I. Introduction and Context

A. Country Context

1. For the last decade, India has been one of the fastest growing economies in the world. Between 2004 and 2011, amidst the global financial crisis, India grew at an average rate of 8.3 percent per year. After slipping in the year 2012–13 due to a combination of domestic and external factors including high inflation, high fiscal deficit, and weak external demand for the country’s exports, the economy has shown signs of turnaround and expanded by 7.3 percent in FY14-15. By recent estimates, the GDP is expected to increase to 7.5 percent in FY15-16 and further to 7.8 percent in FY16-17.

2. India’s urban population has grown 32 percent in the past decade. Although the proportion of urban population concentrated in larger cities continue to remain high, there is strong evidence of an increase in the number of urban growth nodes. Several rural areas now have urban characteristics and there is an increasing trend of absorbing predominantly rural areas into the limits of urban local bodies. These areas form the peri-urban interface, the critical region between the urban and rural areas in India. These transitional areas present unique governance, regulatory, infrastructure, service delivery and environmental challenges for policy makers. The challenges get compounded due to fragmentation of institutional responsibilities, especially in peri-urban areas close to large and growing cities. Administrative

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1 The World Bank: India development update: fiscal policy for equitable growth, October 29, 2015.
uncertainty resulting from weak links and unclear municipal jurisdiction for infrastructure service delivery along with low priority assigned to these areas by rural departments further exacerbates service delivery issues. This has significant policy implications for the Water Supply and Sanitation (WSS) sector.

3. The Government of India (GoI) has made significant investments in the WSS sector across urban and rural areas and have shown continuous commitment through bringing in sector reforms, enhanced financial allocations, policy directions and actions for improvising monitoring and reporting mechanisms in the sector. The GoI’s National Rural Drinking Water Program (NRDWP) Program, SBM (Gramin) are the flagship programs focusing on water and sanitation in rural areas. For urban areas, SBM (Urban), SMART Cities, AMRUT, and erstwhile JnNURM are the major schemes providing support to the WSS sector. These programs/schemes also lay stress on institutional reforms and capacity building of key stakeholders besides providing support for infrastructure coverage. The Guidelines of the Ministry of Urban Development, Government of India, also provide guidance for planning of peri-urban areas and suggest provision of WSS services at par with urban standards.

4. Despite these efforts, many challenges remain. Issues of coverage and service delivery are persistent with multi fold challenges, particularly for peri-urban areas. The state of Uttarakhand faces in some sense, a larger challenge as compared to the rest of India due to its geographical terrain. Over 88% of the State is hilly and 65% of the area of the State is under forests. Rapid urbanization trend in the state has led to expansion of urban centers and the emergence of peri-urban regions around the existing urban centers due to expanding economic activities and job opportunities in the urban areas. One of the fast emerging challenges in the state is to improve WSS service delivery in these emerging areas.

**B. Sectoral (or multisectoral) and Institutional Context of the Program**

5. Urban population of Uttarakhand has increased by nearly 42% during 2001-2011 which is substantially higher than the national average of 31.8% during the same period. In comparison, as per the last census (2011), the rural population of the state grew at a relatively slower rate of 11.23%, as against the national average of 12.18%. The state has seen a multifold increase in the number of Census Towns\(^2\) (only 12 in the year 2001 to 41 in the year 2011), which is a strong indicator of peri-urban growth. Out of 41 Census Towns in the state, 7 had a population of 97,588 (in 2011) and are growing at a decadal growth rate of 90% or more. Peri-urban areas

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\(^2\) The Census of India has defined Census Towns as areas that satisfy the following criteria: (a) minimum population of 5000; (b) at least 75% of the male working population engaged in non-agricultural pursuits; and (c) a density of at least 400 persons per square km. The Census Towns (which are administratively rural) are not considered to be statutory towns/cities which are governed by ULBs. The Planning Commission Working Group on Urban Development for the 12th Plan has considered the growth of Census Towns as an indicator of the growth in peri-urban population.
have largely been neglected in the planning process and most consumers are adopting ‘self-provisioning’ coping mechanisms. As a result, service delivery issues in these towns are becoming increasingly prominent. The WSS interventions to improve services in the urban outgrowths is therefore emerging as an urgent priority. At the same time, the state still continues to face challenges in extending water supply and sanitation coverage in remote rural areas.

