

## PHYSICAL VERIFICATION REPORT

(Conducted by Dy. Director, Planning on 18-04-2011)

1. Name of Project: Up-gradation and augmentation of water supply to Udhampur Town under UIDSSMT
2. Funding Agency: GoI & State Plan (H&UDD)
3. Executing Agency: PHE Division Udhampur
4. Year of Start: 2007-08
5. Year of Completion: 2009-10
6. Need/ Importance of the Project:

In 2007, only 20 lac gallons of water was being pumped daily by the PHE Division, Udhampur for supplying to Udhampur town against the requirement of 30 lac gallons as per standard adopted by GOI for such towns. The per capita availability of water was 82 litres/ soul/ day only against the standard norm of 135 litres/ soul/ day. There was need to augment the supply to bridge this gap.

Moreover, the population of Udhampur town was projected to grow from 0.97 lacs in 2007 to about 1.47 lacs in 2032, thereby further raising the demand of water to 50 lac gallons/ day over this period.

The purpose of the new water supply scheme is to add pumping capacity of 32 lac gallons/ day to the 2007's level of 20 lac gallons/ day in order to bring it to 52 lac gallons/ day and supply adequate hygienic water to the town for the next 25 years, i.e. till 2032.

### 7. Financial Status of Work:

(Rs. in Crores)

|   |             |
|---|-------------|
| Approved Cost   | 28.82       |
| Funds deducted from estimated cost because the expenditure was met out of State plan before start of project (upto 09/2004) | 5.36        |
| Balance Project cost  | 23.46       |
| Value of Work Done (against balance cost)   | 19.95 (85%) |
| Funds Released (against balance project cost)   | 14.27       |
| Expdt. incurred upto 03/2011 (against balance project cost)   | 14.27 (61%) |

## 8. Financial Analysis of Project:

The project for augmenting water supply to Udhampur town was conceived in 2001-02 at an estimated cost of Rs 23.85 crore against which Rs 5.36 crore was expended under State sector plan upto September 2004. After the approval of Gol to fund the project under UIDSSMT, its cost was revised to Rs 28.82 crore and the expenditure already incurred, i.e., Rs 5.36 crore was deducted from the total project cost thereby bringing down the balance project cost to Rs 23.46 crore.

The balance project cost of Rs 23.46 crore was to be utilized over a period of 3 years starting from 2007-08. But only 61% of the balance project cost, i.e., an amount of Rs 14.57 crore (Rs 13.27 crore Central share & Rs 1.30 crore) was released during these three years.

The percentage of year-wise releases works out to 23%, 23% & 15% during 2007-08, 2008-09 and 2009-10, respectively. Instead of enhancing releases during second and third year it was kept intact at 23% during second year and brought down to 15% during third year.

However, PHE Division, Udhampur carried out works valuing Rs 19.95 crores thereby creating a work done liability of Rs 5.60 crores up to March 2010 but the project could not be completed in time. During 2010-11 also the funds required for completing the project were neither provided under State Plan nor was Central Share released due to which the project remains incomplete till date.

The PHE Division Udhampur complained that the contractors whose work done liability has to be cleared are pressing hard for same and have refused to carry out further works unless the liabilities are cleared. Due to non-release of funds and non-execution of balance works in 2010-11 the Engineers have apprehended escalation in cost of project by 4 to 5 crore rupees.

It would not be out of place to mention here that the value of works executed are intimated to be about 85% of the total project cost is not in consonance with the physical achievement of the project which is just around 60% work clearly indicating the possibility of escalation in project cost.

While enquiring about the reasons for stoppage/ reduction in funding, the Executive Engineer, PHE Division, Udhampur intimated that Utilization Certificates have been submitted in time annually and the cause was delay in implementation/ adoption of urban reforms by the State Government in the towns which was desired by Gol and was directly linked with funding the State under UIDSSMT programme.

