



Analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) of Cocoa Industry in Nigeria

¹Ogunwolu, Q.A., ¹Akinpelu, A.O., ¹Adesanya, K. A., ¹Adelusi, A.A., ¹Taiwo, O., ¹Adesida, F.A. and ²Buari, R.A.

¹Economics and Extension Department, Cocoa Research Institute of Nigeria (CRIN), Idi Ayunre, PMB 5244, Ibadan, Oyo State

²Department of Entomology, Cocoa Research Institute of Nigeria (CRIN), Idi Ayunre, PMB 5244, Ibadan, Oyo State
Corresponding author's email: qudusogunz@gmail.com

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Abstract

This study examined the Strengths, Weaknesses, Opportunities, and Threats (SWOT) peculiar to the cocoa industry in Nigeria. The study adopted a qualitative research technique using relevant literature and statistical data from international organisations to identify the factors influencing the industry's internal and external environments. Threats, Opportunities, Weaknesses, and Strengths (TOWS) matrix was then constructed and used to examine possible strategies that could help galvanize the industry back to its old glory days. The government is advised to create an enabling environment for cocoa processors and provide accessible loans and grants for farmers. Extension Agents are challenged to expand their extension services so that cocoa farmers can benefit from new technologies and practices.

Introduction

Agriculture is one of the bedrock of the Nigerian economy. The sector is the second most important sector after the oil sector, providing employment for about 70% of the total labour force (Ettah *et al.*, 2011). Prior to the discovery of oil, agriculture was the mainstay of the Nigerian economy and cocoa was the number one source of foreign exchange (Verter and Bečvářová, 2014).

According to Olatuyi (2020), agriculture contributes about 25 percent to the gross domestic product (GDP) annually, though this is lower than what was obtainable in the 1970s. Agriculture was given prominence in the 1960s and 1970s, the government, having realized the importance of cocoa and other major agricultural exports at the time, decided to set up a marketing board to serve as an intermediary between the farmers and the international market. However, the marketing boards were not going to last for long; in the 1980s upon the advice of the World Bank and the International Monetary Fund (IMF) Nigeria adopted the Structural Adjustment Programme (SAP) in response to the economic crises at the

time. The programme resulted in the deregulation of the agricultural sector and the cocoa industry was not exempted, the marketing board was abolished and agricultural enterprises were privatized (Idowu *et al.*, 2007). This had a lasting effect on the cocoa industry, the shift of government attention from agriculture to oil didn't help either. Cocoa production dropped to 170,000 tonnes in 1999 as opposed to 420,000 tonnes obtained in the 1970s (Olatuyi, 2020).

The recent fall and fluctuations in the prices of crude oil have had an adverse effect on Nigeria due to the monolithic nature of the country's economy. Crude oil accounts for over 70 percent of national earnings hence, any changes in its price will deeply affect the economy (Olaiya, 2016). This was the case in 2020 when the price fell to a ridiculous low of \$15 per barrel. The volatile behaviour of the crude oil price has resulted in a demand to diversify the Nigerian economy and reinvigorate agricultural production and exports (Oseni *et al.*, 2018).

Cocoa (*Theobroma cacao*), a tree crop from the family of *Sterculiaceae* and genus *Theobroma* was discovered in the Amazon basins in the 18th

century (Ajewole and Iyanda, 2010). The crop was introduced to West Africa region in the early 19th century and to Nigeria in the year 1874. The crop is a perennial cash crop that grows in tropical rainforests (Nwachukwu *et al.*, 2010).

Cocoa was and still is Nigeria's number one agricultural export. The value of the cocoa has remained reasonable over the years. According to International Institute for Sustainable Development (IISD) in 2018, the value of global cocoa exports was \$8.8 billion with high demands coming from the chocolate industry which absorbs about 90 percent of the cocoa beans produced.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis is a technique used to identify the internal strengths and weaknesses as well as the external opportunities and threats which may affect the competitiveness and productivity of an organization (Ogunwolu *et al.*, 2020). This tool is often used to measure the strategic position of a business within its prevailing environment. Similarly, Threats, Opportunities, Weaknesses, and Strengths (TOWS) analysis matrix is a strategic instrument used to create an interaction between the internal factors and external factors to generate the best possible strategies and models necessary for the growth of an organization, industry, or sector (Aboud and Sahinli, 2019).

