# Manica and Zambezia Market Mapping and Analysis Project

# For Concern Worldwide Mozambique, as part of COSACA September 2016

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CAPI	Computer Assisted Personal Interview			
FGD	Focus Group Discussion			
IMF	International Monetary Fund			
INSS	National Institute of Social Security Mozambique			
KII	Key Informant Interview			
MOS	Market Observation Survey			
SADC	Southern African Development Community			
WFP World Food Programme				

# **Executive Summary**

This report contains the results of the Rapid Market Opportunity Assessment (MOS) Forcier conducted on behalf of Concern Worldwide in Mozambique. Concern is an international charity fighting poverty and provides humanitarian assistance in emergencies and long-term development support in Mozambique.

In order to combat food insecurity and as a response to flood and drought in recent years, Concern is exploring the possibility of implementing voucher fairs in several locations in Manica and Zambezia provinces. This research thus serves as a baseline for future emergency food distribution. Data was conducted in Manica, Sofala, and Zambezia provinces, which were identified by Concern as areas with large scale food insecurity. The research draws attention to price points in selected markets, supply routes, the availability of produce, and storage capacity of large traders, as well as appropriate measures for emergency food distribution.

# **Key Findings**

Demographics of the population sampled for the quantitative interviews showed that vendors are disproportionately male. Approximately 8-in-10 (78%) of the vendors owned the shop in which they work, with regional variation (84% own in Zambezia vs 65% in Manica).

Prices were broadly perceived to have risen across most commodities and locations since the beginning of 2016. There is also regional variation here: in Zambezia, salt prices have risen while Manica has experienced a broader increase in prices across key commodities such as groundnuts and beans. Such price increases have had grave effects on all market participants, large traders, small vendors, and consumers. Vendors in both qualitative and quantitative interviews cited the government, the "war," or the "political situation" as causes for the rising costs. Government mismanagement of the disappeared loan, donor mistrust, and money in general were also highlighted. When asked about coping strategies, answers differed depending on the type of respondent. One Zambezian trader reported purchasing goods from geographically closer markets to avoid high transportation costs and long commutes on conflict-prone, insecure roads. Traders in Zambezia reported lowering prices to make them affordable for possible customers. Consumers and small vendors in many of the focus groups called for the government to step in to regulate prices in the markets, in a manner similar to how it has managed *chapa* [minibus] fares in the face of price increases.

Of the key food items identified by Concern, cooking oil, salt, rice, and fish were the products most often sold by respondents in the sample. Here again, differences between regions were significant. For instance, according to Zambezia respondents, maize is generally – though not universally – available in their market. Just under 60% of these respondents indicated it was "always" available (5% stated that it was "rarely" or "never" available. In contrast, about a third of Manica respondents (36%) said maize is never available in their market. Further, the

availability of products in Manica has been influenced by issues such as drought and insufficient goods produced in *machambas* (small gardens), both of which have led to an increase in prices. Respondents also noted the inaccessibility of roads during the rainy season (increasing travelling times and rendering some areas inaccessible altogether) and the political conflict creating difficulties for their ability to transport goods between certain areas. Other participants referenced the still-rising prices as the primary reason why some key commodities were not locally available.

Unsurprisingly, bigger traders established supply routes that went beyond their region or province, while smaller vendors purchased key supplies within their province. Smaller vendors restock their goods frequently, with the large majority (85%) purchasing supplies at least once a week. In Zambezia, a third (35%) buy their supplies daily, indicating they do not have the capacity to store larger amounts of food (a key factor in deciding between vouchers and food aid). Overall, larger traders in Zambezia and Manica seemed to have sufficient storage capacity to accommodate goods for a voucher fair. Most traders and vendors were willing to participate in a voucher programme itself, but some – especially traders in Beira – cited storage limitations as a key barrier to their participation. In general, other barriers mentioned for a successful market intervention were climate change, poor roads and infrastructure, and political conflict. While elite traders discussed the political conflict in central Mozambique as their most pressing barrier, lower level vendors highlighted drought and seasonal variations as their central challenges.

Regarding emergency food distribution programmes, participants had little previous exposure to food vouchers and voucher fairs. None of the small vendors in Manica and Zambezia had previously received a food voucher by a customer. Larger traders indicated more exposure to these types of programs, though this was dependent on province. Several traders raised concerns over the logistics of financial transactions regarding goods at voucher fairs. Others indicated a preference to limit the role of community leaders in the voucher process, due to fears of corruption and mismanagement. Logistically, larger traders in all regions had the capacity to participate in the voucher fair, with particular regards to increase in supply on short notice, availability of trucks, and storage capacities. However, willingness to participate in such a fair (as opposed to vouchers in a shop, for example) differed between regions.

#### **Conclusions and Recommendations**

Concern plans to implement voucher fairs in several locations in Manica and Zambezia province as a reaction to the drought. The research data suggest that a voucher programme needs to take the regional differences—such as price fluctuations, availability of goods, and ability for traders to scale-up—into account. Due to the current political conflict and poor road infrastructure in these provinces, long transportation routes are inadvisable. Wherever possible, local traders should be involved to allow for more efficient trade routes and local ownership (not to mention lower costs).

Markets in Mopeia, Caia, Chimoio, and Chitobe proved to be best suited for voucher fairs due to the size of the markets, accessibility and the number of middle-level and large traders. Because of Manica's size and its rural nature, fairs are only likely to work there if there are

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multiple locations involved. Residents in this province often spend 1-2 days travelling for products, so geographical proximity is a crucial issue.

Using multiple traders in smaller markets to allocate the amount of goods (whether for a fair or in the shops) is both feasible and recommended. This will create local profit and ownership, and allow for more vendors to be involved in scaling up economic activity within the smaller areas. Even though involvement of local stakeholders is generally desirable, the role of community leaders should be carefully deliberated upon, particularly in regard to the line between approval and involvement in resource allocation. In particular in Manica, respondents were skeptical of leaders exerting an influence on the management process of the vouchers. Overall, however, vouchers will likely be well received in all areas.



Map I Mozambique

# 1. Background

In March 2016 the Southern African Development Community (SADC) Council of Ministers approved the declaration of a regional drought emergency. The drought has affected several countries in the Southern Africa region, including Mozambique. The government of Mozambique responded to this crisis by declaring a Red Alert - the highest level of national emergency preparedness - in the central and southern provinces. The drought has resulted in steep price increases for key staple food items, leading to reduced access to food by the poorest households in these affected areas.¹ According to the World Food Programme Mozambique, by March 2016 'at least 1,5 million people had been affected by the drought in central (Zambezia, Manica, Sofala and Tete) and southern (Gaza, Inhambane and Maputo) provinces of the country.'²

With the drought and food insecurity situation spreading throughout the country, Concern Worldwide - a member of the COSACA consortium - has initiated various interventions in response. The magnitude of the crisis has necessitated that the COSACA consortium expand into new locations; particularly in Manica and Zambezia Provinces, and in Machaze and Mopeia Districts. Therefore, Concern Worldwide has sanctioned a rapid snapshot to determine the market situation in the two provinces. This assessment gauges the general market dynamics in Machaze District, Mopeia District, and Quelimane and Chimoio cities so as to establish the viability of particular interventions, including cash-based programs.

# 1. Purpose of Assessment & Methodology

# 1.1. Aim of Assessment

The purpose of this rapid assessment was to develop an in-depth understanding of the market situation in select districts of Manica and Zambezia Provinces, as well as in Beira. The objective was to identify market deficiencies and the needs of consumers and vendors; these findings will help determine viable, research-centred programming solutions to the ongoing food security crisis induced by drought. The specific focus of this assessment was on price points and the capacity of traders in the selected areas.

The overall objectives were:

- 1. To identify, through a rapid market analysis, appropriate responses (cash/vouchers/in-kind/market support/advocacy) to meet emergency and early livelihood recovery needs in identified districts;
- 2. To collect information about price points;

<sup>&</sup>lt;sup>1</sup> See WFP Mozambique WFP Southern Africa El Niño Situation Report #3, 2016.

<sup>&</sup>lt;sup>2</sup> See WFP Mozambique Situation Report #1, 2016.

- 3. To strengthen Concern Worldwide and participating agencies' national capacity in market analysis and its use in response analysis; and
- 4. To build participating agencies' understanding of existing coping mechanisms and to inform programming that can serve to reinforce these mechanisms.

The market assessment utilised a mixed methods approach to measure the following key indicators, as agreed with Concern:

- Demographics of consumers, consumer needs and unsatisfied demands;
- Current food prices and general trends on prices of key food items (historical and future, if possible), e.g. maize, rice, cooking oil, pulses, groundnuts, fish, and salt;<sup>3</sup>
- Overview of supply chains (including key routes and prices) in each of the identified districts;
- Capacity of the local market to absorb the increased demand stimulated by Concern's
  planned response in the provinces of Manica (Machaze district) and Zambezia (Mopeia
  district), including the number of active traders in each area, current stock levels, and
  the capacity to increase stocks at desired volumes;
- Potential seasonal factors that could impact market capacity and interventions;
- Potential barriers to a market-based intervention;
- Appropriateness of a *voucher fair* as a response to providing food assistance to communities in Manica and Zambezia.

# 1.2. Methodology

The market assessment comprised a comprehensive desk review (utilising available secondary literature), a quantitative market opportunity survey, qualitative interviews with selected key informants, focus groups and a market observation checklist. These elements are summarised briefly here. A detailed approach to sampling and respondent recruitment is presented below.

