

ASIAN DEVELOPMENT BANK

TAR: IND 38254

TECHNICAL ASSISTANCE

TO

INDIA

FOR PREPARING THE

KARNATAKA URBAN INFRASTRUCTURE DEVELOPMENT PROJECT III

December 2004

CURRENCY EQUIVALENTS

(as of 13 December 2004)

Currency Unit	–	Indian rupee/s (Re/Rs)
Re1.00	=	\$0.022
\$1.00	=	Rs44.55

ABBREVIATIONS

ADB	–	Asian Development Bank
EIA	–	environmental impact assessment
GoK	–	Government of Karnataka
IEE	–	initial environmental examination
KUIDFC	–	Karnataka Urban Infrastructure Development Finance Company
KUIDP	–	Karnataka Urban Infrastructure Development Project
NGO	–	nongovernment organization
O&M	–	operation and maintenance
TA	–	technical assistance
ULB	–	urban local body

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sector	–	Water supply, sanitation, and waste management
Subsector	–	Integrated urban development
Theme	–	Sustainable economic growth
Subtheme	–	Developing urban areas

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. During the 2004 Country Programming Mission, the Government of India confirmed its request for technical assistance (TA) from the Asian Development Bank (ADB) to prepare the Karnataka Urban Infrastructure Development Project (KUIDP) III. Following further discussions, the Government and ADB agreed that TA¹ would be provided in 2004 and the proposed loan in 2005 subject to approval by ADB's Board of Directors. A Fact-Finding Mission was conducted in Bangalore, India, from 15 to 19 November 2004 to prepare the TA. The mission held discussions with officials of Karnataka Urban Infrastructure Development Finance Company (KUIDFC), Urban Development Department, Directorate of Municipal Administration, Town Planning Department, and Karnataka Urban Water Supply and Drainage Board to reach understanding on the objectives, scope, costs, and implementation arrangements of the TA. The preliminary project framework is attached as Appendix 1.

II. ISSUES

2. Various institutions in the state are responsible for the management and delivery of basic urban services. At the local level, urban local bodies provide and manage services. Karnataka has a total of 222 urban local bodies, namely, 6 city corporations, 41 city municipal councils, 82 town municipal councils, and 93 *gram panchayats*. The Department of Urban Development oversees city corporations and the Directorate of Municipal Administration oversees municipalities.

3. The 2002 report of the High-Power Committee for Redressal of Regional Imbalances of the Government of Karnataka (GoK) highlighted the need for urban infrastructure investments in towns in north Karnataka. Economic indicators, such as per capita income, poverty levels, and extent of infrastructure development, demonstrated that these towns lagged behind those in south Karnataka. The lack of urban infrastructure services has become a growth inhibitor and a significant contributor to poverty and the economic imbalance between towns in north and south Karnataka.

4. ADB's assistance began in 1995 and focused on the south. KUIDP I provided total assistance of \$105 million for formulating an integrated urban development strategy for the Bangalore subregion. KUIDP I provided an opportunity to develop "counter magnet" urban locations or growth centers. A component of the loan was directed toward improving infrastructure in the four towns of Channapatna, Mysore, Ramanagaram, and Tumkur, and later the towns of Maddur and Mandya were added, to reduce congestion in Bangalore. A \$20 million component of the loan was channeled through the Housing Development Finance Corporation for on-lending to qualified individuals at affordable interest rates for the purpose of promoting housing ownership and reducing the housing shortage in Bangalore and the four subject towns. This latter assistance was evaluated as successful,³ because it led to the formulation of further ADB assistance for full-scale housing loans.

¹ The TA first appeared in *ADB Business Opportunities* (Internet edition) on 1 September 2004.

² ADB. 1995. *Report and Recommendation of the President to the Board of Directors on Proposed Loans to India for the Karnataka Urban Infrastructure Development Project*. Manila (Loan 1415-IND and 1416-IND, for \$85 million and \$20 million, respectively, approved on 14 December 1995).

