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PROJECT APPRAISAL DOCUMENT  
ON A  
PROPOSED CREDIT  
IN THE AMOUNT OF SDR107.2 MILLION  
(US\$165 MILLION EQUIVALENT)  
TO THE  
REPUBLIC OF INDIA  
FOR A

MAHARASHTRA RURAL WATER SUPPLY AND SANITATION PROGRAM

FEBRUARY 13, 2014

Sustainable Development Unit  
India Country Management Unit  
South Asia Regional Office

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**CURRENCY EQUIVALENTS**  
(Exchange Rate Effective December 31, 2013)

US\$1 = INR61.82

US\$1 = SDR 0.65

FISCAL YEAR

APRIL 1 – MARCH 31

**ABBREVIATIONS AND ACRONYMS**

ACB	Anti-Corruption Bureau
APL	Above Poverty Line
AWMA	Aquifer Level Ground water Management Association
AWMI	Aquifer Level Ground water Management Initiative
BLSC	Beneficiary Level Sub Committee
BP	Bank Procedure
BPL	Below Poverty Line
BRC	Block Resource Center of Government of Maharashtra
C&AG	Comptroller and Auditor General of India
CAFO	Chief Accounts and Finance Officer
CAS	Country Assistance Strategy
CEO	Chief Executive Officer
CPS	Country Partnership Strategy
CSSWS	Community Safe and Secure Water System
DEA	Department of Economic Affairs
DLIs	Disbursement-Linked Indicators
DLPCC	District Level Program Coordination Committee
DPHL	District Public Health Laboratory
DPR	Detailed Project Report
DWSM	District Water and Sanitation Mission of Government of Maharashtra
EDDP	Environmental Due Diligence Plan
ESSA	Environmental and Social Systems Assessment
FSA	Fiduciary Systems Assessment
GDP	Gross Domestic Product
GoI	Government of India
GoM	Government of Maharashtra
GP	Gram Panchayat
GSDA	Groundwater Surveys and Development Agency of Government of Maharashtra
HR	Human Resource

ICRR	Implementation Completion Results Report
IDA	International Development Association
IDW	Infrastructure Development Wing
IEC	Information, Education and Communication
MDWS	Ministry of Drinking Water and Sanitation
M&E	Monitoring and Evaluation
MEETRA	Maharashtra Environmental Engineering Training and Research Academy of Government of Maharashtra
MIS	Management Information System
MJP	Maharashtra Jeevan Pradhikaran of Government of Maharashtra
NBA	Nirmal Bharat Abhiyan
NGO	Non-Governmental Organization
NGP	Nirmal Gram Puraskar
NPV	Net Present Value
NRDWP	National Rural Drinking Water Program
NRHM	National Rural Health Mission
O&M	Operation and Maintenance
ODF	Open Defecation Free
OP	Operational Policy
OPCS	Operational Policy and Country Services
PAD	Program Appraisal Document
PAP	Program Action Plan
PDO	Program Development Objective
PforR	Program-for-Results
PHD	Public Health Department
PMU	Program Management Unit
PRI	Panchayat Raj Institutions
PWD	Public Works Department of Government of Maharashtra
RA	Running Account
RDD	Rural Development Department of Government of Maharashtra
RTI	Right to Information
RCMU	Regional Coordination and Monitoring Unit
RWS	Rural Water Supply
RWSS	Rural Water Supply and Sanitation
SAC	Social Audit Committee
SLPCC	State Level Program Coordination Committee
SPHL	State Public Health Laboratory
SNM	Sujal Nirmal Maharashtra
SO	Support Organization
sq km	square kilometer

STA	State Technical Agencies
SWSM	State Water and Sanitation Mission of Government of Maharashtra
ToR	Terms of Reference
VWSC	Village Water and Sanitation Committee
WSP	Water and Sanitation Program
WSSD	Water Supply and Sanitation Department of Government of Maharashtra
WSS	Water Supply and Sanitation
WSSO	Water and Sanitation Support Organization
ZP	Zilla Parishad

Vice President:	Philippe H. Le Houerou
Country Director:	Onno Ruhl
Sector Director:	John Henry Stein
Sector Manager:	Ming Zhang
Task Team Leader:	Raghava Neti



REPUBLIC OF INDIA

Maharashtra Rural Water Supply and Sanitation Program

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## PAD DATA SHEET

REPUBLIC OF INDIA

Maharashtra Rural Water Supply and Sanitation Program

### PROGRAM APPRAISAL DOCUMENT

South Asia Region  
SASDU

Basic Information		
Date:	February 13, 2014	
Country Director:	Onno Ruhl	
Sector Manager/Director:	Ming Zhang/John Henry Stein	
Program ID:	P126325	
Team Leader(s):	Raghava Neti	
Sectors:	Water supply (70%), Sanitation (5%), Public administration- Water, sanitation and flood protection (25%)	
Themes:	Rural services & infrastructure (87%), Water resource management (10%), Rural policies and institutions (3%)	
Program Implementation Period:	Start Date: 03/11/2014 End Date: 03/31/2020	
Expected Financing Effectiveness Date:	04/01/2014	
Expected Financing Closing Date:	03/31/2020	
Program Financing Data		
<input type="checkbox"/> Loan	<input type="checkbox"/> Grant	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Credit		.
<b>For Loans/Credits/Others (US\$M):</b>		
Total Program Cost	235	Total Bank Financing: 165
Total Co-financing :	70	Financing Gap: 0

<b>Financing Source:</b>		<b>Amount: US\$ Million</b>				
BORROWER/RECIPIENT/Community		70				
IDA: Recommitted		165				
Other		----				
<b>Total</b>		<b>235</b>				
Borrower: Government of India						
Responsible Agency: Water Supply and Sanitation Department, Government of Maharashtra						
Contact:	Mr. Rajesh Kumar	Title:	Principal Secretary, WSSD, GoM			
Telephone No:	+91-22-22626407	mail:	<a href="mailto:pswssd@gmail.com">pswssd@gmail.com</a> <a href="mailto:psec1.wsd-mh@nic.in">psec1.wsd-mh@nic.in</a>			
<b>Expected Disbursements (Bank FY / in US\$ Million)</b>						
Fiscal Year	15	16	17	18	19	20
Annual	13	46	42	36	14	14
Cumulative	13	59	101	137	151	165

**Program Development Objective(s):** The Program Development Objective (PDO) is to improve the performance of Maharashtra's sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas.

### Compliance

#### Policy

Does the program depart from the CAS in content or in other significant respects?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Does the program require any waivers of Bank policies applicable to Program-for-Results operations?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Have these been approved by Bank management?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Is approval for any policy waiver sought from the Board?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Does the program meet the Regional criteria for readiness for implementation?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

**Overall Risk Rating: Moderate**

#### Legal Covenants

Name	Recurrent	Due Date	Frequency
Program Action Plan implementation	Yes	As per targets	Yearly

#### Description of Covenant

Implement the Program Action Plan in a timely manner as per the targets agreed

<b>Team Composition</b>				
<b>Bank Staff</b>				
<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>	<b>UPI</b>
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Pyush Dogra	Senior Environmental Specialist	Environmental Management	SASDC	326142
Mridula Singh	Senior Social Development Specialist	Social Development	SASDS	177086
R.R. Mohan	Senior Social Development Specialist	Social Development	SASDS	98373
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Vidya Mahesh	Program Assistant	Admin. Support	SASDO	191122
Nirmala Chopra	Program Assistant	Admin Support	SASDO	232917

<b>Non- Bank Staff</b>				
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B.K.D. Raja	Consultant	Social Development	SASDU	249953
Kaushik Sarkar	Consultant	Economic Management	SASDU	350193
Ghansham V. Abhayankar	Consultant	Water and Sanitation	SASDU	21612
Aryamala Prasad	Consultant	Governance	SACIN	424160
Abhishek Pruthi	Consultant	Financial Analysis	SARFM	356955

## **I. STRATEGIC CONTEXT**

### **A. Country Context**

1. India has been one of the fastest growing economies in the last decade, but its economy now shows signs of slowing down. Between 2004 and 2011, a period that includes the global financial crisis, India's growth averaged 8.3 percent per year. Expanding social programs lowered the poverty rate by 1.5 percentage points per year during 2004–09, double the rate of the preceding decade. India's growth rate however slipped to a decade low of 5 percent in 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. This slowdown carries high social costs for millions of Indians, and threatens the gains made in poverty reduction over the past decade.

2. India's recently published 12th Five-Year Plan calls for major investments in infrastructure, including water and sanitation, as one of the pathways to increased growth and poverty reduction. Lack of adequate water supply and sanitation facilities impacts the health and economic well-being of millions of Indians, especially those living in rural areas. According to the 2011 Census of India, close to 70 percent of India's 1.2 billion people live in rural areas, and contribute to about 40 percent of the country's Gross Domestic Product (GDP). It is estimated that the total economic impacts of inadequate water supply and sanitation in India is about INR2.44 trillion (US\$53.8 billion) a year, equivalent of 6.4 percent of India's GDP in 2006.<sup>1</sup> This means an annual loss of INR2,180 (US\$48) per person. Therefore, improving access to water and sanitation services is a development priority for India.

### **B. Sectoral and Institutional Context**

3. India has one of the highest coverage statistics for rural water supply (RWS), but the quality of services remains poor and sanitation is a major challenge. By 2010, about 90 percent<sup>2</sup> of India's rural population had reasonable access<sup>3</sup> to an improved water source<sup>4</sup>, but only 31 percent of rural households had access to piped water (2011 Census). However, as of 2010, about 12 percent (97 million) of the global population without access to an improved drinking water source lived in India<sup>5</sup>. Therefore, continuing to expand sustainable access to improved water sources to India's rural population is a priority for India. The quality of services is generally poor – with unreliable/intermittent supply, low pressures and water quality problems. Rural sanitation is another major challenge for India. Of the 2.5 billion people lacking sanitation across the world, over 650 million live in India. Only about 31 percent of rural households in India have access to sanitation (2011 Census). As of 2010<sup>6</sup>, nearly 60 percent (626 million) of the global population practicing open defecation lived in India.

4. Rural water supply and sanitation (RWSS) is a state subject in India, but central government investments in the sector have increased significantly over the past four decades. The first investments from the Government of India (GoI) in the sector started during the fourth Five-Year Plan period

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<sup>1</sup> WSP (2007). The economic impacts of inadequate sanitation in India. WSP/World Bank, Delhi.

<sup>2</sup> Ref: data.worldbank.org.

<sup>3</sup> Reasonable access is defined as the availability of at least 20 liters a person a day from a source within 1 kilometer of the dwelling.

<sup>4</sup> Improved source is a household connection, public standpipe, borehole, protected well or spring, and rainwater collection.

<sup>5</sup> Progress on Drinking Water and Sanitation, 2012 update, WHO/UNICEF.

<sup>6</sup> *ibid*.



(1969-74) and gradually increased over the next plan periods. GoI's investments in the Fourth Plan were a meager INR300 million and expanded to INR401 billion in the 11<sup>th</sup> Plan (2007-2012). State governments invest almost an equal amount from their own resources, and are responsible for managing provision of water supply and sanitation facilities and services. The Ministry of Drinking Water and Sanitation (MDWS) is the nodal ministry at the national level to promote RWSS development in the country. MDWS designs national programs, secures funding from GoI and releases it to states through agreed annual action plans, monitors performance of states, and coordinates with external agencies and other departments within GoI and the states.

5. Institutional arrangements for the management of the RWSS sector vary across states. The 73<sup>rd</sup> constitutional amendment (1993) provided for the devolution of RWSS to the three-tier Panchayat Raj Institutions<sup>7</sup> (rural local governments - PRIs) by conferring a constitutional status of local self-governments to the PRIs and also mandating transfer of 29 subjects to the PRIs, including water supply and sanitation. GoI aims to push the decentralization agenda through its RWSS program guidelines and devolution incentives.<sup>8</sup> While GoI assisted states in achieving near universal access to drinking water, the focus has now shifted to achieving higher levels of service delivery and eliminating the practice of open defecation.

6. Maharashtra is a leading state in the country in adopting RWSS sector reforms that promote decentralization of sector management and demand-responsive approaches. The state has a population of 112.4 million people, of which 61.8 million (55 percent) live in rural areas. It is the second largest state in India in terms of population and third largest in terms of geographic area<sup>9</sup> (307,731 square kilometers). It has 35 districts, with 27,952 Gram Panchayats<sup>10</sup> (GPs), covering 100,712<sup>11</sup> habitations. The Water Supply and Sanitation Department (WSSD) at the state level is the overall lead agency that determines policies, raises resources and monitors sector performance. Zilla Parishads (ZPs) at the district level and GPs at the village level are the key organizations that implement the sector programs. The state-level technical agencies – Maharashtra Jeevan Pradhikaran (MJP, the state's water board) and Groundwater Surveys and Development Agency (GSDA) - provide technical expertise (through staff deputed to ZPs) and support as required. While the roles and responsibilities are well articulated and understood by the different sector organizations, there are capacity gaps with respect to planning, monitoring and implementation of sector programs.

7. The World Bank's (Bank) previous engagements in the state, most notably the Jalswarajya project<sup>12</sup> (2003-09), were instrumental in strengthening decentralization and demand-responsive approaches in the sector, but the state still faces significant challenges in improving service delivery. Due to past investments by the Government of Maharashtra (GoM), all 98,000+ habitations in the state are covered by a water supply system, with varying degrees of technical complexity. The quality of services across the state, however, needs improvement – with less than 30 percent house connections

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<sup>7</sup> The three-tier PRIs comprise Zilla Parishads (district councils), Panchayat Samitis (block councils) and Gram Panchayats (village councils). All these levels of rural local governments have an elected body and an administrative wing.

<sup>8</sup> 10 percent of national allocations to be provided as devolution incentives measured through a Management Devolution Index, initiated in 2011.

<sup>9</sup> This is more than the area (sq km) of countries such as New Zealand (268,680), Italy (301,230), Syria (185,180), Uganda (236,040) and the Philippines (300,000), and is almost the size of Vietnam (329,569).

<sup>10</sup> A GP typically will have four to five habitations, each habitation consisting of a group of houses typically varying from 10 - 100 households.

<sup>11</sup> MDWS State Statistics, View on 09 Dec. 2013

<sup>12</sup> This project was for an International Development Association (IDA) Credit (Cr. 3821-IN) of US\$181 million, which closed in September 2009 with a satisfactory outcome rating in the Implementation Completion and Results Report. It won the 'People's First' award in the World Bank, for the first position globally, in 2010.

on average (despite high demand from rural households), unreliable/intermittent supply (average two to three hours supply per day), low pressures, and water quality problems. Investments are being made every year in the construction of new water schemes and augmentation of existing schemes to raise the service level status of the habitations to Fully Covered.<sup>13</sup> Despite significant efforts, about 3-5 percent of habitations slip back to ‘Partially Covered’ or ‘Not Covered’ status every year, and a major portion of the financing in the sector goes into rehabilitation and upgrading of old systems. Financial sustainability is another critical issue, as tariff collections stand at only 66 percent, recovering a mere 39 percent of operation and maintenance (O&M) costs. In sanitation, the state is leading the country in the number of GPs that have become open defecation free (ODF), but close to half of the rural households (56 percent) practice open defecation. Sustaining ODF status is also a major challenge, as about 90 percent of GPs slip from this status.<sup>14</sup>

8. Under its current 10-year RWSS program, GoM seeks to significantly expand the frontiers in the sector with a focus on increasing house connection coverage, ensuring continuous water supply with adequate pressure and minimum quality standards, and ensuring that 100 percent of the rural population has access to safe water and basic sanitation. However, delivering this vision requires building capacities of institutions through appropriate implementation and management models. Maharashtra is also a rapidly urbanizing state with many large villages (each with a population of more than 10,000 people) and a growing number of peri-urban areas that are demanding higher levels of service. Finally, the state also faces challenges in addressing the needs of water-stressed and water-quality affected areas, managing drinking water quality, and ensuring drinking water security in the face of increasing droughts and climate change impacts on rainfall patterns and the yield of existing sources.<sup>15</sup>

### **C. Relationship to the CAS/CPS and Rationale for Use of Instrument**

9. The proposed Program is consistent with the Country Partnership Strategy (CPS) for the period FY13-FY17 (Report No.76176-IN, dated April 11, 2013), which is organized around three engagement areas – integration, transformation and inclusion – with a cross-cutting focus on improving governance, environmental sustainability and gender equality. In addition, the CPS is based on GoI’s “Finance-Plus” approach, whereby the value-added by the Bank goes beyond financing and contributes to the transfer of knowledge and international best practices, reform of processes and systems, strengthening of capacity and institutions, and exploring innovative financing instruments. The proposed Program is fully aligned with all of these objectives.

10. The Program is seen as an appropriate candidate for the use of the Program-for-Results (PforR) instrument for four key reasons:

- a) It provides an appropriate framework for the Bank to support GoM’s own RWSS program, through GoM’s own systems and procedures, and to strengthen the institutional capacity

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<sup>13</sup> As per GoI guidelines, a habitation is considered ‘Fully Covered’ if it has access to a safe water source which is able to yield a minimum of 40 liters per capita daily, and each household is located within a distance of 500 meters from either a public or a community source, or 30 minutes for fetching water. A ‘Partially Covered’ habitation has access to a water source which does not meet the ‘Fully Covered’ criteria. A habitation is considered ‘Not Covered’ if it does not have access to a safe water source.

<sup>14</sup> TARU Leading Edge Consultants-UNICEF-WSP Study, 2008.

<sup>15</sup> More than 85 percent of the rural drinking water scheme sources are groundwater dependent and groundwater levels are declining rapidly. In addition, due to less than normal rainfall during the previous two to three years, the state faced an acute drought situation in 2013 that has severely affected overall water resources, including drinking water supply.



needed for the program to achieve its desired results. The instrument aligns well with GoM's intention to increase the results orientation of its RWSS program, with clear links between Bank financing and results achieved.

- b) There is strong support for improving outcomes from GoM's existing RWSS program. GoM has recognized that achieving better sector outcomes will require improvements in institutional capacity for planning, implementation and monitoring. The PforR instrument provides better alignment with GoM's objectives of strengthening capacity, while simultaneously encouraging the practice of managing for results and a stronger focus on service improvement.
- c) The Bank has been engaged with GoM in the RWSS sector since 1991 through two projects<sup>16</sup> and has supported the development of community-driven/demand-responsive approaches to planning, implementation and operation of RWSS services, as well as improved fiduciary, social and environmental processes. GoM has shown strong support for these approaches and systems, and has demonstrated continuous development over the last decade. However, efforts are still needed to strengthen and deepen the application of these approaches and systems uniformly and effectively, and to institutionalize them across the state. The PforR instrument would allow the Bank's support to better align with this objective.
- d) Maharashtra is an advanced state and a mature client. The state is, therefore, an ideal partner for pioneering the PforR instrument in India.

## II. PROGRAM DESCRIPTION

11. GoM has an existing RWSS program that is fully aligned with and driven by GoI's National Rural Drinking Water Program (NRDWP) for water supply, and Nirmal Bharat Abhiyan (NBA) for sanitation.<sup>17</sup> The overall objective of GoM's RWSS program is to increase access to safe drinking water and sanitation services to rural communities at an affordable cost and in an environmentally sustainable manner. GoM's RWSS program is in line with the national vision and goals, and also supports the constitutional mandate of strengthening devolution<sup>18</sup>. GoM has demonstrated its commitment to the objectives of its RWSS program by developing relevant policies and guidelines for program implementation, allocating requisite financial resources and putting in place mechanisms to strengthen decentralized sector governance structures. The time horizon of GoM's RWSS program is 10 years (2012-22), with a total resource commitment of US\$3.55 billion.

12. The Bank will support a portion of this program over a six-year period (2014-20) focusing on two primary categories of activities: (i) institutional capacity building for planning, implementation, and monitoring of the RWSS sector across Maharashtra; and (ii) in select districts, implementation of (a) Water supply and Sullage management service improvement in select peri-urban villages, and (b) Water Supply service improvement and improved groundwater management practices in water-stressed and water-quality-affected areas. These two categories of activities address the underlying challenges in the sector, based on the assessments undertaken by the Bank. Institutional capacity building for the sector is aimed to bridge the skill gaps (both number of professionals and types of professionals), systems gaps (planning, monitoring, evaluations, auditing, procurement, financial management, etc.) and physical infrastructure gaps (buildings, scientific equipment and furniture) among key sector institutions and at local governments across the state. The second category, to be

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<sup>16</sup> This will be the Bank's third engagement with GoM in the RWSS sector since 1991.

<sup>17</sup> See Annex 4, Attachment-1 for activities under NRDWP, NBA.

<sup>18</sup> GoM transferred 18 of the 29 subjects to be transferred to rural local governments as per the 73<sup>rd</sup> Constitutional amendment of India. Water Supply and Sanitation is one of the subjects that was fully transferred by GoM to local governments. As per the Ministry of Panchayati Raj, GoI, Maharashtra is among the top five states promoting devolution in the country.

implemented in selected districts, consists of a mix of traditional and engineering and management interventions (see Annex 4 for details), incorporating global good practices and with a focus on service delivery. It is expected that these improved approaches demonstrated in the Program would be absorbed by the ‘capacitated institutions’ and scaled up across the state with necessary fine tuning.

13. With respect to sanitation, GoM has a well-defined philosophy, goal and approaches in promoting community led and owned environmental sanitation. The Program will support this approach through improved institutional capacity and also demonstrate innovative technical and management models for addressing the emerging challenge of ‘sullage’ management’ in peri-urban villages.

14. GoM proposes to call this World Bank-supported portion of its program the *Jalswarajya-2 Program*<sup>19</sup> (hereinafter referred to as the “Program”). GoM has also identified the following medium-term goals for Bank support: (i) strengthening planning and monitoring in the sector; (ii) strengthening capacity for program implementation and sustainability; (iii) increasing access to quality and sustainable water and sanitation services in peri-urban villages; and (iv) increasing access to safe drinking water in water-stressed and water quality-affected areas. These are essentially the key results to be achieved under the Program.

#### **A. Program Scope and Activities**

15. *Category 1. Institutional capacity building for planning, implementation and monitoring of the sector across the state.* The indicative list of activities to be supported under this category are summarized below (details in Annex 1):

- a) Strengthening the current monitoring and evaluation (M&E) systems to capture timely and reliable information on sector activities, service delivery aspects, fiduciary aspects and project / contract management aspects.
- b) Strengthening RWSS planning processes, preparation of strategic plans, tools and guidelines for district annual plans.
- c) Strengthening implementation capacity of sector institutions at state, district and block levels.
- d) Strengthening program management capacity at all levels through additional external technical assistance and other support, as required.
- e) Strengthening water testing laboratories (at state, district and sub-district levels) for undertaking water quality monitoring and surveillance.
- f) Restructuring the Maharashtra Environmental Engineering Training and Research Academy (MEETRA) of WSSD to make it a premier training institute for the sector.
- g) Strengthening GSDA’s capacities on groundwater management.
- h) Strengthening NBA program implementation across the state.
- i) Strengthening the governance and accountability systems of the sector.
- j) Impact assessment of program initiatives.

16. *Category 2. Water supply and Sanitation Service Improvements in selected districts.* Program support under this category would be limited to twelve districts (two each from the six administrative divisions of the state) selected based on transparent, pre-defined and demand-driven criteria. The list of activities to be supported is summarized below (see further details in Annex 1):

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<sup>19</sup> ‘Jalswarajya’ means self-governance in water.

- a) Construction, rehabilitation, augmentation and extension of existing water supply systems and construction of new sullage management schemes in peri-urban villages,
- b) Scaling up of sustainable groundwater management practices in critically exploited aquifers, and
- c) Construction and rehabilitation of water systems in water-stressed and water-quality-affected areas.

17. With respect to sanitation, the Program would provide technical assistance/capacity building support in delivering the NBA across the state. Specific focus will be given to ensuring convergence of various sanitation initiatives -- solid waste management, sullage management, providing access to toilets etc., through the preparation of Village Environmental Sanitation Plans. In addition, effective models for managing sullage will be designed and demonstrated in peri-urban villages.

18. *Program costs and financing.* The estimated funding envelop for the Program is US\$235 million (Table 1). This includes a commitment from GoM of US\$70 million and the proposed Bank support of US\$165 million. Annex 1 provides a detailed list of activities and outputs associated with this funding. All funding (regardless of source) will flow through a distinct WSSD budget line item, and there will be no difference between GoM funding and Bank support at the level of Program implementation.

