

Contextual Analysis in Support of a Cash Based Intervention

A Market Assessment Report Lunda Norte, Angola



By
Paulo Filipe (VAM Consultant)

Acknowledgments

This market report is part of a VAM rapid assessment mission to Lunda Norte in response to the ongoing refugee crisis. The mission aimed at providing technical assistance to enable informed decision-making by WFP and UNHCR on the best transfer modality for intervention. The market assessment component of the mission would not have been possible without the support from the Provincial Department of Trade and Commerce that provided the base data for time series and price volatility analysis. We in debt with André Francisco (a local resource person) who helped with the price data collection and worked as a language interpreter in focus group interviews. A special word of appreciation is due to two cassava commercial farmers who provide a comprehensive overview of the cassava market in Lunda Norte (Mussungo Ianvua) and Malanje (Fernando Correia). Finally, we would like to thank Livio Mercurio (UNHCR) for sharing his experience with CBIs, and Hebrumel staff in Luanda for working extra hours on a Saturday to brief the mission on the administration of a local voucher program.

Disclaimer

The views and recommendations expressed in this report are those of the consultant, and do not necessarily reflect those of the World Food Programme (WFP). Responsibility for the opinions expressed in this report rests solely with the consultant. Publication of this document does not imply endorsement by WFP.

Table of content

1. General overview and key findings	1
II. Methodology and limitations	1
Data and information gathering	1
Main limitations	2
III. Macroeconomic outlook – implications for a cash intervention	3
Will banks cope with increased demand for cash?	3
Food price inflation	5
IV. Food market dynamics	5
Market integration	6
Market price volatility	7
Seasonal price variations	8
V. Institutional factors influencing the option for a voucher system	10
Opportunities for cassava farmers and traders to increase participation in the food market	11
Will local retail business adapt to administer a voucher scheme?	14
Local experience with a voucher scheme	15
VI. Conclusions and recommendations	17

I. General overview and key findings

- 1. This report attempts to provide a market-based evidence from which WFP can make decisions concerning the most appropriate cash-based intervention option for the refugees in Dundo Lunda Norte. To do this, the report analyses the macroeconomic environment of the country; the dynamics of the local markets; the capabilities of local traders to cope with increased demand for food in Dundo "market-catchment" area; and the trader's willingness to take on new challenges in the local food retail sector, i.e. implementing and management of a functional CBI program.
- 2. More specifically, the assessment tries to provide answers to the following questions: (i) are the markets functioning and physically accessible to low-income families who purchase food on a daily or weekly basis? (ii) is the local food market sufficiently stable to cope with increased inflow of commodities? (iii) Do current levels of food price volatility permit local purchase planning? (iv) Is there a conducive macroeconomic environment to accommodate for large scale cash intervention? And (v) what can be learned from local cash-based initiatives?
- 3. Quantitative analyses were used to show current and historical price trends and market volatility. Data analysis was complemented with visits to all seven markets in Dundo, and interviews conducted to informal and formal traders Dundo and Luanda. Contrary to the standard practice of assessing the market feasibility for CBI, we decided not to interview the refugees on issues concerning food assistance options.
- 4. The report concludes that the food market in Dundo is rather small regarding the number of traders and diversification of by-products. However, it a very dynamic owing to the large trade flows observed in and out of the province. This is an indication that the market will cope with the spike in demand for basic foods commodities. A declining trend in price volatility may provide an assurance in the local market, though it is challenging for food assistance programming. Nonetheless, food vouchers stand as the most appropriate modality in the current macroeconomic environment. Traders in Dundo and Luanda would go arm's length to set up a retail market infrastructure in Lovua a newly created municipality with virtually no business activity yet. A voucher scheme is expected to lubricate both the cash and non-cash economy in Dundo and Lovua. It should be noted that Lunda Norte, in general, is a food consumption center depending almost entirely on imports from Luanda. Local crop production is negligible at the national scale, but the trade network is sufficiently well integrated to ensure a continuous supply of food items with minimal seasonal variations. Cassava flour is the only locally produced food commodity with the potential to integrate WFP's food basket for a target population whose main staple is cassava.

II. Methodology and limitations

Data and information gathering

5. The market assessment bases its findings on secondary and primary data analyses. Information was collected through consultation and interviews with key informants in the provincial and national Department of Agricultural Development; discussions with traders in formal and informal markets; and direct market observations. Statistical analysis presented in this

report drew on data available at the provincial Department of Commerce in Dundo; macroeconomic data published by the National Bank, the World Bank and IMF. The current price data was collected from seven markets, which enabled the analysis of market integration and special price differential analysis – see Table 1 for the list of markets. The process of secondary data collection also entailed visits to large food commodity traders in Luanda, and firms with experience in the management of voucher systems.

- 6. The monthly food price data for 2016 and 2017 were used to conduct analysis of seasonality. However, price time series data for the main food commodities were available only as monthly average for the entire Dundo as the system was not designed for the analysis of individual markets. Therefore, we performed the analysis of market integration using nominal prices from the main markets on Dundo (see Table 1). The same data was used to assess the current level of volatility of major food commodities in the market. Food prices were also collected from five retail stores located in different parts Dundo. Only two of these retailers accepted an interview.
- 7. The following topics/questions were used as interview guide across all stakeholders.

Survey questions guide

- [i]. Market capacity to respond to increased demand with sufficient quantities of commodities without resulting in sustained food inflation.
- [ii]. Is the market sufficiently elastic and competitive? Assess market stability and price volatility.
- [iii]. Present rate of inflation and expected trends. Is cash injection likely to result in higher inflation? what is the government policy to reduce inflationary pressure in the economy?
- [iv]. How stable is the macroeconomic environment? How it is likely to evolve in the near future?
- [v]. How do prospective beneficiaries access the market? Is conditionality a necessary requirement?
- [vi]. Identification of existing CBI schemes that can be complementary to WFP's efforts. Identification of possible synergies with local partners.
- [vii]. If vouchers are identified as the most appropriate option, would there be sufficient suppliers with the willingness and capacity to participate in the program?

