A case of resolving Drinking Water Problem by Community Effort: Village-Naini-Poundar

ABSTRACT

Gram Panchyat Naini-Poundar, Block-Augustmuni of Rudraprayag, uttarakhand is situated at a distance of 60 Km from the District headquarter. The population of the village is 796 souls comprising 132 households spread over five habitations. The Villagers were dependent on Naini Poundar Water Supply scheme constructed by the Uttarakhand Peyjal Nigam in the year 1984. The water supply scheme had outlived its technical age in the year 1999. Furthermore, the water source of the scheme was also located in other habitation resulting in frequent disruption by the residents of other habitation. It also showed diminishing trend of water discharge. Thus there was an acute shortage of water in the village. The villagers were dependent on water tankers provided by Uttarakhand Jal Sansthan.

The village was selected under Uttarakhand Rural Water Supply and Sanitation program (URWSSP) in the year 2008-09 on the demand of community for the construction of new water supply scheme in their village. A single village water supply scheme was conceived and executed in the year 2010-11. Since then the water supply scheme is being operated and maintained by the local community with the active support of Gram Panchyat. Needless to mention that water source is situated at a distance of nine kilometers and has obtained concurrence of the concerned GP.

This case study of water supply scheme of Naini-Poundar is significant due to various reasons including (i) remoteness of the water source implying continuous vigilance of the pipeline network and (ii) institutionally and financially sustainable.

1. Background:-

The 73rd Amendment of the Constitution of India came into force in 1993, which ensured conferment of powers and responsibilities to Panchayati Raj Institutions (PRI's) for local self-governance. This state has the distinction of implementing World Bank assisted Rural Water Supply & Environmental Sanitation Project based on demand driven approach during 1996 to 2003. The state of Uttarakhand has been a front runner in the devolution of funds, functions and functionaries to PRI institutions since 2003. The ongoing Uttarakhand Rural Water Supply and Sanitation Project (URWSSP) supporting a sector wide approach (SWAp) for rural water supply and sanitation in the state has been effective since 30th November, 2006. This project is jointly financed by the World Bank, Government of India, Government of Uttarakhand and Community.

The Project development objective is to improve the effectiveness of rural water supply and sanitation (RWSS) services through decentralization and the increased role of the Panchayati Raj Institutions and the involvement of local communities in the state of Uttarakhand. The RWSS schemes under sector program are adopting an integrated approach for improving sustainability of water supply and maximizing health benefits.
The water supply schemes are integrated with catchment area conservation and management program, household and village environmental sanitation program, solid waste management, health and hygiene awareness promotion and safe disposal of waste water. So far about 5000 habitations have been benefited under the project by all three implementing agencies. The village Naini-Poundar is one of the water supply schemes under the project. The water supply scheme for Naini-Poundar was commissioned in December, 2011.

2. Distinct features of Village Naini-Pounder:

Gram Panchyat Naini-Poundar, Block-Augustmuni of Rudraprayag having 796 population comprising 132 households, is scattered in five habitations. The village is situated en route to famous temples *i.e.* Sidheeth Goddess Ma Sheetla Devi and Lord Basu Kedar. It is situated 60 Km away from district headquarter- Rudraprayag at an altitude of 1750 meters above mean sea level (MSL). The temperature varies 20°C to 35°C (during summer) and between -5°C to 5°C (during winter). The village is surrounded by dense Oak forest. Most of the villagers are employed with service sector whereas few are dependent on agricultural land for subsistence. The literacy rate of the village is quite high-85%.

3. Description of water supply scheme:

The villagers were dependent on Naini-Poundar Water Supply scheme constructed by the Uttarakhand Peyjal Nigam in the year 1984. The water supply scheme had outlived its technical age in the year 1999. Furthermore, the water source of the scheme was also located in other habitation resulting in frequent disruption by the residents of other habitation. It also showed diminishing trend of water discharge. Thus there was an acute shortage of water in the village. The villagers were dependent on water tankers provided by Uttarakhand Jal Sansthan. But it was inadequate to fulfill the drinking water need of the villagers. These were the compelling reasons for the community to switch over to demand responsive approach in order to improve their water supply system. The community of the village through a GP resolution requested the local district implementation unit of the URWSSP to include their village for improvement in water
supply and sanitation service. Thus, the village was selected under the project during the year 2008-2009.

**Processed Followed:**

- **Prefeasibility:** It was found during prefeasibility that (i) villagers of Naini-Poundar were having acute shortage of drinking water; (ii) villagers were willing to contribute towards partial capital cost and cent percent O&M responsibility cost.