**Table 1: Program Costs and Financing**

<b>Item</b>	<b>Amount (US\$ Million)</b>	<b>% of Total</b>
<b>Estimated Program Expenditures</b>		
Institutional capacity building for planning, implementation, and monitoring of the RWSS sector across Maharashtra.	64.6	27
In select districts, implementation of: (a) Water supply and Sullage management service improvement in peri-urban villages; and (b) Water Supply service improvement and improved groundwater management practices in water-stressed and water-quality-affected areas.	170.4	73
<b>TOTAL estimated expenditures</b>	<b>235</b>	<b>100</b>
<b>Program Funding Sources</b>		
International Development Association (IDA) (via WSSD budget line)	165	70
GoM (via WSSD budget line) and community	70	30
<b>TOTAL Sources</b>	<b>235</b>	<b>100</b>

19. *Program exclusions.* The Program will exclude activities that, in the opinion of the Bank, are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people; or involve procurement of (i) works, estimated to cost US\$50 million equivalent or more per contract, (ii) goods, estimated to cost US\$30 million equivalent or more per contract, (iii) non-consulting services, estimated to cost US\$20 million equivalent or more per contract, and (iv) consultant services, estimated to cost US\$15 million equivalent or more per contract. Physical investments that are excluded from the Program due to their high environmental risks include: (i) schemes that involve construction or rehabilitation of dams which are greater or equal to 10 meters in height; (ii) groundwater-based schemes in overexploited and critical basins that do not integrate source sustainability measures; and (iii) schemes involving highly polluted surface water sources.

20. *Beneficiaries.* A total of about one million people (present population) are expected to benefit from Program interventions on water supply and sanitation service improvements in the selected twelve districts. This has two parts: (i) an estimated 0.59 million people living in peri-urban villages are expected to benefit from high quality and sustainable water services, of which, by the end of the Program, at least 0.34 million people are expected to connect to the scheme through house connections; and (ii) an estimated 0.47 million people living in water-stressed and water quality-affected areas and in remote habitations are expected to benefit from safe drinking water due to interventions in water purification and rainwater harvesting. In addition about 0.77 million people are expected to benefit from the Aquifer Level Groundwater Management Initiatives. The entire rural population of Maharashtra is expected to reap indirect benefits because of the Program's statewide institutional capacity building interventions. A separate impact evaluation study, planned under the Program, will assess the benefits to various social and gender groups, as well as the indirect benefits of institutional capacity building interventions.

### **B. Program Development Objectives**

21. The development objective for the Program (hereinafter referred to as the "Program Development Objective" or "PDO") is *to improve the performance of Maharashtra's sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas.*

### **C. Program Key Results and Disbursement-linked Indicators**

22. *Key result areas.* The Program will concentrate on four key result areas that will contribute to the achievement of the PDO:

- a) Result Area 1: Strengthened planning and monitoring in the RWSS sector;
- b) Result Area 2: Improved institutional capacity for RWSS program implementation;
- c) Result Area 3: Improved access to quality and sustainable water and sanitation services in peri-urban villages; and
- d) Result Area 4: Improved access to safe drinking water in water-stressed and water quality-affected areas.

23. *PDO indicators.* The following outcome indicators will be used to measure the achievement of the PDO:

- a) PDO Indicator 1: Number of districts using improved planning processes and strengthened M&E systems;
- b) PDO Indicator 2: Percentage of completed rural water supply schemes that follow GoM's demand-responsive approach and exit the implementation process with a schedule performance index of between 0.75 and 1.25;
- c) PDO Indicator 3: Number of people in peri-urban villages who have access to a sustainable water supply system and receive a regular water service; and
- d) PDO Indicator 4: Number of people in water-stressed and water quality-affected areas who have access to a safe and secure drinking water source.

24. *Intermediate results indicators.* A set of intermediate results indicators will be used to measure and track intermediate results or intervening steps towards the PDO. There are two types of intermediate results indicators: those that are linked to disbursements, referred to as ‘*disbursement-linked indicators*’ (DLIs), and those that are not linked to disbursements, referred to as ‘*other intermediate results indicators*.’<sup>20</sup> The achievement of DLIs triggers Bank disbursements to the Program. However, once disbursed, Bank funds would supplement GoM’s own resources to implement the Program. The list of intermediate results indicators are summarized in Table 2. A detailed results framework for the Program is provided in Annex 2.

**Table 2: Intermediate Result Indicators**

Program Result Area	Intermediate Results Indicators	
	Disbursement-Linked Indicators	Other Intermediate Results Indicators (which do not trigger disbursements)
<b>Result Area 1:</b> Strengthened planning and monitoring in the sector	<b>DLI#1:</b> Strengthened M&E System for the sector	<ul style="list-style-type: none"> <li>• Improved sector planning processes for the sector</li> </ul>
<b>Result Area 2:</b> Improved institutional capacity for program implementation	<b>DLI#2:</b> Strengthened Capacity of key Sector Institutions  Percentage of sanctioned staff maintained, trained and equipped every year in key sector institutions as per Annual Capacity Development Plan	<ul style="list-style-type: none"> <li>• Percentage of rural water supply schemes that follow GoM’s demand-responsive approach</li> </ul>
		<ul style="list-style-type: none"> <li>• Percentage of GPs that are using sustainable O&amp;M mechanisms</li> </ul>
		<ul style="list-style-type: none"> <li>• Percentage of GPs that maintain Open Defecation Free (ODF) status</li> </ul>
<b>Result Area 3:</b> Improved access to quality and sustainable water and sanitation services in peri-urban villages	<b>DLI#3:</b> Number of house connections to a Commissioned Water Supply System	<ul style="list-style-type: none"> <li>• Number of house connections to a sustainable sullage collection and safe disposal system</li> </ul>
	<b>DLI#4:</b> Number of house connections to a Sustainable Water Supply System and receiving a Regular Water Service	
<b>Result Area 4:</b> Improved access to safe drinking water in water-stressed and water quality-affected areas	<b>DLI#5:</b> Number of Community Safe and Secure Water Systems (CSSWS)	<ul style="list-style-type: none"> <li>• Number of aquifer level ground water management initiatives (AWMIs) successfully implemented</li> </ul>

25. *Disbursement-linked indicators.* The choice of DLIs was based on four factors: (i) signaling role of the indicator, that is, whether it signals a critical action along the results chain; (ii) perceived need to introduce a strong financial incentive to deliver the activity; (iii) practical aspects of verifying achievement; and (iv) GoM’s capacity to achieve the DLI during the implementation period of the Program. DLI#1 and DLI#2 signal critical actions along the results chain without which the PDO cannot be achieved. DLI#3, DLI#4 and DLI#5 provide funds against performance (achievement of priority outputs) to encourage the practice of managing for results, and a stronger focus on service

<sup>20</sup> All intermediate results indicators are critical to the achievement of the PDO, and will be measured and monitored throughout the Program period.

improvement. Detailed descriptions/definitions of the achievement of each DLI are provided in Annex 3.

### **III. PROGRAM IMPLEMENTATION**

#### **A. Institutional and Implementation Arrangements**

26. Program implementation will be fully embedded within the existing institutional framework of the RWSS sector in Maharashtra and no new institutions are being created. This will enhance the capacities of the institutions and help retain skills within the sector institutions. The role of each agency/unit is summarized below.

- a) The Water Supply and Sanitation Department (WSSD) of the state remains the nodal agency for implementing the Program. The Principal Secretary of this department will have overall strategic Program oversight. S/he will be supported by the Deputy Secretary of the department to provide direction to Program implementation. Day-to-day monitoring and coordination will be overseen by a Program Manager.
- b) A Project Management Unit established under the previous project has been involved in the preparation of the Program, and will support Program Management.
- c) WSSD has a Water Supply and Sanitation Organization (already established at the state level based on GoI guidelines for the sector for institutional capacity building, technical assistance, communication and sector monitoring) which will be responsible for these functions for the Program as well.
- d) The two technical agencies under WSSD – Maharashtra Jeevan Pradhikaran (MJP, which is the state Water Board) and Ground Water Surveys and Development Agency (GSDA) - have specialized skills and will support Program implementation respectively for peri-urban water supply and sullage schemes, and for ground water management initiatives.
- e) The district and sub-district level institutions – Zilla Parishads and Blocks that will be strengthened under the Program - will implement community safe and secure water supply schemes and sanitation improvement initiatives.
- f) The Public Health Department (PHD), another key department in the state, which is responsible for water quality testing and surveillance program in the RWSS sector, will receive Program support to strengthen its laboratories across the state.
- g) State, regional and district level coordination committees will be set up for coordination amongst the agencies listed above.

27. While the institutional framework is in place to implement the Program and manage it at all levels of GoM, the various assessments (technical, integrated fiduciary, environmental and social) have highlighted some capacity gaps, which will be addressed through institutional capacity building activities under the Program, as summarized in Section II A and as detailed in Annex 1.

#### **B. Results Monitoring and Evaluation**

28. GoM has existing management information systems (MISs) for the RWSS sector (see details in Annex 4) which will be gradually strengthened as part of the Program into a sector-wide M&E system. Under this Program, GoM will improve its ability to monitor progress and performance of the RWSS sector on a dynamic basis and use the information for timely decision-making and action. Details of

the steps to be taken under the Program to strengthen the existing M&E system are provided in Annexes 2, 3 and 4.

29. While a sector-wide M&E system is being developed under the Program, WSSD will provide paper-based annual Program reports on the status of Program implementation and results achieved. In addition, the Bank, with assistance from the Water and Sanitation Program (WSP), will support an impact evaluation study for the Program under a separate technical assistance operation. This study will look at the health and socio-economic impacts of the Program on various social and gender groups, as well as the impact of various capacity building initiatives on the performance of GoM's RWSS sector institutions.

30. *Joint Annual Reviews.* GoM and the Bank will undertake joint annual review meetings at the management level to assess progress, identify and propose remedies for any weaknesses, and identify and propose modalities for scaling up successes. These reviews will be critical for early identification of problems (e.g., non-achievement of DLIs) and for restructuring the Program (where necessary) in order to achieve expected results.

### **C. Disbursement Arrangements and Verification Protocols**

31. *Disbursement arrangements.* DLIs for the Program are provided in Annex 3, together with the disbursement amounts for each of the indicators and the protocols for their verification.

32. *Financing allocation to each DLI.* Financing allocation to each DLI will be as follows: up to 21 percent of the credit amount will be disbursed against the achievement of DLI#1; up to 22 percent against the achievement of DLI#2; up to 24 percent against the achievement of DLI#3; up to 15 percent against the achievement of DLI#4; and up to 18 percent against the achievement of DLI#5.

33. *Disbursement modalities for each DLI.* Details of agreed disbursement modalities for each DLI are provided in Annex 3. Disbursements under DLI #1 are not scalable as the indicator relates to a set of actions that are either achieved or not. Where actions are not achieved in any particular year/period, the allocated amount will be carried over to the subsequent year. On the other hand, disbursements under DLI#2, DLI#3, DLI#4 and DLI#5 are scalable, that is, disbursements will be proportional to the progress towards achieving the targeted DLI value. For DLI#2, the target is specified as the percentage of sanctioned staff maintained, trained and equipped every year in key sector institutions as per GoM's annual capacity development plan. As this indicator is about maintaining required levels of trained staff every year throughout the Program period, the targeted value is constant each year. If the target is not achieved in any year, the undisbursed amounts cannot be rolled over to the subsequent year. But if the target is under achieved in any period, pro-rata disbursements will be reduced for that particular period. For DLI#3, the targets are specified as the cumulative number of house connections made to a commissioned water supply system. Similarly, for DLI#4, the targets are specified as the cumulative number of house connections to a sustainable water supply system and receiving a regular water service with adequate pressure and minimum water quality standard. The targets for DLI#5 are also specified as the cumulative number of CSSWS. Where targets for DLI#3, 4 and 5 are not achieved in any particular year, the related disbursements will be rolled over into the next year. On the other hand, if the achievement consistently outperforms the targets, the corresponding credit amount may be fully disbursed before the end of the operation.



34. *Advances.* Advances will be disbursed prior to the achievement of DLIs, as these require GoM to significantly increase expenditures for staff strengthening across the sector, consultancy activities, and planning and construction of water supply schemes for peri-urban villages and for water-stressed and water quality-affected areas. The Bank agreed to provide an advance of up to a ceiling of 25 percent of the credit amount. However, DEA has proposed to limit the advance to SDR12 million (equivalent of US\$18.5 m). The advance will be adjusted against disbursements due when the DLIs are achieved or in the later years of the Program.

35. *DLI verification protocols.* Verification protocols for each DLI are detailed in Annex 3. DLIs will be independently verified by an external entity agreed with, and to be contracted by, GoM. The Bank will further review the evidence base for all DLIs during implementation. GoM's existing MIS and regular sector-related reporting arrangements will be the basis for providing the data needed to verify most of the Program results. For Program results that are not part of the regular sector-related reporting, specific reporting and verification protocols have been developed, as detailed in Annex 3.

#### **IV. ASSESSMENT SUMMARY**

##### **A. Technical**

36. *Strategic relevance.* Improving access to water and sanitation services is a development priority for India, given the well-known health, development and economic benefits accruing from such investments. The proposed Program is thus strategically relevant and aligned with the visions of both GoI and GoM, which are increasingly shifting from just infrastructure coverage to service delivery and sustainability. The Program is also consistent with the Bank's future directions of engagement in India, particularly in response to the "Finance-Plus" approach sought by the Ministry of Finance, whereby the value added by the Bank goes beyond providing finance, but also contributes to the strengthening of institutional capacity.

37. While GoM has sound policies in place to support the development of RWSS services through demand-responsive approaches, historically GoM's efforts in the sector have focused on financing investments for asset creation to increase the coverage of water supply systems and basic sanitation services. However, despite large capital flows into the sector (both from GoI and the state government), the quality of service remains poor, and there are concerns about sustainability. The underlying reason is the limited capacity of sector institutions, which manifests itself in weak planning and monitoring processes, poor implementation and inadequate attention to O&M, which then lead to poor service outcomes. The Program is designed to improve the performance of GoM's sector institutions in these areas and thus effectively operationalize the policies that GoM already has in place.

38. *Technical soundness.* The Program is assessed as technically sound. This will be the third engagement by the Bank in the RWSS sector in Maharashtra over the past two decades. The predecessor project (Jalswarajya, 2003-09) closed with good results (the ICRR outcome rating was satisfactory) and influenced thinking in the sector on a number of policy and institutional issues, including the use of demand-responsive approaches. There is now a strong push for improving outcomes from GoM's existing RWSS program. GoM has recognized that achieving better sector results requires improvements in institutional capacity for planning, implementation and monitoring; a shift towards the practice of managing for results; and a stronger focus on service improvement, as opposed to asset creation. GoM also faces key challenges in its RWSS program: (a) to plan, implement



and manage water and sanitation services in peri-urban villages -- which may be administratively rural but have urban characteristics -- that are demanding higher levels of service; and (b) dealing with water-stressed and water quality-affected areas. The focus of GoI's support to the sector is also shifting from mere expansion of infrastructure to ensuring drinking water security to rural communities, and from building toilets to promoting ODF villages. These interventions require strong technical assistance, complementing financing of infrastructure. The Program will respond to these needs with the strategic selection of key actions through the DLIs and the Program Action Plan (PAP).

39. *Institutional arrangements and governance structures.* Institutional arrangements and governance structures for the Program are assessed as adequate. The institutional arrangement is highly decentralized, with defined roles and responsibilities at different levels. However, there is a need for capacity building support to make available designated staff and skills, improve performance monitoring systems and strategic thinking, as well as results and service orientation. An institutional strengthening roadmap has been prepared by GoM, which will be rolled out under the Program. GoM, with Bank support over many years, has developed community-driven/demand-responsive approaches to planning, implementation and operation of RWSS services, as well as improved fiduciary, social and environmental processes, in line with good practice in the sector. However, improvements are still needed to apply these approaches and systems uniformly and effectively.

40. *Expenditure framework.* GoM has sufficient fiscal space to meet the needs of RWSS sector over the medium term. The sector receives about 3-4 percent of the Annual Plan outlay of the state and this is supplemented by funding from GoI, adding up to about US\$355 million per annum on average. The proposed Program cost of US\$235 million over six years constitutes about 11 percent of GoM's RWSS sector program for the six-year period; however, the Program is expected to have a significant impact on improving the performance of the sector as a whole.

41. *Results framework.* The results framework of GoM's RWSS program is comprehensive and generally sound, but the systems for measurement and reporting of results require improvement. Since this operation supports only a small portion of GoM's RWSS program, a sub-set of the results framework has been adapted for the Program. In order to further improve results-orientation in the sector, a new strengthened state-wide M&E system will be developed under the Program. The Program would initially rely on the existing web-based MIS, and build on it to strengthen the overall M&E function in the sector.

42. *Economic rationale.* The Program is well justified on the basis of direct benefits to over two million people by the end of the 25 years of the expected period of the Program's benefits, post construction. The ex-ante economic analysis reveals positive net benefits at a discounted rate of 12.5 percent, with an Economic Rate of Return (ERR) of 19.14 percent and a benefit over cost ratio of 1.81. A sensitivity analysis for a 10 percent increase in the project costs would still result in a positive Net Present Value (NPV), an ERR of 17.68 percent, and benefit over cost of 1.65. A more detailed economic analysis is presented in Annex 4.

## **B. Fiduciary Systems Assessment**

43. *Background.* A Fiduciary Systems Assessment (FSA) was carried out to evaluate the arrangements relevant to the Program and to determine whether they provide reasonable assurance that the Program funds will be used for their intended purpose. Taking into account the improvements required and agreement on actions required to strengthen the systems (which are reflected in the PAP),

the overall fiduciary framework is considered adequate to support Program management and to achieve desired results.

44. GoM has a well-developed budgetary framework that ensures allocation of adequate resources to all departments and programs. There is sufficient predictability in the availability of resources; however, to maintain transparency in GoM's financing, an exclusive budget line has been allocated to this Program – as is usually done by GoM for externally aided projects. Funds will initially be released by the state treasuries; however, procurement actions will be taken and final payments will be made by SWSM, MJP, GSDA, ZPs and GPs, which operate outside the budgetary system<sup>21</sup> and use commercial banking channels for financial flows and payments.

45. Fiduciary arrangements in the sector are guided by several rules and legislations, including the state financial rules, Public Works Department (PWD) Manual, Store Purchase Rules, MJP Act, ZP Account Code and the Bombay Panchayat Rules. The existing governance and accountability arrangements in WSSD include the Anti-Corruption Bureau, which enforces the Prevention of Corruption Act, 1988; Audits by the Comptroller and Auditor General (C&AG) of India, the country's premier auditor; Right to Information (RTI) Act - 2005; and WSSD's vigilance function and its grievance redress system (E-Pani). Issues identified under the FSA, as summarized in the following paragraphs, will be addressed through the PAP, and other technical assistance and capacity building measures.

46. *Procurement Systems.* The state has a reasonably well established procurement system for works, which are described in the PWD Manual, including: detailed bid documents that meet the requirements of standard conditions and evaluation criteria; a well-developed evaluation process; and an acceptable performance of an average of 45 days for processing contracts. For procurement of goods, which is limited to the establishment of rate contracts for pipes, the 'Stores Purchase Rules' of GoM apply. Services procurement, which is used rarely, is handled under procurement procedures for works.

47. The assessment of the existing procurement management system and arrangements identified certain areas for improvement through Program support: rules and guidelines that are spread across multiple documents and frequently issued circulars leading to a lack of comprehensive instructions for all steps of the procurement process; inadequate regulations for the procurement of services; possible entry barriers for contractors imposed by the mandatory registration of contractors; need for alternative dispute resolution mechanisms; procurement planning; contract administration; standards for disclosure/transparency; system for procurement monitoring (MIS); and oversight over procurement processes.

48. *Financial Management Systems.* The annual expenditure on the RWSS sector totals about US\$355 million, of which a significant portion (65- 80 percent) is spent through GPs. The balance is spent predominantly by MJP, whose mandate is to cover all large/multi-village schemes. Financial flows have a defined route and funds are periodically released by the Finance Department to the expenditure-making entities, such as MJP, GSDA, and ZPs. ZPs, in turn, release funds to GPs for making payments to contractors. Basic accounting records are maintained at all levels, except at GPs where record-keeping is irregular and weak. Independent and regular audits are conducted at all levels:

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<sup>21</sup> These entities receive funds from the state in the form of grants through the Treasuries and then make payments using commercial banks (with the exception of GSDA).

by the C&AG at state-level institutions; the Local Fund Auditor (attached to the Finance Department) at the ZP level; and firms of Chartered Accountants at the GP level.

49. Financial management performance is constrained by several issues: MJP follows a single entry system of accounting, which is not guided by clear rules; MJP audit reports show several recurring observations, in addition to the audits being regularly delayed; the level of ZPs’ oversight and control over GPs (need for fiduciary controls without being burdensome, but allowing independence of GPs); all releases to GPs are recorded and reported as expenditure, although expenditure may be incurred after weeks/months; and, at the GP level, audit acts only as a post control measure and the audit process is not standardized. The audit arrangements which are applicable for the Program are shown in Table 3.

**Table 3: Program Audit Arrangements**

Scope of Audit	Responsibility	Remarks
Financial Statement Attest Audit	C&AG	Audit of Program financial statements
Other state-wide audit mechanisms which would also review this Program:		
Annual C&AG audits of GoM accounts – certification of financial statements, opinion and observations on performance of the state, performance audit of select departments/ schemes	C&AG	Financial statements and performance aspects
Local Fund Audit of ZPs	Local Fund Auditor	Audit covering financial statements and propriety aspects of ZPs
Audit of GPs by Chartered Accountants	Chartered Accountant firms	Audit of sub-project implementation as per standard ToR

50. *Governance and Accountability Systems.* The Anti-Corruption Bureau (ACB) has jurisdiction over all employees of the state government. The ACB has only an investigative mandate and conducts inquiries into cases referred by government departments, the state Ombudsman (Lok Ayukta) as well as complaints filed by citizens on bribery, corruption, criminal misconduct, embezzlement of government money and other corrupt practices by public officials.

51. Each line department or ministry is required to conduct preliminary enquiries on misconduct by its employees. Only a few departments in Maharashtra, such as the Public Works and Water Resources Departments, have assigned this fiduciary responsibility to a Vigilance Officer, based on the GoI model. WSSD does not have a similar vigilance cell. WSSD handling of corruption cases internally is neither codified/formalized nor recorded/disclosed. The PAP proposes identification of an officer, with a clear mandate and designated responsibility for handling any allegation of fraud and corruption, supported by an established cell. The Terms of Reference (ToR) of the officer, along with an annual report on the discharge of the vigilance function, will be disclosed regularly. All allegations of irregularities under the Program will be conveyed to WSSD.

52. Other governance and accountability mechanisms include: (i) C&AG audit, the scope of which includes both the prevention and detection of fraud and corruption; (ii) WSSD will disclose information and respond to requests for information in line with the RTI Act of 2005, through its head office and a network of more than 250 Public Information Officers across the state; and (iii) WSSD’s grievance redress system (E-Pani) records and responds to complaints relating to the sector and the

Program will strengthen the same as appropriate. The PAP addresses strengthening of the vigilance function and the grievance redress mechanism (see Table 5, Action #1).

53. *Applicability of Anti-Corruption Guidelines of the Bank for the Program.* Reflecting its long-standing commitment to transparency and accountability, Maharashtra is fully committed to ensuring that the Program's results are not tainted by fraud or corruption. Through the Program's legal documents, India (as the recipient of the IDA financing) and Maharashtra are formally committed to the obligations under the Anti-Corruption Guidelines for PforR operations. In particular, in the context of this Program, Maharashtra has agreed to report to the Bank any credible and material allegations of fraud and/or corruption regarding the Program as part of the overall Program reporting requirements. The Bank will inform the recipient and Maharashtra about any allegations that it receives. Maharashtra has also agreed to ensure, through regular Program audits, that persons or entities debarred or suspended by the Bank are not awarded a contract under the Program during the debarment or suspension period.

54. The Bank's right to investigate allegations regarding the Program's activities and expenditures, and the related access to required persons, information, and documents will be observed in accordance with the standard arrangements for this purpose between GoI and the Institutional Integrity (INT) unit of the Bank.

### **C. Environmental and Social Effects**

55. An Environmental and Social Systems Assessment (ESSA) of the Program was undertaken by the Bank as per the requirements of Bank OP/BP 9.00. The methodology of the ESSA included analysis of GoM's program information and data, field reviews, field study and consultations. The assessment shows that the state's environmental and social systems are adequate for Program execution, with implementation of identified actions to address the gaps and enhance performance during implementation.

56. *Environmental Systems.* The state has well-defined legal/regulatory systems for safeguarding water resources and ecologically significant areas from pollution; protection of groundwater sources from interference; exclusion of activities that are likely to have significant adverse impacts on eco-sensitive areas, coastal areas and wetlands; and construction activities located in the vicinity of forests and protected monuments. However, implementation of existing provisions faces challenges due to multiple regulations, overstretched regulatory authorities, and weak monitoring. This calls for building capacities and streamlining the adoption of existing regulations/rules. The state system includes initiatives for enhancing source sustainability, certification of water quality for new schemes and water quality monitoring, with scope for further mainstreaming and strengthening.

57. *Environmental Benefits and Risks.* Risk screening suggests that the overall environmental impact of the Program is likely to be positive, owing to benefits such as improved access to safe water and enhanced availability of water. However, risks that can emerge due to improper location, planning, execution and management of schemes are: source un-sustainability, poor water quality, contamination from poorly designed/managed specific water quality treatment units, impacts on natural and cultural heritage sites located nearby, occupational and public safety risks, dam safety in certain cases, and water wastage. Hotspots for environmental management are areas having overexploited and critical groundwater status, poor groundwater and surface water quality, chronically drought prone areas and areas in the proximity of protected natural areas and monuments. Actions agreed to address

environmental risks and gaps in existing systems are: (i) criteria to exclude certain high-risk interventions from the Program; and (ii) a Program Action Plan to strengthen the existing system for environment management (Action #12). Details are in Annex 6.

