

NATIONAL RURAL DRINKING WATER PROGRAMME: AN OVERVIEW

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ABSTRACT

In these 60 years of independence, Indian government investment in rural water supply and sanitation had been supply driven and top down. But poor operation and maintenance (O&M) was causing a number of water supply systems to fail, and water was seen by rural communities not as a scarce socioeconomic resource requiring local management, but as a social right to be provided free of cost by the government. A comprehensive review of water resource management in India concluded that 'India faces an increasingly crucial situation; its limited water resources are stressed and depleting while its demands are growing rapidly in different sectors', and that 'replacement costs of water supply hardware are decreasing several times in the available budget'.

National Rural Drinking Water Programme was introduced in the year 2009 as a Centrally sponsored scheme that provides financial and technical assistance to the State Governments for providing safe drinking water to rural inhabitants. It serves to provide safe and adequate drinking water for drinking, cooking and other domestic needs to every rural person on a sustainable basis. Recently, the Union Cabinet, chaired by the Prime Minister, approved the continuation and restructuring of the initiative to make it outcome-based, competitive and better monitored by laying focus on sustainability of schemes to ensure good quality service delivery to the rural populous. This article provides in-depth coverage of the scheme based on the various Annual reports and Audit reports Government of India and other agencies.

INTRODUCTION

Post-independence at the time of launch of India's planned development, the Environmental Hygiene Committee recommended a programme to provide safe water supply to all villages within a certain period as part of First Five Year Plan (1951-56). For this purpose, the National Water Supply Programme was launched in 1954, under the health sector. Until the Third Five Year Plan (1961-66), drinking water supply in the rural

areas was a component of the Community Development Programme. This effort was supplemented by the Ministry of Health under the then National Water Supply and Sanitation Programme. In 1972-73, Accelerated Rural Water Supply Programme (ARWSP) was launched to supplement the efforts of State Governments, especially in areas of acute scarcity and those endemic to water borne diseases.

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The programme gained further momentum during the Fifth Five Year Plan (1974-79) under the Minimum Needs Programme. In 1986, the National Drinking Water Mission (NDWM), popularly known as the Technology Mission was launched in order to provide scientific input and cost effective technological solutions to address water scarcity. This Technology Mission with stress on water quality, appropriate technology intervention, human resource development support and other related activities was subsequently renamed as **the Rajiv Gandhi National Drinking Water Mission (RGNDWM)** in 1991. In the Eighth Plan (1992-97), Sub-missions for tackling quality problem, i.e. habitations suffering from excess Arsenic, Fluoride, Iron, salinity, scarcity of water sources, and requiring sustainability of the sources & the systems, were taken up. In 1999-2000, decentralized, demand-driven, community-managed sector reforms were undertaken involving Gram Panchayats/ local community in planning, implementation and management of drinking water schemes. This was later scaled up as Swajaldhara in 2002 and was implemented till 2007-08. In 2004-05, Bharat Nirman was launched by the Government of India, as a programme to build rural infrastructure. ARWSP became part of Bharat Nirman aiming at full coverage of habitations by 2008-09. In 2009-10, it was modified and renamed as National Rural Drinking Water Programme (NRDWP) with major emphasis on ensuring sustainability of water availability in terms of potability, adequacy, convenience, affordability and equity, on a sustainable basis, adopting decentralized approach involving Panchayati Raj Institutions (PRIs) and community organizations.

Under ARWSP / NRDWP in the period 2005-06 to 2008-09, 55,067 uncovered habitations and about 3.31 lakh slipped back habitations were to be covered with provision of drinking water facilities and in the period from 2009-10 to 2011-12, 2.17 lakh quality affected habitations were to

be addressed for water quality problem. To ensure that habitations once provided with drinking water supply infrastructure do not slip back and face drinking water problem; sustainability of drinking water sources and systems has been accorded high priority.

THE NATIONAL RURAL DRINKING WATER PROGRAMME (NRDWP)

The Government of India launched the National Rural Drinking Water Programme (NRDWP) in April 2009 by modifying the Accelerated Rural Water Supply Programme (ARWSP) and subsuming earlier sub-missions/schemes. The NRDWP guidelines were further updated in 2013 with focus on piped water supply, increasing household tap connections and raising drinking water supply norms. National Rural Drinking Water Programme serves to provide safe and adequate drinking water for drinking, cooking and other domestic needs to every rural person on a sustainable basis.

In 2013, certain changes were introduced in NRDWP, viz.

- Providing focus on pipe water supply schemes;
- Wherever possible, enhancing service level from 40 lpcd to 55 lpcd;
- Providing greater thrust on water quality and Japanese Encephalitis-Acute Encephalitis Syndrome (JE-AES) affected districts;
- Waste water treatment, recycling; and O&M of ageing schemes.

The objectives of the Programme are-

- To provide safe and adequate water for drinking, cooking and other domestic needs to every rural person on a sustainable basis.
- To cover all the remaining uncovered habitations, the slipped back as well as the water quality affected ones.
- To obtain the Action Plans from State/UT Governments for achieving the goals on time.

To achieve the above objectives, the following framework has been devised:

- To provide safe and adequate drinking water supply to underserved, partially served and slipped back habitations.
- To provide portable drinking water to habitations affected by water quality.
- To encourage states in achieving drinking water security at the local level.
- To perform regular support activities.
- To help areas covered under the Desert Development Programme (DDP) in tackling the extreme conditions of low rainfall and poor water availability.
- To mitigate drinking water issues in rural areas in the event of natural calamities.

