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Promoting cassava markering in Benue State: Learning from previous experience of agricultural commodity trade by Nigeria and other countries*

J. B. Ayoola

Cooperative Extension Centre, University of Agriculture, Makurdi, Benue State, Nigeria.
e-mail:gbayoola@yahoo.com

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Abstract

Cassava is presently one of the important commodities that constitute the new *presidential initiatives* for accelerated development of crop enterprises in Nigeria. The paper undertakes a constraints analysis of the marketing environment for cassava enterprises in the country with a view to recommending viable solutions to promote the enterprises. The key constraints identified include inappropriate technology of production and processing, poor access to credit, poor market infrastructure, among others. Thus cassava marketing can be promoted by developing entrepreneurial skills for good quality cassava products of high demand in international markets such as pellets, chips flour and starch; promoting local use for livestock feed and other agro-industries, mobilizing producer-processor integration in linkages to the arable crop development and marketing company; and improving access to inputs, market information and infrastructures. In addition effective supervision of cassava processing through the National Agency for Food and Drug Administration and Control (NAFDCAC) would promote good quality of cassava products consistent with the WHO standards for food quality and safety, so the international market for the products can be expanded in the ECOWAS sub-region, Europe and South East Asia.

***Key words**:* Cassava; producer-processor-marketing institutions; network competitiveness; alternative uses; entrepreneurial skills; local, national and regional integration.

Introduction

Agricultural marketing in Nigeria has undergone series of transformation since the colonial era. Before the Second World War, various organized colonial trading agencies started some international trade, involving crop and livestock products such as hides and skin/leather for feeding metropolitan industries back in their countries. Then between 1939 and 1945, private marketing companies like the United African Company (UAC), John Holt, CFAO, and Paterson Zochonnis (PZ) emerged in the domestic scene. Subsequently, the following marketing companies/agencies emerged: West African Produce Control Board (established in 1942), First Era Commodity Boards and Nigerian Produce Marketing Company (NPMC) (established in 1949-1953) and Regional Marketing Boards for the East, West and Mid-west (established in 1954-1976). Second Generation Commodity Boards were established between 1977 and 1986. The NPMC and the State Marketing Boards were abolished in 1977 and replaced with seven commodity boards for cocoa, cotton, grains, groundnuts, palm produce, rubber, and tuberous roots.

The period between 1987 and 2001 remained "blank" without any government-assisted or controlled companies in the history of organized agricultural marketing. It is only in 2002 that government came back with the introduction of multi-commodity development and marketing companies.

The distribution of food and general agricultural produce has thus been especially sensitive to structural adjustments in the economy. For instance, the implementation of the structural adjustment program (SAP) in 1986 brought about trade liberalization and the devaluation of the naira, which jointly led to the abolition of commodity boards in 1987. Furthermore, SAP brought along with it the institution of many stringent conditions that seriously affected agricultural production and marketing. Before SAP, agricultural commodities were distributed through well-established marketing channels. Such channels were of two types. First, the channels for food items consumed within the country that involve haulage by rail and road (through trailers) from either the north to the south or vice versa. A typical agricultural marketing channel have a network of intermediary buyers (assemblers, wholesalers and retailers) who buy from primary producers and bear handling costs involving transportation, packaging, storage and local government fees (Figure1). Specifically, the actors within the marketing channel for cassava products in Benue State operate in a network of primary and secondary markets all over the state, and products distribution extend to northern and eastern Nigeria (Table 1). Most of the markets have 5-day cycles, Ihugh is the largest middle-men market in Ushongo LGA while Annune is the biggest in Tarka LGA.

The other channels are those that involve export crops where commodity boards played a crucial role before the advent of the economic adjustment program. Such channels were for commodities like cocoa, rubber, oil palm, cotton and groundnuts. Neither cassava crop nor its products have featured in the history of agricultural commodity exports in Nigeria.

