

Abstract

This study assessed probable water that could be harvested during rainy seasons over Embu County of Kenya. Monthly rainfall data was obtained from Kenya Meteorological Department while percentage distribution of household by household size, main roofing material, number of rooms in the main dwelling and per capita volume of water required was sourced from Kenya Integrated Household Budget of Survey (KIHBS). Minimum water demand per household was computed based on KIHBS. Kenya National Bureau of Statistics (KNBS) 2009 population census was used to determine population and number of occupants in the main dwelling. Embu County receives bimodal rainfall during March-April-May (MAM) and October-November-December (OND). Rainfall is highly variable with 8190 and 7490 litres of harvested water during MAM and OND season respectively expected to last for approximately 43 days (MAM) while 39 days (OND) and thus not sufficient to satisfy minimum water demand levels for Embu population. The total potential harvestable water during MAM and OND accounted for 45.4 % and would go a long way in meeting water demands in the region. Notably, harvestable water was being used to supplement natural sources of water. Therefore, enhanced water harvesting during rainy season could provide an alternate source of domestic water.