



Local storage facility used by women to store crops and seeds

## A CASE OF CENTRAL DROUGHT ZONE AREAS

# THE ROLE OF WOMEN IN ADAPTING TO CLIMATE CHANGE IN TANZANIA

The changes of the climate and its impacts are already occurring and touching the lives of poor people all around the world, especially in developing countries. In Tanzania, like in many other developing countries, women are not only victims of climate change. They are also effective agents of change in relation to adaptation, mitigation and disaster reduction strategies. Their responsibilities in households and communities as guardians of natural resources have prepared them well for livelihood strategies adapted to changing environmental realities. Given their roles in society, (concerning production and reproduction within their family and community) women have important knowledge, skills and experiences for shaping the adaptation process and the search for better and safer communities.

Among the major roles and responsibilities performed by women, reproduction and production as well as taking care of children, elderly, the sick, injured and others are greatly challenging roles. Despite the challenges, especially when resources are scarce and food is limited, women are still fulfilling their principal roles, and they have actively shown their concerns and potential talents in doing so. These talents, capabilities, knowledge, skills and experiences women possess in handling these two main functions can however, if well encouraged and sensitized be translated into actions for climate change adaptation to reduce its impacts and hence strengthen households' livelihoods. In most rural areas people's livelihood depends on agriculture and 85% of women are engaged in agricultural production while facing high risks of loss from droughts, uncertain rainfall and deforestation. These climatic hazards have already led to low production, food shortages and hence famines.

Climate change adds to water insecurity and shortage which in turn takes much of women's time for fetching water for domestic uses. Moreover, water insecurity increases women's workload in subsistence farming as they have to dig deep for land preparation and spend more time in the protection and control of diseases caused by climate change. Traditionally, in most Tanzanian communities, when talking about gender roles, the majority perceives women as powerless and vulnerable. „They always need to be under men's power.“ However, reality shows that women are not just like that! Women are full of strength and talents! People have to acknowledge that women are change agents and wherever women are, they should, “Stand up, play their role and change the climate today!” By so doing, all together, we can reduce the impacts of climate change and hence reduce emissions.

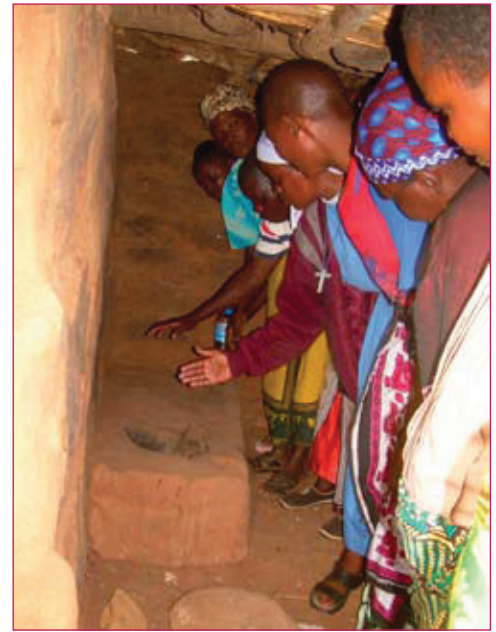
**WOMEN AND ADAPTATION TO CLIMATE CHANGE** There is a lot women can do – and are already doing - as a means to adapt to climate change: Women from the Makoja and Ikowa villages in the Dodoma region, during different workshop sessions undertaken on climate change, had an opportunity to discuss the effects and impacts of climate change and related causes. They all felt their livelihood has been deprived by changes of the weather which affect their agriculturally dependent activities. Women in the above villages discussed possible roles they can realistically play and hence demonstrate their capacity to adapt to these changes. Nobody at this time has an answer on how best to handle this problem, so - although these are local strategies - it is better to be on the road to addressing climatic change. What are these roles women can play in climate change adaptation? Adaptation involves a range of activities to reduce vulnerability and build resilience. The key sectors concerning women's activities to adapt to climate change are Agriculture, Water, Food Security, Forests, Health and the Economy. Traditionally, women have been working and are still assuming their responsibilities in these sectors in most communities, so one needs to underline, that in these areas women are already very active and innovative in order to secure the survival of their families and communities.