³ ADB. 2001. *Project Completion Report on the Karnataka Urban Infrastructure Development Project in India (Loan 1416-IND)*. Manila (PCR 27132-IND).

5. KUIDP II,⁴ approved in October 1999, provided assistance of \$145 million to GoK to support urban infrastructure development in coastal Karnataka and to facilitate policy reforms to strengthen urban management. Ten towns were included in this Project.⁵ The objectives of this Project included (i) strengthening the capacity of local governments in relation to resource generation and cost recovery to achieve sustainability in the operation and maintenance (O&M) of the investments; and (ii) establishing appropriate environmental planning, management, and monitoring mechanisms to address the potential environmental impacts associated with urban and industrial growth in the region. The Project experienced implementation delays, but the pace of contract awards has picked up in recent months. The Project is currently rated as satisfactory by the project performance management system.

6. The executing agency for both projects was KUIDFC, which is wholly owned by GoK and was incorporated in 1993. KUIDFC has the following functions: (i) formulating and appraising urban infrastructure projects, (ii) providing financial assistance and TA to municipalities and development agencies, (iii) mobilizing funds from different sources, (iv) carrying out project monitoring and implementation, (v) formulating and implementing capacity-building programs for the effective delivery of urban services, and (vi) assisting with municipal sector reforms.

7. Following its experience with implementing KUIDP I and KUIDP II and other externally-funded and domestic projects, KUIDFC has now evolved into an agency capable of managing externally aided projects for GoK. KUIDFC has engaged consultants to help prepare KUIDP III. KUIDP III is designed to address deficient urban infrastructure and provide sustainable basic urban services in approximately 21 selected towns in north Karnataka that have traditionally lagged in development because of deficiencies in the provision of basic urban infrastructure services. The Project will help the selected municipalities in the following areas: (i) water supply and sewerage, (ii) urban drainage, (iii) solid waste management, (iv) roads, and (v) slum improvement. Three key areas for urban development will be considered in the design of the Project, namely: (i) equity in the coverage of services, (ii) environmental acceptability and (iii) operational sustainability.

8. As the types of investments contemplated have sometimes been plagued by poor O&M practices, low user charges and poor technical and commercial efficiencies, KUIDFC would like to address these issues and develop its capability in employing performance-based deferred payment schemes for the procurement, operation, management, and maintenance of some of the components of the Project. These are schemes whereby payments are made to contractors based on predetermined performance standards. KUIDFC has engaged consultants to develop such schemes for KUIDP III.

9. KUIDFC, along with GoK, has initiated project preparation and has engaged consultants for this purpose. A draft report is expected to be available for review by ADB by end of December 2004.

10. Within the given framework, the TA will augment the project preparation activities undertaken by GoK and help meet ADB's due diligence and policy requirements. The ensuing Project is expected to boost economic growth in the selected towns through the provision of sustainable urban infrastructure services.

⁴ ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Karnataka Urban Development and Coastal Management Project*. Manila (Loan 1705-IND, for \$145 million, approved on 26 October 1999).

⁵ The towns are the primary urban centers of Dandeli, Karwar, Mangalore, Sirsi, and Udupi, as well as Ankola, Bhatkal, Kandapura, Puttur, and Ullal.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

11. The objective of the TA is to (i) review the feasibility study prepared by GoK and (ii) complement and augment the study to prepare a project suitable for ADB financing. A sector loan approach will be adopted for the Project. The TA will focus primarily on (i) reviewing the performance-based deferred payment schemes proposed by GoK and their application to the proposed Project; (ii) examining the tariff frameworks to ensure the sustainability of the O&M of the investments; (iii) performing financial management assessment of the Project's executing and implementing agencies; and (iv) helping to prepare safeguard frameworks for the environment, resettlement, and indigenous peoples and related plans, as applicable. Based on GoK's feasibility study, the TA will prepare one main report and three town reports for the sample subprojects. A summary initial poverty and social analysis is in Appendix 2.