58. *Social Systems.* The assessment reviewed the state's social policies and procedures and their implementation, and found them to be generally adequate for the Program. The state provides an enabling policy and legal framework to promote: decentralized service delivery, active participation of women, and safeguarding the interests of vulnerable sections (including for scheduled caste and scheduled tribe communities) for targeted support. Special provisions, such as membership on VWSCs, BLSCs, SACs, special women's Gram Sabhas, etc., enable gender inclusion and empowerment.

59. *Social Benefits and Risks.* Findings of the ESSA suggest that the overall social impact of the Program is likely to be positive, owing to benefits such as savings in time spent in collecting water for women and girls, improved health and personal hygiene, effective information dissemination, enhanced community participation, creation of accountable arrangements for service delivery, and social audits to promote good governance mechanisms. Social risks associated with the Program are low, given the nature of the Program, which supports the goals of GoM to enhance decentralization, and promote participation, inclusion, transparency and accountability. The limited risks include:

- a) Subjectivity in selection of districts and GPs.
- b) Land requirements will depend on the nature of investments and can be worked out only after the identification of schemes.
- c) Elite and/or male capture of institutions such as the VWSC and GP. The risk of the VWSC sidelining the GP. Higher tariffs that are burdensome for the poor and vulnerable. Difficulty of obtaining community contributions.
- d) The community stakeholders' perception of weak participatory decision-making, lack of transparency and accountability, and poor conflict management.

60. To address these risks, efforts will be made to: (i) recognize the 'social processes' as one of the core principles of sustainability and ensure that socially and economically weaker sections are brought within the fold of the Program; (ii) implement integrated sub-project scheme cycle, covering technical, social and environment processes; (iii) build capacity of communities to conduct social audits during the project cycle to enhance social accountability of delivery of services through tools such as citizen's feedback, score cards, or checklists; and (iv) provide adequate human resources.

61. The limited adverse impacts associated with land requirement would be addressed by adopting measures suitable to each community. In this regard, the decentralized decision making process to ensure availability of land has been managed effectively under government programs. GoM will build on lessons learned under these programs that provide flexibility to the community to adopt suitable mechanisms to compensate for losses, if any. However, for Peri-urban villages, this approach will be reviewed in year 1 to affirm that the Program does not adversely impact people leading to loss of livelihood. PAP Action #12 covers the measures to address social challenges/gaps. Annex 6 has further details.

## D. Integrated Risk Assessment Summary

62. *Risk Rating Summary.* Table 4 shows the summary risk ratings. The overall risk rating of the Program is “moderate”, because: Maharashtra is an advanced state in India for the RWSS sector; this is the third engagement for the Bank in the sector in Maharashtra; and there is adequate institutional capacity building and technical assistance support under the Program. Detailed risk assessment and proposed mitigation measures are provided in Annex 7.

**Table 4: Risk Rating Summary**

<b>Risk</b>	<b>Rating</b>
Technical	Moderate
Fiduciary	Substantial
Environmental and Social	Moderate
DLI	Substantial
<b>Overall Risk</b>	<b>Moderate</b>

## E. Program Action Plan

63. GoM has agreed to undertake the set of actions summarized in Table 5 to improve Program execution and increase the likelihood of achieving Program results. These actions arise from the gaps identified by the assessments (technical, fiduciary systems, and environmental and social systems) carried out by the Bank, and draw on lessons from previous Bank engagements in the RWSS sector in Maharashtra. These actions are grouped under four categories: cross-cutting; technical and institutional; fiduciary; and environmental and social. Details of implementation responsibility, timing and measurement of these actions are provided in Annex 8. Further details are spelled out in the Program Manual.

**Table 5: Program Actions**

<b>Cross-cutting Actions</b>	
1	Strengthen existing complaint and grievance redress and vigilance mechanisms within WSSD at the state level to handle complaints related to procurement, financial management, service delivery, environmental and social, and fraud and corruption issues under the Program. Information on complaints received and remedial actions taken will be aggregated annually and publicly disclosed.
2	Prepare and implement an annual Capacity Development Plan for key sector institutions (DWSSM, WSSO and BRCs) focused on developing both individual competencies and collective capabilities (resources, tools and assets).
<b>Technical and Institutional Actions</b>	
3	Strengthen RWSS planning processes in Year 1 and review their effectiveness in Year 3 and Year 5.
4	Establish and institutionalize a technical and administrative back-up support mechanism for GPs/VWSCs.
5	As part of the state's M&E system, establish a system to monitor the "schedule performance" (extent of compliance with time schedules) of completed rural water supply schemes.
6	Strengthen institutions to better manage the sanitation program of the state, assess areas of weakness and shortfall (particularly in relation to ODF slip back), and take mitigation actions as needed.
7	Prepare and adopt a comprehensive Human Resources policy for the sector to attract and retain talent/skills, and review and revise the O&M policy based on comprehensive diagnostics of affordability and complexities of schemes.
<b>Fiduciary actions</b>	
8	Compile the rules and procedures on procurement, including for the selection of consultant services, into a comprehensive procurement manual for the RWSS sector, and adopt it.
9	Conduct procurement post-review on a regular basis, covering at least 15% of contracts issued each year in the RWSS sector.
10	Establish double-entry accounting system at all levels in MJP, including simplification of formats for annual audited financial statements and development of entity Financial Management Manual.
11	Establish a system to report information on actual expenditure at GPs/VWSCs; carry out district-level and GP-level audit as per specific ToR.
<b>Environmental and Social</b>	
12	Implement strengthened environmental and social management rules and procedures for the Program, supported by necessary capacity building measures for sector institutions.

## **Annex 1: Detailed Program Description**

### **INDIA: Maharashtra Rural Water Supply and Sanitation Program**

#### **Program Development Objectives**

1. The proposed Program is a subset of GoM's existing program of investment in the RWSS sector. The Program development objective is *to improve the performance of Maharashtra's sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas*. The Program will be implemented over a six-year period, during 2014-20. GoM has identified the following medium-term goals for World Bank support under the Program: (i) strengthening planning and monitoring in the sector; (ii) strengthening capacity for government's RWSS program implementation and sustainability; (iii) increasing access to quality and sustainable water and sanitation services in peri-urban villages; and (iv) increasing access to safe drinking water in water-stressed and water quality-affected areas.

#### **Scope of the Program**

2. The scope of the Program consists of two primary categories of activities: (i) institutional capacity building for planning, implementation, and monitoring of the RWSS sector across Maharashtra; and (ii) in select districts, implementation of (a) Water supply and Sullage management service improvement in peri-urban villages, and (b) Water Supply service improvement and improved groundwater management practices in water-stressed and water-quality-affected areas. The indicative list of activities to be supported under these two categories is summarized below:

##### *Category 1: Institutional Capacity Building for Planning, Implementation and Monitoring of the Sector across the State*

- a) Strengthening the current monitoring and evaluation (M&E) system for the sector to capture timely and reliable information on sector activities, covering key sector performance indicators, fiduciary performance indicators and project/contract management performance indicators.
- b) Strengthening RWSS planning processes, including the preparation of a five-year sector strategic plan for the state; and development and dissemination of tools and guidelines for improving the quality and consistency of district annual plans with GoM strategic priorities.
- c) Strengthening implementation capacity of sector institutions at various levels (state, district and block) through additional HR, streamlining of roles and accountabilities, improving the efficiency of funds flow, developing individual competencies and collective capabilities (resources, tools and assets) that would enable each agency/unit to perform its functions effectively, efficiently and in a sustainable manner.
- d) Strengthening program management capacity at all levels through additional external technical assistance and other support, as required, for all major business processes related to the functioning of the Program, including technical, fiduciary, social and environment processes.
- e) Strengthening water testing laboratories (at state, district and sub-district levels) for undertaking water quality monitoring and surveillance as per GoI/GoM defined protocols.
- f) Restructuring the Maharashtra Environmental Engineering Training and Research Academy (MEETRA) of WSSD, administered by MJP, and establishing it as a premier training institute for the sector.



- g) Strengthening GSDA's capacities for comprehensive monitoring of groundwater quantity and quality to enable better water security planning.
- h) Strengthening sustainable sanitation initiatives by improving NBA program implementation across the state.
- i) Strengthening the governance and accountability systems of the sector, including grievance redress and vigilance mechanisms at the state level, and SACs at the GP level.
- j) Impact assessment (building on impact evaluations under the previous World Bank engagement in the sector) to better assess the impact of the Program and government program initiatives.

*Category 2: Water supply and Sanitation Service Improvements in selected districts*

3. Program support under this category would be limited to selected districts (at least 12), representing all six administrative divisions of the Maharashtra (that is, two districts per region). Districts and GPs would be selected based on transparent, pre-defined and demand-driven criteria (see Tables 1.1, 1.2 and 1.3) as agreed at Appraisal. The indicative list of activities to be supported is summarized below:

- a) Construction, rehabilitation, augmentation and extension of existing water supply systems and construction of new sullage management schemes in peri-urban villages. GoM's ongoing program of NBA for household sanitation will be integrated with sullage management under the Program. This will help to demonstrate new technical and management models of delivering GoM defined quality and sustainable water and sanitation services in peri-urban villages, which is a key challenge faced by the state.
- b) Scaling up of sustainable groundwater management practices in critically exploited aquifers of the state in the selected districts, through the application of the successful Aquifer level Groundwater Management Initiative (AWMI) consisting of technical measures for ground water improvement and collective demand management measures by the community, that were introduced under the previous Bank-supported project. This will help to build capacities for the integration of groundwater management into water service improvement in water-stressed areas.
- c) Construction or rehabilitation of water schemes in water-stressed and water quality-affected areas in the selected districts through water quality improvement measures (such as recharge and dilution of ground water or any other feasible technology) and addressing water security through rainwater harvesting measures. This intervention is included in the Program, to demonstrate that improved service delivery can be achieved through the application of better planning and implementation processes in water-stressed and water quality-affected areas (especially in small, remote habitations), which is one of the key challenges faced by the state.

**Table 1.1: District Selection Criteria**

Parameter	Criteria	Source of Data
<b>Technical</b>	<b>Peri-urban areas</b> (Number of Municipal Corporations, Councils & Nagar Panchayats)	Census 2011
	<b>Water Quality affected habitations</b> - Chemical (Number of sources with single chemical contamination e.g., Iron, Fluoride, Salinity, Nitrate, Arsenic & Others)	MDWS data
	<b>Status of Ground Water Exploitation</b> - Number of Over exploited, critical & semi-critical watersheds	GSDA data
<b>Social</b>	<b>Coverage with sanitation</b> - % of households with individual household sanitary latrines	Census 2011
<b>Proactiveness</b>	<b>Water Tariff collection efficiency</b>	RDD data
	<b>Nirmal Gram Puraskar GPs</b>	MDWS data

**Table 1.2: Village Selection Criteria for peri-urban GPs<sup>22</sup>**

Norm/ Criteria	Max. Marks	Evaluation Process	Allotment of Marks
Percentage of individual household toilets	<b>20</b>	Based on actual percentage	(20 x Toilet %)
Source of existing piped water supply	<b>15</b>	Surface source / Tapping (other than RR scheme)	15
		Other source	0
Per capita availability of water in liters per capita per day (lpcd)	<b>10</b>	31 to 40 lpcd	10
		21 to 30 lpcd	8
		11 to 20 lpcd	6
		0 to 10 lpcd	4
Age of existing scheme (of the latest scheme executed)	<b>15</b>	More than 20 years	15
		16-20 years	12
		11-15 years	9
		5-10 years	6
Affordability (eligible Above Poverty Line population)	<b>10</b>	Population 51 to 100%	10
		Population 26 to 50%	07
		Population 0 to 25%	04
Social Mobilization Indicator e.g., Nirmal Gram Puraskar (NGP), Sant Gadgebaba Award etc. (Only the highest award will be considered.)	<b>10</b>	NGP	10
		Other - National/ State award	08
		Regional award	06
		District award	04
		No Award	00
Tariff Collection	<b>10</b>	100% and above	10
		76%-99%	08
		51-75%	06
		26-50%	04
		0-25%	02
Sanitation Survey (Latest)	<b>10</b>	Green Card	10

<sup>22</sup> The criteria and selection will be applied to peri-urban villages based on techno-economic feasibility considerations.

Norm/ Criteria	Max. Marks	Evaluation Process	Allotment of Marks
		Yellow Card	5
		Red Card	0
Total	<b>100</b>		

**Notes:**

- Population and household figures will be as per the latest Census figures available.
- All figures to be certified by Gramsevak & BDO.
- The selection of GPs will be on the basis of the marks obtained.

**Table 1.3: Village Selection Criteria for Water-stressed Villages**

Norm/ Criteria	Max. Marks	Evaluation Process	Allotment of Marks
Percentage of individual household toilets	40	Based on percentage	(40 x Toilet %)
Average Rainfall in the block	30	Less than 25% of district average	30
		26 to 50% of district average	25
		51 to 75% of district average	20
		76 to 99% of district average	15
		Equal to district average	10
		More than district average	00
Tanker supply in last 3 years	30	Tanker supply for all 3 years	30
		Tanker supply for any 2 years	20
		Tanker supply in any year	10
		No tanker supply	00
	<b>100</b>		

**Notes:**

1. Population and house hold figures will be as per the latest census.
2. All figures to be certified by Gramsevak & BDO.
3. Marks obtained by habitations of the GP will be averaged.
4. Selection of GPs will be on the basis of marks obtained.

*Program Exclusions*

4. The Program will exclude activities that, in the opinion of the Bank, are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people; or involve procurement of (i) works, estimated to cost US\$50 million equivalent or more per contract, (ii) goods, estimated to cost US\$30 million equivalent or more per contract, (iii) non-consulting services, estimated to cost US\$20 million equivalent or more per contract, and (iv) consultant services, estimated to cost US\$15 million equivalent or more per contract. Investments that will be excluded from the Program due to their high environmental risks include: (i) schemes that involve construction or rehabilitation of dams which are greater or equal to 10 meters in height; (ii) groundwater-based schemes in overexploited and critical basins that do not integrate source sustainability measures; and (iii) schemes involving highly polluted surface water sources.

## Program Costs and Financing

5. The estimated funding envelop for the Program is US\$235 million (Table 1.4). This includes commitment from GoM of US\$70 million and the proposed Bank support of US\$165 million. All funding (regardless of source) will flow through a distinct WSSD budget line, and there will be no difference between GoM funding and Bank support at the level of Program implementation.

**Table 1.4: Program Costs and Financing**

Category	Amount (US\$ Million)	% of Total
<b>Estimated Program Expenditures</b>		
Institutional capacity building for planning, implementation, and monitoring of the RWSS sector across Maharashtra.	64.6	27
In select districts, implementation of: (a) Water supply and Sullage management service improvement in peri-urban villages; and (b) Water Supply service improvement and improved groundwater management practices in water-stressed and water-quality-affected areas.	170.4	73
<b>TOTAL estimated expenditures</b>	<b>235</b>	<b>100</b>
<b>Program Funding Sources</b>		
International Development Association (IDA, via WSSD budget line)	165	70
GoM (via WSSD budget line) and community	70	30
<b>TOTAL Sources</b>	<b>235</b>	<b>100</b>

## Implementation Arrangements

6. Program implementation is fully embedded in the existing institutional framework of the sector (see Annex 4 for details) as shown in Table 1.5. The role of each agency/unit is summarized as follows:

- a) WSSD will be responsible for overall Program management in coordination with WSSO, MJP, GSDA and PHD. An SLPCC will be set up by WSSD in the first few months of program commencement for regular coordination across these institutions. SLPCC will be supported by a PMU, which has been in place since the previous project.
- b) The PMU and WSSO will jointly oversee capacity building of sector institutions, as well as the development and implementation of strengthened M&E systems for the sector.
- c) MJP and ZPs will implement planning, design and execution of infrastructure projects as per the prevailing state guidelines.
- d) GSDA will implement aquifer management activities in coordination with ZPs and concerned GPs through Aquifer Water Management Associations (AWMAs - apex bodies of VWSCs of GPs falling within a given aquifer). GSDA will also be responsible for implementing its own capacity building activities, in coordination with WSSO.
- e) PHD will strengthen laboratories at state, district and block levels.
- f) ZPs will take the lead in social mobilization and IEC activities through the Deputy CEO responsible for the DWSM unit, as well as through BRCs and VWSCs.
- g) A DLPCC, headed by the CEO of the district, will be formed to coordinate Program activities of various institutions at the district level.

**Table 1.5: Institutional Arrangements for Program Implementation**

	<b>Activity</b>	<b>Institutional Arrangements</b>
1	Overall program Lead	<ul style="list-style-type: none"> <li>• Led by WSSD and supported by WSSO, MJP, GSDA, and PHD.</li> <li>• Principal Secretary, WSSD will have overall strategic Program oversight.</li> <li>• WSSD will be accountable for Program management and reporting.</li> </ul>
2	Monitoring and Coordination	<ul style="list-style-type: none"> <li>• Deputy Secretary, WSSD, acting as the Program Director, will provide Program direction and monitor implementation.</li> <li>• Program Manager, PMU will have day-to-day implementation monitoring role.</li> <li>• SLPCCs, headed by the Principal Secretary, WSSD, will coordinate between WSSO, MJP, GSDA, PHD and other units and resolve issues.</li> <li>• RCMUs in all six administrative regions of the state will play a key role in close monitoring of activities in the districts of the region. These units will be headed by Deputy Development Commissioners in the Regional Office of GoM.</li> <li>• DLPC, headed by CEO, ZP, will coordinate Program activities at the district level between DWSM, RWS Division, MJP division office, GSDA division office, DPHL and other units.</li> </ul>
3	All water supply schemes in peri-urban villages/GPs	<p>ZP/MJP as defined in Program Manual</p> <p>(a) Led by MJP, the state technical agency for water supply</p> <ul style="list-style-type: none"> <li>• MJP will create a dedicated unit at the state level with adequate capacity for monitoring these projects.</li> <li>• MJP's district units will lead the technical work and will work with concerned GPs and ZPs to ensure adequate community participation and capacity building of GPs for future O&amp;M, including exploring options for O&amp;M through local professional operators.</li> </ul> <p>(b) Led by ZP units (Rural Water Supply Division and Deputy CEO under DWSM)</p> <ul style="list-style-type: none"> <li>• In both cases above, social audit and community interactions (through ward committees) will be improved to enhance community involvement and ownership during planning, implementation and O&amp;M.</li> </ul>
4	All groundwater management interventions (including aquifer level groundwater management interventions)	<ul style="list-style-type: none"> <li>• Led by GSDA and supported by ZPs and GPs</li> <li>• GSDA will create a dedicated unit at the state level for coordination of these projects and will mobilize the required geologists. It will be monitored by the Director, GSDA and the Program Manager.</li> <li>• GSDA's own institutional development plan will be implemented and managed under the leadership of the Director, GSDA. This capacity addition will happen in the first two years of the Program leading to improved reach and periodicity of groundwater monitoring for quantity and quality aspects.</li> </ul>
5	Rainwater harvesting tanks, water quality intervention and water treatment units	<ul style="list-style-type: none"> <li>• RWS division offices in ZPs (headed by Executive Engineers) working along with the Deputy CEO for IEC and capacity building activities will be responsible for the design and implementation of limited rehabilitation, treatment interventions and rainwater</li> </ul>

	<b>Activity</b>	<b>Institutional Arrangements</b>
	(CSSWS)	harvesting tanks, in coordination with GPs. GSDA will provide necessary technical assistance in groundwater surveys, types of structures to be built and their location. GSDA and RWS division will be jointly responsible for water quality interventions and treatment units.
6	Water quality laboratory strengthening, <ul style="list-style-type: none"> <li>• PHD Labs</li> <li>• GSDA Labs</li> </ul>	<ul style="list-style-type: none"> <li>• The office of Deputy Director, Laboratories of PHD will take the lead in the strengthening of district and block-level laboratories. This unit will also be responsible for testing water samples as per water testing protocols of GoI/ GoM.</li> <li>• Monitored by the Program Manager and WSSO.</li> <li>• A key activity of the plan is the construction of 138 sub-division laboratories within the premises of rural hospitals. These laboratories will be built within the first two years of the Program. Staff for these laboratories has already been recruited by PHD. With the addition of these laboratories, PHD will be able to meet the target set out in water quality monitoring protocols for the state.</li> <li>• Director GSDA will take lead in strengthening the regional level WQ labs of GSDA.</li> <li>• NABL Accreditation led by Director GSDA.</li> </ul>
7	Strengthening MEETRA	<ul style="list-style-type: none"> <li>• MEETRA is an autonomous sector training agency under WSSD, set up and nurtured by MJP. WSSD aims to strengthen MEETRA to make it a center of excellence for training and applied research. MJP will support MEETRA in these efforts. A detailed strategy and plan of action will be developed in the first six months and the plan will be implemented in the first two years of the Program. A strengthened MEETRA will be able to offer crucial capacity building support for key stakeholders across the state.</li> </ul>
8	Other sector strengthening activities (M&E, capacity development and communications)	<ul style="list-style-type: none"> <li>• Implemented by the PMU and WSSO and monitored by SLPCC.</li> </ul>
9	Social aspects	<ul style="list-style-type: none"> <li>• The DWSM cell within ZPs (under a Deputy CEO) will be responsible for all social development, gender and communication aspects through its team, BRCs and a contracted SO, as required. The DWSM cells will hire additional staff within six months of Program start up.</li> <li>• DLPC, under the leadership of CEO (ZP), will closely monitor and coordinate with all implementing units. This committee will be set up in the Program districts immediately after Program launch.</li> <li>• The DWSM cell will work on the social aspects of the Program in the Program districts. In addition, within six months of implementation start up, qualified Support Organizations will be hired by the DWSM cell to support GPs on social mobilization and communication</li> </ul>

	<b>Activity</b>	<b>Institutional Arrangements</b>
		<p>activities. Members from BRC will be assigned to work in GPs to promote social mobilization on CSSWS. At the GP level, VWSC will lead and support MJP/ ZP in these activities, SACs will be trained to oversee the quality of works as well as inclusion and equity aspects of service delivery.</p> <ul style="list-style-type: none"> <li>• The PMU and WSSO will take the lead on coordinating capacity building and monitoring implementation of the strengthened social management rules and procedures.</li> </ul>
10	Environmental aspects	<ul style="list-style-type: none"> <li>• MJP, ZPs and GSDA will take the lead in addressing environmental issues based on strengthened environmental and social management rules and procedures adopted for the Program. Key technical and managerial staff of MJP/GSDA as well as ZPs and GPs will be trained on environmental management based on the Environmental Management Manual of GoM.</li> <li>• The PMU and WSSO will take the lead on coordinating capacity building and monitoring implementation of the strengthened environmental and social management rules and procedures.</li> </ul>
11	Procurement	<ul style="list-style-type: none"> <li>• Procurements &gt; INR5 crore (about US\$0.8 million) for single village schemes and &gt;INR3 Cr for multi village schemes will be managed by MJP, and &lt; INR5 crore for single village schemes and &lt; INR3 Cr for multi village schemes will be managed by ZP as per GoM guidelines, or as updated in the Program Manual.</li> <li>• GPs will be supported by RWS divisions of ZPs.</li> <li>• Social audit mechanisms and information dissemination systems will be strengthened to ensure community involvement at critical stages of procurement.</li> </ul>
12	Financial management	<ul style="list-style-type: none"> <li>• Financial management will be carried out by MJP/ZPs for large schemes. For other activities, funds will be managed at the ZP level and at PMU/WSSO.</li> </ul>
13	Performance audits and DLI verification	<ul style="list-style-type: none"> <li>• WSSD will hire a specialist entity to undertake annual performance audits of Program activities and DLI verification. Internal evaluation mechanisms used under the earlier Bank project (e.g., peer-to-peer evaluations) will also be strengthened. The Program also aims to strengthen M&amp;E systems, introduce service level benchmarking systems and social audits. These will also assist in the effective conduct of performance audits.</li> </ul>

## Annex 2: Results Framework Matrix

### INDIA: Maharashtra Rural Water Supply and Sanitation Program

1. The Program's overall Results Framework is shown in Table 2.1. It should be read in conjunction with the definitions below.

2. **A strengthened M&E system** is one that is able to capture and analyze, either in an integrated fashion or in separate modules, a minimum set of indicators on: (i) *sector performance*, including the number of water schemes constructed, people/habitations that are fully covered by improved water sources, household connections, per capita investment costs, functionality of water schemes, hours of service and water quality, number of households and institutions having access to a toilet, GPs attaining and sustaining ODF and clean status, etc.; (ii) *fiduciary performance*, including budget variance, time efficiency of funds flow, timeliness of recording expenditures and account reconciliations, average length of procurement processes, number of bidders and bid responsiveness, and processing time for contractor payments; and (iii) *project/contract management performance*, including the schedule and cost performance of rural water supply schemes.