Main limitations

8. Conducting market analysis without adequate transport becomes a painstaking exercise, particularly in a context where informal retailing takes a sizable share of the marking activity. The depth to which the rapid assessment can go is largely determined by the quality of secondary data available as well as the ability of key informants to provide relevant information. This was hard to achieve in Dundo. For instance, the interviews with formal retailers did not yield relevant results because they do not disclose information easily and freely. However, this behavior may not be unique to Dundo. The Business Extent to Disclosure Index for Angola as a whole has been standing on a low mark of 4 for well over ten years. Disclosure index measures the extent to which investors are protected through disclosure of ownership and financial information. The index ranges from 0 to 10, with higher values indicating more disclosure.

9. The report does not bring information the volumes of trade as the Provincial Department of commerce was unable to provide substantive information on the in-and-out flow of goods from province. Finally, in a business environment dominated by mixed formal and informal transactions, it is challenging to assess the capacity of local firms to undertake complex retail operations such as CBIs.

III. Macroeconomic outlook – implications for a cash intervention

- 10. Viewed from a macroeconomic perspective, the decision to opt for cash or vouchers could be center around the stability of the macroeconomic environment. A cash scheme for a group of vulnerable families must run in a financially sound environment. The economy is facing a situation of failed bank liquidity and a possible currency devaluation, both of which could affect the timeliness and the purchasing power of the cash transfer. When we ask local financial managers whether the market set-up could support a smooth running of a cash scheme, the answer was promptly, yes. Even in Dundo, where a shortfall of cash flow has become a common street talk, financial managers firmly asserted that "there is no problem; we can increase the cash flow should need be." The expressed sense of optimism by managers at local level do not resonate with messages of restrictive liquidity that have been released by the National Bank for the past three years.
- 11. The macroeconomic outlook is mixed, with some optimistic signals from the political discourse pointing towards policies for greater economic diversification with a view to reduce the dependence on the oil sector as the backbone of the economy; and tighter financial regulation aiming at banning capital flight. On the other hand, a pessimistic outlook stem from current inflationary pressures on the economy; exchange rate misalignments feeding the informal currency market; rampant fiscal spending albeit budget deficits for three consecutive years; all having wide ranging implications to the implementation of cash interventions.

Will banks cope with increased demand for cash?

12. Probably not. Irrespective of the optimistic views expressed by the managers of commercial banks in Dundo, which reflect, in part, their individual ability to tap into a pool of scarce resources in times of tight budgetary constraints, it is important to assess the capacity of the National Bank to balance the current account. And the figures coming that house are not very optimistic. An economy which is now grappling with the collapse in crude prices, oil exports accounts for 50% percent of GDP and 75% of government revenues. Due to the historical overreliance on oil, the country was not prepared to deal with the international oil crises which stormed financial sector. We need to bring to mind that oil prices declined by over 72% in just two years (2014 to 2016), leading to a current account deficit for the first time since 2009. Two other important outcomes worth highlighting i.e. a drastic reduction in the supply of foreign currency, and depreciation of the local currency – Kwanza. The annual inflation is currently reported at 26% by official figures, while other non-government sources put the current rate at 35%, despite de declining trend as it can be seen in Figure 1.

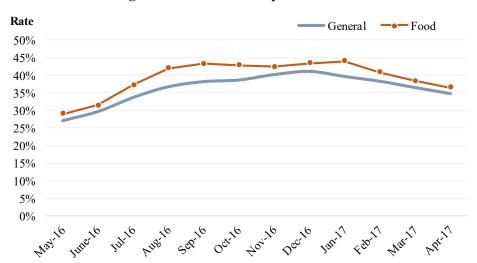


Fig. 1. General and food price inflation¹

- 13. The country is a major importer of industrial and agricultural products, with total food imports reaching \$2.6 billion in 2015². This figure represents a nearly 40 percent decline from 2014 as a result of the country's economic downturn and a shortage of foreign exchange. Demand for food and beverages will continue to rise with increase in population. The concept of urban development adopted by the government, which is drawing rural dwellers closer to the cities, puts even more on imports. It is believed that economic diversification will bring about the much need stability in the economy by promoting the production of export goods apart from oil. It is rather late, but a correct policy path. However, economic diversification is not a short-term goal, particularly when the strategy is centered on government-led programs.
- 14. Faced with a 50% reduction in government revenue to run the economy, the banking sector had few options other than pledging to tighten financial regulation and step up anti-money laundering measures after two international banks halted US Dollar supplies to the Angola. About 14 other international banks followed suit, ending mediation of forex with local commercial banks. For instance, late 2015, the Bank of America and Standard Chartered stopped supplying US Dollars to Angolan banks following years of slack regulations, leading to further shortage of forex in the economy. Early 2015 the National Bank issued a note asserting the country's healthy foreign reserves and secured external financing from China. However, later in the same year, the IMF reported that the country's gross foreign reserves fell from roughly \$32bn in 2013 to \$22bn, which is equivalent to more than seven months of imports. Reports of empty shelves in major retail stores surfaced the mainstream media throughout 2016.
- 15. The loss of revenue prompted the government to slash the 2014 budget by \$15bn, and it was forced to raise \$10bn from external financing for 2015 and \$14.5bn for 2016. The National Bank was left with no options but to increase interest rates and allow the local currency to go on a devaluation spiral. More devaluation is expected in 2017 in the months following the upcoming general elections. In recent months, the government employed strategic measures to deal with the shortage of forex, which include the allocation of US Dollars to priority sectors such as oil, food and health sectors. This has had a negative impact on the private sector's ability to pay foreign

¹ Source of data: (https://tradingeconomics.com/angola/food-inflation) National Institute of Statistics, Angola

² Global Trade Atlas data

suppliers. Foreign firms are finding it increasingly difficult to acquire tradable currency, with many deciding to close down; and international agencies and NGO are facing difficulties to run normal operations.

