

Starting shot for biochar - Nature & Environment

 az.com.na/nachrichten/startschuss-fr-biokohle-2020-10-19

AZ AKTUELL
MITTENDRIN
FÜR DICH

Allgemeine Zeitung NAMIBIA

100
JAHRE
1916-2016

19 October 2020 | [Nature & Environment](#)

Starting signal for biochar

Intrusion bushes are a problem for most Namibian farmers, now the production of the diverse biochar should help as a beacon of hope and be made useful as animal feed, plant fertilizer, pest control or also for carbon sequestration in the soil.







A brochure with practical guidelines for Namibians interested in the production of biochar from invading bush was recently presented in Windhoek. The project is supported by various members of the "Bush Control and Biomass Utilization Project" (BCBU) of the Ministry of Environment and the Society for International Cooperation (GIZ), the project of the Namibian University of Science and Technology (NUST BUSH) and various industrial representatives of the Namibian Charcoal Association (NCA) and the Namibian Biomass Industry Group (N-BiG).

"Biochar is a form of charcoal that is similar to, but clearly different from, barbecue charcoal," says the brochure. The difference between normal charcoal and biochar is that the biochar is quenched with water when it burns and the pores of the charcoal open up. These can then absorb water and nutrients like a sponge. The quenching also

releases the oil in the coal. The leftover water can then be used as a natural pest killer.

Biochar can complement the production of animal feed and barbecue charcoal, as it is made from fine and medium-sized pieces of bush, which are typically too large for bush-based animal feed and too small for charcoal production. However, a special oven is required for production, such as the Kon-Tiki pyrolysis oven with a water connection at the bottom of the oven. These are made locally at low cost for small and medium scale production. If such an oven is not available, a simple hole in the floor can be the solution.

Once the charcoal has been dried and crushed, additional nutrients should be added to it. On Farm Krumhuk, for example, whey, compost and plant tea, fresh cow dung and the crushed biochar are mixed together and worked into the soil. The almost non-biodegradable mixture only needs to be mixed well once into the soil, where it remains active for years.

Carbon Capital chief executive Colin Lindeque said on market potential that agricultural use accounts for roughly half of the global market. "At the international level, biochar is also used for water and air filtration, in electronics, in construction and in cosmetics. It is also used in food and to fix carbon in soils in order to mitigate climate change somewhat," says Lindeque.

In his opinion, experts expect the market to grow by 12 to 15 percent per year, but buyers are looking for specialized, high-quality products. "The local markets could include farmers who grow grapes, blueberries, mushrooms or dates and who farm with cattle or dairy products," explains Lindeque.

Meanwhile, the industry associations are carrying out a number of research projects on farm Krumhuk, south of Windhoek, into how the effects of the use of biochar affect crops. The managing director of N-BiG, Progress Kashandula, explained that the association, together with the Namibian University (UNAM), is also investigating biochar as an additive in bush fodder.

Dr. NUST's Ibo Zimmermann explained that a number of faculties at the university are involved in research on biochar. The NCA also conducts tests and produces smaller Kon-Tiki ovens. "We will organize demonstrations on farms to reach more farmers," said Michael Dége, the NCA's managing director.

Claudia Reiter