

Adding value to bush biomass - an initiative in Okombahe

Federal state – partner country

Saarland – Namibia

Title

Transfer of Research Results for the Production of a Building Panel Made of Bush Biomass to the Namibian Economy

In cooperation with the GIZ programme

Bush Control and Biomass Utilisation

Financing arrangements

BMZ contribution € 253,313 Saarland contribution € 168,910

Duration

01.06.2020 - 30.07.2022

Responsible ministry

Ministry of Economic Affairs, Labour, Energy and Transport of the State of Saarland

This project helps to achieve the following Sustainable Development Goals (SDGs):







Creating Construction Material from Bush Biomass to Boost the Namibian Economy

Local situation

One of the main barriers to economic development in Namibia is severe bush encroachment on farmland. This costs the country around € 100 million per year in lost revenue and is the cause of significant job losses in the agricultural sector. At the same time, the bushes present a natural and as-yet untapped resource that constitutes an estimated 200 million tonnes of wood biomass, the commercialisation of which could create employment opportunities and fund de-bushing efforts.

These naturally abundant raw materials are not currently being commercialised sufficiently in Namibia; this is due, among other things, to a lack of scientific expertise required to analyse locally available natural resources and develop new materials.

"If we want to control bush encroachment, then we also need to control the seeds."

Dr. Erold Naomab,
UNAM Southern Campus,
Assistant Pro Vice Chancellor



Testing the heat and flame resistance of construction panels made from bush biomass

Cooperation arrangements

The Federal Ministry for Economic Cooperation and Development (BMZ) has supported Namibia with the creation of a national de-bushing programme since 2014. Initiated in 2018, the Bush Control and Biomass Utilisation TC programme explores avenues and solutions for realising the economic potential of the country's bush biomass.

Saarland has worked with Namibia since 2010 and primarily offers support with providing advanced training for experts. The project within the German Government and Federal States Programme (German: Bund-Länder-Programm; BLP) supports the Saarland-based Leibnitz Institute for New Materials (INM) in its cooperation with the University of Namibia (UNAM). Over the course of two previous BLP projects aimed at creating a fireproof construction panel made from bush biomass (seed pods, sand etc.), INM and UNAM have been cooperating successfully.

What we are doing - and how

In the current project, the results of previous research into the manufacture of construction panels from Namibian resources are processed into a form suitable for use in an industrial setting. Researchers from INM and UNAM are working together to identify the data required for this purpose. The findings and outcomes will be presented at events held for construction companies, associations, potential investors and scientists. Meanwhile, a network of contacts within the construction industry is being established, the purpose of which is to identify partners to produce and sell construction panels in the future. As part of the process of transferring the research findings

to the private sector, INM advises UNAM on the creation of a technology transfer office and opportunities for networking with local business. The research helps developing the skills of scientific staff at UNAM, and is conducted both in Namibia and through a research programme hosted by INM in Saarbrücken. The materials research laboratory at UNAM receives a range of additional equipment, making it possible to conduct independent research on a greater scale.

Useful links

- Leibniz projects in Namibia: https://www.leibniz-in-africa.de/index. php?id=2541#c2947 (in German)
- University of Namibia (UNAM) http://www.unam.edu.na/about-unam
- State of Saarland's Guidelines on Development Cooperation: https://www.saarland.de/SharedDocs/ Downloads/DE/mbk/Entwicklungszusammenarbeit/ Leitlinien_Entwicklungszusammenarbeit.pdf?__ blob=publicationFile&v=1 (in German)
- TC programme Bush Control and Biomass Utilisation: https://www.giz.de/en/worldwide/28648.html
- More information on the programme: https://www.giz.de/en/worldwide/91262.html https://www.giz.de/en/worldwide/34949.html https://bund-laender-programm.de/en

Published by Deutsche Gesellschaft

Design

für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:

Bonn and Eschborn | Germany

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