

**BIHAR STATE WATER AND SANITATION MISSION
STATE PROJECT MANAGEMENT UNIT
VISHVESHWARIYA BHAWAN, BAILEY ROAD, PATNA 800 015**

**SALIENT FEATURES OF WORLD BANK ASSISTED ‘RURAL WATER SUPPLY AND
SANITATION PROJECT FOR LOW INCOME STATES’ (RWSSP-LIS)**

Project Context

The Government of India has approached its Twelfth Five Year Plan (2012-17) around the theme “Faster, Sustainable and More Inclusive Growth”. The Plan focuses on investment in infrastructure and recognizes the benefits of improved water and sanitation services to health and economic welfare, particularly in rural areas. The 12th Plan calls for major investments in infrastructure, including water and sanitation, as an important measure for reducing drudgery faced by women in fetching water, and improving health and economic well-being of millions of citizens. It recommends piped water coverage for at least 50% of the rural population along with a conjoint approach for addressing sanitation and hygiene challenges. As per the Census 2011, while 87% of rural households have access to water through various sources including tap, hand pump and protected, only 30.8% have access to tap water. Amongst the various states in the country, Census shows very low coverage in eight low-income states with Bihar (2.6%), Jharkhand (3.7%) and Assam (6.8%) being the lowest in comparison to other States in India and UP having a low figure of around 22%. These States also fare low in terms of household and environmental sanitation with only 7.6% households having access to household toilets in Jharkhand, 17.6% in Bihar and 21.7% in UP. In Assam about 59% of households have access to toilets; however, many of these are insanitary and needs to be converted to sanitary toilets.

It is in this context that Government of India (GoI) has proposed to implement a Rural Water and Sanitation Project with the first phase covering four states – **Assam, Bihar, Jharkhand and UP**. These four states have been prioritized by the Ministry of Drinking Water and Sanitation (MoDWS)¹, GOI, “on the basis of States with lowest percentage of households with rural piped water coverage as per Census 2011 figures. Uttar Pradesh (Eastern UP) has been selected because of water quality problems, both bacteriological and chemical.

Further, the GoI has proposed that “once the project gains momentum, balance four States (Chhattisgarh, Madhya Pradesh, Odisha and West Bengal) could be included subsequently” in the second phase.

The Project adopts an integrated approach to water supply, household and institutional sanitation and community-wide environmental sanitation that will be implemented in convergence with NRDWP and NBA.

Key Challenges in RWSS Sector

The RWSS sector in India faces several institutional, infrastructural and service delivery challenges. In many parts of the four Project states, the problems of source sustainability, inadequate water availability and poor water quality are acute. In addition, extensive usage of hand pumps dependent on depleting or contaminated ground water tables has resulted in lack of access to reliable sustainable good quality water. The early generation of top down supply driven approaches yielded low ownership by the consumers/rural communities, inefficient and ineffective operation and maintenance of scheme sources & the equipment and nominal/ low recovery of the O&M costs. In addition, social issues, including equity with regard to gender and socially and economically weaker sections of the society, vis-à-vis access and decision making, remain pertinent and relevant for equity based RWSS scheme. The various challenges:

- Coverage, Source Sustainability and Service levels.
- Water quality.
- Sanitation and hygiene.
- Institutional capacity.
- Implementation approach.
- Cost recovery.
- Policy Support.

National Programs in Rural Water Supply and Sanitation Sector

The Ministry of Drinking Water and Sanitation (MoDWS) is the nodal department for the overall policy, planning, funding and coordination of programs of rural drinking water and sanitation in the country. The key programs of the Ministry providing thrust to the RWSS sector are the National Rural Drinking Water Program (NRDWP) and the Nirmal Bharat Abhiyan-NBA (formerly Total Sanitation Campaign). The MoDWS has prepared a long-term strategic plan (2011-22) for ensuring drinking water security to all rural households. The strategic plan aims to cover 90% of households with piped water and at least 80% of households with tap connections during this period.

Project Development Objectives

The overall objective of the proposed Rural Water Supply and Sanitation Project for Low Income States (RWSS-LIS) is to “improve piped water and sanitation services” for selected rural communities in the target states through decentralized delivery systems.

