Potential of Rainwater Harvesting in Somalia

A Planning, Design, Implementation and Monitoring Framework

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Preamble

In 2004, the Food and Agriculture Organization of the United Nations (FAO) established a project entitled Somalia Water and Land Information Management Systems, SWALIM. SWALIM's objective is to contribute to improved water and food security in Somalia by:

- collecting data needed for water and land resources management
- generating user-friendly information from the data
- storing the information in easily accessible databases and disseminating it through conventional and electronic media
- building capacity among Somali authorities to take over these functions in the future.

In March 2007, FAO-SWALIM signed a memorandum of understanding with ICRAF with the aim of producing a number of outputs. These include rainwater harvesting (RWH) classification scheme and definition system; identifying traditional water conservation systems; identifying technical and socio-economic factors for evaluating, planning and designing RWH projects; assessing the potential of RWH practices for increased agricultural or livestock production; and creating links between national institutions and international bodies or networks involved in RWH. The final output is a common framework for planning, designing, implementing and monitoring RWH projects.

To achieve these objectives and outputs, two rounds of trips were organized for fact-finding missions and consultative workshops in April and May 2007. These events took place in Puntland, Somaliland and Southern Somalia, drawing participants from relevant line ministries in government, UN agencies, international non-governmental organizations and community-based organizations. The draft framework was presented in Nairobi for ratification in June 2007. It is envisaged that the final products that include the framework document and assessment report on the potentials of RWH technologies shall act as reference material for policy makers to prioritize and guide community, government and external support agencies, on RWH investment options.

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Acronyms

ACZ	Agro-climatic Zone
AfDB	African Development Bank
CA	Conservation Agriculture
CBO	Community-Based Organization
DEM	Digital Elevation Model
FAO	Food and Agriculture Organization of the United Nations
ICRAF	The World Agroforestry Centre
ITCZ	Inter-Tropical Convergence Zone
RELMA	Regional Land Management Unit
RWH	Rainwater Harvesting
SWALIM	Somalia Water and Land Information Management Systems
SWC	Soil and Water Conservation
UN	United Nations
UNECA	United Nations Economic Commission for Africa
USD	United States Dollar

Local terms

balli	A natural depression on flatter silt soils that collect surface runoff with water-holding capacity ranging from less than 1000 m^3 to more than 100,000 m^3.
war	A stock pond excavated either by hand, and within the last 15 years by machinery, in heavy sealing soils whose capacity for holding water ranges from less than 100 m^3 to more than 10,000 m^3.
berkad	A concrete-lined reservoir roofed either with corrugated iron sheets or shaded with small bushes suspended over the tanks with nets. Its capacity ranges from 30 to 400 m^3.
xurfad	Either a water pond or earth dam.
ceel	A hand-dug well.
berkad guri	Roof water harvesting.
majaroor	Roof water harvesting.
naxaroor	Soil bunds constructed to conserve both soil and water.
xadhig	Soil bunds constructed to conserve both soil and water.
il	Natural spring
doox xidh	A sub-surface dam constructed in sandy rivers
deshek	Flood-diversion techniques used for delivering flood water for irrigation purposes
mugsid	An underground reservoir