Food price inflation

16. The cost of food in Angola increased by 36.50 percent in April of 2017 over the same month in the previous year. Inflation rate remained at a high level but declined slightly in early 2017. The annual inflation rate was 38 percent in March 2017, although the rate had fallen since the start of the year. The weak local currency (Kwanza - AOA), which lost nearly one-third of its value against the US Dollar in 2016, has sustained higher prices. However, the Government has implemented several measures to lessen the upward price pressure in 2016 including centralizing the sales of wheat flour and selling it directly to registered bakeries at a subsidized price. This contributed to stabilizing bread prices. The question is how long will government hold on to these policies. Stabilizing food prices through direct monetary intervention can only be a short-term measure. The food sector will remain vulnerable to the direction monetary policy will take in the very near future, which is in turn influenced by electoral cycles in Angola. Concurrent to that view, is the already high public expectation that the cost of food will increase in the months following the general elections scheduled for August 2017.

IV. Food market dynamics

- 17. The food market in Dundo is well supplied with the basic commodities, but it lacks diversity. Both formal retail and open markets are well stocked with the same brands of all staples like cassava flour, beans, maize flour, rice, fresh and dry fish (in order of consumption rates) and non-staples like Irish potatoes, sweet potatoes, frozen poultry products, bananas, milk powder and groundnuts. In general, food is available all year-round.
- 18. The market in Dundo is characterized by the absence of brokers and the presence of direct linkages between rural markets outlets and urban consumers. Likewise, there is a fine mix of formal and informal, with small and medium traders playing the dominant role. There are a few large-scale traders with business connections with suppliers in Luanda, but there is no clear dominance of a market share by this group. While the market appears small (by the number of traders) they trade large volumes of goods and there are no visible signs of monopolies in place or price fixing between traders. In fact, price information is transmitted incredibly fast across all local markets. The size of the market in terms of trade volumes seems to be large because of the positive influence of cross-border trade with DRC. Early 2017 the border closed due to war, leaving the local warehouses in Dundo with excessive stock, contributing to a decline in market price in nominal terms (see Figure 2).
- 19. Prices are generally determined by the dynamics of demand and supply. Despite the poor market infrastructures, pockets of demand are easily filled with supply within days. Another observation is the lack of a large processing industry, exemplified by the majority of cassava being sold as *bombo-chips* in the main assembly markets. Most of the milling capacity is made-up of cottage industry hammer-mills.

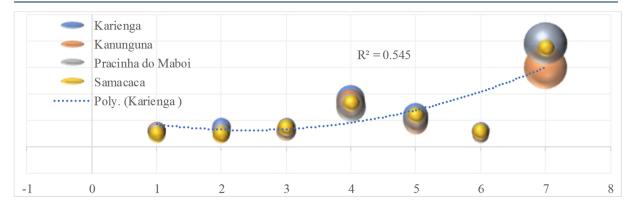
20. Most market places are informal settings. A formal market is identified by a concrete structure often build through government-sponsored programs. They are more organized structure with an established administration and tax system. While retailers sell on the designated market spots, traders usually own a shop adjacent to the market from where they buy and sell directly, thereby avoiding government taxes.

Market integration

21. Despite the strong presence of informal trade activity, the markets in Dundo are well integrated without major price differences between different parts of the municipality. To measure market integration the prices between all major markets in the municipality were analysed as shown in Table 1. The lower part of the table shows a graphic illustration of the market integration calculated through a second order (k=2) polynomial quadratic expression with a parabolic curve. Karienga Municipal Market, a formal and centrally located market, is used as the geographic reference.

Table 1. Nominal food prices and market integration in Dundo - June 2017 - Week 1 (US\$/Kg)

Market	Distance [Km]	Maize flour	Casssava flour	Rice	Beans	Veg.Oil	Salt	Dry fish
Karienga Municipal Market	0.0	1.20	1.51	1.51	3.61	2.41	1.20	7.83
Muanguvu	2.5	1.20	1.20	1.20	3.01	2.41	1.20	7.22
Kanunguna	4.5	1.20	0.90	1.20	3.31	1.81	0.90	6.02
Kaxinde	5.0	1.20	0.90	1.51	3.01	2.11	0.90	7.22
Pracinha do Maboi	6.4	1.20	1.20	1.20	3.01	2.05	0.90	7.83
Pracinha do Bairro Norte	7.0	1.20	1.20	1.20	3.31	2.41	0.90	7.22
Samacaca	7.2	0.90	0.90	1.51	3.31	2.41	1.20	7.53
Mean price	5.4	1.16	1.12	1.33	3.23	2.23	1.03	7.27
Volatility		9.8%	20.4%	12.1%	7.1%	10.9%	15.6%	8.4%



22. The results show that all markets are positively correlated (0.54), reflecting adequate trade flows from other provinces in the region and from Luanda. The fact that from time to time a bridge

along the Malanje – Saurimo road closes down to heavy trucks seems not to influence substantially food prices across the markets in Dundo. The strength of the correlation differs between markets (for instance due to geographical proximity), but is generally strong, with 75% of the correlations above 0.4.