6. Out of the 81 Urban Local Bodies (ULBs) in the state, only 15 have a production level of over 135 LPCD and the rest are below 135 LPCD. At least 34 ULBs have a production level of less than 70 LPCD. The situation becomes significantly grimmer when it comes to delivery of water services at the customer level. Although Census 2011 data shows about 68% of all households in Uttarakhand (78% urban and 63% rural) have ‘access’ to tap water, however efficient and equitable services are lacking, with duration of water supply varying between 1-2 hours of daily supply or 3-4 hours of supply on alternate days. The Non Revenue Water (NRW) is estimated at 40-50% for most towns. Only 13% of the rural habitations are fully covered and the rest 87% are partially covered if the current norm of 55 LPCD is applied to the rural population. The issue of WSS service delivery is further exacerbated in peri-urban areas, which are yet to be integrated in the planning process.

7. The augmentation and upgradation of distribution infrastructure has not kept pace with the rapidly expanding settlements, and, most customers are dependent on private bore-well water supply. In most plain areas of the state such as District Haridwar, water is supplied through both piped system and hand pumps. In some districts like Udham Singh Nagar, the coverage is mainly with hand pumps. Equitable access to water supply services is not ensured in these areas, as the distance from service reservoir, limited storage capacity, difference in ground levels and installation of online pumps to draw water from water-mains affects the service delivery.

8. Access to sanitation services is also a challenge. Although 73% households have access to toilets in rural areas of the state, only 689 Gram Panchayats (GPs) have achieved ODF status which represents about 6% of the total GPs in the state. Achieving state-wide ODF status is a priority with the GoUKD for meeting the SBM-Gramin targets for October 2019. On the urban front, about 96% urban households have access to toilets. Out of 81 ULBs, 25 towns have partial sewerage facilities, with 20% of the total urban population connected to sewer network. While most households are using septic tanks, the septage management, including collection, treatment and disposal of fecal sludge, is a growing concern, especially in the rapidly expanding peri-urban areas.

9. The state has made significant strides in piloting and implementing governance models and decentralization for the provision of water supply and sanitation services. About 80% rural schemes in the state are managed by GPs or their committees. The Department of Drinking Water (DDW), Govt. of Uttarakhand, which is the nodal department responsible for WSS programs across urban and rural areas, has exhibited the commitment to various sector reforms over the past decade. The three main implementing agencies in the WSS sector:
Uttarakhand Peyjal Nigam (UJN); Uttarakhand Jal Sansthan (UJS); and the Swajal Unit have extensive experience in implementing reform oriented projects in the state. UJN is primarily engaged in construction of drinking water schemes in rural and urban areas and sewerage schemes in urban areas, whereas UJS is primarily carrying out functions of O&M of these schemes. The Swajal Unit implemented the World Bank assisted Uttarakhand Rural Water Supply & Sanitation Project (URWSSP) and is now leading the implementation of the GoI-funded SBM-Gramin and the NRDWP’s Capacity Building component. The sector institutions, however, need to be strengthened to improve the sector and program performance, especially in a rapidly transitioning demographics scenario.

