



**UNION TERRITORY OF JAMMU & KASHMIR**

# **EVALUATION REPORT ON**

**INSTALLATION OF HANDPUMPS (UNDER PHE SECTOR)  
(DISTRICT PULWAMA)**



**2014-15  
to  
2018-19**



**CONDUCTED BY  
DISTRICT STATISTICS AND EVALUATION OFFICE, PULWAMA**

**DIRECTORATE OF ECONOMICS & STATISTICS, J&K  
PLANNING DEVELOPMENT & MONITORING DEPARTMENT  
JAMMU & KASHMIR GOVERNMENT**



## PREFACE

Access to safe drinking water is one of the basic necessities of life. Ensuring the availability of safe drinking water during throughout the year is crucial. However, there are some areas which struggle to receive sufficient drinking water supply especially during dry, rainy and snow seasons from the conventional sources. To address this issue and provide safe and adequate drinking water supply to these areas, Handpumps under PHE sector are being installed to tap groundwater resources.

The State Level Evaluation Committee (SLEC) during its 9<sup>th</sup> meeting among other programmes assigned "**Installation of Handpumps under PHE sector**" of Jalshakti Department for evaluation.

The evaluation study of the programme was conducted at the District level in Pulwama and Udhampur districts. The impact of programme on the living conditions of the people due to implementation of programme was assessed under the instant study.

Apart from Director General, PM&CE Division, PD&MD, Regional Directors Evaluation & Statistics Jammu / Kashmir, the report of the study was also shared with HoD, Economics Department Kashmir University and HoD, Statistics Department Jammu University for technical inputs/suggestions in accordance with the terms and Conditions of the Technical Advisory Committee (TAC) on Evaluations.

Gratitude to all those who contributed in the conduct of evaluation study especially HoD, Economics Department, Kashmir University and HoD, Statistics, Jammu University for their valuable inputs/insights, which enhanced the quality and content of this report.

The report of the study stand approved by the Apex Level Evaluation Committee (SLEC) in its 10<sup>th</sup> meeting held on May 15-16<sup>th</sup>, 2024 for release. The Evaluation report is released with the hope that the findings of the study would go a long way in bringing about an improvement the implementation of the programme.

Jammu.

September, 2024.

## CONTENTS

| Chapter No | Description                         | Page  |
|------------|-------------------------------------|-------|
|            | Highlights of the Study             | 1-2   |
| I          | Introduction                        | 3-4   |
| II         | The Scheme & its Progress           | 5-9   |
| III        | Field Findings                      | 10-29 |
| IV         | Summary of Main Findings            | 30-31 |
| V          | Suggestions / Recommendations       | 32    |
|            | Response of implementing Department | 32-33 |
|            | Schedules of the study              | 34-39 |

## Highlights of the Study

- In Pulwama District, there are some areas which do not get the sufficient drinking water supply especially during dry, rainy and snow seasons.
- Non-availability of normal sources like springs, nallahs, streams, rivers etc, in these areas, makes them ineligible for establishment of water supply schemes in these areas.
- Therefore ground water source for supply of drinking water to these areas has been used by way of installing hand pumps.
- The installation of hand pumps in the district started from the year 2002-03.
- As per the information furnished by implementing agency, **256** handpumps have been installed in the District by PHE Ground Water Division Srinagar under NRDWSP/Capex budget schemes during the reference period 2014-15 to 2018-19.
- An amount of **Rs 379.09 lakhs**(97.20%) had been incurred against the allocation of **Rs 390.00 lakhs** by the executing agency for installation of **256** hand pumps in the District during the reference period.
- For field verification, a sample of **20%** hand pumps i.e, **51** hand pumps have been selected through proportionate Simple Random Sampling (SRS) from all the four constituencies of the district.
- During the course of field verification, all **51** sample hand pumps were found existing on ground.
- **46 (90%)** sample hand pumps were found functional and remaining **05 (10%)** were found totally non-functional.
- **03** hand pumps involving expenditure of **Rs 6.22 lacs** reported failed during the execution process (**02** during the year **2014-15** and **01** during **2016-17**, out of a total of **256** hand pumps) and thus could not be installed at all. Expenditure of **Rs 6.22 lacs** on such hand-pumps, thus, remained unfruitful.
- **46 (90%)** hand pumps were found drilled in the centrally located places of the selected villages and only **05 (10%)** pumps were not located in the centre of the locality.
- **36 (71%)** pumps discharge water satisfactorily in sufficient quantity, whereas **15 (29%)** of the selected hand pumps have not achieved the desired level of satisfaction.
- **80%** hand pumps were observed to have proper drainage of waste water and remaining **20%** have improper system of drainage for waste water.
- **92%** hand pumps had pucca platforms and **08%** pumps were having kacha platforms.
- No Village Water & Sanitation Committees (VWSC) has been reportedly existing in any village of the district.

- Although all **51 (100%)** sample hand pumps were found installed by the Ground Water Division of PHE department but were not maintained by them to satisfactory level. The installed hand pumps were reported maintained by villagers themselves as and when need arises.
- Almost all sample hand pumps installed at villages Reshipora, Beighpora & Herpora-Banderpora of Pulwama constituency discharge muddy/mineral salt water, hence not worth for human consumption. Besides one hand pump installed at Buchu Gori-Mohala Tral possess problem of similar kind. Public in these areas thus, suffer a lot on account of potable drinking water.
- Some instances have come into the notice where some influential persons have either installed the hand pumps near their residences or inside their residential complexes, which has defeated the very motive of the programme.
- No criteria with regard to population seems to have been maintained while installing hand pumps in particular areas, though there is a provision of maintaining the population criteria ratio per hand pump in the scheme guidelines. In the areas where there should have been more hand pumps (compared to population), less hand pumps have been drilled.
- As per approved sampling procedure, **255** beneficiary households @ **5** households per sample hand pump were covered for detailed interview. Comments of **51** knowledgeable persons (one per hand pump) were also recorded during the course of study.
- **71%** of beneficiaries reported satisfied with the functioning of hand pumps. Highest satisfaction level of **100%** has been achieved in Pampore constituency and lowest satisfaction level i.e. **44%** achieved in Pulwama constituency. In rest of the constituencies Rajpora and Tral it is **90%** and **62%** respectively.
- Only **57%** households reported good quality of water discharge from selected hand pumps. **33%** households reported the water as either of average quality or bad due to contamination of mineral salts, hence not worth for drinking. Moreover, **10 %** households reported that the installed pumps do not discharge water at all.
- The water of the installed hand pumps should be tested immediately before put to use for general public.
- While drilling hand pumps, expert opinion of Geology and Mining Department at the time of drilling the hand pumps should be considered prior to drilling of hand pump.
- PHE/Jal Shakti department should be made responsible for maintaining the surroundings of the hand pump to ensure portability of water.

## Chapter-I

### Introduction

Drinking water is one of the basic necessities of life. Availability of safe drinking water during all seasons of the year is equally important. Earnest efforts are being made at the national as well as state/UT level to reach the unreached areas by providing safe and portable drinking water, thereby, helping in curbing the water borne diseases and relieve women folk from the troublesome task of fetching water from long distances. Various centrally sponsored schemes and projects like ARWSP, NRDWSP, NDWM, and RGNDWM etc. have been launched to ensure better supply of safe drinking water to the ever increasing population.

The main source of drinking water in district Pulwama is springs, nallahs, streams, rivers and dug wells etc. However, in certain areas the water supply of all these sources does not suffice the requirement especially during dry, rainy and snowy seasons. Underground water is considered dependable source, which can be made available to the public at much lower cost without going through other treatments. Therefore, water for drinking purposes is also made available by exploring groundwater potential. Such type of exploration is being carried by drilling tube wells and hand pumps. Such wells and hand pumps are drilled by Direct Hole Drilling (DHT) /Overburden Drilling Eccentric Piling (ODEX) method types of exploration.

With a view to use ground water source for supply of drinking water to areas where other sources of drinking water are not available /feasible, "**Hand Pumps**" have been installed under NRDWSP/Capex budget scheme by the Government in District Pulwama among other Districts of Jammu & Kashmir.

The drilling of hand pumps have been commissioned in the District mainly under centrally sponsored scheme viz; National Rural Drinking Water Supply Programme (NRDWSP). The funding pattern under the scheme installation of Hand Pumps between the Center and State is **90:10**.

### Objectives of the scheme

The main objective of the "Installation of Hands Pumps" scheme is to provide safe and adequate drinking water supply to all uncovered, partially covered and quality affected habitations in the country. Thus, the scheme is meant for the habitations where potable drinking water is either not available or insufficient both quantitatively and qualitatively.

To know the impact of "Installation of Hand pumps" scheme in district Pulwama, the State Level Evaluation Committee (SLEC) in its 9<sup>th</sup> meeting decided to get the scheme evaluated and assigned the job to the District Statistics and Evaluation Officer Pulwama.

### Objective of the study

The objectives of the study were:

1. To ascertain the physical and financial achievement made under the scheme in district Pulwama.
2. To ascertain whether the hand pumps have been installed or not.

3. To ascertain the impact of hand pumps installed on the living conditions of the people in areas covered by such hand pumps;
4. To ascertain the extent to which hand pumps installed have remained successful in fulfilling the drinking water needs of people ;
5. To make an assessment of beneficiary opinion with regard to quality and quantity of water supplied along with their satisfaction level;
6. To assess the difficulties faced, if any, in the implementation of the scheme and suggest remedial measures for removing bottlenecks.

### **Reference period**

The reference period of the study was from 2014-15 to 2018-19.

### **Source of data**

Secondary data (Official data) was collected from PHE/ Ground Water Division Srinagar whereas, primary data was collected directly from the beneficiaries and non-beneficiaries through on spot field enquiry.

### **Sample selection procedure**

District Pulwama consists of four constituencies viz **Pulwama, Tral, Rajpora** and **Pampore**. The study was launched in all the four constituencies of the district.

During the reference period 2014-15 to 2018-19, a total of **256** hand pumps were reported installed in the district by the executing agency viz Ground Water Division, Srinagar.

A sample of **20%** hand pumps i.e **51** hand pumps have been selected through proportionate **Simple Random Sampling (SRS)** from all the four constituencies of the district. Moreover, **05** beneficiary households in respect of each sample hand-pump were covered for field enquiry thereby covering a total of **255** beneficiaries. Besides, one knowledgeable person from each sample hand pump was interviewed and their opinion recorded about the scheme.

### **Instruments of investigation**

For obtaining *Primary data/ Secondary data*, a set of following three schedules were devised:

- a) Schedule-I & II (For executing agency i.e PHE/ Ground Water Division)
- b) Schedule-III (For beneficiary house hold)
- c) Schedule-IV (For non-beneficiary/knowledgeable person)

### **Field work/Supervision and report writing**

The field work, scrutiny/ consolidation/ tabulation of schedules have been done by the staff of District Statistics and Evaluation Office Pulwama under the technical guidance/Supervision of DSEO Pulwama. Report writing of the study was done by the District Statistics and Evaluation Office (DSEO) Pulwama under the overall guidance of Regional Directorate (E&S), Kashmir Srinagar.

### **Analytical Tools and Techniques**

In order to make logical analysis of data, appropriate statistical and mathematical tools and techniques in the form of percentages, averages, ratios etc have been employed.

## Chapter - II

### The Scheme & its progress

Various Centrally and State Sponsored Schemes and projects like ARWSP, NRDWP etc have been launched by the government from time to time in order to ensure safe drinking water to the public. However, there are some areas which are either located at the tail end of the schemes constructed under these programmes and do not get adequate water supply or there is least feasibility to construct any water supply scheme at all. Thus, the public is subject to face hardships on account of safe drinking water. Therefore, in such areas the water for drinking purposes is made available by exploring ground water potential by installing Hand Pumps at suitable places.