In 2017, NRDWP was restructured to

- Make it more competitive, result-oriented and outcome-based;
- Provide flexibility to states while implementing the programme by reducing its components;
- Providing piped water supply with the only exception allowed in JE-AES affected districts.

FUNDING PATTERN

Funds under the initiative are allocated to States based on the following criteria:

1. Rural population
2. Rural SC and ST population
3. Desert, drought-prone and hilly areas
4. The extent of decentralization of the scheme management to Panchayats.

WATER QUALITY MONITORING & SURVEILLANCE

Water Quality Monitoring and Surveillance was launched as a part of this programme in February 2006, with a funding of 3%. It is aimed at:

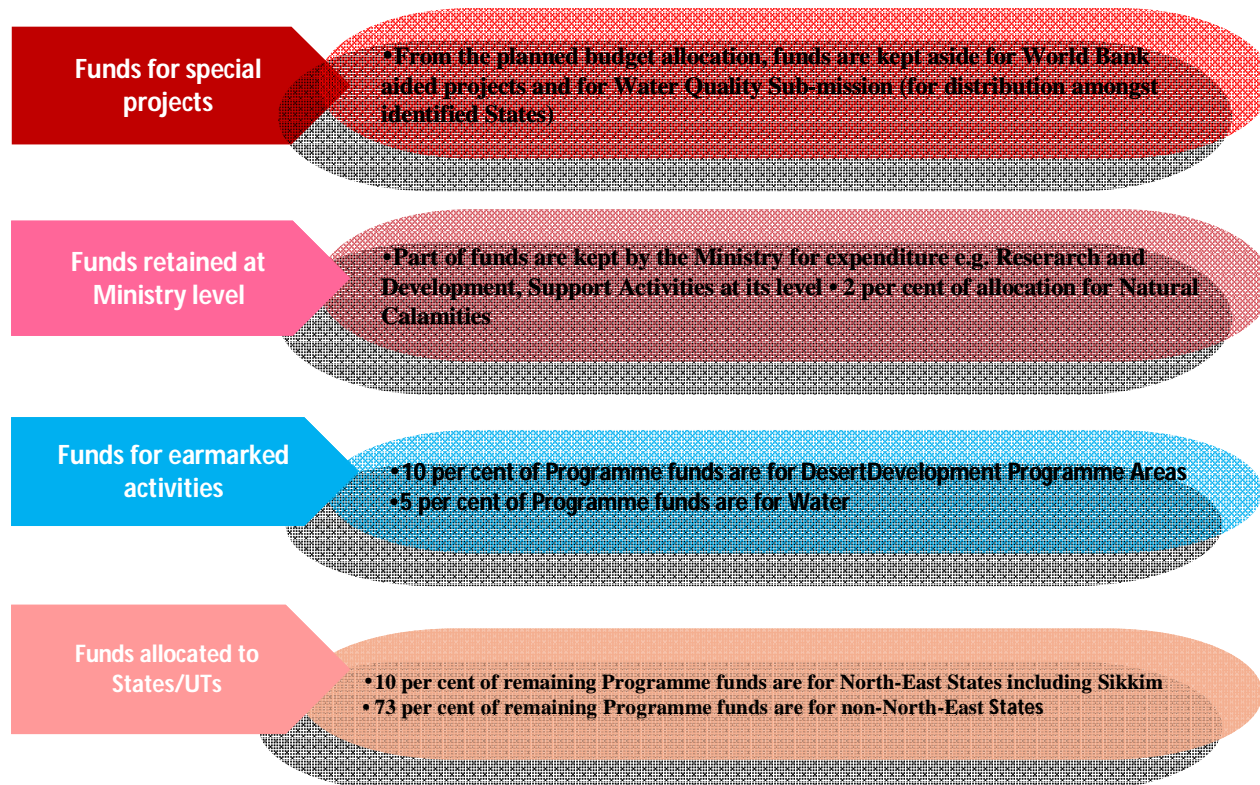
- Empowering the rural communities by creating awareness through Information, Education and Communication (IEC) activities to address ownership of the system.
- Imparting training to five grass root workers in each Gram Panchayat, who could be ASHA workers, Anganwadi workers, science teachers, high school girl children, panchayat member, retired army officials, etc. The training will also be extended to 5 Gram Panchayat workers, 2 persons at the State level, 4 persons at the district and 5 at the block level.

THE LATEST DIRECTIVES

The scheme is now in 2017 restructured with the following directives:

1. It will continue co-terminus with the 14th Finance Commission cycle till March 2020.
2. 2% of the funds have been allocated for areas affected by Japanese Encephalitis (JE) and Acute Encephalitis Syndrome (AES).
3. A sub-program, known as National Water Quality Sub-Mission (NWQSM) has been initiated by the Ministry of Drinking Water and Sanitation in February 2017, to cater to the need of clean water in about 28,000 Arsenic and Fluoride affected habitations (already identified).
4. Pro-financing for the agreed schemes will be made by the State Government, which will later be reimbursed from the central funding.
5. The Other half of the second instalment of funds would be released to the States on the basis of the functional status of completely piped water supply schemes, which is to be evaluated through a third party.
6. The Cabinet has approved a sum of INR 23,050 crore for the programme for the FFC period 2017-18 to 2019-20.

PROGRAMME GUIDELINES



VISION

Safe and adequate drinking water and access to improved sanitation for all, at all times in rural India.

