

Abstract

This study evaluates alternative methods of land preparation for maize production on farms in western Kenya, the results of which may be applicable to regions of similar conditions. People, oxen, and tractors are the three sources of power. Maize production depends on rainfall, and the timeliness of operations is critical. To ensure optimum yields, farmers in the region need to prepare the available acreage for maize planting soon after the onset of the rains. An effective method of land preparation to improve labour productivity is desirable. Labour profiles indicated that those not using the hoe for labour preparation used less labour for the task but subsequently used more labour to perform the other operations. Over a period of 5 years, ownership of oxen for ploughing increased. Higher yields and incomes were associated with oxen ownership. Public support for tractors should be diverted to alternative programmes, one of which should be the promotion of ox cultivation in suitable areas.