

CHAPTER 9

Leveraging Free Trade to Boost Africa's Wildlife Economies through Wild-Harvested Products

By **Ndlovu Wiseman**, PhD

African Wildlife Economy Institute, Stellenbosch University, SOUTH AFRICA

Introduction

The intra-Africa trade of wild products presents a unique intersection of economic opportunity and environmental conservation. With the establishment of the African Continental Free Trade Area (AfCFTA), the potential to enhance trade among African nations has grown significantly, marking an important shift in the continent's economic landscape. The wildlife economy in Africa, encompassing wild-harvested products such as game meat, non-timber forest products, ecotourism, and more, holds significant but underutilized potential to contribute to the continent's Gross Domestic Products and economic integration on the continent.

With fifty-four of the fifty-five African Union nations party to the agreement, AfCFTA is the largest free trade area in the world in terms of participating countries. As Van der Ven and Signé argue, harnessing Africa's liberty through AfCFTA presents an opportunity to enhance the value derived from wildlife resources and ensure sustainability, a benefit to people and conservation.¹ In this article, I discuss the potential for wild products trade in Africa and how the AfCFTA framework, a key resource in enhancing trade among African nations, could be used as a tool to improve livelihoods, generate income, and grow economies on the continent.

Wild Products and the Economy

Wild products hold significant importance and potential for economic development and livelihood support across many African nations. These products—ranging from game meat and medicinal plants to insects and oils from trees like baobab—provide diverse opportunities for income generation, food security, and cultural preservation.²

1 Van der Ven and Signé, "Greening the AfCFTA," 2021

2 Heubach, Wittig, Nuppenau, and Hahn, "The Economic Importance of Non-timber Forest," 2011.

The sustainable use and trade of these products can enhance economic diversification, particularly in rural areas, where alternative employment opportunities may be limited.³ Moreover, the harvesting and processing of these products can create jobs, support traditional practices, and contribute to the conservation of biodiversity. As countries strive to develop resilient and inclusive economies, the potential of wild products as catalysts for sustainable development and livelihood enhancement cannot be overstated. Here I give some of the examples of wild products and wildlife product categories that are currently utilized and have a potential to transform African wildlife economies in the context of free markets and trade in the continent. Specifically, in this section I use game meat, mopani worms, insects, medicinal plants, firewood, fuels, and oils to illustrate their current state in the market and what needs to be done to liberalize the markets and achieve their full potential, thereby transforming African wildlife economies.

Game meat

Game meat from species such as wild boar, impala, springbuck, wilder beast, gazelle, kudu, and buffalo are popular delicacies in many African countries. Countries like Botswana, South Africa, and Namibia have an advanced regulated game meat industry, with strict regulations to ensure sustainable harvesting.⁴ The same cannot be said about other regions such as east, west, and north Africa. Interestingly, while the game meat industry is not regularized in central Africa, it is the primary source of protein and, in some cases, the only source of protein. Currently, trade in game meat faces challenges related to health and safety standards and competition from domestically produced livestock meat. It is crucial to ensure that the game meat trade is liberalized to promote sustainable and healthy alternatives, which requires responsible practices and strict adherence to regulations.

Mopani worms

Mopani worms, also known as mopane worms or mopane caterpillars, are the larvae of the emperor moth (*Imbrasia belina*), native to the southern regions of Africa. Mopani worms are typically found on the mopane tree (*Colophospermum mopane*), which is prevalent in southern Africa, especially in countries like Botswana, Zimbabwe, South Africa, and Namibia. Mopani worms are a significant source of nutrition (protein, healthy fats, and essential minerals such as iron and calcium) and income in southern African countries like Zimbabwe, Botswana, and South Africa, which have thriving mopani worm industries.⁵ The main challenges include over-harvesting and lack of formal market structures. Product standardization, innovation, and cooperatives can enhance market reach and access while facilitating regional integration.

Medicinal plants

Medicinal plants, such as the African potato (*Hypoxis hemerocallidea*) and Sutherlandia, are used in traditional medicine across Africa. Some countries, such as South Africa, have a well-established market for medicinal plants, but the trade faces challenges related to intellectual property rights and sustainability.⁶ Harmonizing regulations and protecting indigenous knowledge can promote the sustainable trade of medicinal plants in Africa and improve public health through affordable and healthier medicines.

3 Ellis and Allison, "Livelihood Diversification," 2004; Shackleton, Campbell, Lotz-Sisitka, and Shackleton, "Links between the Local Trade," 2008.