12. The outputs of the TA will include (i) an investment project suitable for financing by ADB and in accordance with ADB's policies, (ii) a strategy for implementing tariff and cost recovery in the proposed investments, (iii) an economic and financial analysis, and (iv) the environmental and social impact frameworks.

B. Methodology and Key Activities

13. As GoK has initiated project preparation activities, the consultants will review the assessments, analyses, and reports prepared by GoK and its consultants upon commencement of their respective assignments. The consultants will also review GoK and ADB policies and guidelines as they apply to their particular areas. Meetings with GoK will be arranged during the first 2 weeks of the consultants' assignment to obtain an overview of GoK's thrust and approach in relation to project preparation. Following these meetings, the consultant team leader will prepare an inception report identifying the approach and activities for the duration of the assignment. The team leader will produce a consolidated report, including three town reports, that contains all the information necessary to prepare a project for ADB financing.

C. Cost and Financing

14. The total cost of the TA is estimated at \$510,000 equivalent, comprising foreign currency cost of \$338,000 and local currency of \$172,000 equivalent. The entire foreign currency cost of \$338,000 and \$62,000 equivalent in local currency will be financed on a grant basis by ADB's TA funding program. GoK will provide \$110,000 equivalent for fully equipped office accommodation, counterpart staff support, local transportation, and other administrative expenses. GoK will also provide all information required for the TA activities. The Government and GoK have been informed that approval of the TA does not commit ADB to finance any ensuing project. Appendix 3 presents the cost estimates and financing plan.

D. Implementation Arrangements

15. KUIDFC will be the executing agency for the TA and will be responsible for overall coordination with ADB. KUIDFC will also be the implementing agency. KUIDFC will provide complete administrative and technical support to the consultants and will coordinate all activities under the TA with other government agencies. KUIDFC will provide adequate office space for the consultants with sufficient equipment and means of communication. KUIDFC's managing director will be the TA coordinator.

16. An Empowered Committee has been established for the previous ADB projects consisting of senior GoK officials. A similar arrangement is proposed for KUIDP III, with the Empowered Committee chaired by GoK's additional chief secretary for externally aided projects. Members of the committee will include the secretaries of all concerned state departments, such as Planning, Finance, Public Works, Urban Development, and Urban Water Supply and Drainage Board, as well as the managing director of KUIDFC and the director of the Directorate of Municipal Administration. In the interim, as key milestones are reached, reports will be furnished to KUIDFC and GoK's Urban Development Department for review and approval. The final report will be submitted to the Empowered Committee.

17. The TA will be implemented over 5 months from mid-February 2005 to mid-July 2005. ADB will engage all consultants on an individual basis, in accordance with its *Guidelines on the Use of Consultants by the Asian Development Bank and Its Borrowers* and other arrangements satisfactory to ADB for engaging domestic consultants. The consulting services for the TA total 14 person-months (10 international and 4 domestic). An inception report, which will propose the methodology for carrying out activities, is expected to be submitted to ADB by the team leader within 2 weeks of TA commencement. Progress reports will be submitted as agreed in the inception report. A draft final report will be submitted 2 weeks prior to the conclusion of the assignment. The final report will incorporate comments from ADB and GoK and will be submitted at the end of the assignment. The experts to be engaged will include an urban development and municipal engineer acting as the team leader (5 person-months), an environmental specialist (1 person-month), a social development specialist (1 person-month), an economist (1 person-month), two financial analysts (3 person-months), a public-private finance specialist (2 person-months), and a water and sewerage tariff specialist (1 person-month). Outline terms of reference are in Appendix 4.

IV. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$400,000 on a grant basis to the Government of India for preparing the Karnataka Urban Infrastructure Development Project III, and hereby reports this action to the Board.

