

Uttaranchal Urban Development Project (UUDP)

REVISED DRAFT FINAL REPORT EXECUTIVE SUMMARY



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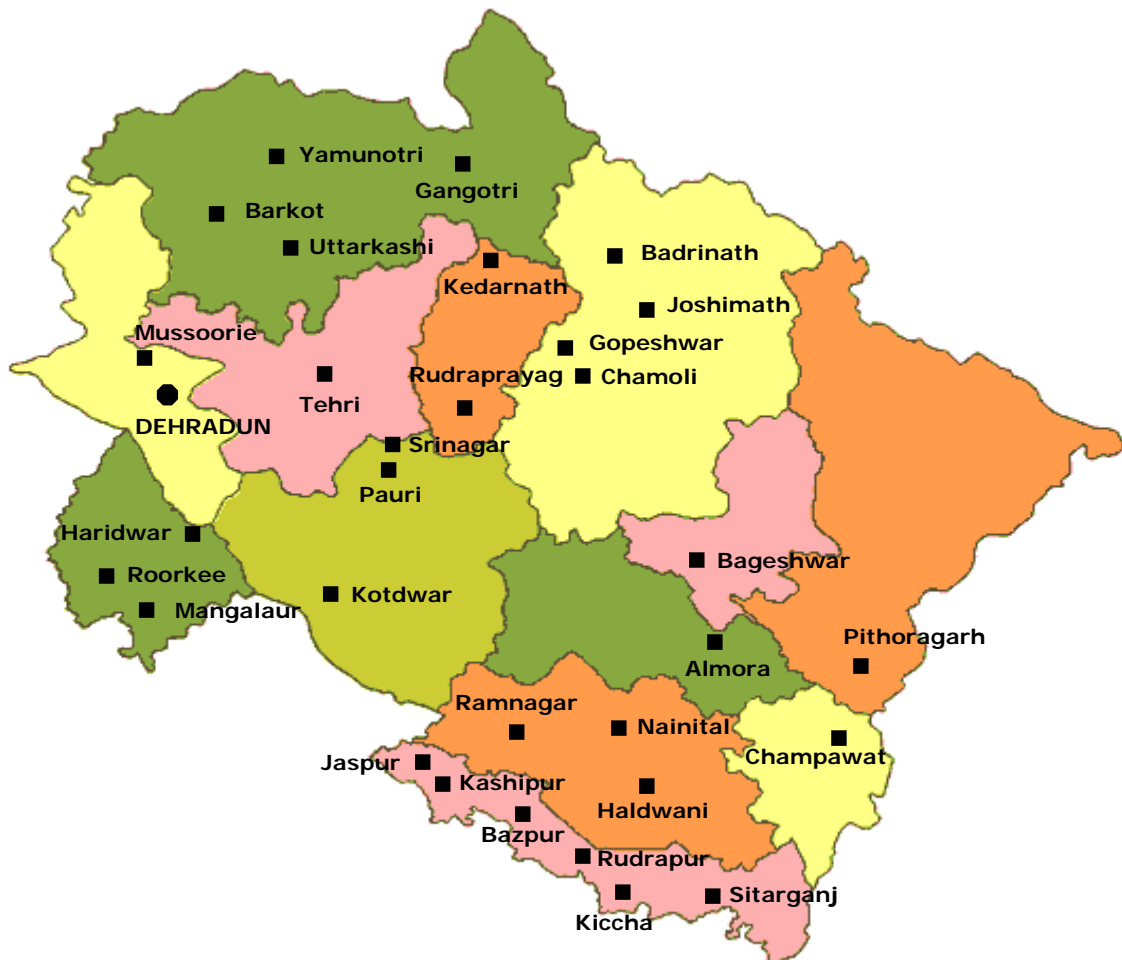
in association with

**Infrastructure Professionals Enterprise
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**Urban Development Department
Government of Uttaranchal**

Asian Development Bank (ADB)

Program Towns in Uttarakhand



Key

- State Capital
- Program Towns

EXECUTIVE SUMMARY

A. Background and Objectives

1. The Indian economy has over recent years been growing at a rate of almost 7 percent per annum. While this growth momentum is expected to be maintained or exceeded over the next few years, the benefits of this growth are not geographically well balanced, and are frequently not felt among the poor and vulnerable. A core policy goal of the Government of India's (GoI's) Tenth Five Year Plan (2002-2007) is reducing regional disparities through targeting of less well-developed areas of the country, to achieve greater regional balance. Uttarakhand, a new state carved from Uttar Pradesh only in November 2000, is one of these relatively less well-developed states, and as a result is afforded "special category" status by GoI which *inter alia* brings fiscal benefits and discretionary finance from the centre.

