

Adaptive Measures for the Factors Affecting Marketing of Coffee (*Coffea robusta* Rio Nunez) in Kogi State, Nigeria

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ABSTRACT

Kogi State is known as the major producer of Coffea robusta in Nigeria. Income generated from marketing of coffee in the State contributed to sustenance of livelihoods and development of communities. Currently, marketing of coffee is in a regretful state and stakeholders are abandoning the trade. The study therefore assessed the factors affecting marketing of coffee in the State. Primary data was collected through interviews and focus group discussion. Four major stakeholders were observed along the marketing chain of coffee in the study area; they included the farmers, local buyers popularly known as produce buyers, secondary processors, and exporters. The major challenges facing marketing of coffee in the study area was poor pricing and marketing systems; this is as a result of inappropriate processing method, lack of quality control and relevant information on improved coffee technologies. Farmers lamented that the abolition of Commodity Marketing Board has a great negative impacts on marketing of coffee in Nigeria. Intervention measures may include the introduction of local or national coffee quality control and certification systems; formation of the coffee producers' and marketers' cooperative society and the establishment of an effective local and export commodity marketing boards to protect farmers against price instability.

Key words: Marketing chain, Commodity Marketing Board, quality control, poor pricing

INTRODUCTION

Coffee is an important foreign exchange earner, contributing in varying degrees to the national income of the producing countries. According to Osorio (2002), about 125 million people worldwide make their living from coffee. Also, about 33 million people in 25 African countries derived their livelihoods by growing coffee on their subsistence farms on about 4.5 million square kilometers of land (Surendra, 2002). The crop was

reported to be the second major traded commodity to oil and thus plays a vital role in the balance of trade between developed and developing countries (Eghe *et al.*, 2008). It therefore guarantees a solid basis for the promotion of economic development (Cambrony, 1992).

In the last decade, coffee growers have been hit by low prices worldwide (Osorio, 2002; 2003; 2004; 2005). Crisis in the coffee sector is mainly felt by the producer and little by the main consumer countries at the end of the marketing chain (CIRAD, 2009). According to Osorio (2005), the decline in coffee prices contributes to increase poverty and makes it more difficult to reach the Millennium Development Goals. In many developing countries, including Nigeria, low pricing of coffee has led to abandonment of coffee farming for readily marketable crops.

Major Stakeholders involved in international marketing of coffee

Coffee typically passes through a number of stages as it moves from the producer to the consumer. During these stages, the product can be shipped from one country to another and transformed from one form into another. According to FAO (2006), the stakeholders involved in marketing of coffee are as follow:

1. **Producer:** Farmers cultivate both species of coffee and harvest the coffee berries. Then they carry out primary wet or dry processing before being sold on to internal traders.
2. **Internal Trader:** Internal traders purchase coffee from producers in either berry, sun-dried or green bean form, usually at the farm gate or a local buying depot. Inadequately dried coffee is often re-dried prior to milling and preparation for export. Internal traders may be required to store significant quantities of coffee and transport it over long distances prior to sale to exporters. Apart from private traders, co-operatives are a common means of buying and processing coffee from growers.
3. **Exporter:** Exporters are often closely associated with internal traders, providing them with pre-financing to enable them source specific coffees required by their overseas clients. In some cases, the coffee undergoes some secondary processing (where they have not been performed by the internal traders) including hulling, sorting and grading. In few occasions, they may re-dry the coffee to meet minimum export requirements. Following this, they are usually required to blend coffee into marketable quantities of homogenous quality, often to specifications previously agreed with their overseas clients. Moreover, exporter organise shipping to overseas markets, storage and handling of coffee prior to export, and maintaining close contact with buyers as the coffee moves along the marketing chain.
4. **International Trader:** International traders source green bean coffees from the various producing countries for roasters mainly located in the consuming countries;

they are typically responsible for logistics, financing, risk management and ensuring just-in-time deliveries. In order to be assured of securing the specific coffees roasters require at any particular point in time, the international traders are closely associated with exporters in producing countries. Furthermore, they provide the pre-finance that is channeled up the marketing chain to the internal traders. In some cases, the exporters are subsidiary companies of international traders.