# 1.2.1. Desk Review

Forcier conducted a comprehensive review of all existing documents, including proposals, relevant literature, and other project documents. The information gathered during the desk review process provided understanding, helped the review of data collection tools, and informed the final report, thus assisting Concern with possible future interventions in Manica and Zambezia provinces.

<sup>&</sup>lt;sup>3</sup> Note that future prices will likely be difficult to determine given the current economic situation in Mozambique regarding the falling meticais exchange rate and government subsidies on basic food items.

#### 1.2.2. Quantitative Research

Quantitative research for this assessment consisted of a market opportunity assessment conducted among a random sample of local vendors at the sample locations. The survey was designed to provide in-depth information on the above indicators, with a particular focus on price points, producer supply chains and expandability of supplies, as well as pricing, revenue, and changes in supply during the rainy season. The quantitative surveys consisted of a total of 95 computer assisted personal interviews (CAPI). The overall number was dependent on the actual market size and surveys were carried out using mobile data collection-enhanced smartphone technology. The Market Opportunity Survey was conducted in markets in Manica and Zambezia provinces (Concern's key areas of interest).

Researchers randomly selected Market Observation Survey (MOS) respondents within markets using a skip pattern, while following a predetermined route through the market. Eligible candidates were over 15 years old and selling goods at the market. The collected sample size was dependent on the number of vendors prevalent in the market, and varied between 5 and 20 observations per market.

# 1.2.3. Qualitative Research

The qualitative research aimed at complementing the quantitative data and consisted of three tools: Key informant interviews (KIIs), Focus Group discussions (FGDs) and Observation Checklists. KIIs were conducted at each market location, FGDs were conducted with consumers and vendors in each location, and quantitative observations were undertaken in each of the markets.

# KIIs with market chiefs

Each of the identified markets had a local chief, who is responsible for administration. KIIs with each market chief aimed to provide additional insight on supply chains and expandability of the markets. Market chiefs were identified by researchers upon arrival at the market.

### KIIs with local government representatives

In most of the selected regions (dependent on availability), one KII took place with a local government stakeholder. The selected individuals were chosen based on their ability to provide institutional perspective on the supply chains, price points, and demands of markets in their respective region. They were identified by Concern staff or its affiliates on-site.

#### KIIs with traders

Targeting local traders, these interviews provided in-depth information on important price points, significant changes in prices, and potential consequences. Additionally, these interviews focused on stock and supply of local vendors and traders, and explored how quickly

supply could be increased. The local producers and vendors were identified during the quantitative interviews and by Forcier staff upon arrival at the market.

# KIIs with regional traders in Quelimane and Chimoio

In order to develop expansion possibilities of traded goods on relatively short notice in the Mozambican market, KIIs occurred with regional traders in Quelimane, Beira, and Chimoio. These traders—who own vehicles to transport commodities long distances—are able to operate on a regional level (i.e. in different provinces) as opposed to local traders who mainly operate in their home district. Such traders would be expected to provide essential knowledge on regional trade routes and (in)formal networks for possible future interventions. These regional traders were purposively recruited by Forcier researchers based on the previous desk review and information gathered on site.

#### FGDs with local customers and local vendors

Two focus group discussions were conducted in each market. One focus group discussion targeted local customers and a second targeted local vendors who own a shop or a stall at the market. Participants were purposively selected by Forcier researchers based on availability and market size. They were of mixed gender in certain areas, while in others they were gender segregated.

#### **Observation Checklist**

In addition to the tools described above, an observation checklist provided insight on the specific structure and equipment of each market. The checklist focused on infrastructure of the markets and condition of the roads leading to and from the markets. A Forcier researcher entered the data on the checklist while in the markets.

# 1.2.4. Summary of Tools and Methods

Table 1 provides an outline of the research methods employed and corresponding allocations of interviews:

Method	Source	Quantity
Desk Review	Relevant Secondary Literature  Previous Market Assessment Reports	N/A
Quantitative Market Opportunity Survey (MOS)	3 markets in Zambezia: 1 each in Mopeia, Chimwara, and Posto Campo  4 markets in Manica: 1 in Chimoio, 3 in Machaze (Chitobe, Chipudje, and Save)  Target group: male and female local vendors	5-20 quantitative interviews per market, dependent on market size and in consultation with Concern. Total 95 interviews
Key Informant Interviews (KIIs)	Provincial districts of Quelimane and Chimoio: 2-3 KIIs with local stakeholders in each location, identified by Concern, included regional suppliers and market chiefs  Provincial district of Caia, Sofala: 2 KIIs with traders, 1 KII with market chief  3 markets in Mopeia district: 2 KIIs with big traders, 1 with market chief, 1 with regional government representative  3 markets in Machaze: 2 KIIs with larger traders, 1 with	Total: 37 KIIs

	regional government representative, 1 with market chief in each location.  6 KIIs in Beira, Sofala: 2 with regional traders, 1 with market chief, 1 with local government representative and 2 with regional vendors/shop owners	
Focus Group Discussion (FGD) with local buyers and sellers	<ul> <li>2 FGDs at each of the 3 market areas in Zambezia: 1 in Mopeia,</li> <li>2 markets in Mopeia district, identified by Concern</li> <li>2 FGDs at each of the 3 market locations in Manica (Chitobe, Chipudje, and Save) identified by Concern.</li> <li>2 FGDs in Chimoio.</li> </ul>	Total 12 FGDs, 6 in Zambezia province and 6 in Manica province
Qualitative Observation Checklist	3 markets in Zambezia: 1 market in Mopeia, 2 additional small markets in Zambezia province  4 markets in Manica: 1 in Chimoio, 3 in Machaze	7 observations, 3 in Zambezia province and 4 in Manica province

Table 1: Research tools, participants and sampling strategies across locations

# 1.2.5. Limitations

# Sample Size

Some of the markets visited for the quantitative survey were quite small and the number of observations varied greatly between locations. Even though Forcier and Concern agreed on an average of approximately 15 observations per site, in some locations the target population was

too small for this. This was the case in all market locations in Manica except Chimoio, as well as in Posto Campo in Zambezia. As agreed on beforehand with Concern, in these cases researchers interviewed most to all vendors present (depending on availability), instead of using random sampling with a skip pattern.

As a result of the small sample sizes, the overall number of observations is 95. The results drawn from this sample provided valuable insights on the opinions of vendors interviewed; however, due to the small overall sample size, generalisations to the overall population of vendors should be considered tentative.

# Units for selling key commodities

In the quantitative questionnaire, respondents were asked about price points and changes in the prices for certain goods. However, the mobile phone technology used did not allow for entering the units used to calculate the increase/ decrease in prices. The researchers could thus not interpret the numbers from the quantitative questionnaire correctly and the answers to that question were taken instead from qualitative interviews.

# Access to key informants

Particularly in Manica and Sofala provinces, some authorities and key informants were initially reluctant to participate in the research. In Beira, the start of research was delayed several days while waiting to obtain permission from the local authorities to conduct interviews. In Manica, some selected respondents were fearful of being robbed. In each case, fieldwork was completed successfully but with delays of up to several days.

# 2. Findings

This section presents the findings of the field research conducted in the three focus areas of Manica, Zambezia, and Sofala. Pre-identified key markets in these provinces were investigated for a possible future emergency food distribution programme. The main indicators investigated were profiles of the population of interest, current food prices, supply chains, capacities of local markets to absorb increases in supplies, and appropriateness of voucher fairs as a means of food distribution.

# 2.1. Profiles of Population of Interest

The quantitative tool targeted small to medium vendors at markets in Zambezia and Manica, while the qualitative interviews targeted consumers and medium to larger traders who could potentially participate in a future voucher fair programme. This section describes in more detail the profiles of the different types of traders interviewed, taking regional differences between the provinces into account.

Overall, 95 small vendors and stall owners were interviewed for the MOS. From these 95, two-thirds (67%) were from Zambezia and a third (33%) were from Manica. In Zambezia, about half (47%) of quantitative observations occurred in Mopeia, with the remainder split between Chimwara (33%) and Posto Campo (20%). In Manica, just under half (46%) occurred in Chimoio and 55% in Machaze. The precise distribution of interviews across market locations and provinces is provided in Table 2.

	Market Location	Total Interviews	Share of Province Interviews
Zambezia	Mopeia	30	46.9%
	Chimuara	21	32.8%
	Posto Campo	13	20.3%
	Total	64	100%
Manica	Chimoio	14	45.2%
	Machaze	17	54.8%
	Total	31	100%

Table 2: Distribution of interviews across provinces and locations

In Zambezia, the gender distribution in the MOS skewed slightly toward male participants, while in Manica this skew was more extreme – only one respondent was female (Figure 3). Respondents in the different markets were chosen by skip pattern when possible to ensure random sampling. As a result, estimates of population characteristics are unbiased and representative of the underlying target population. However, given the small market sizes and small sample size – particularly in Manica, with a sample of just 31 respondents – province-specific demographic characteristics are estimated with considerable uncertainty and should be considered tentative as a result. Despite these caveats, we can conclude that vendors are disproportionately male and that this disparity between genders is most pronounced in Manica.<sup>4</sup>

From all vendors interviewed for the quantitative survey, about 8-in-10 (78%, N=95) reported owning the shop or stall in which they worked. This was corroborated by qualitative interviews, where all but a few traders owned their shops. In Zambezia, the percentage of shop owners

<sup>&</sup>lt;sup>4</sup> Even in the small samples reported on in this report, the differences in gender distribution between Zambezia and Manica Provinces are statistically significant (p < 0.001).

interviewed was significantly higher than in Manica: 84% of respondents in Zambezia owned their own shop, compared to just 65% of respondents in Manica. Differences between gender were also significant: all but one women interviewed reported owning their stalls (97%, N=29), whereas only 70% of male respondents answered the same (N=66).