2. Through its vision 2020, the Government of Uttarakhand (GoU) has made a commitment to reform, and to support enhanced economic growth. Under this policy, GoU has placed emphasis on the development of its urban local bodies in order to enhance their competitiveness and improve the quality of life of their citizens. While the state suffers growth constraints as a result of its hilly and mountainous terrain and high forest coverage, these assets, and its wealth of major shrines and hallowed religious and spiritual centres, offer opportunities for the growth of the tourism sector. In addition, GoU's active development of industrial estates in the plains to the south and south west of the state, and associated industrial incentive schemes, are proving successful in attracting investment in manufacturing to the state. Within this context, the urban centres of the state have a vital role to play in supporting this development, and in realizing the state's economic growth potential. However, the potential role that urban areas can play in the state's development is significantly constrained by limited urban institutional capacity, poor urban management, deficiencies in basic urban infrastructure and services and poor environmental conditions.

3. The aim of the PPTA is to formulate a sector loan from the Asian Development Bank to the Government of Uttarakhand, designed to improve urban infrastructure and services of selected 31 towns out of 63 towns¹ in the state. The objectives of the project require the improvement of basic urban services, the integration of informal settlements and the urban poor within the overall urban development process and support to the decentralisation process, building strong and sustainable local capacity. In addition, City Development Plans for the towns of Dehradun, Haridwar and Nainital under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) of Government of India fall under scope of the project preparation activities. The purpose of this Report is to: (i) provide an overview and diagnostic of existing urban conditions in the state; (ii) provide a rationale for the proposed Uttarakhand Urban Sector Development Program (UUSD); (iii) determine sector needs, and prepare a Sector Road Map to address these needs; (iv) prepare an Investment Program comprising a slice of total sector needs for potential ADB support; (v) identify a package of priority sample sub-projects for early implementation; and (vi) suggest a modality for ADB support and program execution and implementation arrangements.

4. The project should result in improved living conditions and enhanced economic activity in the project towns through better infrastructure and service provision, and improved urban planning, management and finance. The project should also result in the

¹ Plus Yamunotri, a pilgrim destination

adoption of investment prioritization processes which are more responsive to the needs and priorities of citizens and the local economy. The sustainability of these improvements will be enhanced by: (i) improved cost recovery for urban services, and (ii) strengthened arrangements for management, operation and maintenance of assets created under the program, and of urban infrastructure and services in general.

B. The Urban Sector in Uttarakhand

5. The Census of 2001 places Uttarakhand's urban population at 2.18 million including cantonments, (or 1.82 million without), an overall urbanisation rate of 25.5%, compared with a national average of 28%. The rate of population growth varies considerably across different districts and urban areas, but the average urban growth rate of 3.1% exceeds that in rural areas (<2%) and the state capital Dehradun showed an intercensal growth rate averaging over 4% per annum between 1991 and 2001. Urban population is largely concentrated in the larger towns – Dehradun (2006 estimate 576,000) and Haridwar (2006 estimate 190,000) and the towns in the agriculturally rich and industrially active south of the State. Apart from the resident population, the state receives annually a tourist population of 16.4 million (2005 figure), which exerts a high demand on urban services. This 'tourist load', in terms of equivalent resident population is as high as 55% of the total state population.

6. Urban service provision has fallen behind the demand exerted by this increasing urban population. In the water supply sector, while resources are plentiful, poor system design and management means that the overall shortfall in water supply exceeds 50% at the point of consumption. Less than 40% of the urban population is served by sewerage networks, and sewage generated from only two towns is subjected to treatment. Less than 50% of the urban solid waste generated is collected, and that which is collected is disposed of by open dumping. A good part of waste collected and dumped finds its way in to the rivers. Many urban roads are in poor condition, and road networks and parking spaces are insufficient to meet the demands of the current traffic volume. Many town centres are congested as a result of overloaded roads, unresolved traffic conflicts and poor traffic management. The hilly terrain exacerbates the damage caused to infrastructure from inadequately managed storm water flows.