Although there is a general low relative market price for cassava products, a study of the monthly wholesale prices of garri and cassachips at Otukpo market for 1996 to 2001 (Tables 2 and 3) reveals seasonal fluctuation of prices. The lowest prices for garri were between May and September as well as January and February, while March/April and November/December experienced higher than average prices. The price of cassachip however, is highest from July to November/December and lowest from January to June. Although cassava is harvestable all year round, these fluctuations are explained by the seasonality of production (easier to dry cassachips in the dry season) as well as changes in demand.

The issues at stake now have to do with enhancing the contribution of cassava to food security as well as increased household and national income through market promotion for cassava products. This paper intends to look at potential market opportunities for expanding the demand for Nigerian produced cassava locally and internationally; possible constraints that could hinder effective marketing; the roles of different stakeholders in promoting cassava marketing; and finally suggest the way forward.

Market Constraints for Cassava

About 90% of cassava produced is processed to add value, improve nutritional quality and extend shelf life, before marketing. Cassava is processed into garri, akpu, chips, and "ikwurikwu". In Mbashoho community area, more than 60% of the cassava is processed into akpu, whereas cassachips and garri represent about 30% and 10% respectively. Figure 2 illustrates the processing flow for cassava products. These activities are associated with some constraints, which are discussed below.

Production and processing activities are still effected using age-old methods and rudimentary equipments. Hence the quality of the products is rather poor and uncompetitive in the local and international markets. Among all cassava products, garri production is most tedious, time-consuming and capital intensive. Cassava problems prioritization exercise in Ijagbo community of Kwara State identified high labour cost especially in processing, lack of credit facilities, poor storage facilities, tuber rottening before harvest, high cost of inputs, low market value as priority problems associated with cassava products, most of which are incident on processing and marketing [1,2].

There is also general lack of stall and warehouses to service existing markets. Specifically, in Benue State, market operators expressed general dissatisfaction with the local governments neglect of the markets in spite of the huge revenue generated from these markets weekly. Lack of standardized weights and measures, as the local standards vary from place to place. Buyers also practice "good measure, pressed down, shaken together, and running over" (Luke 6:38). Hence, predictability and analysis of the market cannot be done with accuracy and precision. For instance, a big bag of garri weighs between 85 kg and 120 kg, which is a 35-point spread. The institutional arrangement in the local markets comprises a community-selected and local government appointed market overseer (Tor Kasuwa), who is responsible for maintaining law and order and arbitrates disputes in the market. The middlemen association (Baranda) are also well organized, exercising monopoly over the purchase of almost all agricultural commodities. However, producer-marketing associations are non-existent.

Until 2002, there was no organized body responsible for performing the functions of guaranteeing minimum market prices for agricultural commodities and purchasing farm produce at prices favorable to producers after commodity boards were dissolved in 1987. The macro-economic environment did not encourage the provision of essential services under anticipated favorable market forces. Private-sector-controlled institutions that

Table 1. Network of cassava markets in Benue State [5].

Market	Nature of market	Major commodities	Destination
Ushongo LGA:			
Ikyobo	Primary, secondary	Akpu, garri, cassachips, rice, oranges, livestock, yams	Abakaliki, Awka, Enugu, Gboko, Onitsha
	Secondary	Cassachips, soybean, rice, oranges	
Ihugh			Aba, gboko, Makurdi, Onitsha, Akwa-Ibom, Kano, Maiduguri
	Primary, secondary	Akpu, garri, cassachips, rice, oranges, livestock, yams, groundnuts, soybean, tomatoes	Gboko, Makurdi, Onitsha, Eastern States
Lessel			
	Primary	Cassava, corn, beniseed, oranges, pepper, tomatoes, yams	
		Assorted	Mbashoho and environment
Lobi			
	Secondary		Aba, gboko, Makurdi, Onitsha, Akwa-Ibom, Kano, Maiduguri
Gboko			
Tarka LGA:			
Annune	Secondary	Cassachips, groundnut, rice, soybean, tomatoes	Gboko, Makurdi, Kano, Maiduguri
Asukunya	Primary,secondary	Cassachips, groundnut, livestock, mango, yam	Makurdi
Gwarche	Primary	Cassachips, beniseed, groundnut, guineacorn, maize, millet, pepper, rice, soybean, yam	Annune, Tiortyu
Tiortyu	Primary, secondary	Akpu, cassachips, garri,ggroundnut, guineacorn, maize, millet, oranges, pepper, rice, yams	Eastern States (Anambra, Enugu), Gboko, Makurdi