## 8. Physical Status of Work:

| SNo | Major items                              | Physical Achievement   | % Ach. |
|-----|--|--|--------|
| 1   | Construction of RCC Intake structure     | A portion of PDC Canal of Chenani HEP at Salmay is developed as intake structure   | 100%   |
| 2   | Filtration plants                        | 1 completed & commissioned, 1 yet to be taken up   | 50%    |
| 3   | Construction of OHT (ESR)                | 1 completed & commissioned, 2 <sup>nd</sup> partially completed  | 75%    |
| 3   | Ground Service Reservoirs                | 2 completed & commissioned, 1 completed and land for the 4 <sup>th</sup> is being acquired   | 60%    |
| 4   | Pump rooms/ RCC Sump                     | 2 completed and commissioned   | 100%   |
| 5   | Pipe Network                             |  |        |
|     | i) Gravity mains                         | 2000 mtrs out of 2750 mtrs from Jakhani to Salathia chowk complete, 550 mtrs out of 800 mtrs from Jakhani to TCP complete, Jakhani to Gangera yet to be taken up, work in progress | 50%    |
|     | ii) Rising mains                         | 1450 mtrs from Kaller to Jograin Da Talab complete<br>Salmay stage 1 to Jakhani Stage 2 complete, Gangera to TV tower yet to be taken up   | 70%    |
|     | iii) Distribution network                | Work in progress   | 25%    |
|     | iv) Raw water mains                      | Work yet to be taken up  | 0%     |
| 6   | Pumping machinery                        | Most of the machinery procured & installed, except 4 stabilizers which have been procured but are yet to be installed at Salmay Stage 0 & Salmay Stage 1                           | 90%    |
| 7   | Electric sub station                     | 2 sub stations established one each at Salmay Stage 0 & Stage 1, work of shifting of existing feeder from Satani to Dhar Road for Pumping station Sounthian also completed         | 100%   |
| 8   | Const. of Staff quarters                 | Not constructed, one room each added to 1 <sup>st</sup> floor of SE residence & Divisional office  | 0%     |
| 9   | Approach road & fencing                  | Only fair weather roads to most of the locations   | 10%    |
| 10  | Communication/ Transport & communication | In process   | 0%     |

## 9. Field Observations:

(A) Seven sites of the project were visited and the work was not in progress at any site during the field visit. The detail of infrastructure developed at these seven sites is mentioned below: -

### a. Salmay (Stage – 0): -

- i) Pumping station of 1 lac gallon capacity (functional)  
(4 pump cum motors each with pumping capacity of 25,000 gallons)
- ii) Old pumping station was repaired (functional)
- iii) Sump Tank of 2 lac gallon capacity (functional)
- iv) Filtration plant of 1 lac gallon capacity (functional)  
(comprising Pre-sedimentation tank, Chlorifloculator tank, filtration chambers, chlorination chamber, aeration cum alum chamber)

### b. Salmay (Stage – 1): -

- i) Pumping station of 1 lac gallon capacity (functional)
- ii) Sump Tank of 2 lac gallon capacity (functional)
- iii) Electric substation (functional)  
(2 new transformers & 2 old ones installed)

c. Jakhani (Stage – 2): - GSR (Ground Storage Reservoir) of 3 lac gallon capacity (functional)

d. Kathiyala: - GSR of 1 lac gallon capacity (functional)

e. Jojraia Da Talab: - GSR of 0.50 lac gallon capacity (ready but not functional)

f. Kallar (near Womens College): - OHT (Over Head Tank) of 2 lac gallon capacity (partially constructed and hence not functional)

g. Pandav Temple: - OHT of 2 lac gallon capacity (functional)

(B) Some of the observations worth mentioning are: -

### a. Supply of Water to Udampur Town: -

Raw water is being pumped from PDC Canal on right bank of river Tawi, filtered and filled in the Sump Tank at Salmay Stage – 0. The filtered water is then lifted to Salmay Stage – 1 along the hill slope and stored in the Sump Tank located here and thereafter it is again lifted

along the slope to the top of the hill at Jakhani where it is stored in the newly constructed GSR. At this stage the water is filled (by gravity) from the new GSR to another Old GSR also located close by and is then supplied to GSR at Kathiyala and OHT at Pandav temple for distribution to the people of Udhampur city. The OHT at Kallar is partially built and will be the source for supply of water to GSR at Jojrain da Talab for supplying water to the people living in the adjoining areas.