7. Effective urban planning and development is also constrained by the complex institutional landscape which characterizes the urban sector. The Uttarakhand Urban Development Department (UDD) is the administrative department for local governments, while the Uttarakhand Housing Department is the administrative department of the Urban Development Authorities and the Town and Country Planning Directorate which are responsible for urban planning and development control. In addition, the Drinking Water (Pey Jal) Department is the administrative department of Uttarakhand Pey Jal Nigam (UPJN) and Jal Sansthan (UJS) which are the providers of water supply, and sewerage and drainage services to the project towns. In addition to this, there are organisations such as the Uttarakhand Environment Protection and Pollution Control Board, Uttarakhand Public Works Department (PWD), and other line agencies whose functions impact on the urban areas. Effective direction and management of the sector is compromised by the lack of an effective mechanism for inter-departmental allocation of business. Operationally, the allied and compatible businesses of these departments are currently not well aligned, preventing achievement of efficient and effective functioning.

8. The urban sector in Uttarakhand continues to operate under local government legislation inherited from its parent state, Uttar Pradesh. Although this act is outdated, and requires modification, it allows the state government to introduce reforms required

under the 74th CAA. A new draft Bill creating a Municipal Act for the state, which would replace this legislation, and bring further reforms including those of the 74th Constitutional Amendment, is available for consideration by the state assembly. In addition, the state has embarked upon an ambitious range of programs for the introduction of e-governance and municipal management information systems for all urban local governments over the next 1 to 2 years.

C. Program Rationale

9. To achieve greater regional balance, Gol's Tenth Five Year Plan recognizes the need for an accelerated pace of development in the relatively less well-developed states which include Uttarakhand. The strategy to achieve this increased growth includes supporting higher levels of investment in services and infrastructure – including urban services - in these states in order to stimulate the local economy and provide a more attractive environment for inward investment. This has the added benefit of impacting directly on quality-of-life poverty and thus contributing to the attainment of the Millennium Development Goals (MDGs) in the state.

10. In this context, the GoU also views urban development as one of its growth pillars, supporting its lead economic sectors of tourism and the manufacturing industry, as well as providing the key to achieving the MGDs. Accordingly, GoU has set out a vision of enhancing living standards, productivity, and sustainability of all cities and towns in the state, while at the same time securing and conserving the fragile natural and built cultural and environmental heritage of the state. GoU's strategy to realize this vision involves investments in basic urban infrastructure and services, coupled with a commitment to enhance the role and powers for urban local bodies (ULBs) in line with the 74th CA. Concurrently with this, GoU recognizes: (i) the need for parallel measures to strengthen local management and financial capacities of ULBs and their staff; and (ii) the opportunity presented by the private sector in contributing both capital and expertise to the urban development process.

11. The perceived vision of the GoU for long-term urban development is set out in the state's vision document² as:

- a. All towns and cities in the State to be liveable, productive and sustainable;
- b. Private participation in the service driven activities of the urban bodies;
- c. Dehradun to be positioned as a leading city and one of the top ten cities of the country; and
- d. Upgradation of the core arterial network of the cities to at least 10m in width.

12. The provision of infrastructure and services in the key towns in the state, along with parallel empowerment and institutional strengthening and capacity building measures are the key to harnessing the growth potential of these towns and the industries they support. It is recognized that the quality of governance as well as creation of effective service delivery systems are key factors influencing the pace of development in Uttarakhand, advocating a two-pronged approach to development whereby funds for capital investments are linked with institutional and governance reforms.

² Infrastructure Vision – Urban development Report GoU/Crisil July 2004

D. The Program

13. The goal of the Uttarakhand Urban Sector Development Program (UUSDP) is to support the GoI and GoU in their policy of balanced regional socio-economic development and poverty reduction through improvements in urban governance, management and infrastructure and service provision throughout the urban sector in Uttarakhand. The long term sector development plan covers entire 63 towns³ and provides investment requirement to serve the needs up to the year 2027. Correspondingly, the draft UUSDRM charts the development trajectory for the ADB urban sector covering 31 sector towns (including Yamunotri) to serve the needs for the next 20 years, i.e. from 2007 to 2027. The sector towns comprise (a) principal towns like Dehradun, Haridwar and Nainital (covered under JNNURM), (b) important tourist/pilgrim towns and (c) selected middle order towns with high growth potential. In addition to 31 sector towns, an additional 7 towns located on the major rivers like Ganga, Yamuna, Alaknanda etc. have been included in the program for the specific purpose of provision of sewage interception and sewage treatment facilities to prevent discharge of untreated sewage in to these rivers causing pollution to river water, which is used by downstream communities for drinking water. All these towns are located among 13 districts of the state.