Table 2.Export of cassava by Indonesia (1990-1998) [3].

Year	Total Export		
	Dried Cassava	Pellet	Other
1990	597,329,412	570,456,989	3,315,094
1991	492,507,502	364,264,420	1,850,820
1992	368,868,865	501,304,110	3,235,648
1993	516,585,171	408,446,685	10,852,244
1994	386,024,532	298,829,708	1,184,831
1995	426,894,318	53,281,008	1,307,822
1996	290,039,080	93,610,152	4,941,434
1997	184,154,743	59,315,873	3,530,003
	194,616,294	24,770,000	2,017,583

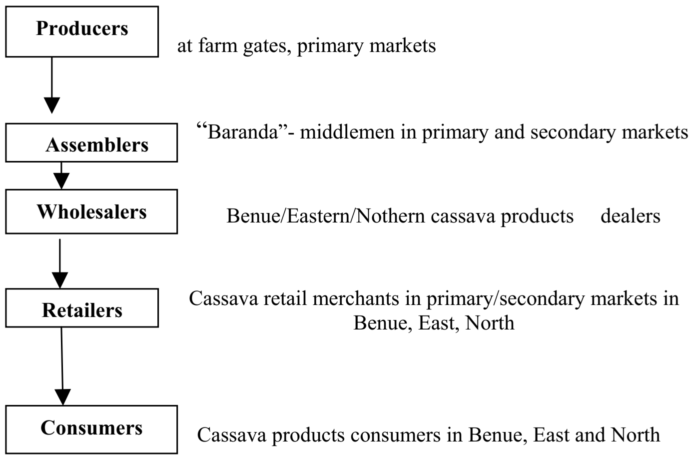

Figure 1. Agricultural commodity marketing channels in Ai-Inamu community, Ogbadibo LGA, Benue State[5].

deal with marketing are absent and/or are completely left out of agriculture. Thus, marketing of agricultural commodities is left to automatically take care of itself or is only considered as an after-thought when production is seen to have glutted the market.

Within the context of global market, Nigerian agriculture is neither sufficiently commercialized nor comparatively competitive. Nigeria's agricultural market potential in the international community is greatly limited by the *non-competitiveness* of the produce owing mainly to three factors: the relatively high prices of Nigerian agricultural commodities as a result of the high cost of production which itself is due to uneconomic scales of operation; unascertained and therefore presently seemingly inferior quality and safety levels of Nigerian foods meant for the international market; and Nigeria's trade policies and fiscal actions whereby she openly restricts/bans the importation of certain food items from countries to which she plans to export food.

Some factors that also contribute to the *non-competitiveness* of Nigerian agriculture include: low resource productivity, poor capacity of Nigerian scientists in truly demand-driven research thereby resulting into development of inappropriate technologies and subsequent negative attitude of farmers towards the adoption of such technologies. They also include irrelevant and non-friendly policies formulated and implemented for farmers without their input; insufficient attention to the development of farm input/output markets; poor farmer-sensitive program design and implementation in agriculture; and lack of continuity of agricultural policies and programs.

Other factors responsible for *non-competitiveness* in the agriculture sector of Nigeria include: high production and processing/marketing costs and high commodity prices; the unsure food quality and safety of produce presented for marketing and consumption; poor quality and non-standardization of the country's final agricultural produce; the use of poor quality inputs (seeds and livestock day-olds); and buyer availability for a given crop. These constraints need be addressed as part of strategies for promoting cassava production and marketing in Nigeria.