The expected physical achievements during the Project period are:

- About 17400 habitations in about 2150 GPs covering about 7.8 million people will be provided with safe and adequate piped water
- About 2150 GPs will prepare comprehensive water security and sanitation plans to make their habitations secure and hygienic
- Quality affected (arsenic/fluoride/iron) habitations covered under the Project in over 24 quality affected (arsenic/fluoride/iron) districts will be provided with safe and potable water from surface sources

The key Project Development Objective (PDO) level results indicators are the following:

- (i) Number of people with increased access to piped water
- (ii) Number of people with access to improved sanitation facilities
- (iii) Number of people using improved latrines
- (iv) Improvements in O&M cost recovery

Guiding principles of the Project

The RWSS-LIS Project is designed to bring about a combination of institutional changes, enhanced investments in infrastructure and capacity and transformation in policies and processes to achieve the agreed objectives in convergence with NRDWP and NBA. The Project design incorporates following guiding principles and features:

Following are the key features of the RWSS-LIS Program and Policies supported by the Project in convergence with NRDWP and NBA:

- Decentralization.
- Community participation and demand responsiveness.
- District wide approach.
- Water Security for all.
- Integrated approach to Water Supply and Sanitation.
- Enhanced Accountability.
- Public Private Partnerships (PPPs)
- Community contribution towards Capital and O&M costs.
- Strengthening Institutions for Building Capacity.
- 'Twinning' with Bank assisted RWSS Projects.

Selection of Project Districts

10 Districts have been selected in Bihar to be covered under the RWSS-LIS Project based on following broad criteria:

- Districts with low coverage of piped water supply and sanitation within the State
- Quality affected districts especially with chemical contamination (Fluoride, Arsenic and Iron) in ground water
- Districts with large number of water scarce habitations
- Districts with large socially and economically disadvantaged population
- Districts where sustainable water sources are available, yet coverage is low

These Districts are namely **Nalanda, Patna, Saran, Munger, Begusarai, West Champaran, Muzaffarpur, Banka, Nawada and Purnia.**

Selection of Project GPs

During the initial phase of the Project, each State will develop detailed criteria for selection of GPs in a transparent manner and to ensure the inclusion of most needy and disadvantaged population. These criteria will be used by the DWSM/DWSCs when they receive and evaluate proposals for approvals. Some broad criteria are mentioned below:

- GPs which demonstrate willingness and commitment (such as agreement for taking up integrated water and sanitation supported by a GP resolution and water security and sanitation plans in place)
- Existing level of Water supply access and service
- Water Quality affected GPs
- GPs with high percentage of SC/ ST/ BPL
- GPs located in hilly terrain/ flood prone zones/ water scarce zones
- Progressive GPs with better capacity: such as if GPWSCs are existing and functional, efficiency of collection of revenues, implementation of schemes under NBA and utilization of funds released; successful execution of other development activities previously, etc.

Project Components

The Project has three main components:

❖ **Component A : Capacity Building and Sector Development**

A1: Capacity Building of MoDWS

A2: Capacity Building of RWSS Sector Institutions and PRIs

A3: Program Information, Education, and Communications (IEC)

A4: Sector Development Studies and Pilot Innovations and Technologies

A5: Monitoring and Evaluation

A6: Excellence Awards for Integrated Water Supply and Sanitation

❖ **Component B : Infrastructure Development**

B1: New Investments

B2: Rehabilitation and Augmentation of Existing Schemes

B3: Catchment Area Program

B4: Water Quality Management

B5: Household, Institutional and Environmental Sanitation

B6: Infrastructure Support

❖ **Component C : Project Management Support**

C1: Staffing and Consultancy Costs

C2: Equipment and Miscellaneous costs

Project Coverage and Costs

The Project will cover 10 districts, about 400 GPs and about 2600 habitations. The total population covered under the Project in Bihar has been estimated as about 24 Lakhs. The total Project cost for Bihar is **Rs. 1606 Crores** over the six year period (2013-14 to 2019-20) as given below:

Summary of Total Project Cost

Figure in Rs. Crore

Project Components	Total Project Allocation	% of Total Project Cost
Capacity Bldg & Sector Dev	117	7%
Infrastructure Development	1413	88%
Project Management	76	5%
Total Project Cost	1606	100%

Project Financing

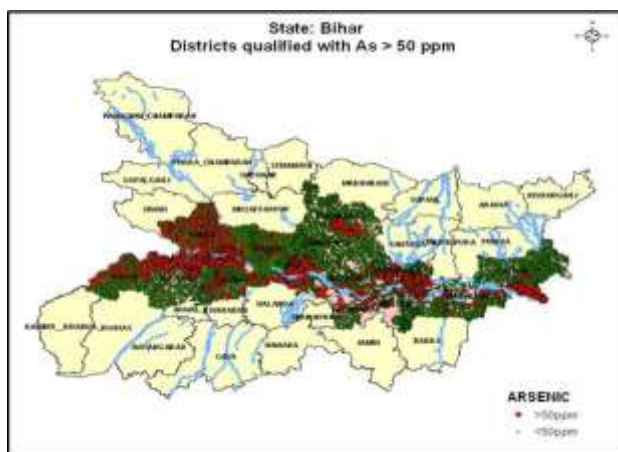
The total Project cost will be financed through a combination of external financing (World Bank-IDA funds), Government of India financing (from out of NRDWP funding) and State Government contribution (as per NRDWP guidelines to match GoI funding under NRDWP). Overall, World Bank will finance 50%, GoI will finance about 33% and States will contribute about 16%. Community contribution will form about 1% of total Project cost.