- 23. In general, market integration is strong for all food commodities including dry fish and salt which are transported all the way from the southern coast. Cassava flour does not show a very strong correlation as compared to all other commodities. This behavior is likely to be associated with the fact that the amount of cassava produced locally influences trade relations and price formation on seasonal basis. Therefore, any attempt to introduce cassava in a voucher system should take the mean price into close consideration. Cassava prices of about 20% lower than the mean market value could be absorbed without major distortions. The food voucher prices for all other commodities could be set at below 10% from the mean market value.
- 24. Market price differentials were used in this assessment to capture differences of food access in areas around Dundo municipal capital. The differential cut off point was set at 15% i.e. price differences above 15 are most likely to reflect food price inflation, thus reducing the purchasing power of the vulnerable groups. The current nominal price data shows no food price inflation, with spatial differences falling in negative territory (-13.4%). This is consistent with the level of market integration discussed above. Cassava floor is the food commodity with the highest price differential across markets estimated at -30% on average from the reference market. Local production is certainly playing a role. The price of maize flour is the same across all markets, except in Samacaca where it can be found 25% lower than the reference market price.

Market price volatility

- 25. In addition to seasonal price fluctuations discussed below, price volatility was introduced in the analysis so as to measure the amount of dispersion of prices over time and space (the seven markets in Dundo), including excessive price changes that cannot be explained by seasonal or cyclical patterns. When prices are volatile, it is harder to anticipate the type of behavior markets will exhibit. This poses a challenge for local procurement and price determination when implementing a cash voucher system. To measure price volatility, the coefficient of variance (the ratio between the standard deviation and the national average value showing relative variability) was calculated over a period of 12 month for all food commodities across the seven markets.
- 26. Figure 2 shows a volatile picture for food commodities except salt. Generally, high price volatility in the market poses a challenge for long-term planning of local purchases. As cash vouchers get introduced in a price volatile market, the implementing agency may have to consider food acquisitions from outside the province or even out of the country as prices may change in between quarters. However, on a positive note, Figure 2 reveals an improvement in price volatility from 2016 to 2017. With the exception of vegetable oil, 2017 average prices of all other commodities are substantially less volatile than the previous year. This trend is associated with both improved trade and a political decision by the Government to prohibit the re-export of basic food basket commodities to the neighboring DRC a policy decision taken well before the eruption of the war. While traders viewed this as a direct government interference in the market, it is positive in the sense that it is helping to stabilize food price. Ironically, the restrictions imposed

by the government together with the prevailing political instability across the border may possibly result in further stabilization of food prices.

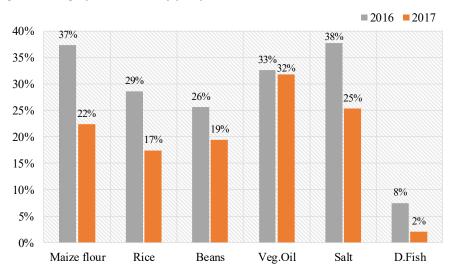
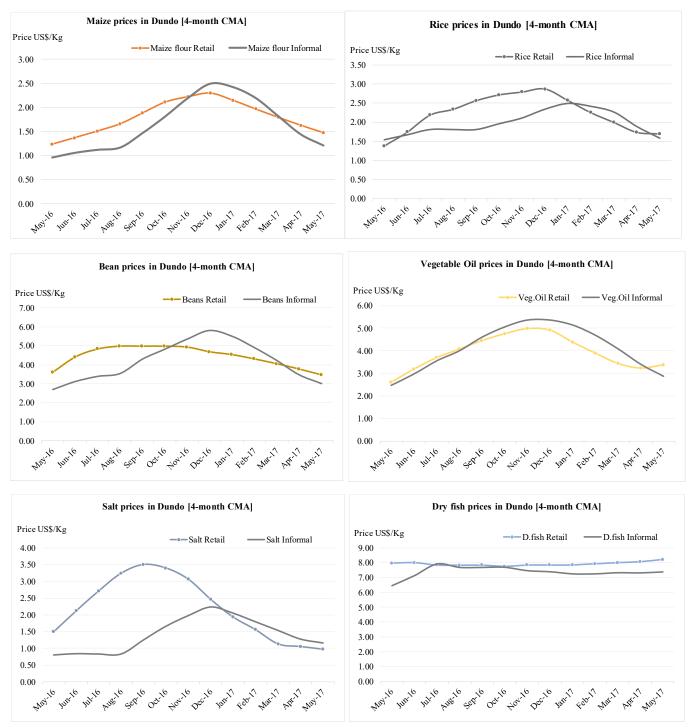


Fig.2. Average price volatility per product in the local market (2016 and 2017)

Seasonal price variations

- 27. To gain a better understanding of market dynamics in Dundo, this section analyses historical price data provided by the provincial department of commerce. The analysis is presented in **Figure 3**. The trend in food prices show two distinct patterns an overall long term increase in food prices as well as general decline in the last five months. The factors explaining the decline have already been discussed above. The centred moving average shows that, with the probable exception of cassava, Dundo market is more affected by cyclical than seasonal fluctuations, which are more associated governments short-term policy decisions concerning monetary and trade controls. Therefore, in a province with little local production, seasonality cannot be taken as a sole predictor of price increases in the market when designing a cash voucher system. This is to say that WFP will not be able to change the course of the programme based on a cropping calendar alone.
- 28. However, seasonality in Lunda Norte is minimal, and it is often imported from the neighboring provinces where production is more significant. This impact is felt mostly in the informal markets. For that reason, the price curves in Figure 3 bring both retail and informal market prices, a dimension in local food analysis that cannot be ignored. Not only that most vulnerable households have easier access to food in the informal markets, but because formal and informal traders have an interesting relationship. And this will have implications to the management of CBIs.