14. The programme comprises a 10-year investment plan for urban facilities for the priority phase, 2007 through 2017 and a longer-term plan through to 2027. Investments in physical infrastructure for town-wide and community-driven sub-projects will be accompanied by a program of urban sector reforms and related institutional development and capacity building measures. These will be targeted at achieving better management of services and formation of accountable service delivery mechanism and increased financial autonomy. This will be implemented within a framework which involves the gradual and progressive transfer of responsibility and accountability for services to the urban local bodies from the state line departments and para-statal currently responsible for these services, which is also in line with the requirement of the JNNURM and the 74th CAA.

15. The estimated investment requirement over a period of 20-years for the Uttarakhand urban sector development (64 towns) is US\$ 2984 million. For 31 towns covered under UUSDP, similar requirement is estimated at US\$ 2611.6 million. . It is noted that the UUSDP (ADB urban sector) comprises 86% of the state's likely population of 2027 including the tourists and floating population.

16. This will be achieved through a program of investments in the areas of infrastructure and service provision, institutional development and capacity building spread over the next 10 years. The program will result in improved living conditions within the sector towns as a result of rehabilitation, upgrading and extension of key infrastructure, strengthened operation and maintenance, and improved local governance practices and locally-led pro-poor planning and project identification. The program will also improve the prospects for accelerated economic growth from the tourism and manufacturing industries and help create conditions for improved long-term service sustainability and greater private sector investment in infrastructure and service provision.

17. A draft program investment plan (20 years) is drawn up for the urban sector based on the needs of sector towns. The sub-sectors included in the plan are: (i) water supply, (ii) sewerage and sewage treatment, (iii) municipal solid waste management, (iv) urban roads and traffic management, (v) storm water drainage and erosion control, (vi) urban

³ Plus Yamunotri, a pilgrimage point attracting large number of pilgrims regularly

renewal and heritage conservation, (vii) slum up-grading and poverty reduction, and (viii) planning, design, institutional development and capacity building. The total proposed investment in the urban sector of Uttarakhand is US \$ 2611.6 million equivalent. Based on previous expenditure patterns, the state plan funds for infrastructure are assumed to contribute a total of approximately US \$ 335 million equivalent (over a period of 10 years) to the sector plan based on current trends. The total estimated cost of the proposed ADB sector program investment plan is US \$ 268.6 million. The likely component of funding under JNNURM is estimated at US \$ 808 million⁴. Under the circumstances, GoU will have to identify an additional US\$ 177.6 million over the first 10 years (2007-17) and US\$ 1022.5 million over the next 10 years (2017-27) to fund its urban investment plan and program over the 20 year period. Table E1 shows the Investment Program of the State for urban infrastructure up-to 2027:

18. The program is drawn up in such a way that it offers flexibility to GoU to choose particular towns and sub-projects, provided they meet certain minimum qualifying criteria. The wide variation in nature and size of towns from a high of nearly half a million in Dehradun to a low of few thousands in hill towns actually calls for such a flexible approach. The program is designed to adequately support the flexible approach associated with the Multi-tranche Financing Facility (MFF).

19. It is proposed that the investment program envisaged by GoU and outlined under the urban sector Road Map will utilize the ADB's Multi-Tranche Finance Facility (MFF) modality. The proposed investment by the ADB in the sector investment plan will constitute an essential component of the larger investment program required to realize the road map for the sector. Under this facility the US\$ 205.5⁵ million of loan funds (Program cost is \$301.3 million) is proposed to be made available through 4 Tranches as the related sub-projects become ready for implementation. The MFF modality is considered suitable for the program as it allows flexibility of actual costs of components, enabling the GoU to obtain and match funds from other sources. Particular among other source(s) is JNNURM, to which the state is simultaneously applying for funds for 3 cities Dehradun, Haridwar and Nainital. The First Tranche will comprise the sample sub-projects prepared for the program and taken from the selected priority towns. Further Tranches will be agreed based on the provisions of a Financing Framework Agreement (FFA) to be agreed between the ADB and the GoU.

