Baobab-Sisal Crafting as a Livelihood Option for Women Entrepreneurs in Climate-change affected areas

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Abstract

This qualitative study explores the transformative potential of baobab-sisal crafting as a climate-resilient livelihood strategy for rural communities, with a focus on women's agency and empowerment in community-based entrepreneurship. Situated in selected villages in Manicaland Province, Zimbabwe, this research examines the intersections between creative entrepreneurship, household income, food security, and rural tourism development in the context of climate change. Employing a triangulated data collection combining in-depth interviews, participant observation, and focus group discussions (FGDs), this study engaged with nine (9) female crafters selected from the five villages in Chimanimani District, yielding insights into the complex dynamics of baobab-sisal crafting as a livelihood strategy. The findings reveal that baobab-sisal crafting enhances household income and food security, catalyzes rural tourism development, and contributes to poverty reduction and economic empowerment. Innovative value chain development for baobab-sisal products, such as mauyu/baobab mats and 'baobab-sisal blankets,' is identified as a critical lever for accessing local and international markets. This research contributes to the discourse on community-based creative entrepreneurship and sustainability as climate change adaptation and mitigation strategies, highlighting the imperative of contextualizing livelihood resilience within complex environmental, social, and economic factors. It was discovered that every year, women entrepreneurs ensure the progress of baobab-sisal trade through sustainable selective extraction of baobab barks and sisal fibers

Keywords: Baobab-sisal, climate change, community-based entrepreneurship, rural tourism

Introduction and Background

Climate change has had devastating consequences for rural communities globally, with Africa disproportionately affected due to its heavy reliance on rain-fed agriculture. Zimbabwe, a country exemplifying this vulnerability, has witnessed persistent droughts and crop failures, compelling rural communities to explore alternative livelihood strategies (Chagumaira et al., 2016). This study investigates the transformative potential of baobab-sisal crafting as a climate-resilient livelihood strategy for rural communities in the five villages in Chimanimani District situated in Manicaland Province, Zimbabwe.

Manicaland Province, situated in eastern Zimbabwe, shares a border with Mozambique to the east. The province is predominantly inhabited by the Shona

heritage groups that is it is inhabited by, among other ethnicities, the Ndau people and to the north of the Ndau, are the Manyika and Hwesa, with some Karanga in Buhera, as well as Njanja/Zezuru to the west.

The Ndau people, who boast a rich cultural heritage and history (Manyebvu, 2015). Originating from the Gaza Empire in Mozambique, the Ndau people migrated to Zimbabwe in the 19th century, bringing with them their distinct language, customs, and traditions. As skilled agriculturalists, hunters, and gatherers, the Ndau people have developed a profound spiritual connection with their ancestors and the natural environment. Their expertise in craftsmanship is evident in the beautiful baskets, mats, and other handicrafts they produce from baobab-sisal (Manyebvu, 2015).

The province is administratively divided into several chiefdoms, including Mutasa, Musikavanhu, and Chimanimani, each possessing its unique cultural and traditional practices. Manicaland Province serves as a critical trade hub for local artefacts and home-grown innovations, with major road routes such as the Masvingo-Mutare Road and the A10 Highway that comes from Harare through Chivhu, Gutu, Nyika to Chipinge, traversing the province, thus offering opportunities to diversify baobab-sisal product sales. The province's border with Mozambique facilitates trade and commerce between the two countries, with the border area serving as a vital accessible local industry trade area.

However, the extraction of baobab-sisal for crafting purposes has raised concerns regarding environmental conservation. The baobab tree (*Adansonia digitata)* is a protected species in Zimbabwe, with its bark and leaves subject to regulated harvesting. Similarly, the sisal plant (*Agave sisalana*) is protected, with its harvesting governed by specific restrictions. This study seeks to contribute to the discourse on the intersection of sustainable livelihoods and environmental conservation, examining the transformative potential of baobab-sisal crafting as a climate-resilient livelihood strategy while scrutinizing its environmental implications.

Statement of the Problem

Most women entrepreneurs in Zimbabwe’s Manicaland Province continue to endure food insecurity and impoverished livelihoods due to their reliance on rain-fed agriculture, despite climate change-induced drought and receding water tables. This study proposes baobab-sisal crafting as a viable alternative, offering a climate-resilient and sustainable solution.

