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**Rediscovering African foods: Promoting native foods for improved
nutrition, health and food security**

Executive Summary

The latest Report on the State of Food Security and Nutrition in the World indicated that between 690 and 783 million people worldwide faced hunger in 2022 and that nearly 600 million people will be chronically undernourished by 2030. The proportion of population facing hunger is significantly higher in Africa at 20 percent, in contrast to 8.5 percent in Asia, 6.5 percent in Latin America and the Caribbean, and 7.0 percent in Oceania. These hunger statistics correlate with elevated levels of other forms of malnutrition, such as stunting, underweight and micronutrient deficiencies, which are complicated by the high cost of healthy diets. Among the estimated nearly 3.2 billion people worldwide who could not afford a healthy diet in 2020, the majority resides in Southern Asia, as well as in Eastern and Western Africa.

These statistics indicate that Africa is at risk of not achieving the Sustainable Development Goals (SDGs), especially SDG 2. The continent is off track in meeting the Malabo targets of ending hunger and all forms of malnutrition by 2025. A confluence of shocks that undermines real progress in Africa's agrifood systems includes climate change and extreme weather conditions, protracted conflicts and wars, transboundary diseases and pests, and global and regional economic slowdowns and downturns. Weak capacities to withstand these shocks and adapt to stressors have made the situation unsustainable. This means efforts must be accelerated towards transformation of Africa's agrifood systems to be MORE efficient, inclusive, resilient and sustainable for *better production, better nutrition, a better environment and a better life*, leaving no one behind.

Agrifood system transformation: the role of Native crops and non-wood forest products

Native crops and non-wood forest products (NWFP) stand to play a crucial role in transforming agrifood systems to better withstand the impact of climate change and protect biodiversity, while promoting smallholders' livelihoods and delivering nutrition and healthy diets for all.

These crops and naturally occurring NWFP are known to withstand heat, water stress and pest and diseases. However, the benefits of native foods go beyond their resilience potential. Akinola *et al.*

Documents can be consulted at www.fao.org

(2021)¹ identified four key broad areas of benefit to be gained from promoting native crops as follows:

- a. *Nutritional benefits* – Their nutrient density can be higher than in other foods.
- b. *Environmental benefits* – Native crops can be drought tolerant in the face of climate change.
- c. *Sociocultural benefits* – Native crops bind families and communities together, preserving cultural heritage and maintaining cultural identity and traditions.
- d. *Economic benefits* – Native crops have lower demand for agricultural inputs and support livelihoods and household food and nutrition requirements, while providing income from sales of these crops.

It is these observations that give rise to the need to promote native crops and NWFP in the continent.

Suggested actions by the Regional Conference

The Regional Conference is invited to deliberate on:

- a. a set of actions needed to raise awareness on the potential role of native crops and NWFPs in transforming agrifood systems among all relevant actors, including policy makers, technical practitioners, the private sector and rural communities;
- b. guiding principles outlining necessary actions to promote increased supply (i.e. production and investment interventions) and demand (consumer awareness) of native crops and NWFPs; and
- c. key entry points and necessary technical and financial investments for their effective promotion; and critical actors to engage in their promotion.

The Regional Conference is also invited to endorse the follow-up actions of: strengthening national and regional policies, programme, strategies and legislation towards the integration of native crops and NWFPs in agrifood systems; supporting actions towards advocacy and consumer awareness on the nutritional benefits of these commodities at all levels; and advocating for increased investments in their production, including reinforcing technology, innovation and research to strengthen their value chains.

Queries on the content of this document may be addressed to:

ARC Secretariat

ARC-Secretariat@fao.org

¹ Akinola R, Pereira LM, Mabhaudhi T, de Bruin FM, Rusch L. *A Review of Indigenous Food Crops in Africa and the Implications for more Sustainable and Healthy Food Systems*. Sustainability 2020. Apr 24;12(8):3493. [doi:10.3390/su12083493](https://doi.org/10.3390/su12083493). PMID: 33520291; PMCID: PMC7116648.

