ABSTRACT

For human existence the availability of safe drinking water is very important. In our country there is abundance of water, but for some reasons pure drinking water is becoming scarce. Groundwater is the most reliable source of drinking water in Bangladesh. In the early 1990s, almost 97 per cent of rural people had access to an improved source of drinking water. Currently, only 78 per cent of rural people have access to an improved source of water due to arsenic contamination and other causes. According to World Bank estimation, 18 million people in Bangladesh are poisoning themselves by drinking arsenic contaminated water and the health of 35 to 76.9 million people is at risk of arsenicosis. Arsenic, salinity intrusion, depletion of groundwater table, drought, flooding etc. make it difficult for rural people to get access to improved drinking water sources. According to the Coastal Zone Policy 2005, 76 upazilas of 19 coastal districts of the country are likely to be seriously affected by the anticipated sea level rise. About 15 million people forced to drink saline water and 30 million people deprived to collect drinking water from nearly available sources. Although groundwater is used for many purposes, but the groundwater table is declining due to gradual desertification process especially in the North-Western region of the country. It is predicted that every year the ground water table is declining by one meter (average) and 27 per cent of tube-wells are out of operation in the dry season. About 55 million people are denied the use of water from tube-wells due to the fall in ground water level during the dry season.

The Department of Public Health and Engineering (DPHE) with cooperation of Non-Governmental Organizations (NGOs) and Donor Agencies are involved in drinking water governance in Bangladesh. DPHE is the only government institution which directly involved in water governance to ensure safe water supply in rural Bangladesh. Statistics suggests that this effort is not enough to ensure peoples' access to safe drinking water. So, the institutional capacity of DPHE in terms of drinking water governance in rural Bangladesh is to be examined. In this study, attempt has been made to assess the effectiveness of water governance provided by DPHE and to find out the way to attain good and efficient governance capacity of this institution.

Key words: Arsenic contamination, sea level rise, salinity intrusion, groundwater level depletion, safe water supply, access, service delivery, water governance, sustainability.