

# **A Study of Portable Drinking Water Supply in Bibile Divisional Secretariat Area**

I.L.M. Sabri

*Central Engineering Consultancy Bureau, Colombo, Sri Lanka*

This study area covers villages belongs to the Bibile Divisional Secretariat Division (DSD) in Monaragala district closer to the western margin of the Uva province. The area consists of 40 Grama Niladari (GN) Divisions which lies around the Bibile DSD. Due to severe drought periods experiencing in every year, the people in Bibile have to face many difficulties to obtain drinking water. The objective of this study was to assess the portable drinking water supply in the Bibile DSD area. The primary data for this study were collected by using questionnaires, provided information by the National Water Supply and Drainage Board (NWSDB), DSD office and GN's. The DSD annual reports and Censes Department's reports were used to collect the secondary data. The water demand requirement per day was estimated based on the forecasted populations. There are two pipe borne water supply schemes (WSS) currently functioning within the area. One is operated by the NWSDB and the other is operated by Bibile Predesiya Saba. These two WSS cannot cater the total demand of this area due to limited capacities of the schemes. There are 17 numbers of rural WSS which are managed by community based organizations (CBOs) in this area and covering 7,019 people. Only 17% public satisfied with existing WSS. The water demand for the Bibile DSD for the year 2020 is estimated as 6,520 m<sup>3</sup> per day. The forecasted water demand by the year 2040 is 8,696 m<sup>3</sup> per day. The total water demand including average industrial and commercial consumption of about 12% of the domestic demand. In year 2020, the people in Bibile will only full filed about 13% of their portable drinking water requirements. Thus, people in the suburbs of the area face severe difficulties in satisfying their drinking water requirement. All of these WSS are operate in partial treatment. Hence, water quality of the WSS are not up to standard during the rainy days as per survey done.

*Keywords:* Water supply, Pipe borne, Water demand