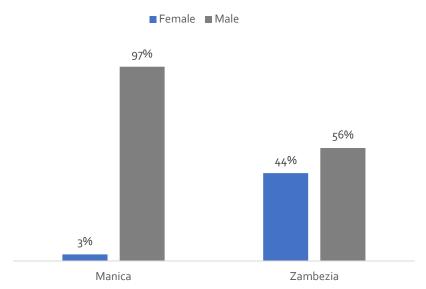


Figure 1 Gender distribution among MOS participants in Manica and Zambezia province (n=95)

Across all study locations – Manica, Zambezia, and Beira – the bulk of consumers were housewives who live close to the market, with the exception of some who ride their bicycles in from surrounding rural areas. In each of the markets, the larger scale traders were predominantly men, many of whom are Asian immigrants to Mozambique (primarily from Pakistan, India, and Bangladesh) with traders in Zambezia and Sofala also being of Somali origin.

# 2.2. Current prices of key food items and price trends

Traders, vendors, and consumers all reported that prices have increased sharply since the beginning of 2016, at times by 100%. The most frequent explanations offered by respondents for the price increases were the ongoing political conflict and the increasing strength of the US Dollar on international currency markets vis-à-vis the Mozambican Metical.

#### 2.2.1. Prices

A consistent theme of both the quantitative survey and interviews with traders was the sharp rises in food prices. Across locations and most food commodities, there was nearly universal agreement that prices had increased since the start of the year. Over 90% of all respondents

indicated that prices for maize, rice, cooking oil, and fish had risen over this period. Meanwhile, 8-in-10 (82%) of respondents indicated that the price of groundnuts had gone up, with slightly more (85%) indicating that the price of beans had risen since the beginning of 2016. Interviews with market chiefs and large traders showed that prices in Manica province increased more dramatically than in Zambezia province, as can be seen in Tables 3 to 5. However, in both provinces prices for cooking oil seemed to have increased most (prices almost doubled in Manica and Zambezia over the last 6 months).

Product	Manica, prices September 2016 (vs six months ago), in MZN				
	1kg Rice	1 kg Farinha	1 litre Oil	1 kg Beans	1kg Groundnuts
Chipudje	50 (25)	50 (25)	120 (60)	80 (25)	n/a
Save	50 (35)	50 (40)	130 (100)		
Chimoio	50 (40)	60 (40)	100 (45)	60 (30)	280 (150)

Table 3 Current food prices in Manica markets observed, prices in Meticais (MZN)

Product	Zambezia, prices April 2016, in MZN				
	1kg r Rice	1 kg Farinha	1 litre oil	1 kg b Beans	1kg g Groundnuts
Caia	25 -30Mts	20 -25Mts	75 -8oMts	50Mts	6oMts
Quelimane	25 -30Mts	35Mts	75 - 8oMts	4oMts	35 - 40Mts
Posto Campo	4oMts	35 -40Mts	8oMts	50Mts	50Mts

Chimwara	30 – 35Mts	50Mts	75 - 8oMts	35Mts	30Mts
Mopeia	35Mts	4oMts	75Mts	6oMts	50Mts

Table 4 Food prices in Zambezia province, April 2016 (in MZN)

Product	Zambezia, Prices September 2016, in MZN				
	1kg Rice	1 kg Farinha	1 Litre oil	1 kg Beans	1kg Groundnuts
Caia	5omts	50 - 55Mts	125Mts	8oMts	70Mts
Quelimane	50Mts	6oMts	120Mts	75Mts	100Mts
Posto Campo	50Mts	50 - 55Mts	140Mts	70Mts	
Chimwara	50Mts	70Mts	150Mts	75Mts	8oMts
Mopeia	50Mts	45Mts	150Mts	50Mts	50Mts

Table 5 Current food prices in Zambezia province, September 2016 (in MZN)

Among the key commodities surveyed, salt appears to have seen the least consistent or dramatic price increase, with only two-thirds (66%) of respondents claiming that salt prices have increased since the start of the year.

In general, there was agreement across locations regarding the direction of price changes. Notable exceptions were beans and groundnuts — in both cases, there was a universal consensus in Manica that prices had increased, while opinions in Zambezia were somewhat more varied. In Zambezia, 78% and 73% of respondents, respectively, believed that prices for these products had increased over the same period. In contrast, respondents in Manica seemed to suggest that salt prices had remained largely constant (71% claimed that the prices had not changed), while 84% of respondents in Zambezia believed they had gone up. These results suggest two key findings. First, prices are broadly perceived to have risen across most commodities and locations since the beginning of 2016. Second, price changes do appear to be location-specific in some cases, with Zambezia experiencing an increase in salt prices, while

Manica has experienced a broader – or more universally agreed-upon – increase in prices for groundnuts and beans.

The price increases appear to have had grave effects on all market participants--large traders, small vendors and consumers alike. As one trader stated, "There is no profit anymore because of the problem of the prices of the food [...]" (Male trader, 52, Mopeia Sede). A large regional trader from Quelimane also pointed out how much the costs for buying goods and transport have increased: "First is how to bring here the goods from where we buy. The second is the price for acquisition is high, for example a truck of goods that we would pay 800.000MT before, now we pay 1.200.000MT. Third is about the number of customers has reduced considerably" (Male Shop Manager, 42, Brandao market, Quelimane).

Many respondents indicated that the supply of goods was sufficient in the area, but that prices affected accessibility: one respondent noted, "There are a lot of goods here, but we can't buy them because the prices are too high." (Female consumer, 28, Chimoio). This type of comment was common in all focus groups and KIIs with market chiefs, government officials, and lower level vendors. Respondents also regularly discussed the current drought, rendering certain products difficult to come by, such as beans and groundnuts in Machaze. "Because of a shortage of rain this year, we don't have any harvest, and what we have available in this market becomes very expensive for us. The government promised to give the local population seeds resistant to drought for cassava and potatoes but they didn't" (Market Chief, Chipudje).

Some participants blamed the government for the price increases. In both provinces, male vendors stated the "war" or the "political situation" is to blame for increases. Others highlighted government mismanagement of the disappeared loan, donor mistrust, and money in general as root causes.<sup>5</sup> A male vendor from Chipudie stated for instance, "our last government, the problems with the loans, this is a consequence of it because they don't take responsibility for it" (Male vendor, 43, Chipudje). "Financial crisis" was also mentioned repeatedly by traders in Zambezia.

When asked how they dealt with these problems and how a possible solution would look, answers differed greatly depending on the type of respondent. One Zambezian trader reported buying goods from closer markets to avoid long commutes on conflict-prone insecure roads and high costs of transport. Traders in Zambezia reported lowering prices to make them affordable for possible customers.

Consumers and small vendors in many of the focus groups called for the government to step in to regulate prices in the markets, in a manner similar to how it has managed *chapa* fares in the face of price increases. Overall, when asked what respondents think are the causes for the increases, many blamed the vendors for marking up the prices. But with further probing on this issue, they also recognised that the vendors have little choice in the matter as their costs are

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<sup>&</sup>lt;sup>5</sup> In August 2016, the International Monetary Fund (IMF) critcised the Mozambican government for mismanaging large parts of the structural adjusment loan, which the IMF had granted Mozambique.

rising as well. Some blamed the government for a lack of regulation of the prices while others blamed changes in the value of the US Dollar (though not the United States itself).<sup>6</sup>

Another common theme was the prevalence of insecurity while transporting goods. For instance, one elite male trader in Machaze noted "because of war I can't order big trucks from Maputo, because they're afraid of crossing Muxungue because of the fighting. And this is one of the reason the prices are so high."

Study participants noted a wide variety of coping strategies used by consumers and vendors to deal with increasing prices. One woman detailed how some vendors cope by thickening oil to make it seem as though there is more in the bottle: "We put a candle in open oil because most of the oil needs to be melted. When it's cold, it becomes thin so it must be boiled...in order to get profit. The cooking oil becomes thin, so if you put in a candle it thickens it up." (Female vendor, 48, Chimoio) A summary of coping strategies used by residents in Manica and Zambezia to deal with the high prices and drought is shown in Table 6.

# Coping strategies of residents in Manica and Zambezia provinces

- Consumers buy in smaller quantities (e.g. cups of maize or rice instead of 1 kg)
- In Chitobe market, vendors now sell manhanha (a type of root found in the bush) for 5 MZN a handful because it is cheaper than regular food
- Some purchase lower priced items, such as bread, rather than cassava
- Consumers are substituting products that take less time to cook: for example, vegetables rather than beans. (Beans take longer to cook, and therefore require more charcoal, the price of which some consumers said has also risen)
- They resort to alternative markets, if possible
- In Chitobe, consumers talked of using *farelho* (maize normally reserved to feed chickens) for food, rather than the regular *farinho* which is more expensive.