20. Individual contract durations are likely to cover periods of between 9 months and about three years, and thus all Tranches are expected to cover periods of between 3 and about 4.5 years. It is proposed that: (i) Tranche I (about US\$ 35.8 million⁶ loan value) covers the period January 2008 to December 2010 excluding bridging TA for 15 months for preparatory work. prior to commencement of works (this would also include preparation for Tranche II); (ii) Tranche II (about US\$ 35 million in loan value) covers the period January 2010 to December 2013, including preparation for Tranche III (iii) Tranche III (about US\$ 49 million in loan value) covers the period July 2011 to June 2015, including preparation for Tranche IV; and (iv) Tranche IV (about US\$ 37 million in loan value) covers the period January 2014 to December 2017.

⁴ GoU has proposed an ambitious plan amounting to US\$2692.16 million for 3 towns – Dehradun, Haridwar & Nainital. It is likely that part of it would actually be available for investment. A pro-rata of 30% is assumed here.

⁵ Includes financing charges of US\$ 32.6 million

⁶ All loan figures quoted here excludes interest during construction

Table E 1: Investment Program of the State for Urban Infrastructure up to 2027 (for sector towns)

| S. No. | Sub-sector | Estimated investment needs over 20 years (2007-27) | Priority Estimated investment needs under Phase I (2007-17) | State Plan Funds under Phase I (2007-17) ⁷ | Estimated cost ^[2] of the proposed ADB program (10 year period) | | Additional Fund Requirement (2007-17) | Investment Need Phase II (2017-27) |
|--------|-------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|--------------|---------------------------------------|------------------------------------|
| | | | | | ADB program ⁸ | ADB Loan | | |
| 1 | Water Supply | 459.9 | 161.6 | 50.0 | 106.0 | 68.2 | 5.6 | 298.3 |
| 2 | Sewerage and Sewage Treatment | 239.5 | 170.6 | 56.0 | 66.6 | 42.9 | 48.0 | 68.9 |
| 3 | Stormwater Drainage | 148.4 | 116.2 | Included in 2 | 0.0 | 0.0 | 116.2 | 32.2 |
| 4 | Solid Waste Management | 304.5 | 161.2 | Included in 2 | 37.2 | 24.0 | 124.0 | 143.3 |
| 5 | Roads and Transportation | 953.6 | 669.9 | 190.0 | 40.7 | 26.2 | 439.2 | 283.7 |
| 6 | Urban Renewal | 206.3 | 109.4 | Negligible | 0.0 | 0.0 | 109.4 | 96.9 |
| 7 | Slum Upgradation | 113.2 | 89.4 | 14.0 | 0.7 | 0.5 | 74.7 | 23.8 |
| 8 | Consulting Services | 121.2 | 73.9 | | 9.7 | 6.2 | 64.2 | 47.3 |
| 9 | Capacity Building and incremental administration | 65.0 | 37.0 | 25.0 | 7.7 | 4.9 | 4.3 | 28.0 |
| | Total | 2611.6 | 1589.2 | 335.0 | 268.6 | 172.9 | 985.6 | 1022.4 |
| | Proposed under JNNURM⁹ | | | | | | 808.0 | 0.0 |
| | Funds to be identified, including GoU budgetary resources¹⁰ | | | | | | 177.6 | 1022.5 |

⁷ Normal small works from GoU and ULBs annual budget allocations

⁸ Excludes Interest during construction and finance charges

⁹ GoU has proposed an ambitious plan amounting to US\$2692.16 million for 3 towns – Dehradun, Haridwar and Nainital. It is likely that part of it would actually be available for investment. A pro-rata of 30% is assumed and shown in this column.

¹⁰ Additional investment requirement will greatly depend on final allocation of funds under JNNURM. If GoU gets a share lower than anticipated, additional sources will be sought. On the other hand, if more than anticipated is allocated, more funds from state budget would be available from GoU for balance 27 towns (plus Yamunotri)

21. The Program investment cost is estimated at \$301.3 million, including taxes and duties of \$29.4 million. Table E2 summarizes the cost by sub-sectors.

