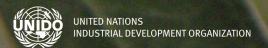
NAMIBIA

PROMOTING SUSTAINABLE BUSH-PROCESSING VALUE CHAINS IN NAMIBIA

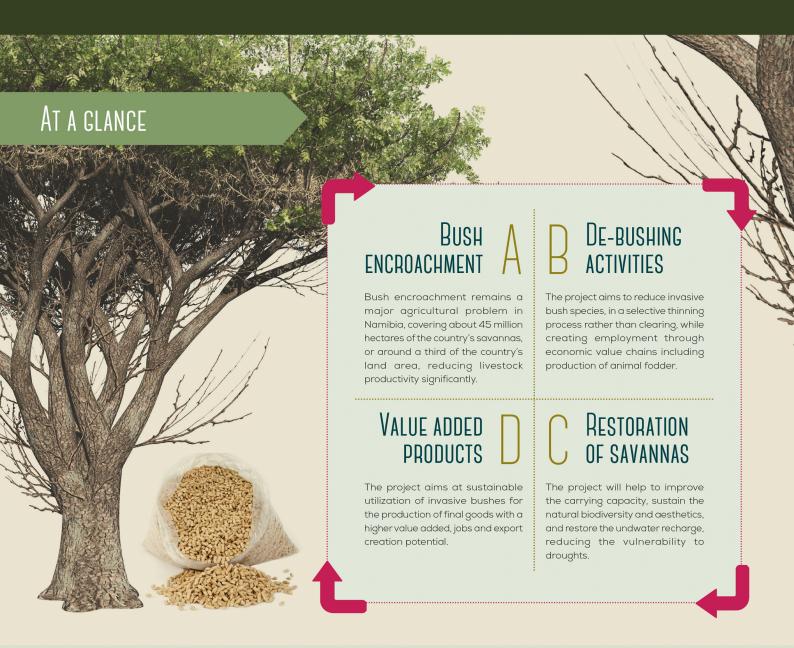
TAKING YOU AND YOUR INDUSTRY TO THE NEXT LEVEL











GOAL: Reduction of invasive bush species while creating employment through economic value chains, including production of animal fodder

CONTEXT

In Namibia, the vast majority of the population is engaged in agricultural production as subsistence farmers, yet due to low productivity levels, only half of the country's food demand can be met through these activities, while the other half is met through imports.

Since Namibia is one of the driest countries in sub-Saharan Africa, concerns about issues related to water management and shortages, waste generation and pollution are growing. In addition, the agricultural activities are threatened by bush encroachment, a form of land degradation that can be found worldwide, but much more frequently in arid and semiarid rangelands. This phenomenon describes the occurrence of high densities of woody species particularly the Acacia bush and Sicklebushthat grow at the expense of grass and herbs, thereby reducing the carrying capacity for livestock and hampering other agricultural activities.

While bush encroachment constitutes an immense challenge, it also provides opportunities: by utilizing biomass, agricultural productivity becomes storable, thereby strengthening the drought resilience of farmers.

OBJECTIVES AND OUTCOMES

The project aims at strengthening important sources of food and income through stimulating the utilization of invasive bush species, e.g. in the animal feed, charcoal and food industry as well as in energy production sectors.

Direct outcomes of the project encompass the identification and testing of appropriate collection and manufacturing technology solutions, which can further be used in Namibia for the effective and productive consumption of bush resources. In addition, the design of a processing plant to convert Acacia and other raw materials into high-value livestock feed, coal, chips, Arabic gum and other selected products is envisaged.

Hence, the sustainable utilization of invasive bushes like Acacia helps to mitigate bush encroachment as a form of land degradation. Through these measures, higher levels of agricultural productivity can be achieved, resulting in a better supply of food, increased resilience of farmers to droughts and reduced poverty, especially in rural communities. The improved provision of arable land for agricultural activities would result in enhanced capacities for local job creation and income and exports generation.

1

2

3

MARKET INTELLIGENCE

TECHNOLOGY TRANSFER

FIELD TESTING.