3. **Full implementation of a strengthened M&E system** will be judged when the district CEO provides a letter confirming that: (i) the system has been installed and is functional as per requirements and specifications; (ii) training has been undertaken; (iii) a team has been appointed in the district to be in charge of the M&E system, and has verified all previous years' data in the system; and (iv) at least one annual performance report has been prepared and submitted to WSSD, covering the minimum set of indicators outlined above, together with a short narrative on any performance shortfalls and an action plan to address the shortfalls.

4. **GoM's demand-responsive approach.** A rural water supply scheme is considered to have followed GoM's demand-responsive approach if the following minimum conditions are satisfied:

- Schemes follow the standard project cycle as used in the Jalswarjya-1 project, and as amended from time to time by WSSD, based on experience;
- A VWSC is established as per GoM guidelines and has received appropriate training in planning, implementation and O&M of the scheme; and
- Women are involved in the planning, implementation and operation of the scheme, through representation on VWSC or other means.

5. **Schedule performance index** is the ratio of time planned and time taken to complete a rural water supply scheme. A scheme is considered completed if the following is satisfied: (i) it is physically completed and commissioned by the relevant engineering officer; and (ii) a financial closure audit has been undertaken and the standard WSSD Exit Checklist has been followed as per GoM procedures.

6. **Sustainable O&M mechanisms.** A GP is considered to be using sustainable O&M mechanisms for water supply, if the following minimum conditions are satisfied:

- The GP is fully covered for water supply as per GoM guidelines;
- A formal management model has been decided by the GP and is functioning as per the O&M guidelines established by WSSD;
- There is an annual assessment of O&M costs and tariff collections;



- The VWSC is receiving administrative and technical backup support from the state/district/block teams and there is a record of support provided;
- There is a proper record of water supply assets, and records of O&M expenditure, revenues and/or subsidies, number of users and hours of service; and
- Biannual SAC audits on inclusion, participation, transparency and service quality are conducted and findings shared in the Gram Sabha.

7. **Sanctioned staff positions** are those that have been approved by GoM.

8. **Key sector institutions** means WSSO, DWSSM and BRCs.

9. **A Capacity Development Plan** means a plan that is based on a balanced assessment of the capacity development needs of key sector institutions. The capacity development plan must not only focus on individual staff training, but must address a combination of individual competencies and collective capabilities (resources, tools and assets) that would enable each agency/unit to perform its functions effectively and efficiently.

10. **Implementation of the Capacity Development Plan in any unit/agency** will be judged when the head of the unit/agency has provided a letter confirming that: (i) WSSO carried out consultations with the unit/agency in preparing the annual capacity development plan; and (ii) a balanced set of capacity development activities focusing on individual competencies and collective capabilities have been implemented during the year.

11. **Aquifer Level Groundwater Management Initiatives (AWMIs)** refer to selected aquifer areas in which various structural (physical interventions) and non-structural (demand management/conservation) measures are implemented with the involvement of the community and with the objective of improving the sustainability of groundwater management to enhance drinking water security. AWMIs will be considered successfully implemented if the following conditions are satisfied:

- Aquifer boundaries are clearly designated through technical assessments;
- Social intermediation is done to raise awareness of the community on groundwater management, form Aquifer Water Management Associations, get buy-in for interventions, which may include: structural measures (earthen bunds/weirs/water retaining structures to retain water and recharge groundwater); non-structural measures (water budgeting, regulation of water use, adoption of efficient cropping pattern, etc.);
- Baseline indicators (which should include, at a minimum, groundwater availability and net available water from run-off) are measured;
- Interventions (structural and non-structural) are planned and implemented with the active involvement of the community;
- Post implementation assessments are made to check benefits; and
- The AWMI has resulted in an increment in groundwater (or at least does not show reduction) in the aquifer area.

12. **Open defecation free status** refers to a status where every household of the GP has access to an improved toilet and is using it regularly with no trace of open defecation practiced by any household member, as measured and confirmed by GoM/GoI's verification methods.

13. **Commissioned water supply system** is one which is physically completed and certified by the responsible engineering officer.

14. **Sustainable water supply systems** are those which are being operated under a formal management model; have 100 percent household meters installed; have net revenues from water tariffs and/or GoM subsidies that are sufficient to cover at least the O&M costs of the system.

15. **Sustainable sullage collection and safe disposal systems** are those which: (i) collect sullage generated from households, treat and dispose sullage according to GoM/GoI environmental standards and norms as per the village sanitation plan; and (ii) are operated and maintained under a formal management model, with net revenue and/or GoM subsidies that are sufficient to cover at least the O&M costs of the system.

16. **Regular water service** means continuity of water supply of minimum water quality standard for 8 hours per day at a minimum pressure of 7.0 meters (at predetermined points in the distribution network) for no less than 300 days in a year, unless the service area is declared a drought-affected zone.

17. **Minimum water quality standard** means that water quality complies with GoM's water quality standards.

18. **Community Safe and Secure Water System (CSSWS)** is a single village water supply system that satisfies the following minimum conditions:

- The system is located in an area that is categorized as water-stressed or water quality-affected, in accordance with established GoM criteria;
- The system delivers potable drinking water that complies with GoM's minimum water quality standards;
- The system provides a minimum quantity of safe drinking water as per GoM/GoI norms for water-stressed and water-quality affected areas;
- The system was implemented in line with GoM's demand-responsive approach; and
- A formal management model decided by the GP is functioning as per the O&M guidelines established by WSSD.

**Table 2.1: Results Framework**

<b>Program Development Objective:</b> to improve the performance of Maharashtra’s sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water–stressed and water quality-affected areas.													
PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y 5	Y6			
<b>PDO Indicator 1:</b> Number of districts using improved planning processes and strengthened M&E systems	<input type="checkbox"/>	<input type="checkbox"/>	No. of districts	0	0	0	6	15	24	33	Annual	Review of district annual plans; Review of annual performance reports	WSSO
<b>PDO Indicator 2:</b> Percentage of completed rural water supply schemes that followed GoM’s demand responsive approach and exited the implementation process with a schedule performance index of between 0.75 and 1.25	<input type="checkbox"/>	<input type="checkbox"/>	% of rural water supply schemes	0	5	10	15	20	25	30	Annual	Annual performance reports	WSSO
<b>PDO Indicator 3:</b> Number of people in peri-urban villages who are connected to a sustainable water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No. of people	0	0	0	85,120	170,240	255,355	340,000	Annual	Technical field visits, review of MJP reports; annual performance reports and user survey	MJP

<b>Program Development Objective:</b> to improve the performance of Maharashtra's sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas.													
PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y5	Y6			
supply system and receive a regular water service													
<b>PDO Indicator 4:</b> Number of people in water-stressed and water quality-affected areas who have access to a safe drinking water source	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No. of people	0	0	203,000	365,000	471,000	0	0	Annual	Technical field visits,  Annual performance reports and user survey	District RWS division
<b>Intermediate Results Area 1: Strengthened Sector Planning and Monitoring</b>													
<b>Intermediate Results Indicator 1:</b> Strengthened M&E system for the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Actions to strengthen the M&E system	Existing M&E system is limited in scope and is not fully used consistently across the state	WSSD has identified sector-wide M&E needs and formulated a plan for developing a strengthened M&E system, which	WSSD has designed and tested the strengthened M&E system	Strengthened M&E system is fully implemented in at least 10 districts	Strengthened M&E system is fully implemented in at least 20 districts	Strengthened M&E system is fully implemented in all 30 districts	WSSD carries out a review of implementation of the strengthened M&E system and identifies required changes and future needs	Annual	Review of WSSO reports; annual performance reports; CEO letters to WSSD	PMU/WSSO

**Program Development Objective:** to improve the performance of Maharashtra’s sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas.

PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y5	Y6			
					can be implemented across Maharashtra								
<b>Intermediate Results Indicator 2:</b> Improved sector planning process for the sector	<input type="checkbox"/>	<input type="checkbox"/>	Actions to improve planning processes	Existing planning processes lack strategic orientation	WSSD prepares and publishes a five-year sector strategic plan	WSSD develops and disseminates tools and guidelines for improving the quality and consistency of district annual action plans	At least 6 districts are using the improved planning framework and are producing annual action plans that are consistent with sector strategic plan	At least 15 districts are using the improved planning framework and are producing annual action plans that are consistent with sector strategic plan	At least 24 districts are using the improved planning framework and are producing annual action plans that are consistent with sector strategic plan	All 33 districts are using improved planning framework and are producing annual action plans that are consistent with sector strategic plan	Annual	Review of district annual plans	PMU/WSSO
<b>Intermediate Results Area 2: Improved Capacity for Program Implementation</b>													
<b>Intermediate Results Indicator 3:</b> Strengthened capacity of key	<input type="checkbox"/>	<input checked="" type="checkbox"/>	% of sanctioned staff maintained,	An average of 20% of sanctioned	75	75	75	75	75	75	Annual	Review of reports prepared by WSSO, interviews	PMU/WSSO,



**Program Development Objective:** to improve the performance of Maharashtra’s sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water–stressed and water quality-affected areas.

PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y 5	Y6			
sector institutions			trained and equipped every year in key sector institutions (as per Annual Capacity Development Plan for the sector)	positions remains vacant in key sector institutions and there is no needs-based Capacity Development Plan								with staff	
<b>Intermediate Results Indicator 4:</b> Percentage of rural water supply schemes that follow GoM’s demand responsive approach	<input type="checkbox"/>	<input type="checkbox"/>	% of rural water supply scheme	GoM’s demand responsive approach is not followed consistently across the state	15	20	25	30	35	40	Annual	Review of reports prepared by WSSO; review of annual performance reports prepared by districts	WSSO
<b>Intermediate Results Indicator 5:</b> Percentage of GPs that are using	<input type="checkbox"/>	<input type="checkbox"/>	% of GPs	10	15	20	25	30		40	Annual	Review of reports prepared by WSSO; review of	WSSO

**Program Development Objective:** to improve the performance of Maharashtra’s sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water-stressed and water quality-affected areas.

PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y5	Y6			
sustainable O&M mechanisms										35		annual performance reports prepared by districts	
<b>Intermediate Results Indicator 6:</b> No. of AWMIs successfully implemented	<input type="checkbox"/>	<input type="checkbox"/>	No. of AWMIs	6	6	10	14	18	22	24	Annual	Technical field visits; review of reports prepared by GSDA; and user survey	GSDA, aquifer management associations
<b>Intermediate Results Indicator 7:</b> Percentage of GPs that maintain ODF status	<input type="checkbox"/>	<input type="checkbox"/>	% of GPs	10	10	15	20	25	35	40	Annual	Household survey	WSSO
<b>Intermediate Results Area 3: Improved Access to Quality and Sustainable Water and Sanitation services in Peri-urban Villages</b>													
<b>Intermediate Results Indicator 8:</b> No. of house connections to a commissioned water supply system	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No. of house connections	0	0	0	17,024	34,048	51,071	68,095	Annual	Technical field visits, review of MJP reports; annual performance reports and user survey	MJP, IVA
<b>Intermediate Results Indicator 9:</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No. of house connections	0	0	0	0	17,024	34,048	51,071	Annual	Technical field visits, review of	MJP, IVA

**Program Development Objective:** to improve the performance of Maharashtra’s sector institutions in planning, implementation and monitoring of its Rural Water Supply and Sanitation program and to improve access to quality and sustainable services in peri-urban villages, and in water–stressed and water quality-affected areas.

PDO Level Results Indicators	Core	DLI	Unit of Measure	Baseline	Target Values (Cumulative, unless indicated otherwise)						Frequency	Data Source/ Methodology	Responsibility for Data Collection
					Y1	Y2	Y3	Y4	Y 5	Y6			
No. of houses connections to a sustainable water supply system receiving a regular water service			ns									MJP reports; annual performance reports and user survey	
<b>Intermediate Results Indicator 10:</b> No. of houses connections to sustainable sullage collection and safe disposal system	<input type="checkbox"/>	<input type="checkbox"/>	No. of house connections	0	0	0	0	17,024	34,048	51,071	Annual	Technical field visits, review of MJP reports; annual performance reports and user survey	MJP, PMU
<b>Intermediate Results Area 4: Improved Access to Safe Water Drinking Water in Water-stressed and Water Quality-affected Areas</b>													
<b>Intermediate Results Indicator 11:</b> No. of CSSWSs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No. of CSSWS	0	0	250	450	580	--	--	Annual	Technical field visits, and household survey	WSSD, IVA



**Annex 3: Disbursement-Linked Indicators, Disbursement Arrangements and Verification Protocols**

**INDIA: Maharashtra Rural Water Supply and Sanitation Program**

**Table 3.1: Disbursement-Linked Indicator Matrix**

<i>DLI</i>	<i>Total Financing Allocated to DLI (USM)</i>	<i>As % of Total Financing Amount</i>	<i>DLI Baseline</i>	<i>Indicative Timeline for DLI Achievement</i>					
				<i>Year or Period 1</i>	<i>Year or Period 2</i>	<i>Year or Period 3</i>	<i>Year or Period 4</i>	<i>Year or Period 5</i>	<i>Year or Period 6</i>
DLI#1: Strengthened M&E system for the sector	<b>34</b>	<b>21%</b>	Existing M&E system is limited in scope and is not fully used consistently across the state	WSSD has identified sector-wide M&E needs and has formulated a plan for developing a strengthened M&E system, which can be implemented across Maharashtra.	WSSD has designed and tested the strengthened M&E system	Strengthened M&E system is fully implemented in at least 10 districts	Strengthened M&E system is fully implemented in at least 20 districts	Strengthened M&E system is fully implemented in at least 30 districts	WSSD carries out a review of implementation of the strengthened M&E system and identifies required changes and future needs
<b>Allocated amount for DLI#1 (US\$)</b>				<b>1.0</b>	<b>15.0</b>	<b>15.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>
DLI#2: Strengthened capacity of key sector institutions (percentage of sanctioned staff maintained, trained and equipped every year in key sector institutions as per the Annual Capacity Development Plan)	<b>36</b>	<b>22%</b>	An average of 20% of sanctioned positions remains vacant in key sector institutions and there is no needs-based capacity	75	75	75	75	75	75

<i>DLI</i>	<i>Total Financing Allocated to DLI (USM)</i>	<i>As % of Total Financing Amount</i>	<i>DLI Baseline</i>	<i>Indicative Timeline for DLI Achievement</i>					
				<i>Year or Period 1</i>	<i>Year or Period 2</i>	<i>Year or Period 3</i>	<i>Year or Period 4</i>	<i>Year or Period 5</i>	<i>Year or Period 6</i>
			development plan						
<b>Allocated amount for DLI# 2 (US\$ million):</b>				<b>6.0</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>
DLI#3: No. of house connections to a commissioned water supply system	<b>40</b>	<b>24%</b>	0	0	0	17,024	34,048	51,071	68,095
<b>Allocated amount for DLI#3 (US\$ million):</b>				<b>0</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
DLI#4: No. of house connections to a sustainable water supply system receiving a regular water service (targets are cumulative)	<b>25</b>	<b>15%</b>	0	0	0	0	17,024	34,048	51,071
<b>Allocated amount for DLI#4 (US\$ million):</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>12.5</b>	<b>6.25</b>	<b>6.25</b>
DLI#5: No. of CSSWS (targets are cumulative)	<b>30</b>	<b>18%</b>	0	0	250	450	580		
<b>Allocated amount for DLI#5 (US\$ million):</b>				<b>0</b>	<b>12.93</b>	<b>10.35</b>	<b>6.72</b>	<b>0.00</b>	<b>0.00</b>
<b>Total Financing Allocated (US\$ million)</b>	<b>165</b>	<b>100%</b>		<b>7.00</b>	<b>33.93</b>	<b>41.35</b>	<b>36.22</b>	<b>23.25</b>	<b>23.25</b>

**Table 3.2: DLI Verification Protocol**

No.	DLI	Definition/ Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/Result Verification		
				Data Source/Agency	Verification Entity	Procedure
1	<b>DLI#1:</b> Strengthened M&E system for the sector	<ul style="list-style-type: none"> <li>• In Year1, disbursements will be triggered when WSSD has defined sector-wide M&amp;E needs and develops an implementation plan for a strengthened M&amp;E system.</li> <li>• In Year2, disbursements will be triggered when WSSD designs and tests the strengthened M&amp;E system.</li> <li>• In Years 3, 4 and 5, disbursements will be triggered when the strengthened M&amp;E system is fully implemented in at least 10, 20 and all 30 districts, respectively,</li> <li>• In Year 6, disbursements will be triggered when WSSD carries out a review of implementation of the strengthened M&amp;E system and identifies required changes and future needs.</li> </ul> <p><i>A strengthened M&amp;E system</i> is one that is able to capture and analyze, either in an integrated fashion or in separate modules, a minimum set of indicators on: (i) sector performance including the number of water schemes constructed; number of people/habitations that are fully covered with improved water sources, number of household connections; per capita investment costs, functionality of water schemes; hours of service and water quality; number of households having access to a toilet, number of GPs attaining and sustaining ODF and clean status, etc.; (ii) fiduciary performance including budget variance, time efficiency of funds flow, timeliness of recording actual</p>	No	PMU/WSSO	Independent external entity to be contracted by WSSD	<ul style="list-style-type: none"> <li>• In Period 1 and 2, PMU/WSSO to prepare annual progress reports on M&amp;E needs identification and system design and testing.</li> <li>• In Period 3-6, full implementation of a strengthened M&amp;E system will be judged when the district CEO of the ZP provides a letter confirming that: (i) the system has been installed and is functional as per requirements and specifications; (ii) training has been undertaken; (iii) a team has been appointed at the district which will be in charge of the M&amp;E system, and that it has verified all previous year's data in the system; and (iv) at least one annual performance report has been prepared and submitted to WSSD covering the minimum set of indicators outlined above, together with a short narrative on any performance shortfalls and an action plan to address the shortfalls.</li> </ul>

No.	DLI	Definition/ Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/Result Verification		
				Data Source/Agency	Verification Entity	Procedure
		expenditures and account reconciliations, average length of procurement processes, number of bidders and bid responsiveness, processing time for contractor payments; and (iii) project/contract management performance including schedule and cost performance of rural water schemes.				
2	<b>DLI#2:</b> Strengthened capacity of Maharashtra's key sector institutions	<p>Strengthened capacity will be judged by the following: (i) In each fiscal year, WSSD achieves staffing levels in its key sector institutions (WSSO, DWSM cell, and BRCs) at an average level of up to 75% of Sanctioned Positions during the Program period across the state; and (ii) WSSD prepares and implements an Annual Capacity Development Plan focused on developing staff individual competencies and collective capabilities.</p> <p><i>A Capacity Development Plan</i> is one that is based on a balanced assessment of the capacity development needs of key sector institutions (WSSO, DWSM and BRCs). The capacity development plan must not only focus on individual staff training, but must address a combination of individual competencies and collective capabilities (resources, tools and assets) that would enable each agency/unit to perform its functions effectively and efficiently.</p>	Yes, but time-bound (i.e., every fiscal year during the Program )	PMU/WSSO	Independent external entity to be contracted by WSSD	<ul style="list-style-type: none"> <li>• PMU/WSSO to prepare annual progress report on capacity strengthening activities.</li> <li>• Heads of each unit/agency to provide letters confirming that: (i) staffing levels in the key sector institutions have been maintained at an average of 75% of Sanctioned Positions at all times during the Program; (ii) a balanced set of capacity development activities focusing on individual competencies and collective capabilities (resources, tools and assets) are planned and implemented during the year.</li> <li>• Independent verification entity to carry out a desk review of progress reports and letters submitted by the unit/agency heads, and may visit a random sample of 5% of the units to verify the reports.</li> <li>• In year-1, the average shall be counted from July 01, 2014 to March 31, 2015 (since the target agreed at negotiations for</li> </ul>

No.	DLI	Definition/ Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/Result Verification		
				Data Source/Agency	Verification Entity	Procedure
						completion of staff recruitment is June 30, 2014)
3	<b>DLI#3:</b> No. of house connections to a commissioned water supply system	A household water connection will be eligible to count towards the physical targets if the connection is made to a commissioned water supply system  <i>Commissioned water supply system</i> is one which is physically completed and certified by the responsible engineering officer	Yes	Reports from MJP; physical survey and inspection of a sample of connections	Independent external entity to be contracted by WSSD	<ul style="list-style-type: none"> <li>• MJP to prepare implementation progress reports on roll-out of household connections in peri-urban schemes</li> <li>• Independent verification entity to carry out physical inspection of a sample of no less than 5% of connections per scheme in all schemes</li> </ul>
4	<b>DLI#4:</b> No. of house connections to a sustainable water supply system receiving a regular water service	A house water connection will be eligible to count towards the physical targets if the connection is made to a sustainable water supply system with regular water service and minimum water quality standards.  <i>Sustainable water supply systems</i> are those which are being operated under a formal management model; have 100% household meters installed; have a net revenue from water tariffs and/or GoM subsidies that is sufficient to cover at least the O&M costs of the system.  <i>Regular water service</i> means continuity of water supply meeting minimum water quality standard for at least 8 hours per day at a minimum pressure of 7.0 m at predetermined points in the distribution network for no less than 300 days in a year, unless the service area is declared a drought-affected zone.  <i>Minimum water quality standard</i> means the water quality complies with GoM's water quality standards.	Yes	Reports from MJP; physical survey and inspection of a sample of connections	Independent external entity to be contracted by WSSD	<ul style="list-style-type: none"> <li>• MJP to prepare annual operational performance reports for all schemes</li> <li>• Independent verification entity to carry out physical inspection of a sample of no less than 5% of connections per scheme in all schemes, as well as household surveys to validate operational performance parameters.</li> </ul>

No.	DLI	Definition/ Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/Result Verification		
				Data Source/Agency	Verification Entity	Procedure
5	<b>DLI# 5.</b> No. of CSSWS	<p>A scheme is eligible to be counted as a <i>community safe and secure water system</i>, if all the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>(i) The system is located in an area that is categorized as water-stressed or water quality- affected area, in accordance with established GoM criteria</li> <li>(ii) The system delivers portable drinking water as per GoM's minimum water quality standards</li> <li>(iii) The system provides a minimum quantity of safe drinking water as per GoM/GoI norms for water-stressed and water-quality affected areas</li> <li>(iv) The system was implemented in line with GoM's demand-responsive approach</li> <li>(v) A formal management model decided by the GP is functioning as per the O&amp;M guidelines established by WSSD.</li> </ul>	Yes	Reports from ZP; physical survey and inspection of a sample of systems	Independent external entity to be contracted by WSSD	<ul style="list-style-type: none"> <li>• ZP to prepare implementation progress reports on the implementation of schemes, processes used and completion and handing over status.</li> <li>• Independent verification entity to carry out physical inspection of a sample of no less than 5% of systems in each district.</li> </ul>

**Table 3.3: Bank Disbursement Table**

<i>No.</i>	<i>DLI</i>	<i>Bank Financing Allocated to the DLI</i>	<i>Of which Financing Available for</i>		<i>Deadline for DLI Achievement</i>	<i>Minimum DLI Value to be Achieved To Trigger Disbursements of Bank Financing</i>	<i>Maximum DLI Value(S) Expected to be Achieved for Bank Disbursements Purposes</i>	<i>Determination of Financing Amount to be Disbursed Against Achieved and Verified DLI Value(S)</i>
			<i>Prior results</i>	<i>Advances</i>				
	<b>DLI#1:</b> Strengthened M&E system for the sector	34	0	0	Results will be verified annually and reported starting from March 31, 2015	Disbursements will be triggered on verified achievement of all actions in any Year or Period	Full implementation of strengthened M&E system in 30 districts and evaluation of the implementation process and identified required changes and future needs	<ul style="list-style-type: none"> <li>• In Period 1 of Program implementation, an amount of <b>US\$1 million</b> may be made available by the Bank for withdrawal by the Recipient when WSSD has defined sector-wide M&amp;E needs and developed an implementation plan for a strengthened M&amp;E system</li> <li>• In Period 2 of Program implementation, an amount of <b>US\$15 million</b> may be made available by the Bank for withdrawal by the Recipient when WSSD has designed and tested the strengthened M&amp;E system</li> <li>• In Period 3 of Program implementation, an amount of <b>US\$15 million</b> may be made available by the Bank for withdrawal by the Recipient when the strengthened M&amp;E system is fully implemented in at least 10 districts.</li> </ul>

No.	DLI	Bank Financing Allocated to the DLI	Of which Financing Available for		Deadline for DLI Achievement	Minimum DLI Value to be Achieved To Trigger Disbursements of Bank Financing	Maximum DLI Value(S) Expected to be Achieved for Bank Disbursements Purposes	Determination of Financing Amount to be Disbursed Against Achieved and Verified DLI Value(S)
			Prior results	Advances				
								<ul style="list-style-type: none"> <li>• In Period 4 of Program implementation, an amount of <b>US\$1 million</b> may be made available by the Bank for withdrawal by the Recipient when the strengthened M&amp;E system is fully implemented in at least 20 districts.</li> <li>• In Period 5 of Program implementation, an amount of <b>US \$1 million</b> may be made available by the Bank for withdrawal by the Recipient when the strengthened M&amp;E system is fully implemented in at least 30 districts</li> <li>• In Period 6 of Program implementation, an amount of <b>US \$1million</b> may be made available by the Bank for withdrawal by the Recipient when WSSD has carried out an evaluation of the implementation process for the M&amp;E system and identified required changes and future needs.</li> </ul>
2	<b>DLI#2:</b> Strengthened capacity of key sector institutions	36	0	0	Results will be verified annually and reported starting from March 31,	Disbursements will be triggered on verified achievement of all actions	Maintenance of staffing levels at an average of 75% sanctioned positions in WSSO, DWSM and BRCs at all times in each fiscal	For each 1% of sanctioned staff that WSSD has maintained, trained and equipped every fiscal year in key sector institutions (WSSO, DWSM and BRCs) as per the annual Capacity Development Plan, an amount of <b>US\$80,080</b> per such



No.	DLI	Bank Financing Allocated to the DLI	Of which Financing Available for		Deadline for DLI Achievement	Minimum DLI Value to be Achieved To Trigger Disbursements of Bank Financing	Maximum DLI Value(S) Expected to be Achieved for Bank Disbursements Purposes	Determination of Financing Amount to be Disbursed Against Achieved and Verified DLI Value(S)
			Prior results	Advances				
					2015	in each fiscal year	year; and implementing an Annual Capacity Development Plan	1% of sanctioned staff (up to a cap of 75%) may be made available by the Bank for withdrawal by the Recipient  If one or more of these actions are not achieved in one or more fiscal years, the corresponding amount for that year will not be disbursed.
3	<b>DLI#3:</b> No. of house connections to a commissioned water supply system	40	0	40  (together with DLI#5)	Results will be verified six monthly and reported starting from March 31, 2017	DLI value must be greater than zero	68,095	For each house connection that is made to a commissioned water supply system, an amount of <b>US\$587</b> per connection may be made available by the Bank for withdrawal by the Recipient
4	<b>DLI#4:</b> No. of house connections to a sustainable water supply system and receiving a regular water service	25	0	0	Results will be verified annually and reported starting from March 31, 2018	DLI value must be greater than zero	51,071	For each house connection to a sustainable water supply system and receiving regular water service, an amount of <b>US \$488</b> per connection may be made available by the World Bank for withdrawal by the Recipient

<i>No.</i>	<i>DLI</i>	<i>Bank Financing Allocated to the DLI</i>	<i>Of which Financing Available for</i>		<i>Deadline for DLI Achievement</i>	<i>Minimum DLI Value to be Achieved To Trigger Disbursements of Bank Financing</i>	<i>Maximum DLI Value(S) Expected to be Achieved for Bank Disbursements Purposes</i>	<i>Determination of Financing Amount to be Disbursed Against Achieved and Verified DLI Value(S)</i>
			<i>Prior results</i>	<i>Advances</i>				
5	<b>DLI# 5.</b> No. of CSSWS	30	0	Advance to this DLI is together with DLI#3	Results will be verified annually and reported starting from March 31, 2016	DLI value must be greater than zero	580	For each community safe and secure water system, an amount of <b>US \$51,744</b> may be made available by the Bank for withdrawal by the Recipient

## Annex 4: Summary Technical Assessment

### INDIA: Maharashtra Rural Water Supply and Sanitation Program

1. The Technical Assessment looked at sector performance in Maharashtra, the impinging institutional issues and some of the major challenges. Specific issues reviewed were the current status of institutional evolution, institutional performance in delivering RWSS services to the communities, and challenges on various fronts including capacities and operational constraints. On sector performance, the current status of service levels, policy environment and strategic directions of the sector, and the results framework were assessed.