PRELIMINARY PROJECT FRAMEWORK

Design Summary	Performance Indicators and Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal</p> <p>Improve living conditions and the quality of life for citizens of selected north Karnataka towns by improving their access to basic infrastructure and essential municipal services</p>	<p>Improved access to basic infrastructure and essential municipal services for approximately 4 million people in about 21 project towns by 2010</p>	<p>Periodic progress reports</p> <p>Project review mission reports</p> <p>Project completion report</p>	
<p>Purpose</p> <p>Improve access of the population to the following urban infrastructure and municipal services:</p> <p>(i) water supply</p> <p>(ii) sewerage and sanitation</p> <p>(iii) solid waste management</p> <p>(iv) storm water drainage</p> <p>(v) roads</p> <p>(vi) slum upgrading</p>	<p>By 2010:</p> <ul style="list-style-type: none"> • xx households are connected to a water supply • xx million liters per day of additional water made available • Each consumer in each town receives at least 80 liters per capita per day of water • xx households have sewerage connections • xx households have access to a low-cost sanitation facility • Solid waste collection efficiency is increased to at least xx% • Scientific waste disposal facility is established and operational in each town • Sewage is separated from primary drainage in each town • xx kilometers of primary roads improved • xx households have improved access to basic services (water, sanitation, solid waste management, roads) 	<p>Monitoring against pre-project baseline surveys on service access in the towns and sector-specific secondary data on service levels</p> <p>Periodic progress reports</p> <p>Project review mission reports</p> <p>Project completion report</p> <p>Community-based monitoring by nongovernment organizations and neighborhood groups in slums</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Willingness to connect to system and pay associated connection charges and tariffs • Commitment by urban local bodies to initiate reforms • Effective coordination with stakeholder agencies like the Karnataka Urban Water Supply and Drainage Board and the Public Works Department • Readiness of both parties to implement performance-based contracts <p>Risks</p> <ul style="list-style-type: none"> • Inadequate response from suitable private operators for performance-based deferred payment schemes • Delays in project implementation • Delays in land acquisition • Delays in securing clearances from the State Pollution Control Board for setting up sewage treatment plants and waste disposal facilities and from the Town Planning Department for land use conversion wherever required
Outputs[†]			
Activities[†]			
Inputs[†]			

[†] To be developed during technical assistance implementation.

INITIAL POVERTY AND SOCIAL ANALYSIS

A. Linkages to the Country Poverty Analysis

Is the sector identified as a national priority in country poverty analysis?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the sector identified as a national priority in country poverty partnership agreement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Contribution of the sector or subsector to reduce poverty in Karnataka:</p> <p>Investments in urban infrastructure have positive spinoffs in terms of economic growth and poverty reduction. The proposed Karnataka Urban Infrastructure Development Project III (KUIDP III) is expected to boost the regional economy through the provision of improved urban services. The 2002 report of the High-Power Committee for Redressal of Regional Imbalances of the Government of Karnataka also provides an economic argument in favor of investments in urban infrastructure in towns in north Karnataka, a region that has traditionally lagged behind the rest of the state. The committee suggests that improved urban infrastructure in the region will lead to increased private investment, and therefore to the reduction of regional imbalances in the state. The Project is expected to reduce poverty through better access to basic services. The Asian Development Bank's poverty reduction strategy also emphasizes access to basic services.</p> <p>An assessment of the current situation in the project towns has identified the poor quality of urban environmental infrastructure and a gap in basic service provision, particularly to the poor. KUIDP III will address deficiencies in basic needs on a citywide basis. Direct benefits will be sustained improvements in water supply, sanitation, and solid waste management within all the project towns. Indirect benefits will be improved living conditions and improved health status of the population.</p> <p>A baseline socioeconomic survey was conducted in the slums in each of the project towns. The baseline reveals the status of the urban poor in terms of basic service access and will serve as the benchmark against which post project benefits to the poor may be measured. Overall, respondents revealed extremely poor access to sanitation, with an average of about 85% of respondent slum households in the pilot towns stating that they had a complete lack of access to sanitation. Direct benefits from the sanitation component are expected to accrue to households that will be able to connect to the sewerage network. Provision of the network will be in the densely built-up core and unserved and underserved areas in the peripheries. To ensure access by the poor to safe sanitation, separate provisions are made for slum settlements. Proposed sewerage networks will cover the entire town and will reach the boundaries of slum areas, which will enable the networking of a large number of slums and the provision of toilets connected to sewers (individual or community, depending on space availability). The Project is expected to benefit all slum households residing in recognized slums (i.e., more than 90% of slum households in each town). The solid waste component in each town is expected to benefit the town's population as a whole, including the poor.</p> <p>Benefits to poor households from the road component will be from employment generation for local poor laborers by giving priority for unskilled jobs to local laborers. Direct and indirect benefits will also accrue to a town's entire population, including the poor, through improved access.</p> <p>An average of almost 80% of slum households in all the towns reported high dependence on standposts for their water supply. Access to house service connections is reported to be much lower. Added to this are issues related to water pressure and duration and frequency of supply. The benefits of improved water supply are expected to accrue to the entire population, including the poor. Slum households (estimated to account for 20% of the total urban population in the towns) will benefit directly from the Project through additional investments identified for improved tertiary distribution within slum settlements. All non-slum poor households (estimated at about 15% of the total urban population) will benefit directly from proposed improvements to the town's water supply.</p>			