Table E2: Cost Estimates of the Investment Program (\$million)

| Category | Total Cost | ADB% | ADB Loan | GoU% | GoU |
|-------------------------------------------------------------------|--------------|-----------|--------------|-----------|-------------|
| I. Base Costs | | | | | |
| A. Urban Infrastructure and Environmental Improvements | | | | | |
| 1. Water Supply | 78.8 | 80.0 | 63.0 | 20.0 | 15.8 |
| 2. Sewerage | 49.2 | 80.0 | 39.4 | 20.0 | 9.8 |
| 3. Solid Waste Management | 26.1 | 58.5 | 15.3 | 41.5 | 10.8 |
| 4. Transportation and Urban Roads | 27.0 | 80.0 | 21.6 | 20.0 | 5.4 |
| 5. Urban Services for Poor | 0.5 | 80.0 | 0.4 | 20.0 | 0.1 |
| Subtotal (A) | 181.6 | 76.9 | 139.7 | 23.09 | 41.9 |
| B. Implementation Assistance and Institutional Development | | | | | |
| 1. Incremental Administration | 4.7 | | | | |
| 2. Consultancy Support | 7.2 | | | | |
| 3. Capacity Building | 0.9 | | | | |
| 4. Awareness Programme & Policy Development | 0.9 | | | | |
| Subtotal (Part B) | 13.7 | 50 | 6.9 | 50 | 6.9 |
| C. Contingencies | 44.0 | 60 | 26.4 | 40 | 17.6 |
| Physical | 12.1 | | | | |
| Price | 31.9 | | | | |
| D. Taxes and Duties | 29.4 | 0 | 0.0 | 100 | 29.4 |
| E. Financing Charges During Implementation | 32.6 | 100 | 32.6 | 0 | 0 |
| Total Program Cost | 301.3 | 62 | 205.5 | 38 | 95.8 |

22. ADB will finance \$205.5 million which is 68% of the Program cost,. The loan(s) will have an amortization period of 20 years, including a grace period of 5 years, an interest rate determined in accordance with ADB's LIBOR-based variable lending facility, a commitment charge of 0.75% per annum, a front-end fee of 1.0% (the fees will be capitalized in the loan), subject to modifications, if any that may be included under individual Loan Agreements.

23. The Government of India will re-lend the loan in the ratio as applicable to the Special category states which currently is 90 percent grant and 10 percent loan. The Government will assume the foreign exchange and interest rate variation risks for the loans. The State will transfer the funds through the executing agency to the implementing agencies as 100% grant for water supply, sewerage and road sub-projects and as 90 percent grant and 10 percent loan for others. The summary of the proposed financing plan is presented in Table E3 below:

Table E3: Financing Plan (\$million)

| Source | Total Cost (Million US\$) | Share in (%) |
|--------------------------------------------|----------------------------|--------------|
| Asian Development Bank | 205.5 | 68.2 |
| GoU | 95.8 | 31.8 |
| Total Investment Program - 10 years | 301.3 | 100.0 |

24. The emphasis of this priority investment program is placed on: (i) addressing the backlog in infrastructure and service provision in the main urban areas in the state, and (ii) rehabilitating and renewing existing dilapidated, degraded or overloaded assets. New assets will also be created under the prioritized program where these are necessary to support environmental protection (such as sewage treatment plants and sanitary landfills) or are critical to economic growth (such as widened roads). The priority program is also intended to: (i) develop a better understanding of the overall improvement measures required; (ii) carry out initiatives to test improved methods of delivery for urban services, and (iii) establishing institutional, operational and financial foundations for further improvement. These levels of capital expenditure are significantly higher than those made over recent years at both state and ULB levels and it will take some time for the implementation and management capacity of service institutions to ramp up – particularly in an environment where responsibilities are being devolved downwards.

25. In line with the policies of both the GoI and GoU, the Road Map also sets out a framework for the development of urban governance, and improvements in municipal finance, operations, management and service delivery in the sector towns. This framework provides a series of sequenced and time-bound actions which support the advancement of municipal reforms through the creation of improved legislative, regulatory and institutional instruments and mechanisms to support ULB operations and a program intended to strengthen the capacities of ULBs for effective and accountable urban service delivery. The road map also stipulates that provision of urban infrastructure and services should progressively move towards a fully commercial and self-sustaining basis through introduction of improved service management and the introduction of appropriate tariff structures.