District Pulwama consists of **327** villages and **57** wards having four constituencies viz Pulwama, Rajpora, Tral and Pampore. Rajpora constituency has maximum number of **108** villages and Pampore constituency has the lowest number of **53** villages in the district.

The installation of hand pumps started in the District from the year 2002-03. During the reference period 2014-15 to 2018-19, **256** hand pumps have been installed by the end of March-2019 in **114** villages/wards of the District at a cost of Rs **379.09** lacs, by the Ground Water Division Srinagar of the PHE department.

It was reported by the executing agency that there is no fixed unit cost on account of construction of Machine Drilled Hand Pump. It varies from place to place of the district due to variation in topography. It comparatively costs more at upper belts than the plain and lower region of the district. On an average, it costs Rs 1.50 lacs to 2.50 lacs per hand pump in the district.

The year wise financial position of the funds made available under NRDWSP/Capex budget schemes for installation of handpumps in the district during the reference period 2014-15 to 2018-19 is given in the following table.

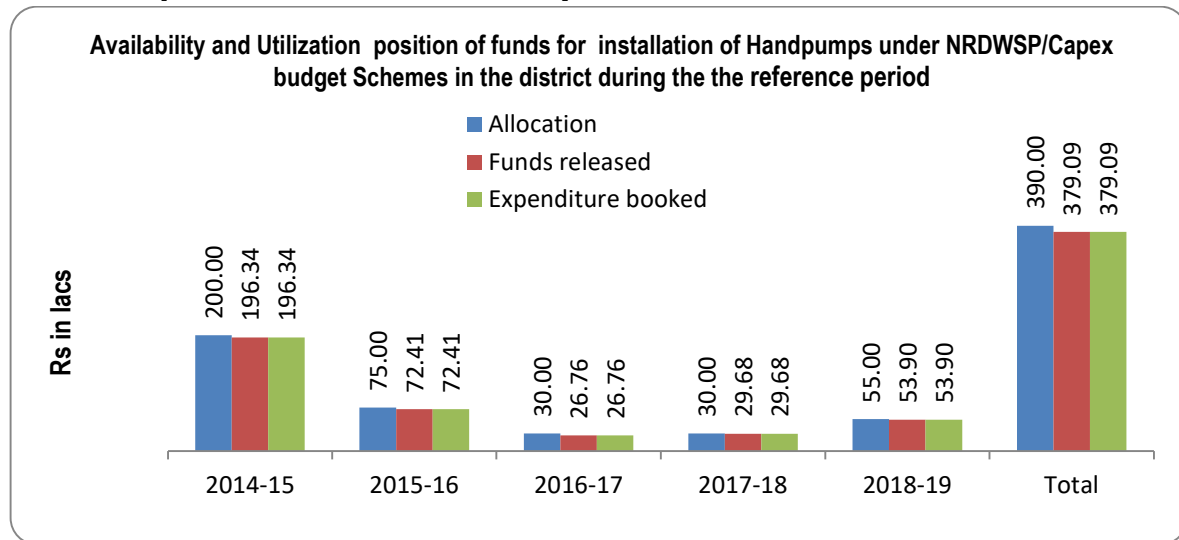
(Rs in lacs)

| <b>Table No: 2.0</b>                          |             |                   |                       |                    |               |                           |                            |
|---|-------------|-------------------|-----------------------|--------------------|---------------|---------------------------|----------------------------|
| <b>Year-wise Allocation &amp; Expenditure</b> |             |                   |                       |                    |               |                           |                            |
| <b>S No</b>                                   | <b>Year</b> | <b>Allocation</b> | <b>Funds released</b> |                    |               | <b>Expenditure booked</b> | <b>%age of expenditure</b> |
|   |             |                   | <b>Central Share</b>  | <b>State Share</b> | <b>Total</b>  |                           |                            |
| 1   | 2014-15     | 200.00            | 176.71                | 19.63              | 196.34        | 196.34                    | 100%                       |
| 2   | 2015-16     | 75.00             | 65.17                 | 7.24               | 72.41         | 72.41                     | 100%                       |
| 3   | 2016-17     | 30.00             | 24.08                 | 2.68               | 26.76         | 26.76                     | 100%                       |
| 4   | 2017-18     | 30.00             | 26.71                 | 2.97               | 29.68         | 29.68                     | 100%                       |
| 5   | 2018-19     | 55.00             | 48.51                 | 5.39               | 53.90         | 53.90                     | 100%                       |
| <b>Total</b>                                  |             | <b>390.00</b>     | <b>341.18</b>         | <b>37.91</b>       | <b>379.09</b> | <b>379.09</b>             | <b>100%</b>                |

The above table reveals that reasonably a good progress has been made by the implementing department in utilizing of funds made available under the scheme during the reference period. An amount of **Rs.379.09 lacs** against an allocation of **Rs.390.00 lacs** has been released to the implementing agency which has been fully utilized by the



department during the reference period. **The utilization of funds during the reference period has been satisfactory.**



*(Graph showing year-wise position of funds received and utilized)*

The executing agency reported that due to some technical defects, **03** hand pumps (02 during the year 2014-15 and 01 during 2016-17) failed at the time of execution process and thus could not be installed. Thus, the expenditure of **Rs 6.22 lacs** utilized on these hand pumps remained unfruitful.

### Physical Progress

The physical achievement made by the implementing department in installation of hand pumps in the district during 2014-15 to 2018-19 is given as under:

**Table No: 2.01**

| Year-wise/constituency-wise physical progress |         |            |   |           |           |           |            |                                 |
|---|---------|------------|---|-----------|-----------|-----------|------------|---------------------------------|
| S. No   | Year    | Target     | Constituency- wise achievement<br>(No. of hand pumps installed) |           |           |           |            | Remarks                         |
|   |         |            | Pulwama   | Rajpora   | Tral      | Pampore   | Total      |                                 |
| 1   | 2014-15 | 100        | 22  | 09        | 33        | 34        | 98         | 02 No. hand pumps failed        |
| 2   | 2015-16 | 63         | 37  | 11        | 10        | 05        | 63         | -                               |
| 3   | 2016-17 | 30         | -   | 05        | 10        | 14        | 29         | 01 No. hand pump failed         |
| 4   | 2017-18 | 25         | 10  | 07        | 06        | 02        | 25         | -                               |
| 5   | 2018-19 | 38         | 10  | 17        | 05        | 06        | 38         | -                               |
| <b>Total</b>                                  |         | <b>256</b> | <b>79</b>   | <b>49</b> | <b>64</b> | <b>61</b> | <b>253</b> | <b>03 No. hand pumps failed</b> |

The above table depicts, that the number of hand pumps installed during the reference period 2014-15 to 2018-19 in four constituencies of the district viz Pulwama, Rajpora, Tral and Pampore are 79, 49, 64 and 61 respectively. The implementing department has succeeded to achieve the target fully during all years of reference period. However, **03** hand pumps, (**02** during the year 2014-15 and **01** during 2016-17) have reportedly failed during the execution process and hence could not be installed. The details/location of these hand pumps is given as under:

1. Govt. Higher Secondary School Dadsara Tral (2014-15)

2. Nai Basti Midoora Tral NHO Ab Rashid (2014-15)
3. Chandgam near Momin Public School Rajpora (2016-17).

While interacting with the public/concerned school authorities, they reported that these hand pumps remained non-functional right from their execution process. The hand pumps discharged bad/muddy water during the execution process and the installing agency reported to the public that these hand pumps failed due to some technical defects and hence stopped the further process.

**[Photographs of above 03 failed Hand pumps]**



***(Failed HP at GHSS Dadsara)***



***(Failed HP at Nai-Basti Midoora Tral)***



***(Failed HP at Chandgam near Momin Public School)***

### Coverage of the scheme

The constituency wise coverage of the scheme as per the claim of the implementing department during the reference period 2014-15 to 2018-19 is given as under:

| Table No: 2.02   |                          |  |   |           |           |           |           |                                |            |
|--|--------------------------|--|---|-----------|-----------|-----------|-----------|--------------------------------|------------|
| Year-wise/constituency-wise number of villages covered |                          |  |   |           |           |           |           |                                |            |
| S No   | Name of the constituency | Total number of villages in the constituency | Year wise number of villages/wards covered under the scheme |           |           |           |           | %age of villages/wards covered |            |
|  |                          |  | 2014-15   | 2015-16   | 2016-17   | 2017-18   | 2018-19   |                                | Total      |
| 01   | Pulwama                  | 86+13 (wards)                                | 10  | 04        | -         | 02        | 06        | 22                             | 22%        |
| 02   | Rajpora                  | 108  | 03  | 06        | 05        | 06        | 09        | 29                             | 27%        |
| 03   | Tral                     | 80+13 (wards)                                | 11  | 02        | 06        | 01        | 01        | 21                             | 23%        |
| 04   | Pampore                  | 53+31 (wards)                                | 20  | 08        | 06        | 05        | 03        | 42                             | 50%        |
| <b>Total</b>   |                          | <b>327+ 57 (wards)</b>                       | <b>44</b>   | <b>20</b> | <b>17</b> | <b>14</b> | <b>19</b> | <b>114</b>                     | <b>30%</b> |

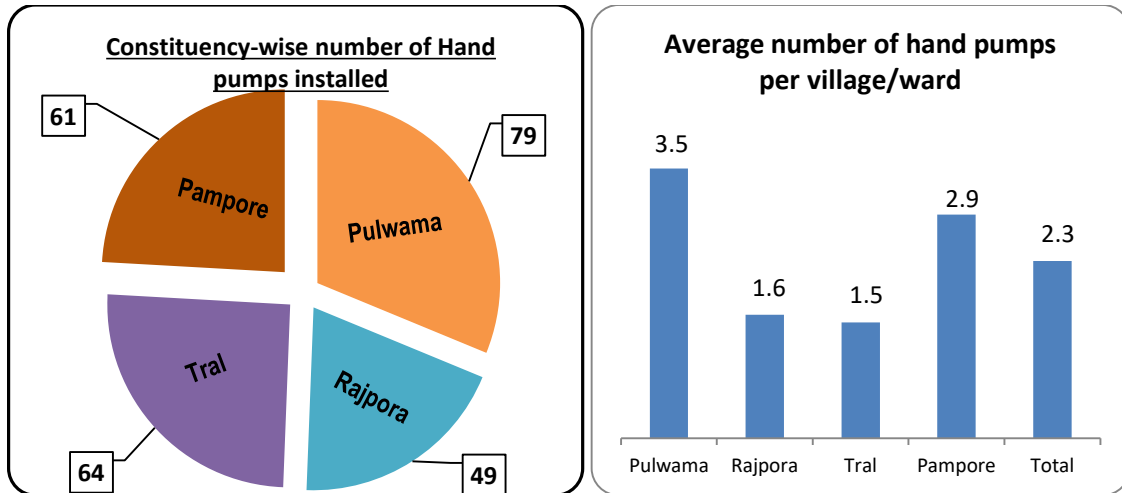
Analysis of the above table reveals that overall 114 (30%) villages/ wards of the district have been covered under the scheme as on ending March-2019 during the reference period. Out of total 114 villages/wards covered, 22 fall in Pulwama, 29 in Rajpora, 21 in Tral and 42 in Pampore constituency of the district. All constituencies except Pampore have been covered uniformly @ about 25%. However, 50% villages of Pampore constituency have been covered under the scheme during the reference period 2014-15 to 2018-19.