Sequel to the aforementioned, it is imperative to carry out a proper Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to understand the internal and external environments of the cocoa industry and make recommendations that will enhance the government's foresight of diversification in the Nigerian economy. The specific objectives of this study are to examine the internal environment of the cocoa sector in Nigerian; examine the external environment; and develop strategies that may redeem the industry.

Materials and Methods

The paper adopted qualitative research in the course of the study. Various literature and theories related to the topic were used to form the basis of the paper. Prior research submissions were consulted in identifying internal and external factors involved in cocoa production in Nigeria.

Also, qualitative data from the Food and Agriculture Organization (FAO), International Cocoa Organization (ICCO), and International Institute of Sustainable Development (IISD) were employed in making assertions and backing up the existing literatures. The study adopted the SWOT and TOWS analysis matrix to generate strategies that will galvanize the cocoa sector in Nigeria.

Results and Discussion

Swot analysis

S represents Strengths, W: Weaknesses, O: Opportunities, and T: Threats.

Strengths (S1)

S1: Existing favourable climate

According to Ajewole and Iyanda (2010), the growth of cocoa trees and their yield is highly dependent on weather elements like rainfall, humidity, sunlight, temperature, and soil characteristics. Cocoa thrives in areas with a moist climate and annual rainfall between 1150mm and 2500mm, with temperature that ranges between 18 degrees and 32 degrees. Nigeria's agro climatic variation from the north down to the south has ensured that the crop can survive in majority of the southern states (Nuga and Asimiea, 2015).

S2: Top agricultural export in Nigeria

Cocoa was the main source of Nigeria's foreign exchange prior to the discovery of crude oil in commercial quantity (Fig. 1). Despite the downturn in cocoa production and export due to the shift of government focus toward oil, cocoa remained the prime agricultural export (Verter and Bečvářová, 2014). According to FAO statistics (2020), cocoa ranks above other agricultural export in terms of value in 2019 with an astonishing 602 million dollars.

S3: Top global producer

West Africa produces about 70% of the global cocoa output (Wessel and Quist-Wessel, 2015). Nigeria is considered one of the key producing areas in West Africa. According to FAO statistics (2020), the average cocoa production since 2010 is estimated at 367,000 tonnes. This figure is the

reason Nigeria is still among the top five cocoa producers in the world despite of the obvious challenges faced in its cultivation (FAOSTAT, 2020).

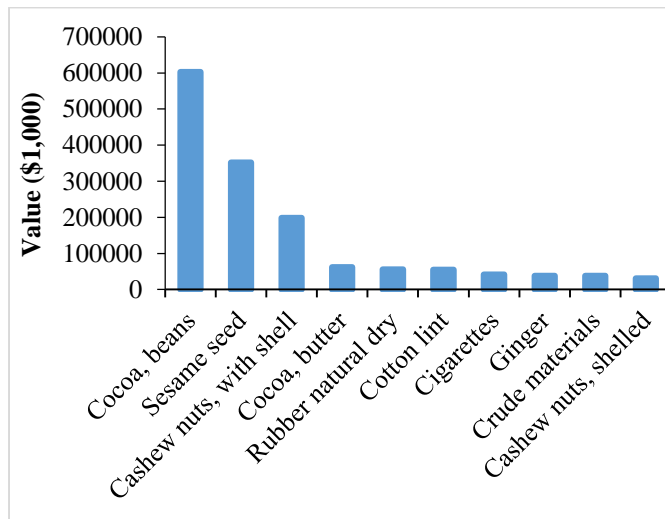


Fig. 1: Top ten agricultural exports in Nigeria

S4: Source of raw materials

The potential of cocoa as a source of raw material in the production of other commodities is quite high. According to Akinlabi *et al.*, (2019), cocoa is a major source of input for confectionaries and chocolate factories. Agbongiarhuoyi *et al.*, (2013) also opined that the cocoa pod husk can be used in the production of organic manure; the husk is also used in the production of animal feeds. The ash retrieved when the pod husk is sun-dried and burnt contains potash which is used as a major ingredient in soap and detergent production (Oddoye *et al.*, 2013).