5. **Roaster/Soluble Manufacturer:** Roasters/soluble manufacturers blend and roast the green beans delivered to their plants by the international traders. In recent years, there have been improvements in roasting technologies that make it possible to alter the components of a blend without changing its taste, while technical innovations such as the steam washing of *C. robusta* have allowed roasters to minimise their raw material costs by substituting cheaper beans in their blends. Around 10% of *C. robusta* exports are treated in this way.
6. **Retailer/Wholesaler:** The majority of retail coffee sales are in supermarkets and hypermarkets across the world and in some markets (particularly mainland Europe) as a finished product.
7. **Consumer:** This is the final consumers of finished coffee products.

Issues in Nigerian Coffee Sector

Kogi State is known as the major producers of *Coffea robusta* in Nigeria. Income generated from production and marketing of coffee in the State has contributed immensely to sustenance of livelihoods and development of communities. It is unfortunate that marketing of coffee is no longer lucrative in the State. A lot of factors have been suggested to cause crisis in coffee trade; however, the issue in marketing chain and low price were considered paramount. As reported by CIRAD (2009), when coffee prices are low, many farmers can no longer earn a living from their coffee production. The social consequences are often dramatic: temporary migration, exodus and abandoned plantations; consequently, most smallholders and their families only manage to survive on other sources of income. Both the producers and the marketers of coffee berries and beans in Kogi State are abandoning the sector and in search of more lucrative business. This calls for urgent attention in order to make necessary intervention to forestall the declining trend of coffee trade. The study therefore assessed the major factors influencing the marketing of coffee in Kabba, Kogi State, Nigeria.

METHODOLOGY

Sampling Method and Population

The study was conducted in Kabba, Kogi State, located in the north-central part of Nigeria. Due to the specialization of the coffee producers, purposive sampling method

was adopted for the study. The respondents for the study include stakeholders mainly involved in the marketing of coffee. These include 13 representatives of coffee farmers and 7 representatives of coffee marketers, which give a total of 20 respondents. The key informants that represented the marketers of coffee in the State include the Chairman and the Secretary of National Coffee Tea Association of Nigeria (NACOPTAN), Kogi State Branch, and the Chairman of Kabba-Bunu Coffee Association

Data Collection

Primary data, collected through the use of structured questionnaire, interviews and focus group discussion, was mainly used for the study. Prior to commencement of the study, contacts to relevant stakeholders concerned with the marketing of coffee were made through phone calls. Dates were then fixed for meeting and visitation. As the highest producing community of coffee in Kogi State, the data collection was scheduled to take place in Kabba-Bunu Local Government Area. Focus group discussions were organized for the representatives of the farmers and the marketers. Personal interview was then arranged for each of the coffee marketing key informants. To be able to analyze the data as efficient as possible and with the least bias, structured questionnaire was developed and administered to the respondents. Tape recording of conversation during the interviews was also made.

Data Analysis

Data collected through the questionnaire was coded and analysed using descriptive statistics. Information collected through tape recording was properly transcribed.

RESULTS AND DISCUSSION

Demographic Information of the Coffee Marketers

The demographic information of the Coffee farmers in Kaba, Kogi State, Nigeria are presented in Table 1. All the respondents (100%) were male and married. Forty percent were between the ages of 61 and 70 years, followed by those between 51 and 60 years (35%). None of the sampled farmers was below 30 years of age. Furthermore, about 40% of the marketers attended secondary school, 30% tertiary, 20% primary while only 10% did not have formal education. Farming (70%) dominated the primary occupation of the traders while the remaining 30% were primarily civil servant. The main association that all the coffee marketers belong to was National Coffee Tea Association of Nigeria (NACOPTAN).

As reported by FAO (2006), coffee is predominantly grown by 25 to 30 million smallholder producers in about 80 countries in the tropics. Each smallholder typically farms between 0.1 and 5.0 hectares of coffee, with most depending directly on the crop as their primary source of cash income. In the same vein, coffee is produced by small scale farmers in the study area and constituted their major cash crop. In the 50's and 60's, coffee

contributed significant financial returns to the local (households) and national economies, and generated interest from both the young and the old. It is unfortunate to discover that majority of the coffee marketers are now old; with about 90% above 50 years of age. The implication of this is that the future trade of coffee in the area is highly threatened due to lack of interest from the active youth.