Table 6 Coping strategies of residents in Manica and Zambezia provinces

Participants made clear that the consequences of price increases were not limited to economics. For instance, female consumers in Chimoio attributed increases in domestic fighting with their husbands to the price changes – husbands provide them with a set amount of money each month for food purchases in the market and that money purchases less food than it previously did.

<sup>&</sup>lt;sup>6</sup> Many respondents noted the increasing strength of the US Dollar relative to the Mozambican Metical (MZM). However, this trend appears to have been driven by inflation in Mozambique, rather than international demand for the dollar, as the same trend affects the value of other international currencies relative to the MZM. For instance, since January 2016, the USD-MZM exchange rate has increased 61%. Over the same period, the exchange rates between the MZM and the Euro, British Pound and South African Rand have increased 64%, 33% and 76%, respectively. Because the depreciation of the MZM has occurred across a range of currencies, it suggests that domestic inflation is the root cause, rather than changes in the international demand for the dollar.

# 2.2.1. Availability of Goods

The MOS addressed the availability of goods in local markets, and the data suggest that many key commodities are not consistently sold by vendors and are generally perceived to be either unavailable or not consistently available in local markets. Importantly, there are dramatic differences across locations in the availability of particular goods: some products rarely seen in one location are widely available in others. This report addresses the issue of availability in two ways. First, it discusses the products stocked by the sampled vendors which provides a representative snapshot.

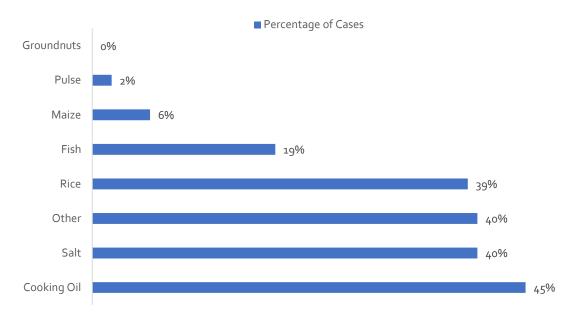


Figure 2: Main items sold by vendors interviewed in quantitative survey (N=95, multiple response options)

Second, it leverages respondents' local knowledge of the market to determine what products they perceive to be available or unavailable in their areas.

When asked about key commodities sold in the stalls visited, four items stood out: cooking oil, salt, rice, and fish were the products most often sold by respondents in the sample. Figure 2 shows the frequency with which respondents sold these key commodities.

When respondents were asked about the broader availability – beyond their specific stock – of products in their local markets, their answers generally mirrored those presented in Figure 2. For instance, they generally felt that cooking oil was available in sufficient quantity in their market, while most felt groundnuts were not sufficiently available. However, for most products a significant share of respondents felt that insufficient quantities were available (Figure 3).

<sup>&</sup>lt;sup>7</sup> Notably, vendors also sold other products, including tomatoes, onions, and sweet potatoes. However, this analysis focused on pre-identified key commodities and their availability in the market, rather than highlighting all available products.

The results presented in Figure 3 mask significant differences across market locations. To illustrate, according to respondents in Zambezia, maize is generally – though not universally – available in their market. Just under 60% of respondents in Zambezia indicated that maize was "always" available, and just 5% stated that it was "rarely" or "never" available. In contrast, over one-third of all respondents (36%) in Manica stated that maize is never available in their market. Even more worrying, a further 42% of Manica respondents stated that they did not know whether maize was available in their market; while it is unclear what a "do not know" response means in this context, it might suggest an even larger share of respondents who are unable to access maize in the marketplace.

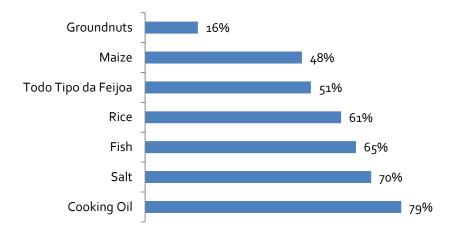


Figure 3: Percentage of respondents stating that a product is available in sufficient quantities in their market

The largest differences between regions occurred in the availability of maize, pulses and cooking oil (Figures 4, 5, and 6). As with maize, a similar pattern is found with regard to pulses—respondents in Zambezia report comparatively consistent availability of pulses, while many respondents in Manica report that pulses are never available. The pattern is reversed somewhat with regard to cooking oil, highlighting the presence of commodity-specific differences across regions. To investigate these discrepancies in greater detail, the next section provides an overview of available products in each of the three locations.

# Manica and Zambezia Market Mapping Project | September 2016

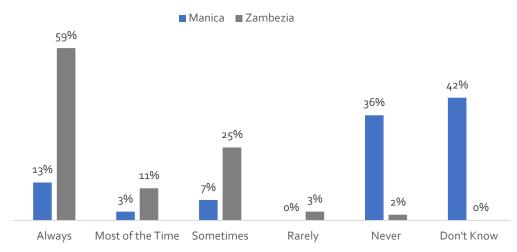


Figure 4: Availability of maize on the market, by province

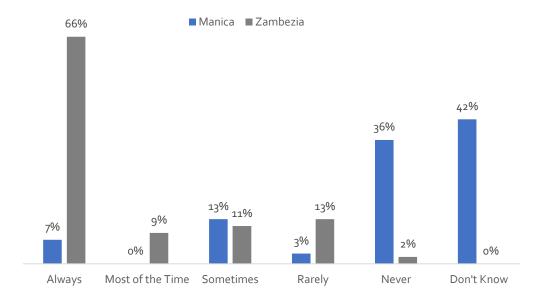


Figure 5: Availability of pulses on the market, by province

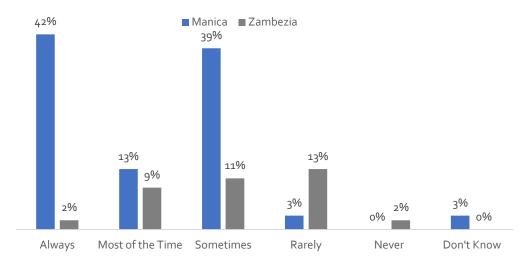


Figure 6: Availability of cooking oil on the market, by province

#### Zambezia

While the above figures highlight the differences between Zambezia and Manica broadly, the availability of produce also varied widely between markets within Zambezia Province. Markets in Mopeia and Caia offered a variety of basic goods – such as maize, fish, vegetables, cassava, salt, sugar, and pasta – but markets in Chimwara and, in particular, Posto Campo had a smaller supply. In Chimwara, fish from the Zambezi river, tomatoes and cabbage were prevalent. On the day of visitation, only vegetables such as these were being sold at Posto Campo market. Pulses were rarely available overall, which one government representative in Mopeia Sede attributed to the recent drought.<sup>8</sup>

Not surprisingly, the availability of goods and supply in the Zambezia markets decrease during the rainy season due to the poor road conditions. Security concerns and the ongoing conflict in the region also influence availability, as well as the number of consumers visiting the regional markets. Consumers and vendors alike stated they were afraid of being targeted en route to markets by military forces and/or attacked by rebel groups. According to Mopeia traders, the ongoing conflict has resulted in fewer vendors risking travel to the markets than would normally occur. Recent floods and the drought were also mentioned to have reduced the supply on the markets. But not all products are more difficult to come by: some claimed that too many vendors tried to sell maize in different forms (i.e. maize grains or flour) at their market.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> This finding is consistent with the MOS results, which found that just 3% of vendors in markets in Zambezia Province stock pulses.

<sup>&</sup>lt;sup>9</sup> Interviews with government representative and market chief, Zambezia, September 2016.

#### Beira

Traders mentioned a sharp increase in prices causing a shortage in supplies at the main markets in Beira. Unlike traders in other regions, they did not explicitly mention conflict and insecurity as reasons for a decrease in the supply of key commodities. Both traders interviewed reported that too many vendors try to sell chicken at the market.

#### Manica

The availability of products in Manica appeared to be dependent on several issues. Many respondents cited the drought and the fact that *machambas* (small gardens) are not producing sufficient goods, leading to an increase in prices. Respondents also noted the inaccessibility of roads during the rainy season (increasing travelling times and rendering some areas inaccessible altogether) and the "war" in causing fear amongst vendors moving products from area to area. Other participants referenced the still-rising prices as the primary reason why some key commodities were not locally available.

Attitudes toward availability also appeared to depend on the socioeconomic status of the respondents: elite traders in Chimoio were quick to point to the current conflict in the central region as their main challenge, while small scale traders in rural areas highlighted the drought and prices for imported goods such as maize and rice. Those traders falling in-between these economic groups cited both issues.

# 2.3. Overview of supply chains, including key routes

This section provides an overview on supply chains in Manica and Zambezia, based on the major findings drawn from qualitative and quantitative interviews.<sup>11</sup>

#### Smaller vendors

Whilst bigger traders established supply routes that went beyond their region or province, the majority of smaller vendors reported purchasing key supplies from local vendors within the province. Only one respondent in the MOS (1%) stated (s)he buys goods outside the province, a trend which could be observed across all regions.

Smaller vendors restock their goods quite frequently, with 85% (N=78) buying supplies at least once per week. In Zambezia, the frequency is higher than in Manica, with one-third (35%) of

<sup>&</sup>lt;sup>10</sup> Note that some participants in Manica specifically used the term '*guerra'* (war) rather than simply calling it a political issue or a conflict.

