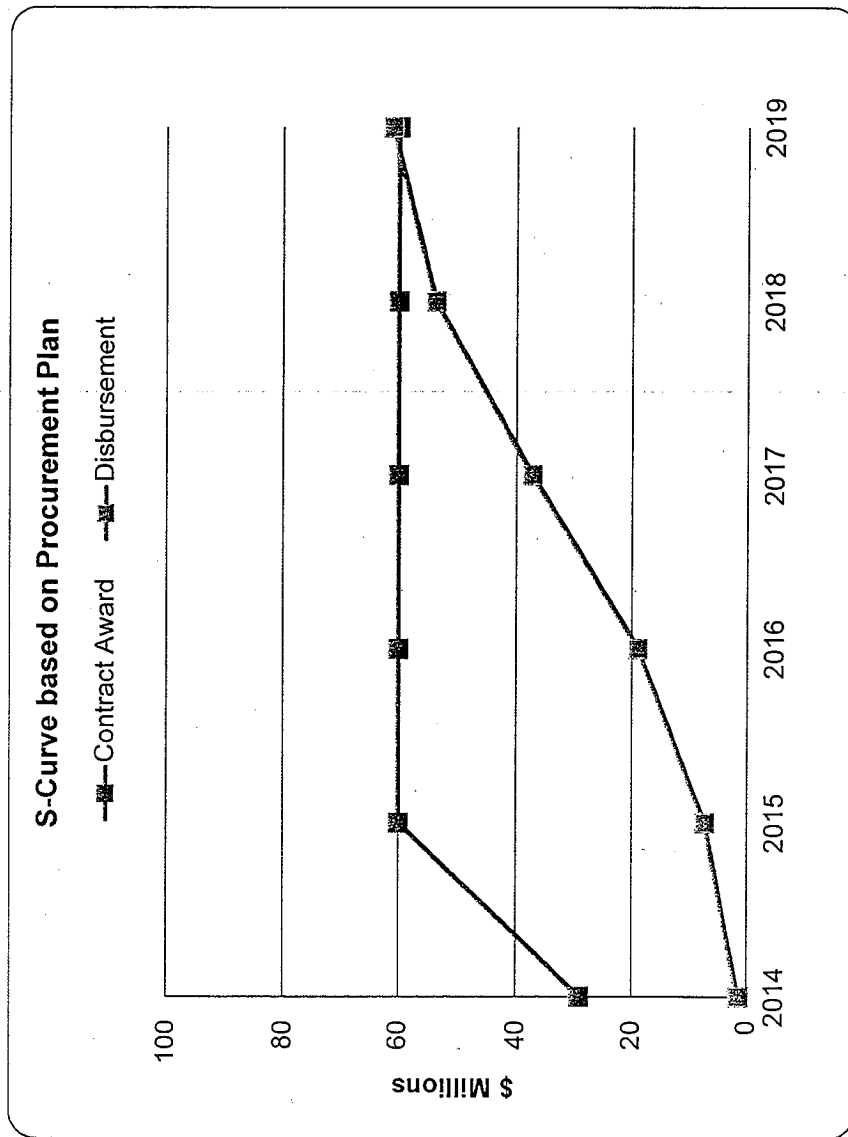
Table 6: Detailed Cost Estimate by Year (\$, million)

Item	Total	2014	2015	2016	2017	2018	2019
A. Investment Costs							
1 Civil Works	74.78	1.59	6.55	13.28	20.66	20.79	11.91
2 Equipment	0.57	0.00	0.00	0.19	0.29	0.10	0.00
3 Land Acquisition and Resettlement	0.66	0.00	0.49	0.16	0.00	0.00	0.00
4 Capacity Development	9.62	3.72	0.82	1.21	1.79	2.01	0.07
a. Project Management and Design Supervision	7.37	2.85	0.63	0.92	1.37	1.54	0.05
b. GIS, MIS, Water Audit and Reforms	1.65	0.64	0.14	0.21	0.31	0.35	0.01
c. Public Communication	0.59	0.23	0.05	0.07	0.11	0.12	0.00
5 ULB Training	0.30	0.00	0.00	0.08	0.10	0.10	0.03
Subtotal (A)	85.93	5.31	7.87	14.92	22.84	22.99	12.00
B. Recurrent Costs							
Subtotal (B)	2.00	0.33	0.33	0.33	0.33	0.33	0.33
Total Base Cost	87.93	5.64	8.20	15.25	23.17	23.33	12.33
C. Contingencies							
1 Physical Contingencies	5.02	0.11	0.45	0.89	1.40	1.39	0.78
2 Price Contingencies	15.01	0.22	0.65	1.84	3.89	5.09	3.33
Subtotal (C)	20.03	0.33	1.10	2.73	5.29	6.48	4.11
D. Financing Charges							
1 Interest During Implementation	5.54	0.12	0.30	0.61	1.10	1.58	1.83
2 Commitment Charges	0.50	0.11	0.10	0.09	0.08	0.06	0.06
Subtotal (D)	6.04	0.23	0.40	0.71	1.17	1.64	1.89
E. ULB Incentive Fund							
Subtotal (E)	3.00	0.00	0.10	0.30	1.00	1.00	0.60
Total Project Cost (A+B+C+D+E)	117.00	6.20	9.80	18.99	30.64	32.45	18.93
% Total Project Cost	100.0%	5.3%	8.4%	16.2%	26.2%	27.7%	16.2%

* Total may not add correctly due to rounding off.

Source: ADB estimates.

G. Contract and Disbursement S-curve



ANNEX 4: PROCUREMENT PLAN

PROJECT1 – KARNATAKA INTEGRATED URBAN WATER MANAGEMENT

Project Number: 43253	Program Name:Karnataka Integrated Urban Water Management Investment Program – Proposed Project 1
Loan Amount:\$75 million	Executing Agency: KUIDFC
Grant Amount:\$1.80 million	
Date of First Procurement Plan:	Date of This Procurement Plan: 18 February 2014

Process Thresholds, Review, and 18-Month Procurement Plan

1. Program Procurement Thresholds

1. Except as ADB may otherwise agree to, the following process thresholds shall apply to the procurement of goods and works.

Procurement of Goods and Works	
Method	Threshold
International Competitive Bidding for Works	\$40,000,000 or more
International Competitive Bidding for Goods	\$1,000,000 or more
National Competitive Bidding for Works	Below \$40,000,000
National Competitive Bidding for Goods	Below \$1,000,000
Shopping for Works	Below \$100,000
Shopping for Goods	Below \$100,000
List here any other methods of procurement approved for use	

2. Prior Review or Post Review by ADB

2. Except as ADB may otherwise agree to, the following prior review or post review requirements apply to procurement and consultant recruitment methods to be used in the program.

Procurement of Goods and Works		
Procurement Method	Prior or Post	Comments
International Competitive Bidding for Works	Prior	
International Competitive Bidding for Goods	Prior	
National Competitive Bidding for Works	Post	First set of NCB model documents to be reviewed by ADB prior to tendering for each type.
National Competitive Bidding for Goods	Post	
Shopping for Works	Post	
Shopping for Goods	Post	
List other methods of procurement		

Recruitment of Consulting Firms and NGOs		
Procurement Method	Prior or Post	Comments
Quality- and Cost-Based Selection (QCBS)	Prior	
Quality-Based Selection (QBS)	Prior	
Other selection methods: Consultants Qualifications (CQS), Least-Cost Selection (LCS), Fixed Budget (FBS), and Single Source (SSS)	Prior	
Individual Consultants	Prior	

3. Consulting Services Contracts Estimated under the First Periodic Financing Request of KIUWMIP

3. The following table lists the consulting service contracts for which procurement activity is either ongoing or expected to begin within the next 18 months.

General Description	Contract Value \$million (base cost)	Recruitment Method (cost ratio)	Advertisement Date (quarter/year)	International or National Assignment	Comments
Package 1 – PMIC	0.75	GOK procured and financed	Q2 2013	National	
Package 2 – PMDSC Project 1	4.10	GOK procured and financed	Q2 2013	National	
Package 3 – PMDSC Project 2	0.64	GOK procured and financed	Q2 2014	National	
Package 4 – KUIDFC Financial Intermediation Development	1.39	GOK procured and financed	Q1 2014	National	
Package 5 – Public Communications and Awareness Consultant	0.51	GOK procured and financed	Q1 2014	National	
IEC & Toilet Program NGO	0.37	GOK procured and financed	Q1 2014	National	Will lead community mobilization, training and assist in the management of the toilet construction subsidy voucher program.
Water Auditors	0.20	GOK procured and financed	TBD	National	3 rd party auditors will monitor and certify baselines and performance-based payments.
ULB Capacity Development Training Programs	0.30	GOK procured and financed	NA	National	Various ULB capacity development programs to be delivered by Karnataka's State Institute for Urban Development.

DSC = design review and construction supervision consultant, IEC = information, education and communication, PMDSC = project management, design and supervision consultancy, PMIC = program management and institutional development consultant, QBS = quality based selection, QCBS = quality- and cost-based selection.

