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Food and Nutrition Security through Increased Livestock Feeds from Improved Forages in Tanzania

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Abstract

Livestock and livestock products are important source of food and livelihoods among the communities in Tanzania. Over 4.6 million households in Tanzania benefits directly from livestock. Livestock provides employment, income, draught power, manure, informal bank and security. Livestock nutrition has been the major constraints mainly due to shortage of feed particularly during dry season. Improved forages of grass and legumes researched and now promoted in over 88 farmers field schools among farmers located in some district councils in Tanzania is yielding better nutrition to livestock and reduced conflicts among land users. With the aim of increasing quantity and quality of forages for livestock, participatory agronomic forage evaluation have been conducted on station and on farm since 2015. Improved forages researched and now promoted includes those of grasses Napier cultivars (*Pennisetum purpureum* cv. Ouma, ILRI-16835), *Brachiaria* spp (cv. Cyman, Cobra, Marandu, Basilisk, Xares and Piata), *Cenchrus ciliaris* (cv Biloela); *Chloris gayana* cv Boma; those of legumes includes *Lablab purpureus*; *Neonotonia wightii*, *Macroptilium atropurpureum* and *Clitoria ternatea*. Napier gave yields of 48 to 82 tons of DM/ha/yr; *Brachiaria* gave 21.7 to 34.1 tons/DM/ha/yr; *Cenchrus* gave 12.2 to 18 tons DM/ha/yr; Rhodes gave 16.5 to 32.2 tons DM/ha/yr; Lab lab gave 1.2 to 3.2 tons DM/ha/yr; *Neonotonia* gave 4.4 to 7.5 tons DM/ha/yr under good agronomic and management practice. The high yields and of quality obtained from both fodder grass and grass legume mixtures are providing substantial livestock nutrition that sustains production of healthy animals and attaining desired products.

This paper highlights efforts accomplished by researchers from local and collaboration institutions in developing forage technologies for improved feed resources all year around that are now promoted by the government particularly Ministry of livestock and fisheries through farmer field schools and demo plots of forages.

Keywords: Demonstration plots, farmer field schools, improved forages, participatory evaluation, pastures technologies