ABSTRACT

Water is absolutely an essential element for survival and is used for various purposes. Globally the availability and the quality of groundwater vary from one place to another. In many regions the ever increase in the extraction of groundwater especially in the developing countries has posed pressure on groundwater. The objective of the research is to assess the spatio-temporal variation in groundwater level through people's perception and to design groundwater management plan. Both primary and secondary data sources were used to achieve the desired objectives. The secondary data were acquired from concerned governmental departments and other private organizations. Primary data were collected through questionnaire survey, personal observations and Global Positioning System (GPS). It was find out that the water table in Wana has fallen by 13 feet during the last five years. The introduction of solar panel affects the groundwater dramatically. The effects vary from place to place but are clearly visible in some areas where surface sources carry very little water or have dried up completely. The depletion of forest resources has reduced the water retention capacity of the soil, while ecological and climatic conditions have led to the low recharge of groundwater sources. As a result, many springs, streams and perennial watercourses have dried up completely. The proposed management plan will have positive impact on the life of existing dams in downstream. It will extend the life of dams because of reducing soil erosion and flash floods. The construction of small and medium reservoirs under the present conditions is the only possible way to meet the impeding water crisis. The construction of Dam will not only provide water for the agricultural activities but will also raise the groundwater level.