

## Colophon

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In Nigeria, informal actors predominate the activities that bring food from farms to the forks of more than 200 million Nigerians. The importance of informal actors on food system outcomes is very significant and cannot be underestimated. In this paper, we outline and discuss the role of informal actors, focusing on production, processing, distribution and trade, preparation and consumption, and waste management. After that, we will discuss some important challenges and implications for policy and practice.

# Food system context

The food systems and the population of Nigeria, which currently stands at 228 million people (April 2024), have suffered from the neglect of the agricultural sector. Since the start of the oil boom in the 1970's, oil revenues have been used for food imports and feeding the rapidly growing cities and towns, whereas it could have been used for investments in rural infrastructure (roads, power supply) and agricultural services and innovation. This lackadaisical attitude towards the rural economy, which relegated the agricultural sector to the background, is known as 'the oil curse'. The paradox of lack of investments in rural development while oil revenues were flowing in, has made village life less attractive, which further accelerated rural-urban migration and the ageing and feminisation of the Nigerian countryside.

Although, Nigeria has more than 70 million hectares of agricultural land, of which, 32 million hectares are cultivated, and almost half of the population (46%) still reside in the rural areas, Nigeria is not able to feed itself. Nigeria's average food import bill has been rising over the years, reaching an annual import bill of about 2.4 billion USD in 2021 (FAO, 2024, Sasu, 2023, Ekugbe, 2024). This represents an import of 10,000 Naira (or 25 USD) per capita.

This skewed development has directly and indirectly contributed to a myriad of problems for Nigeria. The high food import bill has contributed to high costs of living for Nigerian consumers, of whom, 65% are poor. The high food import bill has also increased the pressure on foreign exchange, and hence, has contributed to devaluation of the Naira, the Nigerian



Figure 1: Hawking crayfish and smoked fish in Lagos, Nigeria.

currency. Neglect of rural areas has led to low schooling levels, many school dropouts, and high youth unemployment, which is a driver for crime, both in villages and towns where young people migrate to. Insufficient crime prevention and police control contribute to insecurity. An example is the many conflicts between farmers and herdsmen, which often degenerate into violence, death tolls, and in some parts of the country into an almost intractable business of kidnapping for ransom. There is a massive proportion of unemployment among young people.

It is in this context, the actors of the agricultural sector, who are generally rural people, try to make the best of a difficult situation. One of the easiest means of employment for the many unemployed young people is the informal sector of the food system.

# Giving a face to informality in the Nigerian food system

In Nigerian food systems, informal actors predominate in various activities. For Lagos State, it was already established twenty years ago that almost half of the population of 7.4 million was engaged in informal food activities (FAO, 2003). This percentage is likely to have further increased, as formal employment is hard to find. We, therefore, have estimated that half of the active Nigerian population is engaged in informal activities related to food production, processing, distribution, trade, retail and putting food waste to value.

**Production.** In Nigeria, 70–80% of the estimated 50 million farmers are smallholder farmers, of whom most are female. Smallholders represent 70% of the people living in rural areas. They are at the heart of the in-country agricultural production, cultivating several subsistence crops and one or two cash crops. Labour is mainly provided by family members (FAO 2021; Financial Times, 2023, Adeite 2022). Large commercial farmers employ farm labourers. Smallholder farmers help each other and use services of farm labourers at peak times.

**Processing.** In numbers, informal actors also dominate food processing, especially in home- and cottage processing, which are based on easy-to-apply food processing methods, such as drying, fermentation, packaging, roasting (etc). Informal actors do, for instance, process yam into fermented and dried yam to make yam flour, dry commodities like pepper and okra, process palm fruits into palm oil, process cassava into many different products such as fufu, fermented and dried cassava, and so on. The industrial food processing of foods is dominated by formal actors.

**Trade and brokering.** Large traders and market leaders have developed delicate systems of organising the sourcing of food products in rural areas. Large traders (wholesalers) have direct and/or indirect links to production zones. Farmers sometimes sell directly to wholesale traders, but most often indirectly via brokers



Figure 2: Processing fermented cassava mash into gari.



Figure 3: A retail outlet for tomatoes, pepper, onion and other foodstuffs.

and intermediaries. The produce is transported within the state or other states, to be sold to retailers and consumers. These brokers and intermediaries are very important players and have much influence on the market dynamics and price setting.