Table 1: Demographic Information of the Coffee Farmers in Kabba, Kogi State, Nigeria

S/N	Demographic Variables	Freq n=20	%
1	Gender		
	a) Male	20	100
	b) Female	0	0
2	Marital status		
	a) Married	20	100
	b) Single	0	0
3	Age (Years)		
	a) <20	0	0
	b) 21-30	0	0
	c) 31-40	1	5
	d) 41-50	2	10
	e) 51-60	7	35
	f) 61-70	8	40
	g) >70	2	10
4	Level of Education		
	a) No formal	2	10
	b) Primary	4	20
	c) Secondary	8	40
	d) Tertiary	6	30
5	Occupation		
	a) Farming	14	70
	b) Civil Servant	6	30
	c) Artisans	0	0

Source: Field survey, 2011

Marketing Chain and Network of Coffee

There were four major stakeholders observed along the marketing chain of coffee in the study area (Fig. 1). This is somehow a modification to the link observed in the international marketing chain. It could be observed that the consumer is missing in the

chain; this is because coffee was not processed to final product that could be consumed in the area. The producers are the local farmers that owned the land on which the coffee is planted, and carry out all necessary activities from planting to harvesting of the coffee berry, and partial processing on the coffee berry to obtain the coffee beans. The producer does not normally sell the fresh berry but rather dry processed the beans and store for onward sale. The producers mainly sell the coffee beans to the produce buyers and sometimes to the secondary processors. To add value to their beans, the producers engage in sorting of the beans. Unfortunately for the producer, the buyer in most cases determined the selling price of the coffee.

The internal trader popularly known as *produce buyers* directly scout for coffee berries or partially processed coffee beans at the farm gate, local market or move from farmers to farmers to gather available beans. The produce buyer conducts grading process on the beans before buying berry or processed coffee from the producer. The grading process takes the form of physical examination, taste and odour test, moisture content assessment, and percentage counting. The produce purchased is then sold to the secondary processor or sometimes to the exporter.

Unlike the produce buyers, the secondary processor goes beyond grading and engages in further processing of the coffee beans (this processing method is known as curing) to add more value for acceptance by the exporter. The exporter finally exports the graded beans abroad. It was observed that greater percentage of the best quality coffee produced in the country is eventually exported for final consumption. Unfortunately, bulk of the coffee currently produced by the local farmers in Nigeria does not meet international market standard and criteria and as such are usually rejected.

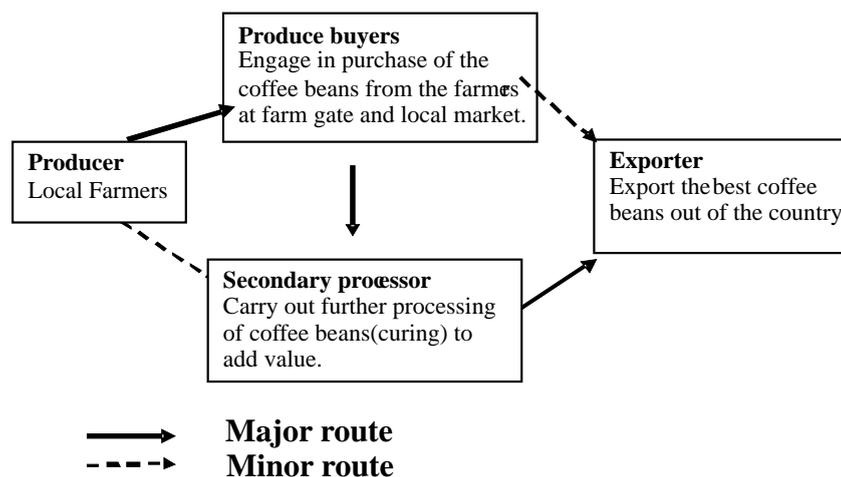


Fig. 1: Marketing Chain of Coffee in Kogi State, Nigeria

Major Challenges in Marketing of Coffee in the Study Areas

Abolition of Commodity Marketing Board

Virtually, all the sampled farmers lamented the abolition of Commodity Marketing Board has a great negative impact to the marketing of coffee in Nigeria. Some of the conversations of the sampled coffee producers include the following:

Abolition of commodity marketing board constituted a major setback to marketing of coffee. Commodity board buys coffee to the last beans thereby helps farmers to sell all their produce at stable price. But since the abolition of the board by the Federal Government, it has destroyed the source of information and stabilization of pricing system and easy marketing network. Since there is no alternative to the commodity board, it has caused major setback to the local farmers. Unless the Federal Government sets up another body or formulates appropriate policy to substitute the abolished commodity board, to reorganise the marketing and pricing system of coffee, coffee farmers will not be encouraged and coffee production will remain in the sorry state.