E. Program Impact and Outcome

26. The anticipated impact of the investment program will be: (i) reduced economic disparities between Uttarakhand and the rest of the country; (ii) increased economic growth potential; and (iii) a reduced incidence of urban poverty. The expected outcomes of the investment program will be an improved urban environment, improved living conditions, better quality urban services and improved economic prospects for the 2.4 million people expected to be living within the Investment Program towns by 2017. It is also expected that the project will enhance the quality of services and experience enjoyed by the 20.5 million tourists and pilgrims projected to be visiting the Program towns annually by year 2017., .

F. Institutional Arrangements for Program Execution

27. It is envisaged that the Uttarakhand Urban Sector Development Program (UUSDP) will be funded by JNNURM as well as ADB and GoU, but it will be executed and implemented under a singular administrative control. The Urban Development Department (UDD) of Government of Uttarakhand will be the Executing Agency (EA) of the Program and will be responsible for overall strategic guidance, technical supervision and execution of the Program. The UDD will set up a state-level Urban Sector Project Management Unit (PMU) to monitor, guide, and supervise the implementation of the Program and to provide overall policy direction. The PMU will be set up as a registered society, with the Chief Secretary as its Chairman and the Secretary of UDD as its Vice Chairman. To address issues of inter-departmental coordination, the society will have a General Body that includes Secretaries of concerned ministries and heads of all line departments that will be involved in program execution.

28. The PMU will have primary responsibility for all the engineering and procurement aspects of Program execution, and approval of all physical works under the Program. The PMU will prepare Tranches and submit to ADB with Periodic Financing Request. The PMU will approve design of subcomponents in consultation with the participating Town Level Committees, procurement and disbursement, maintenance of project accounts and submission of timely reports to ADB and government. The PMU will be staffed with officials from UPJN, UJS and PWD, and in addition PMU will appoint high quality project management, design and supervision consultants.

29. In each of the program towns there will be a Town Level Committee (TLC) which will be the primary client for Program sub-components implemented in the towns. The TLC will be chaired by the town's Mayor or Chairperson, with ward members as well as the Collector, Municipal Commissioner, Divisional Commissioner and special area development authority head (if any) as its members. In addition, the TLC will have civil society members.

30. The PMU will set up Project Implementation Units (PIUs) in each of the 13 districts to directly supervise the execution of works in the towns. These 13 PIUs will oversee works among 31 sector towns + 7 additional towns on an overall basis. The PIUs will be headed by a senior technical person (the Divisional/Executive Engineer) and it will be staffed with engineers, who may be drawn from local staff of the Jal Nigam and the PWD. The PIUs will be responsible to the PMU and they will work under the guidance of the Program Director. The PIU will serve as the interface between the TLC and the PMU. The TLC's feedback and concerns about the physical implementation of works will be routed through the PIU to the PMU.

31. The PMU and PIUs will be supported by Project Management Consultants and Design and Supervision Consultants. In addition, to ensure a timely commencement of program activities a bridging technical assistance will be provided to assist the EA in program preparedness activities.

G. Appraisal of the Program

32. According to the requirement of ADB sector loan program appraisal, economic, financial, social and environmental appraisals were carried out to determine the admissibility of the program and that it satisfies the set criteria for a sound and acceptable program of investment without undue risk. Consequently appraisals have been carried out for the sub-projects and the sector as a whole.

Economic and Financial Analysis

33. An economic rationale of the Project is to provide basic urban services and environmental and living conditions at acceptable levels, not only for social development but also to enable access to economic opportunities (i.e. income and employment), particularly by the poor. In Uttarakhand improvement in access to basic services for the poor like health, welfare and well-being should assist in overcoming the present lack of economic opportunities for the economically and socially disadvantaged groups and the resulting in to reduction in unemployment and under employment in these groups. The economic analysis of the proposed sector loan shows that the government's sector development plan is economically sound, and that a sector loan is an appropriate way for ADB to support the plan.