The actual rupee value of the project may be revised depending upon the rate of the exchange as per mutual agreement during implementation of the Project. Any additional funds available from the interest earned and due to fluctuation in the exchange rate shall also be available for use under the project.

The Project districts will also receive funds for sanitation related activities from NBA and MGNREGS for household, institutional and environmental sanitation.

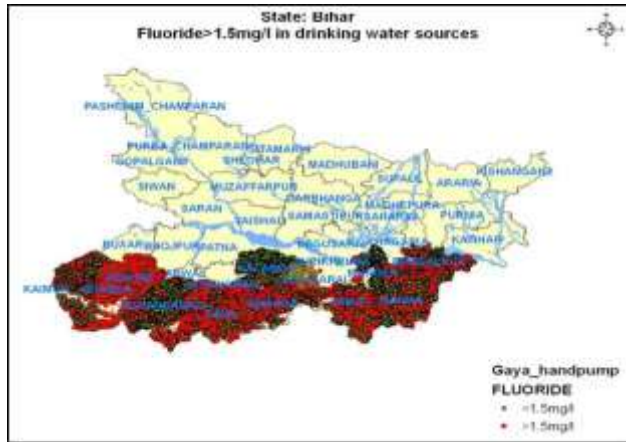
Water Quality Affected Districts

Arsenic affected areas in Bihar



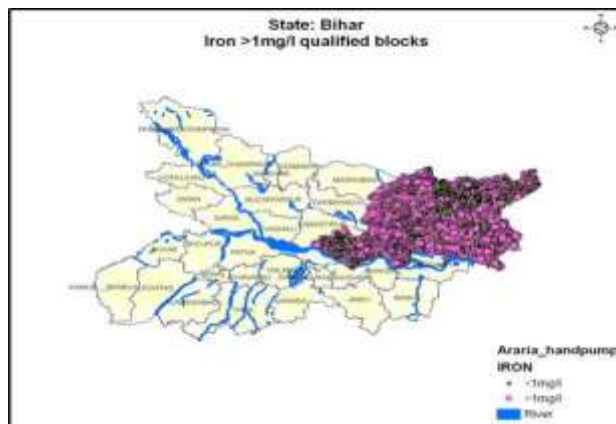
Contaminants	Districts affected (some Pockets only)
Arsenic (>0.05 mg/l)	Saran, Vaishali, Samstipur, Darbahnaga, Buxer, Bhojpur, Patna, Begusarai, Khagaria, Lakhisarai, Munger, Bhagalpur (13 districts)

Fluoride affected areas in Bihar



Contaminants	Districts affected (some Pockets only)
Fluoride (>1.5 mg/l)	Kaimur, Rohtas, Aurangabad, Gaya, Nawada, Shiekhpura, Jamui, Banka, Munger, Bhagalpur, Nawda (11 districts)