### Constituency-wise position of installation of Hand Pumps

The position of installation of hand pumps in the villages of four constituencies of the district as per the claim of implementing department is given as under:

| Table No: 2.03                                   |                          |   |   |                             |  |
|--|--------------------------|---|---|-----------------------------|--|
| Constituency-wise number of Hand pumps installed |                          |   |   |                             |  |
| S No   | Name of the constituency | No. of villages/wards in the constituency | During reference period 2014-15 to 2018-19        |                             |  |
|  |                          |   | No. of villages/wards covered in the constituency | No. of hand pumps installed | Average No. of hand pumps per village/ward |
| 1  | Pulwama                  | 86+13 (wards)                             | 22  | 79                          | 3.5  |
| 2  | Rajpora                  | 108                                       | 29  | 49                          | 1.6  |
| 3  | Tral                     | 80+13 (wards)                             | 42  | 64                          | 1.5  |
| 4  | Pampore                  | 53+31 (wards)                             | 21  | 61                          | 2.9  |
| <b>Total</b>                                     |                          | <b>327+57 (wards)</b>                     | <b>114</b>  | <b>253</b>                  | <b>2.3</b>                                 |

As is observed from the above table, on an average 02 hand pumps per village have been claimed to be installed by the implementing agency. Out of a total of 327 villages and 57 wards, the implementing agency has installed 253 hand pumps in 114 villages/wards of the district.



*(Graph showing Constituency wise number of Hand-pumps installed)*

How far 02 hand pumps per village is commensurate with the population/house hold strength of the villages has been dealt in detail in the next chapter- III titled "Field Findings" under the heading- 05 "Households and Population per hand Pump".

## Chapter - III

### Field Findings

The scheme “**Installation of hand Pumps**” has been launched in district Pulwama during the year 2002-03. The executing agency viz Ground Water Division Srinagar claimed to have installed **253** hand pumps in **114** villages/wards of the district during the reference period 2014-15 to 2018-19. Thus, with a view to assess the impact caused by the implementation of the scheme on the living condition of the people and the extent of functionality of the installed hand pumps, a field study was launched in all constituencies of the district. As per approved draft design, a sample of 51 (20%) hand pumps out of 256 Hand Pumps was selected for field enquiry in 4 constituencies of the district. Five beneficiaries/households and one knowledgeable person per hand pump were selected randomly for field enquiry as per sample design. In this way a sample of 255 beneficiary households and 51 knowledgeable persons got selected for detailed enquiry through the district. The ultimate constituency-wise sample drawn for field enquiry on the basis of which interferences and conclusions were drawn is reflected as under:

| <b>Table No: 3.0</b>                                    |                             |                             |                               |                         |   |  |                               |
|---|-----------------------------|-----------------------------|-------------------------------|-------------------------|---|--|-------------------------------|
| <b>(Constituency-wise sample selected and verified)</b> |                             |                             |                               |                         |   |  |                               |
| <b>S No</b>   | <b>Name of Constituency</b> | <b>Total number of</b>      |                               | <b>Sample number of</b> |   |  |                               |
|   |                             | <b>Hand Pumps installed</b> | <b>Villages/wards covered</b> | <b>Hand Pumps (20%)</b> | <b>Villages/wards where HPs are installed</b> | <b>Beneficiaries/ Households covered</b> | <b>Knowledge able persons</b> |
| 01  | Pulwama                     | 79                          | 22                            | 16                      | 09  | 80                                       | 16                            |
| 02  | Rajpora                     | 49                          | 29                            | 10                      | 05  | 50                                       | 10                            |
| 03  | Tral                        | 64                          | 42                            | 13                      | 08  | 65                                       | 13                            |
| 04  | Pampore                     | 61                          | 21                            | 12                      | 06  | 60                                       | 12                            |
| <b>Total</b>  |                             | <b>253</b>                  | <b>114</b>                    | <b>51</b>               | <b>28</b>                                     | <b>255</b>                               | <b>51</b>                     |

In the selected 51 Hand Pumps, all 255 beneficiaries/households were thoroughly interviewed by the evaluation teams regarding status of Hand Pumps, their functionality, quality of water discharged etc. The observations were recorded on spot for incorporation in this report.

### Existence of sample Hand Pumps

The constituency wise status of hand pumps installed in the selected villages as observed in the field is reflected in the following table:

| <b>Table No 3.01</b>                        |                             |                                    |                                  |                                     |
|---|-----------------------------|------------------------------------|----------------------------------|-------------------------------------|
| <b>Existence of sample Hand pumps (HPs)</b> |                             |                                    |                                  |                                     |
| <b>S No.</b>                                | <b>Name of Constituency</b> | <b>No. of sample HPs inspected</b> | <b>No. of HPs found existing</b> | <b>% age of existing Hand Pumps</b> |
| 01  | Pulwama                     | 16                                 | 16                               | 100%                                |
| 02  | Rajpora                     | 10                                 | 10                               | 100%                                |
| 03  | Tral                        | 13                                 | 13                               | 100%                                |
| 04  | Pampore                     | 12                                 | 12                               | 100%                                |
| <b>Total</b>                                |                             | <b>51</b>                          | <b>51</b>                        | <b>100%</b>                         |

As is clear from the above table, all 51 (100%) sample hand pumps, claimed to have been installed by the Ground Water Division Srinagar in the selected villages were found

existing on ground during the course of field inspection. The status of functionality of these hand pumps is mentioned in the subsequent paras of the report.

### Year of installation of sample Hand Pumps

The year-wise installation of 51 sample hand pumps in different constituencies of the district has been found as under:

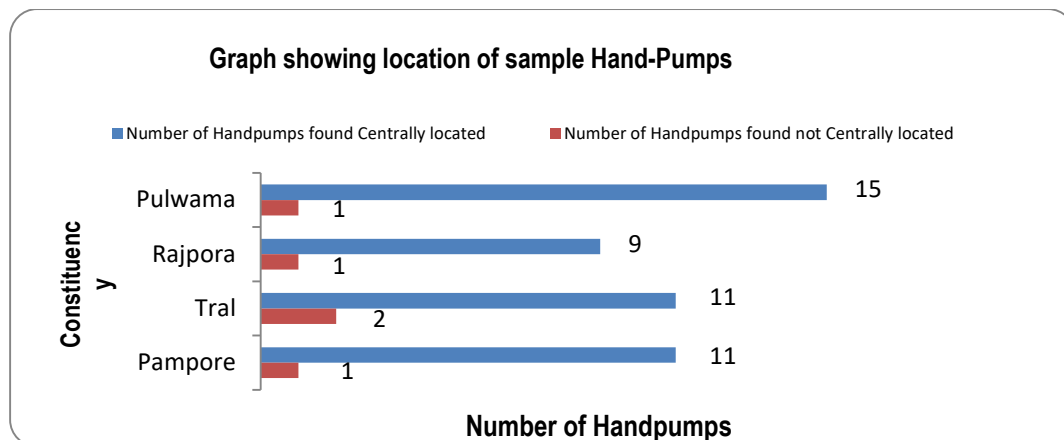
| Table No: 3.02<br>(Year wise installation of sample hand pumps) |                      |                                   |   |           |           |           |           |
|---|----------------------|-----------------------------------|---|-----------|-----------|-----------|-----------|
| S No  | Name of constituency | Total number of sample hand pumps | Year wise installation of sample hand pumps |           |           |           |           |
|   |                      |                                   | 2014-15                                     | 2015-16   | 2016-17   | 2017-18   | 2018-19   |
| 01  | Pulwama              | 16                                | 05  | 07        | 0         | 02        | 02        |
| 02  | Rajpora              | 10                                | 02  | 03        | 01        | 01        | 03        |
| 03  | Tral                 | 13                                | 07  | 02        | 02        | 01        | 01        |
| 04  | Pampore              | 12                                | 06  | 01        | 03        | 01        | 01        |
| <b>Total</b>  |                      | <b>51</b>                         | <b>20</b>                                   | <b>13</b> | <b>06</b> | <b>05</b> | <b>07</b> |

It is clear from the above table that out of 51 sample hand pumps, majority i.e. 20 hand pumps have been installed during the year 2014-15. 13 hand pumps installed during the year 2015-16, 06 during the year 2016-17, 05 during the year 2017-18 and 07 during the year 2018-19 in all the four constituencies of the district. During field inspection 46 hand pumps out of a sample of 51 hand pumps have been found functional and 05 non functional, the details of which are given in the subsequent paras of the report.

### Location of Hand Pumps

Location of the hand pumps installed in the sample villages of the selected constituencies as observed in the field is given in the table as under

| Table No. 3.03<br>(Location of hand pumps) |                      |                       |                             |   |   |
|--|----------------------|-----------------------|-----------------------------|---|---|
| S No                                       | Name of Constituency | No of sample villages | No. of Hand Pumps inspected | No of Handpumps found Centrally located | No of Handpumps found not Centrally located |
| 01   | Pulwama              | 09                    | 16                          | 15                                      | 01  |
| 02   | Rajpora              | 05                    | 10                          | 09                                      | 01  |
| 03   | Tral                 | 08                    | 13                          | 11                                      | 02  |
| 04   | Pampore              | 06                    | 12                          | 11                                      | 01  |
| <b>Total</b>                               |                      | <b>28</b>             | <b>51</b>                   | <b>46</b>                               | <b>05</b>                                   |



Majority of the hand-pumps i.e. 46 were found centrally located and only 05 were found not located in the centre of the locality. Among 05 hand-pumps which have not been sunk at the centrally located places, 01 each fall in Pulwama, Rajpora and Pampore constituency and 02 are in Tral constituency. These hand-pumps are not at all beneficial to the whole population living in that area. Such hand-pumps have been sunk /dugged in view of geographical location of the villages/sites and because of non-accessibility of the installation machinery. None of the 51 sample hand-pumps have been found either of individual type or in contravention of the guidelines of the scheme. The details of 05 '**not centrally located**' hand-pumps are as follows:

1. New Colony Malangpora NHO Fayaz Ahmad (Pulwama Constituency)
2. Ganai Mohalla Dangerpora Shadimarg near. Majsid Sharief (Rajpora Constituency)
3. Baigund near Dharamshala (Tral Constituency)
4. Hari Parigam NHO Gh. Mohi-u-din Bhat (Tral Constituency)
5. Ziyarat Sharief Mantaqi Awantipora (Pampore Constituency)



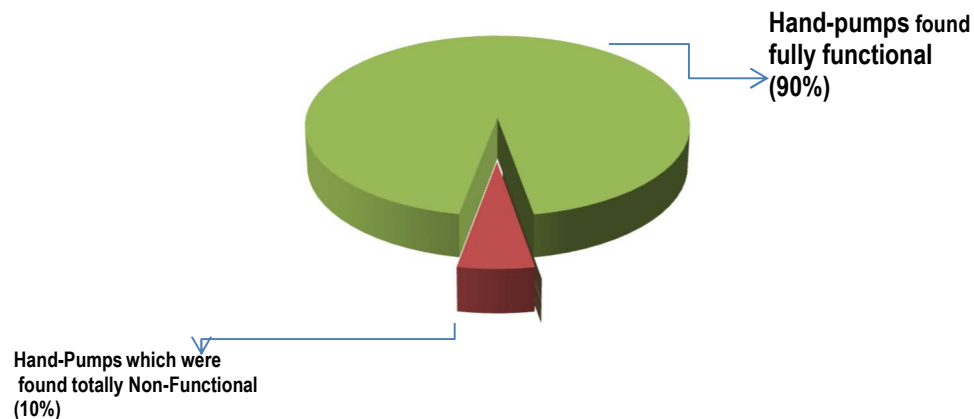
*(Non-centrally located HP at Hari Parigam Tral NHO Gh. Mohi-u-din Bhat)*

### **Functionality/ Status of existing sample Hand Pumps**

During the course of field study the working status of the existing sample hand pumps were also examined and their on-spot status has been summarized constituency-wise as under:

| <b>S No</b>  | <b>Name of Constituency</b> | <b>Number of Hand Pumps inspected</b> | <b>Number of Hand Pumps found fully functional</b> | <b>Number of Hand Pumps found partly functional/partly Non functional</b> | <b>Number of Hand Pumps found totally Non functional</b> |
|--------------|-----------------------------|---------------------------------------|--|---|--|
| 01           | Pulwama                     | 16                                    | 15   | 0   | 01   |
| 02           | Rajpora                     | 10                                    | 09   | 0   | 01   |
| 03           | Tral                        | 13                                    | 10   | 0   | 03   |
| 04           | Pampore                     | 12                                    | 12   | 0   | 0  |
| <b>Total</b> |                             | <b>51</b>                             | <b>46</b>  | <b>0</b>  | <b>05</b>  |

Majority of the Hand Pumps i.e. 46 out of a total sample of 51 Hand Pumps were found fully functional during the course of verification where as 05 Hand Pumps were observed totally non-functional as on date of survey. No Hand Pump has been found partially functional or partially non-functional.



