

# **CHAPTER II**

# **PERFORMANCE AUDITS**

**CHAPTER-II**  
**PERFORMANCE AUDIT**  
**SOCIAL WELFARE DEPARTMENT**

**2.1 Integrated Child Development Services**

**Executive Summary**

***Introduction***

Integrated Child Development Services (ICDS) is India's response to the challenge of breaking a vicious cycle of malnutrition, impaired development, morbidity and mortality in young children. It responds to the inter-related needs of children below six years, pregnant women, lactating mothers and adolescent girls in a comprehensive manner.

***(Paragraph-2.1.1)***

***Infant/maternal mortality rates***

Social Welfare Department, Government of Bihar (SWD) did not prescribe benchmarks for identification of prevalence of underweight children, anemia in case of pregnant/lactating women and Infant Mortality Rate and Maternal Mortality Rate in Bihar. Therefore, the output of implementation of ICDS in the State could not be gauged.

***(Paragraph-2.1.11.3)***

***Universalisation of ICDS***

Hon'ble Supreme court (SC) directed that each habitation should have a functional *Anganwadi* centre and ICDS should be extended to all children upto the age of six years and all pregnant and lactating mothers. Despite the orders, ICDS scheme was extended to only 44 to 46 *per cent* of eligible children, 55 to 58 *per cent* of eligible pregnant/lactating mothers and 10 to 20 *per cent* of adolescent girls as SWD failed to furnish specific requirement of AWCs in the State to Ministry of Women and Child Development, Government of India (MoWCD).

***(Paragraph-2.1.7.3)***

***Planning***

Perspective plan for the mission period was not prepared, whereas Annual Plans were prepared at State level without any inputs from Districts/Projects offices/*Anganwadi* Centers. The Department did not maintain the data on malnourished children. As a result, existing gaps prevailing in programme implementation such as prevalence of underweight/malnourished children, number of children out of preschool education, cases of anemia *etc.* were not assessed in any of the Annual Plans.

***(Paragraphs-2.1.8.1 and 2.1.8.2)***

***Financial management***

The Department could not spend the released funds fully in any of the years from 2011 to 2016 due to delayed release of funds by ICDS Directorate. Consequently, Government of India (GoI) did not release its subsequent share during fourth quarter of 2013-14 and 2015-16 under ICDS (General). Besides, Directorate had submitted incorrect Statement of Expenditure and Utilisation Certificates to GoI resulting in reporting of ₹14.50 crore as expenditure though the amount remained in the bank account.

***(Paragraphs-2.1.9 and 2.1.9.2)***

### **Shortage of Anganwadi Centres**

There were only 84,098 Rural *Anganwadi* Centres (AWCs) against 1,12,272 *Panchayat* Wards in 503 rural project offices of Bihar leaving 28,174 (25 *per cent*) Wards in rural areas without any AWCs. Further, 21,366 AWCs and 1675 mini AWCs sanctioned by GoI in November 2014 were not operationalised as on March 2016 as SWD had not identified the population belonging to Schedule Caste (SC)/Schedule Tribes (ST)/Minorities which was a pre-requisite for opening the AWCs.

**(Paragraphs-2.1.7.2 and 2.1.7.3)**

### **Infrastructure development**

Out of functional 86,752 AWCs in the State, only 24,515 AWCs (28 *per cent*) were running in Government buildings while remaining 62,237 AWCs were running from either rented houses or from places like *Panchayat* office, community hall, open places *etc.* The test-checked 585 AWCs lacked facilities like toilet, drinking water, indoor/outdoor activities, sufficient utensils for preparation and serving of food. Despite availability of funds for construction and upgradation of AWC buildings, the Department did not finalise the budget head for drawals of funds till 2014-15. Therefore released funds could not be drawn from treasury. As a result of delayed finalisation of budget head, the Department could not utilise the funds released by GoI during 2013-15 for construction of 2,915 AWCs and upgradation of 4,405 AWCs.

**(Paragraphs-2.1.10, 2.1.10.1 and 2.1.10.2)**

### **Implementation of six services of the scheme**

Supplementary Nutrition Programme was not provided for targeted 300 days in any of the 585 test-checked AWCs. The prescribed checks to ensure specified standards and quality/ nutrition value of supplementary nutrition were not carried out by Food and Nutrition Board in the State. Besides, hygiene and safety could not be ensured as kitchen and safe water facility was available in only 29,495 (34 *per cent*) and 29,643 (34 *per cent*) of AWCs respectively out of functional 86,752 AWCs. Wheat Based Nutrition Programme (WBNP) to ensure the availability of foodgrains at cheaper rates was not implemented in all AWCs of the State. Medicine kits/Pre-school kits were not available in any of the test-checked AWCs. Data on Immunisation was not maintained at any level in ICDS. Severely malnourished children were not referred to PHC/Hospital.

**(Paragraphs-2.1.11, 2.1.11.1 and 2.1.11.2)**

### **Institutional arrangement for monitoring**

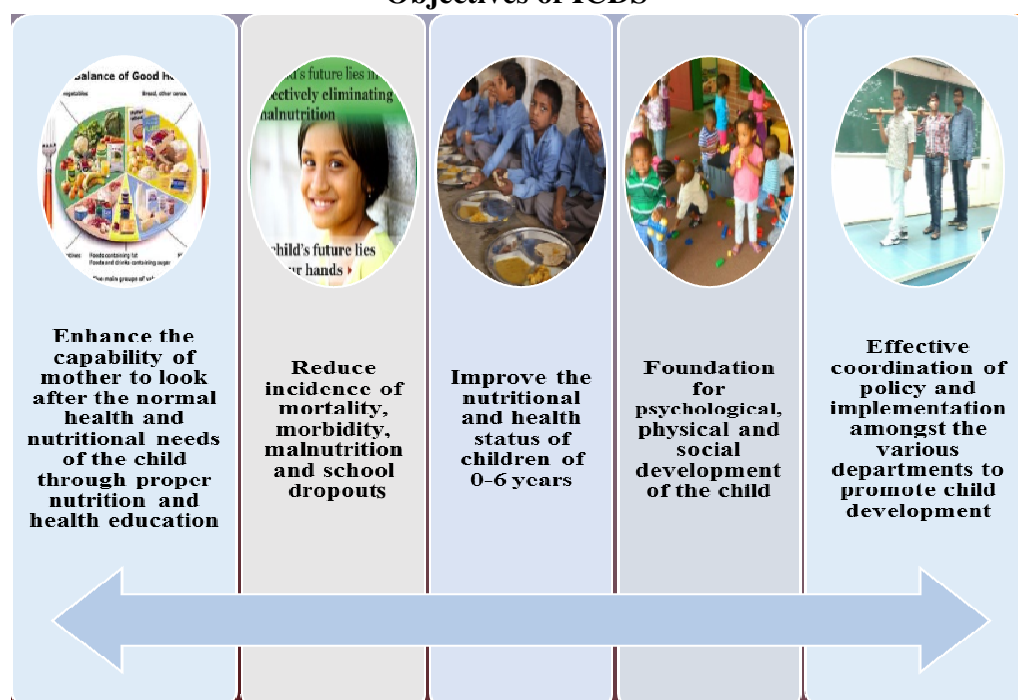
Government of Bihar did not constitute State Mission Steering Group and State Empowered Programme Committee for monitoring ICDS. Bihar Integrated Child Development Society was constituted for overseeing child development and nutrition system in December 2015 only. However, the Governing body for the Society is yet to be constituted (August 2016). As meetings of the monitoring committees in the State and in eight test-checked districts were not convened so far (August 2016), the monitoring of the scheme was inadequate.

**(Paragraphs-2.1.14 and 2.1.14.1)**

### 2.1.1 Introduction

Integrated Child Development Services (ICDS) Scheme, a flagship programme of Government of India (GoI) was launched in 1975 for providing a package of six services (Supplementary Nutrition Programme (SNP), Immunisation, Health Check-up, Referral Services, Pre-school Non-formal Education and Nutrition and Health Education) to combat malnutrition, impaired development, morbidity and mortality in young children and inter-related needs of pregnant women, lactating mothers and adolescent<sup>5</sup> girls. The scheme was to be implemented in Mission Mode during 12<sup>th</sup> Five Year Plan (2012-2017). The objectives of the ICDS Scheme are shown in **Chart no. - 2.1.1**:

**Chart no. - 2.1.1**  
**Objectives of ICDS**



(Source: Guidelines of ICDS scheme)

In Bihar, the scheme was commenced in the year 1975 with two project offices covering 277 *Anganwadi* Centres (AWCs) and is expanded to 544 project offices and a sanctioned strength of 1,14,718 AWCs with 86,752 functional AWCs as of March 2016.

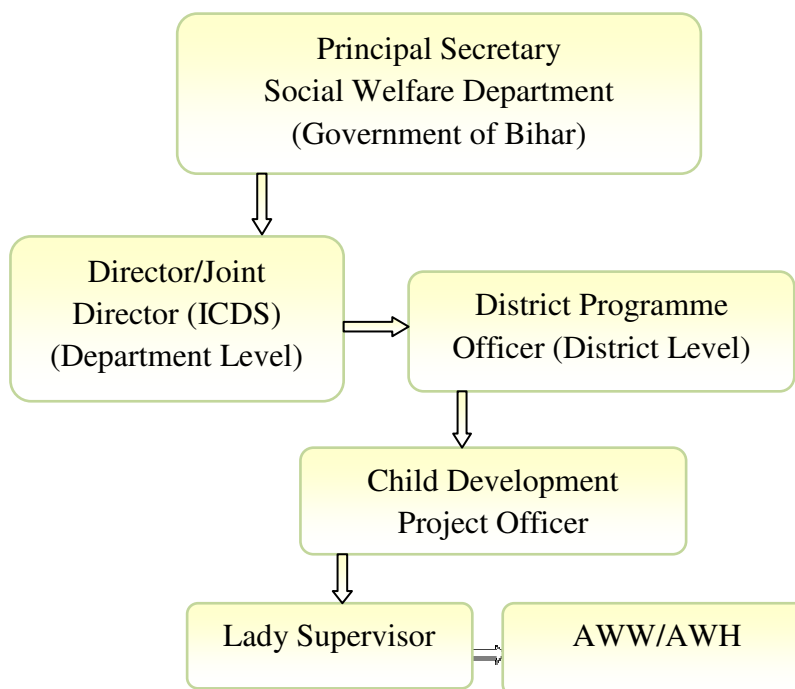
### 2.1.2 Organisational set-up

The Director, ICDS is the implementing officer of the scheme at the State level under overall supervision of the Principal Secretary, Social Welfare Department (SWD), Government of Bihar (GoB). At the district level, the scheme is being implemented and co-ordinated by District Programme Officers (DPOs) ICDS, while at the block level, the Project Offices are headed by Child Development Project Officers (CDPOs) assisted by Lady Supervisors (LSs). Further, AWCs run by *Anganwadi* Workers (AWWs) and *Anganwadi* Helpers (AWHs) are the village/habitation level implementation units of the

<sup>5</sup> At this stage, girls stand at the threshold of adulthood. This stage is intermediary between childhood and womanhood.

scheme. The officers and officials responsible for implementation of the scheme are given in **Chart no. - 2.1.2:**

**Chart no. - 2.1.2**  
**Organisational chart**



(Source: Information provided by Social Welfare Department)

### 2.1.3 Audit objectives

The objectives of the performance audit were to assess and evaluate whether:

- proper planning was done to ensure coverage of the specified six services to all children aged upto six years, pregnant women, lactating mothers and adolescent girls;
- funds allocated and released were adequate and utilised economically and efficiently for the specified services;
- infrastructure facilities were adequate to cover the services to be provided;
- the specified six services of the scheme were implemented efficiently and effectively;
- deployment and training of manpower under the scheme were adequate for effective delivery of services;
- benchmarks were clearly set to achieve the intended indicators such as reduction in underweight, anemia, Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) *etc.* for assessing the outcome of the scheme; and
- system of monitoring and review was in place and effective.

### 2.1.4 Audit criteria

The criteria adopted to achieve the audit objectives were as follows:

- Scheme guidelines and framework for implementation of ICDS;
- Bihar Financial Rules 2005 and Bihar Treasury Code 2011; and
- Directions/circulars issued regarding scheme implementation by GoI and GoB.

### 2.1.5 Audit scope and methodology

The Performance Audit of ICDS for the period 2011-16 was conducted during April to July 2016 through test-check of records of the SWD Secretariat, Directorate of ICDS, 10 out of 38 DPOs, 39 CDPOs (out of 149 CDPOs of test-checked districts) and 585 AWCs by selecting 15 AWCs from the office of each CDPO. Districts *i.e.* DPOs were selected by using 'Probability Proportionate to Size Without Replacement' (PPSWOR) method whereas CDPOs and AWCs were selected by using 'Simple Random Sampling Without Replacement' (SRSWOR) method.

The audit methodology consisted of document analysis, responses to audit queries, collection of information through questionnaires, proforma and joint physical verification along with beneficiary surveys.

In each test-checked office of CDPO, joint physical verification with the ICDS functionaries was conducted in five AWCs. Besides, five beneficiaries under each project office were also surveyed to identify the impact of the implementation of the scheme. Audit observations were based on analysis of information and data collected during audit from above mentioned units.

An entry conference was conducted in March 2016 with the Principal Secretary, SWD wherein the audit objectives, audit criteria and methodology were discussed at the beginning of the Performance Audit. At the end of audit, an exit conference was held in November 2016 with the Principal Secretary, SWD and replies/views on the audit observations are duly incorporated.

### 2.1.6 Audit findings of earlier Performance Audit

The findings of the Performance Audit on ICDS for the period 2002-07 were featured in paragraph 3.2 of Comptroller and Auditor General's Audit Report (Civil) for the year ended 31 March 2007. Major deficiencies highlighted in the Report such as failure to operationalise AWCs, inadequate infrastructure facilities and coverage of the scheme persisted during the current audit also as discussed in subsequent paragraphs:

### 2.1.7 Universalisation of ICDS Services

#### 2.1.7.1 Shortcomings while complying with Hon'ble Supreme Court orders

Hon'ble Supreme Court (SC) ordered (November 2001, April 2004 and October 2004) for universalisation of ICDS and directed that every habitation should have a functional ICDS centre (*Anganwadi*) and ICDS should be extended to all children up to the age of six years and all pregnant and nursing mothers. Hon'ble SC subsequently directed (December 2006) GoI to sanction and operationalise AWCs in each habitation by December 2008 and identify SC and ST hamlets/habitations for AWCs on a priority basis.

To comply with the directions of Hon'ble SC, GoI revised (April 2007) the population norms of AWCs and Mini AWCs (one AWC for 400-800 population and one Mini AWC for 150-400 population). Further, GoI also directed the State Governments to undertake a micro level survey to identify predominantly SC/ST/Minority habitations based on revised population norms and furnish specific requirement of additional AWCs and Mini AWCs by 15

May 2007. The shortcomings noticed while complying with the directives of the Hon'ble SC as well as GoI are discussed in the following paragraphs:

### 2.1.7.2 Shortage of AWCs

During scrutiny of records, it was observed that without completing micro level survey, SWD conveyed (October 2007) a projected requirement of 5,440 AWCs and 5,440 Mini AWCs to GoI. Instead of identifying pre-dominantly SC/ST/Minorities habitations as per revised population norms as directed by GoI, SWD subsequently assessed and forwarded to GoI, the requirement of AWCs thrice between December 2011 and March 2013 on different criteria such as population of children in the age group of 0-6 years (as per Census 2011) and coverage area of an AWC co-terminous with the Ward boundaries of *Panchayats*. However, the latest revised proposal based on Ward boundaries did not include requirement of urban project offices.

Accordingly, GoI sanctioned for the State, 5,440 AWCs and 5,440 mini AWCs in February 2009 and 21,366 AWCs and 1,675 mini AWCs in November 2014. However, it was observed that none of the AWCs sanctioned in November 2014 were operational till date of audit (June 2016) as SWD had not identified the habitations predominantly belonging to SC/ST and Minority communities which was a pre-requisite for opening of new AWCs.

**In absence of a micro level survey, the SWD failed to assess the actual requirements of additional AWCs/mini AWCs in the State.**

Further, according to the criteria adopted by SWD, there was only 84,098 Rural AWCs against 1,12,272 *Panchayat* Wards in 503 rural projects of Bihar leaving 28,174 (25 per cent) of *Panchayat* Wards in rural areas without any AWCs. Thus, in absence of a micro level survey, the SWD failed to assess the actual requirements of additional AWCs/mini AWCs in the State.

### 2.1.7.3 ICDS services not extended to eligible beneficiaries

**Despite directions of Hon'ble Supreme Court, the AWCs had not extended the services of ICDS to every eligible beneficiary and continued with the criteria of 80 children, 16 pregnant/lactating mothers and three adolescent girls for coverage.**

As directed by Hon'ble SC, SWD issued orders (November 2010) to all district/project officials to extend ICDS to all eligible children (six months to six years) and pregnant/lactating mothers under the coverage area of an AWC instead of the existing norms of 80 children, 16 pregnant/lactating mothers and three adolescent girls under an AWC. The SWD also directed to submit AWC-wise list of all beneficiaries so that action could be taken for allotment of the required funds.

Scrutiny in test-checked districts revealed that AWCs had not extended the services of ICDS to every eligible beneficiary and continued with the criteria of 80 children, 16 pregnant/lactating mothers and three adolescent girls. The CDPOs also did not provide the list of total eligible beneficiaries of AWCs to the Directorate to allocate additional funds.

The beneficiaries eligible for the services under the scheme in the State as per the orders of Hon'ble SC are given in the **Table no. - 2.1.1:**

**Table no. - 2.1.1**  
**Details of beneficiaries covered under the scheme in the State**

(Number in lakhs)

Period	Children (six months to six years)		Pregnant/ lactating mothers		Adolescent Girls	
	Population	Coverage (percentage)	Population	Coverage (percentage)	Population	Coverage (percentage)
2011-12	Not available					
2012-13	110.08	48.58 (44)	17.52	10.09 (58)	49.21	9.83 (20)
2013-14	111.77	49.66 (44)	18.21	10.50 (58)	49.83	9.81 (20)
2014-15	99.45	45.27 (46)	17.17	9.52 (55)	53.03	9.12 (17)
2015-16	100.73	44.98 (45)	16.94	9.52 (56)	50.75	4.88 (10)

(Source: Information provided by Directorate)

From the **Table no. - 2.1.1**, it was evident that only 44 to 46 *per cent* of eligible children, 55 to 58 *per cent* of eligible pregnant/lactating mothers and 10 to 20 *per cent* of adolescent girls were covered under ICDS in the State during 2012-16.

Thus, the failure of the SWD to adhere to the directives of the Hon'ble SC resulted in depriving the benefits of the scheme to a major chunk of eligible population. During exit conference the Principal Secretary, SWD attributed (November 2016) inadequate coverage to shortage of staff in DPO and CDPO offices and need of huge resources to meet the target.

#### **2.1.7.4 SC and ST hamlets/habitations not identified for AWCs**

Scrutiny of records in the Directorate of ICDS as well as test-checked DPOs revealed that SC and ST hamlets/habitations were not identified in any of the AWCs as SWD did not carry out the micro-level survey to identify SC/ST habitations as per directives of Hon'ble SC. Thus, the under-privileged sections of the society were not prioritised for the services under the scheme, despite directions from the Hon'ble SC.

On being asked, SWD admitted (November 2016) the fact and stated that:

- Universalisation of the scheme was in progress; and
- Regarding less coverage of beneficiaries, guidelines had been issued to all CDPOs to cover all the eligible beneficiaries.

During exit conference Principal Secretary, SWD stated (November 2016) that micro-level survey could not be completed as the State is heavily populated and vast areas should have to be covered.

However, no reply was given regarding the failure of SWD to operationalise 21,366 AWCs and 1,675 mini AWCs sanctioned for the State in November 2014 due to its failure in identifying population predominantly belonging to SC/ST/Minorities.

#### **Recommendations**

**The SWD should:**

- *comply in full with the directives of the Hon'ble SC regarding assessing the need of AWCs in each habitation,*
- *identify the habitations of weaker sections of the society; and*
- *work towards universalisation of ICDS scheme.*



## 2.1.8 Planning

The directives issued by Ministry of Women and Child Development, Government of India (MoWCD) regarding implementation of ICDS envisaged that planning based on locally relevant strategies is required to achieve the core objectives of the scheme. The SWD had prepared Annual Programme Implementation Plans (APIPs) to address the requirements of the State through ICDS. However, the following shortcomings in planning were observed:

### 2.1.8.1 Deficient survey of beneficiaries

Survey is the basic requirement to assess existing gaps in the implementation mechanism. The planning process of ICDS includes surveys of beneficiaries by the AWWs. According to the directive of SWD, AWWs should prepare a list of eligible beneficiaries under their coverage area in a prescribed proforma. The prepared list should be verified by LSs (20 per cent entries) and CDPOs (three per cent entries) and then be approved by respective *Panchayats*.

**In absence of proper training, the survey conducted by AWWs was inadequate and did not present actual status of beneficiaries.**

Scrutiny of records in 585 test-checked AWCs disclosed that the prescribed format issued by SWD, GoB for survey of the family of eligible beneficiaries were not properly filled in by AWWs as various columns like age, date of birth, entry and exit date in coverage area, type of disability *etc.* were left blank. The reason for inadequate survey was attributed to lack of training to AWWs. Further, LSs and CDPOs had not verified the entries regarding eligible beneficiaries in 525 and 560 AWCs respectively. Besides, the prepared list by AWWs was not submitted to concerned *Panchayats* for approval.

On being asked, the SWD stated (November 2016) that the beneficiaries were being selected from the list of Below Poverty Line (BPL). During exit conference the Principal Secretary, SWD also admitted (November 2016) lack of training to AWWs and stated that AWWs were over-burdened and assured that efforts would be taken to train AWWs.

Thus, the survey conducted by the SWD through untrained AWWs was incomplete and may not present the complete and actual status of beneficiaries in the State.

### 2.1.8.2 Perspective plans not prepared

As per directives of MoWCD, States are expected to prepare the plan for entire mission period (*i.e.* perspective plan) as well as annual plan (*i.e.* Annual Programme Implementation Plan or APIP) that would be based on resource availability and prioritisation exercise. Besides, MoWCD instructed (December 2012) the Department to prepare a four year perspective plan for construction of AWC buildings.

It was observed that perspective plans for the entire mission period as well as four year perspective plan for construction of AWCs buildings were not prepared by the State. However, the SWD had prepared APIPs for the requirements of the State.

**SWD did not prepare perspective plans to ensure utilisation of available resources and their prioritisation.**

The SWD accepted (November 2016) the fact and stated that the perspective plan for the coming four-year period was under process.

In absence of a perspective plan, the SWD failed to ensure resource availability and prioritisation exercise. Further, the requirement of infrastructure like building, equipment *etc.* corresponding to the increased number of beneficiaries over the years could not be ascertained due to lack of a perspective plan for construction of AWCs.

### 2.1.8.3 Preparation of APIPs

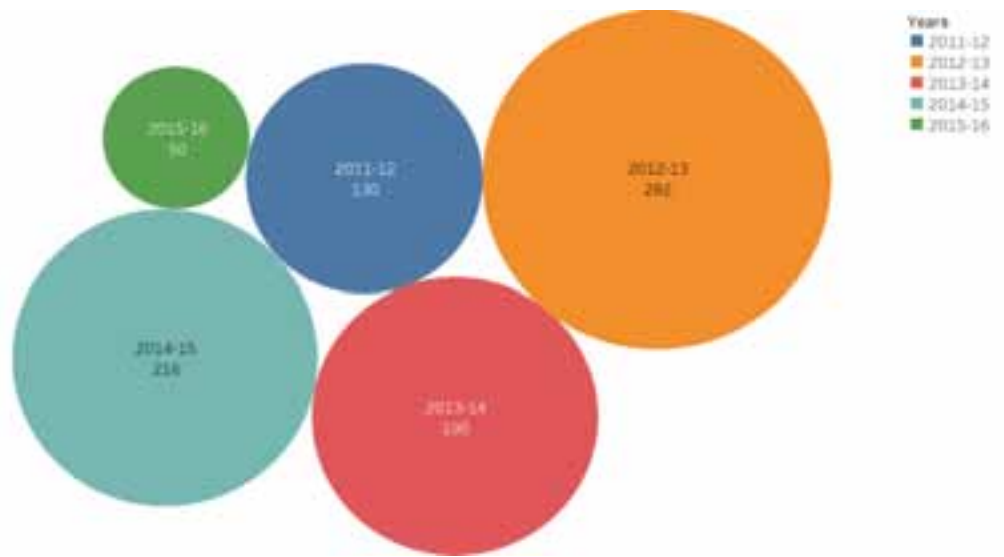
The APIPs are to be prepared following a decentralised planning process wherein the district and block officials and other key stakeholders from the line departments, especially Health, Education, Rural Development, Water and Sanitation and *Panchayati Raj* Institutions (PRI) are to be consulted on the respective planned activities that are to be taken up with support from these departments. Planning teams at different levels were to be constituted with a clear demarcation of their roles and responsibilities. Further, the process of preparation of APIP should be initiated in the month of October so that draft APIP is made available to Government of India (GoI) by the end of December.

It was however observed that the Department prepared APIPs during 2011-16 with the following shortcomings:

- Though annual surveys were conducted by AWWs to identify all eligible beneficiaries, their inputs were not considered while preparing the APIPs as survey was inadequate and APIPs were also not prepared by districts/projects. Thus, plans were prepared by the State itself without taking inputs even from the district and block officials. Further, the proposal for number of beneficiaries (1.51 crore) derived on population based estimates in the APIP of 2015-16 was rejected by GoI and termed as exaggerated. Later, approval was granted for 88.96 lakh beneficiaries. It was also observed that approved number of beneficiaries in the APIPs of 2014-15 to 2016-17 remained constant.
- The SWD did not have data related to malnourished children/out of pre-school children, cases of anemia *etc.* at any level as survey and collection of data by AWWs was deficient. Hence, existing gaps prevailing in programme implementation such as prevalence of underweight/malnourished children, number of children out of pre-school education and cases of anemia were not assessed in any of the APIPs.
- Planning teams for preparation of APIP as well as core team comprising key programme officials of other line departments were not constituted in any test-checked districts. In absence of their input, planning to overcome the shortcomings in infrastructural facilities like shortage of building, drinking water facilities, toilets, kitchen *etc.* was not addressed properly in any year.
- Timely submission of plan to GoI was not ensured in any of the year due to delayed constitution of planning committees at State level. The delay in submission of plans ranged between 50 and 282 days during 2011-16 as shown in the **Chart no. - 2.1.3:**

The SWD did not have data of malnourished children, out of pre-school children, cases of anemia *etc.* at any level. Further, APIPs were prepared without taking inputs of surveys by AWWs.