29. Although food availability in Lunda Norte is largely determined by import policies at national level, the price of maize and beans are somewhat influenced by the seasonal availability in neighboring Uíge and Malange provinces. The same applies to cassava flour whose availability is influenced by changes in weather conditions. For instance, the processing time is longer in colder periods in the year in Malanje and Moxico. Another important factor influencing food prices is currency market – more specifically, speculations over the exchange rate. Every time the National Bank announces restrictions to forex supply in the money market, a negative signal is transmitted

to food importers and it is passed immediately to food vendors. Food prices go up as a consequence.

- 30. Another factor influencing the food market price differential has to do with the timing the informal market is restocked. In months when the public sector salaries are paid in arrears, food prices in the informal sector are pushed upward for at least two weeks until it stabilizes again. In a period like this, small retailers channel some of their stock to the open market to take advantage of favorable prices.
- 31. The price of beans and maize flour have declined sharply from January to May, keeping fairly stable in the period following the harvest season (April to July). The prices of other complementary food commodities vegetable oil, salt followed similar trends during this period, reflecting good food supply in the main markets. The downward price trends of all essential foods might also suggest that households with access to markets could afford a balanced diet. Although sugar was not included in the analysis, the data indicates that the prices have been quiet stable over the last six months. In more remote areas of Lovua, where there is a supply of forest-based resources, low-income households use honey as a substitute to sugar.
- 32. In the period from October to January, a period often associated with low food consumption, the prices of staple commodities showed completely distinct patterns. Price of beans has risen sharply since September/October, reflecting probably a reduction in supply and withholding of stocks by farmers in neighboring Malanje and Uíge before the onset of the harvest. Similarly, the price of yellow maize flour has been increasing by about 30 percent over the last two years. Market information gathered during the mission shows that the demand for yellow maize flour has been on the rise for some time, a phenomenon associated with changes in the consumption patterns in the north-eastern region. A dish of mixed maize and cassava meal flour has been predominant throughout the northern region. Similar eating habits have been reported by the refugee population in both receptions Kakanda and Mussungue centres.

V. Institutional factors influencing the option for a voucher system

- 33. In this section we provide some of the market fundamentals that support the use of vouchers. As it was already mentioned, this assessment did not seek opinion from the refugees with regards to preferences cash, vouchers or dry rations. We found that field conditions at the time of the mission were inappropriate for this type of discussions. On the other hand, the mission was not prepared to provide answers to such questions as (i) how much money exactly would be provided to each person or family; and (ii) how would the cash entitlement compare with market prices and with the value of the food rations they currently receive.
- 34. However, the option of CBI was discussed briefly in a meeting with the leaders in Mussungue Centre who expressed some concerns. They believed that individual opinion would lean towards the cash option, but it brings with it enormous social problems in this stage of settlement. Viewed from the point of view collective welfare, they argued that families would be more open to the idea of vouchers, provided that (i) vouchers would enable diversification of food received; and (ii) the local supplier would be legally bound to deliver the quality of food agreed upon. The view that vouchers would work as a self-targeting mechanism seems to prevail among the leaders.

35. The current economic environment discussed above, coupled with the leaders' perceptions of collective welfare, made the mission assess the capability of the local suppliers to handle a voucher scheme. We assessed the level of formal local retail business and the opportunity of cassava producers to participate in the market.

Opportunities for cassava farmers and traders to increase participation in the food market

36. The question of whether cassava flour could be included in the food basket was raised several times in the food security assessment group discussions. For this reason, the market assessment looked the cassava flour value chain with a view of identifying potential avenues for the participation of farmers and/or traders. The aim of value chain analysis in this report is to analyze the organization and behavior of all the participants in the value chain, to diagnose the constraints and problems that they face, and to identify actions that may enhance the performance of the value chain through the opportunities to participate in the voucher market. This would contribute meaningfully to the welfare of smallholder farmers and large-scale processors.

Cassava value chain – a simple flow analysis

37. The cassava commodity flow analysis used four kinds of data: (i) interviews of cassava assemblers, retailers in the informal markets, and only one miller; (ii) focus group discussions with small farmers in Lovua; (iii) crop production data collected from the provincial department of agriculture; and (iv) price information gathered during field mission. The cassava value chain is very simple. The chain is characterized by one or two types of processing points; two to three types by by-products produced along the chain; two main types of market outlets. With little, if any, industrial consumption, large volumes of the commodities are channeled to meeting the demands of the domestic food market. Surplus production hardly reaches the market as farmers can harvest only the amount necessary to meet the demand.

Primary producers

- 38. Cassava is known as "poor man's crop." It is predominantly grown by subsistence farmers as a staple crop in plots averaging 1 to 2 ha. Cassava is planted during the long rainy season (March May) and its maturity time ranges from 6 months to 24 months (bitter varieties take longer to mature than the sweet varieties). The average yield is between 6 to 10 tons of fresh cassava per hectare, which translates to 2-3 tons on dry weight basis (ratio 3:1). Much of the cassava flour in the local markets is supplied from neighboring provinces of Malaje and Uige where production is reported to be substantially higher.
- 39. As cassava products (fresh root and *bombo-ships*) move from the producer to the consumer, a number of transformations and transactions take place along a chain of interrelated activities, and value is added successively at each stage of the chain. The term value chain is used here to characterize the set of interconnected and coordinated links and linkages that take place as a product moves from the primary production unit (the smallholder farmer) to the final consumer (both rural and urban). In an informal economic setting as the one prevailing in Angola, value chains do not evolve in a deterministic process, but adapt and respond to local conditions, the policy and institutional environment, market power, and consumer preferences to some extent.

This implies that both cassava producers and processors in Dundo and around the region will adapt and adjust to the terms and conditions determined by the food voucher scheme.

