



Government of the  
Republic of Malawi

## MALAWI VULNERABILITY ASSESSMENT COMMITTEE



MALAWI  
Vulnerability  
Assessment Committee



## MARKET ASSESSMENT REPORT AUGUST 2014

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**Acronyms**

ADMARC	Agricultural Development and Marketing Corporation
APES	Agriculture Production Estimates Survey
CaLP	Cash Learning Partnership
CSB	Corn Soya Blend
DADO	District Agricultural Development Office
DoDMA	Department of Disaster Management Affairs
DCCMS	Department of Climate Change and Meteorological Service
EFSA	Emergency Food Security Assessment
ELDS	Evangelical Lutheran Development Service
EPA	Extension Planning Area
FAO	Food and Agriculture Organization of the United Nations
FEWSNET	Famine and Early Warning System Network
GDP	Gross Domestic Product
GPS	Global Positioning System
GTPA	Grain Traders and Processors Association
HEA	Household Economy Approach
MWK	Malawi Kwacha (as of June 2014, 1 US \$ = 410.65 MWK)
MFEPD	Ministry of Finance, Economic Planning and Development
MoLGR	Ministry of Local Government and Rural Development
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoTPW	Ministry of Transport and Public Work
Mt	Metric Tonne
MVAC	Malawi Vulnerability Assessment Committee
NFRA	National Food Reserve Agency
NSO	National Statistics Office
RBM	Reserve Bank of Malawi
SC	Senior Chief
TA	Traditional Authority
USAID	United States AID
WFP	United Nations World Food Programme

## **Acknowledgments**

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## Executive Summary

- *The country has registered a 9% increase of cereal production as compared to last season's estimate. In spite of surplus of production during 2013/14 growing season, pocket areas in 19 districts experienced a combination of late onset of rains, early cessation of rains, erratic rainfall, prolonged dry spells and flooding. These factors have lead households in pocket areas not to meet their food requirements.*
- *Total number of people who will not be able to meet their annual food requirement and need humanitarian assistance during the 2014/15 consumption period is 640,009. The duration of assistance to the affected people varies from two to four months.*
- *The 2014 Market Assessment was commissioned by the Malawi Vulnerability Assessment Committee with financial support from the Humanitarian Fund, and technical support from United Nations World Food Programme and Famine and Early Warning Systems Network.*
- *The main purpose of the market assessment was to determine maize market functionality during the 2014/2015 consumption year and make recommendations per Traditional Authority on the appropriate response interventions (cash or food).*
- *To meet the objectives of the assessment, primary and secondary data sources were employed. A structured trader and market questionnaires were used to collect the primary data while a key informant discussion was carried out to obtain information from national level market actors.*
- *A total of 85 markets selected from 62 Traditional Authorities across 21 Districts were assessed. In total, 42 big and 188 medium vendors, and 280 grain retailers were interviewed using a structured questionnaire.*
- *A team drawn from Malawi Vulnerability Assessment Committee member organizations (M FEED, DoDMA, MoLGR, Christian Aid, WFP, FEWS NET, Save the Children and OXFAM) has participated in analysis and decision making process of transfer modalities.*
- *Key variables considered for transfer option decision were capacity of markets to supply maize grain against the requirements, households' access to market, number of grain traders and price setting behavior, traders' response to absorb additional demand, interconnectedness of markets to supply sources, prices instability, one type transfer modality per Traditional Authority, evaluation reports of emergency intervention and contextual factors.*
- *Markets and traders in 28 Traditional Authorities have no sufficient capacity to absorb the additional demand and hence the analysis team proposed to implement in-kind assistance as an appropriate transfer modality to beneficiaries in these Traditional Authorities. These beneficiaries represent 43% (276,075) of the total caseload (640,009).*
- *Markets and Traders in 34 Traditional Authorities do have varied levels of response capacity to absorb induced demand. As a result, these Traditional Authorities are categorized into three levels based on the confidence on traders and markets to absorb the demand. The categorization process considered maize traded volume viz-a-viz requirements, connectedness to source markets,*

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*markets position in terms of supply source to other markets, and number and mix of traders and contextual factors.*

- **Priority One:** *Markets have better capacity in terms of traded volume and as well number and mix of traders. Most of markets in this category are supply source to other markets or well connected with major supply source markets. Thus, Traditional Authorities served by these markets are highly recommended for cash intervention. Traditional Authorities fall in category one represents 36% (228,295 beneficiaries) of the total caseload of the consumption year.*
- **Priority Two:** *Compared to priority one; markets have lower response capacity, number and mix of traders operate in the markets are lower, and are predominantly supplied from other markets. Traditional Authorities served by these markets are categorized as priority two. Thus, subject to availability of funding as cash, Traditional Authorities served by these markets could be switched to food intervention. The number of beneficiaries in this category represents 13% (83,606 beneficiaries) of the total caseload.*
- **Priority Three:** *Markets in these category are dependent on other source markets including cross border trade and the number of traders are limited as compared to the above two categories. Connectedness to the source is good. Priority Three represents 8% (52,033 beneficiaries) of the total emergency caseload. Depending on funding status as cash, Traditional Authorities served by these markets are the first to be switched from proposed cash to food intervention.*
- *With regards to in-kind assistance, there are Traditional Authorities with access challenges during the rainy season. The analysis team has proposed preposition of food commodities ahead of the rainy season. These TA are TA Ngabu and TA Chapananga in Chikwawa, SC Juma EPA Kamwendo in Mulanje, TA Jenala EPA Tamani in Phalombe and TA Chauma in Dedza.*
- *Main constraints identified by the interviewed traders' to double the current business were lack of capital, low level of local demand, shortage of supplies, transport related issues and other factors that include unpredictable price situation and lack of storage facilities.*
- *Given the markets assessment period (three months ahead of lean season) coupled with markets dynamism, there is a need for continuously to monitor markets (supply, prices and demand) situation in cash proposed areas.*
- *When the cash intervention is implemented, it is fundamental to monitor and understand changes in the markets. Furthermore, it is necessary to assess the response of traders in terms of increasing supply that serves to substantiate the result of the analysis.*

## 1. Introduction

Malawi is a landlocked country in Sub-Saharan Africa sharing boundaries with Republic of Zambia to the Northwest, United Republic of Tanzania to the North and Northeast, and People's Republic of Mozambique to the East, South and Southwest. The country has a total population of 15.80 million, 85% of whom live in rural areas. The total area of the nation is approximately 118,484 square kilometers of which 94,276 square kilometers are land and the rest is taken by the renowned Lake Malawi which is located along the border with Tanzania from the north to the south of the country, also bordering the north of Mozambique. Malawi has a tropical continental climate with maritime influences. From May to August, the weather is cool and dry while from September to November, the weather becomes hot. The rainy season begins in October or November and continues until April.

Administratively, the country is divided into three regions namely; Northern, Central, and Southern, and is further divided into 28 districts. The districts are subdivided into Traditional Authorities presided over by chiefs. The Traditional Authorities are composed of villages which are the smallest administrative units presided over by village headmen and headwomen.

The Malawi Vulnerability Assessment Committee (MVAC) in collaboration with partners carries out annual food security assessments using HEA (Household Economy Approach) methodology in order to identify the food insecure households. WFP's food security assessment methodology, Emergency Food Security Assessment (EFSA) is also employed to provide household level food security situation. While the Ministry of Agriculture and Food Security (MoAFS) third round Agricultural Production Estimate Survey (APES) results suggest a national food surplus production, there are pockets of low production in some districts due to prolonged dry spells experienced in the 2013-14 production season. This has affected households in some Traditional Authorities (TAs). In addition, the national surplus production does not necessarily ensure and lead to availability and equitable distribution of the food to all households. As a result, food access becomes very challenging for the affected households that do not have reliable sources of income and where food market systems are not adequate to redistribute the food from surplus areas to deficit areas.

The 2014 HEA assessment carried out in July identified 640,009<sup>1</sup> food insecure people (116,365 households) in need of humanitarian assistance for the consumption year of 2014/15. These beneficiaries are identified from 19 districts and 62 Traditional Authorities. These districts are: Karonga, Rumphi and Mzimba from the Northern region; Lilongwe Rural, Dedza, Ntcheu, Mchinji, Dowa and Salima from Central region; and Mwanza, Neno, Mulanje, Chikwawa, Nsanje, Balaka, Machinga, Zomba, Phalombe and Blantyre Rural from the Southern region. The Southern and Central regions constitute respectively 43% and 39% of the total affected population. The estimated number of food insecure households are dependent on agriculture as their main livelihood activity, and hence, access to sufficient food without negative coping mechanism before the next harvesting season is very unlikely. Thus, the Government of Malawi with the support of humanitarian organizations will provide food assistance to the affected

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<sup>1</sup> Total number of food insecure beneficiaries is from the HEA assessment which covered 19 districts. The market assessment covered 21 districts, however, the two added districts (Chiradzulu and Thyolo) were included as precautionary measure to monitor their market capacity and functionality.

populations to allow them to meet their minimum food requirements. The duration of assistance varies depending on the household production volume and the availability of stock during the upcoming lean season of the year. Based on the HEA food security analysis the duration of assistance for the 2014/15 consumption year is anticipated to vary from two to four months.

Typically, in the past humanitarian emergency and crisis situation response primarily took the form of in-kind food distribution. However, a growing body of experience and literature shows an increasing interest in alternatives to in-kind food distributions, where people are given the option of cash as well as vouchers to facilitate beneficiary access to the food commodities they need. Cash has been relatively neglected, compared to in-kind forms of assistance, nevertheless the use of cash is not a new answer to emergency contexts. Cash transfer have been implemented in many developing countries to support people affected by natural and manmade calamities. In line with the growing use of cash as a accepted response option, the Government of Malawi together with its humanitarian partners has introduced cash transfers as a valid and feasible response modality in the last few years to respond to food security emergency assistance needs. The selection of the most suitable response option should be based on market assessment findings complying with the 'do no harm' principle of humanitarian response. In order to determine the types of assistance modality to use, local based market assessment is crucial to gauge the capacity of markets and traders in respective intervention areas to provide adequate variety and quantity of food commodities to meet demand throughout the year.

This market assessment was carried out by MVAC in collaboration with WFP, FEWSNET, Save the Children, OXFAM, Christian Aid and other members to assess the capacity of local markets and traders to respond to transfer induced demand. The market assessment assists humanitarian organizations in deciding whether to distribute cash or in kind assistance in the upcoming 2014/15 consumption year.