It was reported that the second filtration plant will be constructed on top of the hill across the river Tawi at Jakhani where another PDC Canal of Chenani HEP is flowing and will act as source of raw water. The water filtered in this plant will be brought down by gravity and supplied to the Udhampur Town partly through the existing infrastructure and partly through the new infrastructure of GSRs & OHTs yet to be developed under the said project.

b. Quality of work done:- The quality of work done at Stage – 0 was good and at the remaining locations satisfactory. However, an old GSR at Jakhani Stage – 2 that was in use was in bad condition and needed immediate repairs. There was also need to construct a retaining wall to prevent damage to the new GSR at Jakhani Stage - 2.

c. Approach roads:- The approach roads to most of the locations (Jakhani Stage - 2, Salmay Stage – 1, GSR Jojrain da Talab) were fair weather roads and need to be developed and black topped. The remaining sites (Salmay Stage – 0, Pandav Temple, Kellar, Kathiyala) were adjacent to already existing roads/ lanes and only required improvement).

d. Distribution Network:- Most of the distribution system that was reported to have been laid was underground except for the rising mains from Salmay Stage – 0 to Salmay Stage – 1 and then to Jakhani Stage – 2 which were visible along the hill slope and were also functioning properly.

10. Problem Areas/ Suggestions:

| SNo | Problem Areas  | Suggestions   |
|-----|--|---|
| 1   | <u>Filtration Plant not being put to optimum use</u> : As per DPR, the capacity of filtration plant developed at Salmay should be 8.727 MLD, i.e., it should be able to filter 8.727 million litres of water per day or 19.22 lac gallons/ day. But the filtration capacity of the | If run for 16 hours (two shifts) the filtration plant can filter only 7.264 MLD of water, i.e., 1.463 MLD less than the approved capacity of 8.727 MLD. If running the plant for more than two shifts, i.e. for 19 hours and 22 minutes does not damage its |

| SNo | Problem Areas  | Suggestions  |
|-----|--|--|
|     | <p>plant was reported to be 1 lac gallons/ hour, i.e., it has to be run for 19 hours and 22 minutes to derive the desired quantity of filtered water. But the plant is presently being run only for 8 hours (single shift) and that too by man-power of the contractor. Only 8 lac gallons or 3.63 million litres of water is being filtered daily, i.e. 42% utility.</p>  | <p>machinery/ equipment it can be considered of desired capacity. In case the plant cannot be run for more than 2 shifts this will imply that it is not of approved capacity. PHE Department may take necessary steps to put the filtration plant to optimum use by engaging its own man-power so that the plant developed by spending huge amount of money is not under utilized.</p> |
| 2   | <p><u>Completion of partially constructed/ non-functional infrastructure:</u> The source of water for newly constructed GSR at Jojrain da Talab is the partly constructed OHT at Kallar the work of which has been left midway and due to which people of the area are receiving water only once in a week through the old distribution network and have to rely on a hand pump installed there to meet their daily requirement of water.</p>  | <p>The work on the partly constructed OHT at Kallar which has been left mid-way need to be resumed immediately by utilizing state share against the balance cost and connected with GSR at Jojrain da Talab to provide water to the people of the area who were complaining for shortage of water supply.</p>  |
| 3   | <p><u>Development works yet to be taken:</u> The following works have yet to be taken up and have been delayed for want of balance funds: -</p> <ul style="list-style-type: none"> <li>a) Second Filtration Plant of 6.49 MLD capacity (shortage of funds)</li> <li>b) GSR at Nagrota (land acquisition in progress)</li> <li>c) Pump room at Gangera</li> <li>d) Steel bridge crossing on river Tawi</li> <li>e) Intake structure at river Tawi to Filtration plant at Salmay</li> <li>f) Raw water transmission from intake structure at river Tawi to Filtration plant at Sounthian</li> <li>g) Development of approach roads</li> <li>h) Construction of staff quarters</li> <li>i) Communication, transport &amp; computers</li> <li>j) Balance work of distribution network</li> </ul> <p>It was informed that funding under</p> | <p>H&amp;UDD and PHE Departments need to take necessary measures to bring about the urban reforms desired by GoI at the earliest in order to ensure smooth flow of central funds for execution of remaining works or else the project cost will escalate.</p>  |