The constituency-wise details of completely non-functional Hand Pumps are given here under:

1. Karimabad near Markazi Jamia Masjid (Rajpora Constituency)
2. Baigund near Daramshala (Tral Constituency)
3. New Colony Malangpora (Pulwama Constituency)
4. New Colony Midoora NHO Tahira Bano (Tral Constituency)
5. Khankah Midoora Near Ziyarat Sharief (Tral Constituency)

The non-functionality of Hand Pumps mentioned from S No. 01 to 03 above was reportedly due to technical reasons as these Hand-pumps have never functioned satisfactorily right from the day of installation. The reasons for their non-functionality as cited by the beneficiaries were attributed either to non consultation of Geology and Mining Experts at the time of digging the hand pump or these hand-pumps have not been dug at appropriate sites or not dugged up to the required depth. However, while ascertaining the reasons for non-consultation of Geology & Mining department at the time of digging the hand pumps, the executing agency reported that it is not mandatory to obtain such opinion/advice of such department during the execution process, as it is not envisaged in the scheme guidelines. There is need to have such reasons ascertained by the executing agency behind the non-functionality of these hand pumps.

The reasons for non-functionality of other two hand pumps mentioned at S. No. 04 and 05 above were attributed to the problem with accessories which need immediate repairs in order to make them functional. The executing agency may as such take immediate steps to make these hand pumps functional by replacing/repairing existing accessories.



[Photographs of some Non-functional Hand pumps]



(HP at Karimabad near Markazi Jamia Masjid)



(HP at Baigung near Daramshala)



(HP at New Colony Midoora NHO Tahira Bano) HP at Khankah Midoora near Zirayat Sharief).



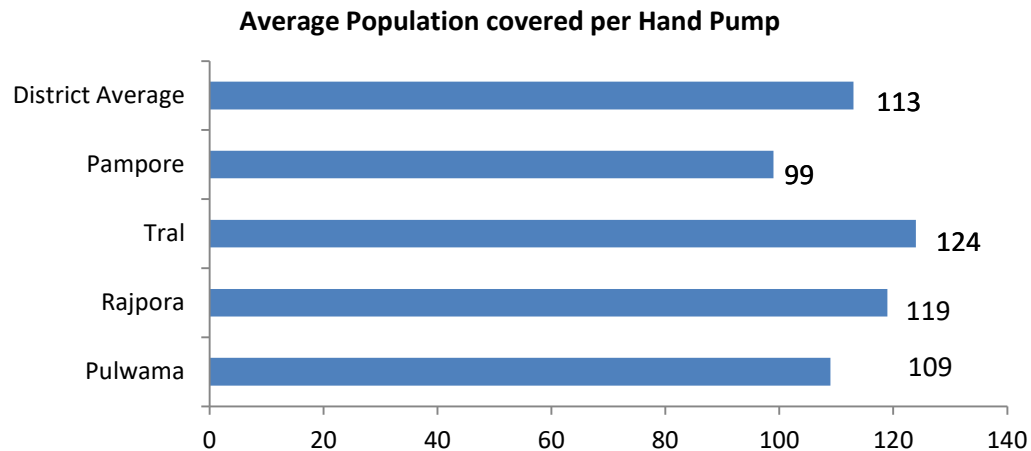
### House Holds and Population per Hand pumps

The main objective of installing Hand Pumps at appropriate sites is to provide drinking water to the households / Population where tap water and other sources are not available. During the course of verification, it has been observed that 51 sample Hand Pumps have been allotted to 887 households comprising of 5743 souls. The household and population ratio per hand pump observed in the sample Constituencies/villages is given in the following table:

| Table No. 3.05                                    |                      |                             |                             |                                    |                                  |                                  |
|---|----------------------|-----------------------------|-----------------------------|------------------------------------|----------------------------------|----------------------------------|
| (Household/population depending on per hand pump) |                      |                             |                             |                                    |                                  |                                  |
| S No  | Name of Constituency | No. of Hand Pumps inspected | Total House Holds benefited | Population benefited by Hand Pumps | Households covered per Hand Pump | Population covered per Hand Pump |
| 01  | Pulwama              | 16                          | 281                         | 1745                               | 18                               | 109                              |
| 02  | Rajpora              | 10                          | 165                         | 1192                               | 17                               | 119                              |
| 03  | Tral                 | 13                          | 243                         | 1618                               | 19                               | 124                              |
| 04  | Pampore              | 12                          | 198                         | 1188                               | 16                               | 99                               |
| <b>Total</b>                                      |                      | <b>51</b>                   | <b>887</b>                  | <b>5743</b>                        | <b>17</b>                        | <b>113</b>                       |

As is clear from the above table, a total of 887 households were found benefited by 51 hand pumps in all the four constituencies of the district. These households get drinking water from these hand pumps in addition to other sources of water. On an average 17

families are benefitted by each hand pump. A population of 5743 souls is covered by these 51 hand pumps, thereby indicating that 113 persons on an average are benefitted by one hand pump. Highest number of 19 households per hand pump with 124 persons per hand pump was recorded in Tral constituency, whereas lowest coverage has been observed in Pampore constituency where only 16 households are covered by each hand pumps covering only 99 persons per hand pumps.



*(Graph showing population covered per hand pump)*

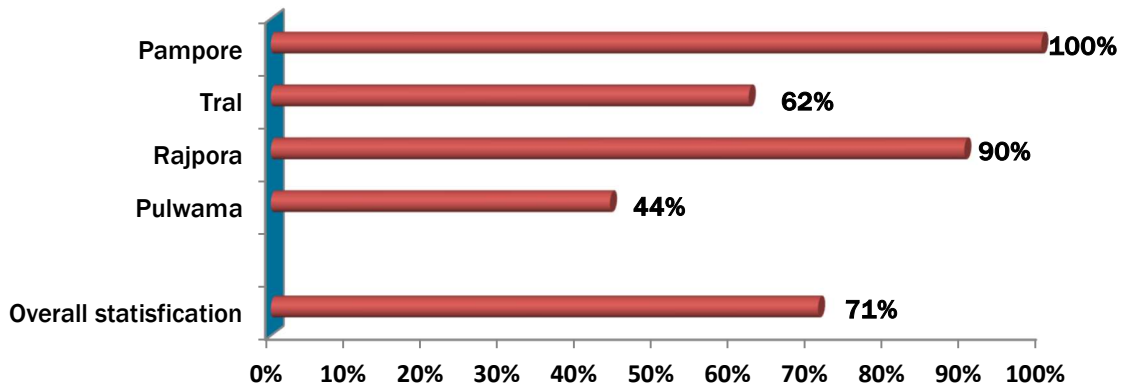
From the analysis of above table, it is clear that a suitable number of hand pumps have been installed in each constituency, so there is no need of further augmentation of hand pumps in these areas. The executing agency while installing the hand pumps has followed same criteria with regard to the coverage of population/ house hold in each constituency.

**Constituency-wise satisfaction level of beneficiaries in %age terms**

The overall satisfaction level of beneficiaries with the functioning of 51 Sample Hand pumps has been summarized in the table as under:

| <b>Table No: 3.06</b>                        |                          |                             |   |  |                             |
|--|--------------------------|-----------------------------|---|--|-----------------------------|
| <b>(Satisfaction level of beneficiaries)</b> |                          |                             |   |  |                             |
| S. No  | Name of the Constituency | No. of Hand Pumps Inspected | No. of Hand Pumps which   |  | Over-all satisfaction level |
|  |                          |                             | Fully satisfies need of beneficiaries/ Suffice the requirement of beneficiaries | Does not satisfy the need of the beneficiaries |                             |
| 01   | Pulwama                  | 16                          | 07  | 09   | 44%                         |
| 02   | Rajpora                  | 10                          | 09  | 1  | 90%                         |
| 03   | Tral                     | 13                          | 08  | 5  | 62%                         |
| 04   | Pampore                  | 12                          | 12  | 0  | 100%                        |
| <b>Total</b>                                 |                          | <b>51</b>                   | <b>36</b>   | <b>15</b>                                      | <b>71%</b>                  |

**Satisfaction level of sample beneficiaries  
Constituency-wise and at district level**



*(Graph showing satisfaction level of beneficiaries)*

The over-all satisfaction level with regard to the functioning of sample hand pumps in all constituencies works out to 71%. Highest satisfaction level of 100% has been achieved in Pampore constituency, and in respect of Pulwama Constituency, it has been observed as 44%. In rest of the constituencies viz Tral & Rajpora, the satisfaction level has been recorded as 62% and 90% respectively.

The lowest satisfaction level has been observed in three adjoining villages viz: Reshipora, Beighpora and Banderpora falling in Pulwama Constituency which needs to be looked into and reasons behind poor quality of water discharged from Hand Pumps need to be addressed on priority. The instant scheme does not fulfill the basic purpose in these villages, as the ground water quality is reportedly bad and is not safe for drinking purposes. The water of installed hand pumps reportedly contains mineral salts in abundant quantity which is harmful to human health, therefore, not safe for drinking. It seems that the executing agency has not conducted the water tests before the installation of hand pumps especially in Pulwama Constituency where quality of water has been reported poor.

**Alternate source of drinking water where hand pumps do not fulfill the requirement of beneficiaries**

As mentioned in the aforesaid para, there are 15 hand pumps out of 51 sample hand pumps which do not suffice the requirement of beneficiaries. The beneficiaries dependent on such hand pumps reported that the water of hand pumps is either muddy or is contaminated with mineral salts, which is hazardous to human life. As such, they full-fill their needs from other nearby alternate sources such as springs, nallahs or rivers etc. The constituency wise details of these hand pumps and alternate source of drinking water of beneficiaries has been reported as under:

| Table No: 3.07                       |                      |                             |  |   |   |           |           |                       |
|--------------------------------------|----------------------|-----------------------------|--|---|---|-----------|-----------|-----------------------|
| (Alternate source of drinking water) |                      |                             |  |   |   |           |           |                       |
| S. No.                               | Name of constituency | Number of sample hand pumps | Number of hand pumps not fulfilling the requirement of beneficiaries | Number of sample beneficiaries reporting that the hand pumps does not suffice/ fulfill their requirements | Alternate source of water where sample beneficiaries fulfill their water requirements |           |           |                       |
|                                      |                      |                             |  |   | Spring  | Nallah    | River     | Others (Tap/ tankers) |
| 01                                   | Pulwama              | 16                          | 09   | 45  | 10  | 00        | 10        | 25                    |
| 02                                   | Rajpora              | 10                          | 01   | 05  | 00  | 00        | 00        | 05                    |
| 03                                   | Tral                 | 13                          | 05   | 25  | 05  | 10        | 00        | 10                    |
| 04                                   | Pampore              | 12                          | 00   | 00  | 00  | 00        | 00        | 00                    |
| <b>Total</b>                         |                      | <b>51</b>                   | <b>15</b>  | <b>75</b>   | <b>15</b>   | <b>10</b> | <b>10</b> | <b>40</b>             |

