

Land and Soil Resources and their Management for Sustainable Agricultural Production in Kenya: Current Position and Future Challenges

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Abstract

Land and soil make up the cardinal resource-base in any agricultural production system and, hence, their proper management is vital for sustainable agricultural production. A study was conducted to evaluate the availability and accessibility as well as constraints to utilization of land and soil resources for sustainable agricultural production in Kenya. The study covered 33 districts drawn from 6 out of the 8 administrative provinces in the country. The selected districts were drawn from agriculturally active provinces. The methodology used in data gathering included collection of information from secondary sources, use of questionnaires, field visits and personal interviews. The country has an area of 583,000 km², out of which land and water occupy 571,770 and 11,230 km², respectively. About 33% and 67% of Kenya's land mass are designated as available agricultural land and arid and semiarid land, respectively. Less than 40% of the available agricultural land is utilized. Only 5% of the country's drainage potential is developed. Besides, most of the semiarid land is of high potential for agricultural production provided irrigation is applied. The country's irrigation potential is estimated at 54,000 ha out of which 20% is developed. More land may be reclaimed for agricultural production from the semi-arid land by applying irrigation. Agricultural land availability is, therefore, not limiting to agricultural production. Skewed land ownership that leaves most of the land in the hands of few people is a factor that undermines access to, and development of, the land. Erosion risk and soil shallowness are important constraints. Suitable land/soil conservation measures targeting all forms of soil degradation processes in relation to agricultural systems in given agro-ecological zones need to be developed if the land/soil resources of the country are to be utilized for sustainable agricultural production.

Key words: Agricultural land, land availability, natural resources, soil degradation.