4. Goods and Works Contracts Proposed under the Third Periodic Financing Request

4. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to begin within the next 18 months.

List of Contract Packages

S. No.	Contract Packages	Number of Packages	Total Cost (\$ million)	Procurement Method	Expected Date of Advertisement	Prior Review Required
A. Sanitation Infrastructure						
01BDG01	Design, Build, Operate & Maintain for 6 years for Byadgi comprehensive scheme from covering FAL STP (5 MLD), network (79km), and 3000 manholes	1	6.45	NCB	April 2014	N

S. No.	Contract Packages	Number of Packages	Total Cost (\$ million)	Procurement Method	Expected Date of Advertisement	Prior Review Required
01HRH01	Expansion of the sewerage network (72 km sewers, 2200 nos manholes, 4 nos pumping stations, 18 MLD STP) in Harihar.	1	7.39	NCB	Dec2013	Y (first civil works package)
01DVG01	Expansion of Sewerage System for Davangere (Districts 1, 1a and 3), (214 km sewers, 7950 manholes)	1	14.27	NCB	Feb2014	N
01DVG01A 01DVG01B ^a	DBO for 20 MLD SBR STP & DBO for 5 MLD SBR STP in Davangere	2	3.35 1.16	NCB	Feb 2014 Feb 2014	Y (first plant package)
B. Water Supply						
01WS02 ^b	Water supply works on 24x7 performance based management contract basis including 1. Design, construct & 6-8 yr O&M for full network in Davangere. Includes extension and rehabilitation of the distribution (DPR in progress) 2. Design, construct & 6-8 yr O&M for full network in Harihara. (157 km distribution, 11 km transmission, 12000 hscs, 15 MLD WTP, 2 rservoirs) 3. Design, construct & 6-8 yr O&M full network in Byadgi.(DPR in progress)	1	38.15	ICB (PBMC)	Apr 2014	Y
C. IT Equipment						
01KMRC01	Various IT equipment procurements for KMRC and the ULBs	Several	0.5	Shopping	Jun 2014	N

ICB = international competitive bidding, NCB = national competitive bidding. PBMC = performance based management contract

^a Packages are tentatively planned as separate packages. KUIDFC will hold a contractors meeting to determine the most responsive package sizing.

^b It is proposed that this package be tendered together water supply works and O&M for the town of Ranebennur, which will be financed by GOK. ADB will exclusively finance capital works for the towns of Byadagi, Davanagere and Harihara. The contract will seek comprehensive services from a contractor for all 4 towns, but is prepared in an itemized manner, which will enable the separation of bills and payments. The total base cost of this package for all 4 towns is \$54.35 million.

ANNEX 5: INDICATIVE TERMS OF REFERENCE FOR FACILITY MANAGEMENT AND INSTITUTIONAL DEVELOPMENT CONSULTANT

Objective	The Objective of the Project Management, Design and Supervision Consultant (Project 1) is to provide assistance to Central and Regional project management units (PMUs) in implementing the first tranche of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP), which will be financed by an Asian Development Bank's (ADB's) loan under a Multitranche Financing Facility. The investment program will aim to achieve sustainable water security in selected river subbasins in Karnataka through improving water resource management in urban areas. Tranche 1 will concentrate in delivering these objectives in 4 towns of the upper Tungtha Badra subbasin: Byadagi, Davangere, Harihar and Ranebennur. The tranche will deliver this through three outputs: (i) expanded efficient urban water and sanitation infrastructure; (ii) improved water resource planning, monitoring and service delivery; and (iii) strengthened KUIDFC capacity. Reform-Based Selection of Towns. Firstly, the program will promote town selection based on willingness to undertake IWRM and financial management reforms. For this purpose, a two-phase methodology will be followed (for tranches subsequent to Project 1). In Phase I, towns will be able to draw a small amount of funds to enable them to undertake water and energy audits, ascertain the condition of existing assets, undertake water planning exercises and achieve improvements in financial management (particularly collection efficiencies). Upon meeting pre-agreed criteria parameters – such as (i) achieving water tariff collection efficiencies in excess of 85%, (ii) updating of customer databases, (iii) completion of preliminary water balances and asset mapping and condition assessments and identification of illegal connections, and (iv) city-level water and sanitation Master Plans – the ULB would then receive approval for further physical investments. A separate small pool funding allocation will be made under Tranche 1 to assist ULBs undertake rapid assessments. The subproject preparation consists of 3 stages: (i) reform willingness (with access to self-help fund), (ii) preparation of water sector Master Plan and concept paper, and (iii) full feasibility study. This consultancy will assist KUIDFC in handling stages (i) and (ii) (named as Phase 1), and overall management, monitoring and evaluation of the entire Multitranche Financing Facility and its tranches. Separate Design and Construction Supervision consultancies for each Tranche will be responsible for the preparation of full feasibility studies and detailed designs (Phase 2). Progressing ULB Reforms through IT. Secondly, building on the extensive work undertaken by the Karnataka Municipal Reform Cell (KMRC) to date, (i) supplementary utility-based IT modules for GIS, MIS, Asset Management and volumetric tariff setting (to assist demand management) and, (ii) new modules for water accounting and water quality and effluent discharge reports, will be developed in partnership with this agency and rolled out. State Level Reforms. At State Level, the program will support Government of Karnataka (i) establish the Water Council as a precursor regulatory body for drinking water supply and sanitation, (ii) develop a State Policy to manage, meter and progressively phase out stand posts.
Scope of Services	The consultant will support KUIDFC Central PMU undertake its project management, monitoring and coordination and institutional reform monitoring functions: (i) assist the implementation of reforms through (a) the operationalization and implementation of the ULB Incentive Pool Fund for Improved Water Sector Planning and Monitoring, and (b) implementation of the reform-oriented selection process for ULBs under subsequent tranches. (ii) assist KUIDFC (a) prepare State Policies to manage, meter and progressively phase out stand posts and (b) establish the Water Council. (iii) review and consolidate subproject reports prepared in accordance with subproject selection criteria, for submission to ADB in the form of comprehensive periodic financing requests,

	(iv) monitoring overall Program implementation and secure compliance with the agreed facility implementation program.
Estimated assignment period	Seven years, from Q1 2014 to Q1 2021 in 2 phases: T1 (Q1 2014 to Q1 2018) and T2 (Q1 2018-Q1 2021)
Financing sources	The first loan will partly cover the consulting service contract (4 years). Subject to satisfactory performance, the contract may be extended under the second loan for a further period (3 years).
Activities	The activities include, but not limited to: Urban Governance and Financial Reform (i) Manage the ULB subproject selection and investment process, including for Phase 1 (access to self-help fund, committal to reform and subproject concept preparation and approval): a. Preparation of guidelines for accessing (1) 'self-help' fund to finance small elements of reform oriented program, (2) information dissemination across the State. b. Preparation of standardized forms defining processes and criteria, eligible items, targets and eligible preliminary investments and expenditures, basic costing and expected returns. c. Preparation of standardized MOUs between KUIDFC and ULB linking reform objectives to access to funds in Phases 1 and 2. d. Define criteria of eligibility for financing of works, thresholds and repayment to KUIDFC, as well as criteria enabling uptake of investments under Phase 2. e. Assist KUIDFC in the evaluation of proposals submitted by ULBs. (ii) Provide direct advice to Project 1 and prospective interested ULBs in relation to the implementation of the reform agenda, including basic assistance to prepare and submit forms to KUIDFC. (iii) Assist the ULBs in conducting procurement of small packages for equipment (e.g. bulk water meters, automatic shut off valves), services (e.g. water and energy audits, household surveys) and very minor civil works, compliant with agreed guidelines for procurement and recruitment of consultants. (iv) Monitor implementation of reforms and preliminary works undertaken with financing from the ULB incentive fund and prepare period reports. (v) Provide recommendations for further uptake of ULBs under Phase 2, i.e. large civil works, justifying completion of minimum reform commitments. State Level Reforms (i) Assist GOK in the process of formulating a State policy on managing, metering and progressively phase out stand posts; including support for consultation, addressing feedback and official adoption and dissemination. (ii) Assist GOK with establishing and operationalizing the Water Council, provide advice, and assist through the development of methodology and a model for tariff setting, and the preparation of customer service guidelines, service standards and performance indicators. (iii) In respect of tariff setting, coordinate and guide KMRC in the development of a module to be rolled out to ULBs across Karnataka. (iv) Review and analyze legal and institutional barriers and capacity constraints to sustainable management of water services by ULBs. (vi) Assist KUIDFC develop appropriate SPV models. (vii) Assist ULBs in the establishment of SPVs with ring-fencing of operations, accounts and resources. (v) Revise/update draft articles of association or equivalent for regional company SPVs. (vi) Prepare guidelines for the preparation of urban watershed management plans. (vii) Prepare guidelines for the preparation of urban water safety plans and assist PIUs in the preparation for program towns. (viii) Prepare model TORs and Request for Proposals for consultancies for water and energy audits, urban watershed management plans, water asset GIS mapping and condition assessments to be utilized under the ULB incentive fund. (ix) Prepare model standard bid documents for the procurement of small civil works and goods (e.g. bulk water meters) to be utilized under the ULB incentive fund.