**Distribution and transport.** Transportation of food products from farmers to wholesalers to retailers and finally to consumers is an essential function in any food system. Bulk distribution directly from farm and food manufacturers to nearby markets or other states is dominated by informal actors. Transport is achieved with donkey carts, motorcycles, tricycles, taxis, vans, buses and trucks. Many informal jobs are created in this area, not only for those driving the different means of transport, but also for the loaders and off-loaders of trucks.

**Informal finance.** There are many forms of informal finance. 'Merry-go-round' is a very widespread form of accessing finance. People who trust each other form a small group and save a certain amount every month. Each month, one or some members receive a lump sum.

An example is a group of 12 traders, who together, contribute N30,000 each month, making a total of N360,000. This is given to one person every month. This means that every member can benefit from a relatively large sum, which can be used for certain projects. This can be the purchase of a new stock of cereals, but it can also be used for the purchase of land, payment of house rent or school fees or repairs to the roofs of the houses.

Another modality is the service of thrift collectors. People (traders, farmers, transporters) save money on a daily or weekly basis and receive the saved amount at the end of the month, for instance. Participants must pay the thrift collector a certain fee, for instance, one day of savings per month or week. An example is a food trader making a daily contribution of N1000, leading to an amount of N31,000 at the end of the month. The thrift collector takes N1000 and gives N30,000 to the trader at the end of a 31-day month.

**Retail – open-air markets, shops, food stalls and supermarkets.** In open markets, small shops in villages and urban neighbourhoods, and food stalls along the road, an uncountable number of small retailers, (probably millions), sell food products in small quantities to consumers.

Open-air markets are the main source of fresh food products for over two-thirds of the Nigerian population (Boston Consulting Group, 2022). Most supermarkets in Nigeria do not sell fresh farm produce but only processed food products. The informally organised open-air markets are, thus, very important for accessing affordable, healthy foods. In the context of increased prevalence of obesity this is important to note. In all markets, load carriers provide services to traders and buyers. They carry loads from stalls to motor and car parks, and vice versa.

**Ready-to-eat food preparation vending.** Informal actors also dominate the food preparation and service sector. In most cases, only small capital is needed to start this business.

There are many street foods on offer, such as roasted corn, roasted plantain, fried yam, fried bean cakes, cold food drinks, puff-puff or meat pies and pastries. Street food vendors sell ready-to-eat foods by the streets and road sides. These ready-to-eat food products are also sold by food hawkers, who are many in any Nigerian town. Hawkers and food vendors are often from poor families, migrants from rural areas, school dropouts, etc. They bring foods closer to consumers. Informal food vendors provide food choices for different economic and social classes, offering all kinds of food online, along the street when driving home, in shops and make-shift tents.

According to the National Bureau of Statistics (2016), the contribution of informal actors in food and restauration services was more than 50%. This could be even more, as many of the street food vendors and hawkers may not have been captured.

**Waste management.** The food system is not complete without ensuring proper management of the inconsumable and unconsumed parts of foods. Informal actors work as waste collectors, cart pushers and collectors of recyclable materials in the streets, or as waste pickers on transfer stations and dumpsites.

Waste collectors go around streets and markets to collect waste in wheelbarrows or carts and take the waste into waste bins, trucks or collection centres. Waste pickers pick wastes from where they are dumped at road sides. Food wastes are usually used for animal feeding in Nigeria. Some of these wastes go directly into composting, which enhances the growth of crops and production of sustainable food with adequate quantity of essential nutrients. A very common job is the collection of recyclable materials such as PET plastic bottles, which are retrieved from wastage and sold to large collectors, who transport the bottles in trucks to the recycling industry.



Figure 4: Street cart pushers, Nigeria.

# Food system outcomes

Just as the 'oil curse' is a paradox (when oil revenues increased, investments in agriculture declined), food system outcomes are also a paradox. While more than half of the population (e.g. more than 114 million people) is very active in all kinds of food system-related activities, national production is not enough to feed the population and food imports are very high. The importance of the agricultural sector for (informal) employment and livelihood strategies is very important, whereas its contribution to the GDP and the trade balance is much more limited.