Weaknesses (W)¹

W1: Ageing cocoa farms

Oduwole (2004) opined that the presence of so many aging cocoa farms has had a negative impact on the national production of the crop in Nigeria. The neglect of agriculture in the 1970s resulted in a major shift from cocoa to crude oil. People became reluctant to farm thereby resulting in the abandonment of many cocoa farms in the country (Ojo, 2005). The existence of old cocoa trees has been a major cause of low yield over the years (Adeogun *et al.*, 2010). Wessel and Quist-Wessel

(2015) and Akinlabi *et al.* (2019) also opined that the existence of aging cocoa farms and lack of adequate soil nutrients in many farms have negatively impacted the aggregate yield of cocoa in Nigeria over time. The aforementioned challenges, therefore, led to the development of efficient cocoa rehabilitation techniques (CRT) in the Cocoa Research Institute of Nigeria (CRIN) (Adeogun *et al.*, 2010).

W2: Crude farming methods and lack of technology

The world has moved from the crude method of farming in favour of mechanized agriculture. The obvious lack or low level of processing and storage technology in the Nigerian cocoa sector has been a major weakness in the sector. Nwachukwu *et al.* (2010) observed that the majority of cocoa farmers in Nigeria are still stuck with crude farm tools which limit their output potential. Oluyole and Sanusi (2009) attributed this to the high cost of mechanized equipment needed for cocoa farming. Akinlabi *et al.* (2019) also argued that the lack of modern equipment has negatively impacted the yield of cocoa across the producing areas. The level of technology in cocoa processing is evidenced by the fact that Nigeria has very few cocoa processing plants. According to Olatuyi (2020), only the Ede processing plant in Osun state is fully operational in southwest Nigeria.

W3: Improper farm management practices

Olujide and Adeogun (2006) observed that very few cocoa farmers in the country undertake practices like pruning, removal of diseased pods and mistletoe, and application of fertilizers among other management practices. Okeniyi *et al.* (2009) argued that farmers do carry out farm management practices but the activities are not properly administered and many farmers are not knowledgeable about the quantity of fertilizers and pesticides needed for cocoa production. In addition, the adoption of inconsistent production patterns, according to Oluyole and Sanusi (2009) and Olaiya (2016) has been documented to have a negative impact on the yield of cocoa. In the view of Oluyole and Sanusi (2009), the lack of adequate

capital for farmers to purchase fertilizers and other agrochemicals also contributed to poor management practices of most cocoa farms.

W4: Lack of proper integration in the cocoa value chain

According to Adewuyi *et al.*, (2014), there is a lack of synergy and integration in the Nigeria cocoa value chain. The value chain is disrupted at the processing stage especially in developing countries like Nigeria because of a handful cocoa processing companies (Olatuyi, 2020). Consequently, the value of cocoa is determined by the global price making it impossible for finished imported cocoa products to be censored and controlled by the local market forces.

Opportunities (O)¹

O1: Provision of employment opportunity

According to Nwachukwu *et al.* (2010), cocoa industry in Africa creates job opportunities for an estimated 10.5 million people with majority from West Africa. Nigeria being a major producer of cocoa in West Africa benefits from this. Ettah *et al.* (2011) stated that agriculture sector provided employment for 70% of the total work force with cocoa being the dominant industry in the 70s. It was also asserted that such a quota can be reached again if cocoa is once again treated as the main export.

O2: Increasing production areas

According to FAOSTAT (2020), there has been a reasonable increase and stability in cocoa production in Nigeria from 2004 to 2019. However, in 2016 the International Cocoa Organization (ICCI) attributed the rising production figures obtained in Nigeria to increasing cultivation areas. This is an area the country can exploit to further increase its production capacity.