B. Poverty Analysis

Proposed Targeting Classification: General intervention

What type of poverty analysis is needed?

A poverty impact analysis will be undertaken during the project preparation technical assistance.

Participatory analysis using a combination of qualitative and quantitative techniques is required to gauge post project benefits in terms of improved access to basic services by the poor. The baseline survey will serve as the benchmark against which post project impacts on the poor may be measured. Benefits to poor households; benefits to women; and capacity building of the poor, including women, are some of the issues that must be monitored or measured following implementation.

C. Participation Process

Is there a stakeholder analysis? Yes No

Stakeholder consultations have been an important element of project development and design. Ten consultation workshops have been held with district and municipal officials, elected representatives, nongovernment organizations (NGOs) and citizens. An additional seven consultations with district- and municipal-level officials were also held. Household surveys of general and slum populations in each town (through which people's opinions were sought and their needs assessed) and focus group discussions with the community are important elements of the study. These consultations and structured interactions with the community will help identify and prioritize projects under KUIDP III for each town.

Is there a participation strategy? Yes No

Public participation has been a key feature of project design so far and will continue through detailed design and, wherever possible, during planning, implementation, and operation and maintenance. The proposed strategy for public participation focuses on partnership building between NGOs, business communities, urban local bodies (ULBs), stakeholder agencies like the Karnataka Slum Clearance Board, and neighborhoods. An assessment of the absorptive capacity of the community was undertaken prior to preparing the participation strategy. The involvement of local, town-level, or district-level NGOs and of an apex NGO to monitor community participation in the project is envisaged. The apex NGO will be responsible for transferring know-how to local NGOs and training trainers from local NGOs, who in turn will train community managers.

The structures and functions of community-based organizations and neighborhood groups are proposed, each having women members, a community infrastructure volunteer responsible for articulating the basic infrastructure needs of the neighborhood groups and a community savings volunteer responsible for savings and credit activities. At the city level, a community development society has already been instituted in most of the cities. Each society's members include ward-level, resident community volunteers; a project officer appointed by the ULB; a member from each local NGO; and an ex-officio member from the Social Welfare Department. Training representatives from the ULB in participatory planning and implementation and gender issues is also proposed. The progress of activities will be discussed at monthly meetings. Participation by the community development societies in the formulation of city-level action plans and the monitoring of the Project is proposed, which will help with concurrent evaluation of the Project and midcourse corrections.

Ongoing consultation and participatory monitoring will help ensure that project elements meet communities' needs, thereby contributing to their sustainability.