Market Opportunities for Cassava

Several opportunities exist for promoting production and marketing of cassava, as part of strategies for national food security and economic reform. These are within the context of both domestic and global liberalized markets which are highlighted below.

Cassava is a very important crop, playing central role in both rural and urban livelihood. For instance, about 90% of rural Kwara State (Ijagbo and Igosun) communities grow cassava as major livelihood source, 20% for cash and 80% for food. This trend is increasing because of increasing need for food. Both men and women grow cassava as most preferred crop due to high-income potential, extensive utilization as food and because the agro-ecological factors favour cassava production above other crops. Hence, much as the production is high, there is also high local consumption representing ready market for the products. The marketing channel (Table 1) further justifies the high market potential for cassava produced in Benue within the country. Industrial use of cassava e.g. in the form of starch, glue, flour etc. would expand market outlets for cassava both within and outside Nigeria. Use of cassava as input for livestock feed industry would expand its domestic utilization as well as opportunity in the export market.

Three Multi-commodity Development and Marketing Companies have been floated since 2002 but are yet to become operational. The companies are: Arable Crops Development and Marketing Company; Tree Crop Development and Marketing Company; and Livestock and Fishery Development and Marketing Company. The arable crops development and marketing company could act as the engine of growth for organizing, arranging and overseeing the marketing of the cassava output. Promotion of small and medium cassava enterprises, and their mobilization into producer marketing associations represent another opportunity to promote cassava marketing. Their operation as a group would facilitate their linkage to the arable crops development and marketing company as well as derive economies of scale, thereby reducing unit cost of marketing.

Nigeria has the capacity in the form of institutional arrangement (e.g. NAFDAC) to address food quality and safety issues consistent with WTO-food supply safety and regulatory system. Technical capacity could be developed through more personnel training or periodic staff secondment to NAFDAC.

There are potential market niches for cassava products from Nigeria to the ECOWAS sub-region and beyond. There is also