The assessment focused on evaluating markets and traders' capacity to provide selected type of commodities in a timely and efficient manner. Typical food basket commodities distributed through humanitarian organizations are primarily cereals (maize), pulses (General beans), cooking oil and nutritious food, CSB (Corn Soya Blend). If the markets do not adequately respond to the increased demand for these basic food commodities, then price inflation is likely to occur which will reduce the purchasing power of beneficiaries and negatively affecting non-beneficiary households too. Findings from this market assessment have identified markets that have a response capacity to provide staple food commodities mainly maize without entailing unseasonal price increases. Furthermore, the assessment's findings captured market constraints for food commodities business expansion, in particular for the grain trade that reflects the consumption behavior of the people.

## **2. Objectives, methodology and limitations**

In order to design the implementation of 2014/15 consumption year humanitarian assistance, MVAC has conducted a markets assessment to determine the functionality of the food market systems (especially the maize market system). The market assessment was conducted in 21 districts, of which 19 were identified by MVAC as food insecure in the 2014/15 consumption season and 2 additional districts were considered to be highly vulnerable as the lean season progresses.

## 2.1. Objectives

The main purpose of the market assessment is to determine maize market functionality during the 2014/2015 consumption year and make recommendations on appropriate food security response interventions for the design and implementation of any food security responses by the humanitarian actors. Specific objectives include:

- Determine accessibility of markets to affected populations
- Review price information for key food commodities on local markets and how the prices will most likely change as the consumption period progresses to the lean period
- Identify any potential inflationary risks associated with increased local demand arising from the use of cash transfers
- Assess current and potential availability of maize supplies for the specific TAs and Districts as the season progresses
- Determine the ability of the markets and traders to respond to increased demand
- Analyze the grains market systems, both for the postharvest and lean season and identify any possible market system intervention points that can support access to food for the poor and vulnerable households during the lean period
- Assess cross-border trading activities associated with supply of grains (maize and pulses) and cooking oil in affected districts and at national level
- Assess the interconnectedness of markets from surplus to deficit areas/ districts
- Project how markets will most likely respond during the lean period
- Recommend the most appropriate response/s per Traditional Authority.

## 2.2. Methodology

The market assessment employed both secondary and primary data sources to meet the stated objectives and to identify suitable markets for market based response options. The secondary data and reports obtained from various sources (RBM, NSO, MVAC, WFP, FEWSNET, FAO etc...) provided background analysis and strengthened the analysis of primary source data. Primary data was collected using structured trader and market questionnaires. Furthermore, key informant interviews were conducted with national level market actors such as GTPA, ADMARC, SGR, Food Processors and big grain traders using structured key informant questions. Furthermore, the geographic positioning of markets was captured using GPS units to map the location of assessed markets.

The District Agricultural Development Offices (DADO) identified key markets that households in the affected Traditional Authorities use to buy and sell staple food commodities. The number of markets considered for this assessment depends on the number of targeted beneficiaries and importance of the market to the population in need of assistance. In Traditional Authorities where the number of beneficiaries were relatively higher (more than 10,000), two key markets were considered otherwise one market was selected.

Prior to the assessment, a three-day training workshop was conducted on the linkages of markets and food security, markets and response option analysis and assessment tools. Following two days of tools familiarization training, the assessment tools were pre-tested at a nearby market and adjustments were made based on feedback from the enumerators. A guideline that explains the tools was prepared, and used to explain concepts and definitions during the training. The guideline was distributed for quick referencing.

Roughly the field level assessment took place over 10 days (10<sup>th</sup> – 22<sup>nd</sup> of August 2014). A total of 85 markets selected from 62 TAs were assessed. In these markets, 42 big, 188 medium and 280 retail grain vendors were interviewed using structured questionnaires. Furthermore, one key informant interview with market chairperson or big trader knowledgeable about the market was carried out using a specifically created key informant questionnaire. The data collection team was drawn from MVAC member organizations (MFEPD, MoLGR, DoDMA, MoAFS, ELDS, DCCMS, USAID, MoTPW, WFP, FEWS NET, Save the Children, OXFAM and Christian Aid). Four teams of data collection with one data entry clerks were deployed to the field. The primary data collected at each market was analyzed using SPSS software. The analysis team comprises team leader and supervisor of the assessment and based on agreed decision making variables, the team made TA level decisions on the most appropriate response options.

### **2.3. Limitations**

The assessment has its own limitations that readers of the document should take in to account. The main limitations are:

- Most TA level markets operate at full capacity only on a fixed number of days (one or two) during the week. It was unavoidable that the assessment team visited some markets on non-market days. In such situations, it was apparent that the number of traders available for interview were fewer than during market days.
- The structure of the market in a few of the assessed TAs was different from the general grain trade. In a few markets producers tended to keep their stock of self-produced as well purchased maize grain from local farmers only for sale during the lean season. These groups of producers are located in their village and obtaining information from these producers was also a constraint.
- Historical price of maize was not available for all assessed markets and hence the price analysis is limited to markets that coincide with data availed from MoAFS.
- In some of the districts, villager's distance from the key markets was not clearly identified; but it was mentioned that no barrier to access markets exist.

## **3. Macro-economic factors**

### **3.1. Gross Domestic Product**

The agricultural sector is of significant importance to Malawi's economy, which accounts for approximately 32 percent of Gross Domestic Product (GDP). The agriculture sector also contributes to the country's foreign exchange earnings, making Malawi vulnerable both to weather conditions and external price shocks. The country's main exports are tobacco, tea and sugar. The service sector is dominated by telecommunications and the banking industry which contributes 49.2% to overall GDP<sup>2</sup>. The industrial

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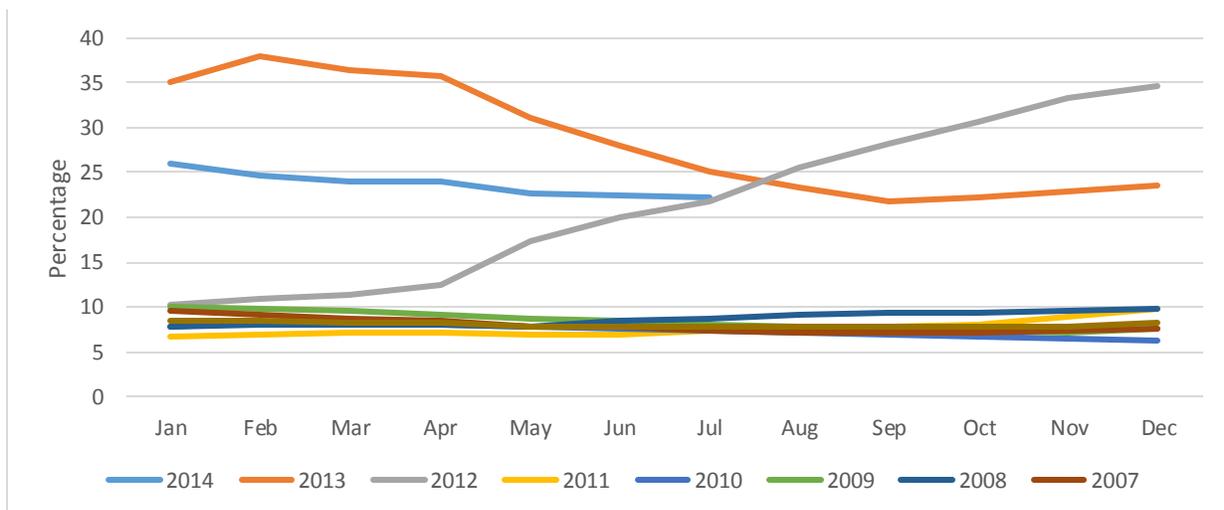
<sup>2</sup> Monitoring African Sovereign Risk, 2013 Quarter 2 Report

sector is relatively small compared to the services and agriculture sectors, but in recent years uranium mining has become a lucrative enterprise in this sector. The real Gross Domestic Product in Malawi expanded by 5 percent in 2013 from the previous year as result of good performance in the agriculture and manufacturing sectors. The annual growth rate averaged 4.39 percent from 1994 until 2013, reaching an all-time high of 16.70 percent in 1995 and a record low of 10 percent in 1994. The economy is projected to grow at around 4.2 percent in 2014<sup>3</sup>. Foreign Direct Investment (FDI) inflows into Malawi are still low, although it is hoped that with improvement in political environment there will be greater inflows of investments. Malawi received an estimated \$91million of net FDI inflows in 2012, and it is estimated that the country received \$102million in 2013.

### 3.2. Consumer Price Indices

The Consumer Price Index measures a broad rise or fall in prices that consumers pay for standard basket of goods and services. Since May 2012, Malawi has experienced very high levels of inflation due to devaluation of exchange rates, policy shift in exchange rate regime, and the increase in prices of petroleum products in line with import costs, and adoption of an automatic adjustment mechanism of exchange rate.

Figure 1. Trends of inflation rate



Source: National Statistical Office

. In July 2014, the year-on-year inflation rate stood at 22.3%. As depicted in Figure 1, the inflation rate averaged 7.9 percent from 2006 to 2011 while it has averaged 21.9 percent over the last three years, reaching an all-time high of 37.9 percent in February of 2013. The year-on-year inflation rate, while still high, is lower than last year for the first half of 2014.