GOAL

- 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 water quality standards and be readily and conveniently accessible at all times and in all situations.
- Attain a clean and Open Defecation Free India by 2nd October 2019.

OBJECTIVES

- Enable all households to have access to and use safe & adequate drinking water and within a reasonable distance.
- Enable communities to monitor and keep surveillance on their drinking water sources.
- Ensure potability, reliability, sustainability, convenience, equality and consumers preference with regard to drinking water supply. These are to be the guiding principles while planning for a community based water supply system.
- Provide drinking water facility, especially piped water supply, to Gram Panchayats that have achieved open-defecation-free status on priority basis.
- Ensure all government schools and anganwadis to have access to safe drinking water.
- Provide support & environment for Panchayat Raj Institutions and local communities to manage their own drinking water sources and systems in their villages.
- Provide access to information through an online reporting mechanism with information placed in public domain to bring transparency and informed decision making.

- h) Cover all BPL households and identified APL households including SC/ST, physically handicapped, small and marginal farmers and women headed households with sanitation facilities in each Gram Panchayat
- i) Follow conjoint approach of sanitation and water supply which would progressively lead to Swachh Bharat and ensure running water availability to all Government School toilets.
- j) Massive Information Education and Communication campaigns to promote behavioral change and ensure use, Sustainability and adequate 'Operation & Maintenance' (O&M) of toilets.
- k) Take up Solid and Liquid Waste Management in all Gram panchayats.

STRATEGIC PLAN

The time line of the strategic Plans for drinking water supply and sanitation in rural areas are as following:

By Year 2017

(a) Drinking Water Facilities

To ensure that

- At least 50% of rural households are provided with piped water supply;
- At least 35% of rural households have piped water supply with a household connection; less than 20% use public taps and less than 45% use hand pumps or other safe and adequate private water sources.
- All services meet set standards in terms of quality and number of hours of supply every day.

BY YEAR 2019

(a) Rural Sanitation facilities

To attain a Clean and Open defecation Free India by 2nd.October 2019.

BY YEAR 2022

(a) Drinking water facilities

To ensure that

- at least 90% of rural households are provided with piped water supply;
- at least 80% of rural households have piped water supply with a household connection; less than 10% use public taps and less than 10% use hand pumps or other safe and adequate private water sources.

PARADIGM SHIFT IN NRDWP

The following paradigm shift has been made in the National Rural Drinking Water Programme guidelines for ensuring sustainable and environmentally friendly drinking water supply projects:

- Move forward from achieving habitation level coverage towards household level drinking water coverage.
- Move away from over dependence on single source to multiple sources through conjunctive use of surface water, groundwater and rainwater harvesting.
- Focus on ensuring sustainability in drinking water schemes and prevent slip back.
- Encourage water conservation including revival of traditional water bodies.
- Achieve household level drinking water security through formulation of proper water demand and budgeting at the village level.
- Convergence of all water conservation programme at the village level.
- Treatment of catchment area of drinking water sources through simple measures such as fencing, prevention of sewage/animal waste leaching into surface/ underground water sources, promoting ecological sanitation to reduce use of inorganic fertilizers so as to prevent nitrate pollution in drinking water sources.

- Promotion of simple to use technologies such as terracotta based filtration systems, solar distillation and dilution through rainwater harvesting for tackling iron, salinity and suspended particulate matters.
- The five grass root level workers trained for testing water quality to be the ambassadors for achieving household level drinking water security in rural India.
- Move away from offline unconsolidated figures to online data entry and linkage with Census village codes.

OPERATIONALIZATION

In order to ensure operationalization of the approaches mentioned above, the following main changes have been incorporated in the Rural Water Supply Programme.

- Awarding performance rather than non-performance of States by removing the weightage for the number of uncovered/partially covered habitations and water quality affected habitations in the allocation criteria for central assistance to the States.
- Introduction of an incentive of 10% of the NRDWP allocation for the States that transfer the management of rural drinking water schemes (RWS) to the Panchayati Raj Institutions.
- Increasing the percentage allocation for "Sustainability" component from 5% to 20%

for implementing sustainability measures in RWS projects by the States. This component is funded on a 100% Central share basis as against the 50% Central share in regard to other components.

- Introduction of a new component of Support Fund with 5% allocation. Setting up of Water and Sanitation Support Organisation by each State to take up support activities focusing on software activities like awareness generation, capacity building, water quality testing, MIS etc.
- In order to encourage the States of North-East and J&K, that have limited resources, the fund sharing pattern for them has been liberalized from the existing 50:50 (Centre to State) to 90:10 (Centre to State).

The National Rural Drinking Water Programme (NRDWP)

is a component of Bharat Nirman that focuses on the creation of rural infrastructure. This has resulted in the provision of significant additional resources and for creating an environment for the development of infrastructure and capacities for the successful operation of drinking water supply schemes in rural areas.

COMPONENTS OF THE NRDWP

The allocation criteria, funding and distribution of allocation under different components at the Central level is as under:

COMPONENTS	NRDWP Central Allocation	Centre-state sharing pattern
NE States and J & K	10%	90:10
Other States	73%	50:50
DDP Area States	10%	100% Central share
Water quality (Earmarked)	5%	50:50*, 90:10**
Natural Calamities	2%	100% Central share
TOTAL	100%	

** North East States and Jammu & Kashmir, * All Other States / UTs

(b) Component, Purpose, Distribution and Centre-State Sharing pattern of the NRDWP at the State level.