I. Introduction

1. Hunger and malnutrition statistics continue to be elevated in Africa. This makes the continent fall behind in meeting the Sustainable Development Goals (SDGs) by 2030 and the Malabo Targets of 2025. Of particular concern is that the continent continues to be off-track in meeting SDG 2 and the Malabo Target of ending hunger and all forms of malnutrition. The most recent estimates show that nearly 282 million people in Africa were undernourished in 2022, an increase of 57 million people since the COVID-19 pandemic. About 868 million people were food insecure and more than one-third of them (342 million people) were severely food insecure. At the same time, food insecurity disproportionately affected more women than men on the continent.
2. Unfortunately, the above-mentioned figures show that today's agrifood systems are far from being fit for purpose, with countries still grappling with multiple forms of malnutrition burdens. From the environment and biodiversity perspective, agrifood systems are causing land degradation and threatening biodiversity. Characterized by intensive monoculture productions, food supply chains do not benefit from enabling business, investment, policy and regulatory environments, and research initiatives (e.g. public or private investment on plant breeding laboratories) that offer opportunities to fully exploit the potential of resilient local varieties.
3. Africa has been and will continue to be the region most adversely affected by climate change. By 2050, an additional 80 million people on the continent could be at risk of hunger, 250 million people could face high water stress, and up to 700 million people could be displaced due to climate change and variability.²
4. Crop adaptation can and must help the African continent mitigate these projected worst-case scenarios. Building more resilient food systems begins with growing crops that can withstand high temperatures, less moisture, pest and disease pressure, and extreme weather events like droughts and floods. These are features of native food crops; however, in Africa, these crops have received little to no funding for their breeding, preservation and marketing.
5. On the contrary, plant breeding investments have been highly concentrated on cash crops (like coffee and cocoa) and on three major staple crops: maize, wheat and rice. Together, these three commodities provide about half of global calories, while 80-90 percent of global dietary intake is sourced from just 12-20 crop species.³
6. However, a healthy diet – one that maximizes human health benefits and minimizes human health risks – depends on the consumption of a diversity of foods, across and within food groups, as well as providing adequacy without excess of macro- and micronutrients; balanced in protein, fat, fibre and carbohydrate.
7. Globally, there is increasing consensus on the need for agrifood systems transformation towards improved biodiversity and better integration of a wider variety of food species. The United Nations (UN) Food Systems Summit of 2021 placed emphasis on the urgent need for agrifood systems to be transformed to be on a sustainable path. Achieving this goal will require increased research and investment in programmes and policies centred on the food and biodiversity nexus.
8. The objective of this document is therefore to:
 - a. build momentum for high-level political commitment on the promotion of native crops and non-wood forest products (NWFPs);
 - b. raise awareness on the multiple benefits that can be achieved by promoting native crops and NWFPs;
 - c. share evidence and knowledge about effective approaches to promote native foods and NWFPs;

² <https://www.fao.org/3/nn078en/nn078en.pdf>

³ D'Odorico, Paolo & Carr, Joel & Laio, Francesco & Ridolfi, Luca & Vandoni, Stefano. (2014). *Feeding humanity through global food trade*. Earth's Future. 2. [10.1002/2014EF000250](https://doi.org/10.1002/2014EF000250).

- d. identify key entry points for stakeholders' engagement, technical and financial investments; and
- e. recommend actions for consideration for enhancing the role of native crops and NWFPs in transforming agrifood systems to be on a sustainable path.

II. Existing initiative to promote native foods

9. The African continent has shown its commitment for promotion of native crops, through the endorsement of the African Orphan Crops Consortium (AOCC) by the African Union. The consortium is working on addressing malnutrition, especially hidden hunger in Africa through nutritious local food crops. These crops, little researched to date, are known as “orphan crops” (“minor crops”, “underutilized plant species” or “neglected crops”). Many of them are rich in vitamins, essential minerals, and other micronutrients. AOCC aims to make these nutritious crops more productive and more profitable for African farmers to grow, and easier for African consumers to use, among other objectives.

10. In addition to the AOCC, other FAO-led initiatives currently promoting such crops include the Vision for Adapted Crops and Soils; the Regional Office for Africa's Compendium on Native Nutritious Crops; Addressing Water scarcity in Agriculture and the environment (AWSAME) as well as declaring 2023 as the International Year of Millets.

Agrifood systems transformation: exploiting nutritious non-wood forest products

11. Other critical initiatives include the drive to transform agrifood systems using NWFPs. Forests account for one-third of the world's land mass and 80 percent of the world's flora and fauna, providing food, income and livelihoods for more than a billion people, ⁴ including many of the world's most vulnerable. In addition, forests play a critical role in climate regulation (e.g. carbon sequestration, global cooling effect, rainfall regulation and local climate stabilization, biodiversity conservation, soil formation and watersheds).⁵

12. Forests provide an array of critical resources including: energy (through wood and charcoal); construction materials; medicinal raw materials; fodder and browse for livestock; non-wood fibres for various uses (e.g. bamboo, bark, cork, leaves, reeds, grass, etc.); and food products (e.g. honey, animal products, such as fish, bushmeat and eggs, and plant-based food products, such as fruits and vegetables, leaves, seeds, roots and tubers, mushrooms, nuts, oil palms, aromatic plants, resins, gums, etc.). Forest foods are widely consumed as part of a regular supplement to the diet or primary source of food in many settings.