**Chart no. - 2.1.3**  
**Delay in submission of AIPs (In Days)**



(Source: Information provided by Directorate, ICDS)

Delay in submission of AIPs defeated the prime objective of AIP to accelerate programme outcome.

- The data of operational AWCs was also not factually correct in the AIPs as all sanctioned 91,677 AWCs (sanctioned by GoI till October 2014) were treated as operational in the AIPs of 2013-14 to 2015-16, while only 86,752 AWCs were operational as on March 2016.

In reply, the SWD admitted (November 2016) the audit contention and stated that AIP for the current year had been prepared in accordance with the instruction of GoI. During exit conference the Principal Secretary, SWD stated (November 2016) that due to vacancy at the State level, planning committee was not constituted in time.

The above discussed shortcomings in the planning process led to preparation of unrealistic, factually incorrect and deficient plans for ICDS in the State.

#### **Recommendation**

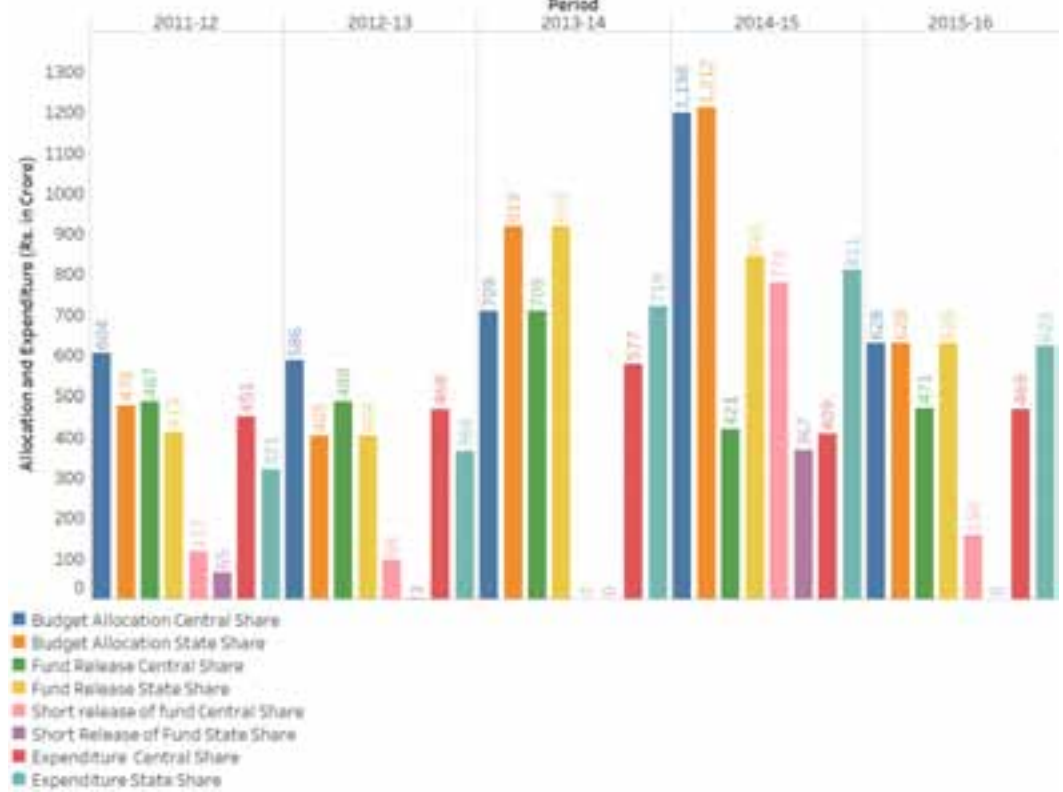
***The survey based on prescribed norms of ICDS should be conducted by SWD to identify beneficiaries and plans should be prepared to optimise the resource availability and specified prioritisation of beneficiaries.***

#### **2.1.9 Financial management**

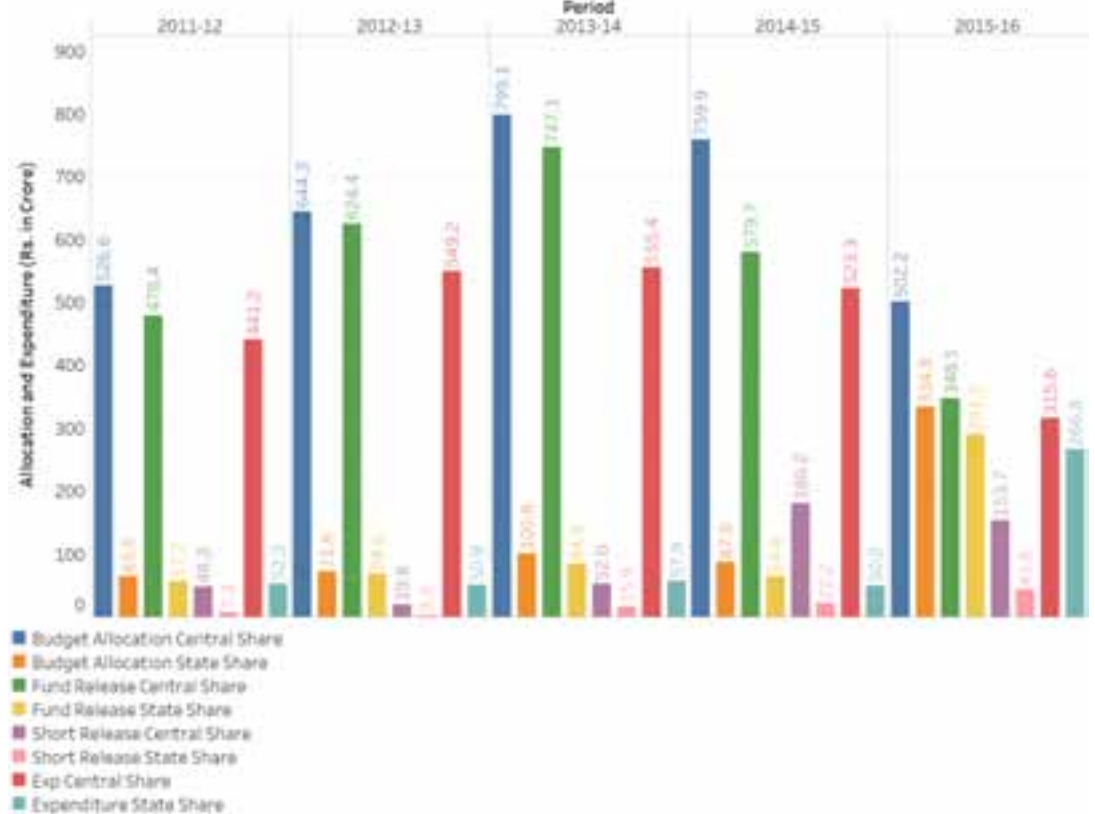
ICDS is a Centrally Sponsored Scheme with funds ratio between GoI and GoB as 50:50 for Supplementary Nutrition Programme (SNP), 90:10 for General Component (GC) meant for establishment (revised to 60:40 in 2015-16) and 75:25 for construction and renovation of AWCs. As per instruction of GoI, the State was required to submit the information of actual expenditure through quarterly Statement of Expenditure (SoE) latest by 15<sup>th</sup> of the month following the end of every quarter and through annual Utilisation Certificates (UCs) latest by 30 April of every year for the preceding financial year.

Details of allocation and release of SNP and GC funds by GoI/GoB along with expenditure incurred there against during 2011-16 are as detailed in **Chart no. - 2.1.4** and **Chart no. - 2.1.5**:

**Chart no. - 2.1.4**  
**Allocation and expenditure under Supplementary Nutrition Programme during 2011-16**



**Chart no. - 2.1.5**  
**Allocation and expenditure under General Component during 2011-16**



(Source: Surrender reports of Directorate, ICDS Bihar)

GoI had short released funds due to unspent balances and delayed submission of SoEs and AIPs.

From the **Chart no. - 2.1.4 and 2.1.5**, it was evident that the funds released for both components could not be spent in totality in any of the year during 2011-16. The short release under Central share against budget allocation was 31 *per cent* in case of SNP funds and 14 *per cent* in case of GC. Short release of funds by the SWD was mainly attributed to less receipt of funds under Central share from GoI. Availability of unspent balances, delayed submission of SoE and AIPs were the main reasons for short release of funds by GoI. The under-expenditure against the released funds was mainly attributed to delayed release of funds (*i.e.* release of funds towards end of the year) by the SWD and ICDS Directorate. Further, in the test-checked districts 12 *per cent* of GC funds and 13 *per cent* of SNP funds against the allotment remained unutilised during 2011-16 (**Appendix-2.1.1**). The shortcomings noticed in the financial management of the scheme are discussed below:

#### **2.1.9.1 Accumulation of Government money in bank accounts**

Bihar Treasury Code 2011 prohibits opening of any bank accounts without the concurrence of the Finance Department and the drawing of Government money in anticipation of demands or to prevent lapse of budget grant and their accumulation in bank accounts.

However, it was observed that 13 accounts were operated in the Directorate office without concurrence of the Finance Department whereas in the test-checked units, bank accounts ranging from two to eight were operated wherein huge Government money, relating to ICDS scheme, amounting to ₹133.60 crore was available as on 31 March 2016. This included ₹18.71 lakh kept idle in inoperative accounts for period ranging from one to eight years in eight out of 37 accounts operated in the test-checked districts.

The Principal Secretary, SWD while attributing this shortcoming to lack of professional Accounts Officers, assured during exit conference (November 2016) that it would be minimised in near future. However, no reply was provided regarding opening of bank accounts without concurrence of Finance Department.

#### **2.1.9.2 Incorrect reporting of Statement of Expenditure**

ICDS Directorate had submitted SoEs of ₹540.10 crore to GoI during 2012-13 for GC. Scrutiny of records disclosed that out of this, ₹14.50 crore was kept idle in the bank accounts but was reported as expended.

During exit conference, Principal Secretary, SWD stated (November 2016) that lack of professionals like Accounts Officers led to such mistakes.

#### **2.1.9.3 Short receipt of funds**

It was observed that due to excess saving of GoI funds under SNP head ranging from ₹20.04 crore to ₹54.55 crore during 2011-14 and ₹59.22 crore and ₹80.41 crore under GC in the year 2012-13 and 2014-15 respectively, GoI deducted its share in subsequent years (**Appendix-2.1.2**). Besides, due to unspent balances under GC in third quarter of 2013-14 and 2015-16, GoI did not release its share in the fourth quarter of the respective years.

#### 2.1.9.4 Irregular maintenance of cash book

The cashbooks were maintained without carrying over the previous closing balances and reconciliation with bank was not carried out.

Scrutiny of cash book maintained in four test-checked offices<sup>6</sup> revealed that the cash books were started by taking bank balances as opening balances on different occasions ignoring previous closing balances of cash book including unadjusted advances. In these cases, previous closing balances amounting to ₹7.56 crore were ignored and ceased to be part of the new opening balances. The details were as under:-

- An amount of ₹46.60 crore was a part of closing balance on 9 March 2014 (referred as old items) in cash book of Directorate, ICDS. Scrutiny of entries of subsequent cash book disclosed that only ₹40.40 crore was referred as old items in January 2015 without showing any adjustment of balance ₹6.20 crore.
- Tender fee amounting to ₹16.60 lakh received on 10 June 2013 continued as part of closing balance till 9 March 2014. Thereafter, details of closing balance were not mentioned in the cash book till 21/1/2015 and ₹16.60 lakh ceased to be part of the cash book from 22/1/2015 without mentioning any reason.
- Similarly, in test-checked Projects, Pakridayal (East Champaran) and Harnaut (Nalanda), opening balances were reduced by ₹85.32 lakh (30/9/2011) and ₹22.79 lakh (11/3/2014) respectively, without any reason.
- In test-checked Project Ramgarh, difference of ₹10.85 lakh was noticed in the balances between cash book and bank statement as on 2/9/2011 which continued till 8/1/2015. Later on, cash book was started as per bank statement on 9/1/2015 and the difference of ₹10.85 lakh was left out without any reasons.

The above serious irregularities showed lack of monitoring by the controlling officers.

During exit conference the Principal Secretary, SWD admitted (November 2016) discrepancies in the Cash Book and stated that these discrepancies were due to absence of any reconciliation with Bank accounts and lack of professionalism in maintenance of accounts. Further, Director ICDS stated (December 2016) that old item was reduced to ₹40.40 crore as ₹6.20 crore was gradually spent and figures of tender fee was subsequently included in old item since 22 January 2015.

The reply of Director, ICDS was not acceptable as no such expenditure was included in the cash books and no supporting documents were provided to Audit.

#### **Recommendation**

***The Department should ensure that funds are allocated timely so as to avoid unspent balances and short release of funds by GoI. The cash books should be maintained properly and responsibility should be fixed for the irregularities found in the cash book.***

<sup>6</sup> Directorate of ICDS, CDPO- Ramgarh, CDPO-Harnaut, CDPO-Pakaridayal

### 2.1.10 Infrastructure facilities

As per the norms for construction of AWC buildings prescribed by the MoWCD (March 2011), an AWC must have a separate sitting room for children/women, separate kitchen, store room for food items, child-friendly toilets, space for children to play (indoor and outdoor activities) and safe drinking water facilities.

Scrutiny of records of Directorate disclosed that out of 86,752 functional AWCs in the State (84,098 Rural AWCs and 2,654 Urban AWCs), only 24,515 AWCs (28 per cent) were located in Government buildings while remaining 62,237 AWCs were running either from rented premises or from places such as *Panchayat* community halls, open spaces *etc.*

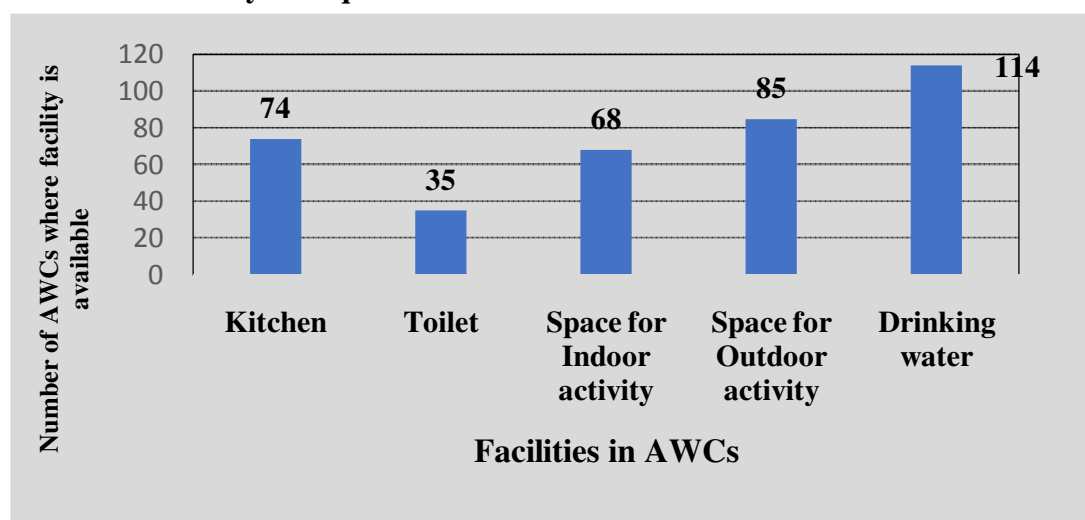


(AWC running in an orchard at Uchakagaon, Gopalganj)

Further, scrutiny of records of test-checked 585 AWCs disclosed that none of the AWCs had separate sitting room for children and women.

Availability of other required facilities such as kitchen, toilet, drinking water, space for children to play in the test-checked 585 AWCs are shown in the Chart no. - 2.1.6:

Chart no. - 2.1.6  
Availability of required facilities in 585 test-checked AWCs



(Source: Information provided by AWCs)

The test-checked AWCs lack infrastructure such as kitchen, toilet, drinking water, space for indoor/outdoor activities *etc.*

It was observed that only three out of 585 test-checked AWCs have all the above facilities. In addition, utensils for preparation and serving of food were

not sufficient in 450 and 327 AWCs respectively out of 585 test-checked AWCs. Reasons for the shortcomings in infrastructure facilities of AWCs are discussed in following paragraphs:

### 2.1.10.1 Delay in construction of AWCs

For construction of 2,915 AWC buildings and upgradation of 4,405 AWCs, GoI released ₹49.19 crore in 2013-14 (at ₹4.50 lakh per AWC) and ₹18.39 crore in 2013-15 (at ₹1.00 lakh per AWC) respectively. The constructions were to be done in convergence with MGNREGA scheme and the funds were to be utilised for construction/upgradation within six months of release.

It was observed that for making budget provision, the SWD did not finalise the budget head for construction and upgradation of AWC building till 2014-15 and therefore released funds could not be drawn from treasury. Later on, after finalisation of the budget head in 2015-16, budget provision of ₹64.41 crore under GoI and ₹30.40 crore under GoB was made for construction and upgradation of AWCs. Meanwhile, guidelines for construction of AWCs were notified by GoI (August 2015) which stipulated that for construction of every AWC building, ₹5.00 lakh was to be drawn from MGNREGA funds and ₹2.00 lakh from SWD. Accordingly, Directorate released ₹58.30 crore for construction of 2,915 AWCs and ₹25.47 crore for upgradation of 3,066 AWCs to districts in March 2016. However, districts did not utilise the released funds till November 2016. As a result, the proposed construction and upgradation of AWCs could not be started till November 2016.

The SWD admitted (November 2016) the fact that the failure to finalise the budget head resulted in delayed release of funds to the Directorate.

### 2.1.10.2 Availability of equipment in AWCs

According to framework of scheme, each AWC must be provided with weighing machines to determine whether the child/adult is normal or malnourished. Further, SWD decided (September 2014) to procure container for boiling water and water filter for the AWCs of the State. It was observed that Director, ICDS provided (July 2014-July 2015) ₹51.86 crore from DFID<sup>7</sup> funds to AWCs for procurement of above said equipment as shown in the **Table no. - 2.1.2** under the *Bal Kuposhan Mukta Bihar* campaign<sup>8</sup>:

**Table no. - 2.1.2**  
**Name and cost of equipment being used in AWCs**

Sl. No.	Name of equipment	Rate per unit (₹)	Funds available to AWCs
1	Adult Weighing Machine	703	₹21.86 crore to 82,793 AWCs
2	Baby Weighing Machine	807	
3	Salter Weighing Machine	880	
4	Inch Tape	50	
5	Growth Monitoring Chart	200	
6	Water Filter	1,500	₹30.00 crore to 82,759 AWCs
7	Container for boiling water	1,000	
8	Fuel	1,125	

(Source: Information provided by ICDS Directorate)

<sup>7</sup> Department for International Development, Government of Britain

<sup>8</sup> Appreciating the criticality of nutrition to human development, SWD formally launched the *Bal Kuposhan Mukta Bihar* or the *Child Malnutrition Free Bihar* campaign on August 15, 2014 to address the high level of child under-nutrition and bring it down to below 30% among children of up to three years of age by 2017



The Director, ICDS instructed (November and December 2014) AWCs to purchase weighing machines from licensed sellers and water filters with ISI or IS-7402 certification. Accordingly, the Directorate transferred ₹46.89 crore in the bank accounts of AWCs and ₹4.97 crore in the bank accounts of CDPOs (July 2015).

Scrutiny of records disclosed following irregularities in procurement of above mentioned equipment:

***Purchase without tendering process***

The purchase of equipment like child/adult weighing machines, water filters etc. was made without adhering to the prescribed rules. As a result, maintenance of equipment could not be done and many equipment were lying defective in AWCs.

Due to purchase by individual AWCs, neither tendering process for procurement was implemented nor any quotation was invited. Hence, the benefit of bulk purchase which would have led to lower costs could not be availed. Besides equipment were purchased by AWWs locally from different agencies without ensuring any guarantee/warranty clause or Annual Maintenance Contract (AMC).

***Purchase without ensuring required specifications***

During physical verification of 195 AWCs, it was noticed that weighing machines were not approved by the Weight and Measurement Department of GoB. Similarly, water filters were not ISI/IS-7402 certified. Even the brand name of equipment was not given on the vouchers.

***Boiled and filtered water was not ensured to beneficiaries***

All the AWCs were provided fuel cost for three months only, along with the cost of water filter and steel containers so that boiled and filtered water could be provided to children under *Bal Kuposhan Mukta Bihar*. It was however, observed that in absence of funds for fuel, boiled water was not provided to beneficiaries.

Further, during physical verification, it was observed that 91 water filters, 64 adult weighing machines and 49 baby weighing machines were defective. Thus, purchases without ensuring guaranty/warranty clause/AMC led to equipment lying defective at AWCs.

In reply, the SWD stated (November 2016) that specification of all related equipment were approved and instructions were issued to buy equipment of standard level. The reply was however silent on audit observations that equipment were purchased without adhering to any quality and specification.

Thus, the Department could neither provide adequate number of AWCs in the State nor the prescribed facilities/equipment in the AWCs constructed.

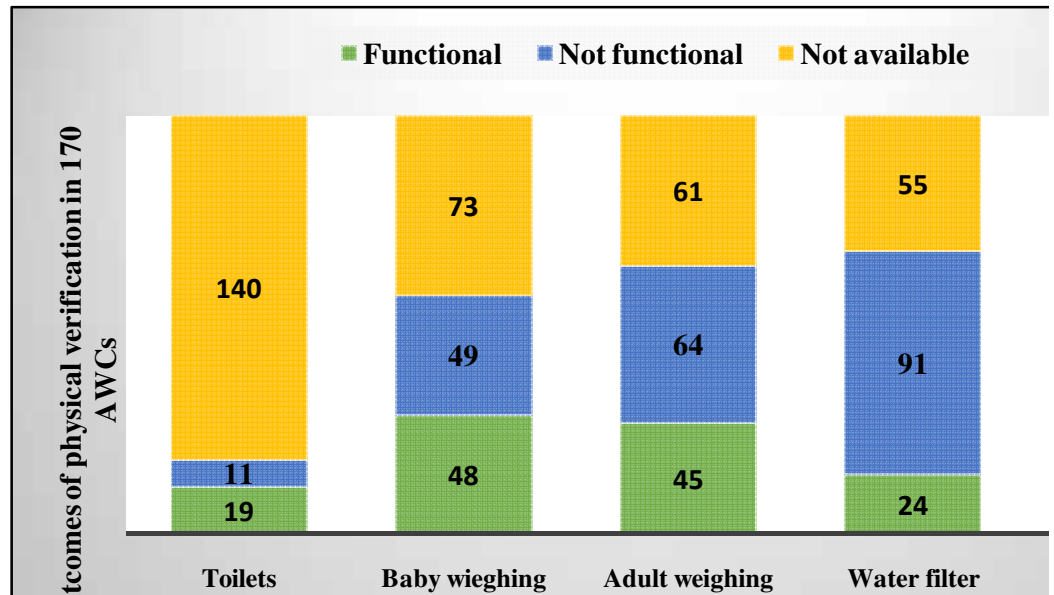
**2.1.10.3 Joint physical verification and beneficiary survey**

In course of Performance Audit of ICDS, the audit team along with the Supervisors /AWWs of test-checked 39 ICDS Project offices under 10 selected districts conducted physical verification of 195 AWCs.

During physical verification, 25 AWCs were found closed and children were not present in 22 out of the remaining 170 AWCs.

The status of toilets, baby weighing machines, adult weighing machines, water filter and Take Home Ration (THR) weighing machines found during physical verification of 170 AWCs are shown in the **Chart no. - 2.1.7:**

**Chart no. - 2.1.7  
Availability of infrastructure and equipment**



Besides, drinking water facilities were available in 26 AWCs only and growth chart of children was maintained by seven AWCs only. Photographs of two AWCs running without proper infrastructure are given below:



*AWC running in temporary shed without toilet, kitchen, water facility (Koylasthan, Mahishi Saharsa).*



*AWC running in temporary shed without toilet, kitchen, and water facility (Harsidhi Block in East Champaran)*



*Defective water filter in mini AWC at Bhathar, Tharthari, Nalanda*



*Defective weighing machines in AWC Miabigha, Hilsa, Nalanda*

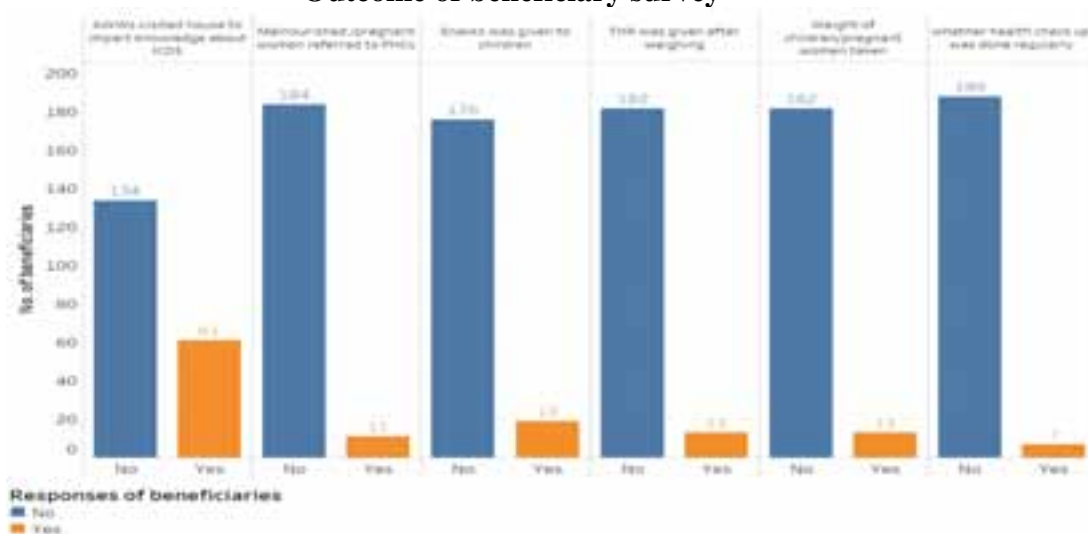
In reply, the SWD assured (November 2016) that shortcomings noticed during physical verification would be scrutinised and corrective and punitive measures would be taken.