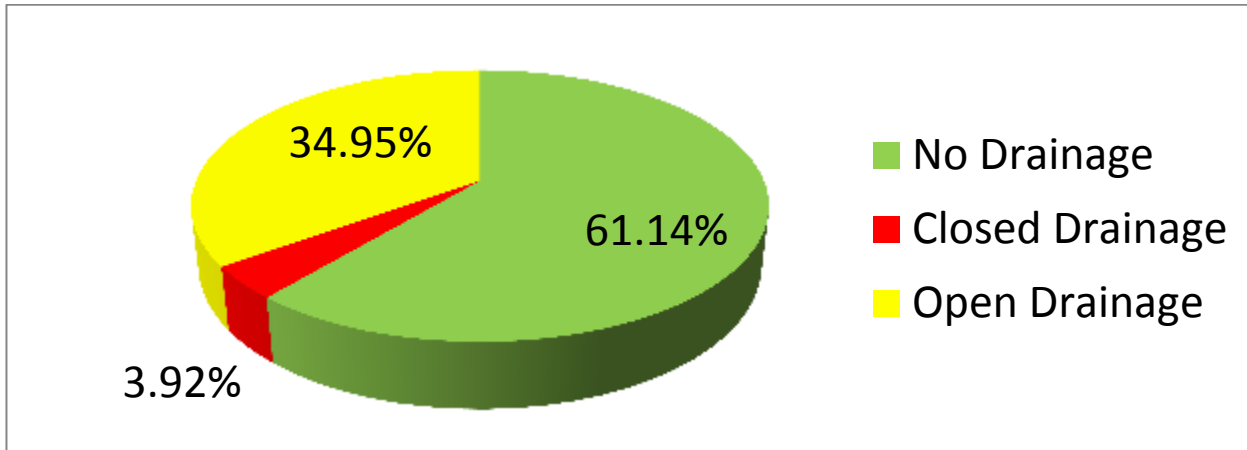
Iron affected areas in Bihar



Contaminants	Districts affected (some Pockets only)
Iron (>1.0 mg/l)	Araria, Supaul, Madhepura, Saharsa, Purnia, Katihar, Kishanganj, Begusarai (9 districts)

Environmental Sanitation Status in Bihar

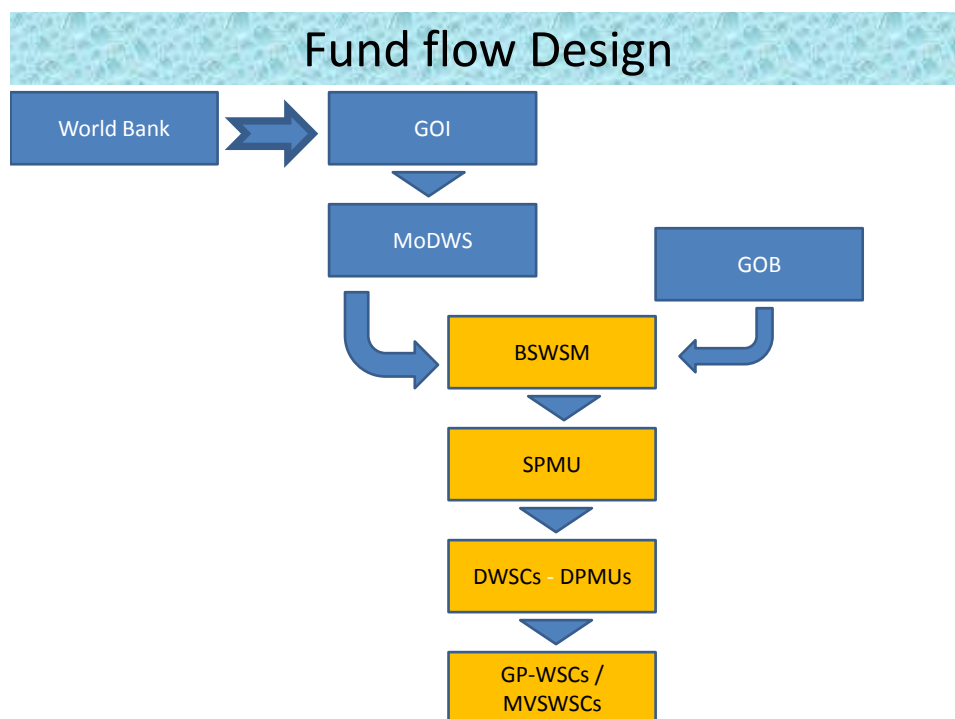
(Source: Census 2011)



Project Financial Arrangements

In a financial year, funds will be released in **2 Installments**- 50% at the beginning of the year and subsequent on utilisation of 60% of the previous release. The Project funds (in the form of budgetary grants) from GoI including the GoI share and World Bank share will be transferred to State in a separate bank account opened for the World Bank Project. State share will also be transferred from Treasury to the same bank account for both water and sanitation components.

The Central share of the Project (including the share to be financed by the World Bank) will be budgeted for in the Demands for Grants of the Union Ministry of Drinking Water and Sanitation (MoDWS). The budget for the State share will be provided for in the Demands for Grants of the PHED



Project Institutional Arrangements

The proposed RWSS-LIS Project will aim towards a more decentralized approach to service delivery with assigning the primary role to the Gram Panchayats and GPWSCs in the design and implementation of schemes, along with separation of governance and operational responsibilities. However, since the capacity of village level PRIs are extremely limited, their role will be gradually enhanced, starting with full role in smaller schemes which would primarily be the single habitation and single GP schemes. The role of PHED will be to provide adequate handholding and support to the PRIs along with necessary technical expertise, leading to substantial capacity building during the project period. The larger and more technically complex MVS schemes (both small MVS and large MVS) will continue to be handled by PHED, but with a difference. GPWSCs and GPs will be involved in the initial planning and consultation processes in MVS as also in later monitoring of intra-GP/habitation works implementation. The O & M of the intra-GP/Habitation assets will also be taken over by GPWSCs after the contractor has completed the contracted O & M period.