O3: Growing global market

One of the obvious opportunities available for all cocoa producing countries is the expansion of cocoa global market. International Institute for Sustainable Development (IISD) (2018) claimed that the global export value of cocoa beans has expanded to \$8.6 billion. In the same vein, Olatuyi (2020) stated that there is an increasing demand for

cocoa beans by chocolate industry having a global market of over \$100 billion.

O4: Source of government revenue

Oseni *et al.* (2018) stated that cocoa exports remain one of the biggest contributors to nation's non-oil export earnings. Olatuyi (2020) argued that although the contribution of the crop to GDP as at 2016 is quite negligible, the crop has a potential of yielding between \$3 billion to \$5 billion annually if it is given priority by government.

Threats (T)¹

T1: Pests and Diseases

Okeniyi *et al.* (2007) noted that one of the major factors militating against the production of cocoa in Nigeria is the incidence of pests and diseases. Cocoa production in West Africa has over the years been hindered by diseases such as cocoa swollen shoot virus disease (CSSVD), black pod disease and root knot disease (Wessel and Quist-Wessel, 2015).

T2: Poor Infrastructural Facilities

The state of infrastructure in Nigeria is a major threat to cocoa production in the country. Proper infrastructure such as good access roads, storage facility, and water supply among others are non-existent in the country (Oni, 2013). The implication of poor access roads for instance, is that farmers will have a hard time moving their cocoa products from farms to the markets (Oseni *et al.*, 2018). Lack of good storage facility and water supply on the other hand, also affects cultivation, storage and processing activities. Lack of water supply is highly detrimental to the cultivation of cocoa especially during the dry season because water is essential for germination and development of the crop. According to Akin-Ponnle (2021), poor storage of cocoa is highly detrimental as this reduces the value of the crop. Sometimes, moulds may grow on cocoa beans that are not properly stored resulting in loss in quantity and quality of cocoa beans.

T3: Information asymmetry

Majority of cocoa farmers in Nigeria have little or no knowledge about cocoa products price

movements in the international market (Oseni *et al.*, 2018). This claim is also supported by Akinlabi *et al.* (2019) who opined the disconnection between the smallholder farmers and the global market as a real disincentive for the farmers.

T4: Inadequate extension services

It is evidenced that researches conducted on cocoa production in Nigeria are not demand driven. The situation is attributed to the existing gap between extension agents and cocoa farmers. Wessel and Quist-Wessel (2015) confirmed the existence of gap between Extension Agents and smallholder farmers. In the same vein, Akinlabi *et al.* (2019) also stated that most farmers are unaware of farm management practices and also lack knowledge of necessary inputs needed for cocoa production due to inability to assess extension services.

Tows analysis matrix

The Threats, Opportunities, Weaknesses, and Strengths (TOWS) matrix was introduced to suppress the glaring weaknesses and threats affecting the industry by interacting the internal and external factors (Ogunwolu *et al.*, 2020). This was done to arrive at strategies that will result in the growth of cocoa industry.

Table 1: TOWS Matrix table

		INTERNAL FACTORS	
		Strengths	Weaknesses
EXTERNAL FACTORS	Opportunities	S1 x O3 S4 x O3	W2 x O2 W4 x O3
	Threats	S2 x T2 T2	W1 x T2 W1 x T4 W4 x T3 W3 x T4

Source: Author’s own construction of TOWS matrix

S1 x O3 Strategy

This strategy is developed from the interaction of strength 1 (S1) and opportunity 3 (O3). The global market for cocoa beans and cocoa by products is constantly growing. Nigeria being the fourth largest producer in the world is not fully taking advantage of the prospects in the cocoa global market. ICCO forecasts that the global price of cocoa is likely to increase by 25 percent in the next decade. According to Nuga and Asimiea (2015), the climate of the country especially in the south favours cocoa production; perhaps Nigeria can increase cultivation area since the climate is favourable and increase her share in the growing global market.