CAPACITY BUILDING

DETAILED TECHNICAL AND ECONOMIC FEASIBILITY STUDY

ADAPTATION AND DEMONSTRATION

ENHANCING AGRO-INDUSTRIAL KNOW-HOW FOR SUSTAINABILITY

Firstly, within a market intelligence study, the needs of the local, regional and international markets will be assessed against the country's resources and capacities. The detailed technical and economic feasibility study will reveal the agro-industrial knowhow and technologies needed for the manufacturing of Acacia bush-based products.

While the study will focus on the identification of appropriate technologies for products such as fodder, coal, biomass and Arabic gum, it will be unbiased towards other potential uses. The following phase of the project is dedicated to the procurement and testing of the equipment, bringing the findings of the study to life. Transfer of know-how and technologies to national beneficiaries for manufacturing of products will take place. The testing in the field and adaptation of equipment will ensure that the technology that is being transferred as part of the project is appropriate for the end users.

This period of testing is essential to ensure attainment of the project goals, since important lessons learnt can be drawn and implemented at this stage of the project.

Capacity building activities and trainings will ensure that the equipment for collecting and treating the invasive bushes is used properly and efficiently. The procured equipment will be demonstrated and later disseminated among participating communities as part of the project. Trainings of the national experts will encompass a feasibility study, market intelligence, operation and maintenance of the machinery.

Once beneficiaries take ownership of the processing of the Acacia bushes, the positive impact of this project will fully unfold and ensure its sustainability.



DONORS: Ministry for Foreign Affairs of Finland and Baobab Capital (Pty) Ltd.

GOVERNMENT COORDINATING AGENCY:

Ministry of Industrialization, Trade and SME Development

NATIONAL COUNTERPARTS: Walvis Bay Corridor Group, Ministry of Agriculture, Water and Forestry of Namibia, University of Namibia and Namibian Meat Board UNIDO's technical assistance aims at stimulating productive, value-added and employment generation activities based on bush value chains, which contribute to the sustainable development of the Walvis Bay Corridor

DIRECT EFFECTS WILL COVER:



FARMING AND PRODUCTIVITY

The reduced land degradation paves the way for enhanced agricultural activities, which are the major source of food supply for the local population. By diminishing invasive bushes, higher volumes of water will be available for crops which will improve yield.



SUSTAINABLE USE OF LAND

The proposed land use is in harmony with natural processes. No chemicals will be used to destroy the invasive bushes, but rather their utilization will follow the natural cycle of growth and harvest, taking into account the local climate and rainy seasons.



RENEWABLE FODDER

During each rainy season, when acacia produces more leaves, bushes will be allowed to grow constantly, and will be cut afterwards to be stored as fodder for dry periods. Thus, the project promotes using the bushes as renewable fodder; hence cattle will receive locally grown, natural food.



JOB CREATION

Technological knowhow, hands-on skills and ready-to-use business models facilitated by the project will provide better opportunities for sustainable jobs creation among women and men in Namibia.



ENHANCED EXPERTISE

Through various technical trainings, the project will enhance human and institutional capacities of related stakeholder institutions, associations, technicians, manufacturers, local farmers, skilled and semi-skilled workers, and entrepreneurs.

INDIRECT EFFECTS WILL COVER:



SUSTAINABILITY

Sustainable management of water resources and forestry

LAND USE PLANNING

Generation and use of knowledge for integrated land use planning

GENDER MAINSTREAMING

Increased gender equality in the agriculture sector

GOOD GOVERNANCE

Putting policy in place and turning it into practice

United Nations Industrial Development Organization Vienna International Centre Telephone: (+43-1) 26026-5090 Fax: (+43-1) 26026-6842 E-mail: IUMP@unido.org http://www.unido.org/iump









© UNIDO 2019. All rights reserved.

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" or "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO. Unless otherwise mentioned, all references to sums of money are given in United States dollars.

Photos © www.shutterstock.com/ Jeerawut Thiratrak, 3dshtamp, Bolkins, Petar Ivanov Ishmiriev, Hilch, Tukaram.Karve