#### **2.1.10.4 Outcome of beneficiary survey**

Similarly, the audit team had interacted with 195 beneficiaries/guardians (five selected randomly from each project office) to know the awareness and impact of various services rendered to them/their wards by the AWCs and recorded their responses in writing. All surveyed beneficiaries were ignorant about the

services of ICDS. The responses of beneficiaries on the queries are shown in the **Chart no. - 2.1.8:**

**Chart no. - 2.1.8**  
**Outcome of beneficiary survey**



As evident from the **Chart no. - 2.1.8**, majority of the beneficiaries were dissatisfied with the services provided by AWCs.

In reply, the SWD while appreciating this beneficiary survey stated that the shortage of staff was a glaring problem and request had been made with GoB for appointments.

**Recommendation**

*Buildings with basic amenities and necessary equipment, utensil etc. should be ensured for each AWC so that intended benefits of the scheme could be provided to beneficiaries.*

**2.1.11 Implementation of the services under the scheme**

The ICDS aims to improve the nutrition and health status of children under the age of six, lactating/pregnant women *etc.* through a package of six services *i.e.* Supplementary Nutrition Programme (SNP), Immunisation, Health Check-up, Referral Services, Pre-school Non-formal Education and Nutrition and Health Education. The children in the age group 0-6 years number around 19.1 million in Bihar, accounting for 18.3 *per cent* of State’s total population (2011 Census). These children are the future human resource of the State.

The shortcomings in implementation of these six services are discussed in the paragraphs below:

**2.1.11.1 Supplementary Nutrition Programme**

Supplementary Nutrition Programme (SNP) is an important component of ICDS as it acts as an entry point for other services provided by the AWCs which are the implementing units of the scheme. As per norms, beneficiaries were to be provided cooked meal (children in the age group of three to six years and adolescent girls) and Take Home Ration (children in the age group of six months to three years and pregnant/nursing mothers) under SNP for 25 days in a month. The cost per beneficiary is based on cost of food items (BPL rate for cereals), transportation, cooking, micro nutrient fortification, processing and storage *etc.* The foodgrains under SNP were provided under

Wheat Based Nutrition Programme (WBNP). Shortcomings in implementation of SNP are discussed in following paragraphs:

***Failure to provide food for the targeted days***

As per norms, beneficiaries were to be provided cooked meal (children in the age group of three to six years and adolescent girls) and Take Home Ration (six months to three years children and pregnant/nursing mothers) under SNP for 25 days in a month (*i.e.* 300 days in a year).

Scrutiny of records in test-checked AWCs disclosed that none of the AWCs provided meals under SNP for 300 days during 2015-16. The status of providing food meals under SNP in test-checked AWCs during 2011-16 are given in the **Table no. - 2.1.3:**

**Table no. - 2.1.3**  
**Details of SNP provided by test-checked AWCs during 2011-16**

Year	Total number of functional test-checked AWCs	SNP provided Below 100 days	SNP provided from 101 days to 150 days	SNP provided from 151 days to 200 days	SNP provided from 201 days to 250 days	SNP provided from 251 days to 300 days
2011-12	525	0	13	37	226	249 (43)
2012-13	527	0	0	35	208	284 (54)
2013-14	530	12	0	17	201	300 (57)
2014-15	537	3	15	59	183	277 (52)
2015-16	581	31	29	182	260	79 (14)

(Source: Information provided by test-checked AWCs)

From the **Table no. - 2.1.3**, it was evident that food under SNP was provided for more than 250 days in 14 *per cent* of AWCs only during 2015-16 whereas in remaining years, it was provided in 43 to 57 *per cent* of AWCs. It was further observed that food under SNP was not provided for 300 days in any of the year during 2011-16 in any of the AWCs of two test-checked districts (*i.e.* Katihar and Buxar).

On being asked, the SWD while accepting the observation replied (November 2016) that sometimes food under SNP was affected due to delay in receiving allotment and consequent clearance of the allotted amounts from treasury and bank.

***Identification of underweight/malnourished children for providing food supplements***

As per revised nutritional and feeding norms for SNP (February 2009), State should provide food supplements of 800 calories of energy and 20-25 grams of protein in the form of micronutrient fortified food and/or energy-dense food as THR to severely underweight children in the age group of six months to three years. Similarly, severely

*Malnutrition is one of the enduring enigmas of contemporary India. A nationwide survey called the Rapid Survey on Children (RSOC), conducted by the Ministry of Women and Child Development, GoI in 2013-14 in league with UNICEF, showed that the proportion of underweight children and stunted (i.e. height not being in accordance with age) children in India were 29 per cent and 39 per cent respectively. The situation in Bihar is worse as the proportion of underweight children and stunted children were 37 per cent and 49 per cent respectively.*

(Source: Survey conducted by MoWCD, GoI in 2013-14)

underweight children in the age group of three to six years should be provided 300 calories of energy and 8-10 gms of protein (in addition to 500 calories of energy and 12 to 15 gms of protein) in the form of micronutrient fortified food and or energy-dense food, as THR.

It was observed that underweight children among three to six years of age were neither identified by AWWs nor provided additional calories and protein as food supplements in the test-checked districts due to lack of training and inadequate data collection by AWWs. It was further observed that the Directorate had released funds to provide additional calories to 12 severely malnourished children aged between six months and three years in each AWCs. Accordingly, AWCs had provided THR to them. However, the AWCs had no record to establish the fact that the beneficiary children were actually malnourished.

The SWD, instead of giving response to the audit observation on malnourished children, reiterated (November 2016) the feeding norms of SNP that additional calorie and protein should be provided to severely malnourished children. However, during exit conference the Principal Secretary, SWD stated (November 2016) that instructions would be issued for identification and coverage of malnourished children and training would be provided to AWWs for the same.



*Malnourished children of AWCs (AWC Pundalaya Uttar bhag no-28 and AWC Bajardih no-30) of Baisi Block of Purnia District.*

### ***Maintenance of food safety and hygiene***

As per GoI order (February 2009), the State with the support of Food and Nutrition Board (FNB) should ensure the quality of supplementary nutrition being provided under SNP with reference to the norms of food safety as well as nutrient composition. The supplementary nutrition should conform to the prescribed standards laid down under the Prevention of Food Adulteration Act and the Integrated Food Law to ensure consistent quality and nutritive value of food. FNB in collaboration with the State should carry out periodic checks to ensure that prescribed standards are adhered to and quality and nutritive value of supplementary nutrition is maintained. In the case of hot cooked meal, proper kitchen sheds having adequate sanitation and safe drinking water should be ensured.

**There was no mechanism for quality checks of supplementary nutrition in the State.**

It was observed that no check was carried out by the Department with the support of FNB to ensure that the prescribed standards were adhered to and that the quality and nutrition value of supplementary nutrition was maintained. Besides, hygiene and safety were compromised as kitchen and safe drinking water facility were available in only 34 per cent of AWCs out of functional 86,752 AWCs.

During exit conference the Principal Secretary, SWD admitted (November 2016) that there was no mechanism for quality check of supplementary nutrition in the state. It was further stated that nutritional consultants were demanded from the State Government which was yet to be provided. Thus, it was evident that the supplementary nutrition had been provided in AWCs without ascertaining the quality and nutrition value of the food.

### ***Wheat based nutrition programme***

WBNP was not implemented in all project offices. As a result, foodgrains were purchased at higher rates from open market.

Under Wheat Based Nutrition Programme (WBNP), foodgrains such as wheat, rice, coarse grain such as *Bajra, Jowar, Maize and Ragi* were provided by GoI at BPL rates to provide supplementary nutrition. The purpose of WBNP was to reduce the procurement cost of supplementary nutrition and to ensure the availability of good quality morning snacks and micronutrients for the beneficiaries. SWD initiated (September 2011) implementation of WBNP in 18 project offices from the fourth quarter of 2011-12 and later included (November 2012) all the AWCs of the State in this programme. However, as on date, WBNP was being implemented in only 197 out of 544 project offices of the State. Following shortcomings were observed under this programme:

- ***Less utilisation of foodgrains:*** The SWD received allocation of 4,55,231 MT rice and 4,752 MT wheat under WBNP from GoI during 2011-16. Out of this, the Directorate could re-allocate only 2,88,974 MT rice and 579 MT wheat to AWCs. However, only 1,70,874 MT rice and 456 MT wheat was utilised. Thus, quantity of 2,84,357 MT of rice and 4,296 MT of wheat (*i.e.* 63 and 90 *per cent* of the allocation respectively) worth ₹162.44 crore were not lifted during 2011-16 (***Appendix-2.1.3***) and treated as surrendered to GoI. It was also observed that due to requisition made by SWD in excess of functional AWCs and further re-allocation of foodgrains to lesser number of AWCs, the allocated foodgrains remained unutilised.
- ***Avoidable Expenditure:*** The WBNP was not implemented in seven test-checked districts<sup>9</sup>. As a result, foodgrains (*i.e.* rice) were purchased at higher rates from the open market. It was observed that AWCs of these test-checked districts purchased 1,58,490 MT of rice at higher rates from open market which resulted in avoidable expenditure of ₹182.28 crore (***Appendix-2.1.4***).

On being asked, the SWD accepted (November 2016) that WBNP was running in 197 project offices with shortcomings such as unavailability of grains in time and shortage of funds. It was further stated that grains were purchased from open market only on failure of State Food Corporation (SFC) to provide grains in time. The reply of the SWD regarding purchase from open market was not in consonance with facts as the said districts where purchases made were not covered under WBNP. Moreover, the SWD had also not initiated any action to implement this programme in all districts.

### ***Fortified blended food***

As per instruction of GoI contained in revised nutritional and feeding norms (2009), THR should be given in a form palatable to the beneficiaries (*i.e.* child, pregnant women, lactating mothers *etc.*) and should be seen as a food to

<sup>9</sup> East Champaran, Kishanganj, Gopalganj, Buxar, Nalanda, West Champaran and Saharsa

be exclusively consumed by them instead of the entire family. Subsequently, SWD decided (September 2012) to start the distribution of fortified food in 44 project offices.

However, the agreement for supply of fortified blended food was made with an NGO in July 2015 only in three projects taken up on pilot basis. Out of this, the NGO had started (December 2015) the distribution of fortified food in only two projects.

During exit conference the Principal Secretary, SWD stated that fortified blended food could not be made acceptable to beneficiaries so far and attempts are being made to make it more acceptable and palatable.

Thus, due to lackadaisical attitude of the SWD, distribution of fortified blended food was yet to be ensured in 542 out of 544 projects of the State.

### ***Recommendations***

***The SWD should ensure that:***

- ***Food under Supplementary Nutrition Programme is provided for the targeted number of days;***
- ***The malnourished/underweight children are identified for providing food supplements;***
- ***The WBNP is implemented in the entire State so that rice under SNP could be provided at subsidised rates; and***
- ***Agencies involved in distribution of fortified blended food are impressed upon to ensure its implementation in entire state.***

#### **2.1.11.2 Immunisation**

As per ICDS guidelines, children below six years of age are to be immunised to protect them from diseases like Polio, Diphtheria, Pertussis, Tetanus, Tuberculosis and Measles. Pregnant women are also to be immunised against tetanus to reduce maternal and neo-natal mortality with the help of Health Department. For this purpose, proper co-ordination was to be made with the Primary Health Centres (PHCs).

It was observed that data of immunisation was not being maintained at any levels in ICDS. However, as per data of Rapid Survey of Children (2013-14) published by GoI, 12 *per cent* of children in the age group of 12 months to 23 months had not received vaccination at all in comparison to all India percentage of seven *per cent*. Besides, in the State, there were nine *per cent* dropouts in vaccination of Diphtheria, Pertussis, and Tetanus (DPT) from DPT 2 to DPT 3 and 10 *per cent* in vaccination of Oral Polio Vaccine (OPV) from OPV 2 to OPV 3. As data was not maintained by AWCs, dropouts in vaccination could not be ascertained.

During exit conference, the Principal Secretary, SWD attributed (November 2016) this shortcoming to lack of training, inadequate education and workload of AWWs.

Thus, information regarding vaccination to all children could not be ascertained from the records of ICDS in the State.

### ***Recommendation***

***Data of immunisation should be maintained properly at each AWCs to ascertain the dropouts in vaccination and achieve the goal of universal immunisation.***

### 2.1.11.3 Health check-up and referral services

Health check-up includes ante-natal care of expectant mothers, post-natal care of nursing mothers and care of new born and children under six years of age especially those born with congenital defects or severely malnourished. Under health check-up component, every AWC was required to maintain basic records like Mother Child Protection (MCP) cards, growth chart of children aged upto six years relating to delivery of services. AWWs were also required to refer severely malnourished children, pregnant women and nursing mothers suffering from serious ailments to nearby PHC/hospital for treatment.

*Maternal mortality rate (MMR) and Infant mortality rate (IMR) are used as a measure of the quality of a health care system in a country. The MMR is the ratio of the number of maternal deaths during a given time period per 1,00,000 live births during the same time-period. Maternal death is defined as the death of a woman while pregnant or within 42 hours of termination of pregnancy. IMR denotes number of deaths of children less than one year of age per 1,000 live births. Absence of proper medical care and insufficient nutrition are the main reasons for maternal deaths whereas low birth weight and malnutrition are the main reasons for IMR. According to data available with Sample Registration System, Registrar General of India, Bihar is lagging behind in national average of IMR and MMR.*

Comparison of data	IMR (2014) per thousand	MMR (2010-12) per lakh
Bihar	42	219
India	39	178

*(Source: Sample Registration System, Registrar General of India)*

To provide primary health care, a medicine kit would be provided at every AWC every year containing basic medicines for controlling common ailments like fever, cold, cough, worm infestation *etc.* including medicine and basic equipment for first-aid. The deficiencies noticed under health check-up and referral services of ICDS are discussed below:

**The AWCs had not maintained the basic records like ante-natal/post-natal cards. Hence, achievements under health check-up could not be ascertained.**

- The basic records like MCP cards relating to delivery of services were not maintained in 428 out of 585 test-checked AWCs while growth chart of children was not maintained in 519 AWCs.
- No benchmarks were provided for identification of under-weight children, anemia in case of pregnant/lactating mothers and reduction of IMR and MMR in Bihar.
- Severely malnourished children were not referred to PHCs/Hospitals for treatment in 562 out of 585 AWCs. However, its impact could not be ascertained as the DPOs and AWCs did not maintain any records of malnourished children.
- GoB provided ₹1.36 crore to test-checked nine districts (except Katihar) during 2011-16 for medicine kits. Out of this, ₹1.03 crore (76 per cent) was surrendered/lapsed in seven districts<sup>10</sup>.

<sup>10</sup> Buxar, East Champaran, Gopalganj, Kishanganj, Kaimur, Nalanda, Purnea.



During exit conference, the Principal Secretary, SWD stated (November 2016) that availability and utilisation of medicine kits would be ensured. It was further assured that AWWs would be trained to identify malnourished children and to acquaint them with referral system.

**Recommendations**

**The SWD should:**

- *prescribe benchmarks for identification of under-weight children, anemia in case of pregnant/lactating mothers and reduction of IMR/MMR in Bihar;*
- *medicine kits should be provided annually to each AWCs; and*
- *identify severely malnourished children/pregnant/lactating mothers and refer to the nearest health centre/Nutrition Rehabilitation Centre.*

**2.1.11.4 Pre-school education**

Pre-school education (PSE) is one of the most important components of the ICDS and is considered to be the backbone of the programme. The purpose of PSE is to provide sustained activities through joyful play-way method that helps to prepare the child for regular schooling. PSE, as envisaged in the guidelines of ICDS, focuses on holistic development of children up to six years.

In the test-checked 585 AWCs, only 22,640 (40 per cent) were enrolled for PSE against the 55,842 available children in the age group of three to six years during 2015-16. As a joyful play-way method, the AWCs should have a Pre-school kit (PSE kit) containing puppets/dolls, soft toys, mirrors and props for dramatic play, building blocks, string and beads, memory games *etc.* The PSE kit should be provided every year to each AWC.

Scrutiny of records of ICDS Directorate disclosed that PSE kits were provided only once during 2011-16 to each AWCs. The PSE kits ordered in March 2011 were still being supplied upto March 2016. However, the PSE kits were not available in any of the test-checked 585 AWCs.

In reply, the SWD clarified (November 2016) that due to a Civil Writ Jurisdiction Case (CWJC) in Patna High Court, the procurement process of PSE kits was restarted in 2014 after its initiation in 2011.

Thus, inadequate enrolments under PSE and lack of PSE kits for preparing the children for regular schooling led to unsatisfactory implementation of PSE.

**Recommendations**

**The SWD should:**

- *initiate steps to enhance the enrolment of children in the targeted age group for pre-school education; and*
- *provide more PSE kits to AWCs to help the targeted children to be able to prepare for regular schooling.*

**2.1.11.5 Nutrition and Health education**

Nutrition, Health and Education (NHED) is a key component of ICDS and has the long term goal of capacity building of women especially in the age group of 15-45 years so that they can look after their own health, nutrition, and development needs as well as that of their children and family. The shortcomings noticed under this component are discussed in following paragraphs:

***Village Nutrition Counselling and Child Care Sessions***

The framework of ICDS stipulates organisation of Village Nutrition Counselling and Child Care Sessions (*Sneha Shivir*) as a community based approach amongst the cluster of four to five AWCs to ensure quick rehabilitation of undernourished children, enable families to sustain rehabilitation and prevent future under-nutrition in community by changing behaviours in childcare, feeding and health seeking. This initiative is need based and wherever required, additional funds could be sourced from normal SNP provisions.

During scrutiny, it was observed that despite approval of funds in the AIPs of 2013-14 (₹8.92 crore) and 2014-15 (₹2.23 crore), State did not take any initiative in this regard and *Sneha Shivir* was not organised in any of the test-checked districts.

On being asked, the SWD replied (November 2016) that *Shivirs* were organised in accordance with the availability of funds. The reply of the Department was contrary to the stated facts of the observation.

***Activities under Early Childhood Care and Education***

The framework of ICDS also stipulates Early Childhood Care and Education (ECCE) programme to ensure holistic development of the child and reflect the inseparable nature of care and education by comprehensively addressing the need for care, nutrition, health and well-being of young children and parent counselling. Under ECCE, State ECCE council was to be constituted and thereafter curriculum for early child care was to be developed by the Council. Besides, ECCE day in a month was to be organised to educate parents and community for care and development of child on the basis of their age.

It was observed that the budget for organising ECCE days in AIPs of 2013-15 and ECCE activities in AIP of 2015-16 was approved by GoI. The Bihar ECCE council and its working committee were also constituted in May and July 2015 respectively. However, the curriculum for early child care was not finalised by the Council as finding of pilot study conducted for finalisation of curriculum was not presented to Council till date (October 2016). Further, ECCE day was also not organised in any of the test-checked districts.

**The ECCE activities were not carried out in any of the test-checked districts.**

In reply SWD stated (November 2016) that ECCE curriculum would be presented very soon before the State ECCE Council for approval. It was further stated that due to delay in release of approved budget of AIP 2013-15 and failure to conduct training of DPOs, CDPOs, Lady Supervisors and AWWs on ECCE, the curriculum was yet to be finalised.

Thus, the intended purpose of this component of ICDS could not be achieved in the State.

***Recommendation***

***The State should immediately initiate the organisation of Sneha Shivir and commence ECCE activities to educate parents and communities for health care.***

**2.1.12 Training**

Training is a very crucial element in the ICDS scheme, as achievement of the programme goals largely depend upon the efficiency of frontline functionaries

in improving service delivery. Training under ICDS is imparted by National Institute of Public Co-operation and Child Development (NIPCCD), Middle Level Training Centres (MLTCs) and *Anganwadi* Training Centres (AWTCs) across the States. The GoI had sanctioned 144 AWTCs and three MLTC for imparting training to AWWs/AWHs and Supervisors according to the requirement of the State.

It was observed that 66 AWTCs and one MLTC were functional as of March 2016 in the State against the sanctioned strength of 144 AWTCs and three MLTCs whereas NIPCCD in the State was yet to be operationalised.

### ***Job training***

Job training was required to be given to each functionary on initial engagement/appointment. Audit scrutiny revealed that, as on March 2011, 167 CDPOs were working in the State without undergoing any job training. Further, no job training was imparted to any CDPOs till March 2016 also. It was also observed that, 1,194 Supervisors and 15,064 AWWs remained untrained till March 2016 (*Appendix-2.1.5*).

### ***Refresher training***

Refresher training was to be provided to each ICDS functionary once in two years. Hence, every year half of the work force in position was required to be imparted training. Audit scrutiny revealed that no refresher training to Supervisors was imparted during 2012-15. Only 17 *per cent* and three *per cent* of their working strength were imparted training during 2011-12 and 2015-16 respectively. Further, the training imparted to AWWs and AWHs ranged between 18 to 30 *per cent* and 15 to 24 *per cent* respectively (*Appendix-2.1.5*).

### ***Induction training***

Induction training was to be imparted to each functionary on initial engagement/appointment. Scrutiny revealed that 1,695 Supervisors in 2011-12, 23,676 AWWs during 2011-16 and 2,775 AWHs during 2013-16 were selected. However, induction training to any frontline functionaries was not imparted during 2011-16 (*Appendix-2.1.5*).

## **2.1.12.1 *Anganwadi* Training Centres**

*Anganwadi* Training Centres (AWTCs) are meant for imparting various training under ICDS to AWWs and AWHs. GoI fixed the norm for training days as 348 days in a year in April 2009 and later reduced it to 300 days from 2014-15.

Scrutiny of records revealed that there was a huge shortfall in imparting training during 2011-16 in the AWTCs against the norms set by GoI and none of the AWTCs of test-checked districts had imparted training on even 300 days and there was shortfall upto 289 days in a year (*Appendix-2.1.6*). Audit also observed that training centres were not constructed in each district. Due to nomination of trainees for training in centres outside the district, training slot remained vacant as trainees were unwilling to participate in distant AWTCs.

In reply, the SWD stated (November 2016) that shortfall in achievement of refresher training was attributed to late approval of State Training Action Plan (STRAP) by GoI. It was further stated that due to selection of less number of AWWs and AWHs, the Job/Orientation course could not be held as per plan. The reply was not acceptable as 15,064 selected AWWs and AWHs were yet

to be trained (March 2016). Without enhancing knowledge and skill of different field functionaries, delivery of quality services could not be ensured by the Department.

### 2.1.12.2 Manpower management

Motivated and qualified workforce in full strength is a pre-requisite to ensure universal and quality ICDS in the State.

It was observed that there were vacancies ranging from five to 24 *per cent* in the State and seven to 30 *per cent* in the test-checked districts under different cadres (*Appendix-2.1.7*). Further, the SWD decided (APIP of 2014-15) to increase the earlier sanctioned post of Additional CDPO from 68 to 328 for project offices having more than 180 AWCs. It was also observed that even the earlier sanctioned 68 posts of Additional CDPOs could not be filled in till March 2016. Thus, vacancies existed in the Department despite GoI instructions (December 2015) to fill up the existing vacancies within three months, while approving the APIP of 2015-16.

In reply, the SWD stated (November 2016) that efforts to fill up the vacant posts at all levels were under active consideration.

Thus, the deployment and training of manpower were not adequate for delivery of services.

#### **Recommendation**

***Steps should be immediately taken to fill up the vacant posts and adequate training should be provided at training centres.***

### 2.1.13 Benchmark was not fixed

Broad Framework for Implementation of ICDS stipulated some key indicators of achievements upto the period of 12<sup>th</sup> plan. Key indicator *inter alia* included, reduction in underweight prevalence (by 10 *per cent* from the current status), improved infant and young child feeding (75 *per cent* of children should have exclusively breastfeeding for six months), reduction in anemia (by 20 *per cent* in case of pregnant women and under five children), reduction in IMR and MMR in collaboration with health and reduction in incidence of low birth weight babies (by 10 *per cent*).

It was observed that in the APIPs of different years, no yearly targets were fixed by the State to achieve the intended indicators. Besides, the current status of total number of underweight children, children who were having exclusively breastfeeding for six months and cases of anemia in children/pregnant women were not on record in the ICDS Directorate/districts.

During exit conference, the Principal Secretary, SWD stated (November 2016) that annual target was specified in APIP and achievement was based on availability of funds for the purpose. The reply was not acceptable as annual targets were not specified in any of the APIPs.

#### **Recommendation**

***Yearly benchmark should be fixed in APIPs and necessary activities should be initiated to achieve the key indicators up to 12<sup>th</sup> plan as stipulated in the framework of scheme.***

### **2.1.14 Lack of institutional arrangement at State level**

As per Framework of the Scheme, State ICDS mission headed by the Chief Minister would be responsible for overseeing child development and nutrition system, consideration of policy matters *etc.* Besides, State Mission Steering Group (SMSG) headed by the Chief Minister would act as an apex body at State level for providing direction, policy and guidance for implementation of the scheme. State Empowered Programme Committee (SEPC) headed by the Chief Secretary would be the highest technical body for planning, supervising and monitoring of the effective implementation of the ICDS in the State. Functions under the ICDS mission would be carried out through State Child Development Society (SCDS), headed by the Mission Director. The SCDS should have a Governing body headed by the Chief Secretary and an Executive Committee headed by the departmental Secretary.

It was observed that neither ICDS mission nor SMSG/SEPC were constituted at the State level. The Bihar Integrated Child Development Society (BICDS) was constituted in December 2015 but Governing body was not yet constituted.

Hence, the society could not fulfill the entrusted responsibilities like endorsement of APIP/long term road map for ICDS Mission, review of implementation of APIP and achievement of child related outcomes *etc.*

#### **2.1.14.1 Monitoring and review**

ICDS mission framework stipulates five tier monitoring and review mechanism from Central level to AWC level. Monitoring would be done at State level through State Level Monitoring and Review committee (SLMRC) under the chairpersonship of the Chief Secretary. The committee was to monitor and review the overall progress of the scheme. Similarly, the ICDS was to be monitored through District Level Monitoring and Review Committee (DLMRC) under the chairpersonship of District Magistrate, Block Level Monitoring Committee (BLMC) under the chairpersonship of Sub Divisional Magistrate and *Anganwadi* Level Monitoring and Support Committee (ALMSC) under the chairpersonship of Member Gram *Panchayat/Ward* (preferably woman member).