	Program Management and Monitoring (i) Prepare a common program management system (framework) for all tranches and ULBs; given distance and communication constraints, a web-based system may be most appropriate with KUIDFC/ULB access and selected sections for public disclosure. (ii) Prepare common guidelines for benefit monitoring and evaluation and train all PIUs and ULBs accordingly. (iii) Prepare a common repository system within PMU for secondary data across the program (with primary data being maintained at the district level). (iv) Prepare and agree common frameworks for reporting (a) progress (physical and financial), (b) accounts, (c) procurement, (d) safeguards compliance and (e) covenant compliance, etc (v) Support KUIDFC with any other activities relating to management and monitoring of the program. (vi) For subsequent tranches, assist KUIDFC and PIUs office devise a program for rigorous impact evaluation demonstrating the benefits of the investment program, train staff and devise a robust sampling framework.																																																							
Output/report requirements	(i) Program performance monitoring system baseline data and their semi-annual updates in accordance with the facility administration manual. (ii) Consolidated quarterly progress reports for all tranches. (iii) Draft standpost policy. (iv) Draft volumetric tariff for water supply and sewerage service model and service standards and guidelines. (v) Draft notifications as requested by the PMU. (vi) Updated draft articles of association or equivalent for regional company SPVs. (vii) Assessment of legal and institutional barriers and capacity constraints to sustainable management of water services by ULBs. (viii) Fund guidelines, access and management forms, draft MOUs, information dissemination materials. (ix) Model TORs and bid documents for various ULB incentive fund target activities. (x) Guideline, templates and outline of safeguards reports and monitoring reports in consultations with safeguards specialist of KUIDFC/RPMU (xi) Semi-annual fund reports. (xii) Inception report, progress reports, draft final report and final report.																																																							
Office, support staff and equipment	The PMU will provide office accommodation and office equipment, including desks and chairs. The consultants will quote the remuneration, per-diem, cost of support staff and assistants, and domestic travels. The cost of organizing workshop and meetings, office supplies, communication and annual subscription for on-line database services will be paid out of the provisional sum, subject to prior approval by KUIDFC.																																																							
Inputs Nat. = 258 person-months	<table><tr><th colspan="5">Estimated Input Requirements</th></tr><tr><th></th><th>Positions</th><th>Type</th><th>Inputs T1</th><th>Inputs T2</th></tr><tr><td>1</td><td>Policy & Institutional Specialist/Team Leader</td><td>Nt'l</td><td>48</td><td>36</td></tr><tr><td>2</td><td>Water Sector Specialist</td><td>Nt'l</td><td>27</td><td>36</td></tr><tr><td>3</td><td>Wastewater and Sanitation Specialist</td><td>Nt'l</td><td>27</td><td>36</td></tr><tr><td>4</td><td>Water Economic Regulation Specialist</td><td>Nt'l</td><td>6</td><td>0</td></tr><tr><td>5</td><td>Utility Commercial and Financial Specialist</td><td>Nt'l</td><td>18</td><td>24</td></tr><tr><td>6</td><td>Procurement Specialist</td><td>Nt'l</td><td>16</td><td>8</td></tr><tr><td>7</td><td>IT/MIS Expert</td><td>Nt'l</td><td>12</td><td>0</td></tr><tr><td>8</td><td>Monitoring and Evaluation Specialist</td><td>Nt'l</td><td>30</td><td>18</td></tr><tr><td></td><td>Total</td><td></td><td>184</td><td>158</td></tr></table> Source: ADB estimates.	Estimated Input Requirements						Positions	Type	Inputs T1	Inputs T2	1	Policy & Institutional Specialist/Team Leader	Nt'l	48	36	2	Water Sector Specialist	Nt'l	27	36	3	Wastewater and Sanitation Specialist	Nt'l	27	36	4	Water Economic Regulation Specialist	Nt'l	6	0	5	Utility Commercial and Financial Specialist	Nt'l	18	24	6	Procurement Specialist	Nt'l	16	8	7	IT/MIS Expert	Nt'l	12	0	8	Monitoring and Evaluation Specialist	Nt'l	30	18		Total		184	158
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Recruitment	The firm will be recruited following the Quality-and-Cost Based-Method following a 90:10 ratio. A time-based contract may be executed.																																																							

**INDICATIVE OUTLINE TERMS OF REFERENCE FOR
PROJECT MANAGEMENT, DESIGN AND CONSTRUCTION SUPERVISION CONSULTANTS
FOR PROJECT 1**

Objective	The Objective of the Project Management, Design and Supervision Consultant (Project 1) is to provide assistance to Central and Regional project management units (PMUs) in implementing the first tranche of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP), which will be financed by an Asian Development Bank's (ADB's) loan under a Multitranche Financing Facility. The investment program will aim to achieve sustainable water security in selected river subbasins in Karnataka through improving water resource management in urban areas. Tranche 1 will concentrate in delivering these objectives in 4 towns of the upper Tungtha Badra subbasin: Byadagi, Davangere, Harihar and Ranebennur. The tranche will deliver this through three outputs: (i) expanded efficient urban water and sanitation infrastructure; (ii) improved water resource planning, monitoring and service delivery; and (iii) strengthened KUIDFC capacity.
Scope of Services	The consultants will update various studies and project preparation documents; carry out contract planning and review detailed engineering designs for proposal submitted by contractors under turnkey tenders; update schedules of quantities and specifications, if deemed necessary, during implementation; review drawings prepared by the contractors; support the PMU in preparation and review of any bid documents, if deemed necessary, invitations, receipt and evaluation of bids. The consultants will supervise and manage the construction with frequent site visits, carry out quality control, testing and reporting, monitor construction activities and certify contractor's progress claims. The preparation of detailed designs and bidding documents for tranche 1 towns have been already been conducted under KUIDFC's supervision. Therefore design functions are expected to be limited to a minimum, as may arise from time to time, either in relation to the review of designs prepared by contractors for turnkey contracts (Byadagi) or during contract implementation. The consultants will identify appropriate technologies and prepare detailed designs for household and community toilets in liaison with the OBA toilet program NGO. The consultants will also act as technical independent verifiers for the OBA toilet program. The consultants will also be responsible for supporting and reviewing safeguards compliance, community mobilization and benefit monitoring and evaluation, as well as assisting the RPMU with overall project management for tranche 1, including the consolidation of reports for the preparation of semiannual safeguards monitoring report to be reviewed and submission to ADB by CPMU.
Estimated assignment period	This assignment is estimated over 4 years, from Q1 2014 to Q1 2018.
Financing sources	The first loan under the facility will finance consulting services for this assignment.
Activities	The activities include, but not limited to: Overall Management (i) Assist the project director with the day-to-day management of Project activities (ii) Coordinate planning, control, and management of the work of a multidisciplinary team. (iii) Develop construction implementation schedules and resource requirements; (iv) Monitor and evaluate progress, and identify and resolve constraints. (v) Provide long-term input to the development of project methodologies. (vi) Identify appropriate technologies and the need for standardization of equipment and materials. (vii) prepare and update implementation schedules and resource requirements (preferably in Microsoft Project Management) (viii) Report analysis of the existing assets. (ix) define quality control mechanisms and parameters for subprojects/components (x) establish a contract tracking systems, including implementation schedules and milestones achievable

- (xi) assist KUIDFC present designs to all stakeholders, seek their feedback and address their concerns where necessary;
- (xii) Carry out baseline and benefit monitoring surveys
- (xiii) Ensure the contractors comply with environmental management plans, and initial environmental examination.
- (xiv) Ensure the contractors comply with ADB safeguards policy and agreed resettlement plan (RP), that no civil works will be carried out prior the complete compensation payment of relevant RP implementation.
- (xv) update costs and economic and financial information, when needed
- (xvi) prepare an asset registry for all assets built under the Project and ensure that as built drawings are transferred into the ULBs' GIS;
- (xvii) Prepare monthly project progress reports in accordance with the facility administration manual
- (xviii) Assist the PMU in collecting the baseline data from primary sources, and monitoring the progress as per the project performance monitoring system as well as the service level benchmarks defined by the Ministry of Urban Development,
- (xix) ADB safeguards policy and agreed resettlement plan (RP), that no civil works prior the complete compensation payment of relevant RP implementation.
- (xx) Assist the PMU in other tasks as assigned by the PMU.
- (xxi) Provide all necessary information regarding project related issues and prepare solutions for recommendations to the Project Director.
- (xxii) Accompany client in meetings with KUIDFC and state government officials, police, local representatives, utility service providers as and when necessary.
- (xxiii) Conduct ADB safeguards briefings on ADB SPS (2009), safeguards related procedures and requirements to RPMU staff, IAs (ULB/PIU) staffs and contractors' prior project implementation in the concerned areas.