34. All project components have a strong economic rationale, since they provide acceptable minimum standards for basic living conditions and help to remove constraints

on social development and economic growth. All components have been based on sound principles of priority and need; they incorporate demand forecasts and they represent least cost technically feasible options with an emphasis on rehabilitation. Economic viability of sample sub-projects were tested. The EIRR results indicate that all sub-projects are economically viable, with the EIRR values exceeding economic opportunity cost of capital. The sensitivity analysis has also demonstrated the robustness of these results, with all sub-project components economically viable even when the combination of changed assumptions was tested.

35. The urban service providers cannot afford to continue system improvements or to increase service coverage. Current taxes and fees are low and are insufficient to sustain the required O&M of the water supply and distribution network. Property taxes have not been revised, and tax collection efficiency is low. The socioeconomic survey showed that there was a willingness to pay more for the municipal services, but active public relations and social marketing activities will be needed to confirm this willingness to pay.

36. Financial analysis was conducted to assess the financial viability of the revenue-generating component of the Project. The analysis shows that the average tariffs, after considering state subsidy for the water supply and sewerage cover fully their respective incremental O&M costs with their average tariffs higher than their respective AIFC for O&M. However, full cost recovery (investment and incremental) is not feasible. The affordability analysis show that the proposed tariff charges are much below the affordability limit. No affordability problems therefore are foreseen for the proposed tariff charges. However, the State must allow the implementing agencies – UJS, ULB - to revise local taxes, fees and charges regularly in accordance with prescribed procedures and within limits set by law to make them less reliant on state subsidies . With minor tariff adjustments, supported by the state operational subsidy on a declining basis, the sample sub-projects are financially viable.

Social Impact Assessments

37. The program is in accordance with the national policy of poverty alleviation as given in National Slum Policy towards provision of urban basic services and aimed at bringing 100% coverage of slum population and poverty pockets by the end of program implementation period. The program also supports GoU in formulating a State Slum Policy for Uttarakhand.

38. The social and poverty impact of the project has been assessed in terms of the benefits and costs for all groups of population in the program towns, arising from coverage, levels of service supply, supply mechanisms, pricing, implementation and operational arrangements. All groups of the beneficiary population has been considered and differentiated according to income, poverty, vulnerability and gender. It is concluded that (a) the Project will have a positive contribution towards poverty reduction in diverse ways. (b) Integration of poor settlements will be achieved under the Project directly through the provision of basic services and primary and secondary infrastructure in the towns and direct linking of the poor settlements to the city-wide services and infrastructure; and indirectly through a pro-poor action-planning process that will build capacity of both the implementers and the beneficiaries. (c) tariff changes and increased cost towards water and sewer charges will be within affordable limit with some subsidy to BPL households.

39. There is no resettlement required in Tranche I sub-projects and other sub-projects. However, if there is unavoidable need for involuntary resettlement involved in sub-projects in future tranches, this will be addressed according to the Resettlement

Framework. Some temporary resettlement is involved among street vendors and the like, who carry out their businesses along roads. Short Resettlement Plans are prepared and there are provisions to meet the cost of such temporary resettlements according to relevant ADB guidelines. Similarly, there are no Indigenous People involved as per appraisals carried out. During implementation, if any IP group is found as affected persons, this would be addressed according to the IPDF.

Environmental Impact Assessments

40. Although the basic aim of the UUSDP is to improve the quality of environment and living conditions, the development of infrastructure facilities may potentially cause certain negative environmental impacts. Thus, sample sub-projects were identified to conduct the environmental assessment and identify mitigation measures. Owing to scale and nature, most of the sub-projects proposed under UUSDP are likely to have minimal impacts. Based on the IEEs for sample sub-projects covering all Tranche 1 sub-projects and other representative sub-projects covering the entire UUSDP, the program is categorized as B-sensitive. It is therefore recommended that at the stage of detailed design, the environmental cell of PMU will conduct environmental assessment and obtain approval from the PMU. The approved appraisal will be submitted to ADB for review and approval.

H. Program Risks

41. The main risks to successful program outcomes comprise: (i) lack of government support in preparation of program Tranches; (ii) potential public resistance to increasing tariffs for water supply and sewerage (ii) low connectivity for the sewerage component, (iii) lack of availability of land for locating assets such as pumping stations, reservoirs, landfill sites for SWM etc. and (iii) a lack of, or slow State action to implement institutional and financial reform agenda items. It is concluded that the program does not face substantial risk and appropriate risk mitigation measures have been identified. When these are built into sub-project design and implementation, risk will be minimized.