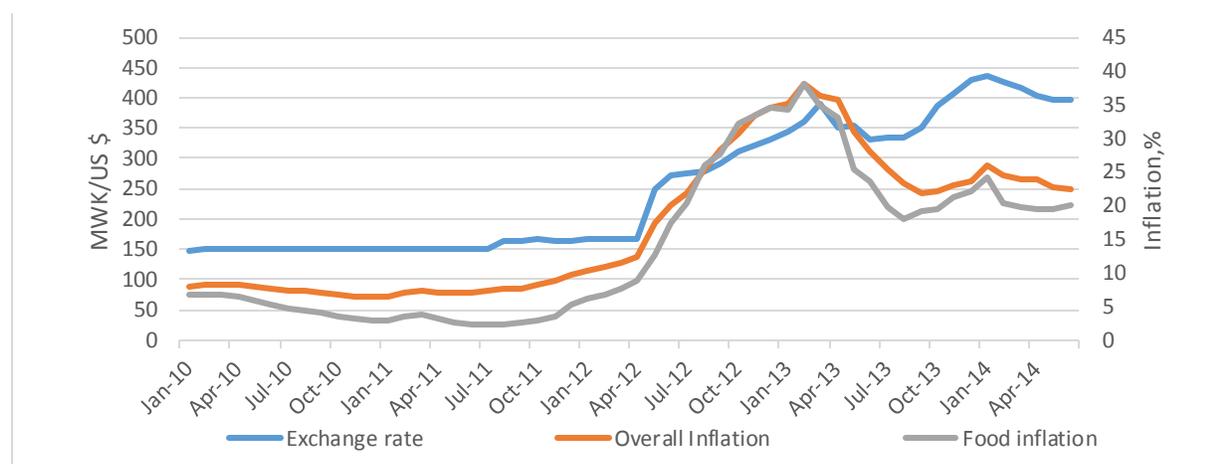
<sup>3</sup> Monitoring African Sovereign Risk, 2013 Quarter 2 Report

In consumer price indices, construction, food and non-alcoholic beverages account for 50.2% of the weight followed by housing, water and electricity, and transport that accounts respectively for 14.7% and 6.6% of the total weights (NSO Report). The significant weight of food commodities in the CPI indicates how much the price index is driven by changes in market prices of food commodities.

### 3.3. Exchange rate

The determination of the country's exchange rate has evolved overtime. One key aspect of the management of exchange rate in Malawi has been the attainment of stable domestic prices. The exchange rate policy chosen affects the country's relative price structure between tradable and non-tradable goods, and ultimately the overall level of domestic prices. In May 2012, the Malawi Kwacha was devalued by a 49 percent and at the same time the central bank announced the adoption of a floating exchange rate regime. Figure 2 shows the relationship between exchange rate and inflation since January 2010 and it would appear that the period of fixed exchange rate coincides with period of stable inflation and that the period of depreciation from May 2012 coincides with a sharp increase in inflation. In August 2014, the exchange rate of the local currency (Malawian Kwacha) against the US \$ in the parallel (black) market, stood higher than the official rate by about 5%. The continued depreciation of local currency will have negative implications on imported commodities such as fuel that has direct impact into increasing the cost of transport and hence food commodities in particular affecting the poor and very poor households. As such, one could argue that the exchange rate as potential source of inflation.

Figure 2. Exchange rates (MWK/US\$)



Source: Reserve Bank of Malawi; National Statistical Office

### 4. Food availability

Malawi's agriculture mainly depends on the smallholder sub-sector which comprises about 3.5 million households (about 90% of all households) with an average farm size of less than a hectare. Maize is the staple food crop and is grown by 97% of all farming households on about 1.6 million hectares of smallholder farms. During the past decade, agricultural production in Malawi has varied significantly year to year from acute shortages of food to improved production due to the great fluctuation in weather patterns that are critical to maize production. In the recent past, Malawi has suffered from dry spells of

different magnitudes, which contribute significantly to the low production of both food and cash crops. The dry spells occur at critical stages of crop development and consequently lead to drops in production for most crops.

Malawi introduced a farm input subsidy programme (FISP) in 2006 mainly to boost maize production. With the introduction of the input subsidy programme for poorer farmers, Malawi has been reporting increases in food production for the past five years. However, Malawi's cereal supply and demand balance sheets from the 2008/09 production season to date indicate that the country registers an annual average cereal deficit of 91,000Mt. Bearing in mind that most households in Malawi obtain over 70% of their caloric needs from cereals especially the maize staple, the facts point to a situation where the country in general and food insecure households in particular are experiencing low food availability. The lack of caloric intake from low cereal availability to the food insecure households is compounded by low availability and uptake of high nutritional value foods such as meat and meat products, and legumes.

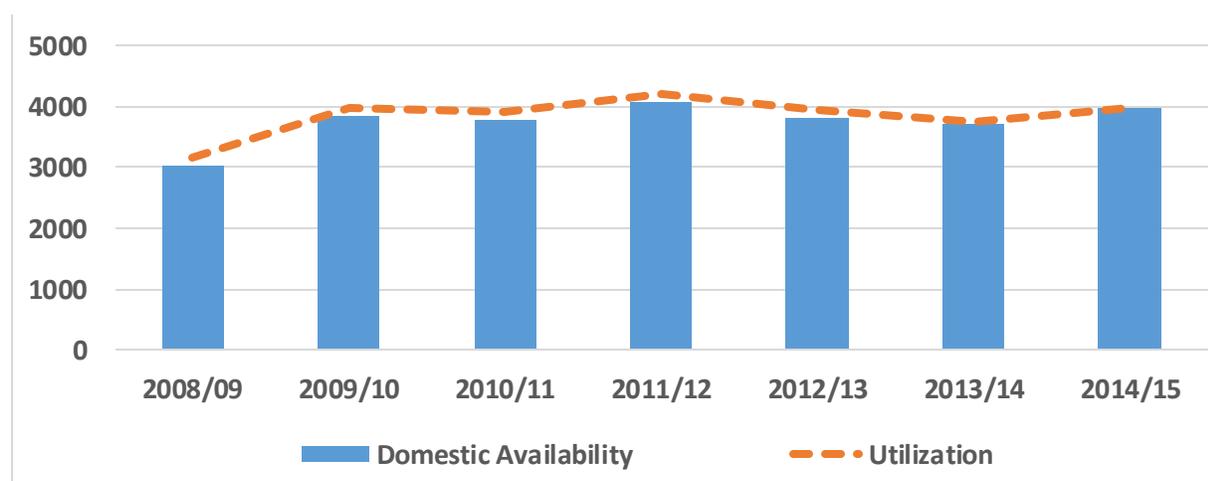
Table 1. Cereal supply and demand for Malawi (000 Mt)

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14*	2014/15
Domestic Availability	3015	3852	3774	4083	3809	3721	3980
Utilization	3165	3975	3900	4195	3924	3736	3982
Deficit/Surplus	-150	-123	-126	-112	-115	-15	-2

Source: FAO Global Information and Early Warning System

\* 2013/14 Ministry of Agriculture, Irrigation and Water Development Food Balance Sheet

Figure 3. Cereal supply and demand for Malawi (000mt)



Source: FAO Global Information and Early Warning System. 2013/14-Ministry of Agriculture, Irrigation and Water Development Food Balance Sheet

Though FAO cereal balance sheet shows deficit of 2000Mt in 2014/2015 (Table 1), the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) production estimate shows a total national maize production of 3.9 million Mt representing nine percent production increase in comparison to the 2012/13 season. This estimated production level will leave the country with a maize surplus of about

978,123 Mt. Other cereals registered a 7 percent increase, tubers registered a 9 percent increase, and pulses a 7 percent increase over last year's production. Based on the MoAIWD estimates, it is unlikely that Malawi will need formal staple net food imports during the current consumption season as some of the cereal deficits are complemented by tubers and pulses. However, those figures are at the national level. There are localized production deficits in areas of the Central Karonga livelihood zone in Northern Malawi, and the Middle Shire and Lake Chilwa/Phalombe livelihood zones in Southern Malawi being the worst hit by production shortfalls caused by dry spells.

The grain marketing board, ADMARC, and the National Food Reserve Agency have not yet started to purchase maize in bulk three months after harvests and when private traders are stocking. During the key informant discussions held with NFRA and ADMARC, the management has indicated a plan to procure respectively 115,000mt and 50,000mt of grain, mainly maize. Owing to better harvest in the current season, the procurement plan of ADMARC for the 2014/15 consumption year is 28% less as compared to the preceding year. However, no planned procurement of maize has been officially announced and the situation with the suspension of donor assistance and the financial constraints in government does not appear to be improving. This is disconcerting since by the end of the 2013/14 consumption year stocks in the strategic grain reserve were very low. Based on the recorded drawdown for humanitarian and commercial use during the 2013/14 consumption period, the opening SGR stock will be approximately 20,000Mt of maize, which is 55,000 MT below the recommended level of 75,000Mt. At its current level, future stocks for humanitarian assistance and commercial sales of subsidized maize would put further constraints on the SGR.

#### **4.1. Cross border trade**

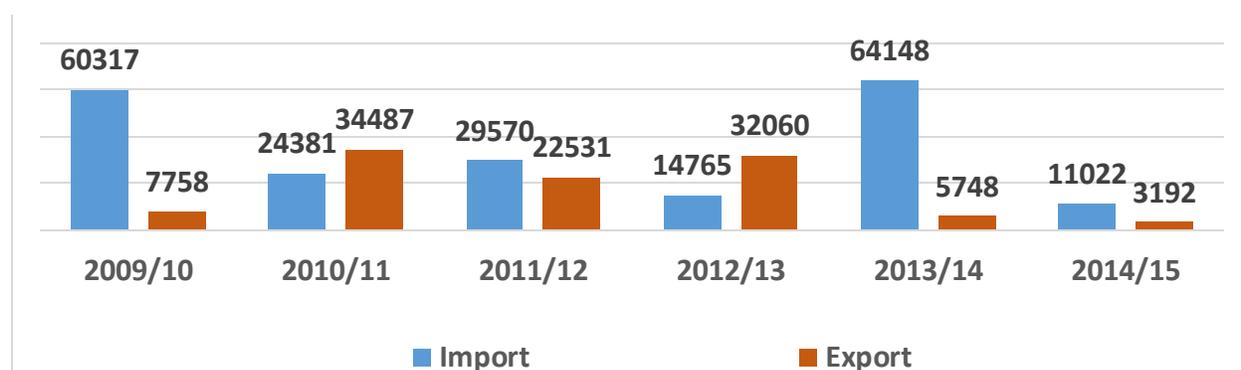
Malawi's geographical position makes the country share long border distance with its neighbors. Food and non-food commodity cross border trade takes place through formal and informal routes. Of the food commodities traded across the borders, maize and cooking oil are the most notable commodities. The flow of commodities particularly for maize is not one way direction flow rather it is traded both ways depending on the location of the crossing points and prices of the commodity. Unlike maize that flows both directions, cooking oil is primarily traded-in from Mozambique and Tanzania to Malawi.