Survey and Design

- (i) Update maps and plans of the water supply and sewerage project sites, as deemed necessary, during contract implementation stages.
- (ii) Review available secondary data, and update the data with primary sources.
- (iii) Update the detailed designs, technical specifications, cost estimates, and bid documents for subprojects, in accordance with the ADB procurement guidelines and standard bidding document, if deemed necessary (e.g. if rebidding is necessary).
- (iv) Assist the PMU with all aspects of procurement including preparation of bid document, bid invitation, evaluation and award of work.
- (v) Ensure compliance of contractors with ADB's procedures and guidelines for project implementation and management.
- (vi) Ensure designs are implemented on the ground with the path of least disturbance to other utilities.
- (vii) Prepare the operation and maintenance manual of the mechanical assets created by the project in collaboration with the respective contractors and the public communication and social development consultant.
- (viii) Update/ finalize the draft resettlement plans with support by recruited NGO for resettlement upon the completion of final design for ADB review and approval prior implementation.
- (ix) Update/ finalize draft IEEs/ EMPs prior to bidding of civil works packages.
- (x) Identify suitable technologies and prepare detailed designs for approved household and community toilets for the OBA toilet program.
- (xi) Assist households and community in liaison with the NGO in the proper selection, design, location and use of toilets and fixture.

Supervision

- (i) Administer and manage the works and supply contracts.
- (ii) Provide most reasonable interpretation of technical specifications in consultation with the PMU.
- (iii) Verify the surveyed maps and design in the light of the ground situation and make necessary modifications, if required, with approval by the PMU.
- (iv) Scrutinize and improve the contractors' detailed work program and guide contractors for each contract.

	(v) Scrutinize the construction methods proposed by contractor including environmental; safety, personnel and public issues. (vi) Monitor the construction method by assessing the adequacy of the contractor's input materials, labor, equipment, and construction methods. (vii) Review and modify the detailed construction drawings as necessary during the works contractual period. (viii) Supervise and monitor construction work of each contract. (ix) Monitor contractors' implementation of environmental standards, environmental and social safeguards, and gender action plans, and provide contractors with mitigation measures in case of failures. (x) Assist PMU/ IAs compliance with ADB Safeguards policy and requirement during Project 1 implementation (xi) Establish quality assurance system including verification of source of material and certification. (xii) Carry out necessary quality control activities and certify that the quality of works conforms to the specifications and drawings. (xiii) Supervise the construction of the various contract packages for achieving the expected outputs of the project. (xiv) Record the work measurement and certify the contractors' interim and final bill of payment. (xv) Assist third party inspections, if necessary, as decided by the employer. (xvi) Review and finalize the "as built" drawings submitted by Contractor. (xvii) Assist the employer in issue of completion certificates. (xviii) Assist for resolution of all contractual issues including examining the contractor's claims for variations/extensions, or additional compensations, etc., and prepare recommendations for approval by the employer. (xix) Inspect the works at appropriate intervals during defect liability period and issue certifications. (xx) Support, assist and provide guidance for complaints- resolution matters and implementation project Grievance Redress Mechanism to the RPMU and IAs, as required. Independent Verification Agent for OBA Toilet Program (xxi) Conduct independent technical inspection and verification on the construction of household and community toilets. (xxii) Conduct independent technical inspection and verification of connection of household and community toilets to the sewer network. (xxiii) Conduct independent verification of the social sanitation marketing program implemented by the NGO. (xxiv) Preparation and submission of periodical technical independent verification reports to CPMU/ RPMU. (xxv) Provide certification of constructed toilets, connections and approval for contractors for sanitation works and materials.
Output/report requirements	(i) Review and updating of engineering designs. (ii) Monthly progress reports on physical, financial, safeguards and gender action plan compliance, (iii) Final/updated RPs for submission to ADB through KUIDFC prior implementation (iv) Draft semiannual safeguard monitoring reports (v) Update bidding documents for each contract. (vi) Draft Evaluation Reports and associated documentation. (vii) Manuals for operations of mechanical assets, (viii) Draft completion certificates, (ix) Third party inspection reports, (x) Project performance monitoring system updates, (xi) Briefing notes to the Project Director on project related issues, (xii) Inception report, progress reports, draft final report and final report.
Office, support staff and equipment	The consultants will be based in Project 1 towns and be responsible for any office rental and transportation. The consultants will quote the remuneration, per-diem, cost of support staff and assistants, and domestic travels. The cost of organizing workshop and meetings, office supplies, computer consumables, communication and annual subscription for on-line database services

	will be paid out of the provisional sum.		
Inputs Nat. = 912 person-months	Estimated Input Requirements		
		Positions	Type
			Inputs
	1	Water Engineer and Team Leader	National 48
	2	Sanitation Engineer and Deputy Team Leader	National 48
	3	Sr. Design Engineer (Water)	National 18
	4	Sr. Design Engineer (Wastewater)	National 18
	5	Instrumentation, Controlling and Automation Engineer	National 18
	6	Structural Engineer	National 18
	7	Mechanical Engineer	National 10
	8	Electrical Engineer	National 10
	9	Environmental Specialist	National 20
	10	Social Development Specialist (R&R & Community)	National 30
	11	Procurement/Contract Management Specialist	National 12
	12	Monitoring & Evaluation Specialist	National 20
	13	Resident Engineer (4)	National 144
	14	Assistant Resident/Junior Engineers (8)	Support 270
	15	Quantity Surveyor	Support 18
	16	Draftspersons (CAD, 2)	Support 36
		Total	738
	Source: ADB estimates.		
Recruitment	The firm will be recruited following the Quality-and-Cost Based-Method following a 90:10 ratio. A time-based contract may be executed.		

**INDICATIVE OUTLINE TERMS OF REFERENCE FOR
PROJECT MANAGEMENT, DESIGN AND CONSTRUCTION SUPERVISION CONSULTANTS
FOR PROJECT 2**

Objective	The Objective of the Project Management, Design and Supervision Consultant (Project 2) is to provide assistance to Central and Regional project management units (PMUs) in preparing and implementing the second tranche of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP), which will be financed by an Asian Development Bank's (ADB's) loan under a Multitranche Financing Facility. The investment program will aim to achieve sustainable water security in selected river subbasins in Karnataka through improving water resource management in urban areas. Tranche 2 will concentrate in delivering these objectives in 4-6 towns in Karnataka. The towns will be defined prior to tendering of this package and will have been selected based on their commitment and performance in implementing water and urban reform improvements. Tranche 2 is expected will deliver the objective through two outputs: (i) expanded efficient urban water and sanitation infrastructure; (ii) improved water resource planning, monitoring and service delivery.
Scope of Services	The consultants will update various studies and project preparation documents; prepare subproject appraisal reports and all feasibility assessments, including the technical studies, economic and financial analyses, safeguards documents (environment and social) etc. The consultants will also prepare detailed engineering designs, schedules, bills of quantities and specifications, support the PMU in the preparation of procurement packages and bid documents. The consultants will assist the PMU preparing invitations, receiving and evaluating the bids. They will carry out contract planning and review drawings prepared by the contractors. The consultants will also supervise and manage construction activities on-site, carry out quality control, testing and reporting, monitor construction activities and certify contractor's progress claims. The consultants will be responsible for supporting and reviewing safeguards compliance, community mobilization and benefit monitoring and evaluation, as well as assisting the RPMU with overall project management for tranche 2.
Estimated assignment period	This assignment is estimated over 5 years, from Q4 2014 to Q4 2019, in 2 phases T1 (Q4 2014 to Q4 2015) and T2 (Q1 2016-Q42019)
Financing sources	The first loan will cover the consulting service contracts for tranche 2 preparation, including feasibilities, detailed design and bid documentation. The second loan will cover the remaining balance, including inputs for tendering, construction supervision and project management.
Activities	The activities include, but not limited to: Project 2 Preparation (i) <u>Technical</u>. Assess infrastructure condition and deficit in selected project towns. Conduct an inventory of, and review, all relevant initiatives for infrastructure development, studies, plans and programs, and public and private sector proposals. (ii) Describe, map, and quantify the condition of basic amenities and services in urban and rural areas, highlighting needs and deficiencies in the water supply, sanitation, sewerage and sewage treatment, and drainage subsectors. (iii) Conduct a physical reconnaissance of underground and surface water supplies. (iv) Assess the impact of wastewater collection and treatment on the water quality of receiving watercourses before and after project construction. (v) Prepare a preliminary engineering design for all project towns. (vi) Screen all viable technical options and complete the technical design for selected least-cost solutions. (vii) Prepare an integrated and comprehensive program in each town for reducing nonrevenue water, taking into consideration capacity for local implementation. (viii) Assess the adequacy of wastewater treatment options, including decentralized systems. (ix) Review and/or define design criteria and standards. (x) Outline designs; arrangements for construction staging, implementation, and

tendering; major civil works schedules; staffing requirements; and methods for selecting appropriate equipment, including maintenance and inspection of subcomponents.