Monitoring was also to be done through management information system (MIS) in which monthly progress report (MPR) on key indicators was uploaded by the AWWs. Besides, AWC was to be monitored and supervised through regular visit by officers of ICDS (from the level of State Secretary to Supervisor) as per prescribed schedule.

It was observed that though the state level SLMRC was constituted (December 2015), its meeting was never held till date. In the test-checked units, DLMRC was constituted in two districts (Saharsa and East Champaran), but only two meetings (upto April 2013) were held in both the districts. Besides, ALMSC was not constituted in any of the test-checked AWCs. The deficient monitoring had been affecting the working of AWCs as physical verification of 195 AWCs revealed that 25 AWCs were found closed while children were not present in 22 AWCs.

It was also observed that during 2012-16, there were differences in the number of functional AWCs and number of AWCs uploaded the data in MIS. Due to

incorrect reporting of AWCs, the actual progress on key indicators was not available with the Directorate.

#### **2.1.14.2 Integrated Performance Managements System (IPMS)**

The idea of Integrated Performance Managements System (IPMS) for monitoring and evaluation of AWWs and other ICDS staff by supervisory functionaries was formulated in the APIP of 2014-15. Under IPMS, each LS and AWWs were to be provided with tablets/mobile sets for web based reporting and monitoring. To implement IPMS, funds of ₹2.30 crore was released (April 2015) to all DPOs for providing mobiles/tablets to all CDPOs and LSs of the state at the rate of ₹6,000 per tablet. Besides, funds of ₹3.39 crore was also released to DPOs of four focused districts (Madhubani, Supaul, Araria and Kishanganj) on pilot basis to provide mobile sets (at the rate of ₹ 3,500 per set) to all AWWs.

However, as on date, neither mobile sets/tablets were purchased nor could IPMS be initiated in any test-checked districts due to lackadaisical approach of the Department. In the release order (April 2015), it was intimated that detailed instructions of purchase would be issued shortly by the Directorate after selecting the vendor. But the said instruction was issued by the Directorate in September 2015 *i.e.* after five months of release of funds and that too without selecting any vendor. Again, it was instructed (October 2015) by the Secretary, SWD that purchase of mobile sets/ tablets would be made in camp mode from the agency whichever agreed to supply the mobile set/ tablet of required specification at prescribed rate in entire State. However, the said agency is yet to be decided.

In reply, the SWD stated that the rates of mobile sets/tablets had been finalised and SIMs would be made available to districts shortly.

Thus, the absence of monitoring committees at different levels, deficient MIS and failure to commence IPMS affected the monitoring and implementation of the scheme.

#### **2.1.15 Conclusion**

Social Welfare Department (SWD) did not prescribe benchmarks for identification of underweight children, anemia in cases of pregnant women/lactating mothers and Infant and Maternal Mortality Rates in Bihar. Therefore, the output of implementation of Integrated Child Development Services (ICDS) in the State could not be gauged.

Hon'ble Supreme Court (SC) directed that each habitation should have a functional *Anganwadi* centre (AWC) and ICDS should be extended to all children upto the age of six years and all pregnant and lactating mothers. Despite the orders, ICDS scheme was extended to only 44 to 46 *per cent* of eligible children, 55 to 58 *per cent* of eligible pregnant/lactating mothers and 10 to 20 *per cent* of adolescent girls as SWD failed to furnish specific requirement of AWCs in the State to Ministry of Women and Child Development, Government of India (MoWCD).

There were only 84,098 Rural AWCs against 1,12,272 *Panchayat* Wards in 503 rural project offices of Bihar. Further, 21,366 AWCs and 1675 mini AWCs sanctioned by GoI in November 2014 were not operationalised as on

March 2016 as SWD had not identified the population belonging to Schedule Caste/Schedule Tribes/Minorities.

In the State, 72 per cent of the functional AWCs did not have their own buildings. The quality of services available to children in test-checked AWCs was seriously compromised as basic amenities such as toilet, drinking water, kitchen and utensils were not available in them.

The Department could not spend the released funds fully in any of the years from 2011 to 2016 due to delayed release of funds by ICDS Directorate. Consequently, Government of India (GoI) did not release its subsequent share during fourth quarter of 2013-14 and 2015-16 under ICDS (General). Despite availability of funds for construction and upgradation of AWC buildings, the Department did not finalise the budget head for drawals of funds till 2014-15. Therefore, released funds could not be drawn from treasury.

Supplementary Nutrition Programme was not provided for targeted 300 days in any of the test-checked AWCs. The prescribed checks to ensure specified standards and quality/ nutrition value of supplementary nutrition were not carried out by Food and Nutrition Board in the State. Besides, hygiene and safety could not be ensured as kitchen and safe water facility was available in only 34 per cent of functional AWCs. Wheat Based Nutrition Programme (WBNP) to ensure the availability of foodgrains at cheaper rates was not implemented in all AWCs of the State. Medicine kits/Pre-school kits were not available in any of the test-checked AWCs. Data on Immunisation was not maintained at any level in ICDS.

Adequate training was not provided to field level functionaries of ICDS such as Child Development Project Officers, Lady Supervisors and *Anganwadi* workers (AWWs). As a result, micro-level survey conducted by the Department for identification of SC/ST/Minority habitations was inadequate and AWWs could not identify malnourished children.

The prescribed monitoring by the State and district level committees was unsatisfactory as meeting of State Level Monitoring and Review Committee was never held while District Level Monitoring Committee was constituted only in two test-checked districts. The deficient monitoring was evident in joint physical verification as 25 AWCs were found closed while children were not present in 22 AWCs.

**2.2 Implementation of National Rural Drinking Water Programme in Bihar**

**Executive Summary**

***Introduction***

National Rural Drinking Water Programme (NRDWP) is a flagship programme of Government of India (GoI) and a component of the *Bharat Nirman*. It is meant to provide access to every rural person with adequate and safe water for drinking, cooking and other basic domestic needs on a sustainable basis.

***(Paragraph-2.2.1)***

***Achievement of the scheme***

As on April 2011, 69 *per cent* of the habitations in the State were fully covered with drinking water facilities. However, as on March 2016, the percentage of fully covered habitations reduced to 54 *per cent*. This was mainly due to failure of the Department to prepare framework for enhancement of service level from 40 to 55 litres per capita per day (lpcd) as per 12<sup>th</sup> Five Year Plan and lack of maintenance of defunct handpumps.

***(Paragraph-2.2.6)***

All the population affected with Arsenic, Fluoride and Iron contamination were not provided with safe drinking water as they were either not covered by the sanctioned schemes or the sanctioned schemes were not completed during 2011-16. As a result, 4.67 lakh Arsenic, 16.51 lakh Fluoride and 79.06 lakh Iron affected population remained deprived of safe drinking water, despite an expenditure of ₹609 crore. During a survey reported in March 2015, Mahavir Cancer Institute and Research Centre, Bihar, Patna found cases of arsenicosis, hormonal imbalances and few cases of Cancer due to excessive use of Arsenic affected drinking water in Simri and Tilak Rai ka Hata of Simri block in Buxar district.

***(Paragraphs-2.2.9.1, 2.2.9.2 and 2.2.9.3)***

***Planning***

During 2011-16, Village Water Sanitation Committees were not constituted in the test-checked districts. As a result, Village Water Security Plan and District Water Security Plan to assess availability and requirement of water sources based on people's choices were not prepared. The Comprehensive Water Security Plan to provide sub-goal and priorities of water facilities in habitations by Bihar State Water Sanitation Mission was also not prepared. In Annual Action Plan, despite availability of funds, targets were not set-up by prioritising partially covered, quality affected, SC/ST dominated habitations and timelines of 12<sup>th</sup> Five Year Plan. Resultantly, the objective to ensure consumer preferences, potability, reliability, sustainability, convenience and equity were not achieved while planning for rural water supply system.

***(Paragraphs-2.2.7.1 and 2.2.7.2)***



### **Financial management**

The Department did not utilise the entire allocated funds in any of the financial year during 2011-16. As a result, 4,119 (79 per cent) out of 5,222 sanctioned piped water supply schemes remained incomplete. Further, instances of delayed submission of proposals for funds to GoI and short release of State share were also noticed. Resultantly, the State was deprived of ₹278.20 crore of GoI share of grants.

(Paragraphs-2.2.8 and 2.2.8.1)

### **Implementation of water supply schemes**

Under 12<sup>th</sup> Five Year Plan, emphasis was to be given to piped water supply scheme to all habitations. However, the Department did not develop any framework to promote coverage of rural habitations with piped water supply scheme (PWSS) upto January 2017 and also failed to complete 79 per cent of sanctioned PWSSs. As a result, the Department could provide piped water to only six per cent of the population and 94 per cent of the population still relied on handpumps, as of December 2016.

Though the designed population for execution of Rural PWSSs was to be estimated on the basis of latest Census 2011, 61 PWSSs in six test-checked districts were executed with designed population of Census 2001 only. Resultantly, the Department may not be able to provide the required water demand to the projected population for the whole design period of 30 years.

Therefore, more vigorous steps need to be initiated by GoB to achieve the goal of NRDWP as well as *Saat Nischay* of Government (to provide one tap connection to every household by 2020-21) to decrease dependency on handpumps for water supplies in the State within the committed timeline.

(Paragraphs-2.2.11, 2.2.11.1 and 2.2.11.2)

### **Water quality monitoring and surveillance**

The Department did not set-up water testing laboratories at sub-divisional level. Water quality testing was carried out only on eight to 16 per cent of functional sources against the norms for testing of 100 per cent source twice for bacteriological and once for chemical contamination. Hence, majority of the habitations were forced to use unsafe drinking water in the State.

(Paragraph-2.2.14.4)

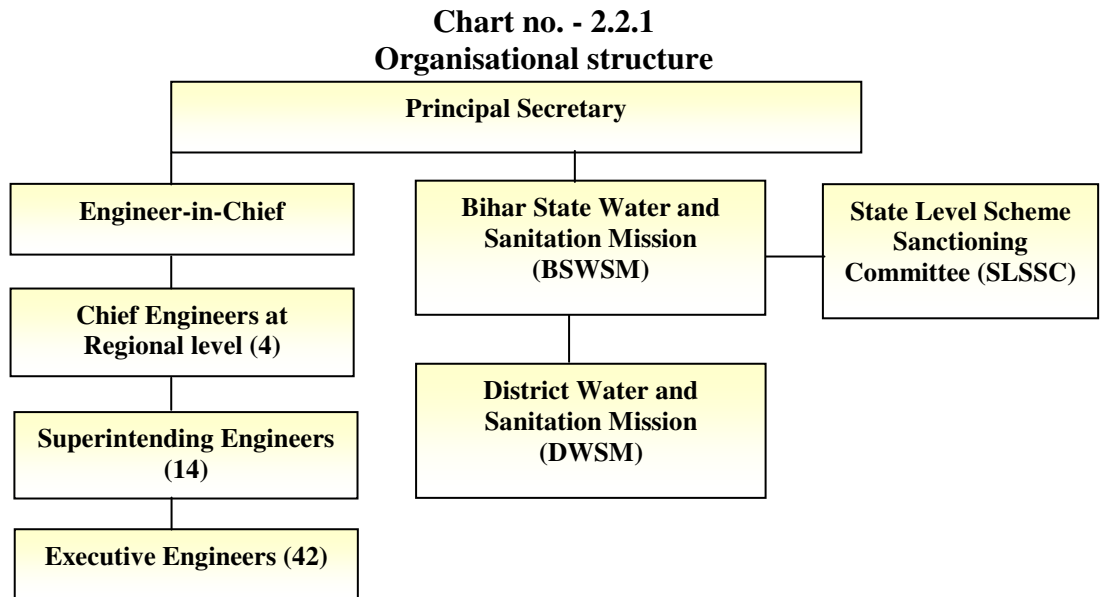
## **2.2.1 Introduction**

The National Rural Drinking Water Programme (NRDWP) is a flagship programme of Government of India (GoI) and a component of the *Bharat Nirman* with the objective of ensuring provision of safe and adequate drinking water supply through handpumps, piped water supply *etc.* to all rural areas, households and persons. This programme was launched (2009) after merging the three erstwhile programmes of Accelerated Rural Water Supply Programme, *Swajaldhara* and National Rural Water Quality Monitoring and Surveillance. Under this Centrally Sponsored Scheme, financial assistance is provided to States/Union Territories for coverage of all rural habitations with safe drinking water including those affected by poor water quality. In addition, sustainability measures for drinking water sources and systems, operation and

maintenance of existing rural water supply schemes, support activities like strengthening of Water Sanitation and Support Organisation (WSSO) and District Water and Sanitation Mission (DWSM), Management Information System (MIS) and Water Quality Monitoring and Surveillance was to be carried out.

### 2.2.2 Organisational structure

In Bihar, the Public Health Engineering Department (PHED) is responsible for implementation of the programme. The organisational set-up of PHED is detailed in **Chart no. - 2.2.1**.



(Source: Information provided by Department)

The Principal Secretary (PS), PHED is responsible for the overall implementation of the programme. BSWSM was set up for policy guidance, co-ordination with various departments, maintenance of accounts and monitoring and evaluation of physical and financial performance and management of the programme. SLSSC headed by PS, PHED, accords approval for all rural water supply schemes while Engineer-in-Chief was the technical head of the Department.

### 2.2.3 Audit objectives

The audit objectives were to examine whether:

- Potability, reliability, sustainability, convenience, equity and consumer's preference were ensured while planning for a community based water supply system;
- Funds were received by the State as per allocation and spent efficiently and effectively by the implementing agencies;
- All habitations/households, schools and *Anganwadis* had access to safe and adequate drinking water;
- Support activities were carried out effectively to enable *Panchayati Raj* Institutions and local communities to manage their own drinking water sources and systems in their villages; and

- Online information reporting mechanism was available in public domain to bring in transparency and informed decision making.

#### **2.2.4 Audit criteria**

The audit criteria were derived from the following sources:

- NRDWP guidelines 2010 and 2013;
- Integrated Management Information System (NRDWP report, Source: www.indiawater.gov.in);
- Bihar Public Works Department (BPWD) Code and Bihar Public Works Accounts (BPWA) Code; and
- Central Ground Water Board reports, relevant circulars, instructions, notifications *etc.* issued from time to time by the Department.

#### **2.2.5 Scope and methodology**

The Performance Audit on NRDWP covered the period 2011-16 and was carried out between April and November 2016 through a test-check of records in 10<sup>11</sup> out of 38 districts covering 12<sup>12</sup> Public Health Divisions. The districts were selected by using Probability Proportional to Size Without Replacement (PPSWR) method of random sampling. In addition, offices of two (Patna and Bhagalpur) out of four Chief Engineers (CEs), four<sup>13</sup> out of 14 Superintending Engineers (SEs) and office of Engineer-in-Chief (E-in-C) were also test-checked. Besides, the Performance Audit included in its scope, 22,149 fully covered (out of 74,378 in the State) and 8,676 partially covered (out of 33,264 in the State) habitations with drinking water which was inclusive of 281 Arsenic, 1,093 Fluoride and 2,896 Iron affected habitations as of April 2011.

Audit methodology included examination of records, issuance of questionnaires, consideration of replies of the Department to the audit memos issued and physical verification of construction sites with Department's officials *etc.* In order to explain the objectives, methodology, scope, coverage, *etc.* of the Performance Audit and to elicit the departmental views, entry conference with the Principal Secretary of the PHED was held in April 2016. At the end of audit, an exit conference was held in November 2016 with the Principal Secretary of the PHED and replies/views on the audit observations were duly incorporated at appropriate places in the Report.

#### **2.2.6 The achievement of the scheme**

The goal of NRDWP was to provide every rural person with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis. This goal was to be achieved by the 11<sup>th</sup> Plan period *i.e.* by March 2012, which was further extended to the 12<sup>th</sup> Plan period *i.e.* by 2017 with increased drinking water supply norms from 40 to 55 litres per capita per day (lpcd).

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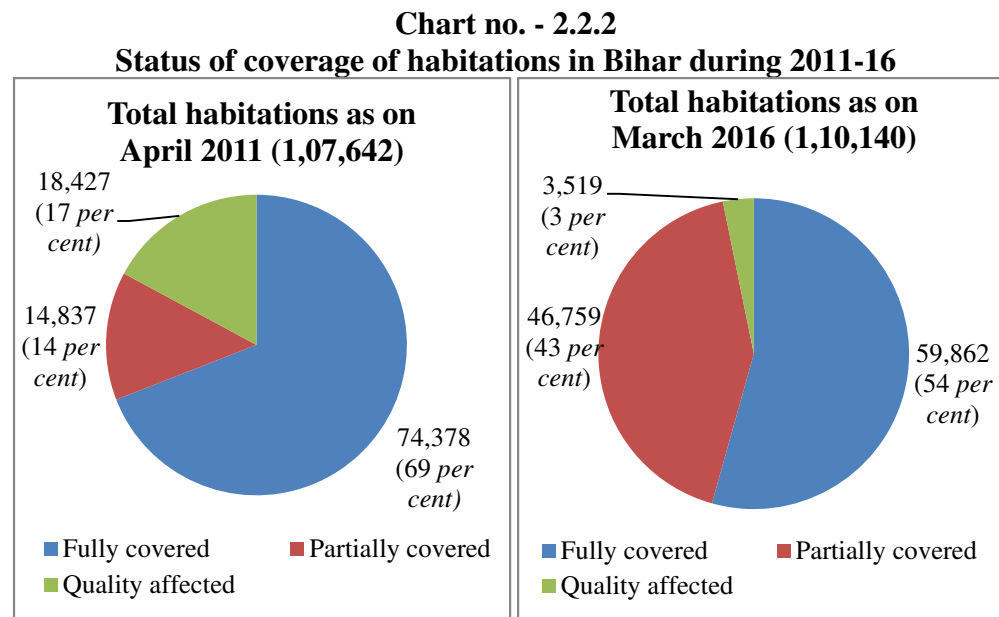
<sup>11</sup> Bhagalpur, Darbhanga, Jamui, Jehanabad, Patna, Rohtas, Saran Supaul, Vaishali and West Champaran.

<sup>12</sup> Betiah, Bhagalpur East, Bhagalpur West, Chapra, Darbhanga, Jamui, Jehanabad, Patna East, Patna West, Sasaram, Supaul, and Vaishali.

<sup>13</sup> Bhagalpur, Darbhanga, Saran and Sasaram.

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In Bihar, no habitations fall under 'not covered' category in terms of availability of water facilities as of March 2011. The status of coverage of habitations in Bihar between 2011-12 and 2015-16 is depicted in **Chart no.-2.2.2**:



**Fully covered habitations decreased from 69 per cent in 2011 to 54 per cent in 2016.**

The **Chart no.-2.2.2** indicated that fully covered habitations (*i.e.* habitations having adequate drinking water resources) decreased from 69 per cent in 2011 to 54 per cent in 2016. This was mainly due to failure of the Department to prepare framework for enhancement of service level from 40 to 55 litres per capita per day (lpcd) as per 12<sup>th</sup> Five Year Plan and lack of maintenance of defunct handpumps. Further, as of March 2016, three per cent of quality affected habitations (*i.e.* habitations affected from Arsenic, Fluoride and Iron contamination) was also left uncovered as 10 multi village and 919 mini piped water supply schemes for coverage of quality affected habitations remained incomplete. Thus, possibility to achieve the goal to provide adequate and safe drinking water to every rural person by 2017 seems unachievable.

Further, cases of deficient planning, improper financial management and incomplete/delayed execution of schemes are discussed in succeeding paragraphs:

## 2.2.7 Planning

### 2.2.7.1 Water Security Plans were not prepared

In order to achieve the goal of NRDWP, Village Water Security Plans (VWSPs) were to be prepared by the Village Water and Sanitation Committees (VWSCs). The VWSPs include details of availability and requirement of water sources on the basis of people's choices. District Water Security Plan (DWSP) was to be prepared by consolidating the VWSPs. At State level, under the broad goal set by each State, a five year Comprehensive Water Security Plan (CWSP) was to be prepared and during each financial year, the sub-goal and the priorities were to be fixed.

Neither the plans for assessment of ground level requirements nor the comprehensive long-term plans for providing sub-goal and priorities of water facilities in habitations were prepared.

During audit, it was noticed that VWSCs were not constituted in the test-checked divisions. As a result, preparation of VWSPs and DWSPs were not done during 2011-16. In absence of above mentioned grass root plans, assessment of availability and requirement of water sources based on people's choices were not considered. At State level, CWSP meant to provide sub-goals and priorities for water facilities in habitations was also not prepared.

The Department stated (October 2016) that VWSCs had not been constituted in every village while *Lok Nirman Samiti* in place of VWSCs had been responsible for drinking water sector. Further, during exit conference (November 2016), the PS, PHED, stated that earlier the CWSP was not prepared. However, Water Security Programme for the State had been made in January 2016.

Thus, neither the ground level requirements were assessed nor any comprehensive long-term plans were prepared to provide water facilities in habitations.

### 2.2.7.2 Annual Action Plan

As per guidelines, every year, the State should prepare an Annual Action Plan (AAP) in a participatory manner. Under the plan, all the habitations remaining to be covered with drinking water schemes with population coverage from zero to below 100 *per cent* and existing and newly identified quality affected habitations were to be covered. While planning, priority was to be given to coverage of habitations whose zero-50 *per cent* of populations only were covered by drinking water schemes. In addition, quality affected, SC, ST and minority habitations were also to be given priority in planning. Besides, all drinking water sources were to be tested at least twice a year for bacteriological contamination and once a year for chemical contamination.

During 2011-16, the Department prepared AAPs annually and submitted to the GoI. The approved targets were uploaded on Integrated Management Information System (IMIS). Scrutiny of records regarding AAP maintained by BSWSM and analysis of target and achievement uploaded on IMIS disclosed the following points:

- Despite availability of funds, the Department fixed targets for coverage of only 12 to 82 *per cent* of partially covered habitations (*i.e.* some habitations not having adequate drinking water source) during 2011-16 (**Appendix-2.2.1(i)**). Thus, during 2011-16, 18 *per cent* to 88 *per cent* of partially covered habitations were not included even in the target list of the Department for coverage of NRDWP.
- Priority was not given to cover the quality affected habitations, as they were not targeted in totality in any of the AAPs during 2011-16. Further, the targeted habitations were also not fully covered. As a result, habitations still remained affected with Arsenic, Fluoride and Iron contamination (**Appendix-2.2.1 (ii)**).
- The Department fixed target for water quality testing of only 25 to 39 *per cent* of available water sources during 2011-16. Hence, reliability of all water sources was not ensured in any of the year during 2011-16 (**Appendix-2.2.1 (iii)**). The fixation of lesser targets was attributed to

AAPs were prepared without taking inputs from grass-root level and considering timelines and priorities as per NRDWP guidelines.

failure in establishment of sub-divisional laboratories and lack of manpower in district laboratories.

- The Department stated that targets for AAPs were being incorporated in Integrated Management Information System (IMIS) by PH Divisions. However, EEs of the test-checked divisions stated that targets for coverage of habitations were not submitted by the Divisions. Instead, the same was communicated by the Headquarters. These contradictory assertions indicated that targets were not fixed by taking inputs from Divisions, which was the lower unit.
- During analysis of AAPs, it was noticed that priority for coverage with drinking water facility was not given to the habitations whose zero to 50 per cent population (except 2012-13) was not getting adequate drinking water. In addition, SC and ST dominated habitations were also not provided priority for coverage with drinking water facility during 2011-16. As a result, 13 to 59 per cent of habitations with less than 50 per cent population, 18 to 54 per cent of SCs habitations and 16 to 44 per cent of STs habitations could only be targeted for coverage with adequate and safe drinking water in AAPs during 2011-16 (*Appendix 2.2.1(iv), 2.2.1(v) and 2.2.1(vi)*).

Thus, despite availability of funds, the Department did not target the prioritised segments of population for coverage of the scheme. Further, the Department did not ensure preparation of VWSPs, DWSPs and failed to involve the divisions in fixing targets for implementation of NRDWP. As a result, the objective to ensure consumer preferences, potability, reliability, sustainability, convenience and equity was not ensured in planning of rural water supply schemes.

The PS, PHED during exit conference stated (November 2016) that funds constraints owing to less release of funds by GoI was the main reason for failure to adhere to the norms in AAP. The reply was not in consonance with facts as the Department did not utilise 28 to 45 per cent of available funds during 2011-16. Further, GoI released less funds due to inability of the Department to use entire available funds, delayed submission of proposals and short release of State share.

### **Recommendation**

***The Department should enable PRIs/local communities to prepare Village Water Security Plan by taking inputs from grass-root level.***

### **2.2.8 Financial management**

As per NRDWP guidelines, the Ministry of Drinking Water and Sanitation (MoDWS) shall release the programme funds<sup>14</sup> and support funds<sup>15</sup>. The State

<sup>14</sup> Programme funds consist of coverage, water quality, sustainability, operation and maintenance, earmarked funds for chemical/bacteriological, calamity and Desert Development programme.

<sup>15</sup> Support funds include Information, Education and Communication (IEC), Human Resource Development (HRD), Research and Development (R&D), Management Information System (MIS) and Water Quality Monitoring and Surveillance (WQM&S).

Government shall match the programme account with requisite matching share. The GoI and State Government provided 50 per cent share each on three components viz. coverage, quality and operation and maintenance (O&M). For other three components namely sustainability, support and water quality monitoring and surveillance (WQMS), GoI provided the entire funds.