<sup>&</sup>lt;sup>11</sup> While Beira is an important supply market for traders across regions, it was not a suggested focal city for this project and the documentation of key supply routes.

respondents buying supplies daily before selling them in their stalls. In Manica no vendor reported buying supplies daily in this way.

# **Bigger Traders**

When asked about trade routes, one regional trader stated he "(...) rent trucks, sometimes we buy goods containers in Beira, Nacala and Maputo."<sup>12</sup> Notably, this trader referred to buying goods in containers, thus implying a large supply capacity. Large traders in Caia and Mopeia reported they mainly import goods from the bigger cities, further stressing the importance of urban areas for regional supply: "I rent a car to get the goods from Beira, Nampula, Quelimane to bring the products in my shop"<sup>13</sup>. Whilst most traders transported their goods from the source directly to their shops or storage unit by car, transportation was cited as a difficulty in remote areas. One vendor noted he must use several means: "I transport by car from Quelimane, Caia and Morrumbala until Lua-lua. From Lua-Lua, I rent a motorcycle to Posto campo market. [sic]"<sup>14</sup>

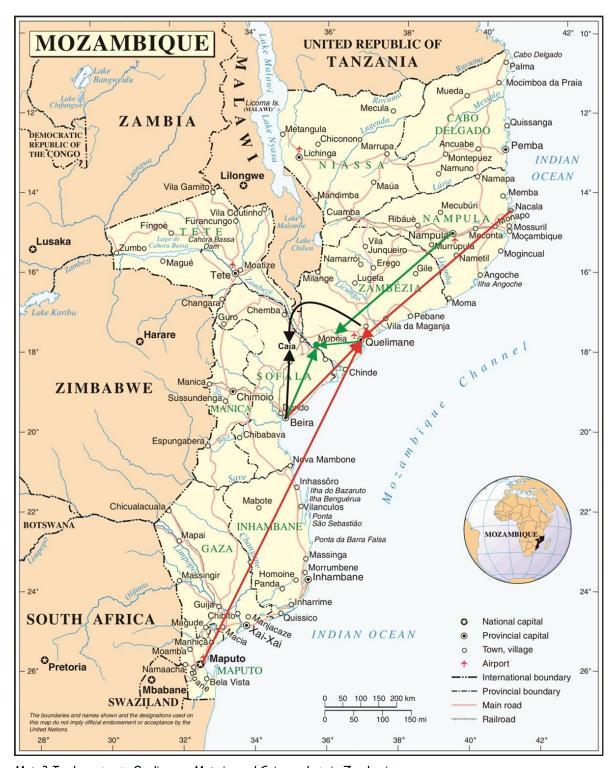
Overall, large traders in Beira were not responsive when asked about their trade routes. However, smaller traders stated they receive supplies from different markets in Beira and "big suppliers located in other markets like Esturo, Pioneiros, Vaz, etc."<sup>15</sup> Based on key findings drawn from Klls, Map 2 below illustrates the trade routes in Zambezia province for markets in Quelimane, Caia, and Mopeia (also see Appendix Map 4 for specific product routes).

<sup>&</sup>lt;sup>12</sup> Regional trader, Quelimane, September 2016.

<sup>&</sup>lt;sup>13</sup> Trader, Mopeia Sede, September 2016.

<sup>&</sup>lt;sup>14</sup> Trader, Posto Campo, September 2016.

<sup>&</sup>lt;sup>15</sup> Trader, Beira, September 2016.



Map 2 Trade routes to Quelimane, Mopeia, and Caia markets in Zambezia

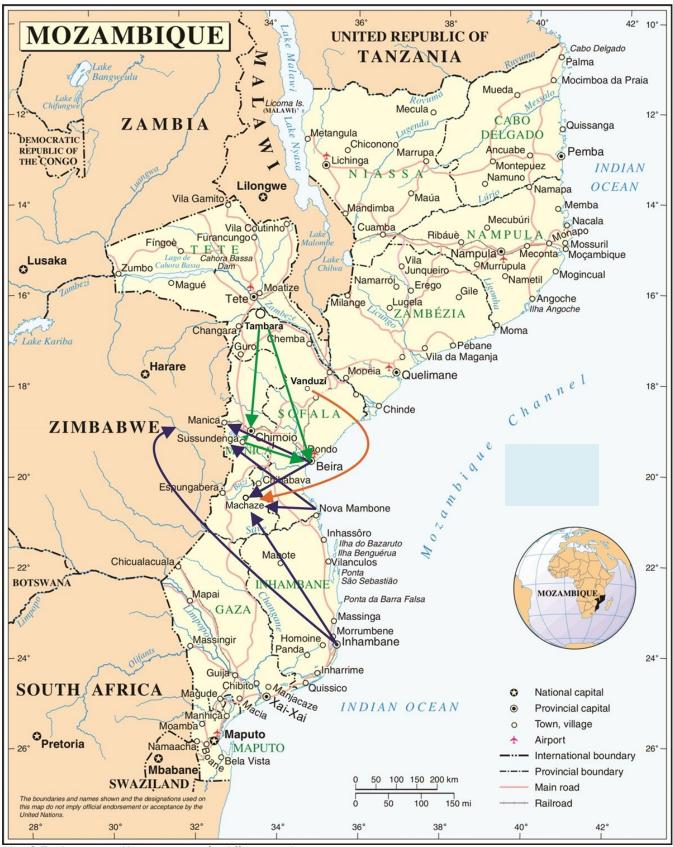
In Chimoio, products generally tend to move in from other main areas such as Beira, Inhambane, Gorongosa, and Inchope. One of the largest vendors in the region purchases

regularly from Thailand, India, and China. A second large vendor purchases food mainly from Maputo and Beira, and internationally from South Africa, India, Pakistan, and Turkey.

In Mercado 38, a key market in Chimoio, local produce comes in from surrounding rural areas where women have *machambas*. Small vendors described product chains as shown in Table 7 and Map 3 below (also see Appendix Map 5):

Product	Originating from	Intermediary	Market Destination
General produce	Nvusi, Macate, Tambara, Massangaze, Nyambirara, Muchoze, Sussundenga, Boa Vista, Zambia, Nhabuta, Zembe,		Gondola, Catanga, Inchope,
Cabbage	Macate, Vanduzi, Rotanda, Rotunga	Mercado 38	Muxungue, Machaze, Mussorize,
Milho	Tambara, Sussundenga	in Chimoio	Local neighborhoods around Chimoio, Inchope, Beira
Dried fish	Beira, Inhambane, Mambone		Sussundenga, Machaze, Manica, Machipanda,

Table 7: Trade routes in Manica province



Map 3 Trade routes in Manica province for different goods

See Appendix Maps 6 and 7 for the following trade routes, discussed extensively here. In Chitobe (the central market for Machaze), many products come in from Chimoio, Nampula, Beira, and Muxungue. Some vendors also discussed bringing in certain items (such as maize, potatoes, onions, bicycles, and plastic goods) from South Africa to save on costs, but this has been hampered by the political conflict. Oil comes from Nampula, which has factories that produce it, while milho comes from factories in Beira and Chimoio. Rice enters from the Beira port, as it is being purchased from Asian countries. In this market, small vendors enter regularly to purchase goods to take back to their home villages (such as Chipudje and Save). Smaller vendors then purchase from areas like Save to sell in their more rural communities.

In Save, beans and maize are produced locally (or brought in from Sussendenga and Chimoio), so are seasonally dependent. Vegetables come from *machambas* close to the river, generally taking residents one day of round trip travel (usually by bicycle). Two of the larger vendors in Save transport goods from Muxungue, Chimoio, Beira, and Maputo (with at least one importing oil from South Africa), but the southern areas are hampering the movement of product due to the political conflict along the north-south roads. From Save, products then travel to much smaller communities such as Mavende, Sambasoca, and Massisanga.

Small areas like Chipudje generally only have consumers entering the market to purchase products (rather than other vendors entering, purchasing, and reselling goods).

Many discussed pooling resources to purchase products, for example by communicating when a neighbor is travelling to Chimoio so as to share costs for goods or petrol. This is preferable to travelling by chapa, as the round trip takes two days by bus. Products in Chipudje generally come in from Chimoio, Chitobe, Chissanguane and Muxungue. Asian vendors in Machaze have a positive reputation amongst smaller vendors and consumers, as they are perceived as offering lower priced products than Mozambican vendors in other areas.

Other product routes are as follows: vegetables come from areas close to River Buzi, but some said this is not generally a viable option, as it takes two days to travel round trip by bicycle. Fish comes from Inhambane (usually sardines, mapula, and maquangua). It also comes from Chissanguane, but the round trip travel distance is one day.

# 2.4. Absorption Capacity of Local Markets

This section highlights the capacity of local markets to absorb increased demand and supply of products. The ability to absorb additional demand is a key factor in adjudicating between voucher-based distribution of food aid and direct food aid, because voucher approaches are only efficient if there is sufficient supply of food for beneficiaries to redeem the vouchers. This section emphasizes two types of absorption capacity: the physical ability of traders and vendors to store sufficient goods near the market, and the ability of traders and vendors to increase stock in sufficient quantities and with sufficient speed to response to upticks in demand.

Overall, traders in Zambezia and Manica seemed to have sufficient storage capacity to accommodate goods for a voucher fair. As we note in section 3.6 below, most traders and vendors were willing to participate in a voucher programme, but some – especially traders in Beira – cited storage limitations as a key barrier to their participation. A majority of respondents in the MOS (74%), and most of the larger traders interviewed in the KIIs, had access to at least one storage unit, although type of storage varied (Figure 7). Differences between provinces in type of storage were not significant but, as would be expected, larger traders noted access to additional storage areas.