In fact, in a poor country where a growing and increasingly young population has limited opportunities for formal education and employment, the food sector is essential for informal income-generating activities. Food is a basic necessity that represents the larger part of poor household expenditures. In other words, the Nigerian agricultural sector and food system is in a survival mode. Many of the poorest (female smallholder farmers, seasonal labourers, off-loaders, bicycle or motorcycle transporters, street vendors, food hawkers or waste collectors) depend on food system-related informal self-employment to make a living.

Due to rural-urban migration, most smallholder farmers who remain in the rural areas are women, with a strong focus on subsistence farming. In the urban setting, women are very much involved in home processing, food retail and preparation. Unemployed young people earn through transport, retail, labour, hawking. The high level of poverty in Nigeria makes the informal sector the best point of food purchase, because of lower prices. Almost two thirds of the Nigerian population (63%) live in poverty (National Bureau of Statistics, 2022). About the same percentage of the population obtains food through informal channels (subsistence agriculture, buying (cheap) food in open markets, from street vendors and other informal sources). Most supermarkets in Nigeria do not sell fresh farm produce but only processed food products. The informally organised open air markets are, thus, very important for accessing affordable healthy foods. In the context of increased prevalence of obesity, mainly among urban middle classes, this is important to note.

A lot of the agricultural produce is processed with rudimentary techniques. Waste is put to value by people who are desperate to earn some Nairas.



Figure 5: Mini lorry loaded with fresh food vegetables in Oyo, Nigeria.

# What if informal actors were not present in Nigerian food systems?

#### Then:

- Most current Nigerian food systems would not function properly; smallholder-based domestic value chains, and the
  most important food markets and distribution channels (open air markets, street vendors), which are used by two-thirds
  of the population, would collapse.
- Primary producers, especially subsistence farmers with limited market connections, would have more difficulties selling their farm produce, which would lead to higher post-harvest losses, especially perishable commodities (vegetables, dairy), further threatening food security.
- Many of the poorest (female smallholder farmers, seasonal labourers, off-loaders, bicycle or motorcycle transporters, street vendors, food hawkers or waste collectors) would have difficulties making a living and to buy food and basic necessities.
- The majority of the Nigerians would be subjected to higher food insecurity risks, as food offered by the formal actors is much more expensive and unaffordable to them.
- Without the diverse informal employment opportunities, many young people (both educated and uneducated) would be idle, and crime rates and prevalence of malnutrition would be higher.
- Urban population would have less access to healthy food (now offered at open markets) and less choice of timeefficient convenience food (food stall, food vendors).
- The Government would have the possibility of increasing tax revenues, as it is difficult and cumbersome to collect taxes from informal actors.

# What are the main challenges and opportunities, and what can and should be done?

From the preceding paragraphs, it is clear that informal actors are essential for Nigerian food systems. The neglected and imperfect Nigeria food systems depend upon informal actors. At least half of the national population of Nigeria (e.g. >114 million) is involved in food system related activities, from small-scale production to home or artisanal processing, small trade and retail, transport, brokering and waste management.

The paradox is that the importance of the informal sector could have been lessened if agricultural sector and rural social and economic development would have received more attention and if national agricultural development programmes would have been effectively implemented. It is due to insufficient attention for rural economic development, lack of investments, high population growth and unemployment, that people have to engage themselves informally in agricultural production, processing, transport, and trade, and in all kinds of retail, food preparation and vending and waste collection.

Without being exhaustive, the following points are of great importance for changing the situation.

**Organisation and empowerment.** It is of strategic importance that the informal actors organise themselves and advocate for effective support to improve the performance of the agricultural sector. Responsive and responsible governance is required in rural areas. Informal actors should realise themselves that they are many in number. Farmer organisations, women groups, self-help groups can empower informal actors and their communities. With improved organisation and self-help groups, informal actors can participate in community-based socio-economic development (e.g. road network maintenance, water projects etc.) if they trust their local governments and other partners, and if they are convinced that their livelihood can be improved from such investments.

**Ensuring security.** Any measure that can address the insecurity in Nigeria will be a welcome development to help the situation in the country. Banditry and kidnapping are widespread. Farmers often cannot go to their fields, cannot get inputs or cannot sell on markets, because the prevailing security situation. Processors and traders face the same insecurity problems. Kidnapping of people along Nigerian highways is so rampant that it is affecting food distribution. In quite some places, farmers also face the risk of losing land use rights, because of mining, urbanisation and estate farming. One of the ways to combat banditry, kidnapping and insecurity in general is by creating conditions for self-employment and income generation, especially for engaging the teeming youths.

