



## HEALTHY SOIL HEALTHY FOOD & AGROECOLOGY SUCCESS STORIES

*Picture taken after a training on bokashi production in Zsesheke. Photo by Royd Michelo*

# Green revolution: Zambia's trailblazing bokashi fertilizer initiative reshapes agriculture

In the heart of the Kapete farming block situated in the Chongwe district of Lusaka province, Zambia, a remarkable project has been blossoming since 2018, spearheaded by the efforts of the Kapete Ecological Centre (KEC) under the visionary guidance of Royd Michelo. The project resonates as a beacon of hope in combating the widespread decline of soil fertility and escalating impacts of climate change that have notably threatened Zambia's food systems.

Recognizing the daunting challenges of the fragile food ecosystem, characterized by plummeting crop yields and escalating food insecurity, Michelo initiated the KEC. The centre emerged as a potent force aiming to rejuvenate the beleaguered soils of Zambia, embarking on a journey to foster conservation agriculture and introduce agroecological farming systems.

At the crux of this innovative initiative is the production of bokashi, a potent organic soil enhancer and bio-fertilizer, formulated following a market-led approach. Aspiring to revolutionize agriculture in the

region, the project delineated a series of objectives encompassing sustainable food production enhancement, nurturing healthy soils, reducing food production costs, and augmenting the climate resilience of the existing farming systems.

In a concerted effort to realize these objectives, a multitude of activities were orchestrated. These activities spanned acquiring knowledge on bokashi production, setting up trial plots at the KEC, and fostering zonal committees. These committees played a pivotal role in identifying and training lead farmers in the nuances of bokashi production technology. After a series of successful trials under varied farm conditions, the remarkable efficacy of bokashi as a soil enhancer was established, paving the way for its commercial production due to heightened demand.

Notably, the project garnered a certificate of analysis and effectiveness from reputable government institutions such as the Zambia Agricultural Research Institute and the Ministry of Agriculture. This certification marked a significant milestone,



substantiating the nutritive value of bokashi and fostering its commercial production and distribution. Consequently, a marketing strategy was devised, facilitating individual farmers to produce and aggregate bokashi for sale, a move that has witnessed enthusiastic participation and knowledge sharing among the community members, including students and pupils.

The ramifications of this project have been profoundly positive, with the community witnessing a surge in the utilization of bokashi, increased organic matter density in soils, and heightened resistance to drought owing to improved soil moisture retention capabilities. Moreover, the initiative has catalyzed a remarkable increase in crop yields within the community, evident from the leap in maize production from 2.7 to an impressive 5.0 tons per hectare on average.

Undoubtedly, the initiative's success can be attributed to several factors, including establishing synergistic partnerships with fellow farmers, traditional leaders, and like-minded organizations. Moreover, the engagement of media houses in information dissemination and active participation in various agricultural events have significantly contributed to the project's outreach and impact.

Despite its triumphs, the initiative faces challenges, including limited production levels of bokashi due to the lack of requisite equipment and facilities to secure organic matter. Additionally, the project encountered initial resistance to accepting the effectiveness of bokashi among communities.

As testimonials from diverse community members,



*Undoubtedly, the initiative's success can be attributed to several factors, including establishing synergistic partnerships with fellow farmers, traditional leaders, and like-minded organizations.*

Headman 10 Katiba work suit participating in the bagging of bokashi

including lead farmers, teachers, traditional leaders, and female farmers reverberate, the success of the initiative is palpable. Echoing sentiments of transformation and resilience, these testimonials bear witness to the life-changing impact of the bokashi project, contributing significantly towards fostering sustainable development and combating climate change in their communities.

As the project strides towards its conclusion, it leaves behind a rich legacy and a pathway for policy advocacy. It stands as a testament to the potential of bokashi and bio-fertilizers in enhancing the resilience of farming systems and fortifying food and nutrition security at various levels. Consequently, recommendations for government adoption of bokashi as a part of farmer support packages, increased sensitization on the use of bio-fertilizers, and fostering youth participation in bokashi production are burgeoning.



Training participants mixing bokashi at KEC 9

STORY BY:  
**Royd Michelo**  
Kapete Ecological Centre, Zambia  
[katchkapetea@gmail.com](mailto:katchkapetea@gmail.com)  
+260 974004061

#### WHO IS AFSA?

AFSA brings small-scale farmers, pastoralists, fisherfolk, indigenous peoples, faith groups, consumers, youth and activists from across the continent of Africa to create a united and louder voice for food sovereignty. AFSA encourages the use and reproduction of this case study for non-commercial use provided that appropriate acknowledgment of the source is given.



For more information and more African case studies see our website [www.afsafrica.org](http://www.afsafrica.org)