- (xi) Discuss existing managerial and administrative arrangements.
- (xii) Estimate project costs at market rates.
- (xiii) Economic and Financial. Prepare detailed financing and disbursement plans.
- (xiv) Describe existing relevant operation and maintenance (O&M) procedures, tariffs, and status of billing and collection for the selected subsectors.
- (xv) Collect and assess community data on general affordability and willingness to pay for water supply and sanitation.
- (xvi) Update water demand and wastewater discharge data and calculate projections for various end user groups.
- (xvii) Propose cost-recovery mechanisms.
- (xviii) Estimate the detailed economic project costs for selected options, applying appropriate disaggregation of costs, standard conversion factors, and shadow prices as required.
- (xix) Identify all quantifiable and unquantifiable project economic benefits, considering with and without Project scenarios, as well as incremental and nonincremental benefits.
- (xx) Review the financial management performance of selected towns. Prepare financial projections for operations 10 years after project completion. Compute relevant financial indicators for each town to assess financial viability.
- (xxi) Assess the Project's financial viability.
- (xxii) Estimate economic and financial internal rates of return and perform sensitivity analyses, including switching values and calculation of the real weighted average cost of capital.
- (xxiii) Calculate the poverty impact ratio and conduct a distribution analysis.
- (xxiv) Social Safeguards. In line with ADB's SPS (2009), identify the scale of impacts, conduct due diligence for social safeguards categorization and enumerate people likely to be affected by involuntary resettlement impacts through a survey and/or census and preparing an asset inventory that identifies all types of losses; ascertain preferential relocation areas, compensation, and livelihood restoration through consultation with those who might be affected.
- (xxv) Establish an entitlement cutoff date and estimating the requirements for financial resources, comparing these with available resources. Provide options for relocating housing and other structures, including transfer to established new sites, options for livelihood restoration, and mechanisms for addressing grievances.
- (xxvi) Assess any possible project impacts that may affect indigenous people (IP) located in the project areas that may trigger the application of ADB SPS SR 3 on Indigenous People.
- (xxvii) Prepare resettlement plans, and indigenous people plan (IPP) as required, based on subproject design for each town. Define institutional responsibilities for approving, implementing, managing, financing, and monitoring the resettlement plan and/or IPP, along with implementation schedules, capacity building, financial plans and budgets, and a plan for internal and external monitoring and evaluation of the resettlement plan for subproject categorized as A.
- (xxviii) Conduct due diligence for lesson learned from the implementation of resettlement plans of Project 1 for improvement in the Project 2 activities.
- (xxix) Environmental Safeguards. In line with ADB's SPS (2009), prepare initial environmental examinations or environmental impact assessments and an associated environmental management plans for each of the project towns, including all subcomponents. Conduct consultations in line with ADB requirements.

Overall Management

- (i) Assist the project director with the day-to-day management of Project activities
- (ii) Coordinate planning, control, and management of the work of a multidisciplinary team.
- (iii) Develop construction implementation schedules and resource requirements;
- (iv) Monitor and evaluate progress, and identify and resolve constraints.
- (v) Provide long-term input to the development of project methodologies.
- (vi) Identify appropriate technologies and the need for standardization of equipment and materials.

	(vii) prepare and update implementation schedules and resource requirements (preferably in Microsoft Project Management). (viii) Report analysis of the existing assets. (ix) Agree quality control mechanisms consistent with PMDSC1 and parameters for subprojects/components. (x) Establish a contract tracking systems, including implementation schedules and milestones achievable. (xi) Assist KUIDFC present designs to all stakeholders, seek their feedback and address their concerns where necessary. (xii) Carry out baseline and benefit monitoring surveys. (xiii) Ensure the contractors comply with environmental management plans, and approved environmental assessments. (xiv) Carry out baseline surveys, and ensure the contractors comply with ADB safeguards policy and agreed resettlement plan (RP), that no civil works prior the complete compensation payment of relevant RP implementation. (xv) Update costs and economic and financial information, when needed. (xvi) Prepare an asset registry for all assets built under the Project and ensure that as built drawings are transferred into the ULBs' GIS for Project 2 towns. (xvii) Prepare monthly project progress reports in accordance with the project administration manual. (xviii) Assist the PMU in collecting the baseline data from primary sources, and monitoring the progress as per the project performance monitoring system as well as the service level benchmarks defined by the Ministry of Urban Development. (xix) Assist the PMU in other tasks as assigned by the PMU. (xx) Assist the RPMU and IAs for the recruitments of third independent party, as required, for monitoring and reporting land acquisition through willing buyer and willing seller mechanism. (xxi) Conduct ADB safeguards briefings on ADB SPS (2009), safeguards related procedures and requirements to RPMU staff, IAs (ULB/PIU) staffs and contractors' prior project implementation in the concerned areas. (xxii) Provide all necessary information regarding project related issues and prepare solutions for recommendations to the Project Director. (xxiii) Accompany client in meetings with KUIDFC and state government officials, police, local representatives, utility service providers as and when necessary. Design and Tender (i) Undertake necessary surveys and investigations (including but not limited to topographical and geotechnical surveys) on the project sites and its surroundings. (ii) Screen and categorized the subproject impacts on safeguards for submission and approval by ADB (iii) Update maps and plans of the water, drainage and sewerage project sites. (iv) Review available secondary data, and update the data with primary sources. (v) Report analysis of the existing assets before designing. (vi) Prepare detailed designs of the agreed technical options, technical specifications, cost estimates, and bid documents for subprojects which should be in accordance with the ADB procurement guidelines and standard bidding document. (vii) Prepare of detailed project reports for advance preparations of subproject for subsequent loans, if any. (viii) Carry out baseline surveys, and ensure the contractors' proposals comply with environmental management plans, and initial environmental examination. (ix) Carry out baseline surveys, and ensure the contractors' proposals comply with resettlement plan. (x) Assist the PMU with all aspects of procurement including preparation of bid document, bid invitation, evaluation and award of work. (xi) Assist the PMU to avoid or minimize impacts on involuntary land acquisition and resettlement (both permanent and temporal) in project activities. (xii) Ensure compliance of contractors with ADB's procedures and guidelines for project implementation and management. (xiii) Ensure designs are implementable on ground with the path of least disturbance to other utilities. (xiv) Recommend design, technology, and process having the simplest and least expensive for operation and maintenance.
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	(xv) Prepare the operation and maintenance manual of the mechanical assets created by the project in collaboration with the respective contractors and the public communication and social development consultant. (xvi) Prepare and finalize required RP and IPP (xvii) Assist the PMU and IA for project disclosure and public consultations Supervision (i) Administer and manage the works and supply contracts. (ii) Provide most reasonable interpretation of technical specifications in consultation with the PMU. (iii) Verify the surveyed maps and design in the light of the ground situation and make necessary modifications, if required, with approval by the PMU. (iv) Scrutinize and improve the contractors' detailed work program and guide contractors for each contract. (v) Scrutinize the construction methods proposed by contractor including environmental; safety, personnel and public issues. (vi) Monitor the construction method by assessing the adequacy of the contractor's input materials, labor, equipment, and construction methods. (vii) Assist PMU/ IAs compliance with ADB Safeguards policy and requirement during Project 2 implementation. (viii) Review and modify the detailed construction drawings as necessary during the works contractual period. (ix) Supervise and monitor construction work of each contract. (x) Monitor contractors' implementation of environmental standards, environmental and social safeguards, and gender action plans, and provide contractors with mitigation measures in case of failures. (xi) Establish quality assurance system including verification of source of material and certification. (xii) Carry out necessary quality control activities and certify that the quality of works conforms to the specifications and drawings. (xiii) Supervise the construction of the various contract packages for achieving the expected outputs of the project. (xiv) Record the work measurement and certify the contractors' interim and final bill of payment. (xv) Assist third party inspections, if necessary, as decided by the employer. (xvi) Review and finalize the "as built" drawings submitted by Contractor. (xvii) Assist the employer in issue of completion certificates. (xviii) Assist for resolution of all contractual issues including examining the contractor's claims for variations/extensions, or additional compensations, etc., and prepare recommendations for approval by the employer. (xix) Inspect the works at appropriate intervals during defect liability period and issue certifications. (xx) Support, assist and provide guidance for complaints- resolution matters and implementation project Grievance Redress Mechanism to the RPMU and IAs, as required.
Output/report requirements	(i) Summary appraisal reports and feasibility studies of all subcomponents for towns in Tranche 2, including technical studies, economic and financial analyses, safeguards documents (IEEs/EIAs and Resettlement Plans) (ii) Detailed engineering designs and DPRs of all subcomponents for towns in Tranche .Bidding documents for each contract. (iii) Bid Evaluation Reports and associated documentation. (iv) Manuals for operations of mechanical assets. (v) Draft completion certificates. (vi) Third party inspection reports. (vii) Monthly progress reports on physical, financial, safeguards and gender action plan compliance. (viii) Project performance monitoring system updates. (ix) Draft semiannual safeguards monitoring reports (x) Briefing notes to the Project Director on project related issues. (xi) Inception report, progress reports, draft final report and final report.
Office, support staff and	The consultants will be responsible for any office rental and transportation.