Objectives

The objectives of the study were:

1. To determine the impact of baobab-sisal income on household income and food security levels of nine (9) women entrepreneurs in selected areas of Chimanimani District over two years;

2. To examine the role of baobab-sisal crafting in catalyzing rural tourism development;
3. To analyze the contributions of baobab-sisal crafting to women entrepreneurs' poverty reduction and economic empowerment; and
4. To identify innovative value chain development strategies for baobab-sisal products

Research Questions

The study was guided by the following questions:

1. What is the impact of baobab-sisal crafting on the household income and food security levels of nine (9) women entrepreneurs in Chimanimani District over two years?
2. How does baobab-sisal crafting influence rural tourism development in selected villages in Chimanimani District?
3. What are the poverty reduction and economic empowerment outcomes of baobab-sisal crafting among women entrepreneurs in rural Zimbabwe?
4. What innovative value chain development strategies can be employed to enhance the competitiveness and sustainability of baobab-sisal products in local and international markets?

Literature Review

A large body of research on baobab-sisal crafting underlines the project's transformative potential as a climate-resilient livelihood mechanism both locally and internationally. Hauze et al (2016) posits that baobab crafting can contribute significantly to sustainable livelihoods and poverty reduction, especially in rural communities where social inequalities are distinctly defined. This assertion is validated by Lisao et al. (2018) who found that baobab-sisal crafting can provide a viable income source for rural women, thereby enhancing their economic empowerment. African scholars have also made notable contributions to the discourse on baobab-sisal crafting. Chingarande (2020) argues that both baobab and sisal crafting can contribute to rural development in Africa by providing an alternative income source for rural communities. Munyebvu (2015) contends that baobab and sisal crafting can enhance biodiversity conservation by reducing the pressure on natural resources. Manyebvu's (2015) contention is supported by the fact that baobab-sisal crafting provides an alternative income source, reducing dependence on natural resources and promoting sustainable use of baobab and sisal resources. This, in turn, contributes to the conservation of natural habitats and the maintenance of ecosystem integrity. The scholars go on to elaborate that the conservation of natural resources is achieved through sustainable harvesting and management practices, such as selective harvesting, reforestation, and habitat restoration, which minimize

environmental impact and promote long-term resource viability. By adopting these practices, baobab-sisal crafting can help maintain ecosystem health and productivity.

Countrywide, “Zimbabwe has an estimated five million baobab trees, with four million of the trees situated on communal lands” (AfroTrade 2014, p. 15). With a lot of people having endured the repercussions of Cyclone Idai in Manicaland, baobab crafting and baobab fruit sales have both rejuvenated the financial standing of many desperate families (UPI, 2019). In his extensive study on African indigenous knowledge systems (AIKS) or ethno-science, Zengeya (2019) highlights the significance of traditional knowledge and practices in promoting sustainable livelihoods and biodiversity conservation in Africa. Zengeya (2019) emphasizes that African indigenous knowledge systems play a crucial role in baobab-sisal extraction, as local communities possess traditional knowledge and practices that ensure the sustainable harvesting and management of these resources. This traditional knowledge, passed down through generations, informs the selective harvesting of baobab fruits and sisal leaves, minimizing harm to the plants and maintaining ecosystem balance (Government of Zimbabwe, 2015).

The extraction of baobab bark has proved to be convenient in circumstances where climate change challenges have led to crop failure and food hunger. In particular, the baobab is a low-altitude growing and drought-resilient succulent tree, which is common in very hot places such as Matabeleland South, Zambezi Valley, Masvingo, Mashonaland West, and Manicaland. It “grows in very dry areas, with rainfall of as little as 500 mm a year. The trees fruit in the middle of the dry season, when there is not much growing and few other income opportunities for local communities” (AfroTrade, 2024, p. 14).

In Zimbabwe, researchers have also explored the potential of baobab-sisal crafting as a climate-resilient livelihood strategy. Chou (2018) found that baobab-sisal crafting can enhance women's economic empowerment and contribute to poverty reduction in rural areas. Chitakira (2020) also argues that baobab-sisal crafting can provide a viable income source for rural communities, while promoting biodiversity conservation. Chagumaira et al (2016) notes that rural communities primarily utilize the income generated from baobab-sisal crafting to meet their basic needs, such as food, education, and healthcare, thereby improving their overall livelihoods.

However, the extraction of baobab sisal for crafting purposes has raised concerns regarding environmental conservation. The Environmental Management Act (2002) designates the baobab tree as a protected species and requires its harvesting to be regulated by law (Government of Zimbabwe, 2015). Similarly, the sisal plant is protected under the same Act. Recent arrests of baobab-sisal crafters by environmental conservation law enforcers have underscored the need for sustainable harvesting practices (USAID, 2022). However, despite intervening challenges, baobab and sisal have multiple uses beyond crafting. In Zimbabwe, for example, the baobab fruit is utilized in the production of fruit juice, with a processing plant already established and commissioned in Mutare City (ZimTrade, 2024). Similarly, in the

Mudzi area, the Harare Institute of Technology, Campaign for Female Education (Camfed) and ZimTrade were planning to sponsor a selected group of ten women picked from the local communities across Zimbabwe to fare their baobab products at international trade fairs (AfroTrade, 2024). So far, “the group has sent sample orders to Egypt and once approved, the market will absorb much of the production coming from Mudzi, which will put the community on the national export map” (ZimTrade, 2024, p. 15).

