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Promoting Cassava Productivity in Ogun State: Linking Data and Policy

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Introduction and background to Ogun State

Ogun State is one of the six states in the southwest geopolitical zone of Nigeria. The administrative structure of the state consists of an Executive Council (comprising the State Governor, Deputy Governor, Commissioners of Ministries) the Legislature and the Judiciary. There are 20 Local Government Areas (LGAs). The state has arable land of 1,204,000 hectares (ha) -74% of total land area of the state - and cultivated area of 350,000 ha (29% of arable land area).

Figure 1: Local Government Areas of Ogun State



Source: Ogun State Ministry of Agriculture



Key Messages

- Cassava yields in Ogun State have increased from 15.5 MT/ha in 2006 to 17.05 MT/ha in 2015.
- The state government's interventionist policies have contributed to the increases in output levels.
- Though achievements so far are commendable, improvements are necessary in the areas of agro-funding and links between the farmers and off-takers to enable the increased output levels to translate to improved incomes and welfare of cassava farmers.

Annual rainfall can support two planting seasons and available complementary water bodies provide for allyear-round irrigated farming. Proximity to markets in Lagos State and the Economic Community of West African States (ECOWAS) creates a growing demand for the state's high-value food products and provides a comparative advantage for their export. The growing industrial clusters in the state have stimulated demand for local agricultural raw materials for import substitution. To promote increased participation of women and youth, more clusters are planned for production and value addition around selected crops.





Ogun State has the potential to be an agricultural powerhouse of the nation.

Agricultural policy of Ogun State

The overall objectives of the state agricultural policy are to achieve self-sufficiency in food production, provide raw materials for agro-based industries, generate employment opportunities and attain desirable levels of exports in order to improve the country's foreign exchange earnings (OSG, 2016). Specific objectives from the state's broad policy include:

- Stimulate increase in animal and crop production.
- Ensure adequate production and supply of raw materials to agro-based industries, such as feed mills, food processing industries, sawmills and tanning and leather industries.
- Generate employment opportunities in agriculture through the development of small, medium and large-scale farms and farming enterprises.
- Ensure the continuous and adequate supply of forest products through the development and orderly exploitation of forest resources in order to protect the environment and ecology.
- Develop, manage and protect wildlife.
- Promote integrated rural development in conjunction with other relevant government agencies in order to improve the quality of life of rural dwellers.
- Protect agricultural land resources from hazards such as erosion, flooding and drought.

Role of government and stakeholders

To promote agricultural development in all its ramifications, the Ogun State Government (OSG) will make small-scale farmers the focal point of agricultural production. To achieve this, the state government is committed to supporting small-scale farmers in the following ways:

- Provide adequate and effective extension services.
- Ensure access to land to provide impetus for increased interest in farming.

- Promote, provide and engage in the distribution of inputs such as improved farming stock, fertilizers, agro-chemicals and farm mechanization services.
- Encourage the establishment of farmers' cooperatives to improve access to finance.
- Control the impacts of pests and diseases.
- Supervise storage and ensure proper grading of produce for maximum returns to farmers.
- Maintain a buffer stock of produce to facilitate all-year-round price stabilization, market guarantee and produce availability.

Ecological Zoning - The state will be zoned according to resource endowments. As a result, the relative advantage of one zone in the production of certain crops, livestock and other non-farm products over the others will be clear. The state can then maximally use the zones for the production of outputs at the best economic levels.

Strategies - Soil properties, relative humidity, rainfall levels, vegetative cover, temperature fluctuations and day length were considered to establish three zones as follows:

- *The Guinea Savannah Zone* includes Egbado North, part of Egbado South and Abeokuta LGAs for the production of cassava, maize, melon, cowpea, yams, soybeans, citrus and cocoa. The zone is also well suited for cattle, sheep, goats and rabbits production.
- The Rain Forest Zone is made up of Odeda, Remo, part of Ijebu-East, Ijebu-Ode and Ijebu-North LGAs for the production of maize, plantain, cassava, kola, cocoa, oil-palm, citrus, cowpea, and rubber. Livestock well suited for this zone are sheep, goats, poultry and pigs. The Mid-Region of the Rain Forest Zone made up of Obafemi/Owode and Ifo/Otta LGAs for the production of rice, maize, cassava, and cowpea. Livestock well suited for this part of the zone are poultry, sheep, goats and pigs.

• *The Fresh Water Swampy Zone* of Ijebu-East is well suited for fish and swamp rice production.

Villages in zones will be grouped together to form farming communities, with target farmers registered as co-operatives to produce each zone's preferred crops. Some farmers, such as the itinerant cattlerearers in the savannah will be provided special protection and support.

Cassava in Ogun State

One of the current state administration's priority crops is cassava. According to the 2002 FAO report, Nigerian cassava production is by far the largest in the world - a third above the production in Brazil and almost twice what is produced in Indonesia and Thailand. In comparison to Nigeria, other Sub-Saharan African (SSA) countries – Democratic Republic of Congo, Ghana, Madagascar, Tanzania and Uganda - production appears quite minimal. The estimated total land area cultivated with cassava in Nigeria as at 2009/2010 farming year was 3.187 million ha (National Survey of Exportable Agricultural Commodities, 2010) with Ogun State cultivating 301,460 ha. This constitutes about 9.5% of the total land area cultivated with cassava in Nigeria. Ogun State, as a leading Nigerian producer of cassava, produces over 16% of the total annual national output annually. The state is therefore, strategically positioned to be a strong player in making cassava the golden crop of Nigeria.