D. Gender Development**Strategy to maximize impacts on women:**

The strategy for participation as outlined focuses on women's participation, which is expected to maximize the beneficial impacts on women. The impact of proposals such as the increased role of women in project design, implementation, and monitoring; the reduced burden of water collection; the health benefits accruing to families; the employment opportunities, etc. resulting from the Project may be measured after implementation. Monitoring and evaluation systems will generate gender-disaggregated information to enable the tracking of gender implications and the impact of the Project.

Has an output been prepared? Yes No

A gender action plan is currently being prepared.

E. Social Safeguards and Other Social Risks

Item	Significant/ Not Significant/ None	Strategy to Address Issues	Plan Required
Resettlement	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	The Project's land acquisition and resettlement implications are currently being verified in the field. A framework for environmental and social assessment is being prepared. If required, provision will be made for preparing resettlement framework and plans during the project preparation technical assistance stage.	<input type="checkbox"/> Full <input type="checkbox"/> Short <input type="checkbox"/> None

Affordability	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	<p>The potential negative impact of water tariff increases on the poor (other than households below the poverty line) is considered acceptable at less than 5% of household income, given that on average, the opportunity cost incurred by such households is currently about 5.5% of household income.</p> <p>Consumption-based tariffs will imply higher charges for higher consumption, probably for or will probably be incurred by high-income households. The same principle applies to the sewerage component.</p> <p>The advantages of and need for individual toilets has been reported by a majority of poor and all women-headed households in the sample. A majority of slum households (other than those below the poverty line) indicated the ability to bear connection charges if allowed to pay in installments. For below the poverty line households, connection charges for water and sewerage will require a subsidy.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Labor	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None	<p>The Project will not lead to any job losses. Construction and operation of the Project is likely to generate employment opportunities for local people.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Indigenous Peoples	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None	<p>Framework and development plans on Indigenous Peoples will be prepared if necessary in accordance with the ADB policy.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Other Risks and/or Vulnerabilities	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	<p>Social risks or vulnerabilities will be identified during PPTA.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Currency	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	271	0	271
ii. Domestic Consultants	0	25	25
b. International and Local Travel	37	10	47
c. Reports and Communication	0	3	3
2. Automobile Rental	0	5	5
3. Office and Administrative Services	0	4	4
4. Contingencies	30	15	45
Subtotal (A)	338	62	400
B. Government of Karnataka Financing			
1. Office Accommodation and Utilities	0	32	32
2. Remuneration and Per Diem of Counterpart Staff	0	62	62
3. Other	0	16	16
Subtotal (B)	0	110	110
Total	338	172	510

^a Financed by the Asian Development Bank's technical assistance funding program.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The consultant team will comprise international and domestic consultants engaged as individual consultants. All consultants will be required to work on developing their output. The consulting services required for the technical assistance (TA) will include, but will not necessarily be limited, to the services described. The consultants should, to the extent relevant, closely coordinate with and use the output of TA commissioned by the Government of Karnataka (GoK), information from investment programs to be carried out or in progress in India's urban development sector, and data from assistance provided by other external funding agencies. The Asian Development Bank's (ADB's) project officer may, however, augment the tasks outlined as required to comply with ADB guidelines and procedures and to improve the quality of the preparation for the Project. The tasks are to be carried out in close cooperation with GoK, and extensive consultation is needed to ensure the transfer of knowledge and full ownership of the processes and documents by the concerned government agencies.

A. International Consultants

1. Urban Development and Municipal Engineer/Team Leader (5 person-months)

2. The consultant will assist with the overall organization of the TA team, supervise and coordinate the work of team members, and assume overall responsibility for consolidating the reports of team members.

