



Harnessing Africa's vegetable heritage

Introducing the

African Vegetable Biodiversity Rescue Plan (2025-2035)

Collecting, conserving and using vegetable genetic resources to improve health, income and climate resilience across the continent

Promoting vegetable production, consumption and conservation as a win-win-win solution for Africa

This rescue plan will address hunger, malnutrition, poverty and climate change through a holistic approach to rescue, conserve and use African vegetable biodiversity, and to simultaneously address supply, demand, and policy challenges. It is aligned with global, continental and national policies and initiatives. Implementation will result in the genetic diversity of selected vegetables and their wild relatives being rescued, conserved, and actively used by farmers, breeders and researchers across sub-Saharan Africa. This will lead to an increase in the supply of nutrition-dense foods, especially for children through school feeding programs and increased homestead production.

Increasing vegetable production and consumption will contribute significantly to achieving the UN SDGs of zero hunger, no poverty, and climate action. Of that there is no doubt, *if* this is integrated into food systems and associated policies. And to ensure this much-needed transition happens in Africa requires urgent actions, to rescue, conserve and use vegetable biodiversity. Due to the decline in populations of local varieties and crop wild relatives because of rapid land use changes and climate change, among other factors, there are increasing risks that potentially valuable genetic diversity may be lost, forever, especially in identified 'vegetable biodiversity hotspots'.



A global problem, an African problem, but one that we can overcome...

Every country in the world is affected by malnutrition. Three billion people, more than third of humanity, suffer from poor quality diets. And a quarter of all children under five years old are stunted, so may never reach their full potential. These are avoidable problems, with the right investments. We have hunger on one side, and too much of the wrong food on the other that leads to obesity, diabetes and many other public health problems that cost governments billions. Eating more 'protective foods' like vegetables, fruits, nuts and seeds, is tremendously important for being able to live healthy lives. Vegetables are excellent sources of vitamins, minerals, nutrients and dietary fiber, but are critically under-consumed. The World Health Organization recommends a minimum daily consumption of 240 grams, but in much of sub-Saharan Africa actual vegetable intake is around 70 grams a day – less than a third of what people should be eating. Production and trade of vegetables are also huge employment and income generators. Per square meter, net benefits from growing vegetables are 5-7 times more than from staple crops, and the ability to produce on relatively small areas makes vegetables especially attractive to youth, women and marginalized groups who often have only limited access to land. Vegetables are also especially valuable during climatic, economic and social shocks (as seen during the Covid pandemic). They are clearly crucial for resilience, and are increasingly promoted by humanitarian organizations as part of recovery programs in emergency situations.



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This African Vegetable Biodiversity Rescue Plan is the outcome of a process that started with a study that found that vegetable biodiversity in Africa is poorly conserved. It identified six 'hotspots' of vegetable biodiversity in sub-Saharan Africa, and proposed priority actions for safeguarding these genetic resources for food and agriculture. African vegetables are also more adapted to climate change compared to staple crops, as recent award-winning research on 'opportunity crops' has shown. A draft plan was developed, and stakeholder consultations collected feedback from experts across the continent, including regional plant genetic resources networks of the Southern Africa Development Community, West and Central Africa, and the Plant Genetic Resources Management Working Group of the African Union's African Seed and Biotechnology Program. The resulting version was validated by representatives from 16 African countries at a workshop in Eswatini in December 2023, and after revision, this was endorsed by the African Union Commission in Addis Ababa in April 2024. This African Rescue Plan is part of the Global Rescue Plan concept that was presented at the 2021 UN Food System Summit.



What are African vegetables?

There are many nutritious plants native to or indigenized in Africa, also called forgotten, neglected, underutilized, orphan, traditional or opportunity crops. Most require less space, fewer inputs and grow on shorter rotations compared to other crops. They are also highly nutritious, and provide many options for farmers, traders and processors to improve their livelihoods and the health of consumers alike. Usually well adapted to local conditions, several African vegetables were identified as climate-resilient and nutrient-dense by the <u>Vision for Adapted Crops and</u> Soils (VACS) initiative and recent research. Examples include African eggplant (*Solanum aethiopicum*), African nightshade (*Solanum* spp.), amaranth (*Amaranthus* spp.), black jack (*Bidens pilosa*), bottle gourd (*Lagenaria siceraria*), cowpea (*Vigna unguiculata*), drumstick tree (*Moringa oleifera*), jute mallow (*Corchorus olitorius*), mungbean (*Vigna radiata*), okra (*Abelmoschus esculentus, A. caillei*), pumpkin (*Cucurbita maxima, C. moschata, C. pepo*) and spider plant (*Cleome gynandra*). These vegetables can provide essential micronutrients and vitamins as part of more diversified cropping systems, and are part of a larger portfolio of 'priority crops' for Africa that also includes fruits, cereals, roots, tubers, nuts, seeds and oil crops.

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