Agricultural Commercialisation and Its Implications on Agrodiversity Management in the Drylands of Central Tanzania

ET Liwenga, RYM Kangalawe, CA Masao

Abstract

The study examines the linkages between agricultural commercialisation and agrodiversity management. It considers agricultural commercialisation an important socio-economic aspect with varied environmental implications, particularly in relation to agro-diversity management. The study was undertaken in Kondoa and Kongwa Districts, in the semiarid central Tanzania. The aim of this study was to examine the implications of agricultural commercialization on agro-diversity management, food security and the environment in general. A variety of methods were used in the study including participatory assessments techniques, field visits and household surveys. Household data was analysed using SPSS. The findings from this study indicate that for decades agricultural production in the semiarid areas of central Tanzania has been centred on production of a diverse number of crops though concentrated on sorghum and millets as the most drought tolerant grain crops. However, from the mid-1980s the balance has shifted in favour of cereal crops like maize, which has become among the major cash-earning crop. Other prominent commercial crops included pigeon peas, sunflower and simsim. Commercial crops appear to be expanding at the expense of traditional drought tolerant crops such as bulrush millet and sorghum, thereby influencing the local agro-diversity. The abandonment of some crops e.g. castor oil plants in favour of market crops also appear to affect the agrobiodiversity in the study areas. It has been found that expansion of farms is a major factor for environmental degradation through deforestation, declining soil fertility due to continuous cultivation and emergence of noxious weeds such as Striga. On the other hand agricultural commercialization appears to have been associated with improvement in food security, household income, housing conditions and education for children. However the emphasis of the less drought tolerant crops like maize in these semiarid areas makes the sustainability of the agricultural system very uncertain.

Keywords: Agricultural commercialisation, agrodiversity, food security, semiarid Tanzania