10. The Government of Uttarakhand (GoUKD) has prioritized water supply and sanitation as a key area of its development agenda and aims to provide universal water supply coverage in urban and rural areas by 2030 and sanitation coverage (ODF) in rural areas by 2019. In addition, the GoUKD has an overall vision of ‘integrated development of the urban areas by making the cities vibrant, clean, and infrastructurally strong, along with improvements in service delivery’. While the State has an annual budget of about USD 82 million through GoI and State WSS sector programs, the requirement is about USD 204 million annually, in order to achieve the sector vision. Given this gap in funding, the areas which are largely unattended are (a) the rapidly expanding peri-urban areas, and (b) the residual uncovered rural habitations. Advances are also needed in sector program and policies for peri-urban areas, including market development, private sector participation and professionalization of the sector institutions for addressing the emerging challenges for improved and equitable service delivery. The proposed PforR program will address these priority areas to help GoUK achieve its longer term vision of universal coverage.

C. Relationship to CAS/CPS

11. The proposed program is consistent with the Country Partnership Strategy (2013-2017), which has three themes: (i) Integration – connecting across transport, energy, skills and private investment, (ii) Transformation – balancing urban-rural development, guiding urban expansion while retaining strong support to agricultural and rural development, and (iii) Inclusion – ensuring benefits for all from faster growth, including the human development agenda. The program fits well under the transformation and inclusion pillar, providing services in currently under-served areas and addressing the needs of the growing peri-urban population, while also balancing rural WSS needs. In addition, focusing on the “Finance-Plus” approach, the value-added of the proposed program goes beyond the financing and contributes to service delivery and results orientation through reform of processes and systems, strengthening of institutional capacity, and exploring innovative financing mechanisms. Citizen engagement will also be a key element of this program. Ultimately, the program will help transform and improve access to water supply and sanitation as well as strengthen capacities of sector institutions. It is therefore in alignment with the overall CPS of The World Bank.
II. Program Development Objective(s)

Program Development Objective

12. The Program Development Objective (PDO) is: (i) to improve water supply and sanitation services in rapidly expanding peri-urban areas and select rural habitations; and (ii) strengthen capacity of key sector institutions in the State of Uttarakhand.

Key Program Results

13. The five result areas to reflect and measure success in achieving the PDO are identified below:

(i) Developing Service Delivery Oriented WSS Sector Policy: The program will support developing and implementing a state wide service delivery oriented WSS policy, based on the current and future WSS requirements in urban, rural and peri-urban areas.

(ii) Strengthening WSS Planning Processes and Capacity for Peri-urban Areas: The program will support planning processes and building capacity for delivering WSS services in peri-urban areas.

(iii) Improving WSS services in rapidly expanding Peri-urban Areas: The program will focus on the following activities:
   • New construction and/or rehabilitation, augmentation and extension of existing water supply systems, septic tank management systems, and extension of sewer networks (where feasible) in select clusters/zones of peri-urban areas.
   • Improving WSS services through 24/7 supply, metering, volumetric tariffs, NRW reduction, and improving O&M cost recovery.
   • Service delivery models, including PPP options, for improving water supply services.

(iv) Strengthening Monitoring and Evaluation (M&E) for the WSS sector: Improving M&E systems to capture planning, implementation, and O&M phases of service delivery, including grievance redress and citizen feed-back.

(v) Continuing Support for RWSS Decentralization Program: The program will continue supporting the decentralization program for piped water supply services as per the SWAp principles implemented under the recent Bank RWSS project in Uttarakhand.

III. Program Description

3 The ‘rapidly expanding’ peri-urban areas and the indicators for ‘improving services’ and ‘strengthening capacity’ will be further defined in the appraisal package.
Program Description

14. The GoUKD has prioritized water supply and sanitation as a key area of its development agenda. It has estimated an investment requirement of USD 3.07 billion for achieving universal coverage for water supply and sanitation across the state by the year 2030, including rural sanitation by 2019. An analysis of data on budgetary allocations and releases for last four years (2011-12 to 2014-15) for the WSS sector (both rural and urban) shows that against an annual requirement of USD 204 million, the current availability of funds is about USD 82 million. This translates into GoUKD WSS Program (‘p’) for the next five years as USD 410 million for supporting expansion in coverage and improvements in services across the state. The proposed UWSS program (‘P’) with a total cost of USD 150 million will account for approximately 37% of the funding requirement for supporting GoUKD’s program ‘p’ over the next five years.