#### Strategic Relevance

2. The proposed Program – with the objective of improving institutional performance and access to quality and sustainable RWSS services – is strategically relevant and aligned with the visions of both GoI and GoM. It is also consistent with the World Bank’s future directions of engagement in India as per CPS 2013-17, and responds to the “Finance-Plus” approach sought by the Ministry of Finance.

3. *National Level.* At the national level, GoI has been making enormous efforts – through funds and program initiatives - to address the challenge of improving sustainable access to safe water supply to rural communities and to improve rural sanitation. Since the 1990s GoI has been identifying and testing reform options in the sector, with the current evolution of NRDWP (from 2011) that has an objective “to provide every rural person with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis.” There is a strategic shift now to water security, decentralized governance and participatory planning. The proposed Program scales up these approaches, after having tested them in the previous Bank supported project (2003-09). With the current low sanitation access rate of 33 percent<sup>23</sup> and high slippage rate (95 percent<sup>24</sup>) in retention of ODF status in rural India, GoI’s strategy has shifted to ‘saturation’ approach in the NBA program, where support will be provided to the community until full sanitation is achieved. The proposed Program integrates these approaches and provides institutional capacity building and technical assistance measures across the sector to enhance the sustainability of these measures.

4. *World Bank Engagement Strategy in India.* The Program comes at a time when the Bank’s engagement strategy in India is to align with the GoI request for “Finance Plus”, i.e., whereby the value-added of the Bank goes beyond financing and contributes to the transfer of knowledge and international best practices, reform of processes and systems, strengthening of capacity and institutions, and exploring innovative financing instruments. The CPS is organized around three engagement areas – integration, transformation and inclusion – with a cross-cutting focus on improving governance, environmental sustainability and gender quality. This Program is well aligned with these requirements.

5. *State Level.* The Program seeks to reap the benefits of the Bank’s long-term engagement with Maharashtra in the RWSS sector over the past two decades. By engaging with an advanced state such as Maharashtra, there is a potential to set new benchmarks in the sector. Maharashtra has consistently

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<sup>23</sup> Census 2011, Government of India

<sup>24</sup> Assessment Study of Impacts and Sustainability of Nirmal Gram Puraskar, March 2011, MoDWS

adopted reforms in the sector that strengthen decentralization, and demand-responsive approaches that lead to improved service standards. Its decentralization process and community engagement strategies have been reinforced by the experience under the earlier Bank-supported Jalswarajya-1 project, as GoM now feels that *'it pays to believe in people.'*<sup>25</sup> In line with the national strategy Maharashtra has formulated a sector vision to “*increase access to safe drinking water and sanitation services to rural and urban communities at affordable cost in an environmentally sustainable manner, including emphasis on water recharging measures and making the state free of open defecation, through enhanced quality service delivery by local self-governments, with community participation wherever possible,*” thereby achieving *Sujal Nirmal Maharashtra* (clean water, clean Maharashtra) by 2020. The current Program will help GoM move towards this vision.

## **Technical Soundness**

6. *Program Design Elements.* GoM’s RWSS program has two main elements which are formulated nationally by GoI: NRDWP for water and NBA for sanitation. The state contributes about 60 percent of funds for these programs, and implements various activities for the expansion of RWSS services (see Attachment 4.1). The proposed Program will be a subset of GoM’s existing RWSS program with a focus on two primary categories of activities: (i) institutional capacity building for planning, implementation, and monitoring of the RWSS sector across Maharashtra; and (ii) in select districts, implementation of (a) Water supply and Sullage management service improvement in peri-urban villages, and (b) Water Supply service improvement and improved groundwater management practices in water-stressed and water-quality-affected areas.

7. *Institutional Capacity Building.* The focus in the sector is shifting from building assets to delivering services, and sustaining them. These shifts call for substantial capacity building for planning, implementation, service delivery (O&M), and monitoring. The Program addresses this need. It is proposed to cover the entire state on institutional capacity building, so that such efforts become catalysts in improving the performance of the government’s overall RWSS program in the state. The scope of interventions cover the institutional challenges assessed.

8. *Service Delivery.* The state faces emerging challenges to demonstrate higher service levels in peri-urban villages and this demands innovations in eliciting active community participation in villages with urban characteristics, designing for higher service standards (e.g., 100 percent house connections and metering, non-revenue water reduction, water audits, pressure control and management) and establishing effective O&M models. These interventions will be different from those implemented under the earlier World Bank-supported project, Jalswarajya (2003-09), which focused on small, single villages. The state also faces challenges in effectively delivering safe water in water quality-affected areas, and in ensuring security of water service year round, particularly in hilly and remote habitations. Under existing government programs, physical interventions are carried out in such areas through water schemes to expand coverage; however, there is a gap in designing and implementing effective technical/social/management interventions. The Program is designed to support this slice of the on-going NRDWP/NBA and demonstrate sustainable service delivery models that address these challenges. For practical reasons, the Program will be implemented in about 12 districts (two in each region) and in a limited number of villages selected through transparent and demand-driven selection

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<sup>25</sup> Website of WSSD of GoM, - <http://www.mahawssd.gov.in/scripts/index.html#Intro>.

criteria. The district and village selection criteria, agreed with GoM, are presented in Annex 1 (Tables 1.1 to 1.3).

9. With respect to sanitation, the Program supports sullage management service improvement in peri-urban villages and capacity building of key sector institutions for improved delivery of the NBA program across the state. The Program also integrates implementation of NBA in peri-urban villages with sullage management initiatives.

10. *Monitoring and Evaluation (M&E)*. The Program assessed the GoI/GoM M&E systems and found them to be satisfactory, but needing improvements to capture information on service delivery aspects. Sector-related information is collected through two existing systems: GoI's web-based MIS and GoM's MIS. GoI's web-based system captures data on physical and financial progress of water supply schemes (though information is based on releases rather than expenditure at GPs) as well as other aspects such as water quality and the number of people trained. All districts have computers and internet facilities and they directly upload the information on to GoI's website every month. This is considered a good system which works well across the state and thus will constitute the primary basis for monitoring some of the results under the Program. On the other hand, while GoM's MIS is meant to capture data on water systems built and their performance (financial, technical and service delivery), it is not yet fully developed and has not yet been made operational across the state. GoM is currently in the process of reassessing its M&E needs for the RWSS sector, with a view to developing a comprehensive M&E system that covers not only sector performance, but also fiduciary and project management aspects. The Program will support this effort and includes M&E as a DLI.

11. *Strengthening client systems*. The Program assessed the client's fiduciary, environmental and social systems and will address some of the critical gaps. Improving these systems would release some of the bottlenecks to service performance, e.g., efficient and timely fund flows, competitive and timely procurement performance, environmental and social sustainability measures, and effective monitoring and evaluation.

12. *Building on experience*. The Program builds on national and international experience, and brings to the table latest practices of service level benchmarking, impact assessment, sustainability evaluation, project management performance monitoring, third party audits, etc. Through these practices, there is potential to establish a new benchmark in the sector.

### **Program Expenditure Framework**

13. The state has been able to sustain a balanced fiscal stance from 2006-07 onwards, with steady rise in revenue receipts. The RWSS sector receives about 3-4 percent of the Annual Plan outlay of the state and this is supplemented by funding from GoI, adding up to about US\$355 million per annum on average. GoM has sufficient fiscal space to meet the spending needs of RWSS over the medium term.

14. Absorption of funds, however, needs to be improved as on average during 2008-12 the state has been able to spend only 73 percent of available funds in the water sector and an even lower 46 percent in the sanitation sector. These have been mostly due to institutional constraints and program operational issues, which are proposed to be addressed under the Program. An analysis of O&M costs and performance revealed that tariff collection (66 percent) and cost recovery (39 percent) are issues to be addressed; the present average per household O&M costs amounting to approximately INR236 (US\$3.8) per year, are projected to increase in future. The sector also receives O&M subsidies from

GoI and the state to support O&M costs of high cost schemes (due to long distance of sources/electricity charges), effective utilization of which is not monitored closely. In view of this, a comprehensive review of the O&M policy is proposed under the Program.

## **Results Framework and M&E**

15. The Key Results of the GoM framework include: <sup>26</sup>

- Increased coverage of metered house water connections for rural households (75 percent by 2017 and 100 percent by 2022).
- Achievement of 24x7 water supply in 50 percent of large villages and peri-urban villages (>10,000 population) by 2017, and 100 percent by 2022.
- Increased sanitation coverage for rural households (90 percent by 2017 and 100 percent by 2022).
- ODF status in 75 percent of GPs by 2017 and 100 percent by 2022.
- Improved solid and sullage management in 50 percent of villages by 2017 and 100 percent in 2022.

16. *Program Results.* Program results complement GoM results. Program key result areas draw on the design of the Program scope defined above:

- a) Result Area 1: Strengthened planning and monitoring in the RWSS sector.
- b) Result Area 2: Improved institutional capacity for RWSS program implementation.
- c) Result Area 3: Improved access to quality and sustainable water and sanitation services in peri-urban villages.
- d) Result Area 4: Improved access to safe drinking water in water-stressed and water quality-affected areas.

17. Within these four broad result areas, the Program has intermediate result indicators, consisting of DLIs and other results. Together these would help measure the outcome of the two key activities of the Program: institutional capacity building and service delivery.

18. The Program will build the capacities of GoM institutions to be able to measure these results, improve the reliability of information through internal checks and third party evaluations, and enhance the capacity of systems by the adoption of latest Information and Communication Technology (ICT) tools. A sector-wide M&E system will be developed (which is one of the DLIs) to measure results of indicators on sector performance, fiduciary performance and project/contract management performance.

## **Institutional Arrangements and Governance Structures**

19. The RWSS sector is managed by WSSD at the state level. Maharashtra's institutional structure is heavily decentralized, with responsibilities delegated to Pachayati Raj Institutions (PRIs)<sup>27</sup>, district level ZPs and village level GPs. Facilitation takes place at the intermediate sub-district level (blocks)

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<sup>26</sup> Ref: Key Result Area (KRA) of WSSD of GoM.

<sup>27</sup> As per the 73<sup>rd</sup> Constitutional Amendment (1993) transferring 28 subjects, including water supply and sanitation, to Panchayati Raj Institutions.



(see Attachment 4.2 for detailed structure). Institutions at these levels have multiple obligations, however RWSS service delivery is one of their primary obligations. At the GP level, VWSC committees have been formed to meet RWSS service obligations. MJP and GSDA, the technical agencies within WSSD, provide technical support (including deputing technical personnel to ZPs) to PRIs and implement technically complex schemes, as per WSSD norms. The roles of these key institutions are shown in Table 4.1 and the institutional arrangements are shown in Attachment 4.2. The Program is fully anchored in the existing institutional arrangements, and will be delivered with limited additions.

20. GoM plans to streamline the institutional arrangements, particularly at the district and sub-district levels, by bringing communications and capacity building within the ambit of a full-fledged unit in the ZP<sup>28</sup> called DWSM Cell (hitherto housed in the department of Village Panchayat, headed by Deputy CEO-Village Panchayat). This cell will be headed by a new position of Deputy CEO-WATSAN (water supply and sanitation). The plans also include strengthening BRCs at the block level (these belong to WSSD) by hiring staff for different skills; and aligning VWSCs and GPs at the village level for more accountability and long-term asset ownership and management. Local expertise is also proposed to be hired at the village level to support VWSCs and GPs. Most of these changes are based on lessons from the previous Bank project and discussions with the Bank. Some of these have already been implemented. Further evolution will be supported under the Program by addressing the following key gaps:

- *Staffing gaps.* Requisite skill set, requisite numbers of staff, capacity development and facilities (office space, mobility, and computers).
- *Business protocols and operational guidelines* to improve effectiveness of program delivery.
- *Monitoring systems.* Integrated M&E systems to monitor service delivery and performance management systems.

**Table 4.1: Roles of Key Institutions in the RWSS Sector<sup>29</sup>**

Role	Level	Institution
Policy making, sector monitoring, mobilization of finance	State	SWSM, <sup>30</sup> WSSD
Technical support to ZP/ GPs	State	MJP, GSDA
Capacity building	State/ ZP	- WSSO -YASHADA* (Yashwantrao Chavan Academy of Development Administration) -MEETRA -ZPs (DWSM cell), BRCs -Key Resource Centers* (external technical support agencies)
All NBA related activities	State/ District	-WSSO at state level -ZP (DWSM cell) at district level
Design and infrastructure creation for water	Districts	ZPs (RWS division and sub-division offices)

<sup>28</sup> There are about 12-14 departments in each Zilla Parishad to handle different devolved functions/activities. Rural Water Supply (RWS) is one such department that handles all engineering aspects of water supply schemes and is headed by a full time Executive Engineer. It is now proposed to create a full-fledged department for handling all capacity building and communications activities of RWSS and also manage NBA under a new Deputy CEO.

<sup>29</sup> Those shown with an asterisk (\*) are outside WSSD.

<sup>30</sup> Approving authority.

Role	Level	Institution
supply schemes below INR50 million <sup>31</sup>		GPs*/ VWSCs
Design and infrastructure creation for water supply schemes costing more than INR50 million and for all sullage management schemes	District/State	MJP, through Division and sub-division offices.
O&M (retail water supply, sanitation, waste water and solid waste)	Village	GP*/ VWSC
O&M of bulk water	District	ZP (RWS division office), MJP
Groundwater Monitoring and management	State/District	GSDA at state level is responsible for groundwater monitoring. GSDA (district level offices) undertakes groundwater management activities in coordination with ZPs and GPs.
Water quality monitoring and surveillance	Districts/blocks	DPHL*, Mini-labs* - both belong to Public Health Department
Oversight (including monitoring and evaluation)	National/state/districts	GoI*/WSSD/ ZPs*
Research and development	State	MEETRA

21. The Program is mainstreamed into this institutional structure, rather than creating a separate structure as was done in Jalswarajya-1. The Program's implementation responsibilities have been carefully assessed based on the proposed evolution of the institutional structure of the sector, and take into account the technical, social and other skills required to deliver the Program effectively.

22. WSSD comes under the mandate of RTI Act of India. It carries out social audits in the RWSS sector through the formation of Social Audit Committees (SAC) at the GP level and uses the 'E-Pani' system for complaint redress. The Program will support strengthening the efficiency and effectiveness of these systems. Further enhancements to social audit processes (drawing on experience from other sectors) and streamlining of ICT into sector governance are being considered. WSSD's vigilance function is weak and is proposed to be strengthened through the Program. WSSD has agreed to nominate an officer as Vigilance officer and codify vigilance information, formalize and consolidate.

### **Economic Justification**

23. The Program will support and contribute to financing GoM institutions, sector policy, and infrastructure that will improve and expand access to safe water and hygienic sanitation in target areas. The Program is well justified on the basis of direct benefits to more than 1.5 million people who will have access to safe water supply and improved sanitation.<sup>32</sup> With an estimated population increase of 1.6 percent per annum on an average, the number of direct beneficiaries will be close to 2.2 million by the end of the expected life of Program created assets. The full range of economic benefits derived from this Program (either financed directly by the Program or by the government at a later stage) cannot be measured in entirety due to the incompleteness and lack of adequate data. To the extent possible, selected meaningful quantifiable benefits were estimated, baseline data were collected

<sup>31</sup> MJP is responsible for schemes costing above INR50 million and also schemes involving advanced technologies. However, MJP also works through ZPs and GPs.

<sup>32</sup> Estimate based on the number of households in the 12 target districts, assuming five persons per household.



through surveys and field visits, and measures were taken from analytical work and similar projects (secondary data) for calculating the net benefit of the Program.<sup>33</sup>

24. *Ex ante* economic analysis was conducted to assess the impacts of the Program based on incremental economic costs and benefits of water and sanitation interventions over the life of the Program. The economic analysis covers the 25-year life of Program benefits post construction, with cash flow discounted at 12.5 percent. Incremental costs include investment costs, capacity building activities and O&M.<sup>34</sup> The stream of financial costs was adjusted for impacts of taxes, subsidies, and externalities to arrive at the economic value, using an estimated Standard Conversion Factor (SCF) of 0.90. Quantifiable gross benefits considered for the calculation of NPV include the following:

- a) The improved water supplies (e.g., 24x7) eradicate the need for any collection and storage, so time saved is 100 percent of time spent before scheme implementation.
- b) The value of incremental water consumed by the target population.
- c) Reduced O&M cost for the existing schemes with the development of new schemes.
- d) Water conservation through groundwater management practices and water harvesting measures. The cost of water saved is a benefit of the project.
- e) Saving in capital cost for augmentation and rehabilitation of the existing system to meet the requirements of increased population in peri-urban areas.
- f) Reduction in coping costs (e.g., storage vessels and purification systems) due to better water supply.
- g) Health benefits are ‘avoided costs’ of water-borne diseases such as diarrhea, jaundice, and gastroenteritis; i.e., less expenditure on treatment of disease, less expenditure on transport in seeking treatment, less time lost for treatment, as well as saving in government public healthcare expenditures due to reduction in incidence of water-borne diseases.

25. Under conservative assumptions and with only partial benefits of the intervention quantified, the Program yields a positive NPV and an ERR above the cost of capital of 12.5 percent, and a benefit/cost ratio of 1.81. A sensitivity analysis for a 10 percent increase in Program costs (capital works, technical assistance and capacity building activities, and O&M cost overrun) would still result in net positive benefits and ERR above the cost of capital, see Table 4.2.

**Table 4.2: Net Present Value and Economic Rate of Return**

<b>Net Benefit Measure</b>	<b>NPV @ 20 Yrs Discounted at 12.5% (US\$ M)</b>	<b>ERR (%)</b>	<b>Benefit Cost Ratio</b>
Total net benefits – Base case	95.1	19.1	1.81
Total net benefit – inflation increase by 2.5% per annum, from 5% to 7.5% (will affect O&M costs and accrued benefits).	129.6	20.6	2.06
Total net benefit – inflation increase by 5% per annum, from 5% to 10% (will affect O&M costs and accrued benefits).	185.8	22.5	2.45

<sup>33</sup> Data collected from six villages in Maharashtra during field visits: Raitale Kharamba, GP Jawhar, District Thane; Wadi, Besa-Beltarodi and Butibori in Nagpur District; and Pipri and Umri in Wardha District. Social and Environmental Assessment data collected by MJP in 60 GPs in Maharashtra have also been used for developing baseline data and indicators used.

<sup>34</sup> Exchange rate used for the analysis is INR 55/ 1 US\$ (at Appraisal stage).

<b>Net Benefit Measure</b>	<b>NPV @ 20 Yrs Discounted at 12.5% (US\$ M)</b>	<b>ERR (%)</b>	<b>Benefit Cost Ratio</b>
Total net benefit – risk analysis (cost overrun by 10% beyond the estimated capital costs)	80.0	17.7	1.65
Total net benefit – population increase at 2.5% per annum	115.9	20.2	1.96

26. Benefits from Program interventions to the country, the water supply and sanitation sector, and to government-funded programs in the RWSS sector cannot easily be quantified. Institutional strengthening, capacity building and training of concerned government agency personnel, as well as a boost to economic activities and employment generation in the districts as a result of the construction and Program activities are many added benefits of the Program. In addition to the target population directly benefitted by the Program, improved systems, the government’s own programs and likely investments would bring benefits to a wider population in the longer term.

### **Evaluation of Technical Risks**

27. The Program’s overall technical risk is assessed as “Moderate.” Risks have been assessed in three areas as listed in Table 4.3, for which mitigation measures were developed (see Annex 7 for details).

**Table 4.3: Key Program Technical Risks**

<b>Sl.No.</b>	<b>Risk</b>	<b>Rating</b>
1	Institutional capacity building may not happen as scheduled.	Moderate
2	No appetite for GoM teams to deliver on critical Program actions.	Moderate
3	No demand from peri-urban villages for higher level water services.	Moderate

### **Program Action Plan**

28. Five key actions have been specifically agreed, as listed in Table 4.4, to address gaps in technical and institutional areas.

**Table 4.4: Program Action Plan on Technical and Institutional Actions**

	<b>Actions</b>
1	Strengthen RWSS planning processes in Year 1 and review their effectiveness in Year 3 and Year 5.
2	Establish and institutionalize a technical and administrative back-up support mechanism for GPs/VWSCs.
3	As part of the state’s M&E system, establish a system to monitor the “schedule performance” (extent of compliance with time schedules) of completed rural water supply schemes.
4	Strengthen institutions to better manage the sanitation program of the state, assess areas of weakness and shortfall (particularly in relation to ODF slip back), and take mitigation actions as needed.
5	Prepare and adopt a comprehensive Human Resources policy for the sector to attract and retain talent/skills, and review and revise the O&M policy based on comprehensive diagnostics of affordability and complexities of schemes.