The monitoring data from FEWS NET Malawi office shows that Muloza, Mchinji and Kalanje are key crossing areas to trade-in significant volume of maize while for traded-out maize Dedza, Mbirima and Songwe are the crossing points where highest volume of maize traded-out. In the last nine consumption years (2005/06-2013/14), on average 62,237Mt of maize was estimated to be traded-in on annual basis where Muloza crossing point accounted for about 40% of the volume. On the other hand, on average about 23,007Mt of maize was traded-out from Malawi to the neighboring countries during the same period (Figure 4). This puts the average net annual informal maize import about 39,230Mt. In spite of the good production in Malawi and the neighboring countries, maize is traded across the borders and this situation is an indication about the weak association between local production and informal trade. Instead, the cross border issue could be driven by among other factors to relative markets access, proximity to the crossing points and price differentials. During this market assessment mission, interviewed traders at Mchinji district indicated that Zambian maize is cheaper by about 5-10MWK/KG and as a result some traders were noted being traveled to the border markets to buy maize and transport

it to their warehouses. This indicates that cross border trade relates more than to satisfy households' consumption purpose of people living around the border areas.

Informal cross border maize imports atypically dropped by 43% from 4,065 Mt in June 2014 to 2,327 Mt in July 2014. Five year trends show that maize imports usually increase modestly between June and July when traders purchase cheaper grain across the border for stocking. The decrease has been driven by a 61% drop in imports through Muloza border with Mozambique in Southern Malawi. Despite lower prices in markets on the Mozambican side, maize sales have declined due to increased household food availability in Malawi as a result of better production leading to 978,123Mt<sup>4</sup> national maize surplus. Low absorption of maize in local markets is acting as a disincentive for local traders to import. The Malawian Government has export ban on grain maize. Informal cross border maize exports have increased from 415 Mt in June 2013 to 1,172 Mt in July 2014 due to increases in exports into Tanzania and some modest exports into Zambia through Northern Malawi border points (FEWS NET, July 2014 Food Security Outlook Report).

Figure 4. Informal cross border trade volume on maize in Mt (Apr-Mar)



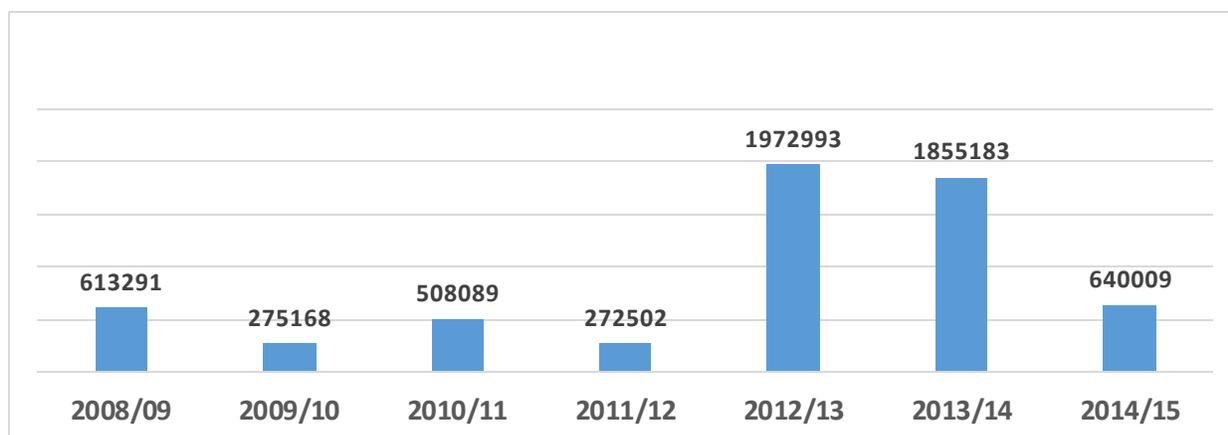
Source: FEWS NET Malawi

## 5. Food security

According to Malawi Vulnerability Assessment Committee (MVAC) reports since the 2008/09 consumption season, Malawi has registered an annual average of 876,747 people who cannot meet their food needs and have had to rely on humanitarian assistance. From the 2008/09 consumption season,

Figure 5. Number of food insecure population

<sup>4</sup> MVAC, Bulletin No 10/14 Volume 1



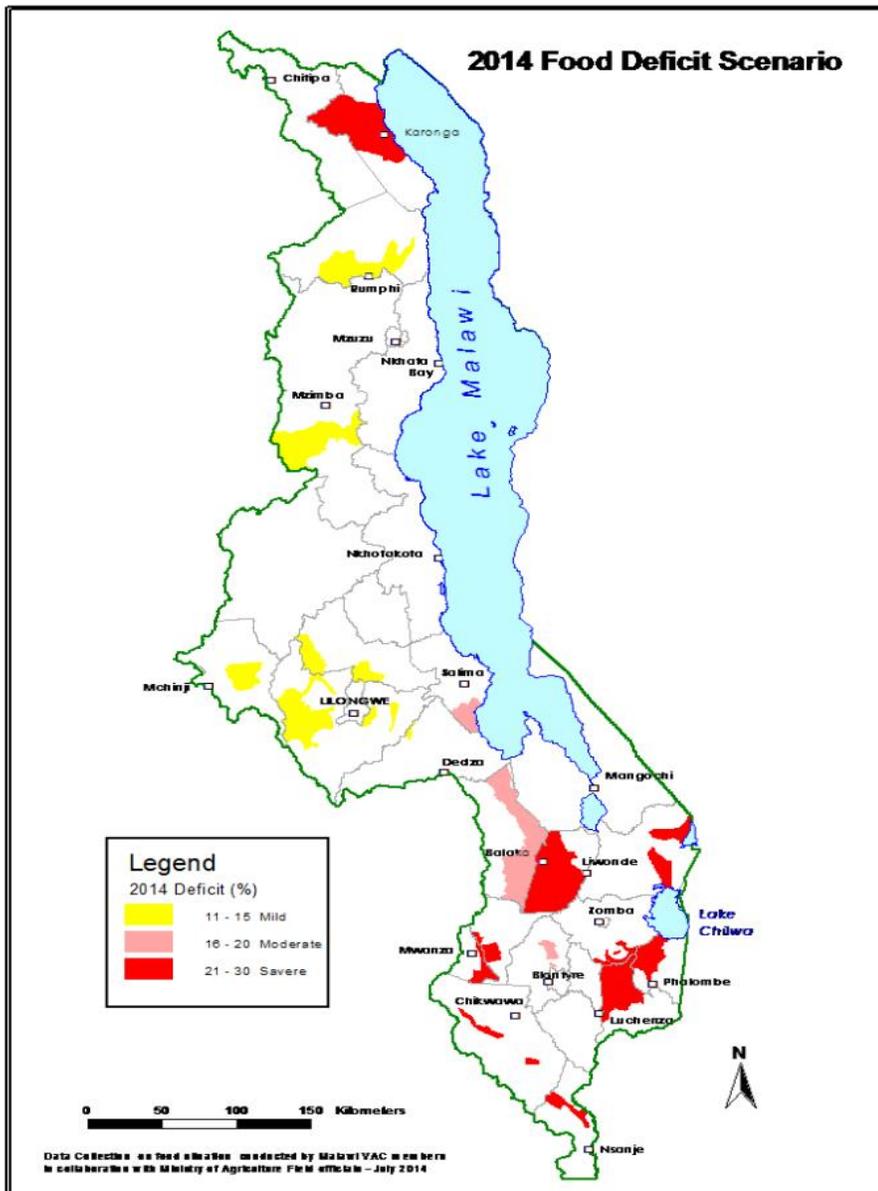
Source: Malawi Vulnerability Assessment Committee

Malawi has registered an average of 15 districts with localized or widespread food insecurity. The food deficit Southern Malawi region accounts for the majority of these food insecure populations with an average of 12 districts affected annually over this period as compared to an average of 4 districts for Central Malawi and 1 district per year for Northern Malawi.

In post-harvest period, most areas in Malawi are generally experiencing favorable food security conditions and nearly all but a few districts are reporting approximately one percent of households that do not have staple food from their own production. As of June and July, only localized areas in Central Karonga and parts of the Middle Shire (a chronically food insecure area) were reporting constrained food access among poor households due to production shortfalls in food and cash crops because of seasonal dry spells and early cessation of rains. Generally, agricultural labor opportunities for poor households are expected to follow normal trends during the post-harvest period and improving income earnings for poor households. Labor opportunities will be limited in areas facing localized food insecurity due to production shortfalls caused by dry spells.

Owing to an official export ban on maize by the Malawian Government in addition to the non-commencement of bulk purchases by NFRA and ADMARC, grain traders have not aggregated stocks as usual from smallholder farmers. The GTPA has indicated that big traders have stocks of maize estimated around 40,000mt which, reportedly is far less than the expected volume of annual aggregation by members which varies from 250,000-300,000Mt of grain. This situation has its own implication on increasing the post-harvest loss and deterioration of maize quality while stocks are kept for long in the hands of farmers who are constrained with good storage facilities. Furthermore, increased maize production across the neighboring countries (Zambia and Mozambique, Tanzania) will be likely to contribute to availability of staple maize on the market at normal seasonal price levels.

Figure 6. Malawi VAC 2014 food insecurity map



Source: MVAC

## 6. Market structure and conduct

Grain marketing for the strategic commodity, maize, reaches its final destination through a number of chains. The local assemblers and small scale traders (retailers) mainly purchase at TA level markets or travel to rural villages to aggregate directly from producers during the peak marketing season (May-August) of the year. They use weighing scales on a pair of poles to purchase from producers. Mostly assemblers supply aggregated commodities to medium and big grain traders or "mobile traders"<sup>5</sup>. Though assemblers and retailers provide easy access to market for smallholder producers, the prices they offer to producers are mostly non-negotiable. On the other hand, medium vendors also buy grains from small scale traders and producers to supply big traders including ADMARC or processors located in major towns of the country. The medium vendors' aggregate higher volume grains and tend to supply big traders in major towns as compared to assemblers and retailers. During the lean season of the year, medium vendors and "mobile traders" play crucial roles in supplying grains from surplus areas or from own stock to deficit areas of the country. The big grain vendors get supply through different sources such as their own agents, purchase points in major production area markets or from medium vendors. Big vendors use the economies of scale of operation to supply processors and institutional procurements such as NFRA.

Grain trade between farm households is also another form of exchange in rural villages. A study on Malawi's Maize Marketing System (2010)<sup>6</sup> indicated that 16% of the maize trade was direct from farmer to consumers, typically within the same village. Small and medium traders purchase account for 29% of farmers' maize, while 45% was purchased by large trades directly from farmers.