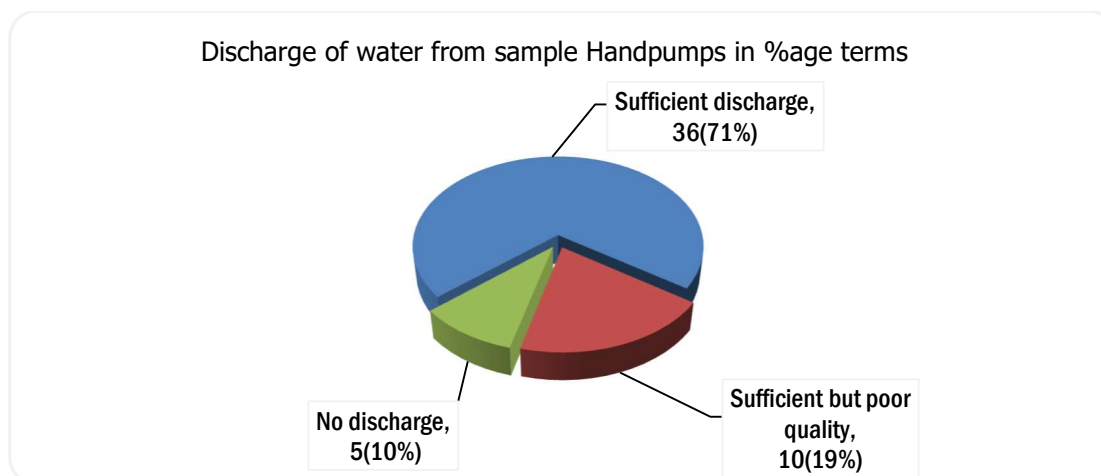
As is clear from the above table, out of 75 sample beneficiaries who reported that the installed hand pumps do not suffice their water requirement, 15 fulfill their water requirement through spring, 10 each through Nallah and River sources. However, a majority of 40 households fulfill their water requirement through other sources especially from tap/mobile PHE tankers. The concerned department should take necessary steps to overcome the problem of inhabitants residing in these areas. The details of these 15 hand pumps are given under sub head 09 of this chapter.

### Discharge of water from hand pumps

The constituency wise satisfaction level of people with regard to discharge of water from hand pumps was observed in the field as under:

| Table No. 3.08                       |                      |                               |                             |   |                                |                              |
|--------------------------------------|----------------------|-------------------------------|-----------------------------|---|--------------------------------|------------------------------|
| (Discharge of water from hand pumps) |                      |                               |                             |   |                                |                              |
| S No                                 | Name of Constituency | Total number of HPs installed | No. of Hand Pumps inspected | No of hand pumps having                     |                                |                              |
|                                      |                      |                               |                             | Sufficient/ satisfactory discharge of water | Sufficient but of poor quality | No discharge of water at all |
| 01                                   | Pulwama              | 79                            | 16                          | 06  | 09                             | 1                            |
| 02                                   | Rajpora              | 49                            | 10                          | 9   | 0                              | 1                            |
| 03                                   | Tral                 | 64                            | 13                          | 9   | 1                              | 3                            |
| 04                                   | Pampore              | 61                            | 12                          | 12  | 0                              | 0                            |
| <b>Total</b>                         |                      | <b>253</b>                    | <b>51</b>                   | <b>36</b>                                   | <b>10</b>                      | <b>5</b>                     |

From the information collected on spot from the beneficiaries of selected 51 hand pumps given in the above table, it has been observed that 36 hand pumps discharge water satisfactorily in sufficient quantity, whereas 10 hand pumps discharge water sufficiently but of poor quality, which is not fit for drinking purposes. The water of these 10 hand pumps is either contaminated with germs or contains mineral salts which are hazardous to human health. Out of these 10 hand pumps, 09 fall in the villages Reshipora, Banderpora and Beighpora of Pulwama Constituency, whereas 01 fall in village Buchoo (Gori mohalla NHO Ab Rashid) of Tral Constituency.



*(Graph showing discharge of water from sample hand pumps)*

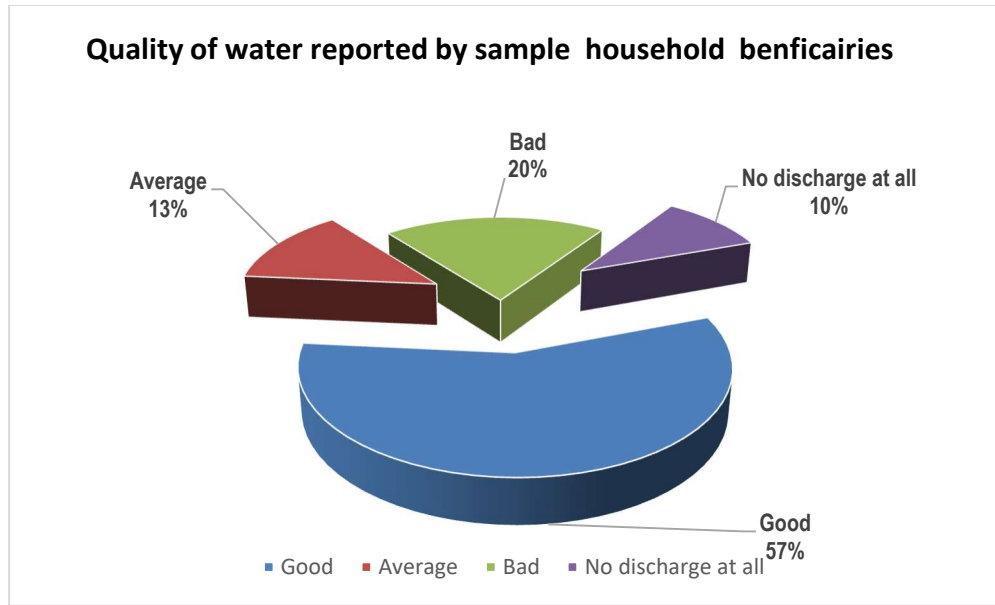
It was given to understand that out a total of 79 hand pumps installed in Pulwama constituency during the reference period 2014-15 to 2018-19, a major chunk of hand pumps (about 60) were dug/sunk in 03 villages alone viz. Banderpora, Reshipora and Beighpora, where the water of all hand pumps has been reported of poor quality containing mineral salts which is not fit for drinking purposes. The people residing in these areas complained of poor quality of water due to contamination of mineral salts and reported that no water testing has been conducted by the PHE department before made available to the public. The residents of these areas demanded immediate action by the government to overcome their problem, as they are subjected to face hardships on account of portable drinking water. In addition, 05 hand pumps out of a sample of 51 are completely non-functional and thus do not discharges water at all. Their non-functionality has been either attributed to non-functionality of machinery or depression of water level in the wells.

The inhabitants residing near these hand pumps demanded immediate restoration of the hand pumps in order to overcome their problem on account of non- availability of portable drinking water especially during rainy and winter seasons. The executing agency may as such take necessary steps immediately to make them functional.

### **Quality of water discharged from Hand pump**

The quality of the water discharged by hand pumps in the sample village was reported by the beneficiaries as under:

| <b>Table No: 3.09</b>                                       |                      |                        |   |   |           |           |                     |
|---|----------------------|------------------------|---|---|-----------|-----------|---------------------|
| <b>(Quality of water discharged from sample hand pumps)</b> |                      |                        |   |   |           |           |                     |
| S No  | Name of constituency | Number of HP inspected | Number of sample beneficiaries contacted @ 5 per HP | Number of sample beneficiaries reporting about quality of water discharged from Hand pump |           |           |                     |
|   |                      |                        |   | Good  | Average   | Bad       | No discharge at all |
| 01  | Pulwama              | 16                     | 80  | 25  | 05        | 45        | 05                  |
| 02  | Rajpora              | 10                     | 50  | 35  | 10        | 00        | 05                  |
| 03  | Tral                 | 13                     | 65  | 35  | 10        | 05        | 15                  |
| 04  | Pampore              | 12                     | 60  | 50  | 10        | 00        | 00                  |
| <b>Total</b>  |                      | <b>51</b>              | <b>255</b>  | <b>145</b>  | <b>35</b> | <b>50</b> | <b>25</b>           |
| <b>% age of households reporting quality of water</b>       |                      |                        |   | 57%   | 13%       | 20%       | 10%                 |



While inspecting the hand pumps in the sample villages, it was observed that out of 255 selected households, 145 (57%) reported that the quality of water discharged from the hand pumps is good. while as 35 households (13%) have reported that the quality of water discharged from the hand pump is not good. 50 (20%) households have opined that the water discharged from the hand pumps located in their areas of habitation is bad. These 20% households reported that the water discharged from the hand pumps is not worth for drinking. It contains bad smell, mineral salts and often discharges muddy particles which are injurious to health. Thus, they do not use water of these hand pumps except on seldom occasion, when all other sources of water become defunct due to unforeseen conditions. Further, 25 (10%) beneficiaries reported that the hand pumps located in their areas do not function at all.

The details of hand pumps which discharge either bad water or do not function at all are as follows:

***a) Hand pumps discharging bad water/Contaminated water:***

- i) Reshipora Awantipora near Jamia Masjid (Pulwama Constituency)
- ii) Reshipora Awantipora NHO Mohd Rajab (Pulwama Constituency)
- iii) Herpora Banderpora NHO Nazir Band (Pulwama Constituency)
- iv) Herpora Banderpora NHO Ab Hamid sheikh (Pulwama Constituency)
- v) Beighpora Tengpora NHO Gh Qadir Wani (Pulwama Constituency)
- vi) Beighpora Naik Mohalla Near Graveyard (Pulwama Constituency)
- vii) Beighpora near Jamia Masjid (Pulwama Constituency)
- viii) Beighpora NHO Tariq Ahmad Naik (Pulwama Constituency)
- ix) Beighpora NHO Muzaffar lone/ Majid (Pulwama Constituency)
- x) Buchu Gori- Mohala NHO Ab Rashid (Tral Constituency)

[Photographs of some Hand Pumps discharging bad/contaminated water]



*(HP at Buchu Gori Mohala)*



*(HP at Beighpora NHO Tariq Ahmad)*



*HP at Beighpora Tengpora)*



*(HP at Beighpora Naik Mohalla)*



*(HP at Beighpora Jamia Masjid)*



*(HP at Banderpora)*



*(HP at Reshipora)*



*(HP at Reshipora Awantipora)*

**b) Non functional Hand Pumps:**

- i) Karimabad near Markazi Jamia Masjid (Rajpora Constituency)
- ii) New Colony Malangpora (Pulwama Constituency)
- iii) New Colony Midoora NHO Tahira Bano (Tral Constituency)
- iv) Baigund near Daramshala (Tral Constituency)
- v) Khankah Midoora Near Ziyarat Sharief (Tral Constituency)

The department must take remedial measures to make the water of these hand pumps worth for drinking and make the non functional tube wells functional in order to overcome the problems of inhabitants residing in these areas as they face hardships on account of portable drinking water. They reported that there are no other feasible sources of drinking water in their areas.