3. The consultant will also examine the feasibility of the investments in the sample project towns in detail and prepare a procurement package that addresses the objectives of cost efficiency. The consultant will identify procurement contracts for international competitive bidding, local competitive bidding, international shopping, or direct purchase in accordance with ADB's *Guidelines on Procurement*. The consultant will develop a project implementation schedule and arrangements for the execution of all project components. The consultant will establish functional relationships between participating institutions, assess additional staffing needs for undertaking project implementation, and prepare a phased staffing schedule. For the ensuing Project, the consultant will develop an appropriately staffed and fully costed proposal for project management and for an engineering design consulting service with draft outline terms of reference. This information will be incorporated into the report and recommendation to ADB's Board of Directors for the proposed Project.

2. Environmental Specialist (1 person-month)

4. The consultant will review the categorization of the project in the sample towns and review and strengthen the following documents developed by GoK's consultants: (i) the overall initial environmental examination (IEE) or environmental impact assessment (EIA) reports that document the comprehensive appraisal of the environmental impacts of the project components in the sample towns, including the design of appropriate mitigation measures (environmental mitigation and monitoring costs), in accordance with the ADB's Environment Policy and *Environmental Assessment Guidelines (2003)*; (ii) the sample IEE or EIA for individual subprojects in the two sample towns; (iii) the environmental assessment review framework guiding the Karnataka Urban Infrastructure Development Finance Company (KUIDFC) in the implementation of subprojects; and (iv) the environmental management plan(s) developed for environmentally sensitive subcomponents, covering project-specific environmental mitigation measures, environmental monitoring indicators, environmental monitoring plans, and organizational and institutional arrangements for implementing the mitigation program. The

consultant will work closely with the local environmental protection authority to confirm that the environmental management plan is practical and meaningful and ensure KUIDFC's ownership of and commitment to implementing the environmental management plan.

5. In addition, as part of the review, the consultant will ensure that during the preparation of the IEE or EIA in the sample towns, as well as of the sample IEE or EIA of subprojects, special attention is given to the following: (i) public consultation; (ii) collection and dissemination of project-specific and quantitative information, wherever available, on potential environmental impacts (both positive and negative) and proposed suitable mitigation measures; (iii) evaluation of KUIDFC's and the implementing agencies' capabilities for implementing environmental mitigation measures and, where necessary, proposing a training program for improving capacity; and (iv) preparation of summary initial environmental examinations or summary environmental impact assessments based on the IEE or EIA. Strengthening or completion of the conditions not met will be undertaken.

3. Social Development Specialist (1 person-month)

6. The consultant will review the resettlement framework and procedural guidelines prepared for the Project and resettlement action plans for the sample towns, taking into consideration the applicable laws of Government of India and its national policy on resettlement and ADB's policy on involuntary resettlement and *Handbook on Resettlement* and. The consultant will ensure documentation of the mechanisms for public information provision, beneficiary consultation, and grievance procedures and of measures to enhance public involvement and participation, particularly by women and poor households, and recommend ways to improve grievance procedures for resettlement planning and implementation. The consultant will also ensure that the resettlement frameworks and plans prepared meet ADB's standards and requirements and that the English and local language versions of the resettlement plan are submitted to ADB.

7. The consultant will review the application of the indigenous people's checklist in the *Handbook on Poverty and Social Analysis* that was used to ascertain the number of indigenous people and their socioeconomic status and the anticipated project impacts on them. The consultant will prepare framework and development plans for indigenous peoples, if necessary, in accordance with ADB's policy on indigenous peoples. The consultants will also examine any social or poverty risk that might arise during the implementation of the project. Recommendation will be made to cope with the risks identified.

