

ABSTRACT

The study was done in Uluguru Mountains to determine the linkage between agrobiodiversity and household food security among smallholder farmers. This objective was based on the fact that, while there are adequate information and corresponding policies on conservation and management of wild biodiversity in Tanzania, few exists on agrobiodiversity and its role in providing food security of the smallholder farmers. Specifically the study sought to; identify the major farming systems including the management and organizational aspects of agrobiodiversity and the associated indigenous practices; determine household food security status and coping strategies among smallholder farmers in the study area; analyse factors influencing household food security in the study area; determine the diversity of crops (farmers varieties, local varieties or traditional varieties) maintained by smallholder farmer; and analyse socio-economic factors influencing agrobiodiversity and household food security. Using participatory rural appraisal, questionnaire surveys and diversity inventory from four villages and 120 randomly selected households, the study found that food security in the study area depends largely on the diversity of crops maintained by the households. The study showed further that food security as a concept is locally perceived and therefore what constitutes food security may be something that goes beyond conventional thinking. The study concludes that communities have inherent abilities to deal effectively with vulnerabilities based on their past experiences and anticipated outcomes. Such experiences and outcomes bring, among other things, agrobiodiversity for household food security. While food security perceptions and food preferences may be quite localized, they point to the fact that interventions to solve problems of food insecurity may only succeed when local perceptions and preferences are put on board. The study draws a number of policy and research implications including the: development of policies and strategies away from mono cropping to diversity as a means for sustainable food and the overall livelihood security of the smallholder farmers in the study area and areas with similar conditions; development of policies for awareness raising in terms of the value of

agrobiodiversity for sustainable agricultural production; need to protect potentially useful crops and the value of agrobiodiversity as a cultural heritage or a combination of these points. Awareness needs to be raised on the importance of minor, semi cultivated and wild crops as sources of food and genetic resources for future food security options and the importance of women in the management of agrobiodiversity at the community level particularly in relation to the minor, semi cultivated and wild crops. The study ends by proposing areas for further research including the establishment of the level of genetic diversity needed for ecologically sound and economically sustainable agriculture; documentation of seed exchange systems and minor and less known crops and their contribution to household food security. Genetic mapping and the role of market integration on agrobiodiversity are also proposed as areas for further research.