4 Burgess, "Country Pasture/Forage Resource," 2006; Van Schalkwyk et al., "The Contribution of Wildlife," 2010; Booth, et al., "Investigating the Risks," 2021.

5 Hlongwane et al., 2021.

6 Gebashe et al., "Cosmeceuticals: A Newly Expanding," 2022.

Baobab oil

Baobab oil, extracted from the seeds of the baobab tree, is used in cosmetics and health products. The trade in baobab oil offers significant economic opportunities, particularly for women in rural areas. However, the industry faces challenges related to quality control and market access.⁷ Investing in processing facilities and establishing quality standards can enhance the competitiveness of baobab oil.

Firewood and fuels

Firewood and other biofuels are essential energy sources in many African countries. The trade in these products contributes to rural livelihoods, but over-exploitation and deforestation are significant concerns. Promoting sustainable harvesting practices and alternative energy sources can mitigate these challenges and ensure a stable supply of firewood and fuels. In terms of livelihood outcomes, this industry is still informal and underdeveloped. It requires considerable improvements to benefit people effectively. A study revealed that despite the comparatively low mean income of firewood harvesting and trading, it remains a crucial source of cash income depended upon by most households. The study further showed that firewood harvesting and trading could not improve households' assets base, mainly financial, physical, and social capital. However, it contributes considerably to the improvement of human and natural capital.⁸

Insects

Edible insects, such as locusts and termites, are consumed in many African cultures. They are a rich source of protein and can be harvested sustainably. However, the trade in edible insects is often informal and faces challenges related to market acceptance and hygiene standards.⁹ Formalizing the trade and promoting the nutritional benefits of edible insects can enhance their market potential.

Opportunities in the AfCFTA for Wild Products

Market Access and Expansion

AfCFTA aims to eliminate tariffs on 90 percent of goods, which will likely increase intra-African trade, including wild-harvested products. This trade liberalization allows producers and traders of wild products to access new markets within the continent, expanding their consumer base and improving profit margins.

Standardization and Regulation

One of the objectives of AfCFTA is to address the challenges of multiple and overlapping memberships in Regional Economic Communities (RECs) and facilitate a harmonious trade regime. This means streamlined regulations and standards for sustainable and legal trade across borders for wild products, reducing the cost and complexity of compliance for businesses involved in the wildlife sector.

7 Meinhold et al., "Connecting Rural Non-timber," 2022.

8 Mohammed, "Contribution of Firewood Harvesting," 2021.

9 Matandirotya et al., "Edible Insects' Consumption," 2022; Grabowski et al., "Insects: A Source of Safe," 2022.

Infrastructure and Investment

AfCFTA aims to enhance economic integration by improving infrastructure and investment in member countries. Improved transportation networks can reduce the cost of moving goods, including wild products, across borders. Additionally, better infrastructure can boost ecotourism by making remote wildlife areas more accessible to tourists.

Economic Diversification and Growth

The trade of wild products offers African countries an opportunity to diversify their economies. Many African nations rely heavily on a few commodities for their economic stability. Countries can develop new revenue streams by promoting wild products such as game meat, mopani worms, and other medicinal plants. For example, Botswana, known for its abundant wildlife, can capitalize on exporting game meat, which is in high demand for its unique flavor and nutritional benefits.

Employment Creation

The harvesting, processing, and trading of wild products can create substantial employment opportunities, particularly in rural areas. For instance, the trade in mopani worms supports the livelihoods of thousands of rural families in countries like Zimbabwe and South Africa. These worms are not only a source of protein but also an income generator for local communities.

Cultural and Traditional Value

Wild products are deeply embedded in many African societies' cultural and traditional practices. The trade of such products can help preserve these traditions and promote cultural heritage. For instance, medicinal plants are used in traditional medicine across Africa, and promoting their trade can support the continuation of these essential cultural practices.

Regional Integration and Cooperation

The AfCFTA aims to create a single market for goods and services across fifty-four countries, facilitating the free movement of goods, including wild products. This integration can improve African nations' cooperation, promoting regional stability and unity. Countries can share best practices in sustainable harvesting and conservation, ensuring that the trade benefits both the economy and the environment.

Sustainable Utilization and Conservation

If appropriately managed, the trade in wild products can promote sustainable utilization of natural resources. The principles of free trade under the AfCFTA can be aligned with environmental regulations to ensure that wild products are harvested sustainably. This can help conserve biodiversity while providing economic benefits. For instance, the sustainable harvesting of baobab oil, used in cosmetics and health products, can be regulated through industry standards to prevent over-exploitation.