Government parastatal food commodity trading entity, ADMARC has around 305 purchase and distribution depots across Malawi. ADMARC's financial source to undertake grain purchase is totally dependent on Government budget; and for the current year, Government budget has not been yet approved and hence ADMARC's bulk procurement has not started yet. Nevertheless, limited level of purchases are on-going using resources generated from last year sale of NFRA grain. Contacted grain traders at Pengapenga market in Ntcheu district explained that the purchase prices of maize varies in areas where ADMARC operates and started to buy. For instance, at Pengapenga market, the price of maize was MWK 70 per KG when ADMARC procured a week ago; however, the following week market day the price had dropped to MWK 65 per KG as ADMARC was not present. Showcasing a decrease of 5 Kwacha per kg or 7% decrease in price over the space of one week.

## 7. Price seasonality and instability

The price analysis used nominal retail prices of maize obtained from Ministry of Agriculture and Food Security for the period of 2007-2014. All markets considered for the assessment do not match with markets monitored by the MoAIWD and hence the analysis is limited to those markets coincide with the available data. Furthermore, some markets have wider price data gap and as a result price analysis for those markets was not undertaken. Market level price analysis is done for Karonga, Rumphi, Nsundwe (Lilongwe District), Liwonde (Machinga District), Chimbiya (Dedza District), Mwanza, Phalombe, Nchalo

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<sup>5</sup> Mobile traders are those traders who travel with trucks to buy grain from local markets during the post-harvest and at the same time to supply staple grain (maize) to rural markets during the lean season of the year.

<sup>6</sup> Malawi's Maize Marketing system, 2010, T.S. Jayne, Nicholas Sitko, Jacob Ricket-Gilbert, & Julius Mangisoni

(Chikwawa District) and Nsanje markets. However, to provide national level price trends and seasonality, the national average price of maize is taken for the analysis. Given market or district level consumer price indices are not available, the analysis is done for nominal price rather than the real price.

### 7.1. Price trends and seasonality

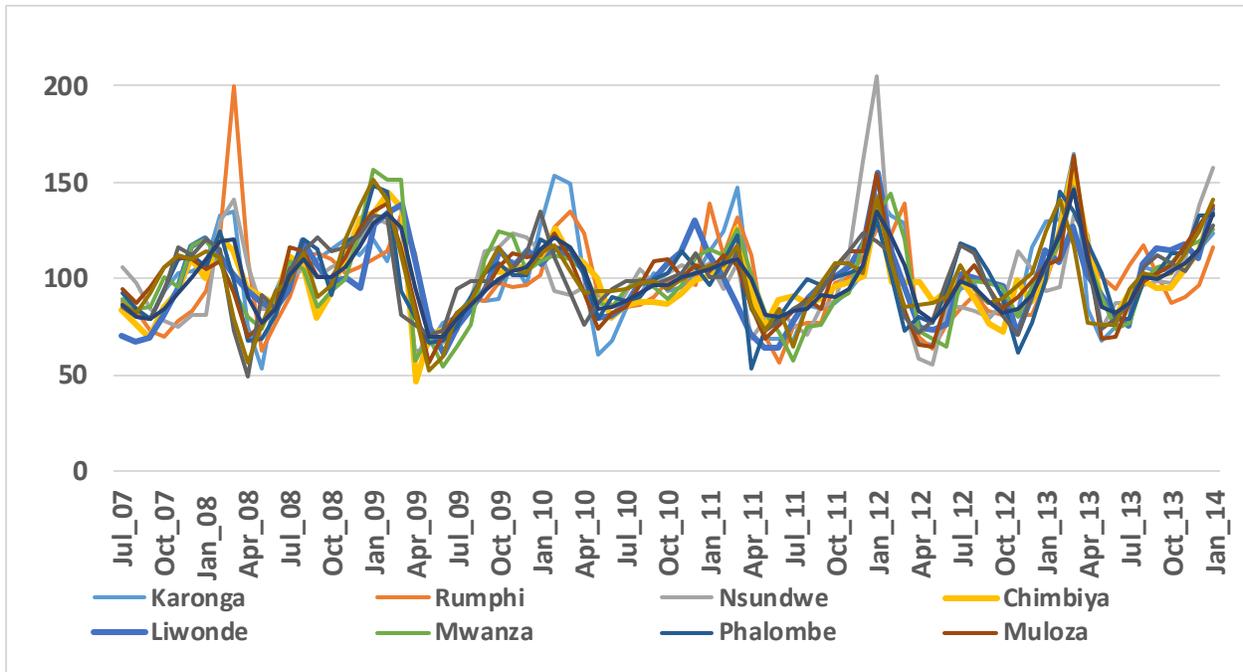
The price trends of agricultural products normally follow seasonal pattern where during the harvest season prices go down and then rise in the lean season. This pattern of seasonality is clearly observed in Malawi maize price analysis. In July 2014, the nominal retail price of maize across markets stood at 15-35% below last year the same month and was higher by about 30-76% compared to the last five years average (2009-13). Average national maize prices between June and July 2014 were stable and experienced a small increase of one percent. The July 2014 average price is 21% lower than the same time last year when the national average price stood at MWK 98/kg, but it is 59% above the five year average. This is most likely a result of adequate maize stocks in many households and minimal grain trading in markets as households still consume maize from their own production. Normally, average national maize prices start increasing between June and July. The smaller than usual increase may also be attributed to low demand on the market as the National Food Reserve Agency and ADMARC which are the biggest buyers of grain have not yet entered the market three months after main harvests.

Understanding the seasonality of staple cereals is helpful in programming market based response options in terms of indicating prices behavior during the different months of the year. Furthermore, seasonal index analysis helps to forecast prices and to plan at times of the year that transfer value adjustments is likely to happen. The 12 months centered moving average is used to calculate the seasonal index of the markets for the period of 2007-2014. Figure 7 shows the seasonal calendar of agricultural activities and the trends of maize price follow the harvest and hunger season of the year. The price of maize is the lowest immediately after the harvest (May) and increases from October through March. This seasonality of maize price is easily observed from Figure 8 where the prices rise and fall in different months of the year. In the same vein, the Grand Seasonal Index (Figure 9) depicts an average of seasonal indices for the analysis period and it shows the seasonality of prices within one agricultural season. Thus, Figure 9 shows explicitly in which month of the full season (year) that the price reaches the peak and the lowest level. The Grand Seasonal Index of maize is above the average value of 100 for the months between December to March and this indicates that price increases are expected to occur starting end of the year till the new harvest comes in to markets.

Figure 6. Seasonal cropping calendar

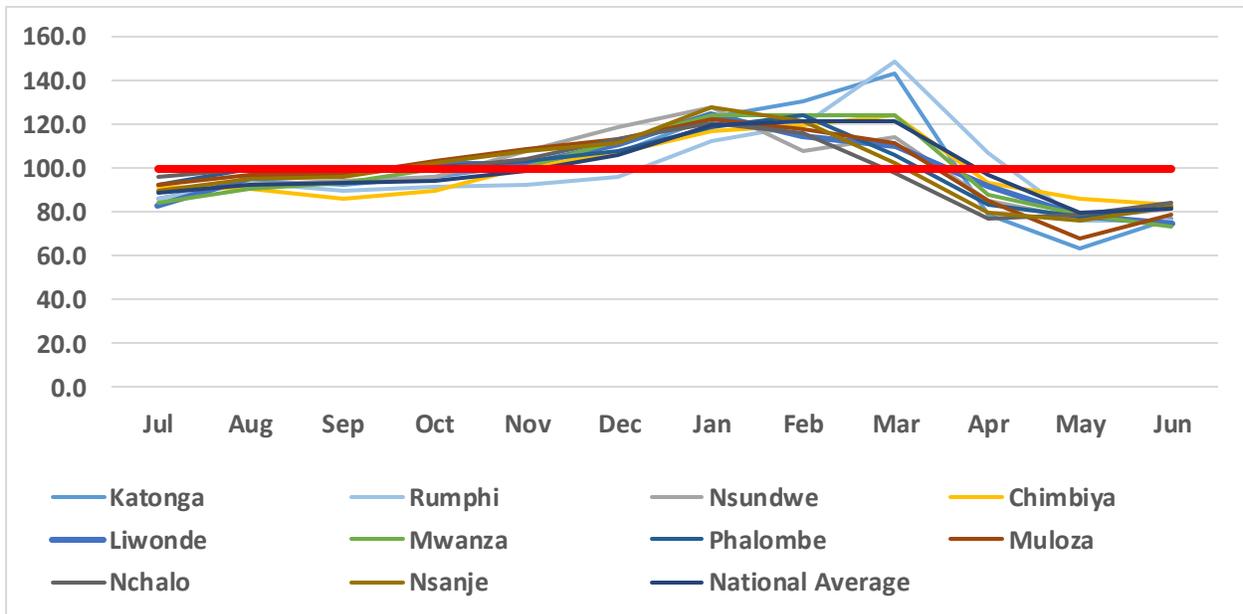
Month	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Weather	rainy season	dry season						rainy season				
Summer season (main season)		green harvest	main harvest						main season planting			
Winter season (in certain areas)	winter planting						winter harvest					
"Hunger season"										hunger season		
Agricultural labour period								peak agric. labour				

Figure 7. Seasonal index of maize prices (2007-2014)



Source: Own analysis

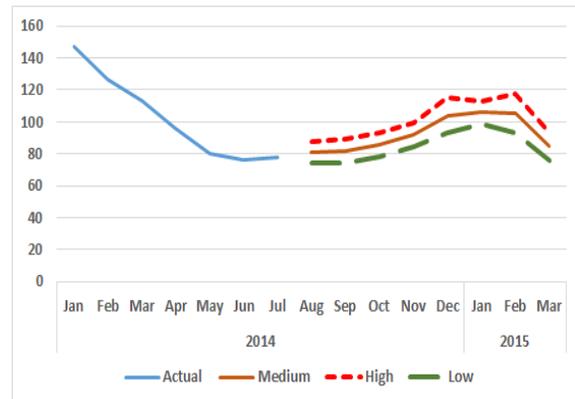
Figure 8. Grand seasonal index



Source: Own analysis

Figure 9. Forecasted maize price MWK/KG

Using the Grand Seasonal Index method and based on the current price trend, national level maize price is forecasted for the month of September 2014 through March 2015 (Figure 10). The result shows that, the highest price will be MWK 118/Kg during the lean season. The forecast of maize price in other markets are also within the forecasted ranges of national maize price. Interviewed traders were also requested to estimate the expected retail price of maize during lean season. They expect the average price to be 90 MWK in Oct and 110MWK/KG in Jan and March 2015.

