

Abstract

Indicators serve a variety of policy goals. They help in the improvement of water resource management policy through better assessment of the water resource. Indicators on Integrated Water Resources Management (IWRM) are comprised of measurements and derived values that track the changes of water resources conditions and their management efforts and success/failure over time. They help measure the state of water resources in general, the pressures exerted on them, and the resulting impacts on ecological and human health. More importantly, such indicators show progress of measures and policies aims to protect the sustainable development of water resources.

In this research, the IWRM indicators for the West Bank were developed depending on the IWRM indicators in the ESCWA region which were discussed in ESCWA Water Development Report 2 of 2007, in addition to the groundwater indicators which were presented on the Groundwater Resources Sustainability Indicators created by the United Nations Educational ,Scientific and Cultural Organization-UNESCO in 2007. The IWRM indicators were developed to fit with the reliable and available data in the West Bank.

The water status was analyzed depending on the Driving Force-Pressure-State-Impact-Response DPSIR framework, the IWRM indicators for the West Bank were developed and categorized into four group: Enabling Environment and Institutional Roles indicators, Supply availability and management indicators, Demand Management and Protection indicators and Health and Environmental Protection indicators.

The main findings of this research indicate that in the West Bank, groundwater presents almost 100% of the total renewable water resource. Non-conventional water resource, treated wastewater, forms only 0.033% of the total abstraction water resources. The per capita annual water use in the West Bank is 50 m³/cap/yr. The West Bank achieves a very good percent with 90% for population with access to safe drinking water by networks, furthermore; provision of sanitation services in the West Bank is only 31% which is the lowest percent of the ESCWA countries. Regarding community based organizations; there are only two organizations in the West Bank, whereas many world countries have recently adopted this type of participatory approach in dealing with the issue of water supply. The per capita agricultural water use is only 45 m³/c/y while it is in other neighboring countries 102 m³/c/y as Jordan.