40. The movement of cassava from the farm-gate to the end consumer involves three to four stages, depending on whether the consumer chooses to go to the small retail store or to purchase directly from the assembly markets. And in these stages, we find about five major categories of actors: farmers, primary assemblers, millers, informal food vendors and formal retailers. One particular feature about cassava sales in Dundo is that very few formal retailers were found selling the commodity. The bulk of it was found in the open market. Although cassava is harvested all year round, there is also a seasonal influence on the chain flow particularly in the cold months of the year (May to August).

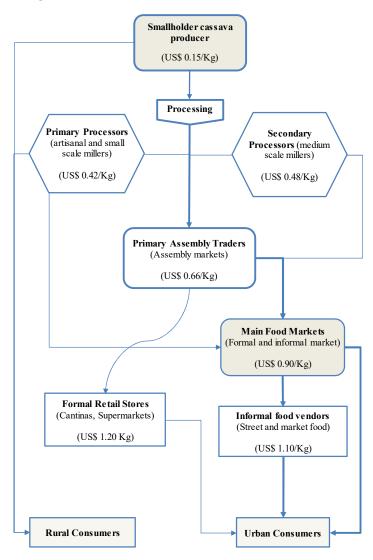


Fig. 4. Cassava market structure and value chain flow

Primary and secondary processors

41. Processing of fresh cassava to flour by small scale millers is the most important economic activity for this commodity. In the absence of any industrial use of cassava, nor for animal feed, many believe that small scale millers produce more than 90% of the total cassava flour found in

the local markets. In Malanje, the establishment of industrial millers in recent years has reduced the share of flour processed by small-farmers and small-scale millers. Nonetheless, artisanal processors remain relevant, and they maintain their participation in the market. Their processing begins on the farm i.e. at the smallholder producer level. In order for cassava to fetch the highest price in the market, the fresh roots are peeled, chipped, soaked in water for fermentation, and dried for about four days. This is a time consuming and a labour-intensive processing, not mechanized, and it is done by women only. This type of flour is believed to be more palatable and it sells at 15%-20% above the standard market price.

42. Women make up the bulk of vendors in all informal food markets. With respect to cassava flour, not all women sit passively in a stool selling the product. Many were found performing three functions in the supply chain i.e. purchase, milling, and selling. Those selling cassava flour have an added cost of grinding the produce and transforming into the final product which is then sold in the markets. About 15% of vendors do grind their own product. Anecdotal evidence suggests that some use traditional means and others use the services of the small-scale grinders available in the area. These vendors spend on average AKZ 1000 per bag (25 kg) on the grinder – thus the preference of some to use traditional means.

Primary assembly traders

- 43. A larger proportion of the smallholder harvest sales go to small-scale assemblers or brokers, who collect and bulk for onward sale to large wholesalers with buying depots in the towns. The large millers sell mainly to a decentralized system of informal retailers (street vendors, multipurpose retail shops, and traditional retail markets) and to a lesser extent to the more highend consumers who shop for the most part in large retail supermarkets such as Nosso Super. Small scale millers who operate in retail markets are important players in areas close to Dundo town. Consumers may buy cassava (bombo) and pay a fee to custom-mill their product into meal. This option provides the means to produce maize meal relatively inexpensively and is preferred by the urban poor and most rural households.
- 44. Throughout the northern region, cassava farmers have a wide range of marketing options. Common buyers who make purchases directly from farmers include, assemblers or small traders, large traders or wholesalers, large scale commercial farmers who forward linkages with large infrastructure projects, households in the village, and medium and large-scale millers. Small and large traders who supply the informal food markets are by far the most frequent visitors. Accessibility condition is a relative concept for this group of players as they venture into remote areas which are largely inaccessible even during the dry season. For these farmers, it could be argued that private buyers operating at the village level may provide farmers with particular advantages relative to other marketing options.
- 45. Four important issues need to be considered when analyzing the terms of trade between the buyers and farmers. First, traders pay cash immediately upon acquiring cassava; sometimes forward linkages seem to work on farmers' interest. Second, they purchase cassava directly at the farmers' gate, saving them from the burden of moving their products to the market several times a month in small amounts. This is particularly bothersome to cassava farmers who have to sell a bulky product. Third, assembly traders are also willing to purchase in small quantities, which is critical in a region where many farms generate small surpluses. Fourth but not least, small-scale assemblers are not very concerned with quality and moisture standards, which many farmers view

as condition leading to large crop loss, and also prevents them from venturing into a more competitive urban retail markets.

46. The relationship between the farmers and the assembly traders portrayed by the four factors discussed above appears to be beneficial to farmers in the short-term. However, this kind of market setting does not allow farmers to become more competitive in the market which is still developing. The absence of appropriate market links and outlets for cassava products appears to be, in the short-term, the single most significant constraint to further develop the cassava value chain.

Will local retail business adapt to administer a voucher scheme?

- 47. Being a net importer of food, one would expect to find a retail sector in Angola prepared to administer any type of food business at the highest level of efficiency. This is perhaps a questionable assumption. This sector handles large volumes of tradable food items per year, with the 2015 imports estimated at close to €3 billion. However, a substantial share of the retail transactions at local level remain informal, with violations of trade regulations, and many failing to disclose simple price data. Food is sold both through modern retail and informal channels. Local industry sources estimate that the informal market controls approximately 80% of agricultural produce retail sales volumes. Informal retail includes both small grocers as well as open markets.
- 48. For the past 15 years, the importance of the informal market has declined especially in urban centers such as Luanda where formal retail is developing rapidly. The government is trying to formalize retail by establishing specific areas for open markets. Municipal authorities throughout the country have been instructed to forcefully eradicate street venders with laws that impose fines for both vendors and buyers. Through this policy, companies increased their participation in the retail business, particularly the government sponsored Nosso Super network which takes close to 30% to retail market share, as shown in Figure 5.

