

PROMOTION OF CASSAVA IN MALAWI AND ZAMBIA

CATEGORY:

POLICY | RESEARCH | FIELD | **CLIMATE**

LOCATION/SCALE:

Malawi and Zambia (National)

IMPLEMENTING ORGANISATION:

Governments of Malawi und Zambia

PERIOD:

1986 - now

IN A NUTSHELL

Following the 1980s droughts, both Zambia and Malawi's governments and specialized international agencies have successfully promoted cassava production in Malawi and Zambia in order to reduce drought vulnerability and dependency on maize monocropping. Since the 1980s, diversifying from maize and promoting cassava production increased smallholder productivity, reduced hunger during lean seasons and drought years, and provided rural households with low-cost, in-kind drought insurance. In both countries, improved cassava varieties produced more output with the same labor and land and without purchased inputs. Cassava is a crop with many advantages for small-scale farmers. It requires little labor and is very resistant to drought and water stress. It has a flexible harvesting calendar and can be kept as a security supply of food for lean periods.

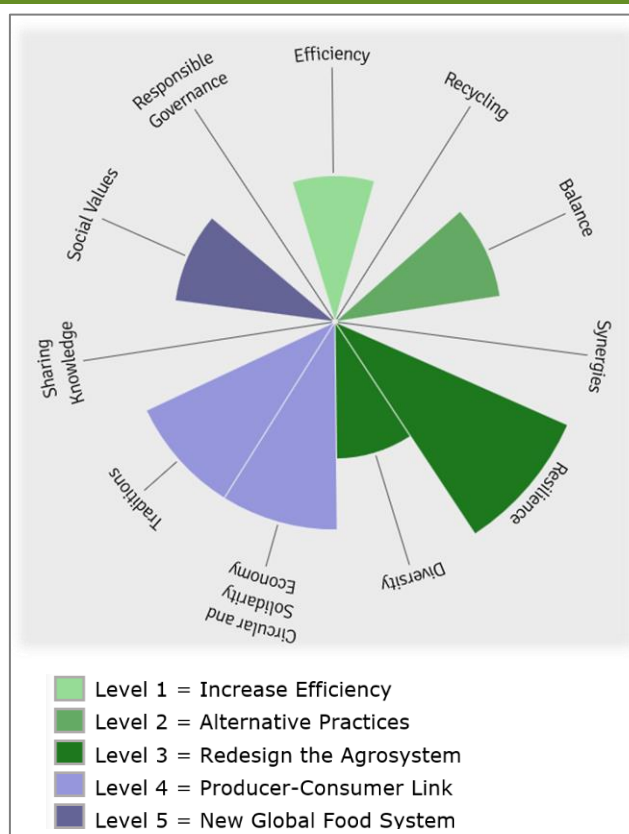


Figure: Assessment based on FAO Elements of Agroecology and Gliessman's five levels of food system change

CONTEXT

For decades, Zambia and Malawi's governments have promoted maize cultivation through massive subsidies and price support to farmers. As a result, maize cultivation spread over the two countries, replacing traditional crops like millet and sorghum. Maize also supplanted cassava, a drought-resistant tuber that protects against famine. Maize is very vulnerable to the region's recurrent droughts and requires improved seeds and a significant amount of chemical fertilizers. In the early 1980s, a series of droughts seriously affected maize crops. In subsequent years, financial constraints forced governments to reduce maize subsidies and support systems, making the crop even more vulnerable to droughts. Meanwhile, cassava also received negative impacts from two exotic South American pests: the cassava mealybug (CM) and the cassava green mite (CGM).

OBJECTIVE

Following the 1980s droughts, both Zambia and Malawi's governments decided to promote cassava, a drought-tolerant crop that can be harvested throughout the year, demands little labor, and doesn't require chemical inputs (fertilizers, pesticides). They turned to the International Institute of Tropical Agriculture (IITA), which began developing effective biological control of cassava mealybug and cassava green mite through trial releases of predator wasp.

KEY INTERVENTIONS

MALAWI:

- In 1986, with support from IFAD, Malawi launched a country-wide program to release predator wasps.
- IITA's research and breeding programs established 1978, were taken up by Malawi's Root and Tuber Crops Research Program. The programs focused on identification of best local varieties and distribution of clean planting material. In the 1980s, the program released a first wave of improved local varieties.
- In response to the 1991-1992 drought, the Malawian government and NGOs launched a program that began multiplying cassava and sweet potato planting materials on a small-scale. As a result, there was rapid cassava and sweet potato adoption.

ZAMBIA:

- In 1982, the Zambian Government reduced the policy focus on maize, listing procurement prices for sorghum, millet, and cassava. During the same period, Zambia's Root and Tuber Improvement Program (RTIP) started collection, inventory, and maintenance of local cassava varieties.
- By 1991, crop diversification away from maize became the government's official policy. The Swedish International Development Agency (SIDA) also funded cassava research, including a series of mass selection trials on 700 accessions.
- The 2002 drought increased farmers' interest in cassava. However, the promotion of improved cassava varieties appeared constrained by the lack of resources in the following years.

LESSONS LEARNED/CHALLENGES

Farmers can grow cassava indefinitely, without having to depend on seed suppliers, fertilizer distributors, or rural credit programs. The crop is easily reproduced and tolerates poor soil conditions (low fertility, aluminum toxicity). Improved varieties are resistant to pests and high yielding, with no need for chemical inputs. Lastly, low-input cassava production generates none of the acidification or pesticide residue that occurs with other crops.

RELEVANT LINKS & REFERENCES

- Oakland Institute: "Drought Prone Malawi and Zambia Turn to Cassava"
https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Cassava_Malawi_Zambia.pdf