Non-Tariff Barriers to Intra-Africa Trade of Wild Products

Regulatory and Policy Barriers

One of the main challenges is the lack of harmonized regulations and policies across African countries. Different countries have varying laws regarding the trade of wild products, which create barriers to trade. While one country may allow the trade of certain wild products and services, another may restrict it, leading to inconsistencies and trade inefficiencies.

For instance, Kenya's recent National Wildlife Strategy 2030 acknowledges that its economy is mainly nature-based, unlike the industrialized nations; however, it supports non-consumptive wildlife use. There is no mention of wild products trade and industry scaling in the strategy, such as game meat. Instead, the strategy emphasizes partnerships with the private sector to grow the tourism industry. On the contrary, Zimbabwe's Biodiversity Economy Report 2023 notes that game meat is consumed in the local tourist markets and communities as tokenism or obtained from illegal hunting. The industry is not liberalized. However, some countries have made significant strides towards opening doors to commercializing the sector. These include Benin, Tanzania, Botswana, South Africa, and Zambia, which have either legalized or are legalizing their trade. To support these initiatives, knowledge and understanding of the legal, safe, and sustainable use of wild meat should be built through research and value chain analysis.

The AfCFTA provides a framework for harmonizing trade policies across African countries. By aligning national regulations with regional standards, countries can reduce trade barriers and facilitate the movement of wild products. This can include standardizing health and safety regulations, sustainable harvesting practices, and certification processes.

Sustainability and Conservation Concerns

The trade of wild products raises significant sustainability and conservation concerns. Over-harvesting and illegal trade can lead to the depletion of wildlife populations and degradation of ecosystems. This is particularly concerning for products like game meat and firewood. Without strict enforcement of sustainable harvesting practices, the trade could harm biodiversity.

AfCFTA can promote sustainable trade practices by incorporating environmental regulations into trade agreements. This can ensure that the trade of wild products contributes to conservation efforts and supports the sustainable use of natural resources. Encouraging certification programs for sustainably harvested products can enhance market access and consumer confidence. Moreover, the AfCFTA framework supports efforts to combat illegal trade and poaching. Countries can address the challenges of illegal activities by promoting regional cooperation and strengthening law enforcement. Sharing information and best practices can enhance the effectiveness of anti-poaching efforts and protect wildlife populations.

Infrastructure and Logistics

Inadequate infrastructure and logistics pose significant challenges to the efficient trade of wild products. Many rural areas where these products are harvested lack proper transportation and storage facilities. This can lead to delays, spoilage, and increased

costs. For instance, transporting game meat requires proper refrigeration, which may not be available in remote areas. Improving infrastructure is essential for facilitating the trade of wild products. This includes investing in transportation networks, storage facilities, and processing plants. Enhancing infrastructure can reduce costs, minimize spoilage, and improve market access for producers.

Market Access and Competition

Access to markets is another challenge for the trade of wild products. Many small-scale producers face difficulties reaching larger markets due to competition from established players and a lack of market information. Additionally, the international market for some wild products is dominated by non-African countries, which can limit the competitiveness of African producers. Investing in capacity building is crucial for enhancing the trade of wild products. This includes training for producers on sustainable harvesting techniques, quality control, and market access. Strengthening institutional capacity can also improve the enforcement of regulations and support the development of value chains.

AfCFTA aims to create a single market for goods and services, which can significantly benefit the trade of these wild products. Countries can access larger markets and benefit from economies of scale by promoting regional integration. This can enhance the competitiveness of African wild products in both regional and global markets.

Health and Safety Standards

Meeting health and safety standards is crucial for the trade of wild products, particularly those intended for human consumption, such as game meat and mopani worms. Ensuring these products meet the required standards can be challenging, especially in rural areas with limited testing and certification facilities. Failure to meet these standards can restrict market access and pose health risks.

Conclusion

The African Continental Free Trade Area offers a unique opportunity to enhance and expand wildlife economies across the continent, driving economic growth and cultural preservation, supporting conservation efforts, and improving livelihoods. By creating a single market, AfCFTA facilitates more accessible access to new markets, standardizes trade regulations, and promotes investment in critical infrastructure. With thoughtful implementation and robust stakeholder engagement, AfCFTA can be a transformative force for Africa's wildlife economies, contributing to a sustainable and prosperous future for the continent. However, realizing these benefits requires addressing substantial challenges related to regulatory barriers, sustainability, infrastructure, market access, health standards, harmonizing policies, building capacity, and illegal trade. Leveraging the principles of free trade under AfCFTA, African countries can address these challenges and promote the sustainable and equitable trade of wild products. This approach can support economic diversification, enhance regional cooperation, and contribute to preserving Africa's rich biodiversity. The trade of wild products, when managed sustainably and equitably, can play a crucial role in the continent's development and the well-being of its people.