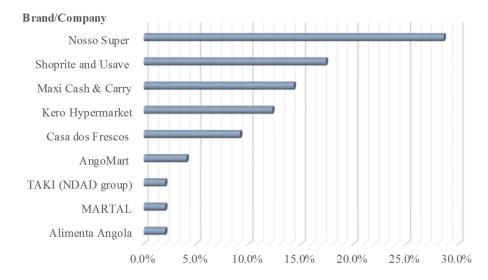


Fig. 5. Distribution of retail market shares of selected companies

49. But access to formal retail shops in Dundo is challenging. Only a small percentage of the population can afford transport to reach to supermarkets. Consequently, the majority of the population prefers to shop close to home in open markets or small convenient stores (cantinas),

which are perceived as offering fresher, less expensive food than hypermarkets and supermarkets. Although *cantinas* are regarded as formal entities in the sense that they hold a legal trading license, their business practices and organizational structure remain informal. Even with convenient supermarkets opening in the past few years in the outer areas of major towns, many buyers feel more comfortable in informal markets. For this reason, local formal retailers have come up with various strategies to attract the informal market customer. Nosso Super, for example, opened its shops at locations near traditional market places. Hypermarket Kero, in turn, tries to make lower and middle-income customers feel comfortable in its shops by offering low prices for locally produced commodities. South African supermarket chain Shoprite is expanding in Angola and new players are entering the formal retail space.

- 50. However, the retail sector faces a number of structural challenges. A lack of local production and processing means a high dependence on imported goods for many more years to come. Some estimate that 60% to 70% of the staple foods consumed in Angola are imported, leading to higher prices. The current water and energy infrastructure is severely deficient, making it difficult for retailers to establish themselves in the countryside. Complex customs rules and legislation make the importation of goods process lengthy and costly. As a result, the biggest retail operators in the country (those who have the largest shares of the retail business) are concentrated in the major cities of Luanda, Benguela, Huíla and Huambo. Out of the seven major retail stores, only Nosso Supper is present in Dundo.
- 51. Apart from Nosso Super and *cantinas*, there are about five middle scale retailers in Dundo with the capacity to supply food uninterruptedly to a population of over 50,000 refugees. Setting up a fully functioning retail infrastructure in Lovua was regarded a worthwhile investment for as long as the demand justifies. However, their managerial capacity, experience in managing foreign-currency transactions, and compliance with legal regulations could not be assessed. These include, Firma Casa Bidji, Bobo International, DDH, Hilief, and Ango Mbolo.

Local experience with a voucher scheme

- 52. CBI is generally a new concept in Angola. In the last four years, a few international organizations have piloted small-scale CBI in selected parts of the country. Therefore, there is no widespread experience and documented practices on CBIs yet. In the private retail sector, there appears to be only one firm Hebrumel with proven experience in running a food voucher scheme. For this reason, this assessment includes a brief overview of the government program as well as the implementation capacity of private retail firm.
- 53. In October 2014, the Government of Angola created the Kikuia Card Program (CK), which came about as a strategic response to the financial and economic crisis. The program aims to provide essential consumer items for the poorest households in the country, through a conditional voucher (locally known as *Cartão Kikuia* credit card). Entitled families would access a bundle of food and non-food items from specific stores indicated by the Government. The program started off with 50,000 registered families and aimed at reaching 140,000 by 2016.
- 54. The cost of the entitlement bundle was initially calculated at 10,000 Kwanzas (Kz AOA) per month which was about US\$ 100 at the exchange rate at the beginning of the program. Currently, following the continuous devaluation of the local currency, the cost the entitlement

bundle is estimated at US\$ 60. By January 2016, the size of the individual family benefit was reduced to Kz 5,000 due to budget constraints. The program was designed to have a group of low-income families entering the program for 12 months and withdrawn after that. A new group of eligible beneficiaries would begin another cycle of 12 months. However, according to a World Bank evaluation report³, all the first-cycle registered families are still in the program. In a meeting with the Hebrumel in the course of this mission, we learned that the laying off beneficiaries from the program had not been an easy task, as the program lacked a proper regulatory framework to that effect.

- 55. The strategy of the transfer of goods by the Kikuia Card Program foresees the provision of financial value on the card on a monthly basis to the beneficiary families. In the first year of the program, the firm in charge of the distribution organized the products in four Kits Basic Basket Kit, Agricultural Kit, Women's Kit and the School Kit and each family could access any four kits. Early in 2016, the decision was made to undo the kits and make all products available off the shelves. The structure and organization of the shops were changed to function as normal retail units open to everyone in the community. By so doing, the program became more inclusive in the communities it was present, and it mitigated the stigma associated with "a hand out to the poor" for beneficiary families. On the business side, Hebrumel was faced with the challenge of maintaining viable retail stores in nine different provinces, out in remote areas with low effective demand.
- 56. Beneficiary families were selected following a strict vulnerability criteria which included households female-headed households; people with disabilities; households with malnourished children and high levels of dependents; former war veterans; and elderly with chronic illnesses. In the case of a male-headed household, the spouse was responsible for providing the information for every family member including education, employment, land ownership and agricultural production, and household income. By May 2016 there were 101,246 registered families with Kikuia Cards.
- 57. The shops managed by the Hebrumel have refrigerated counters for fresh products (often empty and disconnected as they are high energy consumption equipment); shelves and a storage area; air conditioning, and electronic tills for reading the cards. In theory, they sell products to customers other than the beneficiaries of the program. In February 2016 the Government decided to contract two more companies Frescampo and Nosso Super. Frescampo is a food distribution company and manages only two stores in the Bié province. These stores are significantly larger and more equipped than the stores built by Hebrumel, and they were placed in locations more accessible to the general public. Nosso Super is a network of retail stores with 34 outlets across the country a supermarket size with a presence in Dundo. However, they introduced the Kikuia Card program in only two of their stores in Bie province early in 2016, and there have been no reports of further expansion. The three companies cover a varying number of beneficiaries through the stores. Hebrumel covers 31,000 beneficiaries, Frescampo 3,000 and Nosso Super 5,324. The World Bank report indicates that by May 2016, the total beneficiaries with effective access to the program was 39,324. A large number of registered card holder beneficiaries (62,399 families) still do not have access to a shop.