Component	Purpose	NRDWP State-wise allocation	Centre- State Sharing pattern
Coverage	For providing safe and adequate drinking water supply to un-served, partially served and slipped back habitations.	47%	90:10 (for NE States & J&K)
Quality	To provide safe drinking water to water quality affected habitations,	20%	50:50 (for other states / UT)
Operation & Maintenance	For expenditure on running, repair and replacement costs of drinking water supply projects.	15% (Maximum)	
Sustainability	To encourage States to achieve drinking water security at the local level through sustainability of sources and systems.	10% (Maximum)	100% Central share
Support	Support activities like awareness generation, training, IEC, HRD, MIS etc.	5%	100% Central share
Water Quality Monitoring & Surveillance	For monitoring and surveillance of water quality in habitation	3%	100% Central share
TOTAL		100%	

CRITERIA FOR FUND ALLOCATION

quality, sustainability, O&M, support and WQM&S component to the States the criteria followed is:

While allocating the NRDWP funds for coverage,

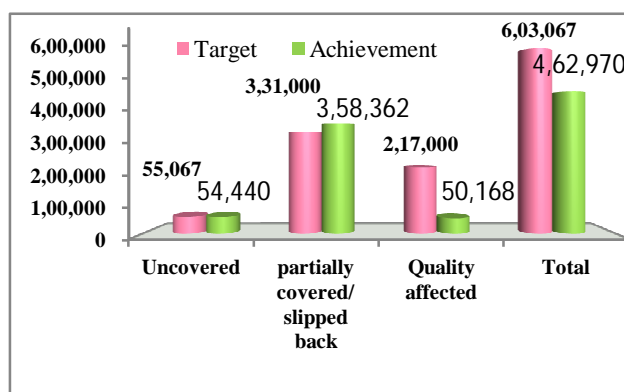
S. No	Criteria	Weight age
I	Rural population as per census	40
II	Rural SC and ST population as per census	10
III	States under DDP, DPAP, HADP* and special category hill States in terms of rural areas	40
IV	Rural population managing rural drinking water supply schemes weighted by a Management Devolution Index	10
	Total	100

*DDP (Desert Development Programme), DPAP (Drought Prone Area Programme), HADP (Hill Area Development Programme)

PHYSICAL PROGRESS IN BHARAT NIRMAN (PHASE-I AND II)

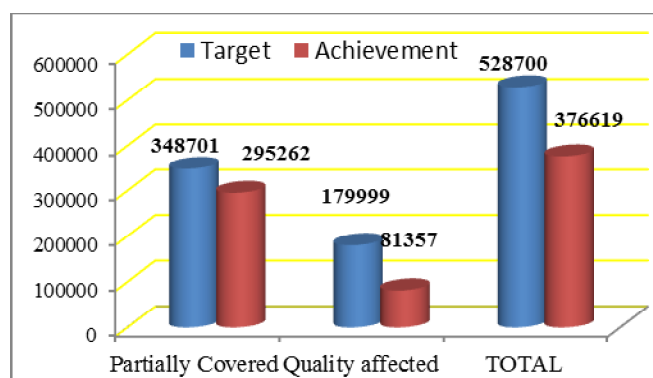
BHARAT NIRMAN (PHASE-I) (2005-06 TO 2008-09)

Bharat Nirman (Phase-I)	Rural Habitations (in number)	
	Target	Achievement
Uncovered	55,067	54,440
Partially covered/ slipped back	3,31,000	3,58,362
Quality affected	2,17,000	50,168
Total	6,03,067	4,62,970



BHARAT NIRMAN (PHASE-II) (2009-10 TO 2011-12)

Bharat Nirman (Phase-II)	Target	Achievement
Partially Covered / slipped back	348701	295262
Quality affected	179999	81357
Total	528700	376619



i) Uncovered habitations: Against 55,067 uncovered habitations to be covered during the Bharat Nirman period, 54,440 habitations were covered during (Phase-I). During Bharat Nirman (Phase-II), 627 habitations have been reported as covered up to 31.03.2011. Thus all uncovered habitations that existed in the beginning of 2005 are now covered.

ii) Slipped back/Partially Covered habitations: In Phase I (2005-06 to 2008-09), 3.58 lakh slipped back habitations were reported as covered by the States.

iii) Quality-affected habitations: As reported by the States, 2,17,000 quality affected habitations were addressed by sanctioned projects and out of these 50,168 habitations have been fully covered with completed projects to provide safe

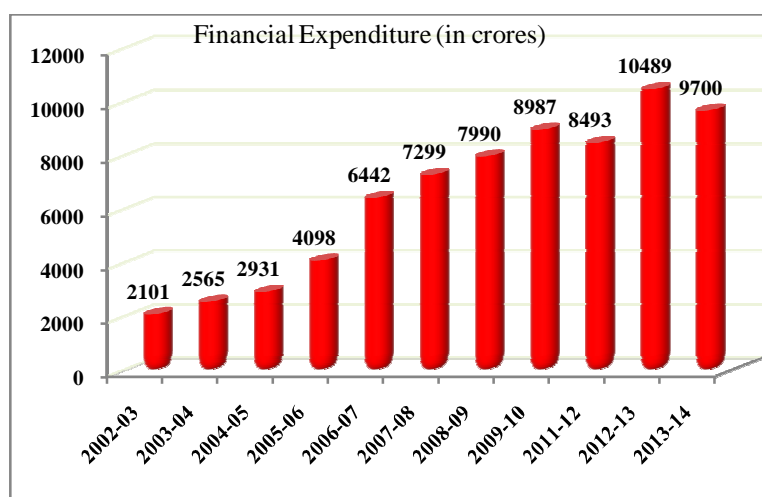
water supply during Phase-I. As on 1.4.2009, at the beginning of Bharat Nirman (Phase-II), States reported that 1,79,999 quality affected habitations were remaining to be covered. Of these, during Bharat Nirman (Phase-II), 81,357 habitations have been reported as covered. Thus, in all during Bharat Nirman (Phases-I and II), 1,31,525 quality affected habitations have been fully covered with completed schemes. In the 12th Five year plan period beginning from 2012-13 onwards, as on 31.12.2014, 43,820 quality affected habitations have been covered.