The Bihar State Water and Sanitation Mission (BSWSM) maintained separate bank accounts for programme funds and support funds during 2011-16. The details of funds allocated, released and expenditure there-against from GoI as well as GoB during 2011-16 are given in the **Table no. - 2.2.1**:

**Table no. – 2.2.1**  
**Release and expenditure of GoI share during 2011-16**

(₹ in crore)

Year	Name of funds	Opening balance	Interest earned during the year	Release by GoI	Total funds available at BSWSM	Release to districts	Expenditure	Closing balance
2011-12	Programme	313.48	7.14	314.89	635.51	440.8	364.22	271.29
	Support	9.44	0.66	15.13	25.23	0	3.08	22.15
	<b>Total</b>	<b>322.92</b>	<b>7.80</b>	<b>330.02</b>	<b>660.74</b>	<b>440.80</b>	<b>367.30</b>	<b>293.44</b>
2012-13	Programme	264.15	4.44	220.83	489.42	349.18	283.50	205.92
	Support	21.49	0.97	3.47	25.93	0	9.59	16.34
	<b>Total</b>	<b>285.64</b>	<b>5.41</b>	<b>224.30</b>	<b>515.35</b>	<b>349.18</b>	<b>293.09</b>	<b>222.26</b>
2013-14	Programme	201.48	3.56	338.95	543.99	353.8	299.02	244.97
	Support	15.37	0.56	0	15.93	0	8.41	7.52
	<b>Total</b>	<b>216.85</b>	<b>4.12</b>	<b>338.95</b>	<b>559.92</b>	<b>353.8</b>	<b>307.43</b>	<b>252.49</b>
2014-15	Programme	241.41	4.99	321.55	567.95	426.35	375.38	192.57
	Support	6.96	0.27	18.94	26.17	0	6.52	19.65
	<b>Total</b>	<b>248.37</b>	<b>5.26</b>	<b>340.49</b>	<b>594.12</b>	<b>426.35</b>	<b>381.9</b>	<b>212.22</b>
2015-16	Programme	187.58	2.10	193.37	383.05	296.14	269.19	113.86
	Support	19.38	0.07	9.36	28.81	0	26.19	2.62
	<b>Total</b>	<b>206.96</b>	<b>2.17</b>	<b>202.73</b>	<b>411.86</b>	<b>296.14</b>	<b>295.38</b>	<b>116.48</b>
	<b>Grand Total</b>		<b>24.76</b>	<b>1,436.49</b>		<b>1,866.27</b>	<b>1,645.10</b>	

(Source : Data collected/ furnished by Engineer-in-Chief office, Patna)

Further, the funds released and expenditure incurred from GoB share are given in the **Table no. - 2.2.2**:

**Table no. – 2.2.2**  
**Funds released and expenditure from GoB share during 2011-16**

(₹ in crore)

Year	Funds released by State Government	Expenditure incurred against State release (per cent)	Savings/ Surrender
2011-12	120.34	109.74(91)	10.60
2012-13	223.99	160.20 (72)	63.79
2013-14	289.38	240.77 (83)	48.61
2014-15	387.91	310.82 (80)	77.09
2015-16	283.55	210.56 (74)	72.99
<b>Total</b>	<b>1,305.17</b>	<b>1,032.09 (79)</b>	<b>273.08</b>

(Source: Data collected/ furnished by E-in-C office, Patna)

**Table no. - 2.2.1** indicated that against available funds, BSWSM released ₹1,866.27 crore to the districts. Out of this, the districts did spend only ₹1,645.10 crore.

Similarly, as shown in **Table no. - 2.2.2**, ₹1,032.09 crore (79 per cent) out of the total State released funds of ₹1,305.17 crore could be spent by the implementing agencies during 2011-16. Reasons for short release of funds by the BSWSM were mainly the failure of the BSWSM to complete 4,119 (79 per cent) out of 5,222 sanctioned piped water supply schemes.

The Department agreed (October 2016) with audit observations and stated that due to slow progress in implementation of schemes, full utilisation of funds could not be achieved.

Further, differences in opening and closing balances of programme and support funds were noticed in **Table no.-2.2.1**. This was due to deduction of interest accrued during the year under programme and support funds from the opening balances of succeeding years. However, it was to be added in the opening balances of funds account. As a result, closing balance was understated by ₹22.59 crore. The inaccuracies in the accounts of the Scheme maintained by BSWSM indicated lacunae in financial management.

During exit conference, the PS, PHED admitted the discrepancies and stated (November 2016) that reconciliation of the same was under process.

#### **2.2.8.1 State was deprived of GoI share**

The guidelines specified that second instalment under programme funds was to be released only after utilisation of 60 per cent of the available funds and submission of proposal for release of second instalment in prescribed format upto December of the financial year. Release of support funds was to be done in two instalments and release of second instalment was based on submission of activity-wise physical and financial progress and Utilisation Certificates (UCs).

**The State was deprived of ₹278.20 crore of GoI share due to delayed submission of proposal, short release of State share and huge unspent balances.**

During scrutiny of records related to release of GoI share, it was noticed that under programme funds, against allocation of ₹345.88 crore during 2012-13, GoI released only ₹172.94 crore. Further, second instalment of ₹172.94 crore was not released due to delayed (February 2013) submission of proposal of funds by the BSWSM. GoI also revised allocation of funds after imposing cut of ₹19.58 crore and ₹36.29 crore during 2013-14 and 2014-15 respectively due to excess opening balance (₹6.46 crore), delayed submission of proposal of funds (₹15.38 crore) and less release of State share (₹34.03 crore).

Further, under support funds, second instalment of ₹15.14 crore, ₹12.49 crore and ₹21.76 crore for 2011-12, 2012-13 and 2014-15 respectively were not released as UCs and proposals were not submitted to GoI. However, the Department spent the funds under support activities like Information, Education and Communication (IEC), Human Resource Development (HRD), Training *etc.* by the Headquarters level from the funds received during the year and opening balance of previous year. Further, funds under support activities were not released to districts during 2011-16. As a result, IEC activities at district level were not carried out under NRDWP during 2011-16.

Regarding delay in submission of funds proposal, the Department stated (October 2016) that due to delayed receipt of expenditure figure from the Divisions, delay was occurred in submission of proposal. Further, the Department also stated that State fund was released as per progress of the



schemes. As a result of delay, the State was deprived of ₹ 278.20 crore of GoI share during 2011-15.

**Recommendation**

***The Department should avoid delay in submission of proposal of funds and delay in submission of UCs to GoI to get the approved allocation of funds.***

**2.2.9 Access to safe and adequate drinking water**

As on April 2011, out of 1,07,642 habitations in Bihar, 18,427 habitations were water quality affected. The shortcomings noticed in implementation of water supply schemes for quality affected population are discussed in succeeding paragraphs:

**2.2.9.1 Arsenic affected habitations**

Excess Arsenic in ground-water drinking sources resulted in crippling and incurable diseases like arsenical dermatitis. The Central Ground Water Board (CGWB) suggested (October 2010) that extraction of ground-water beyond 60 metre depth would be the safest way to provide Arsenic-free water in Arsenic affected areas. In Bihar, 1,111 habitations of 14<sup>16</sup> districts having population of 7,52,168 were affected from Arsenic contamination as of April 2011.

During audit, it was noticed that the Department sanctioned four new multi-village PWSSs with Arsenic removal treatment units for coverage of 323 habitations during 2011-16. In addition, the Department sanctioned 1,376 handpumps beyond 60 metre depth for coverage of 1,376 Arsenic affected habitations at the rate of one handpump for one habitation.

Apart from new schemes, five multi-village PWSS for coverage of 427 habitations and 150 units of mini PWSS for coverage of 150 habitations with Arsenic removal treatment unit were ongoing (*i.e.* PWSSs taken up before April 2011). Each unit of mini PWSSs was to cover 1,000 population and handpumps were to cover 200 population. Details of ongoing and new schemes sanctioned for coverage of Arsenic affected habitations in Bihar during 2011-16 are as shown in **Table no.- 2.2.3:**

**The purpose to provide Arsenic free drinking water in Arsenic affected habitations was not fulfilled due to incomplete schemes and coverage of habitations with handpumps only.**

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<sup>16</sup> Araria, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Lakhisarai, Munger, Patna, Samastipur, Saran, Vaishali.

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**Table no. - 2.2.3**  
**Status of schemes for coverage of Arsenic affected habitations**

(₹ in crore)

Name of scheme	Year of sanction	Number of units to be constructed	Number of habitations to be covered	Estimated cost	Expenditure	No. of units constructed
<b>New PWSS</b>						
Multi-village PWSS with Arsenic treatment unit	2012-13	2	145	362.14	2.59	0
	2013-14	2	178	329.59	16.00	0
	<b>Total</b>	<b>4</b>	<b>323</b>	<b>691.73</b>	<b>18.59</b>	<b>0</b>
<b>Ongoing PWSS</b>						
Multi-village PWSS with surface water	2007-08 and 2010-11	5	427	630.81	321.88	0
Mini PWSS with Arsenic removal unit based on solar motor pump	2009-10	150	150	67.63	37.81	57
	<b>Total</b>	<b>155</b>	<b>577</b>	<b>698.44</b>	<b>359.69</b>	<b>57</b>
<b>Handpumps</b>						
Construction of handpumps in Arsenic affected districts	2012-13	660	660	5.73	4.59	566
	2013-14	716	716	6.47	5.37	574
	<b>Total</b>	<b>1,376</b>	<b>1,376</b>	<b>12.20</b>	<b>9.96</b>	<b>1,140</b>
	<b>Grand total</b>	<b>1,535</b>	<b>2,276</b>	<b>1,402.37</b>	<b>388.24</b>	<b>1,197</b>

(Source : Information provided by E-I-C, PHED)

From the **Table no. - 2.2.3**, it would be seen that only 57 units of mini PWSSs and 1,140 handpumps were completed after incurring expenditure of ₹37.81 crore and ₹9.96 crore respectively during 2011-16. Hence, a population of 57,000 were covered from 57 completed units of mini PWSSs, and a population of 2,28,000 were covered from 1,140 handpumps. Altogether, the Department covered a population of 2,85,000 of Arsenic affected habitations during 2011-16, leaving a population of 4,67,186 at risk of Arsenic poisoning as per IMIS 2011-12 data. From above, it would also be seen that the Department sanctioned only four new multi-village PWSSs for coverage of 323 Arsenic affected habitations during

*The Department did not provide safe and adequate drinking water in Arsenic affected habitations due to its failure to sanction adequate schemes and lack of conviction to complete the sanctioned schemes despite availability of adequate funds.*

(Source: Analysis of records of PHED, GoB)

2011-16. All of these schemes were incomplete as of March 2016. In addition, they also failed to complete ongoing 93 units of mini PWSSs and five multi-village PWSSs as of March 2016. Out of five multi-village PWSSs, three (Maner, Hajipur and Buxar) were sanctioned during 2007-08. It showed that the Department did not consider priority for coverage of Arsenic affected habitations with PWSS. Instead, the Department assured to provide one handpump in each Arsenic-affected habitation for potable water. Hence, due to Department's lackadaisical attitude, population of Arsenic affected habitations continued to remain at risk of Arsenic poisoning.

Above-mentioned facts were further substantiated by the research study of Mahavir Cancer Institute and Research Centre, Bihar, Patna. As per proceedings of the 6<sup>th</sup> International Congress on Arsenic in the Environment, Stockholm, Sweden (19-23 June 2016), a team of Mahavir Cancer Institute and Research Centre, Bihar, Patna surveyed (March 2015) Simri and Tilak Rai Ka Hatta village of Buxar district. The survey study of these two villages of Buxar district deciphered major problems like arsenicosis, hormonal imbalances and few cases of cancer. Thus, Arsenic poisoning is a major threat to the population especially children of age between 8-14 years.



*Persons affected with Arsenic poisoning at Tilak Rai ka Hatta of Simri block in Buxar district*

During exit conference, the PS, PHED stated (November 2016) that handpumps installed in these quality affected habitations were used as short term measures considering that after 60 meter depth, Arsenic contaminations were not found. The reply was affirmation of audit observations that the Department still rely on coverage of Arsenic affected habitations with handpumps only.

Hence, the purpose to provide Arsenic free drinking water in Arsenic affected habitations was not fulfilled after incurring an expenditure of ₹388.24 crore.

#### **2.2.9.2 Fluoride affected habitations**

Excessive Fluoride content in drinking water causes fluorosis, a disease affecting multiple tissues, organs and systems in the body. An individual exposed to excessive Fluoride intake may suffer from dental fluorosis, skeletal fluorosis *etc.* In Bihar, 3,338 habitations of 12<sup>17</sup> districts having population of 17,66,785 were affected from Fluoride contamination as of April 2011.

During Performance Audit, it was noticed that the Department sanctioned only 350 mini PWSSs with Fluoride removal unit for coverage of 350 habitations. In addition, 300 mini PWSSs with Fluoride removal unit for coverage of 300 habitations and one multi-village PWSS with Fluoride removal treatment unit for coverage of seven habitations were ongoing (*i.e.* PWSSs taken up before April 2011). Each unit of mini PWSS with Fluoride removal unit sanctioned for coverage of one Fluoride affected habitation of a population of 1,000.

**The Department failed to provide safe drinking water to 93 per cent of Fluoride affected habitations due to incomplete schemes.**

<sup>17</sup> Aurangabad, Banka, Bhagalpur, Gaya, Jamui, Kaimur, Munger, Nalanda, Nawada, Rohtas, Samastipur and Sheikhpura.

Details of ongoing and new scheme sanctioned for coverage of Fluoride affected habitations in Bihar during 2011-16 are as under:

**Table no. - 2.2.4**  
**Status of schemes for coverage of Fluoride affected habitations**

(₹ in crore)						
Name of scheme	Year of sanction	Number of sanctions	Number of units to be constructed	Estimated cost	Expenditure	Number of units constructed
<b>New</b>						
Mini PWSS with Fluoride removal unit based on solar motor pump	2012-13	1	150	59.79	31.00	22
	2014-15	1	200	91.85	50.59	0
<b>Total</b>		<b>2</b>	<b>350</b>	<b>151.64</b>	<b>81.59</b>	<b>22</b>
<b>Ongoing</b>						
Mini PWSS with Fluoride removal unit based on solar motor pump	2009-10	2	300	135.36	46.85	94
Multi village PWSS for Khaira and other five affected villages	2010-11	1	1	32.33	13.72	0
<b>Total</b>		<b>3</b>	<b>301</b>	<b>167.69</b>	<b>60.57</b>	<b>94</b>
<b>Grand Total</b>		<b>5</b>	<b>651</b>	<b>319.33</b>	<b>142.16</b>	<b>116</b>

(Source : Information provided by E-I-C, PHED)

From **Table no. - 2.2.4**, it would be seen that the Department sanctioned schemes for coverage of only 3,50,000 population (20 per cent) out of 17,66,785 during 2011-16. Further, the Department could cover only 116 Fluoride affected habitations consisting 1,16,000 people during 2011-16 by completing 94 ongoing mini PWSS and 22 new mini PWSS after incurring an expenditure of ₹142.16 crore. As a result, 16,50,785 Fluoride affected population were compelled to drink contaminated water.

During exit conference, the PS, PHED stated (November 2016) that as short-term measure, handpumps without any Fluoride removal attachment units were installed in these quality affected habitations.

The reply highlighted the apathy of the Department as they presume mere installation of handpumps without any treatment unit would provide safe drinking water to Fluoride affected population.

Thus, the Department failed to provide safe drinking water to 16,50,785 population (93 per cent) of Fluoride affected habitations after incurring an expenditure of ₹142.16 crore during 2011-16.

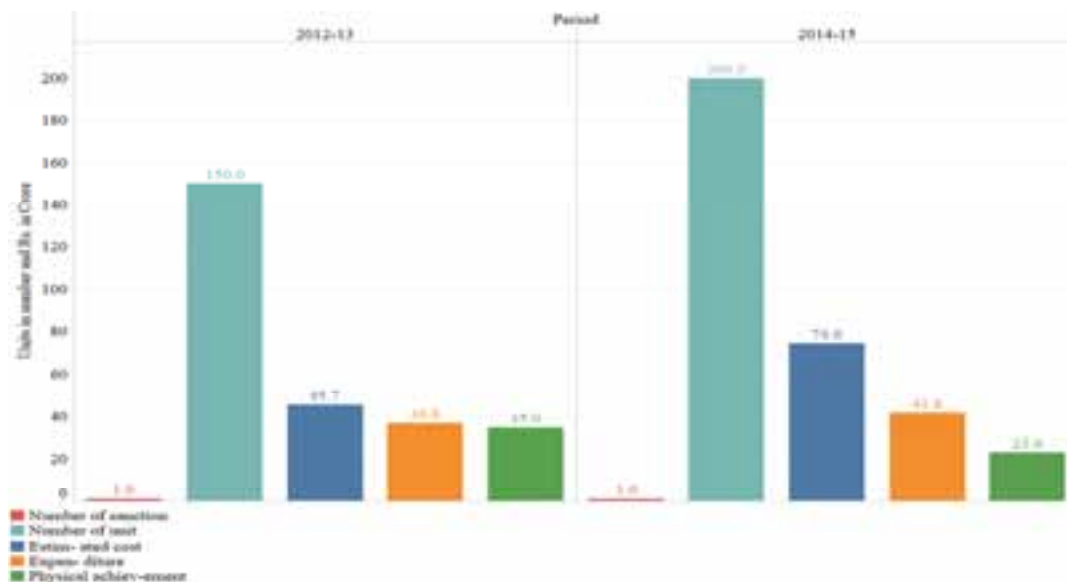
### 2.2.9.3 Iron affected habitations

Iron interferes with laundering operations, impact objectionable stains to plumbing fixtures and also develop taste problems. In Bihar, 13,978 habitations of 15 districts<sup>18</sup> having population of 79,05,956 were affected from Iron contamination as of April 2011.

<sup>18</sup> Araria, Banka, Begusarai, Bhojpur, Darbhanga, Katihar, Khagaria, Kishanganj, Lakhisarai, Madhepura, Munger, Purnia, Rohtas, Saharsa and Supaul.

The Department sanctioned mini PWSSs with Iron removal unit for coverage of one Iron affected habitation of a population of 1,000. Details of scheme sanctioned for coverage of Iron affected habitations in Bihar during 2011-16 are as under:

**Chart no. - 2.2.3**  
**Status of schemes for coverage of Iron affected habitations**



(Source: Information provided by E-I-C, PHED)

**The coverage of Iron affected habitations was not accomplished due to failure in sanctioning and completing the schemes.**

As shown in **Chart no. - 2.2.3**, during 2011-16, the Department sanctioned schemes for coverage of only 3,50,000 out of 79,05,956 population as of April 2011. This was mainly due to improper planning and failure to include data from grass-root level. Out of this, the Department could cover only 58 Iron affected habitations covering a population of 58,000 after incurring an expenditure of ₹78.59 crore. Resultantly, 78,47,956 Iron affected population remained uncovered.

During exit conference, the PS, PHED stated (November 2016) that handpumps without removal units were installed as short-term measure in these quality affected habitations.

The reply was not acceptable as the Department installed handpumps without any treatment removal units as short-term measures and the population of affected areas remained deprived of getting safe water throughout the year.

Thus, the coverage of Iron affected habitation was not accomplished as the Department did not sanction schemes for the entire Iron affected habitations and failed to complete the schemes sanctioned during 2011-16. Resultantly, 78,47,956 Iron (99 per cent) affected population were still compelled to consume contaminated water though an expenditure of ₹78.59 crore was incurred by the Department as per IMIS data.

### **2.2.10 Coverage of schools and *anganwadis***

The objective of the NRDWP envisaged that all schools and *anganwadis* should have access to safe drinking water. The NRDWP guidelines also stipulated that the State was required to compile data from the State Education Department and Women and Child Development Department regarding the

rural Government schools and *anganwadis* in existence and the number of them having drinking water facilities.

**The Department did not compile district-wise data of school and *anganwadis*. U-DISE data disclosed that 4482 schools were still without drinking water facilities**

It was noticed that compiled data for total number of schools and *anganwadis* and availability of water supply in them were neither maintained by the Department at State level nor by the test-checked divisions at district level. However, the Bihar Education Project Council (U-DISE data) data disclosed that 4,482 (6.33 *per cent*) out of 70,813 schools were without drinking water facilities in Bihar as of March 2016. Thus, the scheme objective of providing each school with drinking water remained unfulfilled.

It was further observed that the Department sanctioned six schemes for construction of 16,921 water supply units in schools during 2011-16, of which, 11,750 were constructed after incurring an expenditure of ₹90.99 crore as of March 2016. For *anganwadis*, the Department sanctioned two schemes consisting installation of 16,418 handpumps in *anganwadis* of all districts of Bihar during 2011-16. Out of this, 15,156 handpumps were installed at a cost of ₹62.07 crore as of March 2016 (**Appendix-2.2.2**). In test-checked divisions, out of 5,306 water supply units, only 3,529 units were constructed in schools after incurring an expenditure of ₹20.94 crore and 4,368 handpumps out of 5,013 were installed in *anganwadis* after incurring an expenditure of ₹16.62 crore.

During exit conference, the PS, PHED stated (November 2016) that the mandate of installation of handpumps had been transferred to the Education Department from 2006. However, the reply was not in confirmation with the provisions of NRDWP guidelines.

### 2.2.11 Implementation of water supply schemes

In order to provide adequate safe water for drinking, cooking and other basic domestic needs, the Department provided handpumps and piped water supply schemes (PWSS) such as Multi-village piped water supply scheme (MVPWSS), Single village piped water supply scheme (SVPWSS), Mini piped water supply scheme (MPWSS) for coverage of habitations during 2011-16. The details of schemes sanctioned during 2011-16 are as detailed in **Table no. - 2.2.5:**

**Table no. - 2.2.5**  
**Status of schemes sanctioned and completed during 2011-16**

Type of scheme	No. of units to be constructed	No. of units constructed ( <i>per cent</i> )	No. of units incomplete ( <i>per cent</i> )	Expenditure incurred ( <i>₹ in crore</i> )
<b>Ongoing schemes (schemes sanctioned before 1/4/2011)</b>				
Multi-village PWSS	6	0 (0)	6 (100)	335.60
Single village PWSS	156	130 (83)	26 (17)	158.96
MPWSS (ongoing)	2,785	487 (17)	2,298 (83)	214.79
<b>Total ongoing PWSS</b>	<b>2,947</b>	<b>617 (21)</b>	<b>2,330 (79)</b>	<b>709.35</b>

Type of scheme	No. of units to be constructed	No. of units constructed (per cent)	No. of units incomplete (per cent)	Expenditure incurred
<b>New Schemes</b>				
Multi-village PWSS	4	0 (0)	4(100)	18.59
Single village PWSS (New)	203	70 (34)	133(66)	293.47
PWSS (Re-organisation)	160	80 (50)	80(50)	247.53
MPWSS (New)	1,908	336(18)	1,572(82)	275.04
<b>Total (New PWSS)</b>	<b>2,275</b>	<b>486 (21)</b>	<b>1,789 (79)</b>	<b>834.63</b>
Handpumps	88,162	82,485(94)	5,677(6)	385.30
<b>Grand Total</b>	<b>93,384</b>	<b>83,588 (90)</b>	<b>9,796 (10)</b>	<b>1,929.28</b>

(Source : Information provided by the Department)

From the **Table no. - 2.2.5**, it would be evident that as of March 2016, the Department could not complete 100 per cent of multi-village PWSSs, 17 per cent of PWSSs and 83 per cent of mini PWSSs which were ongoing. Further, percentage of incomplete new PWSSs and mini PWSSs ranged between 50 and 100 per cent as of March 2016 though due date of completion of 165 PWSSs and 860 MPWSSs were already over. Hence, altogether 4,119 (79 per cent) out of 5,222 sanctioned piped water supply schemes remained incomplete. However, the percentage of completion of handpumps was 94 per cent.

The reason for incomplete PWSSs/MPWSSs was mainly attributable to delay in award of work, invitation of tender without ensuring availability of land, assessment of required key plants and equipment and key personnel for execution of works not done, selection of sites and lack of monitoring by competent authorities to complete the work in due time *etc.* The component-wise implementation of the programme is discussed in the succeeding paragraphs:

### 2.2.11.1 Coverage of habitations with piped water supply schemes

The 12<sup>th</sup> Five Year Plan approach also envisaged a significant shift in the rural water supply by promoting piped water supply rather than handpumps.

According to IMIS data, 9.04 crore rural population of the State had a total of 6.86 lakh functional handpumps as of April 2011. Hence, as per norms of coverage of a population of 200 by one handpump, the State had sufficient handpumps to cover the entire population and is required to shift to coverage of population with PWSS. Further, as per information provided by the Department, a total of 10.15 lakh handpumps were available in the State as of March 2016 and 94 per cent population of the State were dependent on handpumps for water supply. The Department could cover only six per cent of the population of the State with PWSSs as of March 2016.

*Saat Nischay (Cabinet approval in February 2016) of Chief Minister included Har Ghar Nal Ka Jal as one of the commitments. This scheme is aimed to ensure clean piped drinking water for every citizen of Bihar, in next five years. It seeks to completely remove people's reliance on handpumps and other sources of drinking water. However, the Department failed to develop the framework to promote coverage of rural habitations through piped water supplies scheme upto January 2017. Consequently, after lapse of one year from the date of decision to provide one tap connection to every household, work could not even be started as of December 2016. Therefore, more vigorous steps need to be initiated by GoB to achieve the goal of NRDWP as well as Saat Nischay of Government to decrease dependency on handpumps for water supplies in rural areas within the committed timeline.*

*(Source: Analysis of records of PHED, GoB)*

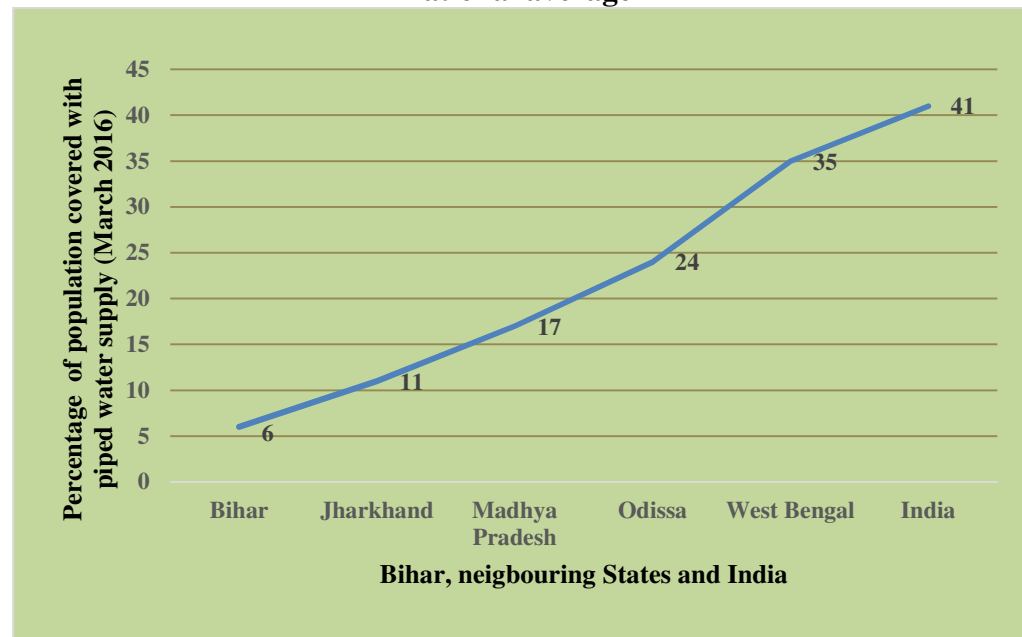
This was mainly due to failure of the Department to develop any framework to promote coverage of rural habitations through PWSS during 2011-16 (upto January 2017). In addition, the Department also failed to complete 79 per cent of sanctioned PWSSs as evident in **Table no. - 2.2.5**. However, in February 2016, the Government made a decision to provide one tap connection to every household by 2020-21. Accordingly, the Department sanctioned (March 2016) a scheme costing ₹7,439.25 crore for coverage of quality affected 21,300 *tolas*/habitations with a tap connection to every household. However, the Department could provide tap connection in only 145, 5,073 and 4,594 households affected with Arsenic, Fluoride and Iron contaminations respectively as of November 2016. Further, the Department sanctioned a scheme costing ₹543.61 crore for coverage of households in non-quality affected 845 *Gram Panchayats* with a tap connection to every household. The scheme was to be executed from the funds provided by the 14<sup>th</sup> Finance Commission and 5<sup>th</sup> State Finance Commission. The Department fixed target for coverage of 3,54,640 households with PWSSs during 2016-17. However, due to unavailability of funds, the work could not start as of December 2016.