### Attachment 4.1: GoM's Existing RWSS Program

	Objectives and Description	Components	US\$ M per Year	% Share Avg.		
				GoM	GoI	Com*
<b>NRDWP (Water)</b>	<p>To achieve household drinking water security<sup>35</sup> through appropriate drinking water security plans at district/village level, through:</p> <p>(i) Single village schemes – point sources and piped water.                      (ii) Regional water supply schemes.                      (iii) Source development work, tube well, dug well, bore holes.                      (iv) Source strengthening for sustainability.                      (iv) Decentralized management with community participation.</p>	<ul style="list-style-type: none"> <li>• <b>Coverage</b> - safe and adequate drinking water supply to unserved, partially served and slipped back habitations.</li> <li>• <b>Sustainability</b> of groundwater sources to achieve drinking water security at the local level.</li> <li>• <b>Water quality surveillance:</b> support to decentralized laboratories to periodically test water samples.</li> <li>• Investments to provide potable drinking water to <b>water quality</b>- affected habitations.</li> <li>• <b>O&amp;M support</b> for expenditures on operations, repairs and replacement costs of water supply systems.</li> <li>• <b>Support</b> activities such as M&amp;E, R&amp;D, IEC, etc.</li> </ul>	275	40	50	10
<b>NBA (Sanitation)</b>	<p>The key objectives of NBA are to:</p> <p>(i) Bring about an improvement in the general quality of life in rural areas.                      (ii) Accelerate sanitation coverage in rural areas to achieve the vision of Nirmal Bharat (clean India) by 2022 with all GPs in the country attaining Nirmal (clean) status.                      (iii) Develop community managed environmental sanitation systems focusing</p>	<ul style="list-style-type: none"> <li>• <b>IEC and capacity building</b> activities to mobilize the community.</li> <li>• Cash incentives to BPL and identified<sup>36</sup> APL households to build <b>individual household toilets</b>.</li> <li>• Establishing <b>rural sanitation marts and production centers</b> for sanitary products and services.</li> <li>• <b>A revolving fund for financing toilet loans</b> to other categories of APL households and child day</li> </ul>	80	60	30	10

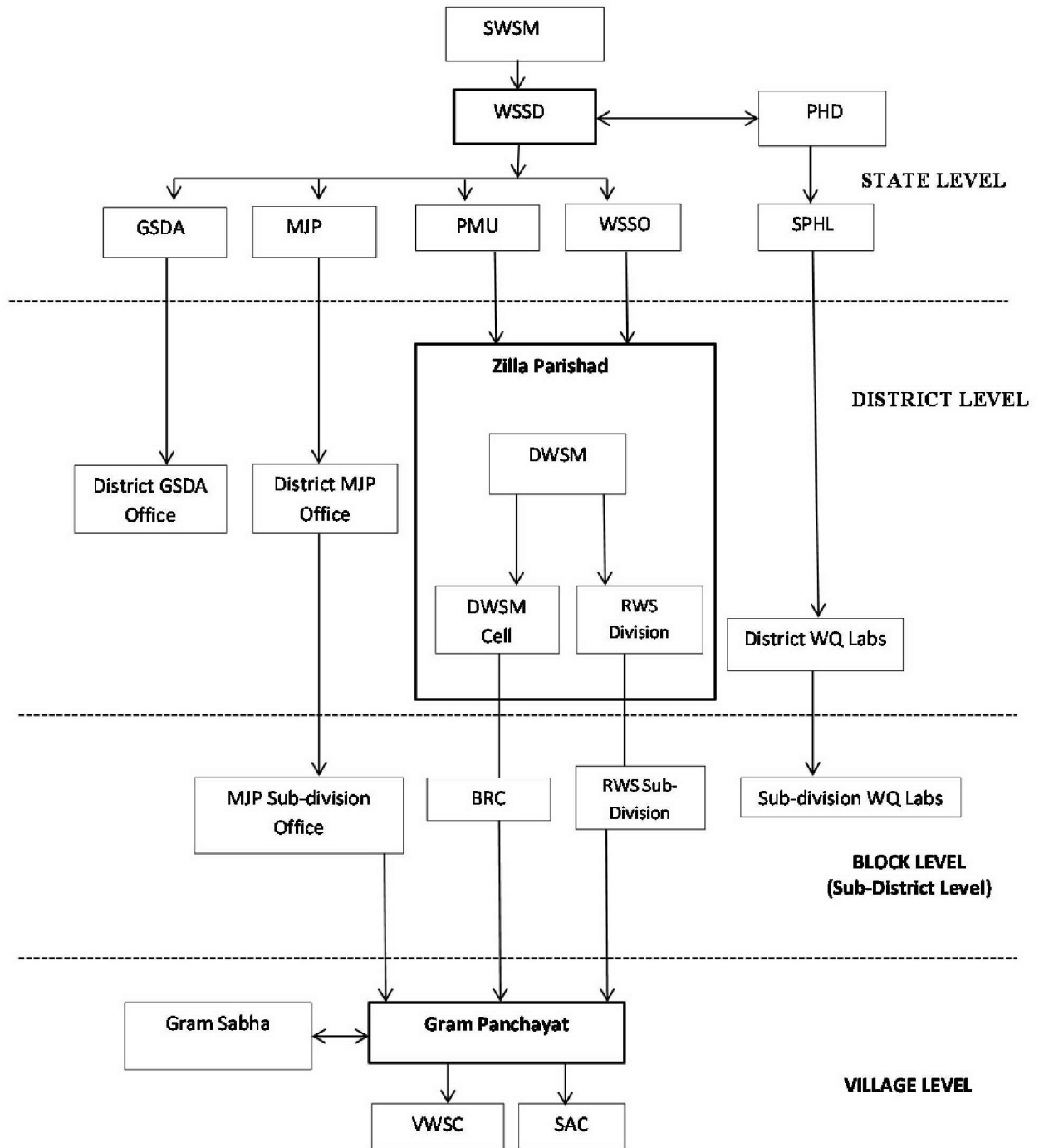
<sup>35</sup> GoI defined household drinking water security as: to provide every rural person with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis. This basic requirement should meet minimum water quality standards and be readily and conveniently accessible at all times and in all situations.

<sup>36</sup> Identified APL includes all Scheduled Castes/Tribes, Small and Marginal Farmers, Landless Labourers with Homesteads, Physically Handicapped and Women Headed Households.

	Objectives and Description	Components	US\$ M per Year	% Share Avg.		
				GoM	GoI	Com*
	<p>on solid and liquid waste management for overall cleanliness in the rural areas.</p> <p>This is sought to be achieved through community awareness-building in a decentralized manner.</p>	<p>care centers.</p> <ul style="list-style-type: none"> <li>• <b>Community and institutional toilets.</b></li> <li>• Financing solid <b>and liquid waste management activities in villages.</b></li> <li>• NGP awards to GPs that achieve ODF status.</li> </ul>				
<b>Total</b>			355			

\* Community

**Attachment 4.2: Institutional Structure in Maharashtra's RWSS Sector**



## **Annex 5: Summary Fiduciary Systems Assessment**

### **INDIA: Maharashtra Rural Water Supply and Sanitation Program**

#### **Introduction**

1. The Bank is partnering with GoM to support the RWSS program of the state. As part of Program preparation, in accordance with OP/BP 9.00, the Bank carried out a Fiduciary Systems Assessment (FSA) of the RWSS sector, to determine whether the fiduciary systems provide reasonable assurance that Program expenditures will be used appropriately to achieve the intended purposes. The FSA is broadly based on work done by a consulting firm and World Bank staff working on procurement, financial management, and governance systems.

#### **Sector Overview**

2. The current institutional framework of RWSS abides by the decentralized framework for service delivery which is empowered by the 73<sup>rd</sup> Constitutional Amendment and the emerging needs of the sector. Key stakeholders involved in the RWSS sector include WSSD, WSSO, MJP, GSDA, ZPs at the district level, and concerned beneficiary GPs at the village level. The sector is governed by the State Water Supply and Sanitation Mission (SWSM) at the state level, which is mandated to make policy, and approve and monitor scheme implementation. SWSM's role is to support and monitor the overall implementation setup in the state.

3. WSSD is the key department responsible for the implementation of schemes/projects in this sector at the state level and through its offices at the ZP level. A majority of the schemes are implemented by beneficiary GPs under the aegis of the concerned ZPs. MJP and GSDA are the State Technical Agencies (STAs) for Maharashtra, each with its separate mandate – MJP for complex and large multi-village RWSSs (apart from urban water supply schemes, which are also its domain, outside of the RWSS structure), and GSDA with a mandate for water source identification, certification and strengthening. ZPs and GSDA support VWSCs (under the GPs) in implementing schemes by providing technical supervision and control. Districts and sub-districts monitor implementation and provide support to the VWSCs. While the block level (sub-district) does not have any operational or fund routing role, it is functionally the closest to GPs and provides support on social issues, as well as monitoring schemes being implemented. BRCs have been formulated at the block level to undertake capacity building and impart training on procurement, accounting, social awareness, dispute resolution, record keeping, etc.

4. Accountability arrangements for the sector are based on several guidelines and rules, in line with the institutional framework. These include the Maharashtra financial rules and budget guidelines, which guide planning, budgeting and release of funds. However, expenditure is significantly impacted by rules laid down in the guidelines of two GoI schemes: NRDWP for water and NBA for sanitation. These guidelines specify funds flow and cost sharing arrangements between GoI and the state/community. The two key expenditure-making entities (MJP/GPs, VWSCs) are guided by the MJP Act and the Bombay Panchayat Rules (applicable to GPs/VWSCs).

5. Table 5.1 presents existing sectoral expenditure patterns. Since GSDA and the ZPs transfer funds to GPs for expenditure, GPs are responsible for a significant part of the state program.

**Table 5.1: Expenditure in RWSS Sector in Maharashtra**

Agency	2011-12		2010-11		2009-10	
	Releases	Expenditure	Releases	Expenditure	Releases	Expenditure
MJP	269.35	253.55	582.23	396.52	431.17	405.32
GSDA	161.44	180.56	107.02	116.85	62.78	42.78
Zilla Parishads (ZP)	973.87	817.88	784.15	826.39	768.89	661.81
Total	1,404.66	1,251.99	1,473.40	1,339.76	1,262.84	1,109.91
GSDA & ZP as % of total		80%		70%		63%

1 Crore = 10 million

### **Fiduciary Systems Overview**

6. Key aspects of Program fiduciary arrangements include:

- a) Periodic release of funds by the Finance Department drawing on an exclusive budget line.
- b) Procurement of works by MJP and GPs (VWSCs) using existing GoM systems. Procurement of most Consultancy services is done at the state level by SWSM/ WSSO/MJP. GoM is developing systems for these and they would be included in the procurement manual.
- c) Implementation and payments by SWSM, MJP, GSDA, ZPs and GPs using (strengthened) country systems.
- d) Compilation of expenditure information and uploading on website by WSSO/SWSM on a quarterly basis, and reporting to the Bank on an annual basis.
- e) Annual Financial Statements (Attest) Audit by the C&AG. Once these reports are in, the reported expenditure would be reconciled with expenditures certified by audit.

7. The FSA evaluated the capacity of relevant institutions to implement the proposed Program while providing adequate fiduciary assurance on the use of Program funds. The assessment highlights several pertinent issues that have been discussed with GoM and the agreements reached. While some solutions (e.g., development of Manuals) will be effective in the short term, others will be implemented (and regularly monitored) in the medium term. The assessment provides reasonable assurance that the overall fiduciary framework for the Program is adequate to support Program management and to achieve the desired results.

8. Key performance indicators are linked to PAP actions and will be monitored during program implementation as per Attachment 1 of this annex.

## **Financial Management Assessment**

9. Funding for the Program will be provided in the GoM budget under WSSD in an exclusive budget line, separate from the other budget line items through which GoM finances the RWSS sector. This is as per the general practice of GoM, wherein it creates separate budget lines for external funding. Bank funds will flow to GoI and then flow through GoM Treasury and, along with GoM budgetary allocation for the Program, will be disbursed to various agencies implementing the Program. Maharashtra Treasuries will monitor performance against this budget line and this will be reported through the existing Budget Estimation, Allocation & Monitoring System. Normally the state budget is approved by the State Legislature before commencement of the financial year on April 1 of each year.

10. Delay in transfer of funds to implementing entities has been a common problem faced by the entire state; no funds are transferred by the Finance Department in the initial (one to two) months of the financial year and further a significant part of the funds are made available in the second semester. This risk is mitigated by the implementing entities (since they operate outside the treasury systems) carrying over some balances at the end of each financial year which are used in the initial months of each financial year to make payments. Secondly, though departments prepare budget estimates, the practice of departments preparing a procurement plan with details of quantity, time schedule for award/completion, and estimates as part of their annual action plan is yet to take root.

### ***Assessment of Institutions***

11. *SWSM / WSSO*. SWSM has been constituted as a Society and is currently being used by GoI for routing funds under NRDWP/NBA. State level expenditure/payments are made by SWSM, which maintains the required accounts and records.

12. *MJP*. Planning and budgeting processes of MJP are defined by the MJP Act, Government Resolutions of the Finance Department and WSSD. MJP's multi-village schemes take approximately one year to be approved from the date of application by the GP. This time is taken in the analysis of the scheme at the block level, including certification of the source, preparation of surveys and project estimates, as well as the administrative and technical approval of schemes. There is a need to streamline this process to enable a more efficient and faster approval process.

13. Release of funds by MJP to its district offices is based on demand submitted by the latter which, in turn, is prepared on the basis of approved contractors' bills. The fund flow is managed internally (through commercial banking channels), thereby exposing the system to possible weaknesses in internal controls.

14. MJP does not have finance and accounts guidelines; therefore, there is a possibility of inconsistency in financial treatment of events. District offices maintain accounts on single-entry basis and send monthly information to MJP Headquarters, which maintains accounts on a double-entry basis. This system currently does not provide a reliable basis for the preparation of accounts and for monitoring. Annual Financial Statements are prepared as per the format prescribed in the MJP Act, 1976 and are in a combined form, including the accounts of the 45



sub-units. Though there is an audit by a firm of Chartered Accountants, the statutory audit is conducted by the C&AG. This report is regular but delayed.<sup>37</sup> The audit process is robust, but certain observations appear each year, suggesting that not all audit findings are being addressed in an appropriate manner.

15. Considering the central role of MJP in Program implementation, the following actions would need to be prioritized: development of a fiduciary manual and switch-over to a double-entry system of accounting; timely completion of audit; and addressing, in a satisfactory manner, the significant observations made in the C&AG audit reports.

16. *ZPs*. While the ZP budget is forward looking in terms of demand for new projects, there is no defined approval time frame at the ZP level for a request for new schemes received from GPs. The gap between the date of application by the Gram Sabha to the date of technical sanction ranges between two months to two years, depending on the executing agency. The budget for “spill-over” water supply projects at the GP level is not revised as per changes in Schedule of Rates during the preparation of next year’s budget, thus leaving the project vulnerable to increased cost. The fund release process to GPs varies across the state, primarily with respect to the involvement of the Chief Accounts and Finance Officer [CAFO (Finance Department)]. In some districts, the CAFO approves only the release and expenditure of projects which are funded through the state government budget, whereas in other districts the CAFO is involved in the approval and release of GoI funds as well. There is a need to follow a uniform practice across the state on the involvement of the CAFO in the approval process for the release of funds to GPs.

17. Contractor payments are made by VWSCs as per Running Account (RA) bills approved by the ZP. The ZP also issues a release order which permits the VWSC to make payments to the contractor; this seems to be an unnecessary impediment, which could cause delays. A Utilization Certificate is submitted by the GPs while requesting each subsequent installment. The most significant weakness in the ZP-level accounting framework is recording/classification of all releases to the GP level as expenditure at the time of release. Each installment released by the ZP is unutilized at the time of release and there is a significant time gap between the release and utilization of funds by the GP.

18. Audit of NRDWP funds at the ZP level is undertaken by a firm of Chartered Accountants. Financial statements are collated using information recorded in books such as the cash book, grant register and other record books; these are prepared based on releases to VWSCs, but neither take into account the GP audit undertaken by the firm of Chartered Accountants nor provide any GP-level information with regard to expenditure or balances.

19. Considering the role of ZPs in Program implementation, the following actions would need to be prioritized: simplification of the process of release of funds to GPs, and uniformity across the districts regarding the role and responsibilities of the CAFO.

20. *GPs and VWSCs*. GPs are involved in the identification of needs and requesting for schemes, but are not involved in the detailed cost estimation for the schemes, which is a

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<sup>37</sup> Report for FY 2009-10 was issued 19 months after the close of the year.

technical function handled by district/sub-district offices. GPs and VWSCs depend on ZPs/BRCs for guidance and technical appraisal of schemes. The GP's role in planning includes expressing felt needs and making decisions through Gram Sabhas. Though final payment to contractors is made by the VWSC, fund availability at VWSC is dependent upon the approval of each RA bill by the ZP, thus making the entire fund release process vulnerable to delay. Overall, there is a constraint due to the limited technical (as well as book-keeping) capacity of VWSCs. A single-entry system of accounting is in use and the task of updating records/preparation of financial statements is linked to the release of the fourth (that is, the final) installment, only for which an audit of the VWSCs' books of account is a pre-requisite. The audit is conducted by a firm of Chartered Accountants drawn from a panel established by each ZP; however, a ToR for GP/VWSC audits does not exist, leading to a lack of uniformity in audits, as well as non-adherence to standards established by the Institute of Chartered Accountants of India. Further, the audit is conducted after 90 percent of the expenditure has been incurred and the fourth and final installment is reached, making it much less effective as a tool for pre-control.

### ***Program Actions***

21. Considering the role of GPs/VWSCs in Program implementation, the following actions would need to be prioritized: regular compilation of information on expenditures as drawn from the books of account of each VWSC/GP, standardizing and formalizing audit (that is, use of a standard ToR) and introducing a requirement for audit much earlier during scheme implementation. The Key Program Actions and other actions to address the gaps through Technical Assistance and capacity building measures are listed in Table 5.2.

### ***Auditing Arrangements for the Program***

22. Audit arrangements will include an annual financial statement attest audit by the office of the C&AG as per a well-established ToR. Other state-wide audit arrangements, which would also cover this Program, include:

- a) The audit conducted by the C&AG for the state of Maharashtra includes a certification of its financial statements, including a confirmation of the financial flows under the Department.
- b) The above certification is supplemented each year by an audit report, which covers significant observations relating to all departments and schemes implemented by the departments.
- c) ZPs are periodically audited by the Local Fund Auditor, who comprehensively reviews their financial performance, and also looks into propriety aspects.
- d) GPs (sub-projects) are audited by firms of Chartered Accountants as per standardized ToRs.

### ***Risks and Performance Indicators***

23. Attachment 5.1 provides the key risks and mitigation measures related to Financial Management Systems, and Attachment 5.2 provides Indicators to measure financial management performance.

## Procurement Management Assessment

### *Procurement Systems*

24. Major items procured by the RWSS sector in the state comprise procurement of works. A limited quantity of goods is procured at the state level by WSSD, WSSO and GSDA. At the district level, procurement of works is carried out by ZPs and MJP, and at the village level by GPs. Procurement is carried out in accordance with three separate guidelines: PWD Manual, Store Purchase Rules and Zila Parishad Account Code. The guidelines require open competitive bidding for procurement for all contract values above INR50,000. Below this threshold, direct contracting from Central Stores and Purchase Office, Rate Contract and Shopping is permitted for procurement of goods, while Item Rate Contracts and Percentage Contracts are permissible for procurement of works. Mandatory negotiations with the lowest bidder is a universal rule for all procurement methods.

25. Bidding documents such as B1 tender document and D tender document are used as standard bidding documents for procurement of works and for procurement of goods respectively. These bidding documents meet the standards of upfront declaration of essential terms and conditions and evaluation/qualification criteria.

26. The assessment finds that the existing procurement management system and arrangements have the following gaps:

- a) *Goods and Works*. Rules and guidelines related to procurement are spread across multiple documents with no clear and comprehensive instructions for all steps of the procurement process.
- b) *Services*. No guidelines/regulations are in place for procurement of services. Evaluations of proposals are based on pass/fail criteria such as registration details, earnest money deposit, turnover, and number of years of experience. There are no specific guidelines for qualitative evaluation of technical proposals. The B1 tender document used for works procurement is also used for procurement of services.
- c) Registration of contractors is a prerequisite for participation in the bidding process, which may act as an entry barrier and restrict many bidders from participating.
- d) No alternative dispute resolution procedure or written processes for complaint/grievance handling exist, besides the jurisdictional avenue during the bidding process. The assessment did not come across any documentation of complaints received.

27. GoM has developed and deployed an e-procurement system and made it mandatory since<sup>38</sup> January 2012. The e-procurement platform used was developed and deployed by the National Informatics Centre, GoI. This being a Government-led action (being implemented but some districts have been exempted), it is assumed that all procuring offices will have the required infrastructure, and associated actions (such as training and capacity building of procurement staff to undertake e-procurement, as well as workshops to the bidder community) would be carried out during the first year of Program implementation. Handholding support would be provided at the districts where the Program will be implemented.

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<sup>38</sup> For Procurement of Goods costing more than INR100,000 (US\$1,600) and works costing more than INR500,000 (US\$8,100)

28. The present system only allows for e-tendering, where uploading of bid documents and bids are facilitated electronically, while evaluation of bids is carried out offline. The state IT Department revamped the system in October 2102 to include features such as active tender notices, contract closures, on line evaluation of bids, MIS reports, and payment gateways for Earnest Money Deposit. With the successful deployment of e-procurement, a significant increase in competition is being witnessed and a reduction in collusion among bidders is expected. As per the current policies of GoM, MJP is responsible for procurement and awarding contracts at the district level wherein the estimate cost of single village schemes is above INR 5 crore and that for regional schemes, above INR 3 crore. Majority of contracts are given on single responsibility basis. In few contracts, MJP provides materials (pipes etc) to the contractor.

29. Across entities, there is a need to enhance procurement capacity. This is important at district/GP level as a large number of works contracts are handled at this level. All institutions in the state have capacity constraints related to skills and competencies required for efficient and transparent procurement. In most situations, procurement processes are mainly dealt with by technical staff with little formal training in procurement and contract management. It is crucial to strengthen the capacities of key staff dealing with procurement on subjects related to procurement, contract management, record keeping, quality control, and transparency. With the state government making it mandatory to use the e-procurement portal, additional IT staff is being deployed through RDD for handholding the e-procurement process at the GP level.

### ***Procurement Performance***

30. Procurement performance was assessed at the GP level and at the state level at MJP -- the two places where most Program procurement is expected to take place. Based on information and data analyzed from 33 projects at the GP level, in 85 percent of the cases the procurement process was completed within 45 days, with another 7 percent taking more than 90 days. Dissemination of bidding opportunities is through advertisements, usually in local newspapers at the district level or even at the taluka (sub-district) level. Data regarding advertisements/quotations sought were available in 75 percent of these villages. Of these villages, 63 percent published tenders in newspapers, while for the remainder quotations were sought for supply of materials/goods. In all cases except one, bids/quotations were received from at least two or three bidders. In almost all cases contracts awarded were at par with the project cost estimate, with the price quoted by bidders being within 10 to 15 percent on either side. Construction delays were observed in 20 percent of the cases.

31. Other key observations on the overall performance of procurement and contract management at GP and MJP levels are:

- a) *Procurement Planning.* Departments prepare budget estimates. However, the practice of preparing a procurement plan, with details of quantity, time schedule for award/completion and estimates as part of the annual action plan, is yet to take root in the system;
- b) *Participation.* Key contracts awarded for procurement of goods at the state level are Rate Contracts for pipes, which are administered by MJP. The Rate Contract process is open only to manufacturers from within the state, resulting in participation of only two to three bidders

in the past few years. Bids for works at the district and GP levels also attract less than three bidders. Other potential bidders active in different states are not participating in the bidding process.

- c) *Contract Administration.* Rate Contracts for pipes are contracted centrally by the MJP head office, while they are implemented and monitored by MJP district offices. In such cases, the contractual obligation of the supplier is to the state level, while contract implementation is the responsibility of the district authority. Under this arrangement contract monitoring and implementation by MJP district offices can become an accountability issue, which can lead to late delivery of goods, inferior quality, delay in payments, poor performance of the contractor, etc.
- d) *Disclosure.* There is a need to develop and implement rules/guidelines for disclosure of information on contract awards to promote transparency. The state needs to formulate and implement a disclosure policy for procurement, such as award and achievement of targets and expenditures at various levels to maintain transparency in the system and also to meet RTI obligations.
- e) *Procurement Monitoring Information Systems.* Information related to the procurement plan, procurement process followed, name of the winning bidder, and performance monitoring of contractor/supplier is not organized or consolidated at the district or state level to help make appropriate management decisions. There is no defined framework for dissemination of procurement-related information such as budget and expenditure, bidders' participation, price comparison, and bidders' performance. The revamped e-procurement system being implemented is expected to have provision for detailed MIS reports and tender-wise information for various departments to monitor procurement at the central level with linkages to budgetary allocations.
- f) *Oversight and Control.* Procurement process monitoring and oversight currently rests within the hierarchies of the procurement management system. A separation of functions for independently assessing and ensuring the integrity of the process and the system is not yet in place. Further, there is a need to establish and institutionalize a post-procurement review process to be conducted annually to assess the degree of adherence to agreed norms and guidelines and the integrity of the procurement process. In the case of assets created, independent quality inspection should also be carried out.

### ***Actions Agreed for Improvements in Procurement Management***

32. The following actions will be taken by GoM to address the above gaps:

- a) A Procurement Manual, which collates rules and regulations which are spread out in different documents for works and goods (but also addresses issues of blacklisting, negotiations, disclosure of awards, etc.,) will be prepared by Year 1. The procurement manual would also include the selection of consultants, including the development of a standard request for proposals.
- b) Procurement post-review will be conducted on a regular basis, covering at least 15 percent of contracts issued each year, and the report will be shared with the World Bank by September 30 each year.
- c) The complaint handling and redress system, including procurement issues, will be covered in the PAP.