In African ethno-science, the baobab tree also holds cultural significance, with its bark and leaves used for medicinal purpose. Aluko et al. (2016) Sisal is also employed for soil erosion prevention and as a fencing material (Zengeya, 2019). Lisao et al. (2018) also found that baobab extraction can provide a viable income source for rural communities, while Zengeya (2019) discovered that sisal extraction can contribute to biodiversity conservation by reducing the pressure on natural resources, as alluded to earlier in this section. The importance of sustainable livelihoods and biodiversity conservation is emphasized in various international, regional, and national conventions, with the United Nations' Sustainable Development Goals (SDGs) stressing the need for sustainable livelihoods and biodiversity conservation (UN, 2015). The African Union's Agenda 2063 also highlights the importance of sustainable livelihoods and biodiversity conservation (AU, 2015).

Zimbabwe's Environmental Management Act (2002) and the National Environmental Policy (2009) established a robust framework for reconciling sustainable livelihoods with biodiversity conservation. The Sustainable Natural Resource Management Framework was established in 2002 (with the Environmental Management Act) and further reinforced in 2009 (with the National Environmental Policy). By regulating the harvesting and use of natural resources, including baobab and sisal, these policies mitigate environmental degradation and promote sustainable resource management (Zengeya, 2019). The policies also foster community-centric conservation approaches, acknowledging the pivotal role that local communities play in environmental stewardship. Additionally, they integrate traditional knowledge and practices into natural resource management, ensuring the long-term sustainability of ecosystems and ecological integrity.

Recent scholarship on natural fiber-based entrepreneurship highlights baobab-sisal crafting as an emerging livelihood strategy among rural women, with production diversifying beyond traditional uses into contemporary utilitarian products such as mats, hats, and ropes (United Nations Industrial Development Organisation, 2024). Agreeably, Oxfam (2025) concludes that studies in Southern Africa indicate that the integration of baobab fibre and sisal leverages locally available, climate-resilient materials to create value-added goods for both domestic and niche export markets. Oxfam (2025) goes on to suggest that the craft is characterised by low entry barriers, minimal capital requirements and intergenerational knowledge transfer, positioning it as a viable micro-enterprise for women in agro-ecologically marginal regions. Empirical work from Zimbabwe and Tanzania demonstrates that participation in sisal

and baobab craft groups is associated with enhanced income stability, asset accumulation, and improved bargaining power within households, although scale-up remains constrained by market access, inconsistent quality standards and limited product design innovation (Lupande, 2026). The dual income-food security pathway operates through direct cash earnings from sales and through in-kind benefits when unsold inventory is retained for household use (Lupande, 2026).

Theoretical Framework

The Climate-Resilient Livelihoods Framework, first propounded by the United Nations Development Programme (UNDP) in 2016 and later prominently advanced by the International Fund for Agricultural Development (IFAD) in 2020, is a conceptual framework that guides the analysis of livelihoods in the context of climate change (United Nations Industrial Development Organization, 2024). The framework applies to various study fields, including agriculture, forestry, fisheries, rural development, climate change adaptation, sustainable development, and women's empowerment. The researcher chose this framework to analyze the climate-resilience of baobab-sisal extraction and crafting women entrepreneurship and identify strategies to enhance their resilience and sustainability. Originating from the need to address the impacts of climate change on vulnerable communities, the framework builds on the concept of sustainable livelihoods, emphasizing the importance of considering social, economic, and environmental dimensions. Based on tenets such as livelihood diversification, climate risk management, ecosystem-based adaptation, social protection, and institutional strengthening, the framework is particularly relevant to the context of baobab-sisal extraction and crafting women's entrepreneurship, where women face challenges like climate-related shocks, market fluctuations, and limited access to resources. A critical impediment to the economic empowerment and livelihood resilience of women entrepreneurs in rural communities is the limited access to markets and sustainable income streams from baobab-sisal extraction. To mitigate this challenge, the development and implementation of innovative value chain initiatives and market access strategies can provide women entrepreneurs with the necessary support to scale up their baobab-sisal crafting enterprises and successfully penetrate local and international markets. This study employed a qualitative research methodology, utilizing a case study approach to explore the climate-resilient livelihoods of women entrepreneurs in the baobab-sisal sector. Data collection involved in-depth interviews with nine (9) women entrepreneurs, supplemented by participant observation and focus group discussions. The data was also analyzed using thematic analysis of the themes related to climate resilience, livelihood diversification, and women's empowerment.