As a result, only six *per cent* of the population of the State was covered with PWSSs as of December 2016.

The status of coverage of habitation through piped water in nearby states as well as all India is given in **Chart no. - 2.2.4**:

**Chart no. - 2.2.4**  
**Comparison of piped water supply in Bihar with neighbouring states and national average**



As evident from **Chart no. - 2.2.4**, the percentage of population covered with piped water supply was only six *per cent* in Bihar as of March 2016 whereas the national average was 41 *per cent*. All the neighbouring States, viz. Jharkhand, Madhya Pradesh, Odissa and West Bengal exceeded the coverage of Bihar and were in the range of 11 to 35 *per cent*.

During exit conference, the PS, PHED agreed (November 2016) with audit observations and reiterated the commitment of *Saat Nischay* of Government to provide one tap connection to every household.

Thus, the Department failed to prepare the framework to promote coverage of rural habitations through PWSS upto December 2015. Consequently, after lapse of one year from the date of decision to provide one tap connection to every household, work could not even be started as of December 2016. Therefore, more vigorous steps need to be initiated by GoB to achieve the goal of NRDWP as well as *Saat Nischay* of Government to decrease dependency on handpumps for water supplies in rural areas within the committed timeline.

The shortcomings noticed in implementation of piped water supply schemes are discussed in succeeding paragraphs:

**Multi-village piped water supply scheme**

**All ten MVPWSSs remained incomplete after incurring expenditure of ₹354.19 crore.**

As on April 2011, total six multi-village PWSS for coverage of 427 Arsenic and six Fluoride affected habitations were ongoing in the State. However, no multi-village PWSSs were completed as of March 2016 despite expenditure of ₹335.60 crore. Further, the Department sanctioned four new multi-village PWSSs for coverage of 323 Arsenic affected habitations during 2011-16. Of which, construction of only one multi-village PWSS was in progress and an expenditure of ₹18.59 crore was made. However, other three were yet to be started (*Appendix-2.2.3*). Thus, all ten multi-village PWSSs remained incomplete after incurring expenditure of ₹354.19 crore. The shortcomings in execution of these multi-village PWSSs are discussed in succeeding paragraphs:

**Delay in acquisition of land**

As per Bihar Public Works Accounts (BPWA) Code, the tender process is to be initiated only after the technical sanction (TS) is accorded and funds allotted for the work. In cases where land acquisition is imminent for execution of a work, the same should be completed in advance, prior to the initiation of the tender process for the said work.

**MVPWSSs remained incomplete after expiry of two to eight years from the date of sanction and incurring expenditure of ₹90.40 crore there on.**

Scrutiny of records of Headquarters and test-checked divisions disclosed that Department had initiated execution of works without ensuring the availability of land in Maner, Kahalgaon, Pirpainti, Matihani, Barauni and Begusarai multi-village PWSS (*Appendix-2.2.4*). The Maner multi-village PWSS initially formulated by considering surface water of river Ganga as source of water but it was changed to ground water source due to unavailability of required land. It remained incomplete after lapse of eight years from the date of sanction. In addition, Kahalgaon and Pirpainti block multi-village and Matihani, Barauni and Begusarai block multi-village PWSSs were also incomplete due to delayed availability of land by two to four years. However, expenditure of ₹90.40 crore was incurred on laying of pipes, construction of master elevated service reservoirs, pre-settling tanks *etc.*



*Pipes related to Maner block of Patna district laying scattered in the field*



*Under construction master elevated service reservoir of multi-village PWSS of Kahalgaon and Pirpainti block of Bhalagpur district*

In addition, three (Shahpur and Neknam Tola of Bhojpur district and Patori, Mohiuddinagar and Mohanpur block of Samastipur district) out of four new

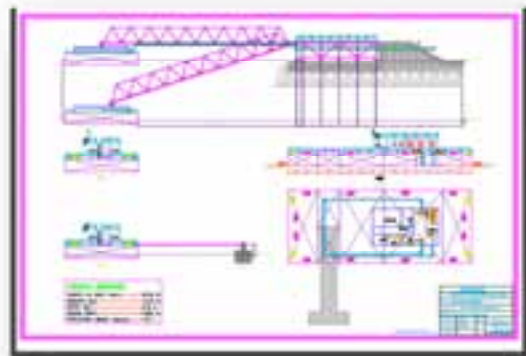
multi-village PWSSs were yet to be commenced due to unavailability of land. Hence, as of March 2016, despite expenditure of ₹90.40 crore, two ongoing and one new multi-village PWSS could not be completed as land was not available.

The PS, PHED agreed (November 2016) with audit observations and stated that land acquisition process would be expedited

***Execution of work without ensuring availability of water source for entire design period***

The manual for preparation of detailed project report (DPR) for rural PWSS stipulated that selected source/s would be capable of meeting water requirement of the system for the design period. Further, it should be prepared with due consideration to climate change and anticipated activities in and around as well as in the upstream of the source.

During Performance Audit, it was noticed that the selected sources to meet the requirement of water in three multi-village PWSSs (i)Buxar (Simri), (ii) Vaishali (Bidupur, Hajipur, Sahdei Bujurg and Desari block) and (iii) Bhagalpur (Sultanganj and Nathnagar block) were changed after initiating the works. Initially, all these PWSSs were sanctioned with provision of construction of fixed jetty<sup>19</sup> for taking water from source point *i.e.* Ganga river. Later, the same was changed into floating jetty due to wide variation of water level at source site of river Ganga.



*Model diagram of floating jetty*



*Estimated drawing of floating jetty*

However, the concept of floating jetty was not a new one because it was already constructed at Jamalpur and Munger PWSS. Hence, lack of foresightedness by the Department to evaluate course changing behaviour of river Ganga led to failure in completion of crucial multi-village PWSSs for Arsenic affected habitations.

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<sup>19</sup> *Jetty: A wooden or stone structure built in the water at the edge of a sea or lake and used by people getting on and off from boats*



*Floating jetty of Munger PWSS*



*Floating jetty of Jamalpur PWSS*

In addition, Simri multi-village PWSS of Buxar district was sanctioned during 2007-08 but as of December 2016, only work of distribution network (94 per cent), pre-settling tank (35 per cent) and one zonal elevated service reservoir (86 per cent) were executed. Further work remained closed since December 2015. This block was badly affected with Arsenic contaminations as cases of arsenicosis was detected by the Mahavir Cancer Institute and Research Centre, Bihar, Patna.

Similarly, Bidupur, Hajipur, Sahdei Bujurg and Desari block multi-village PWSS was also sanctioned during 2007-08. The rate for floating jetty for this multi-village PWSS was approved but the work for the same was still not started. Only work of distribution line was completed upto 95 per cent. However, other works were stopped as of December 2016. The work of distribution pipe line and other works of Sultanganj and Nathnagar block of Bhagalpur district was in progress.



*Pipes related to Simri block of Buxar district scattered in the field*



*Under construction elevated service reservoir of multi-village PWSS of Sultanganj and Nathnagar block of Bhagalpur district*

The assessment for availability of water source for entire design period of water supply scheme was not done and the works remained incomplete after spending ₹247.47 crore

As the assessment for availability of water source for entire design period of water supply scheme was not done correctly, the scope of work was altered and change of design occurred in all the three MVPWSSs after incurring an expenditure of ₹247.47 crore (**Appendix-2.2.5**). However, the rate (except MVPWSSs of Vaishali district) for the said change was not sanctioned and approval from Inland Waterways Authority of India was also not taken. As a result, the expenditure remained unfruitful and people of targeted habitations were still deprived of safe drinking water.

During exit conference, the PS, PHED agreed (November 2016) with the audit observation and stated that considering the meandering nature of Ganga river, floating jetty was a better option.

### 2.2.11.2 Piped water supply scheme

Out of 519 units of PWSSs, 239 units remained incomplete after incurring expenditure of ₹699.96 crore.

The Department sanctioned (during 2011-16) construction of 363 units of PWSSs (203 new units: ₹ 371.48 crore and re-organisation of 160 old units: ₹343.35 crore). Of which, 70 (34 per cent) new units and 80 (50 per cent) re-organisation of old units were completed after incurring an expenditure of ₹541 crore as of March 2016. Apart from new units, total 156 units of PWSSs were ongoing (i.e. PWSSs taken up before 1st April 2011) as on April 2011, of which, 130 units of PWSS were completed after incurring expenditure of ₹158.96 crore during 2011-16. Thus, out of 519 units, 239 units<sup>20</sup> remained incomplete after incurring expenditure of ₹699.96 crore. In 12 test-checked divisions, 89 units (25 complete and 64 incomplete) costing ₹154.20 crore for the period 2011-16 were test-checked. During scrutiny of records related to these units, cases of failure to adhere to norms in execution, procedural delay in award of work and payment without detailed estimates were noticed as discussed below:

#### **Wrong estimation of population**

Required water demand may not be provided to the projected population for the whole designed period of 30 years.

The design population for execution of rural PWSSs was to be estimated on the basis of latest Census (2011) population. However, 61 units of PWSSs in seven test-checked divisions were executed with design population of Census 2001 figure. Further, Chief Engineer (Design) while sanctioning the DPR did not initiate any action to rectify the mistake. Resultantly, required water demand may not be provided to the projected population for the whole designed period of 30 years (**Appendix-2.2.6**).

During exit conference, the PS, PHED stated (November 2016) that due to delayed availability of Census data at the Department level, estimation was done on the basis of 2001 Census data. The reply was not tenable since all the schemes were sanctioned at Headquarters level during 2013-14 and 2014-15 and at that time the Census data of 2011 was already available.

<sup>20</sup> New: 133, Re-organisation of old PWSS: 80 and Ongoing : 26

***Norm for providing adequate drinking water not adopted***

Population of eight test-checked divisions remained deprived of the norms of 55 lpcd of water as 63 units of PWSSs sanctioned during 2013-15 were executed on the basis of service level of 40 or 46 lpcd only.

As per 12<sup>th</sup> Five Year Plan, service level for rural water supply was to be enhanced from the norm of 40 litres per capita per day (lpcd) to 55 lpcd for designing of systems. However, it was observed that 63 units of PWSSs sanctioned during 2013-15 in eight test-checked divisions were executed on the basis of service level of 40 or 46 lpcd only. As a result, habitations covered under these schemes were deprived of drinking water as per the norms of 55 lpcd as of March 2016 (*Appendix-2.2.7*).

The Department replied (October 2016) that before 2013, DPRs for single village piped water supply schemes were previously designed on 40 lpcd.

***Incorrect calculation of design demand for service reservoirs***

The ESR was calculated for lesser capacity resultantly required design demand for entire design period may not be achieved.

The capacity of service reservoir was to be half of total designed demand based on 20 years of design period. However, scrutiny of records of 71 units of PWSSs in nine test-checked divisions indicated that capacity of reservoir was calculated on the basis of 30 or 33 *per cent* of total designed demand. The elevated service reservoir (ESR) was calculated for lesser capacity. Resultantly, required design demand for entire design period may not be achieved (*Appendix- 2.2.8*).

During exit conference, the PS, PHED stated (November 2016) that it had done as per Central Public Health and Environmental Engineering Organisation (CPHEEO) manual. The reply was not acceptable as the capacity of reservoirs were not calculated as prescribed in the Manual of Preparation of DPR (February 2013).

***Ferrule in water distribution network not provided***

Provision for giving household connection through ferrule in water distribution network was not made in any of the work.

As per the strategic plan of MoDWS, GoI, at least 35 *per cent* households were to be provided with service connection in their premises by 2017 and 90 *per cent* households were to be provided service connection by 2022. To achieve this target, provision for giving household connection through ferrule<sup>21</sup> in water distribution network should be provided. Scrutiny of records of 67 units of PWSSs in nine test-checked divisions revealed that the Chief Engineers sanctioned estimates for these PWSSs but provision for giving households connection through ferrule in water distribution network was not made in any of the work.

The Department agreed with audit observations and stated (October 2016) that ferrule connection was not initially provided in schemes. Now the Government had decided to provide house connection.

***Procedural delay in execution of work***

The manual for preparation of DPR for rural PWSS provided by MoDWS, specified time of one to two years for preparation of design, tendering, construction and completion/ commissioning of the proposed standalone water supply schemes. The date of administrative approval (AA) of the proposed scheme was to be considered as day one for this purpose.

<sup>21</sup> A metal sleeve used specially for joining or binding of pipe sections from one part to another.

The work was also delayed due to delayed preparation of TS, NIT and award of work.

Scrutiny of records of 64 units of PWSSs in 12 test-checked divisions disclosed that the test-checked divisions provided 12 months period for execution of a PWSS from the date of work order/ agreement. However, it was noticed that technical sanction (design) was delayed by eight to 522 days while tender finalisation was further delayed by 32 to 364 days. Consequently, the award of work *i.e.* work order to contractor was also delayed by up to 217 days (**Appendix-2.2.9**). The delay was mainly due to delay in preparation of estimates by the divisions after AA. Further, it was also delayed at Chief Engineer level in according TS. However, finalisation of tender was delayed due to selection of site, re-tendering, land dispute *etc.*

Hence, execution of these 64 units of PWSSs could not be completed within the scheduled period and deprived piped drinking water to the habitations despite incurring an expenditure of ₹57.88 crore as of March 2016.

The PS, PHED agreed with the fact during exit conference (November 2016) and assured to comply it in near future.

#### ***Failure to prepare estimates led to excess provision***

The manual for preparation of DPR for rural PWSS specified that detailed estimates for each component of the scheme should be prepared along with the design and drawing.

The Department failed to prepare detailed estimate of ESR resulting in excess provision of ₹1.37 crore and excess expenditure of ₹0.79 crore.

During Performance Audit, it was noticed that in 11 out of 12 test-checked divisions (except Chapra), detailed estimates for construction of ESR was not prepared and enclosed with DPR of rural PWSS. Instead, the rate of ESR in the DPR and bill of quantity of (BoQ) was provided on lump-sum basis. A comparison of lump-sum rates for ESR provided in 32 units of PWSSs works of test-checked divisions with the rate of PH Division, Chapra disclosed that there was excess provision of ₹1.37 crore in 32 units of PWSSs, of which excess expenditure of ₹0.79 crore was made on ESR of 22 PWSSs in five test-checked divisions (**Appendix-2.2.10**).

During exit conference, the PS, PHED agreed (November 2016) with audit observations and ensured to prepare detailed estimate for ESR in future. However, no reply was provided regarding the action to be taken in respect of cases pointed out by Audit.

#### **2.2.11.3 Mini piped water supply scheme**

As of 1 April 2011, construction of 2,785 units of MPWSSs were ongoing (sanctioned before April 2011) in the State. Of which, 487 units (17 *per cent*) were completed at a cost of ₹214.79 crore leaving 2,298 MPWSSs incomplete as of March 2016 (**Appendix-2.2.11**). The Department rescinded (May 2014 to January 2015) the agreements of incomplete 2,180 units of MPWSSs costing ₹392.73 crore due to unsatisfactory progress and failure to execute the work for a long time.

The Department sanctioned construction of 1,908 units of MPWSSs during 2011-16, of which, due date of completion of 1,184 units of MPWSSs were already over as of May 2016. Out of 1,184 units of MPWSSs, the Department could complete only 324 (27 *per cent*) at a cost of ₹198.60 crore as of March 2016 leaving 860 MPWSSs incomplete (**Appendix-2.2.12**). Thus, 3,158 out of 3,969 MPWSSs remained incomplete as on March 2016.

Further, the tender and award of work of all new MPWSSs sanctioned during 2011-16 were finalised at Headquarters level but the Department did not provide DPRs of the schemes to Audit.

The Department stated (October 2016) that MPWSS was a very small scheme in which detailed design and drawing was done by field officers as per site conditions.

The reply was not tenable as substantial number of schemes was implemented during the period on the name of small schemes.

The shortcomings noticed during audit of MPWSSs are discussed below:

***Execution of work without assessment of key plants and equipment and key personnel***

It was noticed during audit that notice for inviting tender (NIT) for eight new MPWSSs was published (January 2013 to November 2014) by Chief Engineer (Urban), PHED, Patna. The work order for these works was also awarded by the Chief Engineer (Urban), PHED, Patna and instructed the bidder to execute agreement with specified PH Divisions.

Scrutiny of tender documents and work order revealed that requirement of key plants and equipment and key personnel were not assessed according to volume of work. The Department uniformly fixed the requirement of four key plants and equipment and 10 key personnel (***Appendix-2.2.12***) for construction of 80 to 281 units of MPWSSs in seven to 12 districts. Resultantly, only 336 out of 1,908 MPWSSs could be completed as of March 2016, though, due date of completion of 1,184 MPWSSs were already over. The EEs of the test-checked divisions also stated that the contractors did not have sufficient plants and equipment and key personnel to execute the work in time. It showed that the Department awarded work for construction of 1,908 MPWSSs without analysing the actual requirement of plants and equipment and key personnel in context to the volume of works.

The PS, PHED agreed (November 2016) with audit observations and ensured to assess requirement as per need before award of work.

***Award of work without availability of land***

As per Bihar Public Works Accounts (BPWA) Code, the tendering process is to be initiated only after the technical sanction is accorded and funds allotted for the work. In cases where land acquisition is imminent for execution of a work, the same should be completed in advance, prior to the initiation of the tendering process for the said work.

It was noticed during scrutiny of records related to new 1,908 units of MPWSSs that in work orders, the Chief Engineer (Urban), PHED, Patna instructed all the concerned EEs to provide list of suitable sites within their districts for construction of MPWSS. It showed that sites for these schemes were not finalised before initiation of the tendering process and works were awarded without ascertaining the availability of land. As a result, sites for only 1,614 against 1,908 units of MPWSSs were handed over to contractor as of March 2016 (***Appendix-2.2.13***). During Performance Audit, EEs of the test-checked districts also stated that selection of sites was initiated after

**The Department did not assess the required key personnel and equipment to execute 1,908 new MPWSS. Resultantly, only 336 MPWSSs were completed.**

**The Department initiated the tendering process without ascertaining the availability of land.**



award of work which was further delayed as No Objection Certificates (NOC) were not received from Land Acquisition Department.

During exit conference, the PS, PHED stated (November 2016) that since the land acquisition was a lengthy process and persistence of land problem across the State was the major cause of incomplete works.

Thus, the Department failed to complete 3,158 units of MPWSSs and the population of 31.58 lakh<sup>22</sup> was deprived of safe and adequate drinking water as of March 2016. Of which, 7.19 lakh population were affected from Arsenic, Fluoride and Iron contamination. As the MPWS schemes were not completed, the Department also failed to achieve the targeted objective of reducing the dependency on handpumps for drinking water.

## 2.2.12 Operation and maintenance

The objective of the NRDWP was to provide enabling support and environment for *Panchayati Raj* Institutions (PRIs) and local communities to manage their own drinking water sources and systems in their villages. For this, existing drinking water supply system was to be transferred to VWSCs formed by local communities and PRIs for management, operation and maintenance.

**The Department neither provided any funds nor transferred any water supply schemes to PRIs during 2011-16 though provisioned in the guidelines of NRDWP.**

During Performance Audit, it was noticed that neither funds nor water supply schemes were transferred to local communities and PRIs for operation and maintenance (O&M) in the test-checked districts during 2011-16. On being asked, EEs of the test-checked divisions stated that VWSCs were either not constituted or not functional and hence, water supply schemes were not transferred to them.

The Department replied (October 2016) that '*Lok Nirman Samiti*' in place of VWSC had been constituted in every village and is responsible for O&M of drinking water supplies in their villages. However, the committee was not found functional in any of the test-checked divisions.

Thus, the operation and maintenance of completed schemes were being done by the Department itself.

### 2.2.12.1 Habitations slipped back to partially covered category due to lack of O&M of handpumps

In Bihar, handpumps are the main source of drinking water for rural communities and supply water to almost 94 *per cent* of the rural population. However, the Department did not take up adequate O&M for handpumps. As a result, habitations slipped back to partially covered category during 2011-16. The details are as provided under **Table no. - 2.2.6:**

<sup>22</sup>  $3,158 \times 1,000$  (one MPWSS was provided for 1,000 population)=31,58,000 i.e. 31.58 lakh

**Table no. – 2.2.6**  
**Status of functional, defunct and O&M of handpumps during 2011-16**

Year	Number of Government handpumps as on April of each Year	Number of functional handpumps	Number of defunct handpumps	Number of handpumps considered for repair and maintenance during the year			Slipped back habitations (in nos.)
				Target	Achievement (including backlog)	Expenditure incurred (₹ in crore)	
2011-12	8,46,309	6,86,169	1,60,140	1,24,929	1,66,991 (104)	21.18	569
2012-13	8,81,964	7,19,923	1,62,041	1,03,450	1,51,409 (93)	18.16	19,032
2013-14	9,31,582	7,70,353	1,61,229	1,09,780	1,30,768 (81)	14.08	30,063
2014-15	9,62,586	8,03,031	1,59,555	1,09,780	1,14,661 (72)	26.23	1,719
2015-16	10,15,340	8,45,664	1,69,676	1,09,384	1,08,461 (64)	10.26	1,701
<b>Total</b>			<b>8,12,641</b>	<b>5,57,323</b>	<b>6,72,290 (83)</b>	<b>89.91</b>	<b>53,084</b>

(Source: Data provided by E-I-C, PHED, Patna)

(Figure in parenthesis showed percentage of achievement against total handpumps not functioning during the year)

From **Table no. - 2.2.6**, it could be seen that the Department did not take up O&M for all handpumps which were not functioning. O&M was done in respect of 64 to 93 *per cent* of handpumps only during 2012-16. Resultantly, 53,084 habitations which were fully dependent on such handpumps for drinking water slipped back to partially covered category during 2011-16.

The Department stated (October 2016) that regular O&M for minor repair were done but defunct or outlived handpumps need complete rehabilitation or installation of new handpumps.

The reply of the Department was affirmation of the fact that lackadaisical attitude in repairing of defunct or outlived handpumps caused habitations under fully covered category to slip back to partially covered category in respect of drinking water.

#### **2.2.12.2 Operation and maintenance of completed mini piped water supply scheme**

**The Department did not carry out O&M of 367 units of MPWSS of which 241 units were related to Arsenic, Fluoride and Iron affected habitations.**

The Department accorded five sanctions for O&M of constructed 993 units of MPWSSs during 2011-16. The tender and award of these works were finalised between September 2011 and November 2015. As per information provided by the Department, against sanction of 993 units of MPWSSs for O&M, sites for only 937 units were handed over to contractors as of March 2016. However, O&M works were being carried out in 626 units of MPWSSs leaving 367 units without any maintenance as of March 2016. Out of 367 MPWSS not maintained by the Department, 241 units were related to Arsenic, Fluoride and Iron affected habitations (*Appendix-2.2.14*).

In test-checked divisions, it was noticed that under four sanctions (except sanctions for O&M of MPWSSs in Iron affected habitations), either the contractor failed to execute agreement with the EEs of the PH divisions concerned or stopped the work of O&M. On being inquired, EEs of the test-checked divisions stated that contractor had neither established office nor any representative was available at district level. Hence, in absence of local representatives, maintenance of completed MPWSSs was affected badly.

The PS, PHED, during exit conference stated (November 2016) that it would be maintained in near future.

Thus, the objective to enable local communities especially quality affected habitations to manage their own drinking water sources and systems were not fully achieved.

### 2.2.13 Sustainability component of the schemes

The main aim of sustainability component was to encourage States to achieve drinking water security at the local level. The sustainability structures should be taken up on priority in over-exploited, critical and semi-critical areas as specified by Central Ground Water Board (CGWB) and in quality affected habitations.

The CGWB identified (March 2011) 11 blocks<sup>23</sup> of eight districts of Bihar as semi-critical<sup>24</sup>. However, as per target and achievement of sustainability component uploaded in IMIS data, no water recharging structures were constructed in these 11 blocks of eight districts during 2011-16.

The PS, PHED during exit conference stated (November 2016) that these structures were being executed by other departments and data relating to these were not available in the Department. The reply was not in consonance with the provisions of the NRDWP guidelines.

Thus, the Department did not use funds of sustainability component to construct sustainability structures in semi-critical areas in contravention of the provision of guidelines.

#### 2.2.13.1 Sustainability through handpumps

As per Master Plan for artificial recharge to ground water in India published (2013) by CGWB, two districts viz. Gaya and Jamui were identified as suitable areas for artificial recharge. The CGWB suggested construction of 277 percolation tanks, 1,663 *nala bundings* and 118 recharge shafts as artificial recharge structures to construct in these areas.

