

Introduction

The topographic and orographic characteristics of water catchments are key factors disadvantaging farmers living upstream in accessing water resources while their downstream counterparts enjoy plenty of water. Climate change is another threat to water availability for farming and poverty alleviation in rural areas. Finally, the absence of market outlets locks these farmers out of business opportunities. In response to these issues, the Government of Kenya (GoK) introduced several pro-poor schemes enabling stakeholder participation in the management of their water resources to ensure water equity and poverty alleviation. This chapter evaluates the strengths and weaknesses of the Green Water Saving (GWS) schemes implemented in Muooni Catchment in Kenya. It focuses on the results of the Political, Economic, Social, Technological, Legal and Ecological (PESTLE) and Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses of Kauti Irrigation Water Users' Association (Kauti IWUA) and presents findings based on the responses of 101 farmers and 20 key informants and a Focus Group Discussion (FGD). The results reveal that Kauti IWUA has a high potential for curbing floods and ensuring water equity under conditions of drought. However, its weak institutional, financial and technological capacities are major barriers to achieving environmental sustainability. The latter was underscored by the lack of proper strategic plans and a disaster preparedness system as well as the obsolescence of the hydro-meteorological equipment. The findings of this evaluation can assist with the further implementation of the water sector reforms enshrined in the Kenya Constitution 2010.

Purpose of the Study

Climate change has been blamed for segregating rich and poor people in most rural areas in Africa, owing to its adverse effects on their livelihoods (Bates et al. 2008). In response to these climate risks and impacts, GoK introduced several pro-poor schemes to enable farmer participation in the management of natural resources and to achieve poverty alleviation (K'akumu 2008; Luwesi and Bader 2013). In assessing the strengths and weaknesses of the GWS schemes implemented in Muooni Catchment by Kauti IWUA, the study revealed both farmer vulnerability and capability vis-à-vis water stresses in these Arid and Semi-Arid Lands (ASALs). The study particularly focused on the risks facing farmers as well as the strategies they put in place to mitigate the effects of environmental degradation on water availability and farming production under fluctuating rainfall regimes. By focusing on the strengths and weaknesses of GWS schemes, the study will advance existing knowledge on pro-poor schemes. This will help to enhance farm profitability and foster the financial and economic viability of farmers in both on-farm and off-farm activities.