Drinking Water Safety Planning in Bangladesh – Strategy to strengthen the institutional capacity for scaling up access to safe drinking water

Prosun Bhattacharya (1), Mattias von Brömssen (2), Boluwaji Onabolu (3), Nargis Akter (3), and Dara Johnston (3)

(1) KTH Royal Institute of Technology, KTH-International Groundwater Arsenic Research Group, Department of Sustainable Development, Environmental Science and Engineering, Stockholm, Sweden (prosun@kth.se), (2) Department of Water Resources, Ramboll Sweden AB, SE-104 62 Stockholm, Sweden (mattias.bromssen@ramboll.se), (3) UNICEF, BSL Office Complex 1, Minto Road, Ramna, Dhaka-1000, Bangladesh

In recent years Bangladesh has made progress towards achieving the goal of universal access to improved water supply but the country is encountering significant challenges in terms of the safety and sustainability of drinking water supplies. Although only 2% of the population are without access to an improved drinking water source, about 65% of the population lack access to drinking water that is arsenic safe and free from microbial contamination. Naturally occurring chemical contaminants in drinking water is not only limited to arsenic, but includes manganese, iron and salinity. Additionally, drinking water quality is compounded by microbial contamination affecting the population.

The government has clearly articulated its commitment to ‘ensure access to safe drinking water for all the urban and rural population of Bangladesh’ in its seventh 5-year plan. Despite the strong articulation in policies and significant efforts for service provision, an estimated 99 million people lack access to microbiologically safe water at the household level and an estimated 19.7 million are exposed to arsenic contaminated drinking water sources. Investments by government and donor agencies have ensured that an additional 65 million people gained access to improved water sources between 1990 and 2015, however there was only a one percentage point decrease in exposure to arsenic through drinking water between 2009 and 2013. At this rate of progress, 20 million people will still be without access to arsenic safe water by 2030 unless the sector strengthens the underlying systems for scaling up access to safe drinking water.

Various stakeholder consultations have indicated that the slow rate of progress is primarily associated with challenges in enforcement of policies, legislative and regulatory framework, institutional arrangements, capacities and social behavior. Over 80% of the estimated 10 million water points in Bangladesh are constructed privately using the services of local drillers, and remain untested. Consequently, without an appropriate regulatory framework and capacity building of the private sector in Bangladesh, access to safe drinking water cannot be secured and scaled up to an appropriate level. It is therefore important to to trigger the institutionalization of strategic interventions that would strengthen the private sector capacity and regulation, institutionalized water quality monitoring, surveillance and sufficient access to reliable data for drinking water safety planning in Bangladesh.