Currently, I still have up to 1000 tons of coffee unsold, this is because there is no buyer... During the existence of commodity board, such problem does not occur. Any commodity under the boards listing, at different States of the country, is purchased without any problem and at stable price.

Since abolition of commodity board, farmers have lost stable pricing system, direct marketing of their produce, and quality control of coffee beans.

The marketing board in West Africa originated from the wartime West African produce control board, established in 1942, as a short-time solution to the problem of price stability. The board was succeeded by four commodity marketing boards in Nigeria, two in Ghana, one in Sierra Leone, and one in Gambia. In 1954, the Nigerian commodity marketing boards cocoa, palm produce, groundnut, and cotton were reconstituted as the marketing boards for the region each vested with statutory authority to purchase all the major export crops grown within the region. With the creation of states in Nigeria, the marketing boards were once more rearranged on a state basis - with two in the northern states and five in the southern states. In addition to these was the Nigerian Produce Marketing Company. The Nigerian Produce Marketing Company was jointly owned by the state marketing boards. Its main functions were: (i) to acquire from state boards any kind of produce purchased and sell such produce; (ii) to issue instructions to the state boards or their servants and agents for evacuation of produce to ports, (iii) to appoint

agents for the storage in bulk of palm oil at the port of export, and (iv) to make arrangements for the oversea sale of Nigerian produce (Nigerian Produce Marketing Company, 1968). All proceeds of sales are shared out of the state boards in accordance with their purchases.

The original objective of the West African export commodity marketing boards was to cut the link between the prices received by producers and day-to-day fluctuations of world prices. The marketing boards announce producer's prices before the opening of each season. Each state marketing board fixes the producer's prices for all controlled produce in the state concerned. The price received by the farmer is the producer/guaranteed price less produce sales tax. The surplus accumulated in years of high world prices were used to maintain the stable price paid to the producers. However, overtime, price stabilization became a subsidiary objective of the boards, which became primary sources of government fund to finance development programs. To obtain large surpluses, the producer prices became totally out of line with the world prices. This then led to disparity in producer's prices paid for each crops among the various marketing boards. Subsequently, the operations of marketing boards were criticized on the ground that the system had failed to provide incentives to farmers to increase production. Apart from the problem of low producer's prices for export crops, it is also alleged that differential pricing led to smuggling of the produce out of Nigeria to neighbouring countries for higher price sale.

Inappropriate Quality Control System

Low standard of the coffee beans from Nigeria might be as a result of inappropriate processing method employed by the producer as well as the middlemen. Wet processing method has been recommended over dry processing because it produces coffee beans with good physical appearance, aroma and taste. On the other hand, dry processing method reduces the quality of coffee beans because it leads to excess moisture of the beans as well as mouldiness, off colour, and bad odour and taste. These consequently reduce the marketability, and most importantly, competitiveness of the beans on the international market. To worsen the situation, there is no proper and appropriate quality control measure for coffee beans in the study area. The concerned authority is not performing their required responsibilities of grading and inspecting the coffee products before they are marketed. Here is a comment by one of the coffee producers to confirm the status of the poor quality control system:

...this country is country of paper without appropriate quality control system. Farmers are requested to collect approved quality control paper at Abuja (the nation capital city) for coffee beans that are to be inspected and graded at Kogi State. Imagine, there is no any grading and inspection, as long as you can pay for the paper, you are free to market your produce.

Apart from the traditional quality criteria associated with coffee the human health risk posed by a mycotoxin viz., Ochratoxin-A (OTA) contamination of coffee brings yet another consideration into the acceptability of coffee in the international market. OTA is reported to occur in coffees (FAO, 2006) of most origins, although there seems to be greater occurrence in unwashed or dry-processed coffees (Achoth, 2005). The European Union has already prescribed maximum allowed levels of Ochratoxin-A in roasted and soluble coffee forms. Few countries have also adopted national standards for OTA in all forms of coffee including green coffee. These developments are leading to a situation where the buyers seek assurances that producers apply 'best practice' (Achoth, 2005; FAO, 2006).

OTA contamination in coffee is linked to mould growth at various stages of coffee production, handling and processing. During post-harvest stages, mould contamination is best avoided by ensuring adequate control of the moisture content of the coffee since moulds cannot grow at sufficiently low moisture levels. Effective management of moisture content of coffee beans at all stages of handling and storage will therefore not only reduce safety problems posed by **OTA** contamination but will also lead to improved quality by reducing taints caused by mould growth.