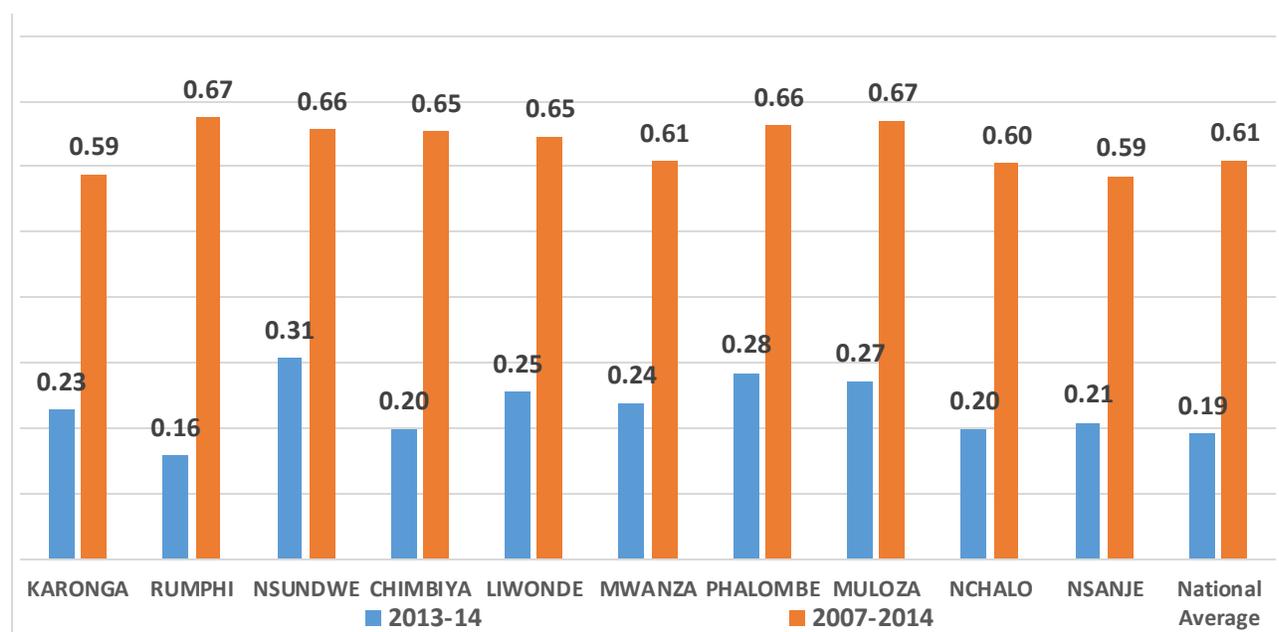


## 7.2. Price volatility

Price volatility is measured by the coefficients of variation<sup>7</sup> and it indicates the dispersion of prices from their average. The coefficient of variation provides useful hints to assess how prices change through the market in space and time for different actors. The price variability signals the stability of prices that reduces uncertainty for decision making and hence provides evidence to support market based response options. Price instability or variability creates uncertainty among market actors and in particular vulnerable households are the most affected ones as they face uncertainty in their budget decision to allocate limited resources to needs. Similarly, traders too suffer from price instability as they would also be unable to anticipate the results or profits of their activities. Producers are also the victims of price instability as they are uncertain about the prices to receive for their products. However, high coefficient of variation doesn't mean that prices are high rather it means high degree of price variability or vice versa. In market based response options, the impact of price instability is high as it has implication in planning the transfer value and related issues. Generally, price instability creates uncertainty on consumers, traders and producers.

<sup>7</sup> Coefficients of variation is calculated as the ratio of the standard deviation to the mean.

Figure 10. Coefficients of variation



Source: own computation

As depicted in Figure 10, the price variability of the markets stood within ranges of 0.19 to 0.31. It means that prices fluctuate from 19 to 31 percent from their average values. However, recent historical prices (2013-2014) data show lower level of prices variability for the same markets. Further disaggregation of analysis period, quarterly basis, indicates lower variability of prices not exceeding 20 percent.

### 7.3. Market price integration

The analysis of market integration helps to understand the flow of commodities between markets and co-movement of prices. When markets are integrated, two conditions exist, price are correlated, i.e. they move in tandem with one another, but at different levels that are determined by transaction costs (necessary yet insufficient condition of market integration); commodities flow between markets, i.e. markets are integrated through trade, which triggers price transmission from one market to another (necessary and sufficient condition of market integration)<sup>8</sup>. One of the indicators for market integration is the analysis of prices correlation coefficient between markets. As a rule of thumb, price correlation coefficient above 0.60 is used as indicator of spatial market integration. Prices may be correlated, but it does not necessarily mean that markets are integrated, because of unobserved factors that may be driving the relationship. While using the simple correlation coefficients, the flow of commodities between markets needs to exist.

<sup>8</sup> WFP Market Analysis Framework, December 2011

Table 2. Coefficients of correlation

	KARONGA	RUMPHI	NSUNDWE	CHIMBIYA	LIWONDE	MWANZA	PHALOMBE	CHITIPA	NCHALO	NSANJE
KARONGA		0.92	0.89	0.95	0.92	0.95	0.91	0.90	0.95	0.94
RUMPHI		1.00	0.88	0.95	0.91	0.91	0.89	0.96	0.91	0.88
NSUNDWE			1.00	0.94	0.95	0.93	0.87	0.87	0.93	0.92
CHIMBIYA				1.00	0.94	0.96	0.95	0.92	0.96	0.94
LIWONDE					1.00	0.97	0.93	0.90	0.96	0.93
MWANZA						1.00	0.95	0.88	0.96	0.95
PHALOMBE							1.00	0.86	0.96	0.93
Chitipa								1.00	0.98	0.88
NCHALO									1.00	0.97
NSANJE										1.00
Mzimba		0.94								
Tsangano					0.94					
Lunzi				0.97						

Source: own computation

For markets that the assessment identified the source and destination markets, the coefficients of correlation are highlighted in Table 2 to indicate the physical movement of maize. Table 2 shows which market are well integrated. It means that, there is co-movement of prices from supply source to destination markets and it is one of the favorable conditions for market based response options. In Malawi, district capital markets are connected by Tarmac roads and it is very likely that maize could move from better production area markets to production deficit area markets. Table 2 shows markets (non-highlighted coefficients of correlation) with higher coefficients value which indicates markets are strongly integrated. The good road networks that connected district capitals have contribution to easy movement of commodities and co-movement of prices.

## 8. Households' access to market

The issue of physical access to market is one of the crucial components in market based response option analysis. Market access creates favorable condition for goods and services to move from source markets to final destination markets and hence it heavily influences a commodity's price level. This assessment based a household's physical access to markets on the information obtained from the DADO and as well as secondary sources. Furthermore, the analysis team has taken in to account contextual analysis and field level experiences in identifying areas with access challenges during the lean season of the year. Of the assessed markets, 47% are connected with main supply sources by tarmac road, 43% by all-weather road and 10% of the markets are connected by dry weather road. DADO officials have indicated that most of the beneficiaries in the targeted Traditional Authorities have no challenges to access the market. However, there are few pocket areas where beneficiaries access to the nearby markets is identified as very challenging especially during the rainy season. The assessment identified 4 TAs and two SCs with access challenges during the rainy months. Traditional Authorities with access challenges during the rainy months are TA Ngabu and TA Chapananga in Chikwawa, SC Juma (EPA Kamwendo) in Mulanje, TA Jenala (EPA Tamani) in Phalombe, SC Chauma and TA Kasumbu (EPA Kanyama) in Dedza.

## 9. Traders and markets assessments

The following section of the report is drawn from the analysis of markets assessment data collected through the survey. Considering high number of assessed markets (85), the description of variables are discussed in broader categories such as by region and traders typology. The details of market based variables are attached as annex. The Agro-Economic Survey Department of MoAIWD classifies grain traders as indicated below. The assessment also followed this classification.

**a. Big vendors:** purchase from producers and traders either at their store location or at farm gate and sell to processors, institutions or traders using the wholesale unit, bag. These big vendors never sell grain at retail unit, KG. They transport grain at the door step of processors or buyer of the grain. The financial capacity is strong as compared to the remaining two categories indicated below. Big vendors never sell to consumers. The number of big vendors at TA level markets are expected to be few.

**b. Medium vendors:** purchase from producers and traders either at their store or at farm gate and in most cases sell to traders and/or consumers, using both retail and wholesale units. The distinction from big vendor is that this group sell in retail unit directly to consumers in the same market they purchase the commodity. They supply rarely to processors and institutions that float grain tender. The number of medium vendors are higher than big vendors in a given market location.

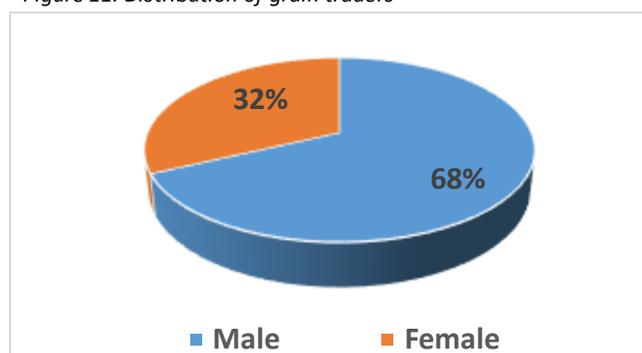
**c. Retailer:** purchase from producers in and/or traders in the same market or far distance for sell to ultimate consumers using retail unit. This group never sell to processors or institutions. Their business capacity is low to meet the minimum requirements of processors and institutional purchase.

### 9.1. Traders characteristics

The proportion of traders interviewed for the assessment were 8% (42) big vendors, 37% (180) medium vendors and 55% (288) retailers. The two most important traded grain commodities that were reported by interviewed traders were maize and general beans. About 60% of interviewed traders placed maize as the primary important commodity while 35% considered general beans as primary product for their business. However, most of the interviewed grain vendors do one commodity trading, which by and large is maize. The percent of big traders' in the assessed markets is low cognizant to the fact that this group of vendors is not operating permanently at localized level markets. With regards to CSB, the availability of the product at Traditional Authority level markets is limited to very few locations, mostly district capital markets. The product is widely available in supermarkets located in big towns.