The cassava value chain in Ogun State is a major employer of labor with virtually every household in the rural and semi-urban communities producing one cassava-based product or another. The cassava processing small- and medium-scale enterprises (SMEs) engage between 15 to 25 direct employees each. There is indirect employment associated with haulage/carriage of the tubers from the farm to the vehicle location, loading and offloading of the vehicles, vehicle hire/transportation, ad-hoc staff and suppliers of water for processing. Cassava thus plays a major role in the livelihoods of women, youth, transporters and other players in Nigeria. About 90% of cassava farmers are smallholders with 95% women responsible for the processing and marketing of cassava (Sanni et al, 2012).

Cassava processing is moving from cottage/SMEs to large scale with most of these large-scale companies situated in Ogun State. There are 153 SMEs in the country with 33 (21.56%) located in Ogun State. The product focus has shifted from the traditional production of only garri and wet fufu to the addition of high quality cassava flour (HQCF), starch and odorless fufu. There are three large companies producing products such as starch, HQCF and glucose syrups.

Figure 2



Source: Ogun State Agricultural Development Agency, 2017

Figure 2 shows the graphical presentation of cassava production and area harvested. The left axis of the graph is land area allocated to cassava (000 ha) while the right axis is for output produced. It can be seen that cassava output in Ogun State tends to closely follow the movement in land area allocated to the crop.

The trend shows that from 2006 to 2007, on a land area of over 358,000 ha, total output increased from over 556,000 metric tons (MT) to 582,000 MT dipping slightly to 532,000 MT in 2008. Land area allocated to cassava also reduced during that period to 327,000 ha. However, with the agro-interventionist policies in place, there were improvements from 2009 to 2011. Output and land area increased from 598,000 MT to 624,000 MT and 353,000 ha to 358,000 ha, respectively. The policies included the allocation of more land areas for farming, use of improved seedlings, effective extension services and farmer-offtaker liaison. Other factors were shifts in the production of the edible cassava variety to higher priced industrial variety.

However, OSG's aggressive drive towards revamping agriculture with the introduction of improved cassava variety and putting in place conflict resolution mechanisms to address farmer-pastoralists conflicts led to a boost in output and land area to 473,000 MT and 277,000 ha.

Figure 3



Source: Ogun State Agricultural Development Agency, 2017

Figure 3 shows that the state's cassava yield's trajectory increased between 2006 and 2012 from 15.6 MT/ha to 17.65 MT/ha. The yield dipped slightly to 17.27 MT/ha in 2014 and further to 16.1 MT/ha in 2014. Since 2014, it has increased again to about 17.05 MT/ha in 2015.

Challenges to improving productivity

Though some positive results are evident in the cassava yields and prices, there are several challenges to cassava productivity growth in the state. They can be considered under broad categories of production, processing and marketing challenges.

1. Production challenges

- High cost of farm mechanization, especially land clearing, thereby limiting area that can be put into cultivation.
- Low levels of exposure and dissemination of information about the use of improved varieties due to inadequate extension agents in the state.
- Significant and increasing farmer-pastoralist conflict. If not addressed, such conflict increases the riskiness of agricultural investments and affects farmers' willingness to make necessary investments to maintain and improve agricultural production.
- High-cost and low-use agro inputs, especially fertilizer.
- 2. **Processing challenges** High-cost and substandard machineries for farm gate value-addition and the low efficiency of processing enterprises.
- 3. Marketing challenges Relatively weak linkages between actors in the chain to deliver cassava to industrial processors. While significant efforts have been made to improve farmer links to input and output market, poor access to markets and information and the deplorable state of rural feeder roads leading to unnecessarily high transportation costs remain challenges for smallholder farmers in rural areas of the state.

Conclusion and policy recommendations

This note leverages on data for one priority crop for the state, cassava policy documents for the state and data from the United Nations Food and Agricultural Organization (FAO) to link evidence from available data to ongoing government programs and policies for cassava in the state.

For OSG to maintain its leading role in cassava production, there is need for:

- Urgent intervention in land clearing/development by government as a means of expanding production for industrialization and reducing cost of production.
- Better linkages between cassava farmers and cassava users such as industry.
- The adoption of innovative ways to further collaborate with financial institutions, such as the Bank of Agriculture and CBN, to increase rural farmers' access to credit.
- Improved access to technologies through strengthened extension services and lower extension-to-farmer ratios are key to maximizing the reach of numerous technologies and management practices that have been developed for the crop.

Further support to infrastructure development to reduce transportation costs, thus reducing the effective price of inputs and increasing farm gate prices of rural farmers, are also important. The current effort of the OSG demonstrates that Ogun State is ready for business. It has encouraged the private sector to invest in agriculture, particularly in value addition. This is likely to have backward linkage effects to rural farmers, thus encouraging them to invest in cassava value-chain enterprises.

This policy note reveals the importance of data collection and analysis for policy making. Better data on cassava production, processing and marketing particularly focused on strategies to successfully link actors in the cassava value chain is important to make more confident links between farmer behavior and government policy and will be useful for the promotion of cassava production and export for Ogun State.

References

Consultative Committee on Agricultural Export Commodity Statistics (2010). National Survey of Exportable Agricultural Commodities in Nigeria.

FAO (2002). The state of food and agriculture 2002. Retrieved from

http://www.fao.org/dorep/007/y5548e/y5548e07.ht m.

Ministry of Agriculture, Abeokuta (2016). Agricultural Policy for Ogun State.

Osabuohien, E., Okorie, U. and Osabohien, R. (2016). Putting Rice on Our Tables: Boosting Production, Processing and Marketing of Rice in Ogun State, Nigeria. Technical Research Report submitted to DTT Farms, Abuja, August.

OSG (2016). Ogun State, Nigeria, Investors' Forum. Retrieved 30 June 2016, from http://ogunstateinvestorsforum.ng/agriculture Sanni, L.O., Siwoku, B.O., & Adebowale, A.A. (Nov 2012). Baseline survey report of cassava value-chain in Ogun State.

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