Adulteration of Coffee Beans

Adulteration of coffee beans in package takes different forms. Commonly occurring adulteration is mixing of unwanted materials (stones, sand, bad beans, etc) or 'good' coffee beans with 'bad' beans in the package (jute bag) to increase and gain more weight. Sometimes, these unwanted materials may be deliberately added or hid at the base or middle of the jute bag. Adulteration is as a result of lack of appropriate sorting and grading of coffee beans, and these result into serious implication of mistrust and outright rejection from the international buyers.

Lack of Information on Improved Coffee Technologies

Another major challenge facing the production and marketing of coffee products is lack of appropriate information on improved coffee technologies. The technologies could be in the form of high yielding and disease resistance coffee varieties, improved processing methods to meet international standard and criteria, local and international market opportunities, among others. The two major Institutions (among others) concerned with the development and dissemination of these technologies includes Cocoa Research Institute of Nigeria (CRIN), and Kogi State Agricultural Development Agency. Only very few of the farmers have received training on wet processing of coffee in the study area. It was gathered that the training received was neither appropriate nor adequate, therefore could not be applied by the farmers. This assertion could be deduced from the statement of one of the producers:

I attended a workshop organized by a research institute on wet processing of coffee. Although the training was new, yet it is more theoretical, and not practical, it is therefore not adequate for my application and implementation on the farm.

It is high time that concerned research institutions and government organizations developed appropriate coffee technologies and disseminate same properly. This is pertinent to resuscitation of coffee production and marketing in Nigeria.

Lack of Incentives and Farm Input

The producers also complained of lack of incentives and farm input in the forms of improved coffee seedlings, pesticides, fertilizers, low interest loan, and advanced farming implements that could facilitate increase in their coffee production. Farmers also informed that they do not benefit from the loan earmarked for farming operations by the government; rather this goes to the some people who use it for different purposes. During interaction with one of the key informants, he made this revelation:

...a research institute brought to us improved coffee seedling, rather than giving to us for free, we were asked to purchase them. How can you expect farmers who are already discouraged from planting coffee spend their money in buying seedlings again. Only one of the farmers and I managed to purchase few seedlings which have already started fruiting.

CONCLUSION

Coffee was considered as a profitable business in Kogi State and proceeds from it were used to train majority of the old people and graduates in the study area as well as implementing community development projects. In fact, coffee had no rivalry in the study area in the past and was dominated by the elite and the rich within the society. Currently, coffee is in a regretful state and needs urgent attention. The major problems facing coffee sector are poor pricing system and uncoordinated marketing network; these is coupled with inappropriate processing method, lack of quality control and appropriate information on the improved coffee technologies.

RECOMMENDATIONS

The future of global coffee market is still very bright as it is recovering from the crisis of the 90's. For Nigeria's coffee sector to tap into the emerging market, the following are therefore recommended:

- There is need for introduction of local or national coffee quality control and certification systems. All the stakeholders should be familiarized and educated on the quality control and certification systems. This is pertinent and urgent within for

resuscitation process of Nigeria coffee sector in order to facilitate entrance of Nigeria coffee into the emerging international market;

- Identify and develop low cost but reliable moisture meters for use in field level by farmers and local traders. This single step would enable farmers and local traders to determine the correct moisture content of coffee before storage, thereby preventing risk of mould formation.
- Specialised care for producing mould free coffee will require extra effort and consequently a higher cost. Incentives should be provided for the production of mould free coffee even if the market mechanism does not provide it. This will encourage the producers to adopt good production practices;
- Government should formulate appropriate policy and set up functional and effective local and export commodity marketing boards at all tiers of government to cut the exploitation and huge disparity between the prices received by the producers and day-to-day fluctuation of world prices;
- To learn from the abolished Commodity Marketing Board, the government policy must make prices of commodity transparent enough to all the stakeholders, and effective to solve the problem of smuggling of produce to neighbouring countries and using marketing reserves for political purposes;
- The conceived idea of the producers to organize themselves into cooperative should be encouraged, supported and strengthened. The cooperative society will assist the stakeholders in proper organisation of their products and obtain good bargaining power. Also, quality control could be easy to maintain when all the stakeholders pull together their products rather than individual products.

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