[Photographs of some Non-functional Hand pumps]



(HP at Karimabad near Markazi Jamia Masjid)



(HP at Baigund near Daramshala)



(HP at New Colony Midoora NHO Tahira Bano)



(HP at Khankah Midoora near Ziyarat Sharief)



## **10. Distance of Beneficiary Households from Hand Pumps:**

The distance of beneficiaries from 51 sample Hand Pumps were reported in the field as under:

| <b>S. No</b> | <b>Name of Constituency</b> | <b>No.of sample Hand Pumps</b> | <b>Distance at which the sample beneficiaries are living away from the Hand pumps</b> |                     |                       |                       | <b>Total</b> |
|--------------|-----------------------------|--------------------------------|---|---------------------|-----------------------|-----------------------|--------------|
|              |                             |                                | <b>0 to 0.5 kms</b>   | <b>0.5 to 1 kms</b> | <b>1 km to 1.5 km</b> | <b>1.5 km to 2 km</b> |              |
| <b>01</b>    | Pulwama                     | 16                             | 70  | 10                  | 0                     | 0                     | 80           |
| <b>02</b>    | Rajpora                     | 10                             | 45  | 05                  | 0                     | 0                     | 50           |
| <b>03</b>    | Tral                        | 13                             | 60  | 05                  | 0                     | 0                     | 65           |
| <b>04</b>    | Pampore                     | 12                             | 55  | 05                  | 0                     | 0                     | 60           |
| <b>Total</b> |                             | <b>51</b>                      | <b>230</b>  | <b>25</b>           | <b>0</b>              | <b>0</b>              | <b>255</b>   |
| <b>%age</b>  |                             |                                | <b>90%</b>  | <b>10%</b>          | <b>0%</b>             | <b>0%</b>             | <b>-</b>     |

Out of 255 sample selected beneficiary households, 230 (90%) were found living within a range of 0 to 0.5 kms from the location of hand pump, whereas 25 (10%) households live within a range of 0.5 km to 1.0 km. They fetch water from these Hand Pump particularly during rainy/dry days, when water from all other sources become either filthy unpurified or completely not available. This facility is required to be extended to them by digging more Hand Pumps near their vicinity area of habitation. No sample beneficiary has been found beyond 1 km away from the installed hand pump.

## **11. Existence of Village Water and Sanitation Committee (VWSC):**

The village water and Sanitation committee (VWSC) is a sub-committee of Gram Panchayat which is responsible for designing, implementation and managing rural water supply and sanitation infrastructure in the concerned Gram Panchayat. VWSC is a group of people residing in the same village headed by the Sarpanch/ senior village leader as the Gram Sabha may decide. It is an important committee in the community to play a pivotal role in planning, implementation, management, operation and maintenance of in-village water supply infrastructure.

As reported by all 255 sample beneficiaries located in all the four constituencies of the district, there are no Village Water and Sanitation committees (VWSC) in any village. The villagers themselves maintain the hand pumps through mohalla committees by contributing small amount of money as and when required for maintenance/repairs of hand pumps. There is no contribution of PHE department in maintaining the hand pumps. The existence of village water and sanitation committee in the villages of all the four constituencies of the district is depicted in the following table.

| <b>Table No: 3.11</b>                         |                             |  |   |  |                              |
|---|-----------------------------|--|---|--|------------------------------|
| <b>(Existence of VWSE in sample villages)</b> |                             |  |   |  |                              |
| <b>S No</b>                                   | <b>Name of constituency</b> | <b>Number of sample hand pumps inspected</b> | <b>Number of sample beneficiaries contacted</b> | <b>Number of sample beneficiaries who reported the</b> |                              |
|   |                             |  |   | <b>existence of VWSC</b>                               | <b>non existence of VWSC</b> |
| 01  | Pulwama                     | 16   | 80  | 00   | 80                           |
| 02  | Rajpora                     | 10   | 50  | 00   | 50                           |
| 03  | Tral                        | 13   | 65  | 00   | 65                           |
| 05  | Pampore                     | 12   | 60  | 00   | 60                           |
| <b>Total</b>                                  |                             | <b>51</b>                                    | <b>255</b>                                      | <b>00</b>  | <b>255</b>                   |

## **12. Maintenance of selected Hand pumps**

Hand pumps installed in the sample constituencies were reportedly maintained as under:

| <b>Table No: 3.12</b>                     |                             |                                       |   |  |
|---|-----------------------------|---------------------------------------|---|--|
| <b>(Maintenance of sample hand pumps)</b> |                             |                                       |   |  |
| <b>S. No</b>                              | <b>Name of Constituency</b> | <b>Number of sample HPs installed</b> | <b>Number of HPs maintained by the deptt. (PHE)</b> | <b>Number of Hand Pumps maintained by others</b> |
| 01  | Pulwama                     | 16                                    | -   | 16   |
| 02  | Rajpora                     | 10                                    | -   | 10   |
| 03  | Tral                        | 13                                    | -   | 13   |
| 04  | Pampore                     | 12                                    | -   | 12   |
| <b>Total</b>                              |                             | <b>51</b>                             | <b>-</b>  | <b>51</b>  |

Maintenance of the installed hand pumps is an important measure. After creating the asset, it is necessary that a substantial amount may be kept by the installing agency for its maintenance so that benefits of the asset so created percolates to the public with proper essence of the scheme.

From the information collected from 51 sample hand pumps on the subject, no hand pump is being maintained by the concerned agency (PHE Department.). Only private public participation is observed in maintaining the hand pumps. All the 51 (100%) sample hand pumps have been reported maintained by the mohalla committees of the villages where the hand pumps have been installed by the installing agency. In certain cases, it has been reported that the public too do not come forward for maintaining the asset, when it is absolutely meant for the benefit of the general public.

To maintain the installed hand pumps, the installing agency must come forward rather than waiting for community participation. However, for better results wide publicity may be given and public awareness camps held to motivate public to maintain the hand pumps so installed in the general interest. PHE department need to come forward to held awareness programmes for the benefit of the general public.

## **13. Public participation in installation of Hand pumps:**

Involvement of public in the installation process of Hand pumps in all the sample constituencies is given in the following table:

| Table No: 3.13                                       |                      |                                       |  |  |   |
|--|----------------------|---------------------------------------|--|--|---|
| (Public participation in installation of hand pumps) |                      |                                       |  |  |   |
| S No   | Name of constituency | Number of sample Hand pumps inspected | Number of beneficiaries /households contacted. | Number of beneficiaries who were   |   |
|  |                      |                                       |  | involved in the installation of HPs by way of paying some beneficiary share/contribution | involved in the identification process during installation of HPs |
| 01   | Pulwama              | 16                                    | 80   | 0  | 80  |
| 02   | Rajpora              | 10                                    | 50   | 0  | 50  |
| 03   | Tral                 | 13                                    | 65   | 0  | 65  |
| 04   | Pampore              | 12                                    | 60   | 0  | 60  |
| <b>Total</b>   |                      | <b>51</b>                             | <b>255</b>                                     | <b>0</b>   | <b>255</b>  |

From the above table, it is clear that all the 255 households selected for detailed questioning were not involved in the installation of Hand Pumps by way of paying some beneficiary share/contribution. Thus, no private participation has been observed in installing the Hand Pumps. All the 51 (100%) sample Hand pumps have been installed by the Government through Ground Water Division of PHE department. However all the beneficiaries asserted that they were consulted/involved by the installing agency during the identification process of hand pumps.

#### **14. Status of platforms of the Hand pumps:-**

The status/ position of platforms of all 51 sample hand pumps have been observed as under:

| Table No: 3.14                          |                      |                         |                                 |            |             |                           |
|---|----------------------|-------------------------|---------------------------------|------------|-------------|---------------------------|
| (Status of platforms of the hand pumps) |                      |                         |                                 |            |             |                           |
| S No                                    | Name of constituency | Number of HPs inspected | Status of platform of Hand pump |            |             |                           |
|   |                      |                         | Pucca                           | Katcha     | Total       | % age share of pucca HP's |
| 01                                      | Pulwama              | 16                      | 16                              | 00         | 16          | 100%                      |
| 02                                      | Rajpora              | 10                      | 08                              | 02         | 10          | 80%                       |
| 03                                      | Tral                 | 13                      | 11                              | 02         | 13          | 85%                       |
| 04                                      | Pampore              | 12                      | 12                              | 00         | 12          | 100%                      |
| <b>Total</b>                            |                      | <b>51</b>               | <b>47</b>                       | <b>04</b>  | <b>51</b>   | <b>92%</b>                |
| <b>%age share</b>                       |                      |                         | <b>92%</b>                      | <b>08%</b> | <b>100%</b> | <b>-</b>                  |

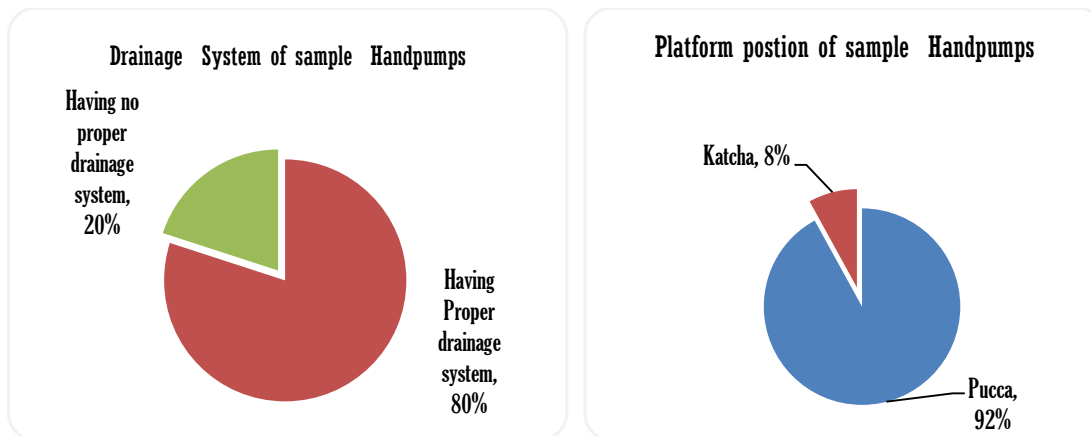
While inspecting the Hand pumps in the sample villages, it was observed that out of 51 sample hand pumps, 47 (92%) have pucca platforms and only 04 (8%) have katcha platforms. Highest number of hand pumps with pucca platforms has been found in Pulwama and Pampore constituencies, where all the 16 and 12 selected hand pumps respectively have 100% pucca platforms. In the remaining constituencies Rajpora and Tral, 02 hand pumps in each constituency have been found with katcha platforms out of 10 and 13 selected hand pumps respectively. The variation in pucca/katcha platforms needs to be looked into by the PHE department as it is provided within the scheme that a concrete pucca platform is to be constructed after installing the hand pump in the particular area.

#### **15. Drainage system of Hand pumps:**

Drains for management of waste water of hand pumps in the selected constituencies were observed as under:

| Table No: 3.15  |                      |                         |  |   |
|---|----------------------|-------------------------|--|---|
| (Drainage system of hand pumps)   |                      |                         |  |   |
| S.No  | Name of constituency | Number of HPs inspected | Status of drainage of Hand pump                    |   |
|   |                      |                         | Number of Hand pumps having proper drainage system | Number of Hand pumps having no proper drainage system |
| 01  | Pulwama              | 16                      | 15   | 01  |
| 02  | Rajpora              | 10                      | 08   | 02  |
| 03  | Tral                 | 13                      | 11   | 02  |
| 04  | Pampore              | 12                      | 07   | 05  |
| <b>Total</b>  |                      | <b>51</b>               | <b>41</b>  | <b>10</b>   |
| <b>%age share of hand pumps having proper/ improper drainage of waste water</b> |                      | -                       | <b>80%</b>   | <b>20%</b>  |

It is clear from the above table that out of 51 sample hand pumps, 41 (80%) have proper management of waste water. 10 (20%) hand pumps has no proper system of drainage for management of waste water. Due to improper drainage system of waste water, the outflow of water remains around the platform, thus creating a situation where bacteria like insects flourish easily thus, causing a threat to health condition of the people living in surrounding areas. In the 20% hand pumps where there is no proper disposal of waste water, the department of PHE should take necessary measures to overcome this menace, which otherwise may prove hazardous to general public.