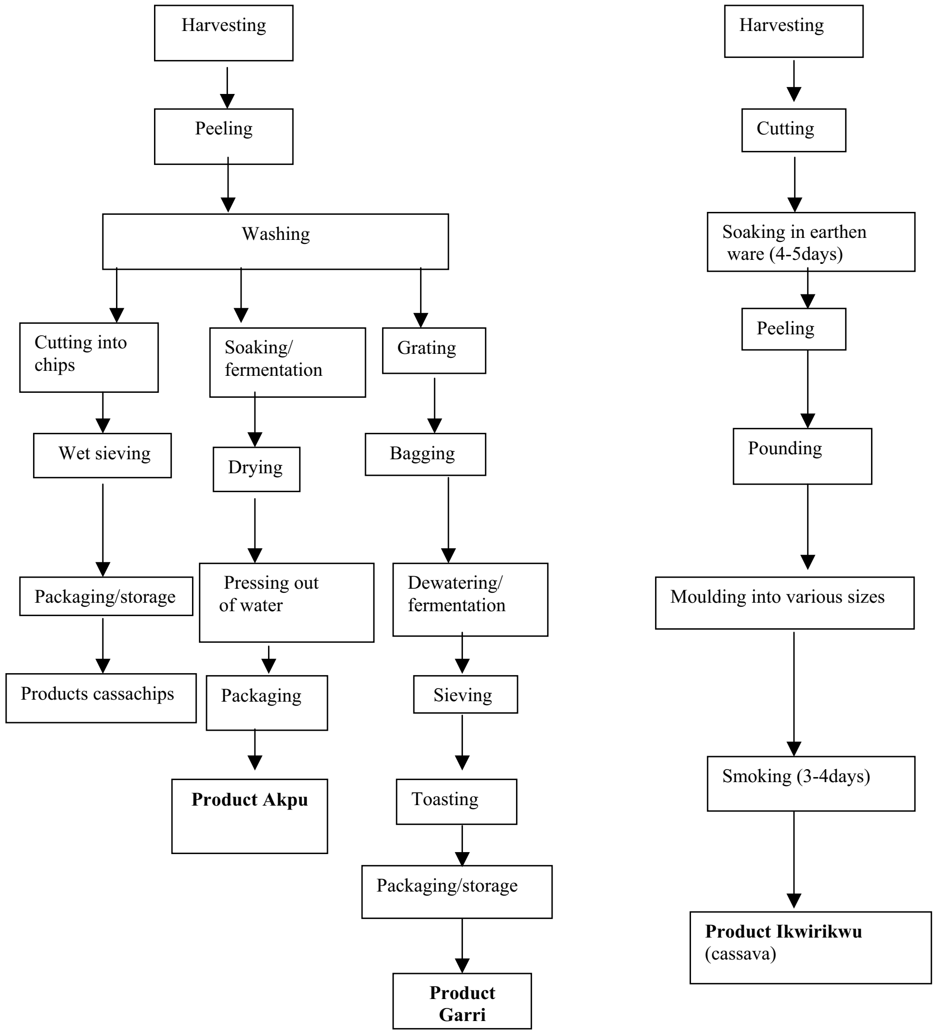

Figure 2. Cassava processing flow chart[5].

opportunity for producing and exporting large quantities of cassava in form of pellets, chips and flour to Europe and Southeast Asia for livestock feeding. The demand for these products has been increasing due to increased consumption for animal feed and other uses [3]. Other countries have been exploring this opportunity, for instance, export of Indonesian cassava consists of dried cassava, pellet and tapioca flour; although the trend has been decreasing due to export regulation (Table 2).

An analysis of regional import demand for groundnut, palm and soybean oils by cote d'Ivoire found that regional imports of individual oilseed products are very sensitive to changes in import prices and income levels [4]. Learning from this experience therefore, Nigeria could take advantage of export demand in both regional and traditional markets if more attention is paid to the domestic policy environments and their implications for prices and incentives in the cassava sub-sector.

Stakeholders' Participation in Cassava Marketing

Promoting food security and national income through a revitalized cassava production and marketing system in Nigeria (and specifically, Benue State) has to be a collective effort of different stakeholders in the sub-sector. Hence, the very first step in this process is to assess the different stakeholders, their roles and what transformation need to take place to achieve improved participation for a more effective system.

The primary stakeholders are the individual smallholder, medium and large scale cassava farmers or groups of farmers; individual small, medium and large scale processors of cassava or cassava-based agro-processing companies; individual smallholder marketers or merchants dealing in cassava products and cassava producer marketing associations. These are responsible for direct production, processing and distribution of cassava products.

The secondary stakeholders include the arable crops development and marketing company, non-government organizations, civil societies, agricultural development projects (extension agents), researchers, and NAFDAC; who facilitate effective role performance of the primary stakeholders through service delivery. The tertiary stakeholders are the finance institutions (private and public), such as the NACRDB, Bank of Commerce and Industry, ADB, NIDC, among others; state and Federal Governments such as Ministries of Agriculture and Rural Development, Commerce and Industry, Health and so on; and of course, the International Development Agencies. These also perform facilitation role through policy formulation, implementation and service delivery.

Collectively, the stakeholders in cassava production and marketing can be categorized into private sector (including civil society) and government. The strategy must be private-sector driven, with focus on developing cassava-based small, medium and large scale enterprises through appropriate training to develop skill, need-based participatory research and extension to arrive at appropriate production, processing and marketing innovations; information sharing and networking with and outside the country.

The role of the government would be that of a facilitator and not a producer, processor or marketer. The shift from government-owned commodity marketing boards of the 1970s/80s, to private sector driven commodity boards of year 2000 is a step in the right direction.