13. In most agricultural communities, people rely on seasonal crop production. For many rural people, and especially for the poor, these cycles may entail periods of food shortage (i.e. the dry season). It is at these critical periods that the importance of forest foods is greatest, enhancing food security and nutrition and resilience of such communities.

14. The African Forest Landscape Restoration Initiative led by the African Union Development Agency and the African-led Great Green Wall Initiative aim to restore degraded lands in 34 African countries and in the Sahel region, respectively. At the same time, the UN Decade on Ecosystem Restoration (2021-2030) represents a crucial opportunity to accelerate transformation towards sustainable and nutrition-enhancing agrifood systems.

15. FAO's Action Against Desertification programme aims to accelerate the implementation of Africa's Great Green Wall Initiative in 11 countries across the Sahel region. The Initiative aims to promote land restoration and reforestation, while promoting greater availability of nutrient-dense wild plant species, improved food security, nutrition and livelihoods. Within this backdrop, through the Action Against Desertification Programme, FAO has been supporting the implementation of the

⁴ FAO. 2021. *Maximizing Nutrition in Forestry using a Food Systems Approach – An evidence-based literature review*. Available online <https://www.fao.org/3/cb5563en/cb5563en.pdf>

⁵ FAO. 2021. *ibid*.

Africa's Great Green Wall initiative in 11 countries across the Sahel region (including Burkina Faso, Eritrea, Ethiopia, Gambia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan).

16. The Initiative aims to benefit communities by providing mechanized land preparation; high-quality restoration seeds and propagation material of well-adapted native species; developing wild or non-timber forest product value chains that aim to improve income, nutrition and diversification of livelihoods; promoting inclusive participation of rural communities in the identification of species and restoration objectives; and supporting the development of innovative biophysical and socioeconomic monitoring systems.

III. Key entry points to promote native crops and non-wood forest products

17. The role of native crops and NWFP in transforming agrifood systems makes it important and timely to attract the attention of policy makers through policy dialogue and high-level advocacy to encourage bold political and financial commitments needed to unleash their potential. While this is critical for the supply side of these food commodities, on the demand side, it means to advocate for their nutritional value and desirability, which remains highly critical to stimulate change in consumer perception, food purchase and consumption patterns. The latter interventions will create a demand pull generating a favourable business environment that enables increased public and private investment along the supply chain. A well-balanced supply and demand for native crops and NWFPs means their price will clear at equilibrium for an optimal, efficient and sustainable welfare gain.

Promoting native crops and non-wood forest products: The main gains at stake

18. Protecting and promoting the production of native crops can be considered a multiple-duty intervention that significantly contributes towards the achievement of sustainable and inclusive food and nutrition security.

A. Improved nutrition and dietary diversity

19. Native foods and NWFPs are often considered nutrient powerhouses compared to some of the most produced, marketed and consumed food commodities. The nutrient content varies depending on the specific crop varieties.

20. For example, teff and minor millets are gluten-free staples that contain higher levels of fat, iron, calcium and protein when compared with rice and wheat.⁶ Several cultivars of banana can contain high levels of pro-vitamin A carotenoids, whereas the most common banana variety, the Cavendish, contains none.⁷

21. In addition to the higher nutrient density found in the native crop species, there are evident nutritional and health advantages associated with consuming diverse diets. Increased nutrient intake is an outcome of dietary diversity that is measured by consumption of a variety of food groups. Many countries across the world incorporate food group classification systems in their food-based dietary guidelines, offering guidance to the population regarding the adequate quantities of food for optimal health and nutrition outcomes. In this regard, food-based dietary guidelines should integrate native crops and NWFPs.

B. Environment protection and climate adaptation

22. Many of the native crops not only have high nutritional benefits, but they are also known to be drought resilient, often thriving under conditions of limited rainfall and unpredictable rainfall patterns. Evidence to this has been gathered in, among others, the AWSAME Initiative, and they include native cereals, tubers, grains, fruits, legumes, leafy vegetables, etc. Their promotion will therefore not only contribute to improved nutrition, but it will also contribute to greater resilience to climate change, either through adaptation or mitigation (low-carbon footprint) characteristics.

