Drought Resilience: Bush-to-Feed

Bush based animal fodder in North-Western Namibia

Strengthening Drought Resilience of Namibian Farmers

Namibian farmers increasingly face challenges to sustain their livelihood due to worsening environmental conditions. Especially bush encroachment hampers agricultural productivity and therewith threatens the livelihood of many Namibians. Today, 26-30 million hectares of Namibian rangeland are affected by high densities of bush that grows at the expense of grass.

While bush encroachment constitutes an immense challenge, it also provides significant opportunities.

Through the concurrent response to bush encroachment (i.e. bush control through selective harvesting) and utilisation of the biomass, agricultural productivity can be restored, strengthening the drought resilience of farmers.

Ongoing Activities and Support Measures

A promising value chain based on Namibian encroacher bush is Bush-to-Feed. Bush-to-Feed refers to the production of animal fodder, using encroacher bush as main ingredient.

A number of Namibian farmers are already producing bush-feed today. The results of these pioneer activities are remarkable and prove that bush-based feed works especially during droughts as emergency feed, but also as supplement feed. In many cases bush based animal fodder has proven to be the only viable option for farmers during drought periods.

Two pilot projects are currently being carried out under the Support to De-bushing Project, a bilateral cooperation between the governments of Germany and Namibia, implemented by GIZ and Ministry of Agriculture, Water and Forestry (MAWF).

The pilot projects aim at testing Bush-to-Feed through dedicated scientific research and feeding trials, both in commercial and communal areas.

At the communal pilot site, the project has partnered up with the UNDP financed NAFOLA project.

Overview

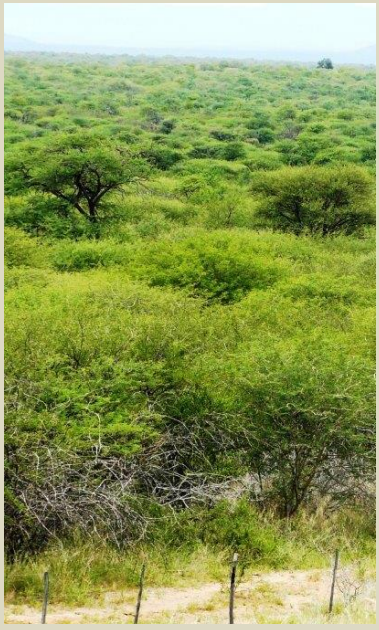
Bush-to-Feed refers to the production of animal **fodder from encroacher bush** and supplements.

It aims at providing affordable fodder during emergency situations, such as **droughts**, but also as **supplementary feed** throughout the year.

Bush-to-feed production contributes to **bush thinning**. Currently 30 million hectares of Namibian farmland are bush encroached.

Bush thinning helps to restore degraded rangeland and increase **agricultural productivity**.

Small-scale Bush-to-feed production **already takes place** today on various, mainly commercial farms.



Bush harvesting and animal feed production in North-Western Namibia

The Production Process

The typical Bush-to-Feed production process involves (1) harvesting of encroacher bush (2) milling the biomass and (3) mixing it with suitable supplements in order to increase the nutritional content and digestibility of the feed. Optionally, the storability of the feed is increased through (4) pelletisation or silaging.

Commonly used bush species include *Acacia mellifera*, *Dycrostachys cinerea* and *Rigozum trichotomum*. Currently, the lack of reliable knowledge and guidelines, leads to unnecessarily high costs of the production. The ongoing research therefore includes the laboratory analysis of different bush species and feed mixes as well as intensive feeding trials. Local supplements, such as plant pods, are being tested. The pilot projects will run until May 2017 and will lead to the compilation of detailed production guidelines. Public workshops at the pilot sites will be organised in order to share the results and raise awareness for the opportunity.

Bush-to-Feed has the potential to develop into a drought response concept that can be replicated throughout Namibia and serve as a best practice internationally.

Bush based animal feed production increases the drought resilience of farmers immediately, while restoring degraded rangelands in the long run.

"We need many hungry stomachs to eat the bush"

Joseph Hailwa

Director of Forestry (MAWF)

De-bushing Advisory Service

Beyond Bush

Further Information:

De-bushing Advisory Service
9 Haydn Street
Windhoek
061-429 256 /250
www.dasnamibia.org

Implemented by giz

In cooperation with UNDP Empowered lives. Resilient nations. gef