- **Planning Phase:** The Planning Phase agreement with the support organization- Shri Raj Rajeshwari Bal Evam Mahila Kalyan Samiti, Rudraprayag was entered into on 16-06-2008. The Planning phase duration was six months. The Support Organization (SO) deployed its team comprising community facilitator, engineer, community worker, etc. for dissemination of project principles and procedures leading to community mobilization and preparing villagers for implementation of water supply scheme. The User Water & Sanitation Sub Committee (UWSSC) comprising 8 members was constituted for management and execution of the water supply scheme. The UWSSC gave due importance for inclusion of women representatives members. There was no appropriate source of water within the village limitations. It was the main concern regarding availability of gravity water source with sufficient water yield in planning phase. Finally, as of combined efforts (i.e. UWSSC, Support Organization and District Implementation agency), community got NOC from nearest Gram Panchyat Uchola to tap ‘Uchola Gahera’ as a water source. Various technical options were discussed in the community wide meetings and “Agree-to-do Meeting”. The discussions on technical options included Gravity, Pumping, RWHT, Reorganization of existing scheme etc. Finally, gravity based scheme from the Uchola Gadhera was unanimously approved by the community. The availability of discharge in the Uchola Gadhera was found to be around 200 LPM throughout the year which was sufficient to meet the water demand of the village.
For the long term sustainability of source various measures were planned under catchment area conservation works as per site requirement. The culmination of the Planning Phase resulted in preparation of Detailed Project Report (DPR) amounting to Rs. 35.6 lakh.

- **Implementation Phase:** The Implementation Phase Quadruple Agreement (IPQA) became effective since 30th August, 2010. The water supply scheme was commissioned on 2nd December, 2011. Following works were done in this phase: (i) Source work: Construction of SCC (Spring Collecting Chamber); (ii) Storage work (RCC): 1 Reservoir of 30KL capacity; (iii) Supply Network: 8665 Mtr.; (iv) Distribution Network: 3445 Mtr. (v) Public Stand Post: 17 (vi) Plantation: 1000 (vii) Recharge Pit: 2 and (viii) RR Dry Stone Check Dam: 4

- **Operation and Maintenance Phase:** The district level project functionaries built the capacity of UWSSC members and PRI members for routine operation and maintenance of the scheme and also account management and financial management. Thus, it was a phase where emphasis was on handholding of the UWSSC and GP. The operation and maintenance phase activities were completed in April, 2012. Since then the scheme is being operated and maintained by the UWSSC under the guidance of GP.

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4. **Evidence of Performance:**

- The scheme is running satisfactorily and meeting its recurring cost without any external support from the government since April, 2012.
- The O&M is being done by the UWSSC.
- The beneficiaries are contributing Rs. 10 per month per family as user charges to the O&M account of UWSSC.
The UWSSC has been able to generate surplus funds to the tune of Rs. 35000.00 (Thirty five thousand) after meeting all its liabilities of O&M.

Community wide meeting are regularly organized to share income and expenditure before the villagers which reflect the full transparency in O&M of the scheme.

Times to time meetings are also organized by the DPMU Officials to provide support/guidance to the Gram Panchayat for smooth functioning/operation of scheme.

Every family/beneficiary of the village is fully following rules/regulation made by UWSSC.

The active participation and contribution of women as a UWSSC member and in a community meeting is highly appreciable.

The UWSSC also resolves the disputes at the village level and involves the villagers to contribute their efforts for scheme operation.

The transparency at every stage has largely contributed towards community satisfaction and ownership.

5. Factor of Success: -

Effective and knowledgeable leadership of the UWSSC has been the driving force for successful implementation and O&M of the water supply scheme.

The public disclosure of all the activities including financial transactions has contributed a lot.

The community has been actively involved in all the phases of the scheme cycle.

The Support Organization has fulfilled all its obligations in true spirit.

Devotion of sufficient time for interaction with community has been one of the contributing factor for this village.

Keeping the view of long term sustainability and operation of water supply scheme the collection of Operation and Maintenance (O&M) cost has been regularly collected by the UWSSC.
As per the policy of sector program the conflict regarding water supply schemes are resolved at UWSSC level itself.

The prime reason for sustainable O & M in this particular village is that there is an effective demand from the community for the water supply service and the community was properly trained to efficiently and effectively handle dispute resolutions, material procurement, financial transactions and record/ book keeping in a satisfactory manner.

6. Lessons Learned: -

The Project is transparent and thrust to maximum power in the hands of the community where in villagers for the first time were made aware, that the facility provided are their own and its maintenance was essentially their concern, as against expecting somebody from the Government to maintain the infrastructure.

- The demand by, and the participation of the community are key elements that influence the community’s willingness to assume financial responsibility for the system.

- It has been proved that the community show tremendous interest and enthusiasm in shouldering responsibilities, including procurement and financial management activities, when properly empowered.

7. References: - i) Officials of District project management unit; ii) Implementation phase report; iii) Sector Information System iv) UWSSC; O&M records;

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