Justification of the Study

In the face of persistent droughts and climate change, rural women in developing countries are increasingly turning to entrepreneurship as a means of survival. However, these women, particularly those in Manicaland Province in Zimbabwe, face numerous challenges, including limited access to resources, markets and support services (Manyebvu, 2015). This study seeks to empower rural women entrepreneurs in the five villages in Chimanimani District found in Manicaland Province who have taken up baobab-sisal extraction as a livelihood option, through providing them with the necessary tools, training, and support to succeed. The glass ceiling concept is particularly relevant in this context, as women in rural areas face numerous barriers to accessing markets, finance, and other resources necessary for business success (ZimTrade, 2024). This project aims to break down these barriers and provide women with the opportunities and support they need to thrive. By empowering rural women entrepreneurs, we can help to reduce poverty, promote economic growth, and foster sustainable development.

This study is particularly relevant in the context of Zimbabwe, where rural women are disproportionately affected by climate change and poverty. The country's economy has been severely impacted by droughts, which have resulted in food insecurity and limited economic opportunities for rural communities (Chingarande, 2020). However, the baobab tree, with its numerous uses and benefits, offers a promising opportunity for rural women to generate income and improve their livelihoods. The project's focus on sustainable baobab-sisal extraction and entrepreneurship is critical, as it recognizes the importance of environmental conservation while also promoting economic development. By providing women with the necessary training and support, we can ensure that baobab-sisal extraction is done in a sustainable and environmentally friendly manner, while also generating income and improving livelihoods.

This project targets feminist organizations, environmental management agencies, local authorities, and women in general. It is a critical step towards promoting women's economic empowerment, sustainable development, and environmental conservation. By working together, the country can create a more equitable and sustainable future for rural women and their communities. The project's objectives are multifaceted and include providing training and support to rural women entrepreneurs, promoting sustainable baobab-sisal extraction and entrepreneurship, and improving access to markets and finance. The project aims to establish women's committees to manage their entrepreneurial enterprises, provide a platform for sharing knowledge and resources, and promote collaboration and networking among women entrepreneurs.

The impact of this project is far-reaching, with benefits extending beyond the individual women to their families, communities, and the environment. By promoting sustainable livelihoods and entrepreneurship, we can help to reduce poverty, improve food security, and promote economic growth. The project contributes to the achievement of several Sustainable Development Goals (SDGs), such as the No Poverty SDG 1,

the Gender Equality SDG 5 and the Responsible Consumption and Production SDG 12. It also contributes immensely to Zimbabwe's National Development Strategy 2's 2026-2030's three strategic pillars; Number 2 (Economic Transformation), 5 (Science, Technology and Innovation) and 7 (Job Creation).

Overall, this study is a critical step towards empowering rural women entrepreneurs who have taken up baobab-sisal extraction as a livelihood option. By providing them with the necessary tools, training, and support, I can help to break down the barriers that prevent them from succeeding and promote sustainable development and environmental conservation. I urge feminist organizations, environmental management agencies, local authorities, and women in general to support this project and work towards creating a more equitable and sustainable future for rural women and their communities. The project's potential for impact is significant, and it has the potential to be scaled up and replicated in other contexts. I believe that this project has the potential to make a real difference in the lives of rural women and their communities, and I urge donors and stakeholders to support this critical initiative. By working together, we can create a more sustainable and equitable future for all.

Limitations of the Study

The study's reliance on a small, purposively selected sample of nine female crafters from Manicaland Province limits the transferability of findings to other contexts, as the snowball sampling technique may have introduced homogeneity and selection bias by drawing participants from similar social networks. The exclusive focus on women actively engaged in baobab-sisal crafting precludes comparative insights from male crafters or non-participants, potentially overstating the livelihood impacts within the broader community. While translation of the Ndau language transcripts into English facilitated wider accessibility, nuances of meaning and culturally embedded expressions may have been lost or altered during transcription, affecting interpretive accuracy. Additionally, the absence of prolonged participant observation beyond interview settings and the short data collection window between 2024 and 2025 constrain understanding of seasonal variations and long-term shifts in income, food security and empowerment outcomes.

