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EXPLORING INNOVATIVE APPROACHES TO IMPROVE SHEA BUTTER PRODUCTION IN NIGERIA: A QUALITATIVE STUDY

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Abstract

Shea butter production in Nigeria is declining as a result of shea trees degeneration by communities for other economic activities. However, the continuous decrease in shea nuts production is affecting the quantity of shea butter produced locally in rural communities. Surveys by scholars have revealed that the demand for shea butter is increasing across the globe, and local processors are not producing enough quantity of shea butter to meet the demand of the larger domestic market and foreign buyers. This study is conducted to investigate the present constraints of shea butter production in Nigeria, using a structured interview approach. The findings reveal that the destruction of shea trees, lack of improved processing facilities, high demand for quality shea butter by domestic companies and foreign buyers are the major constraints. The study also identified factors that can improve shea butter production in Nigeria.

Significance of the Study

The contribution of past studies to supply chain management in the African shea butter industry is irrefutable. However, the available literature from the perspective of innovative approaches in the shea butter industry, is insufficient for the following reasons, many studies focused on the traditional marketing and supply chain approaches, while others capitalised on the value chain processes and largely ignored exploring moving away from traditional approaches to exploring more innovative approaches of finding solutions to the challenges encountered in the value and supply chain. More importantly, quite a number of studies in the African shea butter industry come from countries such as Ghana, Burkina-Faso, Mali and Benin Republic. Whilst all of these literature is available, the result of the findings may not be applicable to the Nigerian context.

Methodology

In order to pull together qualitative data on the constraints preventing high quantity of shea butter production and approaches to increase its production, ten semi-structured interviews were conducted among four government officials, three shea butter factory owners and three shea butter processors in Niger State, Nigeria. Based on the literature reviewed, I formulated two research questions using a semi-structured interview checklist.

Findings

The Key Constraints that Marred Adequate Shea Butter

Production

Shea Trees Destruction

Since the past two decades, Nigeria has been losing shea trees. The shea trees are being destroyed for other economic purposes i.e. for charcoal production, firewood, mortar and pestle making (Adams *et al.*, 2016). Consequently, more of the destructions of shea trees are done in the rural communities where shea butter is processed (Garba *et al.*, 2015). This destruction of shea trees is assumed to be caused by poverty and unemployment (ibid). Some believe that it is caused by the effect of bush burning for hunting of rodents in communities where there is no maximum protection for economic

kernel and this gives room for all forms of impurity to get mixed up with the shea nuts and kernel, we have to take a lot of time sorting..."

Lack of storage facilities and modern processing equipment are considered some of the most central constrictions in shea butter processing in many processing communities in Nigeria (Koloche *et al.*, 2016). This leads to the use of manual human labour which involves the use of children for shea nut picking and processing at the detriment of their schools as young children (*ibid*).



Figure 1: Current Processing Situation in Many Shea Butter Processing Communities

Source: Ph D Researchers Fieldwork, 2015.

High Demand for Quality Shea Butter

In recent times, the demand for high quality shea kernel and shea butter had increased across the African shea belt (Obibuzor *et al.*, 2014). In 2013, it is estimated that the total shea export from Nigeria is 45,000 tons in which shea nut export is estimated at 15,000 metric tons and shea butter quantity as 15,000 metric tons (Ovett, 2013). Nigeria being one of the major producers of shea nuts in the African belt is slow in the bid to meet the internationally accepted standards for shea products (Garba *et al.*, 2011; Obibuzor *et al.*, 2014). Though, shea kernel is exported to various parts of the world which includes African countries,

Europe, America, Asia and Europe for mechanized processing in shea butter (Chalfin, 2004). Despite this, a greater percentage of traditionally processed shea butter is consumed locally in Nigeria by domestic factories and households (Chukwu & Adgidzi, 2000; Ademola *et al.*, 2012). One very important thing to note is that shea butter varies in quality especially according to method of production which is greatly influenced by socio-cultural beliefs. When a factory owner was asked about the challenges in meeting up with buyers' specification in terms of quality, he responded that:

"...for us, factory owners, we add value to shea butter before selling. The quality of unrefined shea butter is very important to us. We look at quality of the shea butter before we use it, we don't use every type of shea butter..... shea butter is of different grades and classifications we make sure that we use (grade A) the best grade for production..."

Innovative Approaches towards Increasing Shea Butter Production

Domestication of Shea Trees

The juvenile stage of shea tree is between 15-25years, in which flowering of the fruit starts at almost the same time and can only reach maturity age between 30-50 years if left undestroyed (Djossa *et al.*, 2008). Therefore domestication of the shea tree becomes a necessity in order to shorten the maturity age and increase shea production even though it is a difficult process (Ugese *et al.*, 2010). Since March 2005, the Nigerian Institute for Oil Palm Research (NIFOR) has taken the lead in the domestication using the Bida Nursery garden as the domestication centre. The centres have developed the oil palm for a long time through research. In the past 5years, a deliberate effort has been made by the Nigerian government to domesticate the shea trees at NIFOR, Bida, Niger state. Though, progress has been made but hasn't yielded the required results. The figure below showed the picture of a shea tree that has been domesticated for 5years but

is still yet to start fruiting, the picture was taken during my PhD research fieldwork in February 2015.



Figure 2: Shea Tree Domestication, NIFOR, Bida Niger State.

Source: PhD Researchers Fieldwork, 2015.

Shea Trees Protection

The Nigerian government gives high priority to forest tree protection, in which the shea tree is inclusive. The Nigerian government strongly believe that the contribution of forest resources to economic growth is immeasurable and therefore the National Council on Environment together with the State Ministries of Environment came up with series of policies to conserve the ecosystem and the resources embedded in it (Usman & Adefalu, 2010). Various strategies have been developed by the government to protect the shea trees. For instance, in Niger state the state government set up the Green Guard Initiative (GGI) in collaboration with GIZ and the communities to protect the forest resources in different communities where shea trees are found in abundance. The GGI was seen as way of creating jobs for the communities because most of those recruited are the community dwellers (Ebayaya, 2014). More importantly community sensitization has been going on for a long time especially after the proliferation of Nigerian streets with charcoal sellers (Ogar 2011).

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