

PROMOTION OF RAINWATER MANAGEMENT TECHNOLOGIES IN THE HORN OF AFRICA: MULTI SECTORAL APPROACH TOWARDS SUSTAINABLE LIVELIHOODS OF PASTORAL COMMUNITIES.

Introduction

Most of the countries in the Horn of Africa are experiencing profound socio-economic and political problems, the most dramatic being food shortages and disruptive water and pasture conflicts. In particular, the pastoral communities in ASAL, which covers more than 80% of the area, have been experiencing a combination of both short-term, often acute food shortages, and long-term or chronic shortages due to the negative effect of recurrent drought on their livestock—main source of livelihoods. The former often translates into famine and starvation requiring emergency food aid. The latter are less obvious, for they are characterised by negative changes in the economic, social and ecological factors and their interrelationships over longer time periods. These crises threaten the stability and existence of the affected communities and economies because their systems are obviously failing to cope.

A number of past interventions have not been sustainable in addressing the situation, hence pastoral communities remain trapped by poverty due to the unpredictable climate. The problem is aggravated by non-responsive government policies, climate change, change in land-use and conflicts over limited resources especially land/pasture and water. Land-use changes upstream coupled with migration by farmers to grazing land are pushing the pastoral communities further into destitution.

Moreover, few opportunities exist outside of livestock management to diversify their income and reduce drought-related risks. However, migration of farmers into pastoral areas has had a few positive impacts as the purely pastoral communities integrate with migrant agro-pastoralists and farmers. This has resulted in a slow transition of some nomadic pastoralists into agro-pastoralists. Farming usually supplements livestock production and enhances sustainable food security. The positive aspect notwithstanding, unsustainable farming systems that are brought from high potential areas by migrating agro-pastoralists, have also contributed to deteriorating livelihoods.

To address the problems and complexity of pastoralists in the drought prone Horn of Africa, there is need to promote some of the promising technologies for improving water availability, food security and livelihoods. Therefore, the problems related to food security need urgent solutions, especially in the ASALs, where environmental degradation has led to decreased productivity, making inhabitants even more susceptible to drought and other natural disasters/calamities. Unless sustainable livelihoods improvement strategies are developed, alleviation of poverty and food security will remain elusive.

One promising technology for rural farming systems is rainwater harvesting. This is the process of interception and concentration of rainwater and runoff and its subsequent storage in the soil profile or in artificial reservoirs for crop production, domestic/livestock use. The recently concluded USAID funded GHARP case studies in Ethiopia,

Kenya, Uganda and Tanzania revealed a number of promising and proven technologies. The proposed project is one of the follow-up activities to the just concluded GHARP project. The project seeks to promote some of the rainwater management technologies in ASAL through a multi-sectoral and integrated approach.

Objectives

The overall objective is to establish two community-based pilot sites for promoting rainwater harvesting and management, and integrated complementary technologies with the aim of enhancing sustainable livelihoods of pastoral and agro-pastoral communities in Kenya. To achieve this objective, an integrated and multi-sectoral approach to rural development will be adopted to bring together various stakeholders to work with pastoral/ agro-pastoral communities.

The Implementation

The proposed project will establish two pilot sites. The sites will be used as demonstration sites for community training and dissemination of water harvesting technologies. The pilot project sites will be selected in consultation with stakeholders from *Baringo, Laikipia, Isiolo, Kajiado, Meru North, Garissa* and *Wajir* districts of Kenya during the project initiation workshop was held between 4-6th October 2004 in Nairobi. The project will be administered by KRA/GHARP Secretariat at a cost of US\$ 199,280, out of which US\$ 181,780 is being requested from OFDA for a period of 18 months. It is envisaged that similar demonstration and community training sites will be established in other GHARP member countries in subsequent phases of the project. The project activities and expected outputs are listed below.

Activity	Output
Rehabilitation/construction of waterpans/earthdams	Two waterpans/earthdams for livestock and micro-irrigation,
Construction of water storage and regulation tanks	Two 50m ³ storage for domestic water supply
Provision of sanitation facilities	4 improved toilets, 4 washing basins, 4 bathrooms
Construction of watering points	4 stand pipes for human, 4 troughs for livestock
Establishment of drip irrigation demonstration plots.	4 low-cost drip irrigation kits for vegetable production
Establishment of tree/vegetable seedlings nurseries	Two tree/vegetable seedlings nurseries
Setting up of experimental rangeland improvement plots	Increased pasture production
Setting up demonstration plots for forage production.	Improved pasture establishment and management
Demonstration of hay making and storage systems	Availability of forage during dry seasons
Introduction of improved bee keeping and honey production systems.	Increased honey production

Watershed management and improvement	A conserved watershed and environment
Community mobilization and training, exchange/exposure visits.	Enhanced community participation, skills and diversified livelihoods.

Project Sustainability

The target communities will be empowered to formulate their own strategic plans to improve their livelihoods based on the results of the project. Community building through technical and leadership training, which is one of the major components of the project, will also enhance sustainability and development of follow-up activities. The communities will be encouraged to formulate a monitoring plan to continuously monitor and document the impacts associated with the project. The project ownership will be bestowed on the stakeholders, especially the benefiting communities, but participation of the multi-sectoral stakeholders will enhance partial ownership, continued support and sustainability.

Though the proposed program will stand on its own, its implementation will involve stakeholders from different sectors being addressed. Effective participatory coordination mechanism will be established during the project initiation and planning workshop, which will bring together all the stakeholders. Community leaders will be used as the entry point into the community and these priorities will be integrated in the project. The project coordination will further be enhanced by the constitution of a multi-sectoral project advisory committee (PAC) that will provide technical backstopping to the project implementation team.

The exit strategy will be formulated as part of the project implementation plan to ensure community ownership and project sustainability. A final project multi-sectoral stakeholders' workshop will be held to review the project implementation, anticipated impacts and widespread adoption of either the whole project package or components of the project depending on communities' needs and aspirations. Policy makers and development partners will be sensitized through project statements and briefs to influence their decisions on ASAL development strategies. It is expected that the project results will be adopted in the on-going policy reforms, especially environmental management and land use change in the 22 ASAL districts of Kenya. This may lead to continued support of the pilot project sites as demonstration centers on a number of viable technologies for improving the livelihoods of the pastoral communities.