FINANCIAL PERFORMANCE UNDER NRDWP

The financial allocations and expenditure under NRDWP have been increased substantially since the launch of Bharat Nirman in 2005-06.

EXPENDITURE OF NRDWP FUNDS IN FIVE YEAR PLAN

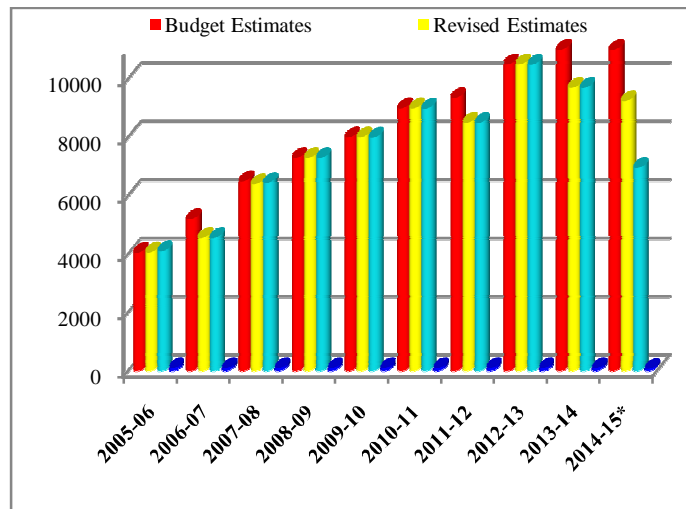
YEAR	Financial expenditure
	(In crores)
2002-03	2101
2003-04	2565
2004-05	2931
2005-06	4098
2006-07	6442
2007-08	7299
2008-09	7990
2009-10	8987
2011-12	8493
2012-13	10489
2013-14	9700



YEAR	Budget Estimate	Revised Estimates	Expend.	Expend in% of RE
2005-06	4050	4060	4098	101
2006-07	5200	4560	4560	100
2007-08	6500	6400	6442.76	100
2008-09	7300	7300	7298.79	100
2009-10	8000	8000	7989.72	100
2010-11	9000	9000	8986.74	100
2011-12	9350	8500	8493.15	100
2012-13	10500	10500	10489.05	100
2013-14	11000	9700	9697.27	100
2014-15*	11000	9250	6953.12	75

- Financial performance at the national level is in terms of the releases made under the programme. The budget estimates, revised

estimates and releases under the 11th and 12th Five-Year Plans are as under:



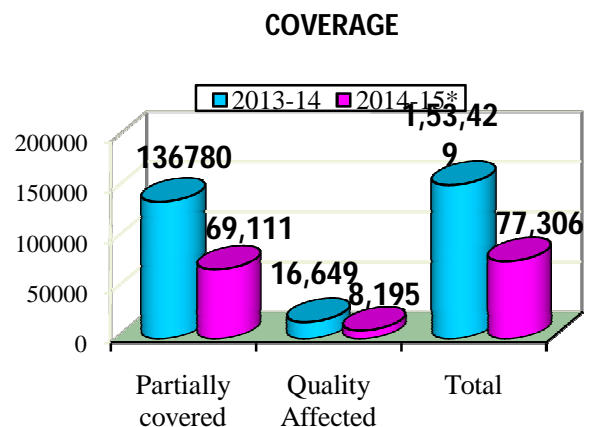
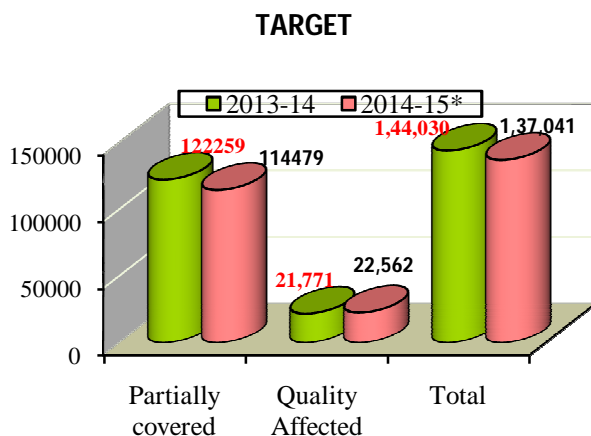
- During the year 2013-14, an amount of Rs. 9,700 crore for NRDWP was provided out of which 9348.40 was allocated to States for NRDWP. Out of these, Rs. 9697.27 crore was released to States or utilized at the national level. For 2014-15, a revised allocation of Rs. 9250 crore was provided. Out of this, Rs. 6953.12 crore has been utilized upto 31.12.2014.
- To provide support to the States in the focus areas of Support Activities and in Water

Quality Monitoring and Surveillance, during 2014-15, an amount of Rs.455.75 crore has been allocated under the Support Fund of which Rs. 187.86crore has been released, while under WQM&S Rs. 273.45 crore has been allocated and Rs. 112.04 crore released and under Water Quality earmarked funds, Rs. 455.75 crore has been allocated and Rs. 142.76 crore has been released till 31.12.2014.