Methodology

This qualitative study, conducted between 2024 and 2025, employed a triangulated methodology to explore the transformative potential of baobab-sisal crafting as a climate-resilient livelihood strategy for rural communities in the five selected villages in Chimanimani District, located on the eastern border of Zimbabwe with Mozambique and in Manicaland Province. The study's methodology involved a combination of in-depth interviews, participant observation, and focus group discussions to select participants. Snowball sampling was used to identify and select participants, where initial participants referred the researcher to other potential participants who met the

study's inclusion criteria. The inclusion criteria consisted of female crafters who were actively involved in baobab-sisal crafting and residing in the selected villages in Manicaland Province. A total of nine (9) female crafters were engaged in the study, providing rich, contextual data on the complex dynamics of baobab-sisal crafting and its impact on household income, food security, rural tourism development, and women's economic empowerment. The nine (9) female crafters were selected through snowballing, purposively selecting two participants per village, serving one village which contained only one female crafter. To ensure the research was conducted ethically, participants' names were coded to protect their identities and maintain confidentiality. Alphanumeric codes: W1 (woman entrepreneur number 1), W2 (woman entrepreneur number 2 up to W9 (woman entrepreneur number 9) were used to refer to participants in the study, and these alphanumeric codes were accorded to the sampled nine (9) women entrepreneurs depending on which number they appeared when they met with this researcher during snowballing. The five (5) sample villages were also coded as A, B, C, D, and E, and all data was stored securely to prevent unauthorised access. By taking these measures, the study ensured that participants' rights and dignity were respected, and that the research was conducted ethically and responsibly. Text data captured in the Ndau language was transcribed into English for the benefit of readers who could not understand it.

The nine (9) participants were selected based on active participation in the craft for at least two years and consent to share income and food security data. Data saturation was deemed to have been reached when interviews with the ninth participant yielded no new thematic categories regarding livelihood impacts, with recurring patterns of income diversification and seasonal consumption smoothing evident across narratives. To triangulate individual perspectives, two focus group discussions were conducted with all nine participants, the first group having four participants and the second, five participants respectively; structured to explore collective experiences of market access, production constraints, and household decision-making, thereby deepening interpretive consistency across cases. Trustworthiness was strengthened through data triangulation across interviews and FGDs, as well as the use of verbatim quotes to substantiate thematic claims. Verbatim quotes captured in the Ndau language were transcribed into English for easy understanding by the non-Ndau-speaking audience.

Trustworthiness was enhanced through member checking of transcripts, maintenance of an audit trail documenting coding decisions, and prolonged engagement with participants over the six-month study period, which collectively supported credibility, dependability, and confirmability of findings while acknowledging limited transferability due to the small, context-specific sample.

Data Analysis, Discussion, and Findings

This section analyses and discusses the data to come up with findings for the study. Qualitative data from the interviews and FGDs were analyzed using thematic analysis

to identify patterns relating to income and food security. Transcripts were coded inductively, reflecting livelihood impacts. Themes were reviewed for coherence and refined into final themes.

Climate Resilience

The findings indicate that women baobab-sisal crafters in the selected villages have adopted various climate-resilient strategies to cope with the impact of climate change, which has become a major threat to their livelihoods. These strategies include diversifying their livelihoods, using drought-resistant tree species like baobab, and implementing sustainable harvesting practices. For instance, W2, a 41-year-old crafter from Village A, noted:

> *Tiri kuchera tsamba dze*baobab *pamwe chikomo chinozara shasha, tichipfanya tsamba dze*baobab *dzisakonde.*
>
> (We harvest baobab bark during the dry season when the trees are less stressed, ensuring sustainability and reducing the risk of tree damage).

This strategy allows them to manage the baobab trees sustainably, ensuring their continued availability for future generations. Additionally, the women crafters have developed a sophisticated understanding of the baobab tree's growth patterns, allowing them to harvest the bark without causing harm to the tree. They made sure that they did not unbark the baobab tree to cause it to go dry, but they did so minimally to allow it to rejuvenate its cells.

W5, a 28-year-old crafter from Village B, also explained:

> *Tiri kushanda nesisal, shiri inosimba inokwata mvura*
>
> (We also use sisal, which is a hardy plant that can survive with minimal rainfall, reducing our reliance on rain-fed crops).

The use of sisal, a drought-tolerant plant, provides an additional layer of resilience to their livelihoods, as it can thrive in conditions where other crops may fail. Furthermore, the women crafters have developed innovative ways to process and utilize the sisal plant, creating a range of value-added products that command higher prices in the market. Products which they crafted from the sisal plant included mats, cloths, blankets, baskets, ropes, and hats. They bragged that they sold the products to supplement their family incomes and could sell them as far as Mozambique under the auspices of illegal migrant traders.

The adoption of these climate-resilient strategies has enabled the women baobab-sisal crafters to maintain their livelihoods despite the increasing frequency and severity of climate-related shocks. By diversifying their livelihoods, using drought-resistant tree species, and implementing sustainable harvesting practices, the women crafters have demonstrated remarkable resilience and adaptability in the face of climate change. To verify the time dedication the women entrepreneurs applied between crop/animal farming and baobab-sisal crafting, the following data were obtained.