**Development of rural farming settlements.** If the low-security situation can be curtailed, farming settlements (according to master plan) with modern low-cost housing estates and basic amenities, such as potable water, good roads etc. should be developed to attract young people to agriculture. This will reduce unemployment, may lower insecurity, and concomitantly, empower informal actors in food system.

**Education.** Offering education services and keeping children at school (avoiding dropout) is essential for preparing young people for employment and income generating activities. School dropouts are more likely to end up in criminal activities. Special attention is needed for schooling and skilling of girls and the abolishment of child marriage.

**Work together with informal actors.** Government, private sector actors and development projects and non-governmental organisations (NGOs) can proactively seek to work together with home processors, first and last mile transporters (with bicycles, motorcycles and tricycles), retailers, waste collectors and others. This would allow capitalisation of local initiatives and entrepreneurship and can contribute to livelihood improvement and further improved waste management. This requires a change of mindset, as in many states there is zero tolerance for transporters, processors, street vendors, waste collectors and others, who are often subjected to harassments, seizure of goods, detention, extortion and even fines by Government officials. Instead of harassing the informal actors, it is possible to team up with informal food sector actors, to find solutions to challenges they are facing for improving productivity, quality and revenues (BOI, 2022). Many of not most of the informal actors are 'breadwinners' and care givers in their households. Improving their income and livelihoods is a direct contribution to poverty reduction.



Figure 7: Leafy vegetables find their way in Agege, Lagos, Nigeria, 2023.

**Support domestic production of healthy food, with informal and formal actors.** The same actors can support the domestic food value chains, which are largely informally organised. These value chains lead to end products that relatively fresh and healthy, as compared to processed and imported supermarket food stuffs. Quality improvement and more attention for hygiene and food safety are however important points of attention, especially for fresh products.

**Addressing the power of middlemen.** Regulation of prices of food commodities will go a long way in checkmating the activities of the middlemen so that farmers will be able to make reasonable profit from the sale of their farm produce, and consumers will have access to affordable food commodities. Linking of food industries with the farmers is a way to go. This requires mutual understanding. Development projects can play an intermediary role.

**Access to finance.** This is a key issue for most of the informal actors. Most of the informal actors are not banked, e.g. do not have bank accounts. They have found informal finance solutions, but the amounts that can be borrowed are small and the interest rates are often high. There are many banks and microfinance institutions, but they do hardly serve the informal sector. Informal actors do not have sufficient savings and collateral and are often illiterate. Government, private sector and development partners can support financial institutions (including saving and credit cooperatives) with risk sharing modalities and with the development of tailored financial products. Learning from informal loan facilities is recommended.

Macro-economic priorities and halting the devaluation of the naira. Improved performance of the agricultural sector is of national macro-economic importance, for reducing imports, improving food autonomy and increasing domestic value creation. Due to its large population and agro-ecological diversity, Nigeria has in principle all what is needed to do much better, both at the production and the market side. Reduced imports are important for halting the continuous naira devaluation, which is in turn important to contain the prices of seeds and inputs.

**Power, electricity and fuel.** Energy is paramount for development in any nation. Petroleum refineries in Nigeria should be made to function and more should be constructed to reduce our overdependence on importation of petroleum products. Since transportation is achieved with fuels which are petroleum products and all businesses, both formal and informal, are dependent on these.

**Climate change mitigation and adaptation.** The promotion and actual use of climate smart and climate friendly measures across the food system is important for the resilience of the Nigerian food systems.

**Food quality and safety.** Since most Nigerians access food from informal channels, there is a need for appropriate liaison between food safety regulatory bodies and the informal actors in food preparation and vending. They can team up, starting at local level, to address food safety challenges. This also requires the organisation and representation of informal actors.

**Loan and credit facilities** should be made available, even for the unbanked and illiterates in the informal sectors. Informal sectors still need Government intervention in providing incentives, enforcing standards, improving the road network, and standardisation of the prices of food commodities because informal food system is a major part of informal economy and its importance cannot be denied.

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