PHYSICAL PERFORMANCE UNDER NRDWP

YEAR	TARGET			COVERAGE		
	Partially covered	Quality Affected	Total	Partially covered	Quality Affected	Total
2013-14	122259	21,771	144,030	136780	16,649	153,429
2014-15*	114479	22,562	137,041	69,111	8,195	77,306

*Achievement as on 31.12.2014



For the year 2013-14, against the target of coverage of 1,22,259 partially covered and 21,771 quality affected habitations, the achievement was coverage of 1,36,780 partially covered and 16,649 quality affected habitations. For the year 2014-15 (Till December 2014), against the target of coverage of 1,14,479 partially covered and 22,562 quality affected habitations, the achievement was coverage of 69,111 partially covered and 8,195 quality affected habitations.

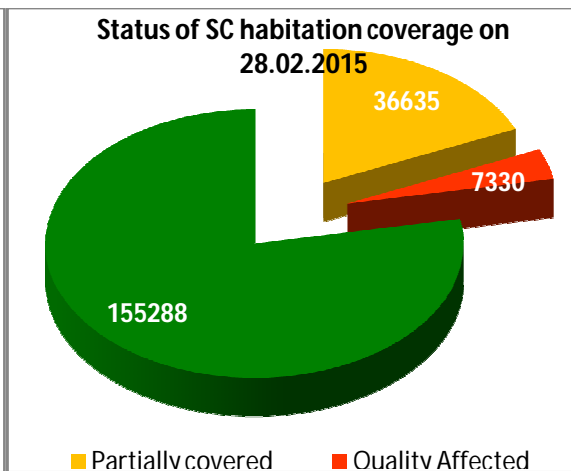
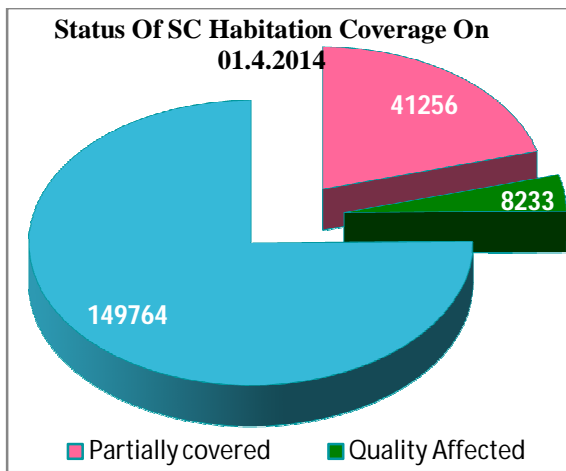
**ANNUAL ACTION PLANS (AAPS):
 PLANNING FOR 2015-16**

From the year 2010-11, the States prepared their AAPs, detailing the activities that they proposed to take up during the year, in the rural drinking water sector, with the financial costs of these proposals. From the year 2012-13 onwards, the online formats for Annual Action Plan got fully established and was widely accepted by the States/UTs. States were released funds under

NRDWP, after their AAP was finally prepared and the target habitations marked on the online IMIS.

PROVISION FOR THE SCHEDULED CASTE AND SCHEDULED TRIBE

The NRDWP has special provisions to ensure coverage of the Scheduled Caste and Scheduled Tribe population with potable water supply. In the criteria for fund allocation to States under the NRDWP, the rural SC and ST population of the State has a weight age of 10%. Thus States with higher SC and ST population get a higher allocation of NRDWP funds. To ensure that adequate funds are utilized by the States in SC and ST concentrated areas, for the year 2014-15, Rs. 2035 crore (22% of total allocation of Rs. 9250 crore) is earmarked for expenditure for SCs and Rs. 925 crore (10% of total allocation of Rs. 9250 crore) is earmarked for expenditure for STs. Out of this, as on 31.12.2014, Rs. 2071.54 crore have been released to States for coverage of SC and ST populations.



The progress in the coverage of SC and ST concentrated habitations is being monitored through the Integrated Management Information System (IMIS) of the Ministry.

- As on 1.4.2014, out of the total 1, 99,253 SC concentrated habitations, 1,49,764 habitations are Fully Covered, 41,256 are Partially Covered and 8,233 are Quality affected. In 2014-15, 14,061 SC concentrated

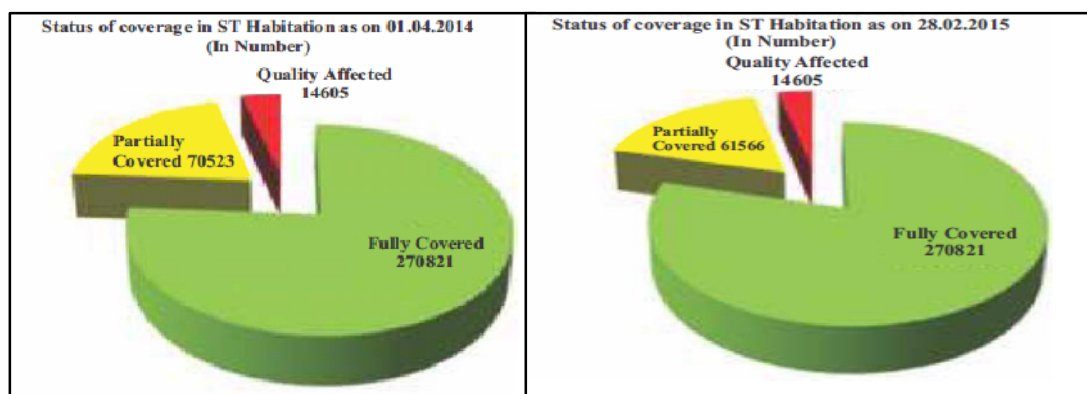
habitations were targeted for coverage and 9412 habitations were covered with potable drinking water supply.