Activity Time Dedication in Months for the Year 2024

Table 1

Respondent	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	
Farming	1	0	2	1	0	0	3	1	4	Months
Crafting	11	12	10	11	12	12	9	11	8	Months

The above data proves that about 89% of the nine (9) women entrepreneurs devotedly spend most of their time on either baobab or sisal crafting, while the remaining 11% did both. A large percentage of the participants suggested that they were very frustrated by the repercussions of the Cyclone Idai, explaining this for the benefit of international readers and other climate change effects like protracted drought and desperate livelihoods. According to Janzon (2018), many people in drought-prone countries have since left farming enterprises for other business ventures that can help them fend for their families. Janzon (2018) identifies some of these business ventures as encapsulating fish farming, poultry, tailoring, crafting, selling products online and a lot more business ventures in the category of the informal business sector. Therefore, for them, they located a viable livelihood option in baobab and sisal crafting, from which they get a lucrative income after selling the resultant products locally and internationally.

The study revealed that baobab-sisal crafting has enabled women entrepreneurs to diversify their livelihoods, reducing their dependence on a single income source and increasing their economic resilience. Women crafters have expanded their product lines to include a range of value-added products, such as intricately designed bags, hats, baskets and jewellery, which attract higher prices and increase their income. These products are not only aesthetically pleasing but also display the women's creativity and skill, setting them apart from other crafters in the region. Table 2 and Figure 1 below show the commonly crafted baobab and sisal products and the average amount of money in United States dollars that the women said is likely to accumulate for the period of two months per woman entrepreneur.

Estimated Value of Baobab-Sisal Product Sale Between May and June 2024.

The information in Table 2 below shows that the sale of mats and carpets attracts both local and international consumers. During the interviews held and observations made, baobab and sisal crafters did not only traded the products in exchange for money but also for other products such as groceries, kitchen ware and any material that could be traded. Mats and carpets had an estimated value of US$2500 (37%), ropes would attract US$2400 (35%), baskets US1200 (18%) and hats, which were commonly bought locally, had an estimated value of US$700 (10%). The respondents expressed that some of the products, like hats, were seasonally bound and were mostly bought during the cold and hot seasons, especially from the end of May to end of April the

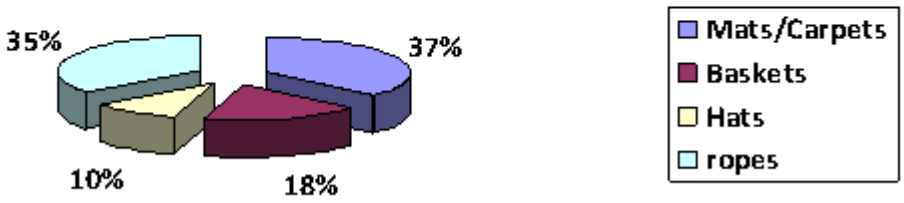
following year. Most women revealed that they normally sustainably extract baobab bark during winter to prevent baobab tree damage due to both diseases and weather, while sisal was extracted when the leaves became mature, that is, in the dry season between the ends of April and October. The respondents elaborated that mostly their local marketing points were by the roadsides and at cultural functions. They also expressed that local and international tourists were regular clients of the baobab and sisal products, with the chief ones being companies and small-scale cooperatives.

Baobab-Sisal Product Estimated Sales between May and June 2024.

Table 2

Product	**Mats/Carpets**	**Hats**	**Baskets**	**Ropes**
Average Value Estimated	$2500	$700	$1200	$2400
Common Market	Local & International	Local	Local & International	Local & International

Fig 1
Estimated value of Baobab-sisal product sale in US$ in two Months



Estimate the percentage value of baobab-sisal product sales in two months

On the concept of diversification, W5 (the Village B woman crafter aforementioned), explained the impact of diversifying her product line:

> *Ndakazvara kufamba tsuma, saka ndakaita pfuma, mapoti nejira*
>
> (I used to only make mats, but now I also make bags and hats, which sell for more money, helping me to support my family).

By expanding her product line, W5 has been able to increase her income and support her family, demonstrating the positive impact of livelihood diversification on women's economic empowerment.

W2, from Village A, noted the unique selling point of their baobab seed jewellery:

Ndakazvara kufamba tsuma, saka ndakaita pfuma, mapoti nejira

(We also make jewellery from baobab seeds, which is a unique product that attracts tourists).

The use of baobab seeds in jewellery making has not only provided an additional income stream for the women crafters but also helped to promote the cultural significance of the baobab tree in the region.