General facilitation roles of the government would include improved private sector participation in policy formulation on cassava production and marketing. Government should be sensitive to domestic policy factors such as sectoral policies as well as macropolicies that could affect cassava production and marketing. For instance, sectoral policies should de-emphasize inputs subsidy and promote liberalized inputs market while infrastructures are developed. Similarly, macro-policies should explore export opportunities open to member countries in regional markets, and import policies should promote quality of local products rather than import ban/restriction as strategy for discouraging import, so as not to violate the WTO regulations. Government should not be empowering the private sector to implement policies. Specifically, government should facilitate organized training on skill acquisition on cassava production/ processing/ marketing for the private sector. This would bring about the development of small and medium scale entrepreneurs with cassava-based interests. Providing conducive environment for efficient production and marketing through improved access to credit (using institutions such as NACRDB, ADB, NIDB, improved private sector involvement in credit provision), seedlings and other inputs, infrastructures, market information (domestic/ international prices, and other market opportunities).

It is expected that improved role performance on the part of private and public sectors would result in the evolution of a territorial commodity chain for cassava. This approach should begin with identification of markets; small farmer/processor groups would develop supply chains for identified markets; while support services such as inputs (seeds, credit, fertilizers, tractor-hire services), capacity building, and market information are provided using existing local institutions. Public-private sector partnership would be required to strengthen agricultural research and extension institutions and encourage private sector financial and input organizations to serve the need of small-scale farmers effectively and promote competitive marketing.

The Way Forward

The success of Benue State Government in promoting cassava production and marketing demands an association with the arable crops development and marketing company, so that it acts as engine of growth for organizing, arranging and overseeing the marketing of cassava outputs from the state. Hence government interventions must focus the small as well as medium and successful large producers, so that the small and medium scale agro-enterprises can benefit from already existing infrastructure of large operators. Government should embark on appropriate intervention strategies that target post-harvest activities (processing and storage) to ensure adequate food quality and safety standards, and attractive food packaging.

Specifically, government should address the following:

- Provide technical assistance that will help link various smallholder producers of cassava products with existing large-scale processing operators in the country to facilitate improved organized marketing and sale.

- Develop skill of private sector (small and medium enterprises) in cassava processing, as livestock feed, cassava/grain flour, good quality chips and pellets; so as to increase domestic demand for cassava and reducing importation of livestock feed without going against WTO international trade requirements of free trade flows between member countries.

- Facilitate marketing arrangements through conducive regional integration in which cassava processors make available quality value-added cassava products, and find alternative uses for them in the ECOWAS sub-region.

- Encourage market development through effective promotion of cassava producers association where SMEs work with and are guided by large professional cassava enterprise operators with successful experience in agricultural trade[6].

- Develop an effective integrated marketing information system that operates with and updates a reliable agricultural census databank set up for all agricultural, in particular cassava producing stakeholders.

- Facilitate effective supervision of cassava processing (using existing institution, NAFDAC) to ensure strict compliance with set standards and guidelines in food quality and safety control.

- Government should embark on arrangements that could influence the level and capacity of economic scales of production so that general costs of production could be reduced for these farmers. Such arrangements include:

- Facilitating increased but guided micro-credit to small-scale cassava producers to ensure continuous production and supply of their produce to the large processors/exporters in line with quality specifications that they maintain with the present buyers.

- Facilitate provision of specifically dedicated and increased credit facilities/funding opportunities to the large-scale operators/ processors (through private financial institutions) for expanding their marketing facilities, enhancing the capacity and productivity of their managerial and other staff through targeted training, and generally helping to improve their marketing arrangements; and provision of technical assistance to ensure a good maintenance culture by these agro-enterprise operators/processors.

- Provision of improved rural infrastructures especially good feeder roads, water and electricity to facilitate processing and distribution of cassava products.

A general reduction in the costs of production, processing and distribution of cassava; as well as improved quality products will be a sure way to improving the competitiveness and general performance of Nigerian produced cassava in domestic and international market.

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