(Graph showing drainage system and Platform position of sample Hand Pumps)

## 16. Views expressed by sample beneficiaries:

It has generally been opined by the informers that the installation of Hand Pumps by Ground Water Division in consultation with PHE Department of Pulwama District is an appreciating step towards providing assured water supply. The programme has proved successful for the people who reside nearer to the road side, as the hand pumps have been installed nearer to the roads because of accessibility of the installation machinery. The only failure of this scheme is that due consultation has not been obtained from experts of Geology and Mining Department, who have the expertise of installing/digging of hand pumps in a particular area. In most of the cases, such consultations have not been procured, with the result the scheme is not a 100% success. Such instances have been especially reported from the villages Reshipora, Beighpora, Banderpora of

Pulwama constituency and village Hari of Tral constituency. The water of hand pumps installed in these areas is not fit for drinking due to contamination of various mineral salts. They, therefore, requested an early redressal of this problem by the concerned department. While, ascertaining the reasons for non-consultation of Geology & Mining department at the time of digging the hand pumps in these areas, the executing agency reported that it was not mandatory to obtain opinion/advice of Geology and Mining department during the execution process, as it is not envisaged in the scheme guidelines.

Further, it has been reported that some hand pumps discharge muddy, red and orange colored water. The people of these areas demand that the water discharged should be tested and after that recommended for drinking purpose, so that it may not affect the health of the common people. Maximum people have appreciated the steps taken by the government to launch this scheme in the hilly areas of the district where scarcity of water was frequently observed and piped water does not cater the need of the people. The people prefer to use hand pump water as compared to piped water and thus demanded additional hand pumps to be installed in the un-covered areas. Additional hand pumps need to be installed in the areas, where the existing hand pumps do not absolutely cater the needs of the people.

The Hand Pumps installed by the Ground Water Division are not being looked after properly by the PHE Department to the entire satisfaction of the people. Whenever need arises for clearing its mechanical/technical defects, it takes months together to set them right. The people have suggested that PHE Department should keep provision for its repairs in the plan and held responsible for repairs of defective hand pumps through mechanical staff rather than kept the liability on the shoulders of general public. The flow of water from some hand pumps is less and does not cater to the needs of the beneficiaries. Due to technical defect in the accessories of these hand pumps, the people are facing a lot of hardships particularly during hot days of summer, when the water from taps and other sources almost disappears. Lack of proper maintenance of hand pumps creates problems for common people. The field staff of the PHE Department should be made responsible, accountable and answerable for the maintenance of hand pumps.

Some people viewed this programme even better than piped water system of PHE department and demanded to extend this programme in all leftover villages/areas of the district. More funds need to be kept in the Annual Plan so that the demand of the people is redressed.

Further, in spite of best efforts put forth by the installing agency to install the hand pumps at centrally located places, some people still expressed their grievances that the hand pumps are far away from their residential locations. These hand pumps were installed at the sweet will of the installation agency, neglecting the general desirability of the people living in that area. In future whenever, such programme is launched, the opinion of the people should also be taken care off.

### **17. Views of knowledgeable persons about the scheme:**

As per approved design of the study, 51 knowledgeable persons (one from each sample hand pumps/villages) were also interviewed and their opinion about the implementation of the Hand Pumps Scheme sought. All the 51(100%) knowledgeable persons considered the installation of hand pumps a right step towards solving the water crises

in the villages both during normal times and also during hard days like rainy day/dry conditions. However, certain reservations were expressed by most of the knowledgeable persons about the selection of spots for installation of hand pumps, their functionality, and discharge of water both in qualitative & quantitative terms. Despite all these reservations, all the knowledgeable persons were in favour of the continuance of the scheme and for bringing all the un-covered villages of the district under it. They further suggested for bringing improvement in the implementation of the scheme, the PHE department should also involve them or other senior citizens of the localities/villages in the implementation process especially at the time of selection of spots for installation of hand pumps.

### **18. Observations of Evaluation Team:**

The evaluation study was conducted at the instance of the State Level Evaluation Committee (SLEC) and assigned the job to District Statistics and Evaluation Officer Pulwama. The District Statistics and Evaluation Officer Pulwama himself inspected a number of sites and recorded his comments. The observation recorded during the course of inspection by the DSEO Pulwama and his staff during field study is elucidated as under:

01. The scheme has been appreciated by the majority of the people of the sample villages of the district, except the people of sample village Reshipora, Beighpora, and Banderpora of Pulwama constituency, where the installed hand pumps discharge muddy/mineral salt water. The water discharged from these hand pumps has never been tested, causing serious threat to health conditions of the people living in the surrounding areas. It is suggested that the water discharged from all these hand pumps need to be got tested by the PHE authorities.
02. About 65% villages are yet to be covered under the scheme; in spite of the fact the PHE department has provided piped water system which does not cater the need of the people particularly during rainy and hot days of summer.
03. Some instances have come into the notice where some blue eyed persons have either installed the hand pumps near their residences or inside their residential complexes, which has defeated the very motive of the programme. To quote an example, these irregularities have been observed at following sites:
  - a) In Shadimarg, one hand pump has been sunk near the residence of Naveed Ahmad Shah, New colony Shadimarg, who subsequently fenced the area of the pump, thereby, depriving the other people from the benefits of the hand pump.
  - b) In village Awan-pora of Awantipora block, one Shri. Gh Hassan Wani through his influence has installed hand pump near his residence and latter on fenced the same for his personal use, thereby, depriving other people from the benefits of the hand pump.
  - c) The hand pump near CRPF camp Lethpora has been seen fenced by some blue eyed person for their personal use only. Such hand pumps need to be surveyed by the concerned department and get immediately freed from the occupation of such miscreants in order to derive the objectives of the programme for which it is meant.
04. Some technical defects seen to have been occurred in some hand pumps affecting the discharge of water. These hand pumps have not been repaired by

any agency for a pretty long time, and thus do not meet water requirement of the people. The hand pumps where such instances have been recorded are as under:

- a) Hand pump near Ziyarat Sharief khankah Midoora Tral
- b) Hand pump near Daramshala Baigund Tral
- c) Hand pump near the H/o Tahira Bano Midoora Tral
- d) Hand pump near Jamia Masjid Noorpora Tral
- e) Hand pump near Markazi Jamia Masjid Karimabad Pulwama.

Such hand pumps need to be repaired by the concerned department immediately in order to realize the benefit of the scheme by the people.

05. The hand pumps should have been installed near strategic sites, such as hospitals, private institutions, schools and public places (Bus stands, Sumo Stands etc.). It has been observed that in spite of approach roads and proper accessibility, no hand pumps have been installed near such places.
06. No criteria with regard to population seem to have been maintained while installing the hand pumps in particular areas. In the areas where there should have been more hand pumps (compared to population), less hand pumps have been drilled. For example at Village Haal (Block Shadimarg), only one hand pump has been dug, where there should have been at least three to four hand pumps as per the population of the village.

While ascertaining the reasons for not following the population criteria ratio per hand pump from the installing agency, it was reported that it is necessary to maintain the population criteria ratio per hand pump in the defined guidelines, but the hand pumps are being constructed as per site identification and recommendations of Territorial Division.

07. Most of the areas face acute shortage of drinking water, particularly during rainy and hot days of summer. Such areas identified through the present study need to be covered and for identifying more such areas, detailed survey need to be conducted. PHE department should take immediate steps to cover the left over villages/ wards/ sites where there is acute shortage of water for drinking purposes. Some of the areas identified by the evaluation teams during field study where there should be hand pumps for drinking water are as under:

- a) New colony near Irrigation Division Tral, where the people face acute shortage of drinking water throughout the year.
- b) Village Kamla Tral
- c) Sikh Basti Pamposh colony Saimoh Tral
- d) Her Buchoo Tral
- e) Karimabad Pulwama
- f) New colony Barsoo Awantipora.

All the left over areas, where there is proper accessibility of installation machinery and approach road should be covered in a phased manner and brought under the ambit of the programme.

08. For maintenance of hand pumps, a separate provision may be kept by the concerned department every year so that the pumps can function at the

satisfactory level. PHE department should be made responsible for maintenance of these hand pumps.

### **19. Impact of Hand Pump Scheme upon the living conditions of the people**

Majority of the beneficiaries reported that installation of hand pumps in the sample villages have left positive effects upon the living conditions of the people. Most of the beneficiaries (80%) reported that installation of hand pumps in their localities/ villages have removed the uncertainty of water supply through tap system. They can now fetch water from hand pumps any time without any wait. They further reported that considerable time of their women folk has been saved by installing hand pumps in their localities/ villages.

Before installation of hand pumps, they reported to use muddy water for drinking purposes during rainy days. During hot days of summer they reported to face acute shortage of drinking water. But, now with an assured availability of drinking water through hand pumps that too nearer their homes, the beneficiaries definitely were feeling better. The remaining 20% of sample beneficiaries especially from villages Reshipora, Beighpora, Banderpora and Hari reported that the hand pumps installed in their areas do not serve the purpose for which they were dug due to contamination of mineral salts/ muddy water. They reported that the installed hand pumps have left no positive impact upon their living condition.

About 90% of beneficiaries regarded installation of hand pumps as best alternative to insufficient, untimely/uncertain tap water supply and strongly advocated for continuance of the hand pumps scheme. They demanded installation of more and more hand pumps in the villages so that whole population of the villages is covered. Moreover, hand pumps turned non functional and others which also are not functioning properly were demanded to make functional so that their installation will serve some purpose.

Overall, the "Hand Pump Scheme" has laid positive impact upon the living condition of the people especially upon the women folk who had to fetch portable drinking water far away from other sources during rainy, snowy and hot days of summer.



## Chapter - IV

### Summary of Main Findings

The main findings of the study along with some suggestions for consideration of the installing agency are:

- A total of 256 hand pumps including 03 non-functional hand pumps have been claimed installed by the Ground Water Division Srinagar under NRDWSP/CAPEX Budget schemes in district Pulwama in 114 villages/wards during the reference period 2014-15 to 2018-19.
- Funds to the tune of Rs 379.09 lacs have been made available against an allocation of Rs 390.00 lakhs during the reference period which have been utilized in full (100%) by the installing/ executing agency.
- 03 hand pumps involving expenditure of Rs 6.22 lacs reportedly failed during the execution process, (02 during the year 2014-15 and 01 during 2016-17, out a total of 256 hand pumps) and thus could not be installed at all. Expenditure of Rs 6.22 lacs upon such hand pumps, thus, remained unfruitful.
- There is no fixed unit cost per hand pump. It varies from place to place due to varied topography of the district.
- Maximum number of Hand Pumps i.e 79 have been claimed installed in Pulwama constituency ,whereas, minimum number i.e 49 hand pumps have been reported installed in Rajpora constituency during the period under reference.
- A sample of 51(20%) Hand Pumps were selected out a total of 256 Hand Pumps for field enquiry in all the 04 constituencies of the district through proportionate Simple Random Sampling. As such the study was launched in 28 villages/wards, out of 114 villages/wards claimed covered by the installing agency.
- 255 beneficiary households were covered for detailed interview. Comments of 51 knowledgeable persons (one per hand pump) were also recorded during the course of study.
- All 51 (100%) sample Hand pumps claimed installed by the implementing department in 28 villages/wards were found existing on ground during the course of field inspection.
- 46(90%) out a sample of 51 hand pumps were found functional, whereas 05(10%) were found totally non-functional.
- On an average, 17 families are covered by one hand pump. 113 persons on an average are benefitted by one hand pump in selected villages.
- Out of 51 sample hand pumps, 46 (90%) hand pumps were found drilled in the centrally located places of the selected villages and only 05 (10%) pumps were not located in the centre of the locality.
- 36 (70%) pumps discharge water satisfactorily in sufficient quantity, & 10 (20%) in sufficient but of poor quality. While as 05 (10%) hand pumps discharge no water at all. In all 15 hand pumps (30%) of the selected pumps have not achieved the desired level of satisfaction.
- Overall 71% of beneficiaries were satisfied with regard to the functioning of hand pump. Highest level of satisfaction (100%) has been achieved in Pampore constituency and lowest satisfaction level i.e. 44% achieved in Pulwama constituency. In rest of the constituencies Rajpora and Tral it is 90% and 62% respectively.