- As on 01.04.2014, out of the total 3, 55,949 ST concentrated habitations, 2,70,821 are Fully Covered, 70,523 are Partially Covered and 14,605 are quality affected. In 2014-15, 35166 ST concentrated habitations were targeted for coverage and out of which 20016 habitations have been covered.

PROVISION FOR MINORITIES

While there is no earmarking of NRDWP funds for expenditure in minority concentrated districts, attention is given to coverage of such habitations in the planning process. Out of the total 2, 28,870 habitations in the Minority Concentrated Districts

(MCDs) identified by the Ministry of Minority Affairs, as on 1.4.2014, a total of 1,48,274 habitations are Fully Covered, 67,413 are Partially Covered and 13,183 are Quality affected. In 2014-15, 19,242 habitations have been targeted for coverage and 10416 habitations covered with potable drinking water supply till 31.12.2014.



Since inception of the programme till 11.02.2015, 4.36 lakh chemical kits, 1178.17 lakh bacteriological vials have been purchased / supplied, 38.06 lakh rural drinking water sources were tested by using these kits and 28.07 lakh persons (including grass-root workers in GPs, block & district officials) have been entrained in different States to carry out the water quality tests as per on-line data reported by the States on IMIS. This helps in keeping surveillance on the quality aspects of drinking water sources. With effect from 1.4.2009, NRDWQM & SP has been subsumed in the NRDWP. From 2011-12 a separate component of Water Quality Monitoring Surveillance has been created for which 3% of NRDWP funds are allocated.

also aimed to provide 50% of rural population potable drinking water (55 litres per capita per day) by piped water supply. Of this, only 18% of rural population was provided potable drinking water. It also sought to give household connections to 35% of rural households. Of this, only 17% of rural households were given household connections.

EVALUATION

• UNDERPERFORMANCE OF THE SCHEME

By 2017, NRDWP aimed to provide all rural habitations, government schools, and anganwadis access to safe drinking water. However, by December 2017, these objectives were not completely attained. Of this, only 44% of rural households and 85% of government schools and anganwadis were provided access. It

• PLANNING AND DELIVERY MECHANISM

The CAG noted deviations from the programme guidelines in the planning and delivery framework established at the centre and states. 21 states had not framed water security plans. Deficiencies were found in the preparation and scrutiny of annual action plans such as:

- (i) Lack of stakeholder and community participation, non-inclusion of minimum service level of water in schemes, and
- (ii) Absence of approval of State Level Scheme Sanctioning Committee for schemes included in the plans.
- (iii) The apex level National Drinking Water and Sanitation Council set up to co-ordinate and ensure convergence remained largely non-functional.

- (iv) State level agencies important for planning and execution of the programme, such as the State Water and Sanitation Mission, State Technical Agency, and Block Resources Centres were either not set up or were under-performing.

- **FUND MANAGEMENT**

Between 2012-17, total allocation of Rs 89,956 crore (central share of 43,691 crore and state share of Rs 46,265 crore) was provided for the programme. Of this, Rs 81,168 crore (90%) was spent during the period. The availability of funds declined during 2013-14 and 2016-17 due to reduced central allocation and inability of states to increase their own financial commitment. The CAG noted delays of over 15 months in release of central share to nodal/implementing agencies in states.

- **PROGRAMME IMPLEMENTATION**

NRDWP failed to achieve its targets due to deficiencies in implementation, such as:

- (i) Incomplete, abandoned and non-operational works,
- (ii) Unproductive expenditure on equipment,
- (iii) Non-functional sustainability structures, and
- (iv) Gaps in contractual management, with a total financial implication of Rs 2,212 crore.
- (v) Inadequate focus on surface water based schemes and 98% of the schemes, including piped water schemes continued to be based on ground water resources.
- (vi) The operation and maintenance plans were either not prepared in most states or they had deficiencies in them, leading to schemes becoming non-functional.
- (vii) Institutional mechanisms for inspection, vigilance and monitoring not functioning and the overall monitoring and oversight framework lack effectiveness.

CONCERNS

The top-down model of service delivery, deeply embedded within the local institutions, at the district level and the concept of demand-driven scheme and community ownership faced complete setbacks. Acc. to the *IDS Bulletin* Volume 43 Number 2 March 2012 4practices of informal institutions such as patriarchy, patronage and local **clientelism** also shaped the implementation of the scheme.