⁶ Andreotti, et al. 2022. *When neglected species gain global interest: Lessons learned from quinoa's boom and bust for teff and minor millet*. Global Food Security. Volume 32, March [2022100613](#)

⁷ Kennedy, et al. 2022. *The role of traditional knowledge and food biodiversity to transform modern food systems* – ScienceDirect. Trends in Food Science & Technology. Volume 130, December 2022, Pages 32-41

23. On the other hand, promoting forest-based food products comes with multiple benefits. In addition to providing an array of highly nutritious food products, forests play a fundamental role in slowing down climate change and promoting environmental sustainability through carbon sequestration, global cooling effect, rainfall regulation and local climate stabilization, biodiversity conservation, soil formation and watersheds.⁸ Protecting this biodiversity for food and nutrition security calls for complementary and multisectoral interventions that aim to protect and ensure effective management of forests in general.

C. Sociocultural benefits

24. Food forms an important part of people's cultures and norms, and this has been the case for ages. One of the key advantages of native foods and NWFPs is that they are culturally acceptable products that are obtained from local, natural environments. Food is a key element that makes people retain their cultural identity and origin. This is the main reason why people from different cultures and geographic locations eat different foods. Food is also important for religious ceremonies and gatherings, and this is usually bound to native foods and religious, cultural and ritual practices. This also influences how the food is procured, prepared, preserved and consumed. In this regard, promoting these foods can play a big role in binding families and communities together, preserving cultural heritage, and maintaining cultural identity and traditions. In this way, native foods stand to play a role in binding communities and fostering peace and tolerance, and improving perceptions on how people associate with their environment. Cultural acceptability builds trust in these foods, and this can promote consumer or customers loyalty. This factor can be leveraged upon to promote consumer uptake of these foods, even for high-income consumers in urban areas.

D. Economic benefits

25. Promoting and cultivating native crops can contribute not only to the conservation of biodiversity and cultural heritage, but also to the economic well-being of communities through cost-effectiveness, market opportunities and sustainable agricultural practices. Some of the economic benefits include the following insights:

- a. *Adaptability to local conditions:* Native crops are often well-adapted to local climates and soil conditions, which can reduce the need for expensive inputs such as pesticides and fertilizers, lowering production costs for farmers.
- b. *Diversification of income sources:* Growing a variety of native crops can help farmers diversify their sources of income. Different crops may have different growing seasons and market demands, providing a more stable income throughout the year, smoothing consumption patterns.
- c. *Market opportunities:* As there is an increasing global demand for diverse and exotic foods, native crops can open new market opportunities. These crops may appeal to consumers looking for unique, culturally significant or health-promoting food options.
- d. *Reduced dependency on imported varieties:* Growing native crops can reduce dependency on imported varieties, which may be costlier due to transportation and importation fees. This can enhance food security and nutrition security and reduce the impact of external economic shocks for communities.
- e. *Support for small-scale farmers:* Many native crops are suited for small-scale or subsistence farming. Supporting the cultivation of these crops can empower small-scale farmers, providing them with opportunities to improve their livelihoods.

IV. Conclusion and key recommendations

26. Native crops and NWFPs have an important role to play in transforming agrifood systems to better withstand the impact of climate change and protect biodiversity, while promoting smallholders' livelihoods, delivering nutrition and healthy diets for all. Native crops and NWFPs have been shown to be sustainable in that they have nutritional, environmental, sociocultural and economic benefits.

⁸ FAO. 2021. *Op. cit.* page 3.

Importantly, they stand to play a role in improving the economic and nutritional status of rural populations, in the true spirit of leaving no one behind.

27. However, these food commodities have received little to no investment in plant breeding to improve their resilience, yield or nutritional value, and lack promotional efforts to enhance their marketability and, ultimately, consumption. Moreover, agricultural policies have generally favoured only a few crops – primarily staples, such as maize, rice and wheat – to the detriment of biodiversity and, ultimately, food diversity.

28. Given these observations, it is recommended that:

- a. national and regional policies, programmes, strategies and legislations are oriented towards enhancing the integration of these food commodities in agrifood systems;
- b. capacity of stakeholders is enhanced for their uptake and integration in national and international agrifood systems;
- c. consumer awareness is strengthened on their nutritional benefits at all levels; and
- d. investments are increased for their production, including strengthening technology, innovation and research to strengthening their value chains.