The number of grain traders by gender and type of activity engaged shows differences between male and female grain traders. Male grain traders comprises about two-thirds of the interviewed traders and are twice the number of female grain traders across the assessed market. In terms of business type, big and medium grain trading is dominated by males while the share of women as retailers is relatively higher as compared to the other two trader categories. The domination of male grain traders in the big and medium categories of the grain business is most likely the reflection of male engagements in the business for long period of time and also easier access to working capital and financial sources.

Figure 11. Distribution of grain traders



Source: Traders survey, August 2014

Table 3. Distribution of grain traders by gender

	Big	Medium	Retailers	Total
Male	81%	80%	58%	68%
Female	19%	20%	42%	32%

Source: Traders survey, August 2014

The length of time during which traders have been operating in the business has its own contribution to the performance of the individual's business and the market in general. The longer the trader has been in the business, the higher the likelihood that the trader will have experience and knowledge about identifying reliable sources of markets during different times of the year. Furthermore, the trader will develop working relationships with market actors and customers to run transactions smoothly. The results of the trader survey showed that half of the interviewed traders have more than 5 years of working experience in grain trade activities. A large proportion of interviewed traders (40%) have grain trade working experience between one to five years (Table 4). The new entrants to the grain business

Table 4. Distribution of grain vendors by years of experience

	Big Vendor	Medium Vendor	Retailer	Total
Less than 1 Year	11.9%	4.3%	8.2%	7.1%
Between 1-5 Year	38.1%	38.8%	41.1%	40%
More than 5 Year	45.2%	55.3%	49.3%	51.2%

Source: Traders; survey, August 2014

in the last one year accounts only 7% of interviewed traders. This result suggests that traders in the assessed markets have sufficient experience and knowledge about grain trade and are more likely to respond to the changes in the demand. In terms of region specific categories, the Northern and Southern region have traders with more than five year grain trade experience accounting respectively for 58% and 52% of the interviewed grain traders.

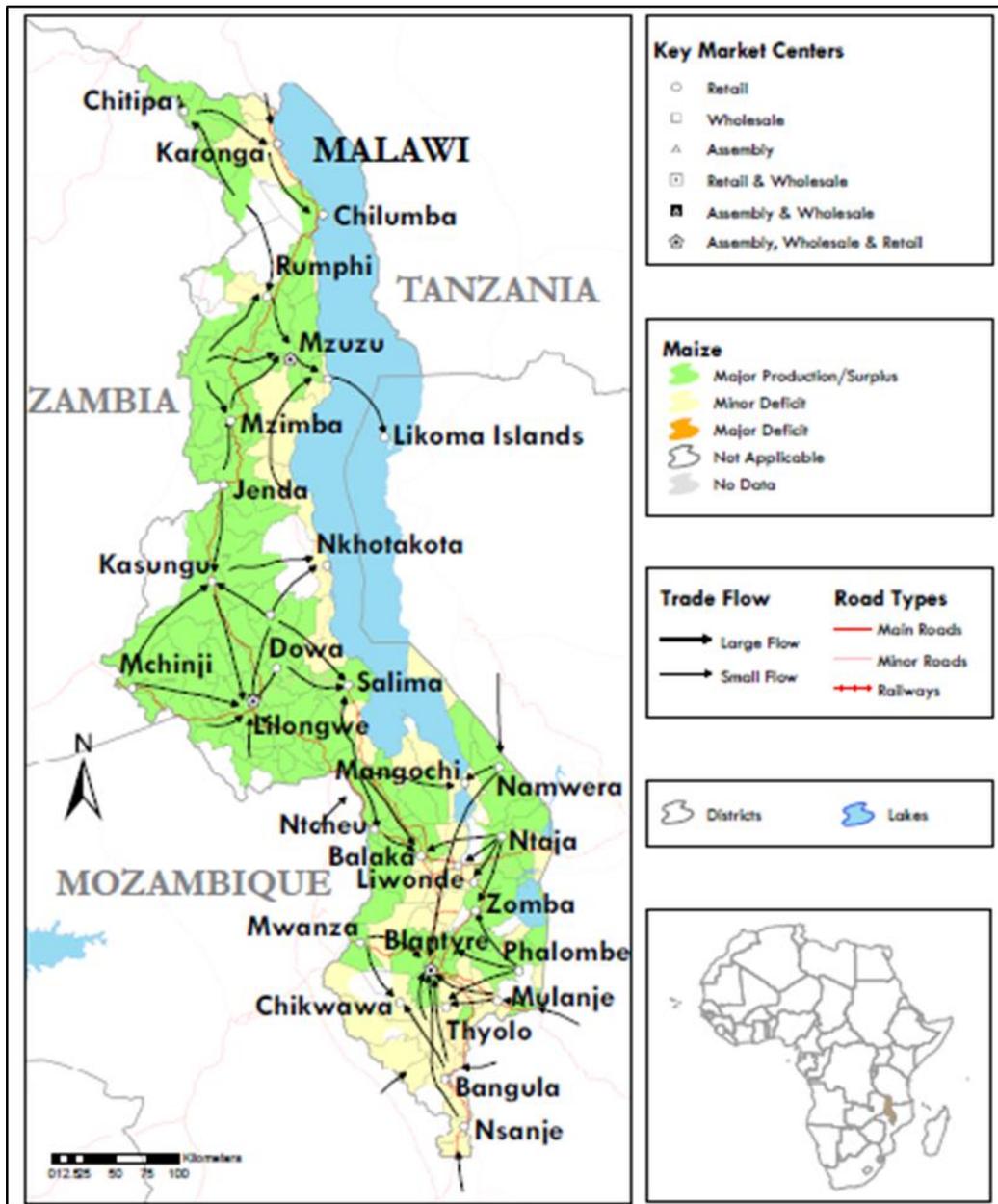
Interviewed traders were asked to estimate the number of grain traders who permanently operate throughout the year. The estimates on the number of grain traders operating in the assessed markets was noted to vary from a minimum of five to the maximum of twenty three traders. The higher the number of traders in any market, the better for the market performance in terms of increasing competition and trade volumes to meet consumers' demand. In few of assessed markets, there is a tendency among the traders operating in the market to set the price of grain for the specific market day. However, in terms of its applicability the situation is quite different where each trader negotiates with customers on prices. For instance during the data collection at Pengapenga market of Ntcheu district, maize traders had set price

of maize at MWK 65/KG, however, we have seen that traders were exchanging above and below the price set for the market day. In the event few traders operate in the market, it could be likely to observe agreed price across traders but such a practice was not commonly implemented across markets.

## **9.2. Flow and volume of traded commodities**

The main staple food commodity, maize, is largely produced in the Central and Northern region of the country. The commodity (maize) flows from these two regions to the food deficit region (Southern region) and also within the region where the demand for the product exists. The flow direction and volumes of grain varies during the postharvest and lean season. Post-harvest season is characterized by the aggregation of grains in rural locations to move to main trading centers. Basically, the flow of commodities is based on the demand for household consumption and as well for processors and institutional stocks. Processors and institutional warehouse facilities are located in major urban centers mainly Lilongwe and Blantyre. In visited TA level markets, there are assemblers who buy grain directly from farmers for sell to mobile traders who come at a given trading center to buy and take away the commodities. On the other hand, grain traders from other urban centers (like Blantyre, Lilongwe, Balaka etc.) travel to major rural supply markets, rent available stores, buy and finally take out the commodities. These traders never sell grain in the local markets and what they are doing is to rent temporary stores to keep the purchased commodities until they are ultimately transported to the final destination. Such a practice is predominantly employed in the Central and Northern regions of the country where production is available in sufficient amount. Figure 12 shows the flow direction of maize within the country.

Figure 11. Maize flow map



Source: FEWS NET

Interviewed grain traders were asked about estimates of traded quantities of the two most important commodities during the post-harvest and lean season of the year. Considering the number of traders and the weekly traded volume of the commodity, the survey has come up with monthly traded volumes of maize for comparison purpose with the expected induced demand from the cash intervention. This variable is used as one of the quantitative variables employed in the decision making process of the transfer options. Boma markets (District capital) and large trading center in township areas have the capacity to entertain larger traded volume in comparison with TA level markets. Of the assessed 85

markets, Chimbiya, Balaka center, Chigwirizano, Chilinde, Kamwendo, Karonga center, Mkozi, Lunzu and Ntaja, are markets with the highest monthly trade volume of maize. The monthly estimated maize trade volume for these markets ranges from the minimum of 200mt to the highest at Chimbiya, 1997Mt. Chimbiya is one of the main grain market centers of Malawi where traders from numerous locations come and buy during the weekly market day.

Generally, the purpose of quantifying maize trade volume is to gauge the capacity of traders and markets viz-a-viz the additional demand from cash intervention. The CaLP minimum requirement for market analysis indicates that the relative scale of a potential intervention is one of the key indicators to look at when determining the risk of a programme having a negative impact on the market. As a basic principle, markets assessment need to lean heavily towards seeking rigorous answers to key questions when an intervention is expected to increase the total demand for relevant goods within 10% to 25%. Considering the good harvest of maize in the country coupled with an export ban and also better production situation in the neighboring countries, this analysis used ranges of 20-25%, of the induced demand against market capacity as one of the indicators to gauge specific market response capacity to absorb the additional demand. Beneficiaries in one TA can be served by multiple markets and in such cases the total traded volume of the markets were combined for comparison purpose against the induced demand. In this assessment, markets capacity to absorb the induced demand of 25% and lower percent were considered as one of the necessary conditions to cash response options.

### 9.3. Credit and stock strategy

In the last two years, 65% of big vendors, 75% of medium vendors and retailers didn't receive any credit to run their business. This implies that large proportion of traders were dependent on their own capital to operate grain trade. Of the main reasons, significant proportion (61%) of big traders' response was that they had no need for credit while the same reason was applicable to a third of medium vendors. In case of retailers, a third of them had no option to access credit for various reasons including lack of knowledge where to go for credit. About 35% of the retailers found a high interest rate and collateral requirements as impediments to their credit access.

About 64% of big vendors, 69% of medium vendors and 40% of retailers do have a bank account. This implicates that most of the vendors do have information and experience in dealing with banks and have better opportunity to access credit from banks as compared to vendors without a bank account. Of grain vendors who received credit in the last two years, 27% of them do have bank account as compared to those who received credit without possessing a bank account.