Audit noticed that the Department did not sanction any schemes for suggested artificial structures for Gaya and Jamui districts during 2011-16. Instead, the Department sanctioned three schemes for installation of 59,198 handpumps in place of old and defunct handpumps as point source recharging systems during 2011-16. Out of this, 55,907 handpumps were installed after incurring an expenditure of ₹262.90 crore. The Department sanctioned these handpumps on the basis of installation of two or four handpumps per *Panchayat*. This made it clear that these handpumps were installed in the name of sustainability structure but it was used mainly for coverage of habitations. Thus, the expenditure was irregular.

<sup>23</sup> (i) Birpur (Begusarai), (ii) Gaya Sadar (Gaya), (iii) Kurtha (Arwal), (iv) Masaurhi (Patna) (v) Meskaur (Nawada), (vi) Mushhahari (Muzaffarpur), (vii) Nagarnausa (Nalanda), (viii) Naokothi (Begusarai), (ix) Rajgir (Nalanda), (x) Sampatchak (Patna), and (xi) Tajpur (Samastipur)

<sup>24</sup> Semi critical areas are those areas where the stage of ground water development is between 70 per cent and 100 per cent and significant decline in long term water level trend has been recorded in either pre-monsoon or post-monsoon period.

The Department did not provide water recharging structures in 11 blocks of eight districts identified by CGWB.

The Department, in the guise of sustainability structures, installed 55,907 handpumps at an expenditure of ₹262.90 crore.

In test-checked divisions, it was also noticed that the divisions did not make any provision for salvage of materials or sale proceeds of unused materials of the old and defunct handpumps.

During exit conference (November 2016), the PS, PHED stated that due to alluvial soil in most part of Bihar, new handpumps were installed against defunct and old handpumps.

The reply itself affirmed that the Department installed only new handpumps in place of old and defunct handpumps which violated provisions of sanctions.

### **Recommendations**

#### **The Department should ensure:**

- *identification of critical, semi-critical and over exploited areas in respect of ground water recharge in the state;*
- *construction of artificial recharge structures as per the recommendation of CGWB.*

### **2.2.14 Support activities**

The activities like strengthening of Water Sanitation and Support Organisation (WSSO) and District Water and Sanitation Mission (DWSM), Management Information System (MIS) and Research and Development are to be undertaken by the Department as support activities.

#### **2.2.14.1 Water Sanitation and Support Organisation**

As per NRDWP guidelines, WSSO and DWSM were required to be strengthened by appointing consultants in specialised areas. This helps to enable *Panchayati Raj* Institutions (PRIs)/local bodies/Village Water and Sanitation Committees (VWSCs) to take up targeted Information, Education and Communication (IEC) and Human Resource Development (HRD) activities along with planning, implementation and operation and maintenance activities related to rural water supply systems. Further, Block Resource Centres (BRCs) were to be set up to liaise between the VWSCs and DWSM.

During Performance Audit, it was noticed that WSSO was constituted in November 2010. However, approval for appointment of consultants for WSSO<sup>25</sup> and DWSM<sup>26</sup> was provided in March 2013 only. However, one consultant each for Human Resource Development (HRD), Information, Education and Communication (IEC), Monitoring and Evaluation (M&E) and Water Quality Monitoring and Surveillance (WQM&S) was appointed in January 2016 only. As per information provided by the test-checked divisions, consultants were not engaged for DWSMs/DWSCs. Further, BRCs were also not set up at Block level as well as VWSCs at village level.

**The Department did not appoint consultants at division level to enable support and environment for PRIs to manage their own drinking water sources.**

<sup>25</sup> Director-1, Consultant IEC-1, HRD-1, M&E-1, Water Quality Consultant-1

<sup>26</sup> Consultant IEC & Equity - 38, M&E and MIS - 38, HRD - 38, Hydro Geologist - 38, Sanitation & Hygiene : 38

As consultants were not appointed at division level, the programme objective to provide enabling support and environment for PRIs and local communities to manage their own drinking water sources and systems in their villages was not achieved.

The Department replied (October 2016) that they have its own man power for implementation and maintenance of drinking water schemes from EEs to JEs at field level.

The Department was required to strengthen DWSM by appointing consultants in specialised areas which was not done violating the provision of the guidelines.

#### **2.2.14.2 Integrated Management Information System**

As per NRDWP guidelines, IMIS maintained by MoDWS of GoI, is an important mechanism for monitoring the Programme implementation. To this end, the officials are required to furnish the data online, as prescribed by Department of Drinking Water and Sanitation. The release of funds is based on data furnished online by the State.

During scrutiny of IMIS data, it was noticed that correct data was not updated in IMIS and there were mismatch in the information provided as explained below.

- Further, it was also noticed that as per IMIS data, the target set for construction of sustainability structure were 1,468 during 2011-16. Against this, 1,023 structures were shown as constructed after incurring an expenditure of ₹64.94 crore. However, scrutiny of list of schemes sanctioned by SLSSC during 2011-16 showed that schemes for sustainability structure was not sanctioned during 2011-16.
- As per IMIS data, 7,52,186 people were affected with Arsenic contamination as of April 2011. During 2011-16, the Department could cover 2,85,000 Arsenic affected population leaving as on March 2016, a population of 4,67,186 uncovered. However, as of March 2016, IMIS data showed only 1,07,833 Arsenic affected population.
- As per IMIS data, 3,338 habitations were affected with Fluoride contamination as of April 2011. During 2011-16, the Department could cover 116 Fluoride affected habitations leaving as on March 2016, 3,222 habitations uncovered. However, as of March 2016, IMIS data showed only 1,093 Fluoride affected habitations.
- Similarly, as per IMIS data, 13,978 habitations were affected from Iron contamination however, the Department could cover only 58 Iron affected habitations during 2011-16. Resultantly, as on March 2016, 13,920 Iron affected habitations remained uncovered. However, IMIS data showed only 4,402 Iron affected habitations as of March 2016.

Thus, the integrity of the IMIS data as an important mechanism for monitoring the programme implementation was in doubt.

The Department stated (October 2016) that updation was done every year which was a cumbersome process and skilled I.T personnel were required for updation. It was however assured that efforts were being made for same.

**The integrity of the IMIS data as an important mechanism for monitoring the programme implementation was in doubt.**

### 2.2.14.3 Research and Development

The NRDWP guidelines stipulate setting up facilities of Research and Development (R&D) Cell to meet the new issues and challenges emerging in the rural drinking water and sanitation sector in States. Accordingly, the State Government was to establish R&D cells with adequate manpower and infrastructure.

**The Department did not initiate any action to set up facilities of R&D to meet emerging challenges of efficient water delivery and water management for the people of the State.**

Scrutiny of records of Department disclosed that the Department had not initiated any action to set up facilities of R&D to meet emerging challenges of efficient water delivery and water management for the people of the State. Thus, the Department failed to address any of the emerged challenges of ongoing water supply schemes (MVPWSSs) and the schemes were delayed.

The PS, PHED during exit conference stated (November 2016) that structures suggested by GoI were being taken by the Department.

### 2.2.14.4 Water quality monitoring and surveillance

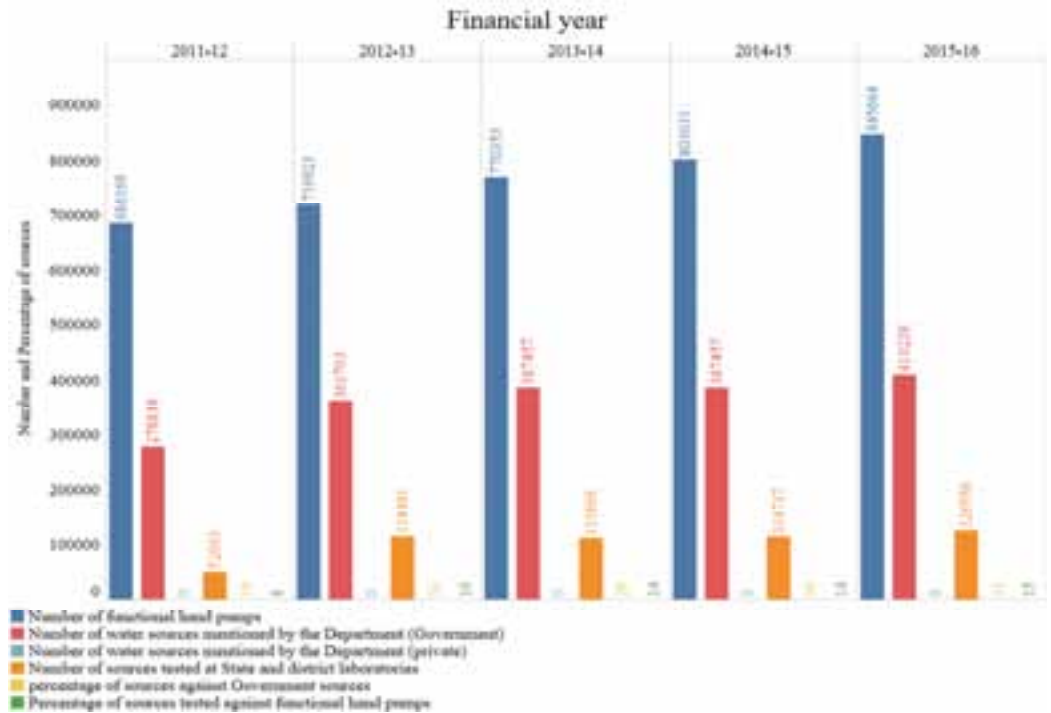
Under the National Rural Drinking Water Programme, emphasis was to be given on the issue of Water Quality Monitoring and Surveillance (WQMS). For this, the State was to access funds from NRDWP (WQMS) for setting up and upgrading drinking water testing laboratories at the State, District and Sub-divisional level. Cent *per cent* of the samples should be tested at sub-divisional laboratories both for bacteriological as well as chemical and physical parameters. Further, 10 *per cent* of samples should be tested by the district laboratories apart from routine cross verification by the State laboratory. For chemical and physical parameters, testing may be carried out once a year and for bacteriological parameter, it is desirable to test twice a year (pre and post-monsoon) and as and when water related diseases are detected. Further, field test kits (FTK) should be procured from WQMS funds and provided to all *Gram Panchayats* (GPs) to test all the sources.

**In absence of sub-divisional laboratories, failure to provide FTKs and lack of required manpower, quality of drinking water was not ensured.**

During Performance Audit, it was noticed that water testing laboratories at State level (1) and district level (38) were available in Bihar during 2011-16. However, approval for establishment of 76 sub-divisional water quality test-laboratories and their O&M for five years was provided (July 2014) by the SLSSC. But the same was not established as of March 2016 as the Department finalised the tenders for works with delays and the works were awarded to agencies in November 2016 only.

Hence, in absence of sub-divisional laboratories, testing of water sources were being carried out through District laboratories during 2011-16. Details of year wise water testing conducted by State and District laboratories are provided in **Chart no. - 2.2.5:**

**Chart no. – 2.2.5**  
**Statement regarding number of sources tested by State and District laboratories**



(Source: Information provided by the Department)

From **Chart no. - 2.2.5**, it would be seen that the testing of water sources was done for only eight to 16 *per cent* during 2011-16 though an expenditure of ₹20.43 crore was made on WQMS. This was mainly attributable to failure in establishment of sub-divisional laboratories and required man-power in district laboratories (32 chemists and lab assistants each out of the sanctioned posts of 38) in the State. Further, the Department stated that FTKs was not provided to GPs because results of FTKs provided previously, were not encouraging.

In absence of sub-divisional laboratories, failure to distribute FTKs and lack of required man-power, quality of drinking water was not ensured.

During exit conference, the PS, PHED stated (November 2016) that work to establish sub-divisional laboratories had been awarded to agencies.

### Recommendations

#### The Department should:

- *establish sub-divisional laboratories to test all the drinking water sources;*
- *provide adequate man-power and infrastructure in laboratories.*

### 2.2.15 Conclusion

The objective of National Rural Drinking Water Programme to provide every rural person with adequate safe water for drinking, cooking and other basic domestic needs is yet to be achieved in the State. The failure of the programme was mainly attributed to deficient planning, weak financial management and inadequacies in implementation.

The population affected with Arsenic, Fluoride and Iron contamination were not provided with safe drinking water as they were either not covered by the sanctioned schemes or the sanctioned schemes were not completed during 2011-16. As a result, 4.67 lakh Arsenic, 16.51 lakh Fluoride and 79.06 lakh Iron affected population remained deprived of safe drinking water, despite an expenditure of ₹609 crore.

Department did not utilise the entire allocated funds in any of the financial years during 2011-16. Resultantly, the State was deprived of GoI share of ₹278.20 crore.

The percentage of fully covered habitations was reduced from 69 *per cent* in 2011 to 54 *per cent* in 2016. This was mainly due to failure of the Department to enhance the service level benchmark from 40 to 55 litres per capita per day (lpcd) as per 12<sup>th</sup> Five Year Plan and lack of maintenance of defunct handpumps.

The Department did not develop any framework to promote coverage of habitations through Piped Water Supply Schemes (PWSSs) during 2011-16. As a result, Bihar is lagging far behind in coverage of habitations through piped water supply (six *per cent*) than nearby States as well as national average (41 *per cent*). Consequently, 94 *per cent* of the population was still dependent upon handpumps.

Though the designed population for execution of Rural PWSSs was to be estimated on the basis of latest Census 2011, 61 PWSSs in six test-checked districts were executed with designed population of Census 2001 only. Resultantly, the Department may not be able to provide the required water demand to the projected population for the whole design period of 30 years.

Therefore, more vigorous steps need to be initiated by GoB to achieve the goal of NRDWP as well as *Saat Nischay* of Government to decrease dependency on handpumps for water supplies in the State within the committed timeline.

The Department did not set-up water testing laboratories at sub-divisional level. Water quality testing was carried out only on eight to 16 *per cent* of functional sources against the norms for testing of 100 *per cent* source twice for bacteriological and once for chemical contamination. Hence, majority of the habitations were forced to use unsafe drinking water in the State.

In Annual Action Plans, despite availability of funds, targets were not set-up by prioritising partially covered, quality affected, SC/ST dominated habitations and timelines of 12<sup>th</sup> Five Year Plan. Resultantly, the objective to ensure consumer preferences, potability, reliability, sustainability, convenience and equity were not achieved.



**2.3 Mukhya Mantri Gram Sadak Yojna****Executive Summary*****Introduction***

Mukhya Mantri Gram Sadak Yojna (MMGSY) was launched (June 2006) by Government of Bihar to provide all-weather connectivity to small unconnected villages having population of 500-999 (as per Census 2001) which could not be taken up under Pradhan Mantri Gram Sadak Yojna due to lower population size. The scheme was aimed to provide basic infrastructure of rural roads connectivity to access goods and services located in nearby villages or major towns/market centres. GoB decided (January 2013) not to take any new proposal under MMGSY since 2012-13 as connectivity target under PMGSY was lowered up to 500 and above population.

*(Paragraph-2.3.1)*

***Planning***

Comprehensive New Connectivity Priority List (CNCPL) was not prepared at Block level in three out of 10 test-checked districts. Besides, connectivity was provided to ineligible villages under the scheme and 34 road works not listed in CNCPL were selected for constructions.

*(Paragraphs-2.3.7.1 and 2.3.7.2)*

***Financial Management***

The budget allocation as well as release of funds was reduced to 13 *per cent* in 2015-16 when compared with that of 2011-12 as Government of Bihar decided not to take further new proposals under MMGSY. The implementing agency of road works *i.e.* Bihar Rural Roads Development Agency (BRRDA) had not submitted Utilisation Certificates for grants-in-aid of ₹178.76 crore.

*(Paragraphs-2.3.8 and 2.3.8.1)*

***Implementation of scheme***

Survey and investigation was not ensured in six roads prior to finalisation of alignment and availability of land. Resultantly, road works initiated were abandoned. There was delay in completion of works up to eight years. Though new eligible villages were not sanctioned under MMGSY from the year 2012-13 onwards, connectivity could not be provided in previously selected 183 eligible villages as on March 2016 due to abandonment of works by contractors and incomplete road works.

*(Paragraphs-2.3.9 and 2.3.9.1)*

***Quality control and supervision of works***

The prescribed quality control mechanism was not adhered to as test for workmanship of road works was not done by the Works Divisions. Besides, the inspections of District Quality Monitors were not done in any of the executed road works and compliance to 25 *per cent* inspection reports of Mobile Quality Monitoring Units were pending as on March 2016.

*(Paragraphs-2.3.10.1, 2.3.10.2 and 2.3.10.4)*

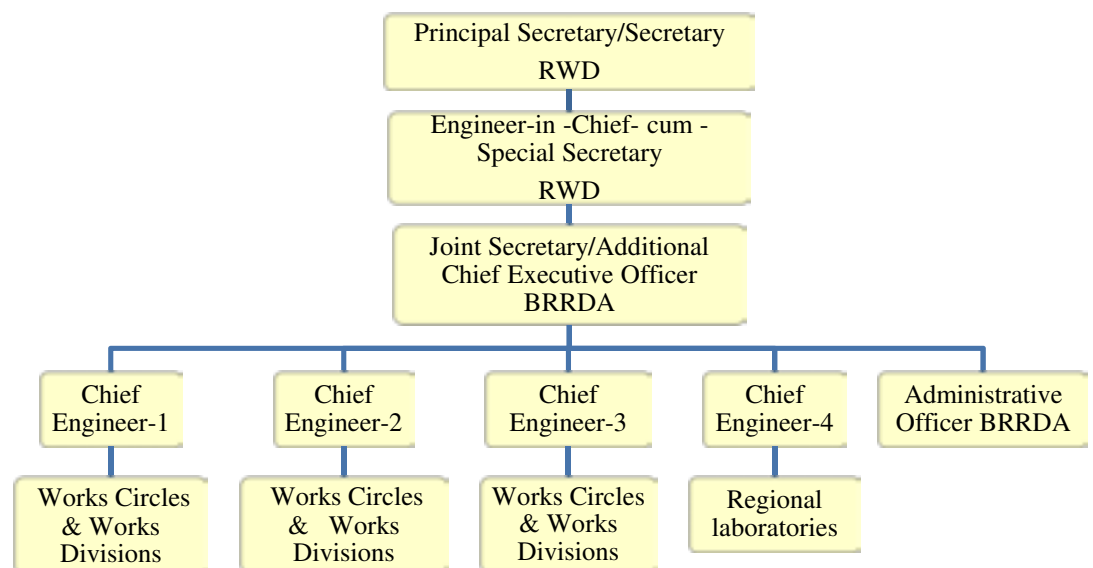
### 2.3.1 Introduction

Rural Road Connectivity and its sustained availability is a key component of rural development as it assures access to economic and social services and generates sustained increase in agricultural income and productive employment opportunities. The Government of Bihar (GoB) launched (June 2006) MukhyaMantri Gram SadakYojana (MMGSY) to provide connectivity to unconnected villages having a population 500-999 (as per Census 2001). Later, GoB decided not to take any new proposal under MMGSY since 2012-13 as connectivity target under PMGSY was lowered up to 500 and above population. Hence, funds for only maintenance works of the constructed roads were provided in 2014-15 and onwards. Till March 2016, 7,341.49 Kilometre (Km) rural roads were constructed under MMGSY in Bihar.

### 2.3.2 Organisational set-up

The Secretary, Rural Works Department (RWD), Government of Bihar is responsible for implementation of the scheme through the Bihar Rural Roads Development Agency (BRRDA) at the State level. There is a District level MMGSY Steering Committee (DSC) headed by the Minister, with the District Magistrate (DM) as Member Secretary. The committee is responsible for selection, periodic supervision and monitoring of the scheme. The organisational chart is given in **Chart no. - 2.3.1**:

**Chart no. - 2.3.1**  
**Organisational set up for implementation of MMGSY**



(Source: Information provided by RWD)

### 2.3.3 Audit objectives

The objectives of the Performance Audit were to ascertain whether:

- Planning for the scheme was meant for providing all-weather single road connectivity to eligible unconnected villages;
- Financial management was adequate and efficient to ensure optimum utilisation of funds;

- The road works were executed economically, efficiently and effectively; and
- The existing monitoring system and quality control mechanism were adequate and effective;

#### **2.3.4 Audit criteria**

Audit findings were benchmarked with reference to the following audit criteria:

- Budget of State Government during relevant period;
- Guidelines on MMGSY;
- Rural Roads Manual and Indian Road Congress (IRC) specifications;
- Orders/guidelines/circulars issued by State Government;
- Periodical reports/returns prescribed by State Government;
- Reports of District Quality Monitors and State Quality Monitors; and
- Bihar Public Works Department Code/Bihar Public Works Account Code/Bihar Financial Rules.

#### **2.3.5 Audit scope and methodology**

The Performance Audit of MMGSY was carried out during April to July 2016 for the period 2011-16. During the audit, records of RWD, BRRDA and Rural Works Divisions in 10<sup>27</sup> out of 38 districts of Bihar were test-checked. The districts were selected by Probability Proportional to Size without Replacement method with size measuring the expenditure of last five years. Further, 25 per cent of the works which also included maintenance of roads, subject to a minimum of 15 works in each selected districts *i.e.* 161 out of 531 road works were selected through Simple Random Sampling without Replacement (SRSWOR) method.

The audit methodology consisted of document analysis, responses to audit queries, collection of information through questionnaires, proforma and joint physical verification along with beneficiary surveys. Audit observations were based on analysis of information and data collected during audit.

An entry conference was held in April 2016 with the Secretary, RWD wherein the audit objectives, audit criteria and methodology were discussed at the beginning of the Performance Audit. At the end of audit, an exit conference was held in December 2016 with the Secretary, RWD and replies/views on the audit observations were duly incorporated.

#### **2.3.6 Audit findings of earlier Performance Audit**

A Performance audit of MMGSY for the period 2006-09 was featured in Comptroller and Auditor General's Audit Report (Civil) for the year ended 31 March 2009. Major deficiencies such as incorrect selection of roads, delay in execution and deficient quality controls were found to persist even during the current audit as discussed in subsequent paragraphs.

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<sup>27</sup> Kaimur, Katihar, Khagaria, Madhepura, Madhubani, Nalanda, Patna, Rohtas, Saran & Siwan

### 2.3.7 Planning

The guidelines envisaged preparation of block level lists of unconnected villages having a population of 500 to 999 (as per Census 2001) in each district. After preparation of list of unconnected villages, the target groups of scheme were to be identified within the list. For this purpose, district level and block level Comprehensive New Connectivity Priority List (CNCPL) of all such villages was to be prepared on the basis of the following criteria:

- Population of unconnected habitations;
- Percentage of Schedule Caste and Schedule Tribe population with respect to total population (five to above 75 *per cent*); and
- Distance of the unconnected village to the existing *pucca* road (less than one Km to more than 4 Km).

All villages which fall within the specified criteria were to be grouped in general order of priority in CNCPL. The DSC should finalise the villages to be taken up first from CNCPL for providing connectivity during a particular financial year. The Annual Action Plan (AAP) of each district containing priority list of roads for villages selected by DSC, was to be prepared ensuring that the total cost of the selected projects were twice the amount of the funds earmarked for each district. Road works were to be proposed from the aforesaid AAP considering availability and earmarking of funds for the district.

It was, however, seen during audit that the procedures prescribed for selection of road works were not followed. Instances of deficiencies in planning and selection of works are discussed below:

#### 2.3.7.1 Comprehensive New Connectivity Priority List not prepared/adhered to

The guidelines of scheme envisaged selection of village enlisted in CNCPL by DSC. Scrutiny of records in selected districts and BRRDA disclosed that Block level CNCPL was not prepared by the EEs, RWD, Works Divisions and the prescribed procedure for selection of villages was not followed while taking up road works in three<sup>28</sup> out of 10 test-checked districts.

RWD accepted (November 2016) the observation and stated that all these roads were important and selected by DSC and were to be included anyway in the State Core Network. The reply was not in accordance with guidelines as the roads were not selected from CNCPL.

#### 2.3.7.2 Ineligible villages were selected for providing connectivity

As per guidelines of the scheme, only such unconnected villages having population of 500 to 999 (as per Census 2001) and fulfilled the eligibility criteria were eligible for connectivity under the scheme. Further, road works under MMGSY were to be taken up for providing single all-weather connectivity to unconnected villages and the villages already connected with all-weather roads were not to be selected in the scheme.

Scrutiny of records in selected districts disclosed that these criteria were not adhered to during selection of villages as discussed below:

<sup>28</sup> Katihar, Madhepura and Rohtas

The provisions of guidelines were not adhered to during selection of road works

- Eight roads in four districts were executed with expenditure of ₹9.32 crore for providing connectivity to villages which were not eligible for connectivity under the scheme as per specified criteria (*Appendix-2.3.1*).
- Contrary to the provisions of guidelines, 34 road works in four out of 10 test-checked districts were selected for providing connectivity to such villages which were not enlisted in CNCPL and ₹43.22 crore was incurred on their execution as on March 2016 (*Appendix-2.3.2*).
- The Department spent ₹3.38 crore over eight road works for providing connectivity to ineligible villages (*Appendix-2.3.3*). It was seen during joint physical verification of three test-checked districts that six plain cement concrete roads (Khagaria: three roads, Saran: two roads and Rohtas: one road) were constructed in villages which were already having all-weather connectivity. In Nalanda district, two villages were enlisted in both formats 'Ka'<sup>29</sup> and 'Kha'<sup>30</sup>. In format 'Ka' it was clearly mentioned that villages were connected with all weather road, despite that these villages were enlisted in CNCPL and roads were constructed.
- Seven roads were executed under MMGSY for providing connectivity to villages eligible for execution under PMGSY. Consequently, three of these roads were excluded from the sanction list of roads under PMGSY and GoB had to bear the construction cost of these road works. Thus, imprudent decision to include eligible roads of PMGSY under MMGSY caused avoidable burden on the state exchequer amounting to ₹8.36 crore (*Appendix-2.3.4*) which could have been utilised for providing connectivity to other unconnected villages.

The RWD stated (November 2016) that roads were selected in DSC meeting headed by Hon'ble minister and all MLAs, District Board Chairman and Vice-chairman were members of the committee. All these roads were extremely important from local point of view.

However, the fact remained that provisions of guidelines of MMGSY were not adhered to during selection of road works.