- d) A Procurement MIS module, which can be integrated with the e-procurement system, will be developed.

### ***Program Actions***

33. Based on the assessment and agreements reached with GoM (use of e-procurement systems, control and oversight through the annual post review, and the integrated complaint management and M&E systems) procurement systems under the Program offer reasonable assurance of value for money with integrity. The key Program Actions and other actions to address gaps identified through technical assistance and capacity building measures are listed in Table 5.2.

### ***Risks and Performance Indicators***

34. Attachment 5.1 provides the key risks and mitigation measures related to procurement systems, and Attachment 5.2 provides Indicators to measure procurement performance.

## **Fraud and Corruption Risk Mitigation in the RWSS Sector in Maharashtra**

### ***The State Anti-corruption Framework***

35. In India, law and order is the responsibility of states. Neither GoI nor central nodal anti-corruption agencies, such as the Central Vigilance Commission, have jurisdiction on corruption issues in states, except for investigating and prosecuting central government employees. India's supreme audit institution, the C&AG, is the only federal institution which has a mandate to help mitigate the risk of corruption in the implementation of any public policy or program across the country through its financial, compliance or performance audits.

### ***The Anti-Corruption Bureau (ACB), Maharashtra***

36. The ACB was established in 1957 and now enforces the Prevention of Corruption Act, 1988, by investigating "bribery, corruption, criminal misconduct, embezzlement of Government money and other venal practices by public servants." The Maharashtra ACB has jurisdiction over all employees of the "State Government, of the statutory Corporations of Bodies set up and financed by the State Government, and of the Municipal Corporations, Nagar Parishads, Zilla Parishads and Panchayats in the state." ACB is part of the state Home Department and has only an investigative mandate. Its staff comprises mostly of some 200 police officers seconded from the state police. It conducts inquiries into cases referred by government departments, the state Ombudsman (Lok Ayukta) as well as complaints filed by citizens on bribery, corruption, criminal misconduct, embezzlement of government money and other corrupt practices by public officials. As per the Constitution of India, the ACB cannot investigate any 'Class I' (highest ranking) officers of the state government without the government's concurrence. ACB discharges its mandate in two ways: (i) by trapping public servants accused of demanding bribes; and (ii) by investigating assets disproportionate to known sources of income amassed by a public servant. In 2012, the Bureau received 135 cases related to disproportionate assets and caught 513 officials asking for a bribe, only one of whom was from an agency of the RWSS sector.

### ***Vigilance Function in the RWSS Department***

37. Each line department or ministry is required to conduct preliminary enquiries on misconduct of its employees. A few of them in Maharashtra, such as the Public Works and Water Resources Departments, have assigned this fiduciary responsibility to a Vigilance Officer, following the GoI model, where the Vigilance Cell in every line ministry or department is compliant with the ToR issued by the Central Vigilance Commission. In the Maharashtra PWD, the Vigilance Cell is placed under the authority of the Chief Engineer (Head of the Department), has branches at the district level and is responsible for the prevention and detection of fraud and corruption, a mandate it fulfills through surprise checks (for quality assurance) and by addressing complaints received by the administration/government.

38. WSSD does not have such a vigilance cell and its vigilance function is neither codified/formalized nor recorded/disclosed. Ideally, an officer with a clear mandate and support from an established cell should be assigned the responsibility of handling any allegation of fraud and corruption. The ToR should be disclosed and an annual report on the discharge of the vigilance function within the department should be prepared for review by any stakeholder. The mandate and contact details should be made publicly available and any referred allegation should be kept on record. The PAP includes an action to address this.

### ***Decentralized Vigilance Function***

39. There is an established system by which the CEO of a ZP can trigger police investigation (by filing a First Information Report in the local police office) against VWSCs and contractors for fraud, embezzlement and corruption. Such an investigation can also be triggered by the local administration, whose vigilance role has recently been strengthened.

40. In 2011, GoM established Committees for Eradication of Corruption at District, Divisional<sup>39</sup> and Taluk (sub-district) level (respectively chaired by the District Collector or the deputy at the district level or the divisional commissioner at the divisional level) for handling complaints against public officials related to delays, irregularities, incompetence and corruption. These committees comprise public officials and representatives of civil society, who are appointed for two years. In addition to conducting preliminary enquiries on complaints, these committees are mandated to hold quarterly reviews of complaints received, remedial actions taken and to suggest methods to expedite processes. They are also expected to collect further information on sectors where corruption is prevalent and to suggest mitigating measures.

41. Each line department is also mandated to establish a Vigilance Squad under the aegis of its most senior officer at the district level. As part of strengthening the vigilance function, this decentralized vigilance mechanism will be an integral part of the WSSD vigilance function and will be operationalized under the Program.

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<sup>39</sup> A group of districts is administered at the Divisional level by a Divisional Commissioner.

42. The WSSD vigilance function will also ensure that allegations of fraud or corruption pertaining to the Program raised by or referred to ZP officials are recorded and monitored by the Department. These measures will be supported under the Program.

### ***Mitigating the Risk of Fraud and Corruption through External Audit***

43. The Program will be subject to external financial audit by the C&AG (through the state Accountant General). Both prevention and detection of fraud and corruption fall within the C&AG's jurisdiction: "examination of system for detection and prevention of fraud and corruption will be an integral part of all regularity audits and also of performance audits, whenever it forms one of the audit (sub) objectives. Audit must evaluate and report on the adequacy of the systems in place and competence with which the management (of the audited entity) has discharged its responsibility in relation to prevention, detection, response and follow-up/remedial measures in relation to fraud and corruption. Reports of individual cases of suspected fraud and corruption should be confidentially addressed, in the first instance, to the controlling authority concerned. More serious cases should also be confidentially reported to the Secretary of the Administrative Departments (where they are not the controlling offices) concerned and the investigative authorities like Central/State Vigilance Commission, Lok Ayukta, etc."

44. C&AG guidance to staff also includes the following specific provision on externally-funded projects, which reads: "Audit is (supposed) to identify matters relating to inadequacies in systems and control, cases of fraud and presumptive fraud, wasteful expenditure and failure of administration to take corrective action on recommendations contained in the earlier report."<sup>40</sup>

### ***Other Accountability Mechanisms***

45. Broader accountability mechanisms, beyond external audit, that also help mitigate risks of fraud and corruption and strengthen fiduciary control, are:

- a) *Transparency*. Under the RTI Act, 2005, any public entity is bound to proactively disclose information of general interest (listed in Section 4 of the Act) and answer any request for information in a timely manner. The RTI Act grants citizens the right to "i) inspect works, documents, records; ii) take notes, extracts or certified copies of documents or records; iii) take certified samples of material; and iv) obtain information in form of printouts, diskettes, tapes, video cassettes or in any other electronic mode or through printouts of information related to public." The RTI has become an effective accountability mechanism and millions of applications for information are being filed every year. There is empirical evidence that it is a more effective tool for citizens to obtain the service they are entitled to than to bribe their way through red tape. The Maharashtra State Information Commission, which oversees implementation of the RTI Act within the state, has recently highlighted to the state line departments that they have to comply with Section 4 of the Act on voluntary disclosure of information. WSSD has committed to abide by the law and to significantly strengthen its public information system. WSSD is well equipped to answer requests for information, thanks to a network of 258 public information officers spread over each RWS Division of

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<sup>40</sup>[http://saiindia.gov.in/english/home/Our\\_Process/Audit\\_Methology/Guidelines\\_Notes/Book\\_Fraud\\_Corruption.pdf](http://saiindia.gov.in/english/home/Our_Process/Audit_Methology/Guidelines_Notes/Book_Fraud_Corruption.pdf)



ZPs, with 119 first appellate officers and a next level of Appellate Authorities appointed by the WSSD Chief Information Commissioner in each of its six divisions.

- b) It has been agreed that in order to ensure comprehensive disclosure of information pertaining to the implementation of the Program, a system will capture information pertaining to the activities of VWSCs, including (but not limited to): (i) village assemblies’ resolutions, administrative and technical sanctions; (ii) technical details of schemes sanctioned (designs, plans, estimates); (iii) funds released to VWSCs; and (iv) completion certificates/audit, information on Gram Sabha resolutions, administrative approval, technical approval, costs of projects, and contractors. Such information will be captured in the strengthened M&E system of the sector, and aggregated on the WSSD website.

### ***Social Accountability Mechanisms***

46. Social accountability mechanisms (VWSC accountability, social auditing) are detailed in the Environmental and Social Systems Assessment. The WSSD grievance redress mechanism (E-Pani) will be strengthened to capture, record and handle allegations of fraud and corruption pertaining to the Program, and improve its access and effective use by stakeholders, including beneficiaries. A follow-up mechanism is being put in place to handle grievances that are not resolved at the village level. WSSD is also expected to draft and disclose citizen’s charters (under the recently revived state Performance Management and Evaluation System).

### ***Program Actions***

47. The anti-corruption framework can be construed as potentially effective. However, two mechanisms call for significant strengthening: (i) WSSD’s vigilance function needs to be codified, formalized and consolidated; and (ii) grievance redress mechanism (E-Pani) needs to be made more accessible and comprehensive, and allow for the capture and handling of allegations of fraud and corruption. The Key Program Actions, and other actions to address gaps through technical assistance and capacity building measures, are listed Table 5.2 (extracted from Table 5 in the main text of the PAD).

**Table 5.2: Key Program Actions**

	<b>Cross-cutting actions</b>
1	Strengthen existing complaint and grievance redress and vigilance mechanisms within WSSD at the state level to handle complaints related to <u>procurement</u> , <u>financial management</u> , service delivery, environmental and social <u>fraud and corruption issues</u> under the Program. Information on complaints received and remedial actions taken will be aggregated annually and publicly disclosed.
	<b>Fiduciary Actions</b>
2	Compile the rules and procedures on procurement, including for selection of consultant services, into a comprehensive procurement <b>manual for the RWSS sector</b> and adopt it.
3	Conduct procurement post-review on a regular basis, covering at least 15% of contracts issued each year in the RWSS sector.
4	Establish double-entry accounting system at all levels in MJP, including simplification of formats for

	annual audited financial statements and development of an entity Financial Management Manual.
5	Establish a system to report information on expenditure (not releases) at GPs/VWSCs. Carry out district and GP level audits as per a specific ToR.

#### Other Actions

	Other Actions	Links to PAP/DLIs
	<i>Fiduciary Issues</i>	
1	Develop a Procurement Management Information System module, drawing on the e-procurement system.	DLI #1
2	Include complaints handling related to fiduciary issues under the comprehensive complaint handling and redress system of WSSD.	PAP – Action#1
3	Strengthen institutional capacity in terms of staffing, staff training and orientation, review of rules/guidelines, and simplification of procedures. Address critical issues and improve the effectiveness of audit.	DLI#2
	<i>Governance and Accountability Issues</i>	
4	Strengthen/codify/formalize WSSD's vigilance function and codify, formalize and consolidate information on vigilance issues.	PAP – Action#1
5	Make the grievance redress mechanism (E-Pani) more accessible and comprehensive, and allow for the capture and handling of allegations of fraud and corruption.	PAP – Action#1

### Attachment 5.1: Fiduciary Risks and Mitigation Measures

Risk	Mitigation Measure
MJP's accounting is on a single-entry basis and does not have a defined accounting framework/manual.	Issuing MJP's fiduciary manual, which will ensure use of Generally Accepted Accounting Principles, including the use of a double-entry accounting system. System study and development of manual (Year 1); Revised system rolled out and ability to generate entity financial statements (Year 3).
MJP audits regularly delayed and audits contain recurring observations.	Improve timeliness of MJP accounting and audit; create a task force to address past audit observations.
Variation across districts in terms of procedure for release of funds (ZP to GP).	Uniformity in procedure – ensure adequate fiduciary coverage across the state.
Additional layers of review at the ZP level, leading to delays in payments to contractors by GPs.	Simplification of procedure and empowerment of GPs.
Reporting of GP level expenditure based on releases by the ZPs.	Expenditure data captured on a systematic and regular basis.
Lack of staff capacity at lower levels, coupled with multiplicity of instructions, and delays in procurement process and outcomes.	Mandatory use of e-procurement, with already provided IT staff for handholding and the development of the Manual to assure consistency and predictability for staff as well as the bidding community.
Governance issues, including petty corruption, collusive practices, etc., with no clear dispute resolution mechanism, could impact the integrity of the process.	Mandatory use of e-procurement and establishment of a complaint handling and redress management system.
Lack of independent control and oversight mechanisms could lead to inefficient procurement management, leakages and losses.	Mandatory procurement planning at state and entity levels, integration of procurement MIS as part of the integrated M&E system and an annual post review of procurement contracts awarded.
GP audits delayed (only after incurring 90% of scheme expenditure) and not standardized (no clear ToR for audit).	Bring GP audits early on in the scheme cycle and regulate the audit process by defining ToRs and adherence to standards.
Fraud and corruption: lack of a formalized vigilance function at the department level; beneficiaries lack access to grievance redress mechanism.	The WSSD vigilance function and its grievance redress system (E-Pani) will be strengthened. WSSD vigilance function will be codified, formalized and consolidated. E-Pani will be made more accessible and comprehensive, and allow for the capture and handling of allegations of fraud and corruption.

## Attachment 5.2: Indicators

### Financial Management

<b>Risk</b>	<b>Performance Indicator</b>	<b>Baseline</b>	<b>Recommended Standard</b>
Reporting of expenditure at MJP level.	Accurate and uniform reporting of expenditure.	Single-entry system of accounting and no framework to guide financial management.	A fiduciary manual which ensures use of Generally Accepted Accounting Principles, including use of double-entry accounting system.
Reporting of program expenditure at GP level.	Expenditure reported based on payments made by the VWSC/GP.	Reporting of GP level expenditure based on releases by ZPs.	Expenditure data captured through 'Priasoft' or similar software.
District-level audit.	Streamlining district level audit.	Separate audit reports issued for different GoI schemes.	Specific audit ToR and consolidation of Audit Reports.
Audit framework at GP level.	Standardization and uniformity in GP audits.	GP audit not guided by any framework.	Specified ToR made mandatory, including adherence to the Institute of Chartered Accountants of India guidelines.

### Procurement

<b>Risk</b>	<b>Performance Indicator</b>	<b>Baseline</b>	<b>Recommended Standard</b>
Procurement plan.	Implementation agencies prepare procurement plans.	None of the agencies prepares a comprehensive procurement plan.	Annual procurement plans are prepared.
Use of e-procurement.	All procurement is undertaken through e-gp system and time taken for procurement process.	60 days	Timely conclusion of contracts within initial validity period; lower repeat bidding; and lower bid cancellations.
	Checking GoM and World Bank debarment list before contract award.	Not always done.	Done in all cases before award.
Average number of bidders.	Number of tenders sold and bids received.	2 bidders	Improvement in level of participation and competition.
Number of contracts with cost increases over award amount.	Cost increases due to amendments or change orders.	Contracts not completed within awarded amount.	Quality of process, documents, specifications; quality of competition.
Processing of contractor payments.	Average time taken for release of payment from date of validation of Measurement Book and date of bill raised by contractor.	70% payments are made within the agreed timelines in contracts.	Improved efficiency of contractor payments.

<b>Risk</b>	<b>Performance Indicator</b>	<b>Baseline</b>	<b>Recommended Standard</b>
Contract administration/time over-runs.	Average time taken for completion of project from date of award of contract and difference between estimated date of completion as per contract and completion date.	20% of contracts are delayed from the contract duration stated in the contract.	Improved time efficiency in project execution.

**Annex 6: Summary Environmental and Social Systems Assessment**  
**INDIA: Maharashtra Rural Water Supply and Sanitation Program**

1. An ESSA was undertaken by the Bank as per the requirements of Bank OP/BP 9.00. The assessments were carried out through a comprehensive review of relevant government policies, legislation, institutional roles, program procedures and an analysis of the extent to which these are consistent with Bank OP/BP 9.00. Further, actions to address gaps to enhance risk mitigation were identified and detailed. The ESSA methodology included analysis of information/data on GoM's RWSS programs, field reviews, and consultations with all key stakeholders.

**Environmental Systems**

2. The risk screening suggests that the overall environmental impact of the Program is likely to be positive, owing to benefits such as improved access to safe water, enhanced availability of drinking water, groundwater protection, and reducing groundwater contamination. However, environmental risks could arise due to improper location, planning, execution and management of schemes, especially in hotspot areas. Hotspot areas are characterized by: extent of groundwater withdrawal (overexploited and critical groundwater status), poor groundwater quality, poor surface water quality, drought proneness, and proximity to protected natural areas and monuments. The risks are: water sources not being sustainable, poor water quality, contamination from poorly designed/managed water quality treatment units, non-scientific disposal of treated sullage, impacts on natural and cultural heritage sites, occupational and public safety risks, dam safety in certain cases, and water wastage.

**Key Findings**

3. The key findings of the ESSA on environmental systems are:
- a) The state has well-defined legal/regulatory systems for safeguarding water resources and ecologically significant areas from pollution, for protection of groundwater sources from interference, and for excluding activities that are likely to have significant adverse impacts on eco-sensitive areas, coastal areas and wetlands. However, implementation of the existing provisions faces challenges (due to multiple regulations, overstretched regulatory authorities etc.). Procedures are well defined for design and execution of RWSS schemes in forest areas and near protected monuments. These also require approvals from the Forest Department and the Archeological Survey of India, respectively. Monitoring implementation of these procedures at the state-level by WSSD needs to be strengthened.
  - b) The state's approach to enhancing source sustainability in scheme planning includes source selection based on technical assessment and community consultation, source strengthening, and water conservation. Regulations for protection of groundwater from interference from nearby sources are also enacted. There is a need for mainstreaming this approach of sustainability planning in all schemes.
  - c) The state's systems for safeguarding drinking water quality includes certification of water quality by GSDA/DPHL for new groundwater-based schemes and by MJP/DPHL for new surface water-based schemes. Water quality monitoring comprises periodic testing,

surveillance and information management; there is a need to strengthen this system, especially for water quality hotspot areas.

- d) The state has experience of integrating rules and procedures for environmental management in single village rural water supply schemes, for example, in the World Bank-supported Jalswarajya-I project (2003-09). Strengthened environmental management rules and procedures have been developed by GoM to be rolled out through the Program.
- e) Addressing the environmental management needs of the Program requires capacity building of key RWSS organizations in the state, i.e., MJP, GSDA, ZPs, GPs and PHD.

4. The assessment shows that with the implementation of identified actions to address the gaps and to enhance performance during implementation, the state's environmental systems are adequate for Program implementation.

### ***Key Program Actions***

5. Key actions agreed with GoM to address identified environmental risks and gaps are:
  - a) *Exclusion of high-risk interventions.* Investments excluded from the Program are: schemes that involve construction or rehabilitation of dams which are  $\geq 10$  meters in height; ground water-based schemes in overexploited and critical basins that do not integrate source sustainability measures; and schemes involving highly polluted surface water sources.
  - b) *Strengthening the existing GoM system for environmental management.* The Program Action Plan focuses on strengthening GoM procedures and capacity for environmental management of the Program, i.e., 'Implement strengthened environmental management rules and procedures for the Program, supported by necessary capacity building measures to the sector institutions'.

### ***Implementation of Program Actions***

6. *Implement Strengthened Environmental Management Rules and Procedures for the Program.* WSSD has developed a manual describing strengthened procedures and providing technical guidance for environmental management of RWSS interventions for the Program. The key elements of the strengthened environmental rules and procedures are:

- a) Exclusion list of high-risk interventions.
- b) Compliance Checklist to ensure that activities that are not legally permissible are not undertaken and that requisite permissions are obtained before any scheme/intervention is financed.
- c) Environmental Due Diligence Plan (EDDP) to systematically identify potential impacts and prepare mitigation plans for schemes/interventions that pose environmental risk by virtue of their location, scale or nature. Schemes identified as requiring an EDDP<sup>41</sup> are those:
  - Located in/near forest land, eco-sensitive zones, coastal regulation zones, ecologically sensitive/important/notified wetlands, and protected monuments.
  - Located in water scarcity and quality hot spots.

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<sup>41</sup> RWSS projects do not require prior environmental clearance from the center or the state as per the Environmental Impact Assessment Notification, 2006. The EDDP being proposed is not an environmental impact assessment.

- Requiring construction and/or rehabilitation of dams<sup>42</sup> that are 5-10 meters in height.
  - Involving laying or replacement of asbestos-cement pipes.
- d) Technical guidelines for siting, design, operation, maintenance, etc.
- e) Internal and third-party monitoring of the environmental performance of the Program (with additional emphasis on identified environmental hotspots). The key monitoring indicators are:
- Indicator 1: Number of schemes for which EDDPs have been prepared and integrated in detailed scheme reports and contract documents as a percentage of schemes identified as requiring them.
  - Indicator 2: Percentage of schemes/interventions that are in compliance with legal/regulatory requirements on environment.
7. The manual recommends adoption of strengthened procedures and technical guidance as good practice for the entire GoM RWSS sector program. Application of the manual will start from the first year of the Program.
8. *Capacity Building of Key Sector Institutions.* Capacity building of key sector institutions for environmental management includes:
- a) *Human resources.* Hiring the following professionals:
- Environment management specialists at the state level in WSSO, PMU, MJP, and GSDA.
  - Environment management specialists at the district level in ZP, MJP and GSDA.
  - Environmental management specialist in MEETRA.
  - Water quality specialist in WSSO, ZP and BRCs.
- b) *Training and IEC.* Training programs on environmental management rules and procedures, source sustainability, water quality monitoring and surveillance, and water treatment technologies will be organized for staff of key sector institutions. IEC activities on these aspects will also be organized for the community. These will be implemented on the basis of a detailed training/IEC calendar, starting from the first year of the Program.

**Table 6.1: Implementation Plan for Environmental Actions**

<b>Sub-action Description (Environment)</b>	<b>Deadline</b>	<b>Responsible Party</b>	<b>Completion Measurement</b>
Implement strengthened environmental management rules and procedures for the Program.	Implementation starting in the first year.	WSSD, GoM	Formal endorsement <sup>43</sup> of strengthened environmental management rules and procedures (compiled in an Environmental Management Manual) by GoM; integration of EDDPs in detailed scheme reports/plans and bid documents of scheme interventions

<sup>42</sup> EDDPs for dams will include a screening process that will determine if a detailed environmental impact assessment is necessary.

<sup>43</sup> Formal endorsement refers to: (a) Integration of Environmental Management Manual into a Program Operations Manual that is approved by the Empowered Committee of the WSSD, GoM; and (b) Formal communication from WSSD to the Bank, indicating integration of the Environmental Management Manual in the Program Operations Manual, along with a copy of the Manual.



Sub-action Description (Environment)	Deadline	Responsible Party	Completion Measurement
			identified as requiring the same in the Manual.
<p>Strengthening HR on environmental management:</p> <ul style="list-style-type: none"> <li>• Environment Management Specialists at the state level in WSSO, PMU, MJP, GSDA.</li> <li>• Environment management specialists at the district level in ZP, MJP and GSDA to ensure implementation of strengthened environmental rules and procedures for peri-urban water schemes, sullage management schemes and aquifer management interventions.</li> </ul> <p>In addition to the above, GoM plans to recruit water quality specialists in WSSO ZP (DWSM cell) and BRCs, and environment management specialists at the state level in MEETRA.</p>	Confirmation of staff recruitment by GoM at the end of the first year. On-going, starting in first year.	WSSD, GoM	Confirmation by WSSD on the list of specialists appointed at state level; formal communication from WSSD confirming assignment of environment management specialists as part of the district teams of MJP and GSDA for peri-urban water schemes, sullage schemes, and aquifer management interventions.
Provision of training and IEC on environmental management aspects to staff of state technical institutions, PRIs and the community.	On-going, starting in the first year.	WSSD, GoM	Training/IEC implemented on the basis of a detailed training/IEC calendar.

## Social Systems

9. The ESSA reveals that the social impact of the Program is likely to be positive, owing to benefits such as savings in time spent by women and girls in collecting water, improved health and personal hygiene, and processes that improve information dissemination, community participation, service delivery accountability, and social audit. Potential social risks are: politicization of the selection of districts and GPs; land procurement; elite and/or male capture of community institutions; conflicts between VWSCs and GPs; higher tariffs, making services costly; community contributions not forthcoming; weak participatory decision making; lack of transparency; and poor conflict management.

