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“Global food security and food safety:
The role of universities”

Improving Food Security for Pastoralists under Semi-arid Environment of Eastern Sudan

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Abstract

Improving food security for pastoralists under semi-arid environment of eastern Sudan
The research study was initiated to give special attention to disadvantaged pastoral communities by creating an enabling environment for them to maintain a balanced production system in eastern Sudan. Range improvement and disease control through pastoral development agent/veterinary services is expected to serve these pastoral societies and assist them to recover from the devastating effects of drought and its accompanying poverty and destitution. Range improvement and management was attempted through water harvesting, seeding, and active involvement of pastoralists. The intervention was conducted in fenced enclosure (600 ha) Using different types of Terraces-crescent, U, V. shaped terraces have enabled satisfactory management of water run-off for the benefit of the broadcasted desirable native range plants seeds. Herbage dry matter increased to more than four folds (from 0.12 tons/acre to 0.50 tons/acre). The contrast in vegetation height and diversity between the stand inside and outside the enclosure tempted and induced the agro-pastoralists to adopt the idea of protecting the range plants during their germination and the active growth period. Water management was done by harnessing water of Gash River to Tambi basin thus availing water for pastoralists and their animals during the dry season. This had enriched ground water aquifer raising water table up to six meters. Also pastoralists were trained in old wells and manmade reservoirs desiltation to increase water capacity. Next summer season pastoralists were not complaining of water scarcity. Women were trained in making cheese from surplus milk. Paravet training was done to improve ethno-veterinary practices by local healers.

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