equipment	The consultants will quote the remuneration, per-diem, cost of support staff and assistants, and domestic travels. The cost of organizing workshop and meetings, office supplies, and communication will be paid out of the provisional sum.				
Inputs Nat. = 922 person-months	Estimated Input Requirements				
		Positions	Type	Input T1	Input T2
	1	Water Engineer and Team Leader	Nt'I	6	48
	2	Sanitation Engineer and Deputy Team Leader	Nt'I	0	48
	3	Sr. Design Engineer (Water)	Nt'I	10	8
	4	Sr. Design Engineer (Wastewater)	Nt'I	10	8
	5	Instrumentation, Controlling and Automation Engineer	Nt'I	6	12
	6	Structural Engineer	Nt'I	6	12
	7	Mechanical Engineer	Nt'I	4	6
	8	Electrical Engineer	Nt'I	4	6
	9	Environmental Specialist	Nt'I	6	15
	10	Social Development Specialist (R&R & Community)	Nt'I	6	22
	11	Economist/Financial Specialist	Nt'I	5	0
	11	Procurement/Contract Management Specialist	Nt'I	6	18
	12	Monitoring & Evaluation Specialist	Nt'I	3	15
	13	Resident Engineer (4)	Nt'I	0	192
	14	Assistant Resident/Junior Engineers (8)	Support	0	384
	15	Quantity Surveyor	Support	4	12
	16	Draftspersons (CAD, 2)	Support	20	20
	17	Office Manager	Support	12	48
	18	Secretary	Support	12	48
		Total		120	898
Source: ADB estimates.					
Recruitment	The firm will be recruited following the Quality-and-Cost Based-Method following a 90:10 ratio. A time-based contract may be executed.				

INDICATIVE TERMS OF REFERENCE FOR FINANCIAL INTERMEDIATION CAPACITY DEVELOPMENT CONSULTANT

Background and Objective	The Objective of the Project Management, Design and Supervision Consultant (Project 1) is to provide assistance to Central and Regional project management units (PMUs) in implementing the first tranche of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP), which will be financed by an Asian Development Bank's (ADB's) loan under a Multitranchise Financing Facility. The investment program will aim to achieve sustainable water security in selected river subbasins in Karnataka through improving water resource management in urban areas. Tranche 1 will concentrate in delivering these objectives in 4 towns of the upper Tungtha Badra subbasin: Byadagi, Davangere, Harihar and Ranebennur. The tranche will deliver this through three outputs: (i) expanded efficient urban water and sanitation infrastructure; (ii) improved water resource planning, monitoring and service delivery; and (iii) strengthened KUIDFC capacity. KUIDFC was established in November 1993 under the Companies Act 1956, as a limited liability company with an authorized share capital of INR 100 million (about \$2.5 million). The entire equity of the company is from the government. While KUIDFC has the legal mandate to act as a financial institution, it has restricted its function to managing and passing on government funds, it has not borrowed funds directly, nor lent them on a commercial basis. Capital base and skills need strengthening.
Scope of Services	The consultants will be responsible for assessing KUIDFC's capabilities as a financial intermediary with respect to financial management, credit and risk management, project appraisal, loan management, and information systems. The consultants will accordingly develop appropriate (i) policies, (ii) frameworks (iii) procedures to transform KUIDFC into a viable financial institution. The consultants will also be responsible for assessing the present human resource strength and accordingly prepare a road map that ensures KUIDFC's conversion.
Estimated assignment period	This assignment is estimated over 2 years, from Q2 2014 to Q2 2016.
Financing sources	The first loan under the facility will finance consulting services for this assignment.
Activities	The activities include, but not limited to: Assessment of Present Capabilities (i) Assess KUIDFC's financial management, credit and risk management, project appraisal, loan management, and information systems (ii) Assess KUIDFC's capacity to conduct social and environmental impact assessments, including policies, frameworks and procedures. (iii) Assess KUIDFC's ability to attract private capital and cofinancing, and capacity to structure PPP deals. (iv) Assess KUIDFC's human resource structure, and strengths. Corporate and Finance (xii) evaluate KUIDFC's current business model, pipeline and associated business objectives and strategy/plan, if any. (xiii) assess KUIDFC's internal structure and organization and its appropriateness in meeting business plan targets (xiv) reviewing KUIDFC's lending structure and policies (xv) evaluating KUIDFC's risk management, asset-liability management, credit appraisal, and financial policies, and assessing their suitability in light of KUIDFC's business plan (xvi) evaluating KUIDFC's collateral valuation process and perfection arrangements (if any) and minimum required loan to collateral ratio compared to private commercial bank market practice (xvii) review the existing exposure limit policy of KUIDFC and compliance with any other prudential regulations (xviii) evaluating KUIDFC's current financial position (xix) examining KUIDFC's capital adequacy relative to India bank requirements and

	Bank for International Settlements guidelines (xx) reviewing KUIDFC's medium term (5-year) financial projections and evaluating the reasonableness of the assumptions used in the balance sheet, cash flow, and income statements (xxi) review the accounting standards followed in the most recent annual report, comparing them with International Accounting Standards, identifying major differences, and preparing key income, cash flow, and balance sheet data using International Accounting Standards; (xxii) identifying all existing credit facilities available to KUIDFC (xxiii) assess KUIDFC's financial soundness as evidenced by adequate capital, asset quality, liquidity, and profitability. Estimate total contingent liabilities, breakdown by type, and highlighting any major legal cases outstanding that could result in claims on KUIDFC, if any; (xxiv) assess KUIDFC's corporate and financial governance and management practices including, among other things, transparent financial disclosure policies and practices (xxv) assess KUIDFC's autonomy in lending and pricing decisions (xxvi) review human resource and recruitment policies for the KUIDFC (xxvii) assess KUIDFC's PPP current and future program Appraisal (xii) Review current appraisal and lending policies and procedures, including those pertaining to client eligibility, lending criteria, loan coverage, expenditure eligibility, exposure limit, security mechanisms, (xiii) Assess appraisal processes and criteria (including technical and design, costing, procurement, financial and economic assessments, and safeguards). (xiv) <u>Safeguards</u>. Based on KUIDFC's current and likely future portfolios, assess potential environmental and social impacts and risks associated, as well as its commitment to and capacity for environmental and social management. (xv) Assess safeguards appraisal, monitoring and management capacity. (xvi) Assess and review the environmental and social management system of KUIDFC, including (a) environmental and social policies; (b) safeguard screening, categorization, and review procedures; (c) current organization structure and staffing; (d) performance monitoring and reporting procedures; and (v) track record in environmental and social management. Based on the above findings, (xxviii) Assist KUIDFC develop/update the following (a) Business and Financial Strategy/Plans (b) Recapitalization, asset quality improvement, liquidity, and profitability programs (c) Credit and risk management policies, operating systems, and procedures (d) Corporate and financial governance and management systems (e) Organization restructuring program (f) Human Resources strategy and associated plan (including base, recruitment, and training). (g) Reengineer business and appraisal processes, as necessary (h) Procurement policy/guidelines (i) Policies, systems, and procedures to assess and monitor the economic, social, and environmental impact of subprojects (in the form of an Environment and Social Management System) (j) Assess and recommend an IT base in support of project appraisal, monitoring and financing to computerize processes, secure data archiving and create an audit trail. (k) Guide/ advice KUIDFC on how to set up/ establish an Environmental and Social Management System (ESMS) that includes identification for the structures, policy, mechanism and resources/ skills requirements
Output/report requirements	(i) Business and Financial Strategy/Plans (ii) Recapitalization, asset quality improvement, liquidity, and profitability programs (iii) Credit and risk management policies, operating systems, and procedures

