



INSTITUTIONAL SETTING AND PURPOSE

Groundwater resources are monitored and managed by the Ministry of Natural Resources and Energy through The Department of Water Affairs. As secondary task the Ministry is obliged to supply and manage water in the rural areas of the country. The country has approximately 6,000 boreholes dug for groundwater exploration, the bulk of them for domestic water supply particularly in water stressed areas. Exploration wells are intended for the monitoring of groundwater levels and quality.

Groundwater monitoring is coordinated from the headquarters in Mbabane. A groundwater monitoring plan existed but was curtailed to enable the use of the groundwater boreholes to provide potable water to communities affected by the drought that has been observed over the years. However, groundwater monitoring is being revised through support from the SADC Groundwater Management Institute. A groundwater monitoring project is being piloted with the aim of rolling out to a national scale subject to availability of funds. Considered parameters are water levels, major ions (Ca, Mg, K, Na, Cl, NO₃, SO₄, HCO₃ and CO₃), EC, pH, just to name a few.

PROCESSING AND DISSEMINATION

Groundwater levels are supposed to be measured monthly, but they are currently measured only once after the borehole has been drilled. Afterwards, it is the responsibility of the user to monitor the water level, but these values are not communicated to the Ministry in a systematic and harmonised manner.

There is no database to store groundwater monitoring data, however, this would soon be a thing of the past post the ongoing pilot groundwater monitoring project implementation. Data are stored in Excel files and is accessed by staff within the Department with no access to external users.



Figure 1 – Field visit in Eswatini for SADC project

Sources

- Feedback from the Department of Water Affairs - received on 22-10-2020; and
- SADC country visits - 2017.