- The Programme was launched with the primary objective of providing safe and adequate drinking water to the rural population on a sustainable basis. The 12th Plan aimed at providing all rural habitations, schools and *anganwadis* with safe drinking water by 2017 against which actual achievement of covering habitations was only 44.5% and 85% for schools and *anganwadis*.
- With a goal of providing 50% of rural households/ population with potable drinking water (55 lpcd) by piped water supply and at least 35% of rural households with household connections by April 2017. The actual achievement (December 2017) against these deliverable was however only 18.4% and 16.8% respectively.
- The apex level National Drinking Water and Sanitation Council that was set up to co-ordinate and ensure convergence remained inactive. Other bodies for planning and execution of the programme such as State Water and Sanitation Mission, State Technical Agency, Source Finding Committee, Block Resource Centers were also either not set up or were not performing their assigned functions.
- The idea of community, which was strongly embedded in the policy discourse, did not hold strong by the time it reached the village – the potential and the intention had been filtered out.

The community was still a group of beneficiaries who had to be supplied with water, rather than agents who could participate in the operation and maintenance of the scheme.

- The availability of funds for the programme decreased from 2013-14 to 2016-17. Moreover, even the funds allocated could not be fully utilized and there was diversion of funds amounting to Rs.358.59 crore towards irrelevant items of expenditure and blocking of funds of Rs. 304.02 crore with State Water and Sanitation Missions and work executing agencies.
- There was inadequate focus on surface water based schemes and a large number of schemes (98%) including piped water schemes continued to be based on ground water resources.
- Lack of proper site investigations and timely obtaining of requisite, its statutory and other mandatory clearances with poor contract management and enforcement of contractual terms resulted in works remaining incomplete, abandoned or non-operational as well as unproductive expenditure on equipment with an overall financial implication of Rs. 2,212.44 crore.
- Further, lack of required number of States/district/sub-divisional level **laboratories** resulted in shortfalls in prescribed quality tests of water sources and supply thereby weakening the objective of providing safe drinking water to the rural population.
- Lastly, institutional mechanisms for inspection, vigilance and monitoring were not functioning in the manner envisaged and the overall monitoring and oversight framework lacked effectiveness.

Thus, the overall coverage of rural habitations increased by only 8%at 40 lpcd and 5.5%at 55 lpcd even after incurring of expenditure of ` 81,168 crore during the period 2012-17

RECOMMENDATIONS

Based on the findings, we recommend as follows:

- In view of the fact that the institutional framework for planning and delivery as contemplated in the programme guidelines were either non-existent or nonfunctional in a large number of States, Ministry should review the feasibility and practicality of these mechanisms to ensure that they serve the intended purposes.
- Water security plans and annual action plans must be prepared with community participation to ensure that schemes are aligned to community requirements and ensure optimum and sustainable utilisation of water resources.
- Ministry must strengthen capacity building/IEC at block and village levels so that they are equipped and empowered to meaningfully participate in the planning, management and monitoring of scheme and programme.
- Emphasis should be given on community management beyond participation.
- There is a need to develop linkages between national plans and community needs.
- Planning should take into account state specific aspects and requirements and towards this end, Ministry should stipulate a realistic timeframe for preparation of State Specific Policy Framework and Annual Action Plans that may also be monitored by the Ministry.
- Allocation of resources for the Programme should be dynamic and based on a clear assessment of requirements and achievements under each component.
- Plans and schemes should be granted approval only after technical and sustainability aspects have been duly vetted and it should be ensured that all clearances are in place so as to ensure unimpeded execution of the works/schemes.

- Focus should be placed on effective works and contract management so as to ensure that works are completed in time as per the contractual terms. Any default on the part of contractors should be viewed strictly in accordance with the contract stipulations so as to penalise delays attributable to the contractors and enforce accountability.
 - Focussed attention should be accorded to mitigating measures in all quality affected habitations to ensure availability of safe drinking water and infrastructure for testing water quality should be made effective so as to meet the objective of providing safe drinking water.
 - To strengthen both Programme planning and implementation, Ministry should improve the effectiveness of all envisaged monitoring tools including Integrated Management Information System
 - The CAG recommended that the Ministry of Drinking Water and Sanitation should review the feasibility and practicality of the planning and delivery mechanisms to ensure that they serve the intended purposes. It also suggested that the water security plans and annual action plans must be prepared with community participation ensuring that schemes are aligned to community requirements and utilize water resources in an optimum and sustainable manner
- resources in an optimum and sustainable manner.
 - It recommended that allocation of resources should be dynamic and based on a clear assessment of requirements and achievements under each component of the scheme.
 - The focus should be placed on effective works and contract management to ensure that works are completed in time as per the contractual terms
 - The focus should be placed on effective works and contract management to ensure that works are completed in time. Delays attributable to contractors should be penalised and accountability should be enforced.
 - It is recommended that allocation of resources should be dynamic and based on a clear assessment of requirements and achievements under each component of the scheme.

CONCLUSION

Existing sources of water supply, whether authorized agencies or other conventional sources aren't fulfilling the water requirement of rural communities. Moreover, the challenges don't seem to be limited to provide water supply to those rural areas which are still lacking of supply system but it's also related to the dissatisfaction reported among the people who are covered under water supply system. Authorities involved in management of rural water supply should be flexible enough so that they may find the issues related with the water supply like inappropriate hours of supply and frequent fall in pressure of water. Villagers are not satisfied with the waters system and willing to contribute in terms of both manually as well as economically for the developed water system. Hence government can apply a fixed monthly charge which helps in revenue generation which

WAY FORWARD

The CAG recommended that the Ministry of Drinking Water and Sanitation should review the feasibility and practicality of the planning and delivery mechanisms to ensure that they serve the intended purposes.

- It is also suggested that the water security plans and annual action plans must be prepared with community participation to ensure that schemes are aligned to community requirements and utilise water

can be utilized for maintenance of water supply system.

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