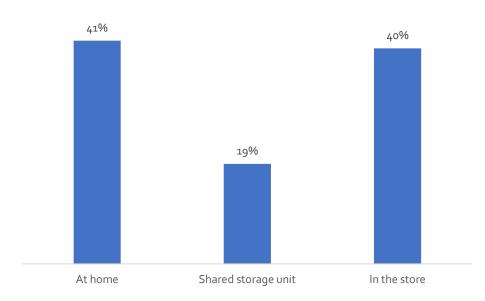


Figure 7: Types of storage units used by vendors on markets in Zambezia and Manica

In Zambezia, most traders stored their goods in the shop, while larger traders had access to extra storage space in town. Most Mopeia and Caia traders have extra storage possibilities in case of a sudden increase in demand (only one in Mopeia did not). The two traders interviewed in Beira have a storage room attached to the shop. One respondent said he purchases most of his goods locally, while the other larger one transports them by truck from Etsuro and Pinueiro. The market chief noted goods also come in from Maguinino.

In Manica, the availability of storage was more extensive. There were large traders in Chimoio, and several middle-scale traders in Machaze. One large trader in Chimoio had five shops and large storage units that hold 10,000 tons, 20 trucks (35 tons each), and small vehicles to use during the rainy season when the large trucks have difficulty travelling to rural areas via unpaved roads. A second large trader had ten large trucks, five large warehouses that hold 1,000 tons each, and he regularly supplies to government and NGOs. One middle-scale trader in Save had an outside storage until that could store 60 tons, and access to vehicles. Another in Chitobe had five shops (three in Chitobe, one in Save, and one in Chipudje), with a six ton

vehicle to use during the rainy season (and access to a ten ton vehicle during the dry season), and four storage units.

In general, storage existed in all of the Manica markets, but their rental prices varied. In Chimoio, small and middle-scale vendors either had their own space, or they rent a space for 300 MZN a month in a nearby location (others rent space for 30 MZN a bag until the bag is finished). Some pay as low as 8 MZN a day to store products.

Beyond storage capacity and the ability to move products, there were concerns among many vendors and traders that they would be unable to obtain sufficient quantities to respond to increased demand from a voucher fair. These concerns were concentrated by location, which is unsurprising, given the significant differences in the size of markets, access to regional markets, and other factors that shape available supply. Traders in Mopeia indicated that they could travel to Quelimane with both cars and trucks for additional supplies, while Caia vendors would travel to Beira. Most participants in Mopeia and Caia indicated they could scale up with their existing suppliers, or that they could contact additional suppliers in Quelimane, Morrumbala, Beira, and Nampula.

Among KII participants in Zambezia, opinions were generally, if tentatively, positive regarding their ability to increase supply. Somewhat over half of participants suggested that they could increase supply, while others cited high prices as a reason they could not accommodate increased demand. Similarly, Zambezia participants did not think their current suppliers could readily increase their capacity to supply local markets. Perhaps in response to the role of increased prices in tightening available supply, two participants suggested they could increase supply more efficiently if regional traders were willing to supply them on credit. This suggests a possible alternative approach, in which a voucher fair is combined with credit guarantees of some type between vendors, traders and facilitating organisations such as Concern.

In contrast, traders and vendors in Beira were sceptical of their ability to respond to increases in demand. None of the larger traders in Beira felt that the market could support an increase in demand, and smaller vendors concurred. Several participants noted that prices for vendors have increased so much recently that they had to buy less goods from bigger traders, affecting the supply at the market; a dramatic increase of supply, therefore, could be problematic. One respondent stated, "I do not think the Beira market would able to reply to that demand; day after day with products becoming more expensive and some of them are even disappearing from the market" (Trader, 50, Beira).

# 2.5. Potential barriers to market interventions (seasonal or others)

Overall, the potential barriers to market interventions cited by respondents do not involve a simple supply and demand chain for products. Instead, barriers involve much larger challenges: climate change, poor roads and infrastructure, and political conflict. Elite traders discussed the current political-military conflict in the central part of Mozambique as their most pressing

current barrier. One elite male trader in Chimoio stated he previously had vendors traveling from areas like Catandica, "but they aren't coming anymore because of the military tension. The drought isn't the problem."<sup>16</sup> Another stated:

"I get beans from Tambara, so I have a convoy that goes there. Sometimes it takes two days as I wait for the convoy, I'm wasting money that way. I have to cover gaps. One of the problems is that we can't travel freely to get goods because of the military tension. Takes a long time to go there and back. We have to do it in military convoys for safety."<sup>17</sup>

Lower level vendors were more likely to highlight drought and seasonal variations as their central challenges. During the dry season (or a drought such as the current situation) women are unable to work in the *machambas*, fruits and vegetables such as lemons, lettuce, bananas, cassava, and potatoes don't make their way to the market, and the women have few to no alternatives for employment. "Sometimes there's no sweet potato, or cassava disappears. You might have 50 mets to buy it, but then you come to the market and there's no cassava to buy." 18

#### Zambezia

In Zambezia, most vendors recognised fluctuations in business during the rainy season. Due to inaccessibility of roads, fewer customers attend the markets. At the same time, others noted how "in the rainy season and in the harvest time campaign of sesame, there's good selling because the people have money because they have sold the products from their farms." Market chiefs and local leaders in Zambezia highlighted the drought and political conflict as the central challenges affecting road security and trade in the region. <sup>20</sup>

#### Manica

Transportation is also a central issue in Machaze. During the rainy season, the roads turn problematic as vehicles become stuck in the mud, large vehicles cannot get through, and vendors are forced to use smaller 4x4s. One vendor in Chimoio also noted the use of cows to collect goods and rescue stranded vehicles (by pulling them out of the mud), which created additional costs. Many travel long distances—often two days by bicycle—to access the markets. In much of Machaze (particularly Chipudje) no storage space exists on the scale Concern proposes for fairs, thus raising the possibility of splitting products between smaller storage units).

<sup>&</sup>lt;sup>16</sup> Elite trader, Chimoio, September 2016.

<sup>&</sup>lt;sup>17</sup> Male vendor, 39, Chimoio, September 2016.

<sup>&</sup>lt;sup>18</sup> Female vendor, Chimoio, September 2016.

<sup>&</sup>lt;sup>19</sup> Male vender, 32, Chimwara, Setember 2016.

<sup>&</sup>lt;sup>20</sup> Trader, Mopeia Sede, September 2016.

<sup>&</sup>lt;sup>20</sup> Trader, Posto Campo, September 2016.

#### Beira

Similar to the aforementioned areas, one respondent in Beira stressed that prices "have been drastically going up and because of that the numbers of customers has been decreasing, which negatively affects the business in this market." One trader highlighted that theft from his factory poses a problem for a successful business, whilst another trader stated the strong US Dollar was responsible for the increase in prices. <sup>22</sup>

# 2.6. Appropriate responses to emergency situations

This section describes the exposure respondents have had to emergency food distribution programmes in general, and vouchers in particular. It also discusses the willingness and ability of vendors and traders to participate in a voucher programme.

Overall, exposure to voucher fairs and programmes as a means of food distribution has been extremely low; respondents in Zambezia were more aware of vouchers as a method for food distribution than those in Beira or Manica, but no small vendors in any locations had received a food voucher as payment from a customer in the past. Meanwhile, large traders appeared to have the capacity to participate in a voucher fair, but the willingness or interest in doing so varied markedly across regions.

# 2.6.1. Exposure to and Acceptance of Vouchers

Most participants had little previous exposure to food vouchers and voucher fairs. None of the small vendors in Manica and Zambezia had previously received a food voucher by a customer. Larger traders indicated more exposure to these types of programs, though this was dependent on province.

#### Zambezia

Bigger traders in Mopeia Sede indicated via KIIs that WFP had previously implemented similar programmes, but none of them had been directly involved in them.<sup>23</sup> Several traders raised serious concerns over the logistics of financial transactions regarding goods at voucher fairs and one large trader noted "some organisations are slow to pay."<sup>24</sup> One Mopeia trader emphasised the need for proper supervision by the implementing organisation and demanded timely reimbursement:

<sup>&</sup>lt;sup>21</sup> Market chief, Beira, September 2016.

<sup>&</sup>lt;sup>22</sup> Traders, Beira, September 2016.

<sup>&</sup>lt;sup>23</sup> Traders, Moepia Sede, September 2016.

<sup>&</sup>lt;sup>24</sup> Elite trader, Quelimane, September 2016.

"Because some organisations are not serious, they [sign a] contract but they delay to pay. For example there is an organisation that signed a contract with me and now have gone three months without paying."<sup>25</sup>

In Posto Campo, Chimwara, and Caia, traders seemed less concerned and more willing to participate under the provision that the distances between the fair and local markets are not too long. One shop owner in Caia saw positive potential in participation: "It would be a good idea, yes, for key commodities, because it would benefit the traders. We would have many customers." Another large regional trader in Quelimane focused more on the social aspect of a possible intervention: a voucher fair would be "(...) very welcomed. We should help each other." 27

#### Beira

Traders interviewed were very critical about the idea of a voucher fair and stated they would not like to participate in such an event (only one said he would). Key barriers to participation are storage limitations and the potential for beneficiaries to sell vouchers. Both traders interviewed preferred direct food distribution over other methods.