References

1. Barnes, J. I. *Wildlife Economics: A Study of Direct Use Values in Botswana's Wildlife Sector*. University of London, University College London, 1998.
2. Booth, H., et al. "Investigating the Risks of Removing Wild Meat from Global Food Systems." *Current Biology*, 31(8) (2021): 1788-1797.
3. Burgess, J. "Country Pasture/Forage Resource Profiles." Food and Agriculture Organization of the United Nations (FAO), 2006.
4. Ellis, F., and Allison, E. "Livelihood Diversification and Natural Resource Access." *Overseas Development Group, University of East Anglia* (2004).
5. Gebashe, F. C., et al. "Cosmeceuticals: A Newly Expanding Industry in South Africa." *Cosmetics*, 9(4) (2022): 77.
6. Grabowski, N. T., A. Abdulmawjood, F. Acheuk, et al. "Insects: A Source of Safe and Sustainable Food? –'Jain' (Yes and No)." *Frontiers in Sustainable Food Systems*, 5, 701797, (2022).
7. Heubach, K., R. Wittig, E. A. Nuppenau, and K. Hahn. "The Economic Importance of Non-Timber Forest Products (Ntfps) for Livelihood Maintenance of Rural West African Communities: A Case Study from Northern Benin." *Ecological economics*, 70(11), (2011): 1991-2001.
8. Hlongwane, Z. T., R. Slotow, and T. C. Munyai, "The Role of Edible Insects in Rural Livelihoods, and Identified Challenges in Vhembe District, Limpopo, South Africa." *Resources (Basel, Switzerland)*, 10(12) (2021): 123.
9. Kamuti, T. "A Critique of the Green Economy-Approach in the Wildlife Ranching Sector in South Africa." *Africa Insight*, 45(1), (2015): 146-168.
10. Lindsey, P. A., G. Balme, M. Becker, et al, "The Bushmeat Trade in African Savannas: Impacts, Drivers, and Possible Solutions." *Biological Conservation*, 160 (2013): 80-96.
11. Matandirotya, N. R., W. L. Filho, G. Mahed, B. Maseko, and C. V. Murandu. "Edible Insects' Consumption in Africa towards Environmental Health and Sustainable Food Systems: A Bibliometric Study." *International Journal of Environmental Research and Public Health*, 19(22)14823 (2022).
12. Meinhold, K., W. K. Dumenu, and D. Darr. "Connecting Rural Non-timber Forest Product Collectors to Global Markets: The Case of Baobab" (*Adansonia digitata* L.). *Forest Policy and Economics*, 134, 102628 (2022).
13. Mohammed, S. "Contribution of Firewood Harvesting and Trading to the Livelihood of Rural Households in the North East Gonja District in the Savannah Region of Ghana," Doctoral Dissertation, Department of Silviculture and Forest Management, Kwame Nkrumah University of Science and Technology, Kumasi (2021).
14. Quartey, J. D. "Africa's Continental Free Trade and Sustainable Development: An Economic Assessment." *Management and Economics Research Journal*, 5(1), (2023): 15-44.
15. Sekonya, J. G. "Governance, Informality and Agency in the Making of Cross-Border Mopane Worm Livelihoods in Southern Africa." Doctoral Dissertation, Department of Environmental and Geographical Science, University of Cape Town (2022). <http://hdl.handle.net/11427/36554>.
16. Snyman, S. "The Role of Private Sector Ecotourism in Local Socio-economic Development in Southern Africa." In *Effecting Positive Change through Ecotourism*. Routledge, 2020: 47-68.
17. Shackleton, S., Campbell, B., Lotz-Sisitka, H., and Shackleton, C. "Links between the Local Trade in Natural Products, Livelihoods and Poverty Alleviation in a Semi-Arid Region of South Africa." *World Development*, 36(3) (2008): 505-526.
18. Van der Ven, C., and Signé, L. "Greening the AfCFTA: It Is Not Too Late." Africa Growth Initiative at Brookings, 2021. www.brookings.edu/research/greening-the-afcfta-it-is-not-too-late.
19. Van Schalkwyk, D. L., K. W. McMillin, R. C. Witthuhn, and L. C. Hoffman. "The Contribution of Wildlife to Sustainable Natural Resource Utilization in Namibia: A Review." *Sustainability*, 2(11) (2010): 3479-3499.