- 90% of selected households were living 0 to 0.5 km away from the location of hand pumps, whereas 10% households were found living within a range of 0.5 to 01 km of the hand pumps. No sample household has been found beyond 01 km to fetch the water
- 57% beneficiary households reported that quality of water discharged from hand pump is good whereas 13 % reported that water discharged from hand pumps is average. 20% households have opined that water discharged from hand pumps located in their areas is bad and not worth for drinking due to contamination of mineral salts. Such instances have mainly reported from Reshipora, Beighpora and Banderpora areas of Pulwama Constituency. Further, 10 % households reported that there is no discharge of water in pumps located in their areas.
- All the hand pumps (100%) have been installed by Ground water division Department and no involvement of public including sample beneficiaries has been sought while installing the pump.
- All 51 selected hand pumps although the assets of PHE department are not maintained by them to satisfactorily level. Only private public participation in maintaining the hand pumps has been reported.
- Out of of 51 selected hand pumps, 47 (92%) have pucca platforms and 04 (08%) have katcha platforms.
- Out of 51 sample hand pumps, 41(80%) pumps were observed to have proper drainage of waste water. 10 (20%) hand pumps of the total selected pumps had improper system of drainage of waste water.
- Out of 255 sample households, 75 (29%) depending on 15 hand pumps reported that these hand pumps do not fulfill their requirements due to insufficient or bad quality of water. They reported to use alternate sources of water like springs, nallahs, rivers, water tankers etc.
- No Village Water & Sanitation Committees (VWSCs) has been reported existing in any village of the district.

## Chapter - V

### Suggestions / Recommendations

- Due to insufficient tap water supply, some non-beneficiaries reported to use nallah/river/khul water for drinking purposes need to be covered under the scheme.
- While drilling hand pumps, expert opinion of Geology and Mining Department has not been sought. Some of hand pumps have been drilled on the spots where either no water is discharged from them or the water discharged is muddy and contain mineral salts like zinc/iron contents and thus not fit for human consumption. It is suggested that in future expert opinion of Geology and Mining Department may be considered prior to drilling of the hand pump.
- Priority should be given to the places where there is no potable water source/tail end of schemes/ erratic water supply or scarcity of water due to topographical constraints.
- No hand pump should be installed in such locations where it has already reached maximum saturation level.
- The habitations that have been provided road connectivity during last two years should be given priority by promoting off road installation of hand pumps.
- Area proposed for installation of hand pump in any habitation should be easily approachable by the users in all seasons.
- Enough space should be available for construction of a platform and adequate drainage.
- The final site selection for installation of hand pumps should be decided by the Hydro-geologist after carrying out scientific Investigations for drilling bore-well point by considering the geological formation and aquifer systems.
- The water of the installed hand pump should be tested immediately before put to use for general public.
- PHE department should be made responsible for maintaining the surroundings of the hand pump to ensure portability of water and should get water tests conducted from time to time from departmental labs/other labs. In the event of a water test, result showing water not fit for human consumption, the same should not be used for drinking purpose and the hand pump should be painted red along with an indication plate displaying that the water of hand pump is not fit for human consumption.
- Embarrassed hand pumps by the blue eyed persons need to be surveyed and freed from their occupation immediately in order to derive the real motive of the programme.
- Priority should be given to install hand pumps near strategic sites, such as Hospitals, Private institutions, Schools and Public places like Bus stands, Sumo stands etc.

## **Response of the Implementing Department**

As per terms of reference of the State Level Evaluation Committee(SLEC) the Draft Evaluation Report on Installation of Handpumps under PHE Sector (Pulwama) was forwarded to the Chief Engineer Jalshakti (Kashmir) for departmental response on the findings of the study.

The Chief Engineer Jalshakti (Kashmir) vide letter No: CE/PHE/28092-96 dated:21-11-2023 has responded to the suggestions as given under:

1) **Maintenance of Handpumps:**

All 51 selected hand pumps during field study were observed not maintained well. The Chief Engineer Jalshakti in this regard reports that the maintenance of the hand pumps fall under the purview of the Panchayati Raj Institutions as per the Government order No:207-PW(Hyd) of 2012 dated:22-05-2012. The testing kits were reported to have already been provided to the PRI representatives by the PHE Department for conducting tests on the hand pump wells for ascertaining the quality of water.

2) **No criteria with regard to population per hand pump followed.**

The Chief Engineer Jalshakti regarding this reports that the practice stands rectified by the department and wherever handpumps are to be installed, a certificate is provided viz-a-viz community benefitted before installation of handpumps.

3) **Seeking expert opinion of Geology and Mining Department/Hydrologist for construction of hand pumps:**

Regarding this, it has been reported that the point has been noted and shall be incorporated in the future tendering process which will help in minimizing the failure rate.

## Schedules/Instruments of Investigation of the Evaluation Study

### Schedule - I For PHE Department

- 1) Year of implementation of the scheme in the district \_\_\_\_\_
- 2) No of villages in the district \_\_\_\_\_
- 3) No of villages covered under the Hand-Pumps Scheme \_\_\_\_\_
- 4) Cost of Installation of one Hand-Pump in detail \_\_\_\_\_
- 5) Total number of Hand-pumps installed in the district during the reference period 2014-15 to 2018-19 (Year-wise physical targets/achievements):

|       |         | <u>Installation of Hand-Pumps(In No's)</u> |             |                               |
|-------|---------|--|-------------|-------------------------------|
| S.No  | Year    | Target                                     | Achievement | Reasons for Shortfall, if any |
| 1     | 2       | 3  | 4           | 5                             |
| 1.    | 2014-15 |  |             |                               |
| 2.    | 2015-16 |  |             |                               |
| 3.    | 2016-17 |  |             |                               |
| 4.    | 2017-18 |  |             |                               |
| 5.    | 2018-19 |  |             |                               |
| Total |         |  |             |                               |

- 8) Year-wise Financial targets/achievements:

*( Amount in Lakh Rs)*

| S. no | Year    | Allocation | Funds released |             | Expenditure booked 03/2019 | Reasons for shortfall, if any |
|-------|---------|------------|----------------|-------------|----------------------------|-------------------------------|
|       |         |            | Central Share  | State Share |                            |                               |
|       | 2014-15 |            |                |             |                            |                               |
|       | 2015-16 |            |                |             |                            |                               |
|       | 2016-17 |            |                |             |                            |                               |
|       | 2017-18 |            |                |             |                            |                               |
|       | 2018-19 |            |                |             |                            |                               |
|       |         |            |                |             |                            |                               |

- 6) List of Hand-Pumps installed in the district during the reference period 2014-15 to 2018-19 with complete address

(Village/Locality/Mohalla etc):

- i) -----
- ii) -----
- iii) -----
- iv) -----

7) Problems/difficulties faced, if any, in the implementation of the scheme in the District  
:

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

Seal & Signature of the Ex.Engineer, PHE

**Schedule - II**  
**For PHE Department**

List of Hand-pumps installed in the district during the reference period 2014-15 to 2018-19.

| <b>S.no</b> | <b>Name of the Constituency</b> | <b>Name of the village</b> | <b>Locality/Mohalla where Handpump installed</b> | <b>Year of installation of Handpump</b> | <b>Target coverage (Population/Households)</b> | <b>Present status of the Handpump</b> |
|-------------|---------------------------------|----------------------------|--|---|--|---------------------------------------|
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |
|             |                                 |                            |  |   |  |                                       |

Seal & Signature of the Ex.Engineer, PHE  
District\_\_\_\_\_

**Schedule - III**  
**For Beneficiary Household**

**Identification:**

- i) Name of the Village \_\_\_\_\_
- ii) Name of Mohalla/Locality \_\_\_\_\_
- iii) Name of the Constituency \_\_\_\_\_
- iv) Name of the Head of the Beneficiary Household \_\_\_\_\_
- v) Name of the Informant \_\_\_\_\_
- vi) Relation of the Informant with the head of HH \_\_\_\_\_

**Information about Hand-Pump:**

- i) Does any Hand-Pump exist in your Mohalla/locality ( Yes/No)
- ii) If yes, year of installation and households benefitted \_\_\_\_\_
- iii) If yes, is it centrally located (Yes/No)
  
- iv) Again if yes in item (i) above, what is its present status:-
  - a) Fully Functional
  - b) Totally Non-Functional
  - c) Partly Functional/Partly Non-functional.
- v) If Functional, does it suffice your requirement( Yes/No)
- vi) If No, how do you fulfill your requirement:-
  - a) From Spring
  - b) From Nallah
  - c) From River.
- vii) What is the discharge of water from Hand-Pump:-
  - a) Sufficient
  - b) Insufficient
  - c) Sufficient but of poor quality
  - d) No discharge of water at all.
- viii) Quality of water discharged by the Hand-Pump:-
  - a) Good
  - b) Average
  - c) Bad
- ix) Distance of Beneficiary Household from Hand-Pump:
  - a) 0-0.5 Kms
  - b) 0.5 Kms – 1.00 Kms
  - c) 1.00 Kms – 1.5 Kms
  - d) 1.5 Kms – 2.00 Kms
  - e) 2.00 Kms – 2.5 Kms



- f) 2.5 Kms – 3.00 Kms
- x) Does village water & Sanitation committee exists in your village(Yes/ No\_\_\_)
- xi) Who Maintains the Hand-Pump\_\_\_\_\_
- xii) Have you ever been involved by the PHE department in installing/maintaining the handPump( a) Yes  b)No
- b) Status of the Paltfrom of the Hand-Pump
  - a. Pucca
  - b. Katcha
- c) Does the Hand-Pump has proper drainage for management of waste water(Yes/No)
- d) Remarks of the Beneficiary, if any, \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- e) Observations of the Field Investigator\_\_\_\_\_
- f) Observations of the Supervisor \_\_\_\_\_

Name of the field Investigator \_\_\_\_\_  
 Designation \_\_\_\_\_  
 Signature \_\_\_\_\_  
 Date \_\_\_\_\_

**Schedule- IV**  
**For Knowledgeable Person (Sarpanch/Numberdar/Panch)**


**IDENTIFICATIONS**

1. Name of the Scheme: \_\_\_\_\_
2. Name of the Constituency \_\_\_\_\_
- 2(a) Name of the Village: \_\_\_\_\_
3. Name of the KP (Sarpanch/Numberdar/Panch) : \_\_\_\_\_
4. How many Hand- Pumps have been installed in your village:  
\_\_\_\_\_
5. Does this cover whole population of your village:- \_\_\_\_\_
6. What was the Source of drinking water prior to installation of Handpumps):-
  - a) Tap Water
  - b) Spring
  - c) Nallah
  - d) River
7. What is your opinion about the hand pumps Scheme \_\_\_\_\_
8. Does this hand pump have been installed
  - a) as per choice of the people
  - b) on the advice of expert.
9. Is hand pump maintained by govt. or panchayat community or none(\_\_\_\_\_) \_\_\_\_\_
10. Are you satisfied with the discharge of hand pump dug in your village:
  - a) YES
  - b) NO
- 11.If No, what is your suggestion for improvement \_\_\_\_\_

Name of the field Investigator \_\_\_\_\_  
Designation \_\_\_\_\_  
Signature \_\_\_\_\_  
Date \_\_\_\_\_



**UNION TERRITORY OF JAMMU & KASHMIR  
PLANNING DEVELOPMENT AND MONITORING DEPARTMENT  
DIRECTORATE OF ECONOMICS & STATISTICS, J&K  
JAMMU AND KASHMIR GOVERNMENT**

 [jkpdm2020@gmail.com](mailto:jkpdm2020@gmail.com)

 [jandk-des@jk.gov.in](mailto:jandk-des@jk.gov.in)

 [www.jkplanning.gov.in](http://www.jkplanning.gov.in), [www.ecostatjk.nic.in](http://www.ecostatjk.nic.in)

Printed at Ranbir Government Press, Jammu.