15. The PforR program (P) is expected to become effective in 2017 and span 5 years, supporting the larger GoUKD’s WSS program (p) for Uttarakhand. The program P will focus on improving WSS services in rapidly expanding peri-urban areas and water supply services in select rural habitations, benefitting about 1.5 million rural population. The water supply component of the peri-urban areas will include construction, rehabilitation, augmentation and extension of existing water supply systems in dense clusters / zones of peri-urban areas. The sanitation component of the peri-urban areas will support septage management for the selected clusters along with extensions of sewerage networks wherever feasible. The water supply component for rural habitations will support piped water coverage for uncovered rural habitations, in continuation of the project recently closed. The program will also support: (i) service delivery oriented WSS sector policy; (ii) planning and capacity building programs for peri-urban areas; (iii) institutions for sustaining the interventions; and, (iv) M&E systems for comprehensive and integrated sector wide monitoring.

16. The GoUKD intends to use the program ‘P’ to improve service level from the present rural water supply standards (55 lpcd, 7 meter terminal pressure, intermittent supply) to meet the peri-urban demand (up to 135 lpcd, 12 meter terminal pressure, metered connections, continuous supply) and assist establishment of sound service delivery in the peri-urban areas. Pumping schemes based on ground water (tube well), sub-surface water (infiltration well/infiltration gallery), surface source (river and rivulet), and gravity schemes with sources such as rivulet and spring, will be harnessed, including connecting with existing schemes, on the basis of technical feasibility. Significant step-up from the existing sanitation system is envisaged by introducing septage management and, where feasible, sewer network in the peri-urban area will be linked with the city sewerage system.

<table>
<thead>
<tr>
<th>WSS (100% coverage): Requirement and Availability of Funds</th>
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<tbody>
<tr>
<td>Requirement</td>
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<tr>
<td>Rs.</td>
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<tr>
<td>Crores</td>
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<tr>
<td>Urban</td>
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<tr>
<td>Rural</td>
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<tr>
<td>Total</td>
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<td>Annual requirement</td>
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* Average of last four years (2011-2015)
17. In addition, a small component (20% program funds) will support sustaining the decentralization SWAp program\(^4\) for piped water supply services in the rural areas of the state. The rural water supply component will primarily follow the recently completed URWSSP model and will focus on building or rehabilitating water supply facilities including source-strengthening measures, which the Gram Panchayats (GPs) plan, implement, and manage.

18. The program ‘P’ is expected to have a significant impact on improving the sector performance as a whole by bringing in the much needed focus on peri-urban areas as well as establishing ways to respond to emerging challenges in the sector that can be adapted in other parts of the country. The diagram below presents the Bank supported PforR Program (P) and the GoUKD’s overall WSS program (p). The selection criteria for the rapidly expanding peri-urban clusters and select rural habitations will be discussed and finalized during initial preparation phase of the program.

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\(^4\) The SWAp under the recently closed URWSS Project (2006-15) supported decentralization of responsibilities to the Gram Panchayat, including designing, implementing and maintaining schemes.
Program Key Result Indicators

19. The program ‘P’ is likely to benefit 1.5 million rural population in the peri urban areas and rural habitations of Uttarakhand, including 0.75 million female population. The following outcome indicators will be used to measure the achievement of the PDO:

- PDO Indicator 1: Policy for WSS Sector adopted.
- PDO Indicator 2: Number of metered customers in peri-urban areas connected to improved water supply system.
- PDO Indicator 3: Number of customers in peri-urban areas connected to septage management system.
- PDO Indicator 4: Number of additional rural population connected with piped water supply.
- PDO Indicator 5: Annual M&E Report disclosed on WSS Sector web-site.