#### Manica

While key traders in Chimoio had heard of vouchers, only a few of the smaller traders had (mainly from television), and virtually no consumers expressed knowledge of them. One group in Chitobe discussed an example in which the World Food Program targeted a rural area with a list of food beneficiaries. Upon leaving, however, the local leaders changed the names on the list to distribute the food to favoured others. None of the vendors, traders, or consumers thought direct food aid was a good idea. All preferred that the consumers, rather than the vendors, receive the vouchers. The reasons for this differ:

Direct food aid "is not very good. This will cause problems—if the NGOs bring food, then people will come from far away and sit and wait and say they don't feel well, and this takes too long, we're stuck here. It's better that every two weeks I go to Omar [local vendor] to get my food, and it's better than waiting in a queue and causing problems."<sup>28</sup>

"People could use feticeiros, it would cause local problems."29

"We would take care of this consumer card the way we do about our ID cards, so we don't lose them. We would prefer this because the vendor would hide the card, and say, no I don't have your card with me I haven't seen your card."<sup>30</sup>

<sup>&</sup>lt;sup>25</sup> Trader, Mopeia Sede and Chimwara, September 2016.

<sup>&</sup>lt;sup>27</sup> Elite trader, Quelimane, September 2016.

<sup>&</sup>lt;sup>28</sup> Market chief, Chitobe, September 2016.

<sup>&</sup>lt;sup>29</sup> Female consumer, Chipudje, September 2016.

<sup>&</sup>lt;sup>30</sup> Female consumer, Chipudje, September 2016.

"If the organization comes to give food directly, there will be people who don't receive it and it will cause problems."<sup>31</sup>

"There wouldn't be security for the trucks when they are coming in, people would steal."32

Some respondents indicated a preference for limits on the role of community leaders in the voucher process, suggesting mistrust of them. For instance, one respondent stated, "it would be better for the *secretario do bairro* to register the recipients so they know exactly who would be getting food. But the shop should distribute the food, not the *secretario*."<sup>33</sup> Overall, research participants in Manica were sceptical of the value of direct food aid, citing the potential for theft, long waits in queues for food distribution, social problems within the community, and corruption among local officials in aid allocation.

### 2.6.2. Ability of traders to participate

Logistically, larger traders in all regions had the capacity to participate in the voucher fair, with particular regards to increase in supply on short notice, availability of trucks, and storage capacities. However, willingness to participate in such a fair differed between regions.

#### Zambezia

Larger traders in Mopeia Sede and Caia reported having storage capacity and means of transport to increase supply on a relatively short notice. A large trader from the old market in Mopeia Sede stated: "Yes, I would get the products in less than a week, I can supply with rice, I get a truck that remains [sic] for more than a month."<sup>34</sup> Additionally, regional traders from Quelimane reported to have a high stock turnaround: "We provided 100 tons of food products to the INSS [National Institute of Social Security]." The other regional trader interviewed in Quelimane reported similar numbers, indicated he received around 300 tons of various goods in the previous month, which were stored in his own warehouses in different locations in town.<sup>35</sup>

On the other hand, the inclusion of local traders from Posto Campo in a future voucher fair could be difficult, as the largest trader in the village noted: "I would not be able to accommodate. Because of my economy and I do not have enough stock."<sup>36</sup>

Aside from storage capacity, traders were concerned about the security situation on the roads, which is corroborated by respondents stating that they fear using roads and taking long

<sup>&</sup>lt;sup>31</sup> Male vendor, Chitobe, September 2016.

<sup>&</sup>lt;sup>32</sup> Male vendor, 25, Chitobe, September 2016.

<sup>33</sup> Male vendor, 45, Chipudje, September 2016.

<sup>&</sup>lt;sup>34</sup> Trader, Mopeia Sede, September 2016.

<sup>&</sup>lt;sup>35</sup> Regional Trader, Quelimane, September 2016.

<sup>&</sup>lt;sup>36</sup> Trader, Posto Campo, September 2016.

distances due to the ongoing conflict. A trader in Mopeia said the "political and military situation makes it difficult to transport the goods from out the district of Mopeia".<sup>37</sup>

Traders in Mopeia preferred direct distribution over food vouchers, corresponding with their aforementioned more critical comments. This points towards distrust regarding reimbursement and is partially based on negative experiences. Establishing trust, ensuring timely reimbursement and emphasis on fair payment could help create a more accepting environment for the distribution of food vouchers. In Mopeia and in Chimwara, the local government representatives recommended Mopeia as the best location for a voucher fair. Caia also seems to be easily accessible and has the advantage of having a larger number of traders who could participate.

#### Beira

Traders in Beira were more critical toward participation in a voucher fair, as described above. Additionally, the bigger traders were concerned about adaptability to a sudden increase in demand:

"I do not think the Beira market would be able to reply to that demand day after day, products becoming more expensive, and some of them are even disappearing from the market. But I also do not think demand could increase in that time frame because these days almost everyone is broke."<sup>38</sup>

Another trader stated: "Because we do not import much of our products we buy them locally and recently they are more expensive and some tend even to disappear, and if demand was to increase in that time frame we do not think we would be able to accommodate it."<sup>39</sup>

#### Manica

Chitobe traders reported they have space. They indicated a scale up in product could occur if the products are divided up between them and they could each store some of it (as there may not be space in one location to store product on the scale Concern proposes). One issue discussed by vendors pertains to security in transporting free food:

"The problem is security of transporting it when it's coming into Machaze for the fair because there will be a lot of people that attend, and they'll know that there's free food coming in, and then security will be an issue."40

Another vendor added "with the fair, people could fight over the cards [...] and this wouldn't work without the police escorting the vehicle, it just wouldn't work." <sup>41</sup>

<sup>&</sup>lt;sup>37</sup> Trader Mopeia Sede, September 2016.

<sup>&</sup>lt;sup>38</sup> Regional trader, Beira, September 2016.

<sup>&</sup>lt;sup>39</sup> Regional trader, Beira, September 2016.

<sup>&</sup>lt;sup>40</sup> Male vendor, 25, Chitobe, September 2016.

<sup>&</sup>lt;sup>41</sup> Male vendor, 45, Chitobe, September 2016.

While one key vendor in Save was open to the idea of a fair, the main vendor in Chitobe was not. Overall, vendors in Chimoio were more open than those in Machaze to the idea of fairs: "Yes, we would be willing to participate—the issue is the proximity of areas. There wouldn't be security issues because we'd use two armed security guards. We have drivers, containers, trucks, security guards, everything."<sup>42</sup>

<sup>&</sup>lt;sup>42</sup> Elite trader, Chimoio, September 2016.

### 3. Conclusions and Recommendations

#### Indicator

#### Conclusions

#### **Food Prices**

Prices for key commodities such as maize, rice, cooking oil, etc. have sharply increased in markets in Manica, Zambezia, and Sofala provinces. These increases are likely to continue as the metical depreciates.

This sudden increase has affected consumers and all levels of traders (small, medium level, and large). Traders and vendors reported that consumers now buy fewer goods and consumers reported reverting to less expensive goods, such as subsidized bread instead of cassava as a coping strategy. In rural Manica, some noted now eating maize intended for feeding animals instead of the regular *farinha*, because it is cheaper. Also in Manica, women reported in qualitative interviews that the rise in prices also led to domestic quarrels with their husbands, as they could not purchase the same amount of goods with their allocated money.

Smaller vendors tended to see the recent drought and the political situation as responsible for the increase, whilst larger traders painted a broader picture, also naming a strong US Dollar, the political conflict, and the general economic recession as causes contributing to increased prices.

Vendors interviewed in the quantitative survey mentioned rice, pulses, groundnuts, and salt as key goods. However, availability of goods varied greatly between regions and even between markets within a province. A majority of respondents in Zambezia stated that maize and pulses were available at least most of the time, while respondents in Manica claimed the opposite. In contrast, cooking oil was available at least most of the time for a majority of respondents in Manica, but not in Zambezia.

Despite regional differences (e.g. market locations close to the Zambezi offered an abundance of fish) market size seemed to be the overall determining variable for the diversity of supply.

# Supply Chains and Key Trade Routes

The majority of smaller vendors interviewed in the MOS state they buy key commodities predominantly from traders within their province. They also reported restocking goods frequently, with around 85% claiming they do so at least once a week. More than a third of vendors interviewed in Zambezia stood out with restocking goods daily, which is likely a sign they have small or no storage capacities.

On the other hand, traders interviewed in KIIs purchase their goods in large markets in the provincial capital (inside or outside their region). Beira and Quelimane stood out as important markets for supplies of goods (Quelimane being mentioned by respondents from Zambezia and Sofala provinces, whilst Beira was important for respondents across all regions).

Along with the aforementioned supply markets, regional traders from Quelimane

also purchase goods by container from the capital of Maputo. Traders in Beira purchase their goods mainly from other markets in town or surrounding areas, such as Esturo, Pioneiros, and Vaz.

In Chitobe (Machaze district), traders also imported goods from South Africa, although this supply route is currently affected by the ongoing conflict in central Mozambique. In Manica, the cities/towns of Nampula, Chimoio, and Muxungue serve as key regional supply markets where smaller traders and vendors purchase commodities to sell in their home village markets.