## ***Key Findings***

10. The key findings of the ESSA on social aspects are:
- a) The state follows an established legal system which includes: assistance to affected people without legal rights; land procurement through consent award; assistance for livelihood support; grievance redress; special powers to tribal communities; recognition of rights of forest dwellers; empowering communities to manage their RWSS affairs; subsidizing capital cost contribution for vulnerable groups; subsidies towards the cost of individual toilets; decentralized service delivery; and safeguarding the interests of vulnerable people.
  - b) Land requirements are minimal as schemes under the Program are mostly rehabilitation/augmentation of existing schemes and sullage treatment, with limited extensions to unserved areas. The legal/regulatory system and state policy include provisions for compensating the loss of assets at replacement cost and rehabilitation of adversely affected people. The state's approach to land procurement for RWSS schemes is: (i) first, use available public land under the GP; (ii) second, GPs buy required land at a negotiated price; and (iii) finally, seek voluntary donation of land. It is the responsibility of the GPs to provide land for the Program; they will follow the sequence of options mentioned above. The preferred method is to identify public land that is free from encumbrances. In the case of private land, GPs will purchase land at 'replacement cost', if land is not provided voluntarily. For 'voluntary donation' of land, procedures developed will be followed. Land owned by vulnerable groups will not be considered.
  - c) National and state policies and laws offer an enabling environment for decentralized decision making. However, implementation remains weak as systems are not fully developed and implementing agencies lack resources. Objective, transparent, pre-defined and demand-driven criteria have been developed for the selection of Program districts and GPs. To ensure community participation and inclusion of all sections of the community in decentralized decision making, preparation of ward-level plans and their collation at the GP level has been initiated for peri-urban areas. The Gram Sabha (village assembly) will ratify all decisions after discussion at the GP level. To ensure the participation of women and vulnerable communities at all levels, the Mahila Sabha (women's assembly) will discuss all schemes, related activities and decisions, and will present them to the Gram Sabha for approval.

## ***Key Program Actions***

11. Key actions agreed with GoM to address identified social risks and gaps are:
- a) *Decentralized Planning.* MJP/ZP will implement schemes as per plans ratified by the Gram Sabha, in collaboration with the GP/VWSC. Post implementation, schemes will be handed over to GPs, and an effective O&M arrangement will be developed. This will ensure adequate ownership at the village level and sustainable O&M.
  - b) *Social Accountability.* Existing social audits conducted by SAC will be strengthened under the Program, with a focus on inclusion, participation, transparency, expenditure tracking and quality control. SAC will continue to function through the post-implementation period to audit O&M performance. Findings of the Committee will be shared in the Gram Sabha and corrective measures will be taken to improve transparency.

- c) *Grievance Redress*. The E-Pani system will be strengthened through the Program.
- d) *Demand Responsive Service Delivery and Vulnerable People*. The Program will design: (i) a comprehensive communication program for dissemination of Program strategy and IEC material; and (ii) a community operational manual that details step by step activities to be implemented, as well as roles and responsibilities of all implementing partners. Special provisions that already exist to safeguard the interests of vulnerable people (e.g., scheduled castes and tribes) and the provision of subsidies to them will be continued under the Program.
- e) *Transparency and Accountability*. Strengthened transparency and accountability includes: display of information on all activities, including cost, at prominent and public places in the wards; form SACs that are representative of all wards and women; and develop simple formats for reporting findings during planning, implementation and post implementation. A grievance redress system will be established and support will be provided for conflict management at the village level. Capacity building will include hiring staff and conducting training according to the annual plans. These are detailed in the Program Manual and in the Community Operational Manual.
- f) *Capacity Building*. The capacity of key implementing institutions (PMU, WSSO, MJP, ZPs and BRCs) will be built to ensure decentralized decision making, transparency, and accountability. In the Program villages, Support Organizations (SOs), usually local capacitated NGOs, will be hired by ZPs (DWSM cell) for training and capacity building of GPs/VWSCs/ward-level committees and SACs, as required. The DWSM cell will be strengthened by hiring social specialists to coordinate with SOs and monitor SOs' performance.

## **Implementation of Program Actions**

### 12. *Implement Strengthened Social Management Rules and Procedures for the Program.*

The overall risks associated with social aspects are low. The agreed actions to mitigate/ manage identified social risks are:

- a) *The Program Manual* will include a section on social aspects to inform Program implementing organizations of key social aspects, including: social inclusion processes and procedures; roles and responsibilities of all stakeholders; and sub-project cycle to facilitate planning, implementation and post implementation. This will be further detailed in the Community Operations Manual prepared in the local language, Marathi, to enable the community understand these issues.
- b) *Establish systems to promote social accountability*. SACs will be formed at the GP level, as per GoM norms, to audit plans for compliance on inclusion, community consultations, land acquisition, and services to vulnerable groups. During implementation, expenditures on civil works will be tracked. At the post-commissioning stage, service levels, maintenance and cost recovery will be audited.
- c) *A Grievance Redress Mechanism will be developed* at the GP level for conflict management. Operational guidelines will be developed to improve conflict resolution and track and document all grievances.

### 13. *Capacity Building of Key Sector Institutions on Social Management.* Developing the capacity building plan for the Program will entail:

- a) *Strengthening communications.* The IEC program will be revised to include a comprehensive communication strategy and a Community Operational Manual to disseminate complete information about the Program, its implementation and post implementation, to enable GPs to make informed decisions.
- b) *Deepening decentralized decision making.* SOs will be hired to support GPs/VWSCs to facilitate implementation of the Community Operational Manual, mobilize and prepare plans at the ward level (for peri-urban villages) and consolidate them at the GP level. SOs will also assist in ensuring that free, prior, and informed consultations are organized for the proposed investments in GPs that have dominant tribal communities. It is mandatory to have the Mahila Gram Sabha review the GP plan to ensure that their needs are addressed before the plan's ratification by the Gram Sabha. The Gram Sabha will ratify/approve all decisions of the scheme after due discussion at the GP level.
- c) *Strengthening transparency.* In order to improve transparency and accountability of implementing organizations, selection criteria have been developed for inclusion of districts and GPs in the Program. Information on all activities, including cost, will be displayed at prominent and public places in the wards. All planning, procurement, implementation and post-implementation (O&M and withdrawal) activities will be ratified by the Gram Sabha.
- d) *Monitoring progress* on implementation of strengthened social management rules and procedures for the Program, including review of land procurement.
- e) Social development and communication specialists will be positioned at the state level at the PMU and in ZPs' DWSM cells at the district level to ensure compliance of social management procedures and outcomes. A comprehensive training plan and modules will be developed for key implementation agencies and MEETRA's capacity will be strengthened as a center of excellence to provide training on social management.

**Table 6.2: Implementation Plan for Social Actions**

<b>Sub-action Description (Social)</b>	<b>Deadline</b>	<b>Responsible Party</b>	<b>Completion Measurement</b>
Implement strengthened social management rules and procedures to enhance guiding principles - inclusion, participation, transparency, accountability and grievance management.	Implementation starting in the first year.	WSSD, GoM	Strengthened social management rules and procedures included in the Program Manual and in the Community Operational Manual.
Capacity building: <ul style="list-style-type: none"> <li>• Social development and communication specialists in the PMU.</li> <li>• Hire SOs at the district level to ensure implementation of strengthened social management rules and procedures for the Program.</li> </ul> <p>GoM has a communication and gender specialist in the PMU.</p>	Confirmation of staff recruitment by WSSD at the end of the first year; on-going, starting in the first year.	WSSD, GoM	Formal communication from WSSD confirming hiring of specialists and SOs.

<b>Sub-action Description (Social)</b>	<b>Deadline</b>	<b>Responsible Party</b>	<b>Completion Measurement</b>
Develop training plan and modules on social management rules and procedures; communication strategy and IEC material; and impart training to all stakeholders.	On-going, starting in the first year.	WSSD, GoM	Training/IEC implemented on the basis of a detailed training/IEC calendar.

## Annex 7: Integrated Risk Assessment

### INDIA: Maharashtra Rural Water Supply and Sanitation Program

<b>1. PROGRAM RISKS</b>			
<b>1.1 Technical Risk</b>	<b>Rating:</b>	Moderate	
<p>WSSD has experience of implementing World Bank supported projects (including delivering capacity-building efforts) on time, with good outcomes. State level and district level institutional coordination mechanisms have been defined in the Program Manual. Nevertheless, there could be delays in building capacity of organizations, mainly in hiring professionals, training and retaining them.</p>	<b>Risk Management</b>		
	<ul style="list-style-type: none"> <li>• Ensure that within the first year of the Program all teams are in place at the state, district and block levels for delivering investments in peri-urban villages and for implementing AWMIs.</li> <li>• WSSD will implement the overall staffing plan. The Bank will monitor the implementation of this plan.</li> <li>• A HR manual that lays down procedures for recruitment, training and retention of professionals will be prepared and implemented. This is part of the PAP.</li> <li>• Revision of salary and increment structure offered to contract professionals to bring them on par with other sectors. The Bank will review status during the mid-term review and advice on necessary changes.</li> </ul>		
	<b>Resp:</b> WSSD and Bank	<b>Stage:</b> Implementat ion	<b>Due Date :</b> On-going
			<b>Status:</b> In progress
<b>1.2 Fiduciary Risk</b>	<b>Rating:</b>	<b>Substantial</b>	
<p>GoM is already moving towards e-procurement across the sector, online transfers to pay contractors, and is strengthening M&amp;E systems (which include Procurement and Financial Management systems). However, gaps in fiduciary systems listed below may affect Program delivery:</p> <ul style="list-style-type: none"> <li>• MJP's accounting is on single-entry basis; it does not have a defined accounting framework/manual.</li> <li>• MJP audits regularly delayed and audits contain recurring observations.</li> <li>• Variation across districts in terms of</li> </ul>	<b>Risk Management</b>		
	<ul style="list-style-type: none"> <li>• Issuing of MJP's fiduciary manual to ensure use of Generally Accepted Accounting Principles, including use of double-entry accounting system.</li> <li>• Improve timeliness of MJP accounting and audit, create taskforce to address all significant past audit observations.</li> <li>• Uniformity in procedures to ensure adequate fiduciary coverage across the state.</li> <li>• Simplification of procedures and empowerment of GPs.</li> <li>• Expenditure data captured on a systematic and regular basis.</li> <li>• Mandatory use of e-Procurement, with IT staff available for support and the development of a Manual.</li> <li>• Establishment of a complaint handling and redress management system.</li> <li>• Bringing GP audits early on in the scheme cycle and regulating the audit process by</li> </ul>		

<p>procedure for release of funds (ZP to GP).</p> <ul style="list-style-type: none"> <li>• Additional layers of review at the ZP level, leading to delays in payments to contractors by GPs.</li> <li>• Reporting of GP-level expenditure, based on releases by ZPs.</li> <li>• Lack of staff capacity at lower levels, coupled with multiplicity of instructions, affects procurement process and outcomes.</li> <li>• No clear dispute resolution mechanism.</li> <li>• Lack of independent control and oversight mechanisms, especially on procurement.</li> <li>• GP audits delayed and not standardized (no clear ToR for audit).</li> </ul>	<p>defining ToRs and adhering to standards.</p> <ul style="list-style-type: none"> <li>• Strengthening the WSSD vigilance function and grievance redress system (E-Pani). WSSD vigilance function will be codified, formalized and consolidated. E-Pani will be made more accessible and comprehensive, and will capture the handling of allegations of fraud and corruption. This is part of the PAP, Action 1.</li> </ul> <p>The Bank will provide on-going implementation support for effective implementation of the above risk management measures.</p>			
	<p><b>Resp:</b> WSSD and Bank</p>	<p><b>Stage:</b> Implementat ion.</p>	<p><b>Due Date :</b> as per PAP</p>	<p><b>Status:</b> In progress</p>
<p><b>1.3 Environmental and Social Risk</b></p>	<p><b>Rating:</b> Moderate</p>			
<p><u>Environmental</u> WSSD has experience under the previous World Bank-supported project in successfully adopting improved environmental management processes, including source sustainability measures, water quality testing of all public water sources and their analysis, having requisite manpower at the institutions to manage the environmental issues. etc. The environmental systems analysis identified the following risks:</p> <ul style="list-style-type: none"> <li>• Poor siting, design and O&amp;M leading to water sources not being sustainable, poor water quality, impacts on natural and cultural heritage sites, occupational health and public safety risks, dam safety (in cases involving large dams) and water wastage.</li> </ul>	<p><b>Risk Management</b> Environmental</p> <ul style="list-style-type: none"> <li>• Activities that present the possibility of potentially significant, adverse environmental impacts have been excluded from the Program. Action 12 in the PAP focuses on implementation of strengthened environmental and social management rules and procedures for the Program, supported by necessary capacity building measures, including: <ul style="list-style-type: none"> <li>○ Implementation of strengthened environmental management rules and procedures for the Program (integrated in the Program Operational Manual) including scheme-specific environmental plans for RWSS interventions in hotspot areas.</li> <li>○ Capacity building on environmental management through strengthening of HR, and through training and IEC, including: <ul style="list-style-type: none"> <li>▪ Environment management specialists at the state level in PMU, MJP, and GSDA.</li> <li>▪ Environment management specialists at the district level in MJP and GSDA.</li> </ul> </li> </ul> </li> </ul>			

<ul style="list-style-type: none"> <li>Capacity of implementing agencies needs strengthening to ensure compliance with relevant legal and regulatory provisions.</li> <li>Source sustainability planning and water quality monitoring need to be strengthened, especially in hotspot areas.</li> </ul>	<p>The Bank will monitor satisfactory implementation of the above risk management actions, especially during implementation support missions and site visits.</p>						
<p><b>Social</b> Under the previous Bank supported project WSSD demonstrated improved Demand Responsive Approaches, Women Empowerment initiatives, Social Audit mechanisms, peer-to-peer evaluations between the villages and districts, and a number of innovative IEC activities. The social systems analysis identified the following risks related to the Program:</p> <ul style="list-style-type: none"> <li>Selection of districts and GPs can be politicized.</li> <li>Community stakeholders perceive the risk of elite and/or male capture of institutions such as the VWSC and GP, the risk of VWSC sidelining the GP, higher tariffs making services burdensome for the poor and vulnerable, and community contributions becoming a challenge. Community stakeholders perceive weak participatory decision making, lack of transparency and accountability, and poor conflict management.</li> </ul>	<p><b>Risk Management</b> Social</p> <ul style="list-style-type: none"> <li>Selection of districts and GPs to be undertaken as per agreed pre-defined selection criteria. These criteria will be made available to all districts and GPs and will encourage interested GPs to apply.</li> <li>The Program Manual defines project cycles for ensuring appropriate awareness generation, participation (in Gram Sabhas etc.), equity and accountability. Capacity building of key sector institutions, including GPs and VWSCs, as well as implementing IEC activities in early stages to reduce risks related to participation and elite capture. These actions and steps are further detailed in Community Operations Manual prepared in the local language, Marathi, for easy understanding of all stakeholders.</li> <li>SACs will be formed in all Program villages and their capacity built to audit plans to ensure that they are in compliance on inclusion, participatory processes, land procurement, and access to benefits for vulnerable groups. Expenditures on civil works will be tracked. Service levels, maintenance and cost recovery will be audited after schemes are commissioned.</li> <li>Grievance redress mechanisms will be developed and implemented at the GP level.</li> <li>The Bank will support WSSD in refining policies and guidelines related to community contributions, financing of O&amp;M etc., with a focus on affordability of poorer sections, as required.</li> <li>Capacity building plan will be implemented.</li> </ul> <p>The Bank will monitor satisfactory implementation of the above risk management actions, especially during implementation support missions and site visits.</p> <table border="1" data-bbox="867 1344 2005 1412"> <tr> <td data-bbox="867 1344 1129 1412"><b>Resp:</b> WSSD and Bank</td> <td data-bbox="1140 1344 1451 1412"><b>Stage:</b> Implementation</td> <td data-bbox="1461 1344 1822 1412"><b>Due Date :</b> On going During implementation.</td> <td data-bbox="1833 1344 2005 1412"><b>Status:</b> In Progress</td> </tr> </table>			<b>Resp:</b> WSSD and Bank	<b>Stage:</b> Implementation	<b>Due Date :</b> On going During implementation.	<b>Status:</b> In Progress
<b>Resp:</b> WSSD and Bank	<b>Stage:</b> Implementation	<b>Due Date :</b> On going During implementation.	<b>Status:</b> In Progress				



<p><b>1.4 Disbursement-Linked Indicator Risks</b></p> <p><b>Description :</b>  This Program is the first operation in India to adopt the PforR instrument, with DLIs, although there has been previous experience with DLIs in Specific Investment Loans, where a portion of the financing was disbursed based on DLIs. In the current Program design, DLIs and their targets for the Program strike a balance between outputs and outcomes. The time lines of the DLI targets have been chosen to match implementation progress.</p>	<p><b>Rating: Substantial</b></p> <p><b>Risk Management :</b>  WSSD and the Bank will monitor progress of disbursement under the Program DLIs. The DLIs will be reviewed during the mid-term review and will be modified as necessary.</p>			
	<p><b>Resp:</b>  WSSD and Bank</p>	<p><b>Stage:</b>  Implementation</p>	<p><b>Due Date :</b> On-going during implementation</p>	<p><b>Status:</b> In Progress</p>
<p><b>2. OVERALL RISK RATING</b></p>		<p><b>Moderate</b></p>		
<p>Maharashtra is an advanced state of the country in the sector and this is the third engagement for the World Bank in the sector in Maharashtra. There is adequate institutional capacity building and technical assistance support under the Program. In view of this, the overall risk is considered to manageable and so is rated ‘Moderate.’</p>				

## Annex 8: Program Action Plan Implementation

### INDIA: Maharashtra Rural Water Supply and Sanitation Program

Action	Due Date	Responsible Agency	Completion Measurement
<b>Cross-cutting Actions</b>			
1. Strengthen existing complaint and grievance redress and vigilance mechanisms within WSSD at the state level to handle complaints related to procurement, financial management, service delivery, environmental and social aspects, and fraud and corruption issues under the Program. Information on complaints received and remedial actions taken will be aggregated annually and publicly disclosed.	Establish system by Year 2, then monitor annually.	WSSD	<ul style="list-style-type: none"> <li>• Database is maintained on complaints and actions taken.</li> <li>• Report on complaints and actions taken is prepared annually and publicly disclosed.</li> <li>• WSSD's vigilance function strengthened/codified/formalized along with consolidation of information on vigilance issues.</li> <li>• Grievance redress mechanism (E-Pani) more accessible and comprehensive, and captures and handles allegations of fraud and corruption.</li> </ul>
2. Prepare and implement an Annual Capacity Development Plan for key sector institutions (WSSO, DWSM and BRCs) focused on developing both individual competencies and collective capabilities (resources, tools and assets).	Annually, starting from Year 1.	WSSO	<ul style="list-style-type: none"> <li>• Annual Capacity Development Plan prepared and implemented focusing on individual staff competence and collective capabilities (resources, tools and assets) in key sector institutions (WSSO, DWSM and BRCs).</li> </ul>
<b>Technical &amp; Institutional Actions</b>			
3. Strengthen RWSS planning processes in Year 1 and review their effectiveness in Year 3 and Year 5.	Year 1, Year 3 and Year 5	WSSD	<ul style="list-style-type: none"> <li>• Strategic sector plan is prepared in Year 1 and disseminated to all districts.</li> <li>• Guidelines for improving the process and quality of district-level planning are prepared and disseminated to all districts in Year 1.</li> <li>• Improved quality and consistency of district annual plans, in line with the strategic plan.</li> </ul>

			<ul style="list-style-type: none"> <li>• Strategic sector plan and effectiveness of district-level planning reviewed in Year 3 and Year 5.</li> </ul>
4. Establish and institutionalize technical and administrative back-up support mechanism for GPs/VWSCs.	Year 2	WSSO	Report on the technical/administrative back-up model established. Annual report on the extent of adoption of sustainable O&M mechanisms by GPs issued.
5. As part of the state's M&E system, establish a system to monitor the "schedule performance" (extent of completion within time schedules) of completed rural water supply schemes.	Establish system in Year 2, then monitor annually.	WSSO	Annual report on the schedule performance of completed rural water schemes.
6. Strengthen institutions to better manage the sanitation program of the state, assess areas of weakness (particularly in relation to ODF slip back), and take mitigation actions as needed.	Year 2	WSSO	<ul style="list-style-type: none"> <li>• Assessment required to roll out NBA completed by Year 1.</li> <li>• Identification of institutional strengthening and mitigation actions completed by Year 2.</li> <li>• Annual implementation.</li> <li>• NBA integrated in peri-urban areas where improved drinking water supply services are planned.</li> </ul>
<b>Policy Actions</b>			
7. Prepare and adopt a comprehensive HR policy for the sector to attract and retain talent/skills, and review and revise O&M policy based on comprehensive diagnostics of affordability and complexities of schemes.	Year 2	WSSO	<ul style="list-style-type: none"> <li>• Policies reviewed and revised as needed by Year 1.</li> <li>• Actions implemented and monitored from Year 2 onwards.</li> </ul>
<b>Fiduciary Actions</b>			
8. Compile rules and procedures on procurement, including for selection of consultant services, into a comprehensive	Year 1	WSSD	<ul style="list-style-type: none"> <li>• Manual prepared by Year 1.</li> <li>• Put to use from Year 2 onwards.</li> </ul>

procurement manual for the RWSS sector and adopt it.			
9. Conduct procurement post-review on a regular basis, covering at least 15% of contracts issued every year in the RWSS sector.	Annual	WSSD	Report on annual procurement post-review.
10. Establish double-entry accounting system at all levels in MJP, including simplification of formats for annual audited financial statements, and development of entity Financial Management Manual.	Year 2	MJP	Double-entry accounting system is established and implemented.
11. Establish a system to report information on expenditure at GPs/ VWSCs; carry out district-level and GP-level audits as per a specific ToR.	Establish system in Year 2, then monitor annually.	WSSD	Reports on expenditures at GP/VWSC levels.
<b>Environmental and Social Actions</b>			
12. Implement strengthened environmental and social management rules and procedures for the Program, supported by necessary capacity building measures for sector institutions.	Ongoing	WSSD, MJP, GSDA, ZPs	<ul style="list-style-type: none"> <li>• Environmental checklist included in the Environment Management Manual is utilized and integrated into the detailed scheme reports of all schemes/interventions under the Program.</li> <li>• EDDPs are implemented for schemes/interventions identified as requiring them.</li> <li>• Appointment/assignment of environmental management specialists at the state and district levels (end of Year 1).</li> <li>• Training and IEC activities on environmental management are implemented as per an annual training and IEC calendar.</li> <li>• Social processes planned and implemented for all schemes under</li> </ul>

			<p>the Program.</p> <ul style="list-style-type: none"><li>• Social development specialist, communication specialist and Support Agency mobilized.</li><li>• Capacity building implemented in accordance with the training calendar.</li></ul>
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## **Annex 9: Implementation Support Plan**

### **INDIA: Maharashtra Rural Water Supply and Sanitation Program**

1. The overall responsibility for implementing the Program rests with WSSD. The Bank will work closely with WSSD to support overall implementation by maintaining regular dialog with GoM teams, undertaking periodic joint reviews with a focus on key issues, undertaking field reviews on a sample basis, offering need-based expert support on issues related to polices, institutional changes, technical aspects and systems development, and supporting risk management. The implementation support plan is given below.

2. **First 12 Months.** The Bank will provide special support during the crucial first year of Program implementation in the following areas:

- Review of progress in setting up teams and support in orienting/training them about the Program, as well as assistance in organizing an international study tour.
- Review of and support to the process of hiring and orientation of the Independent Verification Agency; review of progress on institutional strengthening, including plans for MEETRA and the vigilance unit within WSSD.
- Review of the community operations manual, the HR manual, and procurement manual.
- Review of O&M policy improvements.
- Review of plans for strengthening MIS/M&E systems development, including the grievance redress system (E-Pani).
- Support rolling out the implementation of the strengthened Environmental and Social Manual of GoM.
- Support rolling out e-procurement and financial management systems.
- Support in developing impact assessment strategy.

3. **During 12-48 Months.** Main support from the Bank during this period will include:

- Periodic review missions to discuss progress on key aspects and advice on course correction. These discussions and advice provided will be captured in aide memoires.
- Review progress with respect to DLI indicators and PAP, and assess shortfalls, if any.
- Review progress of MIS/M&E systems development and their use.
- Undertake field visits on a sample basis to review progress and advice accordingly.
- Support WSSD in making key policy decisions needed to strengthen Program implementation.
- Review the risk management framework and update as required on an annual basis.
- Assist in the design of mid-term evaluation, analysis of results, and subsequent Program course correction, as required.

4. **After 48 Months.** The Bank will develop an appropriate support plan based on the progress of the Program in the first four years:

- If progress is as per plan, the above support activities will be continued on a reduced scale.

- If there are any major issues, support will be provided to restructure the Program, as required.
- Specific support will be provided to: (i) design, conduct and review the results of an end-term evaluation; (ii) strategize on scaling up Program approaches and lessons across the state; and (iii) support development of appropriate policies and an institutional and systems roadmap for such scaling up and sustaining Program results.

5. **Skills Needed.** The following skills are needed for providing the above support:

- RWSS sector experience and knowledge.
- Engineering skills to review and advise on designs, costing and execution.
- Institutional development knowledge and expertise.
- Environmental management expertise.
- Knowledge and expertise on social aspects, mainly related to social inclusion, community participation, transparency and social accountability.
- MIS/M&E systems development and use.
- Procurement knowledge.
- Financial management, audits, and government budgets.
- Anti-corruption and governance aspects.

*Specialist Skills needed*

- Impact Assessment.
- Information and Communication Technologies, including GIS and Remote Sensing.
- Ground Water resource assessment and management.
- Water Quality Management