Intermediate Result Indicators

20. There are two types of results indicators: the Disbursement Linked Indicators (DLIs), and intermediate results indicators. The achievement of DLIs triggers World Bank disbursements. However, once disbursed, the World Bank funds would supplement GoUKD’s own resources and can be utilized for activities linked to any results indicators. The list of results indicators discussed with GoUKD are summarized in the Table below\(^5\). A detailed results framework for the program will be developed subsequently.

PforR Program: Preliminary Result Areas and DLIs

<table>
<thead>
<tr>
<th>Program Result Area</th>
<th>Intermediate Results Indicators</th>
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<tr>
<td></td>
<td>Disbursement-Linked Indicators</td>
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<tr>
<td><strong>Results Area I:</strong></td>
<td>DLI#1: WSS Policy adopted</td>
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<tr>
<td>Service delivery oriented WSS Sector Policy</td>
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<tr>
<td><strong>Result Area II:</strong></td>
<td>DLI#2: Preparation and adoption of WSS master plan for select peri-urban areas</td>
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<tr>
<td>Strengthened WSS planning and capacity for peri-urban areas</td>
<td>DLI#3: Capacity enhanced for select institutions and key stakeholders</td>
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<td><strong>Result Area III:</strong></td>
<td>DLI#4: M&amp;E System designed and implemented: baseline and existing schemes information captured</td>
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<tr>
<td>Strengthened M&amp;E System</td>
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\(^5\) This is an indicative list of DLIs and Intermediate Result Indicators at the PCN stage. These will be further developed and detailed for the appraisal package.
| Result Area IV: Improved WSS services in peri-urban areas | DLI#5: Number of metered customer connections | • Performance-based-agreements achieved with Water Service Providers  
• Volumetric tariffs implemented  
• NRW reduced  
• O&M cost recovery improved |
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<tr>
<td>DLI #6: Scheme source augmented for 24/7 water supply services to customers</td>
<td>DLI #7: Improved WSS services in rehabilitated/augmented/new Water Supply System</td>
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<tr>
<td>Result Area V: Improved Water Supply services in select rural habitations</td>
<td>DLI#8: Number of additional rural population connected with piped water supply</td>
<td>• SWAp principles (as per previous project) followed for Water Supply coverage in rural habitations.</td>
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### IV. Initial Environmental and Social Screening

21. An environmental and social systems assessment (ESSA) is currently underway to identify the adequacy of the environment and social systems. The project interventions are not expected to have any adverse environmental and social impacts. Preliminary findings suggest that improvements in water supply and sanitation systems, including septage management would have overall positive environment, social and gender impacts in the program area. The ESSA will focus on existing institutions and organizations including their capacities, relevant to environmental and social safeguards, including relevant policies, regulations and procedures. Based on the findings of this assessment, an action plan shall be incorporated in the ESSA to enhance the capacities of the implementing agencies.

22. Access to water supply and sanitation services in peri-urban areas is poor and its distributional impact is currently skewed against the poor and vulnerable. These areas are also generally characterized by weak/broken local institutions, poor social capital, low accountability and participation. The ESSA will focus on identification of social and environmental risks and analysis of existing legal structure, relevant policies, regulations and procedures. It will look at current institutional and organizational arrangements, and how they seek to operationalize such policies and analyze their capacity, so as to identify the gaps therein. Based on the findings of this assessment, the Program Action Plan will seek to develop systems and support management processes which can achieve requisite environmental and social outcomes. In particular, there would be emphasis on inclusive, participatory and gender informed planning processes and execution of water supply programs for equitable and sustainable benefits to vulnerable communities. Suitable systems incorporating citizen engagement, community participation, and a robust grievance redress mechanism would also be developed. The draft ESSA will be disclosed and stakeholders will be consulted prior to Appraisal. The final ESSA, after incorporating stakeholder comments, will be disclosed on the website of DDWS and the World Bank.
V. Tentative financing
(Same as in AUS)

Source: ($m.)
Borrower/Recipient 30.00
IBRD 120.00
IDA
Others (specify) Total 150.00

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