



Optimizing crop mix and soil moisture management as climate change adaptive strategies



The GoZ-UNDP/GEF: **Coping with Drought and Climate Change project** is working with small-holder farmers in Chiredzi district to demonstrate diversification of crop types, soil moisture management and use of climate information in drought risk management and climate change adaptation. Demonstration plots have been established in four sites across Matibi II communal lands of Chiredzi district.

Background

Rainfed agriculture is risky in Arid and Semi-arids lands such as Chiredzi district in southeast Zimbabwe. However, more than 95% of the farmed land in sub-Saharan Africa and Zimbabwe is rainfed. The Coping with Drought and Climate Change project is harnessing local knowledge and practices, integrating this with contemporary science to evaluate with farmers the success and failures of current and introduced practices to risk prevention, reduction or shifting for those faced with drought. Such knowledge is needed at grassroots, and national and international level so that policies can be properly translated into actions that are rich in local content, planned in conjunction with the vulnerable local people.

Interventions under this initiative have focused on diversifying the crop mix to include open pollinated drought tolerant maize varieties, sorghum, pearl millet, groundnuts, cowpeas and cassava. These crops were integrated with soil moisture management practices and selection of appropriate planting dates. Farmers compare the performance of introduced (improved) varieties against local varieties under different management practices. Typical traditional African practices for soil moisture management that the project is building up on include: making of ridges and infiltration (“zai”) pits. The use of rainwater harvesting (controlling and making use of rainwater in-situ) in rainfed agriculture has become common as a result of the uncertain nature of the rains in many parts of Africa. The project has also introduced raingauges and climate forecast products to improve farmer decision making on timing of planting, choice of crops and weeding.

Partners and collaborators

Chiredzi Research Station and the Department of Agriculture, technical and extension services (Agritex) are key partners in this initiative. A strong working relationship has been developed between these institutions and the participating farmers. These local actors are key to having real impact on the ground.

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