**AGRICULTURE** Although agriculture is facing lots of climate hazards, women still depend on it to earn their livelihoods. Agriculture pays 95% of family life sustenance to the majority. Women however, produce half of the food needed for the family's life. In detail, the role of women to produce and successfully harvest includes:

- Early preparation of farms
- Practice tilling cultivation
- Planting early
- Plant multiple crops (both drought and non drought resistant crops)
- Utilization of compost manure
- Avoid cultivating in high lands
- Making water edges around the farms
- Plant trees around the farms.



Shortage of water increases human diseases



Learning the use of fuel saving stoves

These tasks can be performed by all people in families but women are in the front line in doing and advocating its implementation. Even after harvesting, women are responsible for making sure they select and save seeds for the coming season.

**FOOD SECURITY** Women in most communities have the responsibility to care for the household's food security including the production, collection and storage of food. This means, it is important that women know the food requirement for the family in a week, a month as well as a year. Consequently, women are preparing, processing and storing vegetables and fruits during the growing season in order to use them in the dry season when vegetables and fruits are not available. Processing these vegetables and fruits is easy by the use of local knowledge. The storage of surpluses is an effective risk averting measure that woman can undertake against future livelihood failures. Agriculture households, especially in dry areas like Dodoma Singida, Shinyanga and Tabora are using indigenous storage infrastructure for both seed and crop harvest to avoid the risk of post-harvest damage like decay. Finally, the mobilization and formation of village or community cereal banks (CCBs) for food security and other benefits associated with banking the crops in this system are important measures.

**FOREST** Since firewood collection is the responsibility of women in most communities, women have been at the fore front of initiating tree nurseries and planting activities around their homes and in farms in order to restore the loss of trees being cut for firewood and charcoal making. Moreover, women have been constructing and using fuel saving stoves and wonder-baskets in cooking to reduce the demand of firewood.

**WATER** Women are the main collectors and suppliers of water for all domestic purposes. Even when the water is scarce due to drought women are forced to walk long distances to fetch water. As water is most important for life, it must be available no matter where to get it. When water is not available at home women are answerable. To ensure continuous and available water supply, women have joined hands and voice their concerns to the government asking for the construction of deep water-wells, tanks and rain water harvesting systems.

**HEALTH** Climate hazards have brought several serious diseases attacking people in communities. For instance, due to climate change and global warming, there have been increased incidences of malaria in many areas. Taking care of the sick people in the family is again the responsibility of the women. Sometimes, they are responsible with no resources to support them. In adapting to such situations, rural women have been reverting to the use of low cost traditional medicines and indigenous knowledge and health care.

**ECONOMY** Despite their major role in production for the household, women are known to have a low income in all communities. Traditions and culture have impeded them from engaging in economic activities. As women cannot by-pass such tasks, they have responded by engaging more pro-actively in initiating and running small economic activities such as keeping and sale

of small-stock (poultry, piggery, goat, pigeon pears, dairy cows etc.), growing and sale of surplus horticultural and vegetable crops particularly during the dry season, mushroom production and fishing. In order to control spending and accumulate savings, women have adopted interesting methods such as constructing a wooden box with a permanent lock where they normally deposit small amounts of money (e.g. a few shilling coins) on a daily basis, and only open it after a specified period such as a month. Other options include engaging in other legal business for income generating purposes and nutrition improvement (such as tea shops, retail shops, etc.).

**CONCLUSION** Women are engaged in more climate change related activities than what is reported, documented or recognized by the public. At the same time, the effects of climate change are significantly impacting on poor people, particularly women. Climate change is exacerbating the problems and inequities that women are already facing. Women's livelihoods are highly dependent on natural resources which are heavily threatened by climate change. We have seen that women in most households in rural areas have the major responsibility for collecting and storing food, fuel for cooking and heating, and water for all domestic uses. When weather patterns are erratic, women spend more time on each of these tasks, which means, less time is spent on education, development work, health etc. Therefore, there is a need to strengthen women's ability to contribute and exercise their unique and valuable perspectives and expertise on climate change.

Grace Mketto