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Need of Intensified Watershed Management Interventions in the Upper Catchment of GERD to Avert Sedimentation

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Abstract

There is a need to do intensified soil and water conservation (SWC) measures in the upper catchment of GERD to control sediment approaching the dam. From literature review, the estimated annual sediment load arriving at the dame site varies. It is estimated as high as 473-million-ton yr⁻¹. Three other studies also estimated it as 245, 287, and 308.6 million-ton yr⁻¹. Sediment emanating from the upper catchment of GERD also reaches in downstream dams of Sudan and Egypt. Related to sedimentation threat at GERD, prevailing challenges in watershed management are reviewed. These are land degradation, absence of national land use policy and tenure security, lack of long-term reliable financing for watershed/land management programs/projects, short life span of land management-based projects/programs, lack of applying quality SWC measures, soil erosion threat to lime application, overlying of fertile agricultural lands and infrastructural facilities with less fertile subsoils and debris, infestation with invasive and exotic plants, poor or no involvement of the private sector, lack of adequate community ownership, limited research, Inefficient documentation, reporting, and M&E (Monitoring & Evaluation) system. Framework opportunities prevailing in Ethiopia for the pursual of watershed management are identified. These are diverse landscapes, presence of extensive extension on NRM (National Resource Management) and watershed management, the presence of solidly founded experience to implement land management, existence of community mobilized land management initiatives, presence of strong policy and strategy on watershed approaches, and presence of established planning unit at the community level. The Way Forward or recommendations are adequate resource mobilization, formulation of national land use policy, do comprehensive watershed classification and coding, scaling up of best practices, establish labor support system, acquire sufficient planting materials, and strengthen capacity building and knowledge management

Keywords: Soil Conservation, Sedimentation, GERD, Upper Blue Nile Basin, Land management, Natural resource management