	(iv) Corporate and financial governance and management systems (v) Organization restructuring program (vi) Human Resources strategy and associated plan (including base, recruitment, and training). (vii) Reengineer business and appraisal processes, as necessary (viii) Procurement policy/guidelines (ix) Policies, mechanisms, and procedures to assess, manage and monitor the economic, social, and environmental impact of subprojects (in the form of an Environment and Social Management System) (x) IT-based assessment.																																																								
Office, support staff and equipment	The PMU will provide office accommodation and office equipment, including desks and chairs. The consultants will quote the remuneration, per-diem, cost of support staff and assistants, and domestic travels. The cost of organizing workshop and meetings, vehicles, office supplies and communication will be paid out of the provisional sum.																																																								
Inputs Nat. = 912 person-months	<table><tr><th colspan="4">Estimated Input Requirements</th></tr><tr><th></th><th>Positions</th><th>Type</th><th>Inputs</th></tr><tr><td>1</td><td>Urban Infrastructure Finance Specialist and Team Leader</td><td>National</td><td>15</td></tr><tr><td>2</td><td>Financial Policy Expert</td><td>National</td><td>10</td></tr><tr><td>3</td><td>Financial Management Specialist</td><td>National</td><td>10</td></tr><tr><td>4</td><td>Urban Infrastructure Planning Specialist</td><td>National</td><td>8</td></tr><tr><td>5</td><td>Enterprise Resource Planning Specialist</td><td>National</td><td>10</td></tr><tr><td>6</td><td>Public-Private Partnership Specialist</td><td>National</td><td>6</td></tr><tr><td>7</td><td>Human Resources Development Specialist</td><td>National</td><td>10</td></tr><tr><td>8</td><td>Environmental Specialist</td><td>National</td><td>8</td></tr><tr><td>9</td><td>Social Safeguards Specialist</td><td>National</td><td>8</td></tr><tr><td>10</td><td>Procurement Specialist</td><td>National</td><td>6</td></tr><tr><td>11</td><td>IT specialist</td><td>National</td><td>6</td></tr><tr><td></td><td>Total</td><td></td><td>97</td></tr></table> Source: ADB estimates.	Estimated Input Requirements					Positions	Type	Inputs	1	Urban Infrastructure Finance Specialist and Team Leader	National	15	2	Financial Policy Expert	National	10	3	Financial Management Specialist	National	10	4	Urban Infrastructure Planning Specialist	National	8	5	Enterprise Resource Planning Specialist	National	10	6	Public-Private Partnership Specialist	National	6	7	Human Resources Development Specialist	National	10	8	Environmental Specialist	National	8	9	Social Safeguards Specialist	National	8	10	Procurement Specialist	National	6	11	IT specialist	National	6		Total		97
Estimated Input Requirements																																																									
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9	Social Safeguards Specialist	National	8																																																						
10	Procurement Specialist	National	6																																																						
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	Total		97																																																						
Recruitment	The firm will be recruited following the Quality- Based-Method.																																																								

INDICATIVE TERMS OF REFERENCE FOR PUBLIC COMMUNICATION AND AWARENESS CONSULTANT

Objective	The objective of the public communication and awareness consultant is to provide assistance to the central program and regional project management units (PMU) in successfully communicating and raising awareness in program towns on topics associated with the Karnataka Integrated Urban Water Management Investment Program, namely water management and urban reform. The investment program will aim to achieve sustainable water security in selected river subbasins in Karnataka through improving water resource management in urban areas. Tranche 2 will concentrate in delivering these objectives in 4-6 towns in Karnataka. The towns will be defined prior to tendering of this package and will have been selected based on their commitment and performance in implementing water and urban reform improvements. Tranche 2 is expected will deliver the objective through two outputs: (i) expanded efficient urban water and sanitation infrastructure; (ii) improved water resource planning, monitoring and service delivery.
Scope of Services	The consultants will (i) develop and provide information, education and communication materials in various paper and digital formats, (ii) provide strategic advice on public communication of the project, (iii) coordinate, organize, and supervise various participation and consultation activities in accordance with the Communication Strategy, and (iv) implementation of the effective gender mainstreaming initiative under the project following the Gender Action Plan. The consultants will report to and will work under the overall guidance, control and direction of the Project Director. The consultants will work closely with the program management and institutional development consultants, and design and supervision consultants, to deliver required outputs collectively.
Estimated assignment period	This assignment is estimated over 4 years, from Q4 2014 to Q4 2019, in 2 phases T1 (Q4 2014 to Q4 2016).
Financing sources	The first loan will cover the services to assist tranche 1 towns.
Detailed Tasks	The activities include, but not limited to: (i) Prepare a new public communications and awareness strategy relating to water management and reform. Topics are expected to include (a) water conservation and management (household and common resources), (ii) water-hygiene-sanitation-health nexus, (iii) metering and volumetric tariffs, (iv) stand post management, metering and progressive phase out. (ii) The strategy should also incorporate gender and inclusion elements. (iii) Prepare information, education and communication materials in both printed and digital format, and update the printed materials every 3 months, and the digital materials every week. (iv) Format and standardize the digital presentation materials prepared by the PMU, program management consultant (PMIDC) and design and supervision consultant (PMDSC) to have a uniform look representing one organization. (v) Suggest editorial changes to written materials for public disclosure and submission to the financiers. (vi) Support the PMUs, through the preparation of artwork, including for various reports. (vii) Identify participants and organize awareness raising workshops and focus group meetings. (viii) Organize and conduct awareness campaign, workshops and focus group meeting. (ix) Prepare records/minutes of campaigns, workshops and meetings. (x) Develop gender sensitive materials. (xi) Provide support in developing radio broadcasting program on the program. (xii) Provide support in developing video program on the project for internet. (xiii) Recommend specific detailed action plan for raising awareness among the beneficiaries on their responsibilities, including issues such as water metering, and user-charges for water supply and sewerage services for achieving the goal of the project, and implement such actions upon endorsement by the Project Director. (xiv) Open and maintain Facebook and twitter accounts dedicated for the project.

	(xv) Consolidate and summarize the comments, suggestions, and grievances posted on the project's website, Facebook and Twitter daily, and report it to the Project Director with recommended replies and solutions. (xvi) Collect the newspaper articles on the project daily, and maintain in a digital database archive, such as Evernote. (xvii) Liaise with all forms of media for all project activities. (xviii) Work with media to ensure regular positive coverage about the project in Kanada and English newspaper, and minimize the prejudice, bias, misconceptions and stereotypes on project impacts, outcome and outputs.																																				
Output/report requirements	(i) A new public relations strategy. (ii) Education and communication materials in both printed and digital format. (iii) Template and standard digital presentation materials. (iv) Awareness campaigns, workshops and focus group meetings on the project consistent with the Communication Strategy. (v) Records/minutes of campaigns, workshops and meetings. (vi) Radio broadcasting program on the project and airing. (vii) Video program on the project for internet and airing. (viii) Project's website, Facebook, and Twitter accounts. (ix) Recommendation on specific detailed action plan for raising awareness among the beneficiaries. (x) Consolidated and summarized comments, suggestions and grievances posted on the project's website, Facebook and Twitter accounts on every weekdays. (xi) Consolidated newspaper articles on the project everyday. (xii) Inception report, progress reports, draft final report, and final report.																																				
Office, support staff and equipment	The PMU will provide office accommodation and office equipment, including desks and chairs. The consultants will quote the remuneration, per-diem, cost of support staff and assistants, and domestic travels. The cost of organizing campaigns, workshops and focus group meetings, and mass publication of printed materials, social surveys, office supplies, computer consumables, communication and annual subscription for on-line database services will be paid out of the provisional sum.																																				
Inputs Nat. = 437 person-months	<table><tr><th colspan="4">Estimated Input Requirements</th></tr><tr><th></th><th>Positions</th><th>Type</th><th>Inputs</th></tr><tr><td>1</td><td>Media relation management expert as team leader</td><td>National</td><td>12</td></tr><tr><td>2</td><td>Public communication strategy expert</td><td>National</td><td>9</td></tr><tr><td>3</td><td>Contents and editing expert</td><td>National</td><td>9</td></tr><tr><td>4</td><td>Public communication and event coordination expert</td><td>National</td><td>9</td></tr><tr><td>5</td><td>Digital contents and media creator</td><td>National</td><td>7</td></tr><tr><td>7</td><td>Social and community development expert</td><td>National</td><td>7</td></tr><tr><td></td><td></td><td></td><td>53</td></tr></table> Source: ADB	Estimated Input Requirements					Positions	Type	Inputs	1	Media relation management expert as team leader	National	12	2	Public communication strategy expert	National	9	3	Contents and editing expert	National	9	4	Public communication and event coordination expert	National	9	5	Digital contents and media creator	National	7	7	Social and community development expert	National	7				53
Estimated Input Requirements																																					
	Positions	Type	Inputs																																		
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3	Contents and editing expert	National	9																																		
4	Public communication and event coordination expert	National	9																																		
5	Digital contents and media creator	National	7																																		
7	Social and community development expert	National	7																																		
			53																																		
Recruitment	The firm will be recruited following the Quality-and-Cost Based-Method following a 90:10 ratio. A lumpsum contract may be executed.																																				