Following are the Institutional Arrangements for the Project:

❑ State Level Arrangement

- State Water and Sanitation Mission (SWSM)
- Public Health Engineering Department (PHED)
- State Project Management Unit (SPMU)
- Water and Sanitation Support Organizations (WSSO)
- State Water and Sanitation Training Institute (Pranjal)

❑ District Level Arrangement

- District Water and Sanitation Mission (DWSM)
- District Water and Sanitation Committee (DWSC)
- District Project Management Units (DPMU)
- District Project Management Consultants (DPMC)
- PHED at District Level
- Block Coordinators
- Multi Village Water Supply and Sanitation Committee (MVS – WSC)

❑ Village / GP Level Arrangement

- Gram Panchayat (GP)
- Gram Panchayat Water Supply and Sanitation Committee (GPWSC)
- Support Organisations (SO)

Project Implementation Arrangements

Water Supply

The Project envisages implementing water supply schemes through:

- Single Habitation Schemes (SHS)
- Single GP Schemes (SGS) - Multiple Habitations
- Small MVS (Multiple GPs- usually 2 to 4)
- Large MVS (Multiple GPs- usually more than 5)

Two types of scheme cycles have been drawn up along with integration with Sanitation:

- one for small water scheme (SHS & SGS) which will be designed and implemented by GPWSCs/ GPs
- another for larger water schemes (MVS) which will be implemented by PHED but with active involvement of GPWSCs/ GPs in initial planning and later monitoring

Sanitation

The project proposes that the sanitation component is designed to be complementary to the NBA program of Govt. of India by bring about convergence in institutional arrangements and also integrating the water and sanitation processes into a single scheme cycle. The sanitation component will follow a saturation approach for achieving ODF coverage, with funding from NBA and support from the Project.

All the covered GPs will be first preparing a Sanitation plan that will capture the baseline status and also assess the need sanitation facilities. The Sanitation plan will include household sanitation, institutional sanitation and environmental sanitation. Project assisted habitations will be prioritized in these plans through NBA. The facilities required will receive funding mostly from the ongoing NBA program and wherever possible MGNREGS scheme will also be utilized to construct some of these facilities.

In general, there will be an insistence on a professionally prepared comprehensive sanitation plan prior to approval of any schemes.

Batch-wise Implementation

The Project will be implemented in 3 batches each of three years duration, with overlaps. The Project implementation is expected to commence in February 2014 after all approvals have been received. . Capacity building component activities such as training, exposure visits, and development of systems for monitoring will all commence in the first year itself.

Batch	Years		SVS Schemes		Small MVS Schemes		Large MVS Schemes		Total	
	From	To	No.	Habitation Coverage	No.	Habitation Coverage	No.	Habitation Coverage	No.	Habitation Coverage
Batch-1	Feb 2014	Mar 2017	152	555	3	56	1	90	156	701

Batch-2	Feb 2016	Mar 2019	108	515	6	470	3	400	117	1385
Batch-3	Feb 2017	Mar 2020	56	450	1	60	0	0	57	510
Total			316	1520	10	586	4	490	330	2596

Project Results Framework and Monitoring & Evaluation

The RWSS-LIS Project has a strong M & E component that will not only help the implementation of the Project in the 4 Project states but will also be a model that can be adopted by the other non-Project states in the country.

The M&E component will measure the processes, outputs and outcomes of the Project while guiding and tracking the flow of activities and funds. The proposed system will be at two levels- **Overall sector level (referred to as LIS-MIS)** and at the **State level (referred to as S-MIS)**.

The Project will support Governance **and Accountability Action Plan (GAAP)** meant to address and mitigate the governance and fiduciary risks and enhance the project development effectiveness by strengthening the institutional framework, accountability and fiduciary systems. Governance indicators will also be included as part of the overall Performance Monitoring Framework. This also includes a robust grievance redressal mechanism at all levels to allow any aggrieved person seek redressal to his/her complaints within a given timeframe.

Sector Assessment Study

Following studies have been conducted with respect to the RWSS-LIS Project and uploaded on BSWSM website :

- 1) Social Assessment including Capacity Building and Communication Strategy
- 2) Environmental Assessment and Environmental Management Framework
- 3) Assessment of Rural Drinking Water Supply Services