| SNo | Problem Areas   | Suggestions   |
|-----|---|---|
|     | UIDSSMT is linked with implementation of Urban Reforms and the Central Share has been stopped by GOI due to delay in bringing about the reforms.  |   |
| 4   | <u>Shortage of man-power:</u> It was informed by the Executive Engineer concerned that they are facing shortage of manpower to operate the newly created infrastructure/ machinery.   | PHE Department may obtain the details of actual man-power required; men actually engaged and work out the shortage. Some decision needs to be taken to address this issue. Engagement of engineers/ ITI diploma holders registered with Employment Exchange concerned could to be considered.   |
| 5   | <u>Creation of work done liability:</u> It was informed by the engineers of the executing agency that work done liability of Rs 5.80 crore has been created.  | H&UDD as well as PHE Department need to examine the demand of work done liabilities for its early clearance.  |
| 6   | <u>Distribution Network:-</u> Some work has been done on laying the distribution network but considerable work has yet to be done. With delay in funding there is every possibility that the project cost will escalate and if balance cost is not revised to meet the hike, the re-laying of distribution network will remain un-attended adversely affecting the desired level of impact which the project envisages? | H&UD Department and PHE Department need to examine this issue and ensure that the project is executed in totality without neglecting supply/distribution network.   |
| 7   | <u>Construction of Staff Quarters for Operating Staff:</u> Construction work of Staff Quarters has not been taken up. However, one room has been added on first floor of Superintending Engineer, Hydraulics' Residential Quarter at Udampur and one room in Divisional office.   | No staff quarters have been constructed for the operating staff at any of the project sites. However, funds are being diverted for development of residence of SE and Divisional office. PHE Department need to stop diverting funds for works not approved in the project and re-coup the project funds so diverted from the State Plan. |

| SNo | Problem Areas  | Suggestions   |
|-----|--|---|
| 8   | <p><u>Land Compensation</u>: An amount of Rs 16.27 lacs has been earmarked for land acquisition in the DPR. However, the expenditure incurred for acquiring about 12 kanals and 8 marlas land at different sites was reported to be Rs 51.23 lacs and it was informed by the executing agency that an additional amount of Rs 50 lacs is required for acquiring land at the remaining locations (Jakhani, Nagrota, etc.) for carrying out the balance works.</p>   | <p>Any provision of funds required for acquiring land over and above the approved amount of Rs 16.27 lacs need to be met out of State Plan. The PHE Department needs to re-coup the excess expenditure already incurred on land acquisition by utilizing project funds from the State Plan.</p>   |
| 9   | <p><u>Diversion of funds within components/works</u>: - Not just for land acquisition and construction of staff quarters but even in case of works that have been executed till date, the component-wise expenditure has not been restricted within the limits prescribed in the approved cost leading to inter-component diversion of funds without approval from competent authorities. This has resulted in shortage of funds for execution of remaining components/works that are yet to be taken up and will also be one of the reasons for escalation in project cost. For instance, approved balance cost for construction of two filtration plants was Rs 160 lacs, but the allotment amount of the one filtration plant which has been developed is Rs 186 lacs which is higher than the approved cost and the work of second filtration plant is yet to be taken up.</p> | <p>PHE Department should have restricted its component-wise expenditure within prescribed limits and any excess expenditure that was genuine/unavoidable should have been met out of the state plan after obtaining approval from competent authorities. This would have brought down the work done liabilities projected by the executing agency to a considerable extent. While revising the project cost in future these facts may also be taken in account.</p> |



11. Conclusion:-

The Water Supply Project of Udhampur City is of prime importance and any slippage in time for its execution will delay the supply of adequate and hygienic water to the city. H&UDD and PHE need to address the problem areas immediately so that the project taken in hand is completed.

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| Physical Verification<br>Conducted by :           | Madan Gopal Sharma,<br>Deputy Director Planning,<br>Monitoring Cell, Chief Minister's<br>Secretariat.  |
| Officers of Executing Agency<br>who accompanied : | Sh. R.K.Sharma<br>Executive Engineer<br>Sh. Rajiv Abrol<br>Assistant Executive Engineer (Civil)<br>Sh. Surinder Singh<br>Assistant Executive Engineer (Mech.)<br>Sh. Anil Prabhakar<br>Junior Engineer (Civil)<br>Sh. Suman Sharma<br>Junior Engineer (Civil)<br>PHE Division, Udhampur. |