Bush-based Animal Feed Survey Findings

A number of Namibian farmers are producing bushfeed, which refers to the practice of mixing milled encroacher bush with additives.

12 bush feed producers from six different regions have shared their experiences in a survey conducted by the Support to De-bushing Project in 2016 for a duration of 4 months (June-September). It aimed at capturing current bush to feed practices and identifying key challenges. This information will assist in the development of suitable interventions with regards to the production, effective use, storage and future commercialisation of encroacher bush feed.

Findings

The survey results show that bushfeed has been produced for more than ten years, with the earliest documented production dating back to 1972. Bushfeed has been used by many farmers not only as a drought emergency feed, but 50% of the respondents also use it as a supplement feed throughout the year or as a feedlot feed.

Farmers testified that bushfeed production reduces pressure on the rangeland and grazing. It also allows to maintain the herd size during times of fodder shortage.

The majority of respondents provide bushfeed to their cattle and sheep. However, some also feed their goats, pigs, donkeys or game with bushfeed, with excellent results.

Farmers have tried different bush-based rations depending on the availability and cost of supplements. The use of local pods and drought resistant fodder crops such as camel thorn pods and spineless prickly pear as supplements to the milled bush have shown to be very suitable options to enhance the nutritive value of bushfeed. Among the commercial supplements, Rangeland Grower™ and HPC30™ have given positive results. Molasses is used as an affordable source of energy and to enhance palatability and reduce dustiness in feed.

Sixty percent (60%) of the farmers dry the milled bush, store it and only mix it with supplements shortly before feeding. Other farmers mix the milled bush right after harvesting. To further enhance storability, one respondent pelletises the mixtures. None of the respondents is ensiling, but it is has been reported as a promising technique.

The Earliest Producer

Mr Hermann Bayer is the earliest bushfeed producer among the survey respondents. He started in 1972.

During regular hunting trips by horse, he realised that every time it got harder to ride through the encroaching bush.

Although there was little awareness of bush encroachment at that time, he instinctively thought of de-bushing. He decided to buy a bulldozer and soon developed the idea of using bush for animal feed.

Today Hermann Bayer believes that tackling the encroachment problem in its early stages has saved his farm.
**Good Practices**

Farmers have reported practices that play a role in the success of their production. Some of them have been summarised below.

**Using drought resistant fodder crops**

The use of drought resistant fodder crops, such as spineless prickly pear and old man saltbush, as supplements to the milled bush has been the key for the success of various bushfeed productions. **Spineless prickly pear** has shown to give results comparable to maize chops as energy source. **Old man saltbush** is a good source of protein, salt and minerals.

Planning and synchronising the fodder crop production with the yearly bushfeed production is essential.

Practicing **swales/furrows** to retain the water is advised when planting drought resistant fodder crops.

**Feeding according to nutritional requirements**

Exceptional growth rates of up to 7 kg a week in cattle and 1.5 kg a week in sheep were obtained by farmers who fed animals with bush-based rations. The respective farmers had made efforts to send samples of their milled bush and prepared bush-based rations for laboratory analyses e.g. MAWF laboratory so that the nutritional value could be tested and ideal rations be determined. Such practices help to avoid unnecessary expenses caused by excessive use of nutrients and avoid animal illnesses caused by their lack.

**The harvesting and production process**

Some farmers are able to produce between 10-15 tonnes per month. The total production output does not only depend on the technical equipment used for cutting, chipping and/or milling, but also on the set-up and management of the operation. Most farmers prefer the combination of a **wood chipper** and a **hammer mill** over the use of a combined all-in-one machine.

The high labour intensity of bush harvesting is a major obstacle and it keeps 42% of the respondents from expanding their production. Machines such as **chainsaws** and **brush cutters** are more efficient options than pangas.

Planning the production time is key. Ideally the bush should be cut during the peak of its nutritive value, i.e. during the **rainy season**. This reduces the amount of required supplements. The milled bush can be dried and stored for the dry periods. Pelletising and ensiling not only enable the storage of the feed mixture but also add value to the mixture.