The main transportation for moving stock consists of cars, trucks, and bicycles or motorbikes (for smaller vendors in field posts). Traders try to buy more locally and avoid taking long commutes whenever possible in order to compensate for poor road conditions and the unstable political situation. This is especially true for smaller vendors and traders. Larger traders highlighted as a key challenge the political conflict affecting their trade, but this did not seem to effect geographical change in their trade routes.

### Absorption Capacity Markets

Traders in Zambezia and Manica reported they have enough storage capacity and overall financial means to accommodate goods for a voucher fair. With some differentiation between the regions, they were generally willing to participate in a voucher program. Traders in Beira were more critical about participating in a fair, citing the storage problem as a key concern.

A majority of vendors, and in particular large-scale traders, had access to a storage unit of some type. Vendors interviewed in the MOS reported to have either a storage room attached to the shop, at home, or shared with other vendors. Differences between provinces in type of storage were not significant. Larger traders mentioned having extra storage rooms and additional capacity frequently in the KIIs.

In Zambezia, traders from the larger markets in Mopeia Sede and Quelimane were most optimistic in being able to accommodate a sudden increase in demand. They stated they could bring additional goods by car or truck from Quelimane, Beira, and Nampula to store in their facilities. A similar picture presented itself in Caia (Sofala), where a lively market and connection to public transport and truck routes provide opportunities for several larger traders.

Traders interviewed in the bigger markets in Beira also reported that they have large storage facilities and the capacity to increase stock on short notice. However, at least two of the interviewees were skeptical about the capacity of the markets to deal with a sudden spike in demand and were reluctant to participate in a food voucher fair.

In Manica, several large traders in Chimoio and middle-scale traders in Machaze had the storage capacity and the means of transport to participate in a voucher fair in the future. One of the key traders in Machaze was not willing to participate in a fair, preferring the vouchers be used in shops.

# Potential barriers

Traders and consumers mentioned multiple barriers that prevented trade in their region. Lower level vendors saw drought and the increase in prices as major obstacles. Larger traders painted a more macro-level socioeconomic picture: the political conflict, poor infrastructure and conditions of the roads during rainy season, and a strong US-Dollar.

Limited availability of key goods presents a critical barrier. As noted above, regional availability of different goods varied significantly. In some markets, staple products like maize were routinely unavailable.

# Appropriate Responses

A majority of respondents in all interviews had not been exposed to a food voucher programme in the past. In all three regions, larger traders in the big (or bigger) markets (Quelimane, Mopeia, Caia, Beira, Chitobe, Chimoio) had the storage and logistical capacity to participate in a voucher programme. However, willingness to participate differed between location: in Zambezia, larger traders from Mopeia Sede were more skeptical than traders from Chimwara and Caia. They were worried mostly about timely reimbursement and profitability. To a certain extent these concerns were also shared by traders in Beira and Manica.

In all regions, participants preferred vouchers given to customers rather than a list retained solely by a vendor. The key reason for this was the fear of manipulation. Some traders in Zambezia preferred direct food distribution over a voucher fair, but the majority of all respondents preferred a voucher programme.

#### Recommendations

Since prices vary between regions, vouchers should account for these differences.

Supply routes: due to the political conflict and overall poor infrastructure in these areas, long transport routes are unadvisable. Wherever possible, local traders should be involved to allow for shorter trade routes (and lower cost).

Implementers should weigh the pros and cons of using a fair over utilising the already existing shops, particularly in Manica. Because Manica is extremely large and predominantly rural, fairs are only likely to work if there are multiple locations involved. Residents in this province often spend 1-2 days travelling for products, so geographical proximity is a crucial issue.

Using multiple traders in smaller markets to allocate the amount of goods (whether for a fair or in the shops) is both feasible and recommended. This will create local profit and ownership, and allow for more vendors to be involved in scaling up economic activity within the smaller areas.

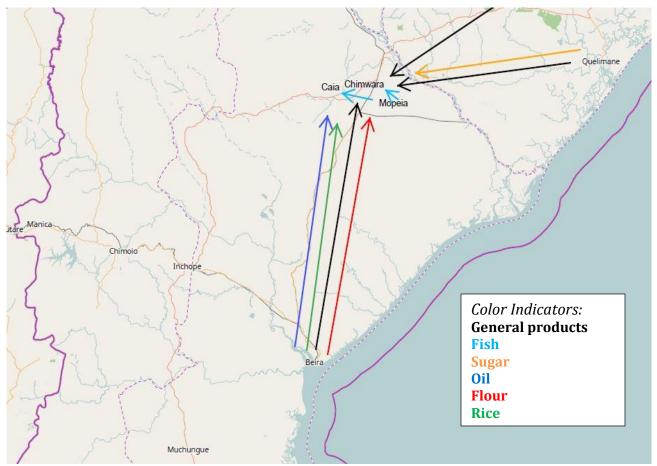
Markets in Mopeia, Caia, Chimoio, and Chitobe are likely best suited for voucher fairs due to the size of the markets, accessibility and the number of middle-level and large traders. Traders in more remote areas have capacity to scale up, but may need assistance with additional resources such as alternative transportation or larger storage spaces.

Follow up discussions should occur with the key traders in each area to assess capacity for mentorship. For example, Concern has as a goal the possibility of working with middle-level traders. While large-scale traders have easy access to multiple forms of transportation and storage, security for vehicles, and the like, middle-level traders have more sporadic capacity. Therefore, one consideration should be whether additional resources outside of food are necessary to involve traders on this level. Along these lines, Concern might consider a mentorship program between the large scale traders in the key cities and the smaller traders in remote areas to assist in capacity building.

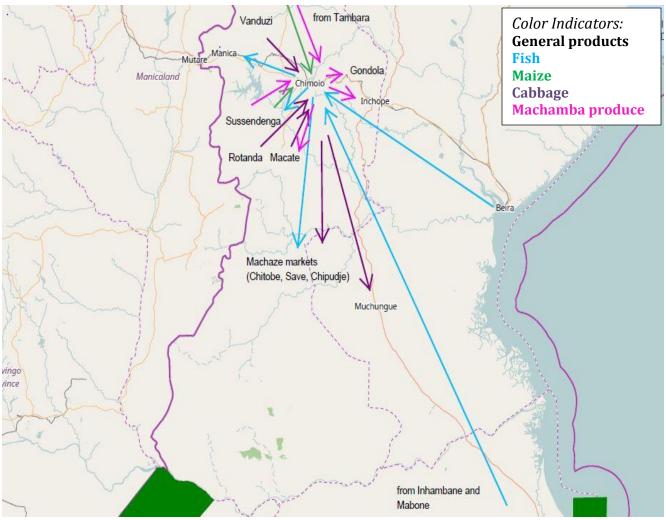
The vouchers should be supplemented with a list given to the area vendor in order to cross-check names. This will help prevent mismanagement or the selling of vouchers to others who do not constitute the intended beneficiaries.

The role of community leaders should be carefully deliberated upon, particularly in regard to the line between approval and involvement in resource allocation. Many respondents (particularly in Manica) were skeptical of using them in the distribution process due to low levels of trust regarding the potential for mismanaging resources.

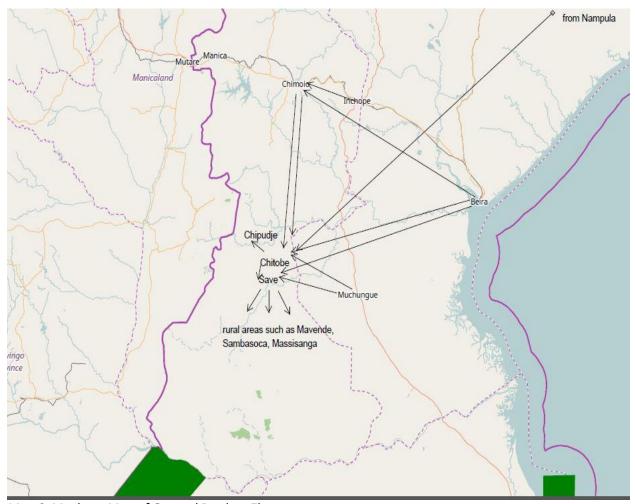
## 4. Appendix



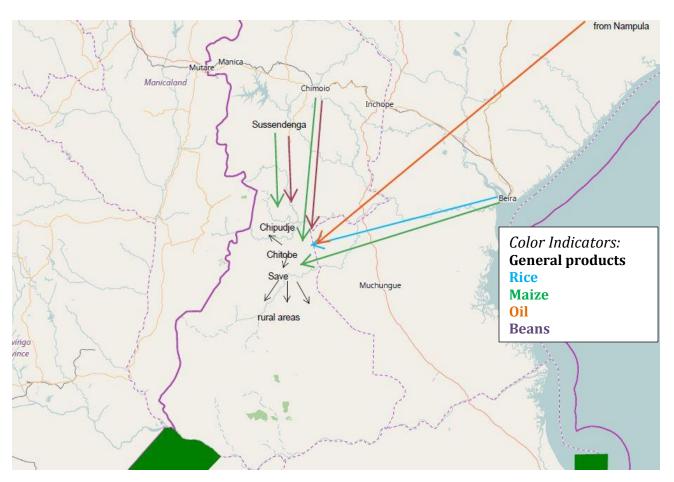
Map 4. Zambezia Map of General and Specific Product Flow



Map 5. Mercado 38 in Chimoio Map of Specific Product Flow



Map 6. Machaze Map of General Product Flow



Map 7. Machaze Map of Specific Product Flow