³ Banco Mundial. Avaliação de processos – Programa "Cartão Kikuia". Setembro 2016. Luanda

VI. Conclusions and recommendations

- 58. The indicators used to assess the potential for a CBI based intervention suggest that the market is better prepared to handle a voucher system than cash, with a minimal disruption to basic market functions. The main concern of introducing cash in the current economic environment is that it may contribute to an already high rate of inflation both general and food. Besides, putting cash in the hands of an unsettled and unknown group of beneficiaries may catalyze social inequalities in a municipality with low effective employment. The findings from this assessment do not support the argument that a cash intervention could facilitate the local economy. When diamond smuggling is removed from the income equation, we are left with a dormant agricultural sector, public administration, and an informal sector fighting to survive in an increasingly regulated environment. Cash could be even more problematic to the local economy if a large proportion of refugees decide not to settle in Lovua. A lack of banking services in Lovua poses a further structural constraint.
- 59. At this stage, a voucher system is less likely to distort the local price formation (even if cassava is included in the basket) and no risk of food price inflation is foreseeable. The performance of the main market indicators displayed in Figure 6 suggests that in the short run vouchers can be beneficial for the market. Market price volatility and market distortions, though in a negative territory, their magnitude is small; it is not, however, unusual in markets with a large informal segment.

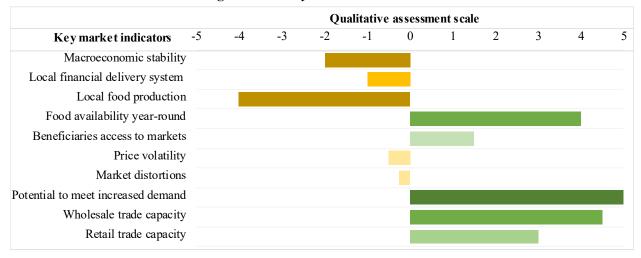


Fig. 6. Summary of market indicators

60. Local food production indicators perform poorly, with cassava flour and salt being the only products that can be supplied from a local source all-year round. However, trade flows from the coast to the eastern parts of the country have been securing the adequate availability of all essential food commodities in the local market. All the leading food importers in Luanda have assured that the supply pipeline will remain healthy in the months ahead, offsetting poor local production in food deficit areas – Lunda Norte included. Although food availability is not of major concern, the

same cannot be said for physical access. The dependence on informal food markets discussed above signals constraints to access, and the indicators perform worse in Lovua where there is no functional market yet. In fact, the Administration in Lovua regards the settlement of refugees as the much-needed demand factor to stimulate the local market. It is the same factor that will predispose retailers and informal market vendors in Dundo to seek new market avenues in Lovua.

- 61. The analysis of food price volatility indicates that the average prices for 2017 have been less volatile that the previous year and a downward trend is most likely to prevail in the months ahead. However, prices need to be regularly monitored if a voucher system is to be introduced. The price data used in this assessment was gathered from different sources (primary and secondary combined) because the province does not have a comprehensive market data collection system in place. The provincial department of commerce (who provided some of the data) has been trying to fill in the gap, but the technical capacity is severely limited. Therefore, it is recommended that WFP establishes a monitoring system for its own program.
- 62. A close follow-up of the macroeconomic situation is equally required. At the time of this mission, there were indications that the government would do the best it can to prevent further deterioration of the leading indicators. However, the election season is often associated with fiscal indiscipline, and we cannot predict its outcome. Furthermore, we cannot assume that the new government following the elections in the coming month of August will keep the promises of maintaining inflation at the current level as well as the implementation of tight monetary regulations.
- 63. The current humanitarian operation may bring about opportunities for the smallholder farmers to participate in the market if food assistance is provided through vouchers. Cassava farmers in the region may tap into that market without compromising the supply for the domestic consumption. Although cassava flour is not part of the traditional food assistance ration, it makes part of the diet of the target population in almost equal proportions as maize. Cassava does not have a mature stage. This allows the crop to be harvested at a farmer's discretion. A plant can be harvested when its roots are sufficiently developed to meet a consumer's needs or delayed until the next growing season. This feature makes cassava an ideal secondary crop for small-scale farmers throughout the northern region, as they can stagger their harvesting activities to ensure a continuous supply of food at any given season.
- 64. This assessment discourages a cash intervention on the basis of the macroeconomic outlook for the country, as well as the social welfare concerns raised by some leaders of the refugee community. Despite the challenges facing the retail sector, a food voucher system will address both social and economic concerns. However, since the local retail sector lacks experience in administering voucher schemes, WFP could assess further the viability of having Hebrumel as a potential local partner for the following reasons:
 - a. The firm has proven experience in running a voucher system targeted at very low-income families:
 - b. It has both retail and wholesale capabilities, running its own transport services across the country;
 - c. the stores are connected on online; program offices in Luanda and Johannesburg will have access to the server and monitor the program at any time;

- d. they can set up a fully-fledged and functional structure in Lovua in 30 days and supply the entitlements ahead of payment, as long as there is a signed contract;
- e. payment to a foreign bank outside the country is a preferable option; and
- f. the firm has been providing beneficiaries with food as well as nonfood items such agricultural inputs, hygiene stuff, kitchenware, and school stationary. An entitlement bundle per refugee family in Lovua would be set at US\$150.00 per month.