EVALUATION REPORT ON ACCELERATED RURAL WATER SUPPLY PROGRAMME

1. The Study

Provision of drinking water supply in rural areas was primarily the responsibility of the States, but it was observed during mid-sixties that water supply schemes, were implemented only in the easily accessible villages, neglecting hard core rural areas. In order to accelerate the pace of coverage of the problem villages, the Government of India introduced the Accelerated Rural Water Supply Programme (ARWSP) in 1972-73 to assist the States and Union Territories with 100 percent grant-in-aid to implement the programme in such villages.

At the instance of the Planning Commission, the Programme Evaluation Organisation undertook the study to evaluate the performance, implementation and impact of the safe drinking water supply programme and to examine the extent and nature of community, participation in implementation, operation and maintenance and to assess the awareness about safe drinking water and sanitation in the rural areas.

2. Objectives of the Study

The main objectives of the study were:

- i) to assess the performance of the rural water supply schemes in terms of coverage of villages, habitations and populations,
- ii) to assess the quality, availability sustainability and dependability of water sources,
- iii) to identify the factors contributing to the re-emergence of `no source' villages in many States,
- iv) to understand the problems in maintenance and operations of the water structures and system, and
- v) to assess if the scheme has made the desired impact on the beneficiaries and awareness of the people about the importance of safe drinking water, sanitation and hygiene.

3. Sample Size/Criteria for Sample Selection

A multistage stratified sample design was adopted for the study. The sample units were states, districts, blocks, villages and households. Two districts with one block each were selected on the basis of the maximum number of `no source' villages. Two villages under ARWSP and one village under MNP, and one`no source' village were selected randomly from each block. 10 households from the general category and 5 from SC/ST category were also selected randomly. In all 1305 households spread over 87 villages in 29 districts of 16 States were selected for the study.

4. Reference Period

The study was conducted in January, 1996 and completed by the end of March, 1996 except in Himachal Pradesh where it was completed by the middle of May, 1996.

5. Main Findings

- The rural drinking water supply schemes were implemented by the Public Health Engineering Department (PHED), Department of Rural Water Supply and Sanitation (RWSS), Water and Sewerage Board (WSB), Jal Nigam and Zila Parishad. However, PHED was the dominant implementing agency in the selected districts. Most of the implementing agencies had constituted the District Coordination Committees with the District Collector as the chairperson and representatives from PHED, SEB and WSB.
- 2. In the selected districts ARWSP covered 86 percent of the villages, of which nearly 20 percent were partially covered and one percent had permanently defunct systems. Hand pumps (HP) and pipe water supply (PWS) was found to be the major modes created under the programme. A smaller proportion of villages had open dug wells (ODW) and mini water supply system (MWS). In general priority was given to ensuring access to SC/ST population in the implementation of the schemes. It was observed that about 12 percent of households covered under the programme were regularly using water from private open dug wells, hand pumps and natural sources.
- 3. A number of households reported that the locations of alternate water sources were more convenient for them. Inconvenient locations of public supply points was a disincentive for using such sources by some beneficiaries. This was also true for the tribal and desert areas.
- 4. Some of the States reported non-potability of water due to excess iron or fluoride content or bad smell. About 87 percent of the sample village reported breakdown of modes during the reference year. In two-thirds of these cases the frequency of

breakdown was more than two. The incidence of breakdown was much higher in the case of PWS.

- 5. It was observed that irregularity in electricity supply in rural areas and overexploitation of ground water for irrigation was one of the main reasons which affected the operation of public water supply facilities.
- 6. It was found that a number of households continued to depend on private and natural sources of water due to inconvenient location, frequent breakdowns, longer waiting time, low yield and bad quality of water, etc.
- 7. It was observed that the greatest weakness of the programme had been the lack of community participation in the implementation and in operation and maintenance of the facilities created.
- 8. It was found that a large number of no-source villages were not fully covered under the programme due to depletion of ground water tables, contamination of sources and defunct modes owing to major breakdowns.

6. Major Suggestions

- 1. Since coverage of villages gives a misleading picture, the official records of coverage of areas and people should be maintained in terms of habitations rather than villages.
- 2. Since a large number of households were not using public sources due to inconvenient location and longer waiting time, the norms regarding distance from modes and the number of people to be served per point need modifications.
- 3. The water quality of sources created should also be monitored, in order to prevent people from using unsafe water from alternate sources.
- 4. The villagers should be motivated to take over routine O&M activities and contribute funds for repair and maintenance as it is not possible for the Government agencies alone to look after the same without the active participation of the villagers.
- 5. The installation of PWS systems in rural areas should be avoided as this system is less dependable than other sources.
- 6. It is imperative to take suitable measures for making drinking water sources sustainable. Firstly regulatory measures by the States should be taken to control over exploitation of ground water for irrigation and secondly, people's participation in water conservation and harvesting is essential to ensure a balance between the two competing uses of ground water.