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# A Survey of the Constraints Associated with the Mechanized Tillage of the Fadama Using Animal Drawn Tillage Implements

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**Abstract :** Fadama tillage in Northern Nigeria and in Zaria in particular, has relied on manual labour and corresponding implements which are associated with drudgery, loss of human energy due to bending and reduced productivity. A survey was conducted to study the present tillage practices and determine the constraints associated with the use of animal traction for mechanized tillage of the Fadama. The study revealed that Fadama farmers (mostly aged between 36 and 60 years) use manual labour with tools like small hoe, big hoe and rake to till during the dry season (October of one year to March of the next year). Most of the Fadama farmers believe that tillage operations like ploughing, harrowing and basin making are very important tillage activities in the preparation of seedbeds for crops like green maize, sugarcane and vegetables, but are constrained to using animal traction for tillage due to beliefs like unsuitability of the workbulls and corresponding implements, Fadama soil being too heavy for the system and the non-attainment of deep tillage required by crops like sugarcane and potato. These were affirmed by local blacksmiths of animal traction implements and agricultural officers of government establishments.

**Keywords :** snimal traction, Fadama, tillage implements, workbulls
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