S2 x T2 Strategy

The strategy is derived from the interaction of strength 2 (S2) with threat 2 (T2). According to FAO statistics (2020), cocoa beans is the top agricultural export in Nigeria with a quantity of 299, 625 tonnes. This level of export is attained despite the prevailing problem of poor infrastructure. According to (Oseni *et al.*, 2018), so many cocoa beans have gone to waste due to lack of proper storage and power supply. The export quantity would improve if farmers and processors are provided with the adequate infrastructure required for production and processing.

W2 x O2 Strategy

The origin of this strategy is in the interaction of weakness 2 (W2) and opportunity 2 (O2). Ageing cocoa farms have been identified by different literatures such as Olaiya (2016) and Akinlabi *et al* (2019) as a major problem confronting cocoa yield in Nigeria. This position was supported by ICCO (2016) that the level of output of cocoa bean in Nigeria is as a result of efforts on increasing cultivable land as against increase in yield. This problem can be solved through formulation of policies that will address the issue of land scarcity for agricultural purposes. Land reform acts will enable cocoa farmers’ access lands at a subsidized rate. Also, inputs such as machineries and agro-chemicals should be made available to cocoa farmers at subsidized rate for increased production.

W4 x O3 Strategy

This strategy is derived by interacting weakness 4 (W4) with opportunity 3 (O3). As reported by Adewuyi *et al.* (2014), there is vacuum in the cocoa value chain in Nigeria. This is because Nigeria exports larger quantity of cocoa bean leaving about 10% for processing locally (Afolayan, 2020) while the price is determined by global market. Meanwhile the finished products such as beverages and chocolates are imported with a higher value. Thus, there lies global opportunities for Nigeria cocoa agro-sector if well harnessed in terms of value addition.

W4 x T3 Strategy

The strategy is derived from the interaction of a weakness and a threat factor which are W4 and T3 respectively. According to Akinlabi (2019), information asymmetry is a major threat to cocoa production and processing in Nigeria. Adewuyi *et al.* (2014) also identified lack of synergy among actors in the cocoa value chain. It is logical to say that these two factors are entwined in some ways. A better information coordination between the key stakeholders in cocoa production and processing will enhance the integration of actors in cocoa value chain. According to Chikezie *et al.* (2019), proper information synergy and coordination between actors in the different stages of value chain results in increased production and profit for all the actors.

W3 x T4 Strategy

This strategy originates from the interaction of the third weakness (W3) and the fourth threat (T4). Extension agents have a huge role to play in cocoa production sector to bridge the information gap among processors, researchers and smallholder farmers (Oke *et al.*, 2020). Inadequate extension service is identified as a major threat to cocoa cultivation by Wessel and Quist-Wessel (2015). Extension agents are meant to educate and update farmers regarding new discoveries in agricultural technology and modern farm management practices (Dongo *et al.*, 2009). An increase in the activity of extension agents especially with respect to contact with smallholder farmers will result in a better-informed group of farmers which will

reflect in their choice of farm management practices and ultimately improved yield.

Conclusion and Recommendation

This paper has been able to examine both the internal and external environments of the cocoa industry in Nigeria. The strengths and weaknesses in the internal environment have been identified as well as the opportunities and threats in the external environment. The factors identified covered production, processing and marketing aspects of cocoa in Nigeria. The paper has been able to come up with reasonable and practicable strategies (using TOWS matrix) that will aid the growth of cocoa industry and assist government's plans of diversification. It is therefore recommended that:

- 1) From the various strategies identified, government, farmers, extension agents and all other stakeholders have huge roles to play in cocoa sub-sector.
- 2) There is need for government to support cocoa processing companies through offering of tax break and formulation of favourable policy on production and processing. This will go a long way in boosting cocoa production and export activities as well as creating a strong synergy between farmers and processors.
- 3) It is very important that farmers should be linked with sources of credit and grants to foster their production capacity. Exposure of the farmers, knowledge of farm management practices and information about new research developments depends on their access to extension services. It is therefore very important to strengthen the extension system to bridge the knowledge gap between cocoa farmers and other key actors in cocoa value chain.

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