4. Water and Sewerage Tariff Specialist (1 person-month)

8. In the context of GoK's urban drinking water and sanitation policy, the consultant will (i) review the water and wastewater tariff levels and structure and determine their adequacy for achieving GoK's policy objectives and ADB's position on tariffs (Economic Research Department Technical Note no. 9) by comparing them with the Project's average incremental financial cost; (ii) assess the mechanisms for approving water and wastewater tariff increases; (iii) recommend any improvement, taking into consideration the full cost-recovery requirement, cross-subsidy, affordability, and future operating capacity, replacement and expansion (capital investment), and debt repayment; and (iv) recommend a plan for tariff increases in line with any state water and wastewater tariff guidelines. The consultant will examine investments in other sectors and assess cost-recovery mechanisms that are proposed for ensuring the sustainability of operation and maintenance (O&M) of the proposed investments, including all urban local bodies' revenue streams and property taxes. The consultant will develop practical cost-recovery

mechanisms for the O&M of water, wastewater, roads, and urban drainage and other effective means of funding them adequately. The review will take into consideration the Ministry of Urban Development and Poverty Alleviation's on-lending policies to the state of Karnataka and their implications for urban development projects in Karnataka.

5. Financial Analyst (1 person-month)

9. The consultant will review the methodology for the financial analysis of each subproject in the sample towns to ensure that it complies with *ADB's Guidelines for the Financial Governance and Management of Investment Projects Financed by ADB*. The costs should be expressed in equivalent US dollars and broken down into direct and indirect foreign exchange costs and local currency costs for each project town. The estimated project costs should also be presented by sector (i.e., water, sewerage, solid waste, drainage, slums, roads) broken down by category, i.e., costs for land, civil works, materials and equipment, consulting services, incremental administration, and O&M. The tax and duty elements should be calculated separately for each budget line. The financing plan should be presented in a format acceptable to ADB using COSTAB or similar programs.

10. In addition, the consultant will conduct a financial management assessment of KUIDFC and the implementing agencies in accordance with the *Guidelines for Financial Governance and Management of Investment Projects* that will include a review of (i) corporate planning and budgetary controls, (ii) financial and management accounting and reporting, (iii) internal control and audit systems, and (iv) data processing. The consultant will identify any financial management issue that could affect project implementation and/or the sustainable operation of project investments and suggest mitigation strategies, to be incorporated either into project design or project implementation arrangements. The consultant will suggest appropriate financial covenants to monitor the Project's financial performance. In light of ADB's 1995 policy on governance for sound development management, the consultant will recommend ways to improve the corporate governance of KUIDFC and the implementing agencies.

6. Economist (1 person-month)

11. The consultant will review the methodology for conducting economic evaluation with sensitivity analyses of the project components in the sample towns. Unquantifiable benefits will be explicitly identified and assessed in qualitative terms. The consultant will ensure that the economic analysis is performed in accordance with ADB's *Guidelines for the Economic Analysis of Projects* and retrospective reports. The consultant will review the estimate of the detailed economic project costs and identify all quantifiable and unquantifiable project economic benefits, considering them with and without project scenarios, as well as incremental and nonincremental benefits.

B. Domestic Consultants

1. Public-Private Finance Specialist (2 person-months)

12. The consultant will review the study on the performance-based deferred payment schemes, including the market assessment and contract documents prepared by the appointed advisers to GoK, and examine the schemes proposed for each sector (i.e., water supply, wastewater, roads, solid waste management, and urban drainage), with particular focus on the (i) compatibility and fit with ADB's lending modalities and operating procedures, (ii) structure, (iii) payment adjustment mechanisms, (iv) termination provisions, (v) dispute resolution

mechanisms, (vi) performance criteria, and (vii) penalties for nonperformance. The consultant will recommend changes, if any, that would strengthen the structure of the scheme for the specific sector, taking into consideration experience with similar schemes in other states or countries. The consultant will examine the draft bid documents and contracts to ensure that the procedures and guidelines are consistent with ADB's procurement and disbursement guidelines. The consultant will examine the financing structure and its impact on cost-recovery mechanisms, if any. The consultant will also assess the suitability of projects for the proposed scheme based on a set of criteria and will apply the criteria for monitoring the success of the scheme.

2. Financial Analyst (2 person-months)

13. The financial analyst will review the financial models prepared by GoK's consultants and will update the models based on inputs from the water and sewerage tariff specialist and the financial analyst during the course of their review.