The diversification of livelihoods through baobab-sisal crafting has also enabled women entrepreneurs to tap into new markets and customer segments. For example, the women crafters have started selling their products to tourists visiting the region, providing an additional source of income and exposure to new markets. This has not only increased their income but also enhanced their economic resilience and ability to adapt to changing market conditions.

Access to Markets

The study further aimed to identify the barriers encountered by women entrepreneurs and the promotional tactics they deployed to market their products. The following data were gathered.

Table 3

Entrepreneurs' Common suggested challenges	**Suggested Intervention Measures**	**Marketing strategy**
-Long-distance markets **-competition from other products** **-Price fluctuations** **-environmental laws** **-lack of labour for extracting bark and sisal** **-stereotypes from other provinces**	-Need for skills and digital training -sponsored participation in trade fairs and cultural events -media marketing support -access to loans -support through local authorities -networking expansion	-word of mouth: persuasive advertising -Use of local newspapers to reach potential clients -travel to selling points, local and international -customise the products to suit customer taste -collaborating with local businessmen -attempts to engage NGOs -success story telling in local trade fairs, cultural events, and magazines

-limited networking opportunities **-lack of government support through local authorities to license the activity** **-digital divide**		-social media (especially WhatsApp)

As presented above, the women entrepreneurs indicated that they faced challenges, such as travelling long distances to reach potential clients in both local and international markets, which disadvantaged them financially. They also expressed that they met stiff competition from other products not made of baobab and sisal, such as metal, wood, and plastic products, which were more standardized, legally branded, and licensed. They pleaded that the government needed to support them through local authorities, especially by legalizing baobab bark and sisal extraction. W8 and W5, for example, complained that they were recently arrested and warned not to extract bark from baobabs, which they said were protected tree species. However, despite all the odds, they said they ignored the order to support their families. The women entrepreneurs also said that despite stereotypes from neighbouring provinces chiding them as one of the most backward and savage provinces, they would continue conscientizing people about the value of their culture and the lucrative value of baobab trees and the sisal plant. The respondents also expressed that extracting baobab bark and sisal leaves was a very painful and demanding job, which required the help of their husbands. However, most of them said that they were ‘single mothers’ and that they had to hire labour from men, and that they would devote themselves to weaving and selling to eke a living despite fluctuating market prices.

The respondents indicated that they were in great need of training workshops, especially relating to digital technology, for them to widen the scope of their business and to network with potential clients in both local and international markets.

Women's Empowerment

The findings of this study unequivocally demonstrate that baobab-sisal crafting has been a transformative force in the lives of women entrepreneurs in the selected villages. By empowering women to take control of their economic and social destinies, baobab-sisal crafting has enabled them to transcend traditional gender roles and stereotypes, thereby enhancing their overall well-being.

A critical factor in this empowerment process has been the formation of cooperatives, which provide a platform for women crafters to share knowledge, skills, and resources.

These cooperatives have fostered a sense of solidarity and collective ownership among the women, enabling them to negotiate better prices for their products and access new markets. As W8, a 27-year-old crafter from Village C, noted:

> *Tiri kushanda pachena, tichipfanya masangano anokwata tsamba dzebaobab*
>
> (Through our cooperative, we have been able to access training and markets, increasing our income and improving our livelihoods).

The cooperatives have also facilitated the development of a supportive and inclusive community among the women crafters. W1, a 40-year-old crafter also from Village C, explained.

> *Tiri kushanda tichipfanya kuita kwenyu tsamba dzebaobab.*
>
> (We also provide support to each other, sharing knowledge and skills to improve our products and businesses).

This sense of community and mutual support has been instrumental in building the women's confidence and self-esteem, enabling them to take on leadership roles and assert their rights in their communities. Furthermore, the cooperatives have enabled the women crafters to develop a range of entrepreneurial skills, including marketing, finance, and product development. This has enabled them to increase their income and improve their livelihoods, thereby reducing their vulnerability to poverty and economic shocks. The findings of this study demonstrate that baobab-sisal crafting has been a powerful tool for empowering women entrepreneurs in the selected villages. By providing a platform for women to share knowledge, skills, and resources, the cooperatives have enabled them to take control of their economic and social destinies, thereby enhancing their overall well-being.

Government Policies and Baobab-Sisal Women Entrepreneurs

The Zimbabwean government, through its environmental conservation agencies such as the Environmental Management Agency (EMA), including those that regulate water and climate, has implemented policies aimed at conserving the country's natural resources. However, these policies have had unintended consequences on women entrepreneurs in the rural areas, particularly those involved in baobab-sisal crafting. The Environmental Management Agency (EMA), has been enforcing regulations that restrict the extraction of baobab bark, a key material used by women in Manicaland Province to craft various products such as mats, baskets and blankets. Despite the conservative approach to harvesting, which allows the trees to rejuvenate, the women are facing challenges in accessing the raw material.