INDICATIVE TERMS OF REFERENCE FOR OUTPUT BASED AID (OBA) TOILET PROGRAM NON-GOVERNMENTAL ORGANIZATION (NGO)

Background and Objective	The Objective of the Non-Governmental Organization (NGO) is to provide assistance to the Central and Regional project management units in implementing the output-based aid (OBA) toilet program which will be financed as grant by the Asian Development Bank under the first tranche of the Karnataka Integrated Urban Water Management Investment Program (KIUWMIP), which will be financed by an Asian Development Bank's (ADB's) loan under a Multitranchise Financing Facility. The OBA toilet program will aim to increase the demand and use of properly designed and constructed household and community toilets by providing subsidies to low income households in 4 towns of the upper Tungtha Badra subbasin: Byadagi, Davangere, Harihar and Ranebennur. The OBA mechanism will be used for three sanitation components (i) construction and connection to the sewer network of new individual household toilets; (ii) construction, connection to the sewer network and operation of community toilets; and (iii) sanitation marketing to promote open defecation free communities.
Scope of Services	The Non-Governmental Organization will assist the ULBs in the implementation of the output-based aid toilet program in accordance to the KIUWRMIP OBA Toilet Program Guidelines. The NGO will be responsible for identifying OBA beneficiaries to construct and connect to the sewer network, household and community toilets in 4 towns of the upper Tungtha Badra subbasin: Byadagi, Davangere, Harihar and Ranebennur. The NGO will also be responsible for the independent verification of the social aspects of the construction, connection, operation and maintenance of household and community toilets. The NGO will develop and implement a social sanitation marketing program to promote open defecation free communities. This program will be developed and delivered using a participatory approach. The social marketing program will also be delivered using an OBA mechanism.
Estimated assignment period	This assignment is estimated over 2.5 years, from Q2 2014 to Q4 2016.
Financing sources	The first loan under the facility will finance services for the NGO.
Activities	The activities include, but not limited to: Identification of OBA Beneficiaries and Independent Verification (i) conduct social surveys and verify existing baseline data to identify OBA beneficiaries in the 4 towns facilitate the creation of new community groups (in the absence of existing ones) who will oversee and coordinate the construction of toilets and their connection to the sewer network (ii) Facilitate the creation of community based groups to carry out long term implementation, operation and maintenance (iii) Identify those eligible for OBA grants in liaison with the community based groups (iv) Train and facilitate community groups in OBA process, beneficiary identification and selection, operation and maintenance etc (v) Review beneficiary applications and verify and recommend to the community groups (vi) Help households and communities in making informed decisions regarding toilet construction and connections (vii) Carry out role of independent verifier for social aspects of house connections. Verify agreed outputs have been delivered (viii) Verify social aspects and quality and workmanship of toilets and if its operational Social Sanitation Marketing Program (i) Promote toilet construction and good hygiene practices using participatory approaches similar to CLTS and/ or PHAST (ii) Work with other local sanitation programs where applicable

	(iii) facilitate 100 community based groups, with equal participation of women in each group to promote positive behavior in health, hygiene and sanitation issues (T: Davangare–25, Harihar–25, Ranebennur–25, Byadgi–25) (iv) Train and equip the community groups to provide continuous sanitation marketing in the community (v) develop and implement social and behavioral change training program on toilet demand creation, social leadership, health, hygiene and sanitation conducted for women and men, including promotion of ODF communities (T: F-50%, M-50%).																																
Output/report requirements	(i) Independent verification reports to ULBs (ii) Monthly progress reports to CPMU/ RPMU on project implementation																																
Office, support staff and equipment	The NGO will prepared a simplified proposal, including the remuneration, per-diem, cost of support staff and assistants, local travels, and administration costs																																
Inputs Nat. = 96 person-months	<table><tr><th colspan="4">Estimated Input Requirements</th></tr><tr><th></th><th>Positions</th><th>Type</th><th>Inputs</th></tr><tr><td>1</td><td>Community Development Coordinator</td><td>National</td><td>30</td></tr><tr><td>2</td><td>Public Health / Hygiene Promotion Officer</td><td>National</td><td>30</td></tr><tr><td>3</td><td>Training Materials Development Officer</td><td>National</td><td>12</td></tr><tr><td>4</td><td>Surveyor (1)</td><td>National</td><td>12</td></tr><tr><td>5</td><td>Surveyor (2)</td><td>National</td><td>12</td></tr><tr><td></td><td>Total</td><td></td><td>96</td></tr></table> Source: ADB estimates.	Estimated Input Requirements					Positions	Type	Inputs	1	Community Development Coordinator	National	30	2	Public Health / Hygiene Promotion Officer	National	30	3	Training Materials Development Officer	National	12	4	Surveyor (1)	National	12	5	Surveyor (2)	National	12		Total		96
Estimated Input Requirements																																	
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1	Community Development Coordinator	National	30																														
2	Public Health / Hygiene Promotion Officer	National	30																														
3	Training Materials Development Officer	National	12																														
4	Surveyor (1)	National	12																														
5	Surveyor (2)	National	12																														
	Total		96																														
Recruitment	The NGO will be recruited following the Quality-Based-Method. A performance-based lumpsum contract will be executed and payment schedule is as follows: (i) Mobilization allowance = 10 % of contract sum (ii) Completion of social and behavioral change training program on toilet demand creation, social leadership, health, hygiene and sanitation for women and men, including promotion of ODF communities of targeted households (T: F-50%, M-50%). = 40% of contract sum (iii) 10% of low income (average monthly income INR 0 – INR 1,400) participants of the social sanitation marketing program build/ rehabilitate individual household or community toilets following implementation of the program = 20% of contract sum (iv) 20% of middle income and high income (average monthly income >INR 1,400) participants of the social sanitation marketing program build/ rehabilitate individual household or community toilets following the program = 20% of contract sum (v) 40% of targeted households become ODF at the completion of the social sanitation marketing program = 10% of contract sum																																
Recruitment	The NGO will be recruited following the Quality- Based-Method. A contract with performance-linked milestones may be executed.																																

ANNEX 6: PROJECT READINESS CHECKLIST
Karnataka Integrated Urban Water Management Investment Program – Tranche 1

Sl. No.	Milestones	Action points	Responsible agency	Status / Projected date for meeting readiness milestone
1	Before loan fact-finding mission of ADB	PPTA, if any, is substantially completed 1.2 Feasibility study report and preliminary design completed	ADB/EA EA	Completed Completed
2	Before loan appraisal mission of ADB	2.1 Concurrence of the line Ministry/Competent Authority 2.2 Approval under FRBM Act from Deptt of Expenditure 2.3 Approval for Govt of India guarantee by Budget Division, if required 2.4 Commitment to provide counterpart funds 2.5 Budgeting for at least 30% of land acquisition and resettlement requirements completed, if any. 2.6 Designation of PMU/PIUs staff completed and core staff for the project assigned 2.7 Procurement plan for the project detailing contract packages, modes of procurement, pre-requisites for awarding the contracts, approval flow chart, decision making structure and schedule for each contract be in place 2.8 Terms of reference (TOR) for all consultancy contracts including Project Management consultants, shortlist of consultants/consulting firms and documents for prequalification of contractors are prepared and approved/reviewed by ADB 2.9 Environmental Management Plan (EMP) for the first two years of project implementation be finalized. Complete IEE/EIA and secure ADB approval 2.10 Relief & Resettlement Plan for the first two years of the project implementation should be finalized and confirmation regarding R&R activities are aligned with the Procurement Plan be conveyed.	Line Ministry/ DEA EA DEA EA EA EA EA EA ADB/EA ADB/EA ADB/EA ADB/EA	Obtained Obtained Obtained Secured A provision of Rs 30 crores has been made in the Budget for FY 2013-2014. CPMU established at KUIDFC, Head Office, Bangalore. RPMU & PIUs created, to be staffed. Completed TORs prepared. Standard Bidding document of Sewerage approved by ADB. IEEs completed. Minor updates may be required for few subprojects after completion of DPRs RPs prepared as part of the feasibility and being updated as part of detailed design.

Sl. No.	Milestones	Action points	Responsible agency	Status / Projected date for meeting readiness milestone
3	Before loan negotiations	3.1 Bidding documents for all contracts, including criteria for consultant recruitment and procurement, to be awarded during first 12 months of project implementation should be prepared, approved and issued. Issue of RFP for consultants and calling of bids for civil works	ADB/EA	PMD/SC & FM/DC Consultants shortlisted, RFPs issued, proposals received and under evaluation by CSC. NCB Bidding documents for small civil works approved by ADB.
		3.2 Project Implementation Plan/ Administration Manual/ Memorandum covering scope, organization and its TOR, procurement, budgeting, disbursement, reporting and auditing arrangement be finalized.	ADB/EA	FAM prepared as part of Loan Fact Finding. To be discussed and finalised during loan negotiations.
		3.3 At least 50% of land acquisition (if required) to be completed	EA	72% of land available with the ULBs. Subprojects tendered/ for immediate tendering do not require land.
		3.4 Establish (a) financial management system (b) auditing arrangement (c) fund flow arrangement (d) system of oversight.	ADB/EA	Established.
		3.5 All Statutory clearances like environmental/forest clearances to be in place	EA	CFEs for STPs in process. No forest dept. clearances required.
		3.6 Administrative clearances for temporary use of land i.e. right of way taken	EA	Further action will be taken by the ULBs as per the provisions in the Municipal Act.
		3.7 Administrative approval for shifting of utilities taken	EA	Will be obtained wherever required.
		3.8 At least 30% of the tendering work should be completed for awarding	EA	Two packages amounting to 30% of the total contract value for civil works under the loan have been

Sl. No.	Milestones	Action points	Responsible agency	Status / Projected date for meeting readiness milestone tendered.
				1. Harihara sewerage: Bids invited on 30 December 2013. 2. Davangere sewerage: Bids invited on 3 February 2014.
		3.9 Provision of budget for project implementation in first financial year	EA	A provision of Rs 30 crores has been made in the Budget for FY 2013-2014.

