

Abstract

Farmers living in most Arid and Semi-Arid Tropics (ASATs) of Kenya face the great challenge of fetching water from alternative sources to curb the effect of drought on rainfed agriculture and forestry. They recourse to traditional Soil and Water Conservation (SWC) measures and other available technologies for saving blue water. Yet, these technologies have become ineffective, owing to the intensity of water disasters arising from climate change and the unsound management of the catchment's land and water resources. Hence, Green Water Credits (GWC) schemes have been propounded to be bio- physically needed, technologically possible, politically and socially acceptable, and economically feasible for ensuring adaptation to and mitigation of climate related water disasters. These schemes significantly rely on effective SWC measures, hydro-policies, agro- technologies and Payments for Environmental Services (PES) to mitigate the effects of drought on farming and forestry. This paper reveals the strengths and challenges facing these schemes in the ASATs of Kenya. Policy makers need to address these issues prior to implementing GWC schemes.