### 2.3.8 Financial Management

The scheme was to be implemented by the State Government through its own budget. Funds were to be made available in the form of Grant-in Aid (GIA) to BRRDA. The GIA received by BRRDA were to be kept in a separate bank account and drawn by the Executive Engineers (EEs) of Works Divisions based on authority letters issued by BRRDA. The status of availability of funds and expenditure incurred under the scheme during the period 2011-16 is given in **Table no. - 2.3.1:**

<sup>29</sup> Format 'Ka' includes such villages which were already connected by all-weather roads.

<sup>30</sup> Format 'Kha' consists of the name of unconnected villages.

**Table no. - 2.3.1**  
**Status of availability of funds and expenditure during 2011-16**

(₹ in crore)

Financial year	Opening balance	Budget allocation	Release to BRRDA	Misc. receipts	Total funds (2+4+5)	Expenditure during the year	Closing balance
1	2	3	4	5	6	7	8
2011-12	151.52	469.93	469.93	13.56	635.01	482.41	152.60
2012-13	152.6	707.01	587.00	18.32	757.92	561.47	196.45
2013-14	196.45	260.35	260.34	17.33	474.12	244.45	229.67
2014-15	229.67	17.91	16.91	15.47	262.05	84.73	177.32
2015-16	177.32	60.00	61.00*	4.51	242.83	25.1	217.73
<b>Total</b>		<b>1,515.2</b>	<b>1,395.18</b>	<b>69.19</b>		<b>1,398.16</b>	

\* ₹One crore transferred from Programme fund to CNC fund

(Source: Information provided by BRRDA)

As provided in **Table no. - 2.3.1**, RWD spent ₹1,398.16 crore (87 per cent) against available funds of ₹1,615.89 crore<sup>31</sup> under the scheme. Further, GoB decided not to take any new proposal under MMGSY since 2012-13 as connectivity target under PMGSY was lowered up to 500 and above population. As a result, the budget allocation as well as funds released to BRRDA came down to 13 per cent in 2015-16 when compared with that of 2011-12.

#### 2.3.8.1 Utilisation Certificates were not submitted

Rule 342 of the Bihar Financial Rules stipulate that Utilisation Certificates in respect of GIA should be submitted within a year from the date of grant sanctioning letter.

Scrutiny of records disclosed that GoB had provided ₹1,312.27 crore during 2011-14 as GIA to BRRDA for implementation of scheme. However, BRRDA had submitted Utilisation Certificates for ₹1,133.52 crore only (86 per cent) till March 2016 leaving a balance amount of ₹178.76 crore (**Appendix-2.3.5**). It was further observed that there was delay ranging from one to four years from the stipulated period of submission of Utilisation Certificates.

The Department stated that Utilisation Certificates were submitted as per final audit report up to 2014-15 and Utilisation Certificate for ₹78.98 crore against balance amount had been submitted in August 2016.

However, no reason was stated for the delay in submission of Utilisation Certificate.

#### 2.3.8.2 Funds for maintenance work not utilised

Maintenance funds to service the contract was to be made available by the State Government to BRRDA. **Table no. - 2.3.2** showed the availability, requirement of funds for maintenance of roads as per maintenance contract and funds utilised during the years 2011-16:

**BRRDA submitted Utilisation Certificates with delays ranging from one to four years.**

<sup>31</sup>

Available funds : ₹151.52 crore + ₹1395.18 crore + ₹69.19 crore

**Table no. - 2.3.2**  
**Availability and utilisation of funds for maintenance works**  
 (₹ in crore)

Financial Year	Number of completed roads at the beginning of year	Maintenance funds required during the year (as per maintenance contract)	Funds available with BRRDA during the year	Expenditure under contracts during the year
2011-12	1,016	6.97	14.58	0.57
2012-13	1,412	11.25	14.57	1.88
2013-14	1,774	15.99	18.19	3.61
2014-15	2,174	20.07	32.86	12.80
2015-16	2,113	22.89	80.36	8.56
<b>Total</b>	<b>8,489</b>	<b>77.17</b>	<b>160.56</b>	<b>27.42</b>

(Source: Information provided by BRRDA)

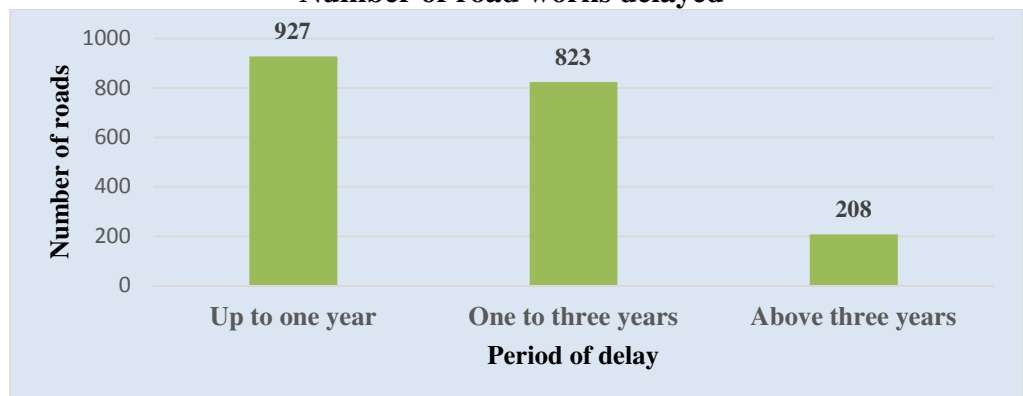
It was evident from the **Table no. - 2.3.2** that despite availability of funds, ₹27.42 crore *i.e.* 35.53 *per cent* funds could only be utilised for maintenance work against ₹77.17 crore required to be utilised as per maintenance contract during the year 2011-16.

Hence, funds for maintenance of roads was not utilised implying that the maintenance was not done under the scheme, though there was need for maintenance as found in test-checked districts and discussed in **paragraph 2.3.9.6**.

### 2.3.9 Implementation of Scheme

As MMGSY was launched by GoB for providing all-weather connectivity to small villages, the road works were required to be completed within the period specified in the clauses of contract. Scrutiny of records of BRRDA revealed that 2,877 works were taken up for execution in the State during 2006-12. Out of this, 2,776 road works (96 *per cent*) were completed (as on March 2016). Works relating to 20 roads were abandoned due to lack of Government land, flood damage at site *etc.* However, 81 roads were still incomplete (as on March 2016) due to land dispute, local hindrance, delay by contractors *etc.* It was also observed that the constructed road works were delayed from one to more than three years (up to eight years). The duration of delay in completion of roads are given in the **Chart no. - 2.3.2**:

**Chart no. - 2.3.2**  
**Number of road works delayed**



(Source: information provided by BRRDA)

Further, the status of connectivity provided to eligible villages in the State during 2011-16 is given in the **Table no. - 2.3.3:**

**Table no. - 2.3.3**  
**Connectivity to eligible villages**

Year	Number of eligible villages sanctioned but not connected/completed at the beginning of the year	New eligible villages sanctioned during the year	Total number of eligible villages to be connected (2+3)	Villages connected through MMGSY during the year (per cent)	Eligible villages not connected (4-5)
1	2	3	4	5	6
2011-12	2,800	545	3,345	791 (24)	2,554
2012-13	2,554	0	2,554	1,046 (41)	1,508
2013-14	1,508	0	1,508	948 (63)	560
2014-15	560	0	560	291 (52)	269
2015-16	269	0	269	86 (32)	183

(Source: Information provided by BRRDA)

It was evident that though new eligible villages were not sanctioned from the year 2012-13 onwards, connectivity could not be provided under MMGSY in previously selected 183 eligible villages as on March 2016. Out of this four villages were provided connectivity under PMGSY. But the remaining 179 villages could not be provided connectivity as the roadworks were either abandoned or remained incomplete as on March 2016. The delay in completion of projects defeated the primary objective of the scheme to provide connectivity to small villages at an early stage.

It was further noticed that out of 531 works, 507 (95 per cent) works were completed during 2011-16 in 10 test-checked districts. Out of this, 194 (38 per cent) road works were completed with delay up to one year, 179 (35 per cent) road works were completed with delays from one to three years and 32 (six per cent) works were completed with delays above three years and up to seven years.

The RWD stated (November 2016) that land encroachment, want of road materials and transportation problems caused unwanted delays in completion of projects in time.

The reply was contrary to the facts as the construction works were delayed from three to 62 months despite availability of land in 29 test-checked works. Further, it was observed during joint physical verification of four roads that they were completed in shorter length due to faulty preparation of detailed project report (DPR) as discussed in succeeding **paragraph 2.3.9.2.**

The irregularities in implementation of the scheme noticed in the records of BRRDA as well as test-checked works are discussed in following paragraphs:

#### **2.3.9.1 Inadequate preparatory work led to abandonment of works**

According to Clause 1.5 of the Rural Roads Manual, the alignment of rural roads should be decided only after conducting proper surveys and investigations following the existing cart tracks and other such alignments.



Necessary preparatory works were not ensured before commencement of road works and six works were abandoned as Government land was not available.

Scrutiny of records of BRRDA revealed that six road works<sup>32</sup> were abandoned as Government land was not available. As a result, these roads did not reach upto the targeted eight villages. The agreement value of these works was ₹4.61 crore while expenditure of ₹1.89 crore was incurred till abandonment of the works in March 2016.

In reply, the RWD stated (November 2016) that surveys and preparation for rural roads were based on existing alignments and during construction of roads, local residents stopped work claiming private land. It was also stated that Department had taken action against officers concerned for preparing DPRs without proper field verification.

### 2.3.9.2 DPRs for full length of roads were not prepared

As per guidelines of the scheme, the villages/tolas were to be treated as unconnected until all-weather road had reached upto villages or their community building. During joint physical verification in three test-checked districts, it was seen that four roads were not constructed up to the target villages even after incurring an expenditure of ₹3.89 crore as detailed in **Table no. - 2.3.4:**

**Table no. - 2.3.4**  
**Failure to prepare DPRs for full length of roads**

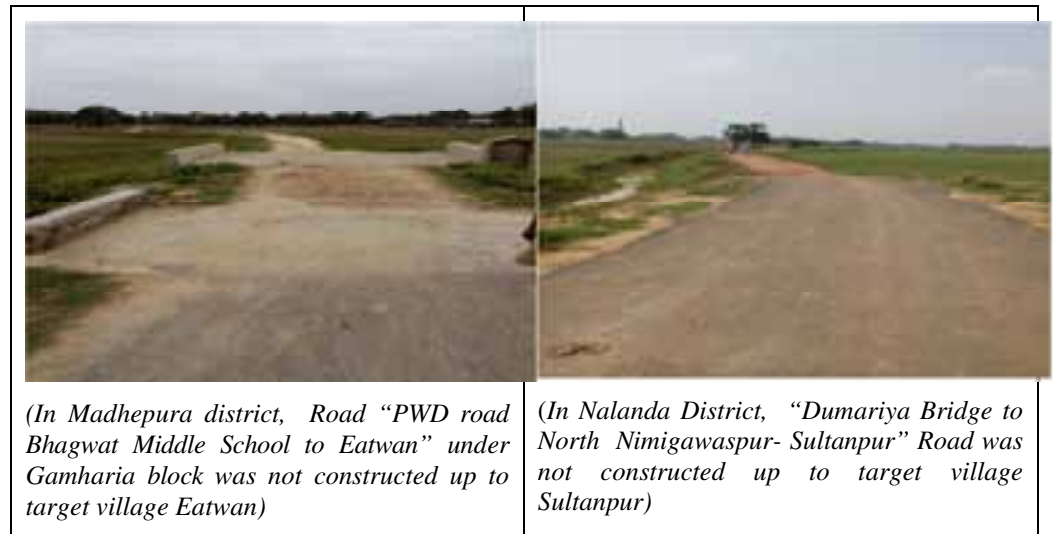
Sl No	District (Name of road)	Length as per DPR (in Km)	Length required (in Km)	Expenditure incurred as on March 2016 (₹ in crore)
1	Katihar (Bathaili to Khaira PMGSY road)	1.2	2.5	0.71
2	Madhepura (BM school to Etwā)	2	2.4	0.89
3	Madhepura (Brataini to Chakfajula)	4.15	4.7	1.23
4	Nalanda (Dumaria bridge to Nimigwaspur sultanpur)	2	4	1.06
<b>Total</b>				<b>3.89</b>

(Source: Records of test-checked divisions)

As shown in **Table no. - 2.3.4**, it was noticed that DPR for these roads were prepared by EEs of Works Divisions for shorter length than actual required.

<sup>32</sup> Begusarai:2, Bhagalpur:1, Gaya:1, Lakhisarai:1 and Sheikhpura:1

Photographs taken during joint physical verification of two roads are given below:



In reply, RWD stated (November 2016) that budget allocation under MMGSY was earmarked district-wise. Due to this limitation of funds, in some cases length of roads were reduced and target habitations could not be connected.

The reply was not in consonance with provisions of guidelines which envisaged that road works were to be taken up considering availability of funds for providing connectivity to unconnected villages.

### 2.3.9.3 Delay in execution of agreements

State Government order stipulated time limit of 15 days from the date of award of work for execution of agreement with contractor under MMGSY. Scrutiny of records revealed that agreement was executed with the contractor with delay of 27 to 160 days after award of work in 18 test-checked works. The details are given in the **Table no. - 2.3.5:**

**Table no. - 2.3.5**  
**Delay in execution of agreements**

Sl.No.	Name of districts	Number of roads	Range of delay (days)
1	Katihar	5	61 to 160
2	Nalanda	4	27 to 74
3	Siwan	2	54 to 63
4	Kaimur	2	79 to 94
5	Saran	4	29 to 56
6	Khagaria	1	64

*(Source: Records of test-checked divisions)*

During exit conference (December 2016), the Secretary, RWD accepted the audit observation and promised to minimise the delay.

### 2.3.9.4 Short realisation of compensation for delayed completion of works

As per clause 2 of condition of (F2) contract, the contractor shall be liable to pay daily compensation equivalent to half *percent* of the estimated cost of the work remaining incomplete. However, the amount of compensation to be paid under the provisions of the clause shall not exceed 10 *percent* of the estimated

cost of the work. Further, as per clause 2 of Standard Bidding Document, if the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contract or extended date of completion, he shall pay as agreed compensation, the amount calculated at the rate of two *per cent* per month of delay to be computed on per day basis, provided the total amount of compensation for delay to be paid under this condition shall not exceed 10 *per cent* of the tendered value of the work.

Scrutiny of records in selected districts revealed that there was delay in completion of 32 works in ten test-checked districts ranging from one month to over seven years and the Department realised short compensation of ₹4.09 crore against ₹5.50 crore specified in the conditions of their respective agreements (**Appendix-2.3.6**).

In reply, RWD stated that 10 *per cent* amount from bills of contractors had been deducted and instructions were issued to PIUs *i.e.* EEs for deduction of liquidated damages as per clause of agreement.

#### **2.3.9.5 Labour cess was not deducted from bills**

Workers Welfare Cess Act, 1996 stipulates that deduction of labour cess should be made at one *per cent* of the cost of construction by the executing authorities. Accordingly, executing authorities of all departments were required to deduct labour cess at prescribed rates from the bills of the contractor.

Scrutiny of records in test-checked districts revealed that the EEs of Works Divisions did not deduct labour cess amounting to ₹0.56 core in 47 works in nine test-checked districts and created a liability to that extent (**Appendix-2.3.7**).

In reply, the Department stated that provision for deduction of labour cess was not included in DPR. Therefore, it was not deducted from the bills of the contractor. Thus, the absence of a provision in the DPR as per the Act for deduction of labour cess resulted in creation of liability to Government.

#### **2.3.9.6 Maintenance not done in MMSY roads**

As per agreement, five year maintenance of roads constructed under the scheme was to be carried out after completion of original construction work by the same contractor who executed the original construction work.

It was noticed that out of 649 roads where maintenance work was due as per contract during 2011-16, maintenance work was not carried out in 508 roads (78 *per cent*) in test-checked districts despite availability of funds (**Appendix-2.3.8**). Thus, Works Divisions did not ensure maintenance of roads as per contract.

Joint physical verification of 30 roads in test-checked districts showed that the roads constructed and completed under the scheme were not properly maintained. Photographs taken during the joint physical verification corroborates the poor status of the roads.

	
<p>(In Madhepura district, road Puraini Dumrailchowk to Makdampur built in 2008-09 and required to be maintained upto 2013-14 was in damaged condition)</p>	<p>(Road from Bridge near Chandi in Gorari - Niranjanpur Road to Kirahin Rohtas district completed in November 2012 and required to be maintained upto November 2017 was in damaged condition)</p>
	
<p>(Road from Karakat Nahar Bridge to Sansar Dihari via Jahanpura Bridge in Rohtas district completed in November 2012 and required to be maintained upto November 2017 was in damaged condition)</p>	<p>(Road from Chanasi- Fatuha Road to Turkdihain Patna district completed in November 2014 and required to be maintained upto November 2019 was in damaged condition)</p>

The Department stated that it had taken serious initiatives against contractors and officers concerned and presently maintenance in 54 *per cent* roads had been done and remaining roads were under process of maintenance.

### **Recommendation**

***The Government should take effective steps for completion of incomplete road works and ensure maintenance of completed roads.***

#### **2.3.10 Quality control and supervision of works**

The guidelines of MMGSY lay special emphasis on ensuring good quality of roads for which a detailed procedure was prescribed. The responsibility of ensuring quality of works lies on the Works Divisions. All works were to be effectively supervised and payment for works to be made on the basis of quality control tests. A three-tier quality control monitoring mechanism was also prescribed in the guidelines as indicated below:

- **Tier-1** Quality tests were to be carried out by the Contractor/Works Division.

- **Tier-2** A panel of District Quality Monitors (DQM) was to be constituted at district level for inspection of works.
- **Tier-3** An independent quality monitoring to be done through State Quality Monitors (SQMs) comprising retired Engineer-in-Chief/Chief Engineer/Superintending Engineer/retired senior administrative officer of Deputy Secretary level and above.

The shortcomings noticed in quality control and monitoring of the constructed roads are discussed in the following paragraphs:

#### **2.3.10.1 Mandatory quality control tests not ensured**

As per guidelines of the scheme, roads constructed under MMGSY should meet the specifications of Indian Road Congress (IRC-SP 20-2002) and Rural Roads Manual (RRM). The RRM stipulates that the contractor shall set-up a field laboratory of minimum needed equipment (Camber board, Sieve Sets, Core Cutter with accessories, balance and oven to facilitate analysis of gradation, moisture and field density) at locations approved by the Engineer-in-charge and depute needed personnel in order to carry out all required tests at specified frequency.

The quality tests were to be conducted in their sequence for different layers of pavement (Earthwork level- Test EW 1 to 8, Sub-base level – Test SB 1 to 9, Base level – Test GB 1 to 6, Bituminous layer- Test BL 1 to 14, Rigid Pavement- Test RP 1 to 9) and data was to be recorded in Data Sheet for Quality Control Tests as prescribed in the RRM.

Necessary quality checks were not ensured during implementation of road works.

Audit examination revealed that Data Sheet for Quality Control Tests containing result of all mandatory tests in respect of test-checked works was not available with the Works Divisions. Quality test reports of district/regional level laboratories in respect of soil, stone aggregates, PCC cube *etc.* only were available which clearly indicated that all mandatory quality control tests for workmanship as prescribed in the RRM was not ensured for these road works by the EEs of Works Divisions.

In reply, the RWD stated (November 2016) that quality reports regarding soil, stone metal, bitumen, concrete strength of cube were obtained from district/regional laboratory and there was no compromise with the quality of work during construction of roads.

The reply was contrary to the facts as workmanship such as compaction, thickness of layers, camber, super elevation, geometrics *etc.* were not found up to the prescribed specifications in 26 roads out of Mobile Quality Monitoring Units (MQMU) inspections carried out in 54 test-checked roads, which substantiated that mandatory quality control tests were not done during construction.

#### **2.3.10.2 Inspections not held for quality monitoring by DQMs**

As per guidelines of the scheme, DQMs were to be empanelled in each districts for exercising quality control checks over the works executed under the scheme.

Audit noticed that inspection of DQMs for quality monitoring was not done in any of the executed road works in the test-checked districts.

In reply, the RWD accepted (November 2016) that DQMs could not be put in place as the selection and empanelment procedure could not be completed in time.

### 2.3.10.3 Independent quality monitoring inspections were not adequate

The quality monitoring for MMGSY is structured as an independent quality monitoring through SQMs.

Scrutiny of records revealed that during the period of audit MQMUs were engaged by the GoB as independent quality monitors in place of SQMs. Out of 1,792 works executed/paid during 2011-16 under the scheme in test-checked districts, MQMU inspections were carried out in 728 works only in the State, which clearly exhibit inadequacy of quality monitoring. As quality monitoring by DQMs was not done for the scheme, no independent quality control checks could be exercised in remaining 1,064 works. Further, the quality monitoring was done in 54 out of 161 test- checked works only.

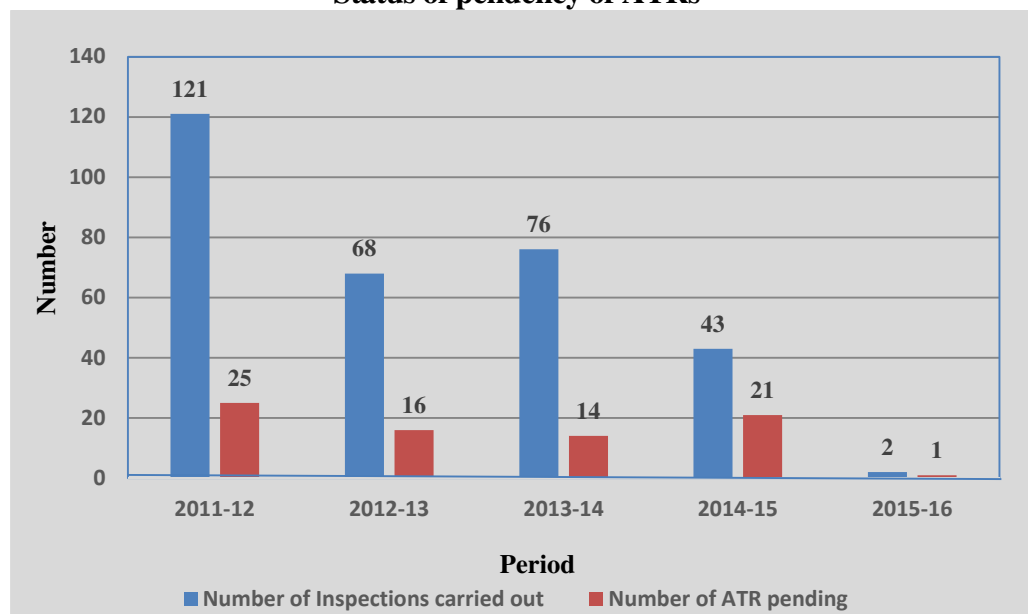
BRRDA stated that earlier 15 MQMUs were assigned for job of SQM as Quality Monitors. However, looking into the inadequacy in number of inspections now 45 more SQMs have been assigned the job to inspect the roads. The RWD stated that presently 64 SQMs had been empanelled for inspection of roads and the Department had established quality monitoring cell for independent quality monitoring inspections.

### 2.3.10.4 Action Taken Reports (ATRs) on MQMU inspections were pending

State Government order (2011) stipulated that the reports of quality control should be reviewed for ensuring good quality and workmanship.

The status of pendency of ATRs on MQMU inspections carried out during 2011-16 in selected districts is given in the **Chart no. - 2.3.3:**

**Chart no. - 2.3.3**  
**Status of pendency of ATRs**



(Source: Information given by BRRDA)

It was evident from the **Chart no. - 2.3.3** that the compliance of inspections carried out by MQMUs were not being ensured. It was also observed that out of 310 inspections carried out during 2011-16, ATRs were pending in 77 reports (25 per cent) as on March 2016.

The RWD replied (November 2016) that compliance of ATRs were regularly monitored at Headquarters level and directions had been given to all EEs concerned.

The reply was contrary to the facts as the period of pendency of ATRs was ranging from one to four years which was indicative of ineffective quality controls being exercised by GoB.

#### **2.3.10.5 Inadequate inspection by SE/CE/EIC**

The guidelines of scheme provides for regular inspection of works by Executive authorities like EEs/SE/CE/EIC.

During scrutiny of records in test-checked districts, no inspection by the executive authorities was carried out in 161 selected road works in test-checked districts except one road work namely 'Hasilpur Panchayat antargat Kasturichak Domba Pul Railway line tak' under Sonpur block of Saran district.

The RWD replied (November 2016) that sufficient number of SQMs had been empanelled and roads under construction and five year maintenance were inspected regularly now.

#### **Recommendation**

***The State Government should ensure strict compliance to quality control checks to be exercised at various stages by different authorities and take prompt action for rectification of defects pointed out during quality control check.***

#### **2.3.11 Beneficiary Survey**

During the course of audit of MMGSY, the audit team interacted with 279 villagers in four test-checked districts<sup>33</sup> (12 roads) to know about the status of work, connectivity to villages, maintenance and condition of roads and recorded their responses. Seven out of the 12 roads were constructed according to prescribed population limit while five of them were not included in CNCPL of concerned district (**Appendix-2.3.9**). During beneficiary survey the following facts were noticed:

- Fifty two (19 per cent) stated that their villages did not get all weather connectivity as roads did not reach their villages.
- Two hundred thirty six (86 per cent) stated that roads were not maintained and were in bad condition.
- Fifty five (20 per cent) stated that road works were incomplete in their villages.

#### **2.3.12 Conclusion**

The Mukhya Mantri Gram Sadak Yojna was implemented without reliable data of unconnected villages as the Comprehensive New Connectivity Priority List for

<sup>33</sup> Madhepura:3, Nalanda: 3, Patna: 3 and Siwan:3.

unconnected villages having population 500-999 (as per Census 2001) was neither prepared nor adhered to. As a result, 183 villages remained unconnected as on March 2016 despite an expenditure of ₹1,398.16 crore as the works remained incomplete or abandoned by the contractors. Under the scheme, connectivity was provided to ineligible villages also.

Quality controls specified in the guidelines were not ensured and 25 *per cent* of Action Taken Reports on Mobile Quality Monitoring Units were pending as on March 2016. Though maintenance works were due in respect of roads constructed upto 2014-15, the same was not carried out in 78 *per cent* of the roads. The intended target of providing connectivity to all unconnected villages having 500-999 population was not achieved despite the scheme had completed a decade in the State.