A female crafter, during an interview session, shared her experience of being arrested and charged for extracting baobab bark. Accordingly, a lot of female entrepreneurs were arrested in 2022 after being caught harvesting baobab bark in Manicaland (USAID, 2022). She explained that keeping up with family responsibilities has become

increasingly difficult, especially for single mothers like herself who are solely responsible for providing for their children. The crafter lamented that most of the women entrepreneurs in the area are widows with children to look after, and the restriction on baobab bark extraction has severely impacted their livelihoods. Furthermore, the women are also incurring high transportation costs when transporting the bark from the harvesting points to their homes for further processing into baobab fiber and weaves, which adds to their financial burden.

The restrictive policies have not only affected these women's ability to access raw materials but also their ability to market and sell their products. The women in the selected five villages of Chimanimani District have been innovative in finding ways to overcome these challenges. For instance, they have formed collaborative teams for bark extraction, transportation of artefacts to markets and exchange of weaving resources and skills. Some women have also started offering training services to novice women entrepreneurs, which has helped to build their capacity and confidence. The women have also established committees to manage their entrepreneurial enterprises, and more women are joining the business to earn a living.

The women in the baobab-sisal crafting industry have expressed their desire for a machine that can debark and weave the fibres, which would greatly improve their productivity and efficiency. However, this desire is often at odds with the government's environmental policies, which restrict the debarking of certain tree species. The women argue that controlled harvesting of baobab trees can be sustainable and that the trees can rejuvenate if harvested properly. They believe that with the right support and policies, their businesses can thrive and contribute to the local economy. In fact, studies such as the one by Zengeya (2019) have shown that baobab-sisal crafting can enhance household income and food security, catalyze rural tourism development, and contribute to poverty reduction and economic empowerment.

Networking Among Women Entrepreneurs

The women in the baobab-sisal crafting industry have demonstrated the importance of networking in overcoming challenges and achieving success. They have formed collaborative teams and networks that enable them to share resources, skills and knowledge. Digital networking has also played a crucial role in enabling women to access markets and information that can help them improve their businesses. The women have also formed joint ventures and partnerships with other stakeholders, which have helped to increase their access to finance, markets, and technology.

Interview data obtained from the women's networking strategies reveals that they are using a range of approaches to build their businesses. Some of the strategies include forming collaborative teams in bark extraction and transportation of artefacts to markets, exchanging weaving resources and skills, and offering training services to novice women entrepreneurs. The women have also established women's committees to manage their entrepreneurial enterprises, which has helped to improve their decision-making and leadership capacity.

Overall, the Zimbabwean government's policies aimed at conserving the country's natural resources have had unintended consequences on women entrepreneurs in the rural areas. The restriction on baobab bark extraction has severely impacted the livelihoods of women in Manicaland Province, who rely on the craft to support their families. However, the women have demonstrated their resilience and resourcefulness in finding ways to overcome these challenges. Through networking and collaboration, the women have been able to build their capacity and confidence, and their businesses continue to thrive despite the challenges. The study highlights the need for policies that support sustainable livelihoods and entrepreneurship, particularly for women in rural areas.

Conclusion and Recommendations

This study has demonstrated the transformative potential of baobab-sisal crafting in empowering women entrepreneurs in rural Zimbabwe, thereby enhancing their economic and social status. To harness the full potential of this initiative, women entrepreneurs, policymakers, and stakeholders must collaborate to create an enabling environment that fosters sustainable livelihoods, climate resilience, and women's empowerment (Oxfam, 2025; ZimTrade, 2024).

To this end, the following actionable recommendations are proposed:

- First, the Ministry of Women Affairs, Community and Medium Enterprises should ensure that women entrepreneurs are mobilized to establish and strengthen cooperatives to enhance collective bargaining power, access new markets, and share knowledge and skills;
- Second, the Ministry of Women Affairs, Community and Medium Enterprises should also provide targeted support, including training programs, access to finance, and market linkages, to women-led initiatives.
- Furthermore, the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development, through vocational training centers and polytechnics, should deliver entrepreneurship and vocational training to women entrepreneurs on the baobab-sisal project under the Heritage-based Curriculum.
- Finally, the Ministry of ICT, Postal and Courier Services, as well as the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ), should implement the universal service fund to support ICT hubs and digital literacy for women and rural communities. This will open up digital platforms and social media for women entrepreneurs to access new markets, promote their products, and build business networks.

By implementing these recommendations, women entrepreneurs in rural Zimbabwe can unlock new opportunities for economic growth, social empowerment, and

environmental sustainability, ultimately contributing to the achievement of the Sustainable Development Goals.

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