

The use of alternative animal feeds to enhance food security and environmental protection in the Sudan (The case for Prosopis Juliflora)

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Editor in chief: Zeremariam Fre (PhD).**

Prosopis juliflora (referred to in this paper as Prosopis or locally known to as "Muskit") is a member of a fast growing, ever green and drought resistant shrub which grows in semi-arid areas all over the world, including Sudan and several arid and semiarid countries in Africa. The seed pods are palatable to local animals, particularly ruminants such as sheep and goat. The leaves are relatively unpalatable – due to both the tannin content and to their indigestibility. However, in Sudan and elsewhere, Prosopis has also caused considerable problems because of its rapid growth and damage to farmlands, pasture and especially the irrigated agricultural schemes. The shrub is dispersed in a number of ways, including distribution of seeds from the pods via the faeces of goats and sheep. A concerted but unsuccessful attempt at its removal has been made by the government.

There are differing perspective in Sudan among policy makers and academics and such views range from total physical eradication of Prosopis to seeking alternative uses for it. This paper uses as its point of departure that Prosopis in underutilized resource and that it has great potential as an animal feed resources in the arid lands of Sudan and Africa.

During 2007, The Pastoral and Environmental Network in the Horn of Africa (PENHA) and the Animal Production Research Centre (APRC) within the Animal Resources Research Corporation within the Ministry of Science and Technology (MOST) have been engaged in some serious research to investigate the potential and more effective use of Prosopis as an animal feed. The results from the four month study which came to an end in late 2007 have clearly indicated that prosopis has indeed a great potential for use as animal feed in various forms if fed in appropriate quantities and made more palatable to the animals .Following the outcomes of the research led to a series of pilot training programmes were conducted with pastoral communities in Eastern Sudan and Eritrea. The overall conclusion is that Prosopis can provide a significant input into the feed of small ruminants in the pastoral areas of Sudan as a well as other parts of Africa.