Table 5. Reasons for not taking credit

	No need for credit	No option	High interest rate	Collateral requirements	Less amount availed	Not applicable	Other
Big	60.6%	4.3%	4.3%	8.7%	0	13%	8.7%
Medium	33.9%	32.3%	11.8%	16.5%	1.6%	3.1%	0.8%
Retailers	25.1%	34%	18.7%	17.2%	1.5%	3.4%	0%

Source: Traders' survey, August 2014

With regards to credit provision, it is only 19% of big vendors, 36% of medium vendors and 44% of retailers who rendered short term in-kind credit to customers. During the post-harvest months, most households depend on own production and the low level of credit provision is likely to be associated with seasonal trends. Relatively, medium vendors and retailers have direct trade exchanges with customers and it is not surprising to see a higher proportion of credit provision to customers by these traders. Furthermore, interviewed traders were requested to respond qualitatively about the number of people requested for credit as compared to a year ago. The result showed that 57% of big vendors, 43% of medium vendors and 37% of retailers reported less number of people have requested credit against last year's requests. However, a quarter of retailers have reported that more people requested credit compared to last year (see Table 5). Generally, the number of people requesting a loan is expected to be higher when the lean season progresses. Thus, increasing the purchasing power of beneficiaries through market based response options is likely to create effective demand and ease beneficiaries' credit requests.

Table 6. Response to request for credit

	More	Less	The same	Not applicable	No answer
Big vendor	4.8%	57.1%	14.3%	4.8%	19%
Medium vendor	14.4%	43.3%	32%	1%	9.3%
Retailer	28.5%	36.8%	25%	0.7%	9%

Source: Traders' survey, August 2014

Producers are the main source of grain either at vendors purchasing shop or at near-by market locations. The result of the survey's analysis indicates that 83% of big traders, 73% of medium traders and 60% of retailers purchase grain (maize) mainly from producers as the primary source. In most of the cases assemblers supply grain to big traders due to the fact that middle vendors and retailers would prefer to purchase directly from producers to minimize transaction costs incurred by assemblers and to maximize their profit margins. However, lean season supply to the retailers comes mainly from big and medium vendors or from "mobile-traders". High reliance of retailers on big and medium vendors during the lean season could be factored to their financial capacity to purchase and keep stock for sell in the lean season. In relative terms, medium vendors in assessed markets have better financial capacity over retailers and they are known in keeping grain stocks for sell to consumers directly or via retailers during the lean season.

Table 7. Description of primary purchase source

	Producers	Assemblers	Big vendors	Other	Total
Big vendors	83.3%	9.5%		7.2%	100%
Medium vendors	72.9%	8.5%	11.2%	7.4%	100%
Retailer	59.6%	8.9%	26.4%	5.1%	100%

Source: Traders' survey, August 2014

In most of the markets, grain traders put their weighing scale at their shop and buy directly from producers and others who sell grain. It was observed that producers prefer to sell to traders with a modern weighing scale that displays the total weight of their commodity as compared to the usual weighing scale that traders put on pairs of poles to weigh grains. The modern scale has options to display weights and as well total prices of grain subject to price data insertion. However, all interviewed traders didn't enter prices so that total value of the weighed commodity will not be displayed. During the weekly market days, a highest purchase and sell volume takes place while on daily basis the activity continues irrespective of the specific market day. About 61% of surveyed markets operate seven days of the week while the remaining markets operate a fixed number of days (one or two times) per week.

Traders were asked as to where they keep grain stock irrespective of the storages condition (quality). The survey found that about half of the big vendors have their own warehouse exclusively dedicated for grain trade. Furthermore, 21% of big vendors use rented warehouses to run their business; and more than a quarter of medium vendors and 42.5% or retailers use their own residential house as storage to keep commodities. It is common for retailers to use open space as storage location during the non-rainy season and they would create a form of shelter to protect the grain from rainfall during the rainy season.

Table 8. Distribution of storage facility

	House	Shops	Own Warehouse	Rented Warehouse	Open space	Other	Total
Big Vendors	9.5%	11.9%	50%	21.4%	4.8%	2.4%	100%
Medium Vendors	29.3%	11.2%	36.7%	16.5%	1.6%	2.7%	100%
Retailers	42.5%	20%	12.1%	16.4%	3.9%	3.6%	100%

Source: Traders' survey, August 2014

The availability of warehouses dedicated for grain trade with big and medium grain vendors is indicative about the existing storage facility to increase their sales volume. There is a significant difference between traders' category in terms of their storage capacity and this directly reflects their scale of business operation. The average storage capacity of big traders is often twice and even three times larger respectively as compared to the medium vendors and retailers average storage capacity. Half of big traders' have storage capacities of more than 50Mt while one third of the medium vendors and fewer than 10% of retailers do have such level of storage capacity. About two thirds of the retailers do have the capacity to store less than 5mt of grains. The low level of storage capacity for retailers is likely to be associated with the frequency of restocking and volume of purchase per restocking rounds. Compared to big and medium traders, retailers buy small quantities of grain with frequent restocking while the big and medium traders buy higher volume of grain at once and it takes time to deplete the stock.

Table 9. Traders storage capacity

	Less than 5Mt	5.01-10mt	10.01-15Mt	15.01-30Mt	30.01-52Mt	52.01+
Big Vendor	16.7%	4.8%	7.1%	21.4%	19.0%	31.0%
Medium Vendor	26.2%	8.2%	12.0%	20.8%	14.2%	18.6%
Retailer	64.0%	15.1%	7.4%	4.8%	5.9%	2.9%

Source: Traders' survey, August 2014

It was indicated in previous sections that current year production is better as compared to the previous year both within the country and also in the neighboring countries. This increased production is likely to translate in improving the supply of staple grains to the markets and hence better availability. Interviewed traders have rated the supply of staple grains to the market as compared to a year ago. The results show that about 47% of vendors rated the current supply as normal to above normal whilst the same percent of traders rated it as below normal. Regionally, about a third of traders in the Central and North regions, and 62% of traders in South rated the current market supply normal to above normal (Table 10). In spite of the overall production increases, pocket areas of Central and Northern regions were also affected. Thus, most of assessed markets were either within the affected TAs or close to them and it is not unique that more than 50% of traders in these areas to rate market supply as below normal. However, as the lean season progresses and more demand on market appears, it is likely that the supply situation to improve as most of the areas in these two regions were not affected.

Table 10. Traders' ratings of markets supply

	Above Normal	Normal	Below Normal	I don't know
North	21.8%	12.6%	58%	7.6%
Central	18.8%	17%	60%	4.2%
South	41.6%	21.2%	32.7%	4.4%

Source: Traders' survey, August 2014

#### 9.4. Response capacity and constraints

In terms of response capacity to induced demand, the survey result shows that 79%, 55% and 33% of interviewed traders have the capacity to respond to respectively 25%, 50% and 100% additional demand. The capacity to respond to additional demand for grain (maize) varies across vendor but the absorption capacity declines as the proportion of induced demand increases from 25% to 100% (Figure 13). The response capacity of traders' indicates declining trends as the demand increases from 25% to 100%. However, more than half of big and medium traders have reported that they have the capacity to respond up to 50% of additional demand (Table 11).

Figure 12. Response capacity to demand increases

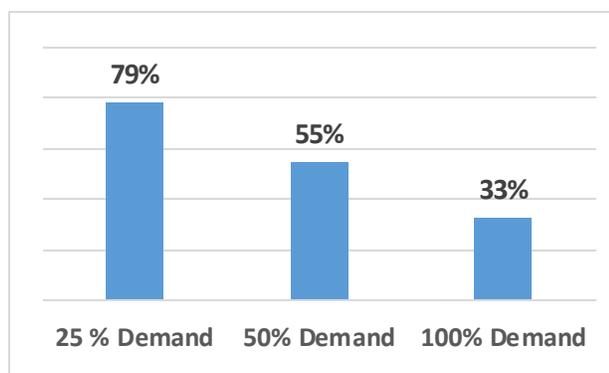
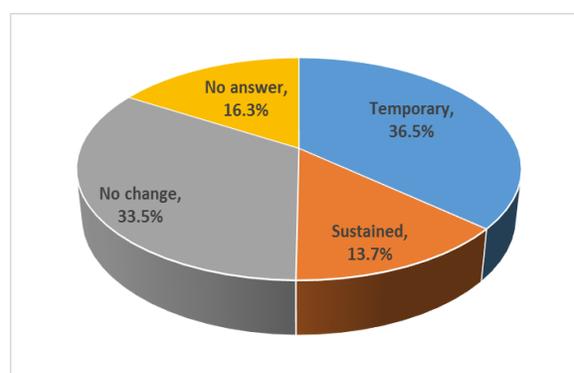


Figure 13. Price changes to 25% demand increases



Source: Traders survey, August 2014

In line with the response capacity of traders, about 14% of traders do expect prices to increase and to remain higher for the period of demand increases (Figure 14). Furthermore, big and medium vendors are the one who supply grains during the lean season of year and 19% of them expect increases in price that will sustain for period the demand increases. Conversely, one third of the interviewed traders indicated that a price change would be temporary till the markets would respond to the changes in demand (Table 12). Generally, an increase in demand during the upcoming lean season of the year could lead to price changes.

Table 11. Response capacity to increased demand

	Yes (25%)	Yes (50%)	Yes (100%)
Big vendor	69.0%	54.8%	35.7%
Medium vendor	84.6%	65.4%	40.4%
Retailer	76.1%	48.2%	27.9%

Source: Traders' survey, August 2014

Table 12. Response of traders on price changes duration for 25% demand increases

	Temporary	Sustained	No change	No answer
Big vendor	31.0%	19.0%	11.9%	38.1%
Medium vendor	37.2%	19.1%	28.2%	15.4%
Retailer	36.5%	13.7%	33.5%	16.3%

Source: Traders' survey, August 2014

It is known that supply response to meet the additional demand takes time to source grain from supply sources. About 56% of traders' indicated that it takes about one week to one month duration to respond to 50% additional demand. The disaggregated lead time to respond to 50% additional demand shows that 38% of traders will respond within one week, 11% within two weeks and 7.3% within one month. Furthermore, 45% of big vendors and 58% of medium vendors need the maximum of two weeks to respond to 50% additional demand (Table 13). Considering the two weeks lead time, it can be inferred that the big and medium traders have the potential to double their business within in a month. The frequency of response to the affected population is on a monthly basis and hence the lead time to respond to induced demand by big and medium vendors is likely to increase the trade volume.

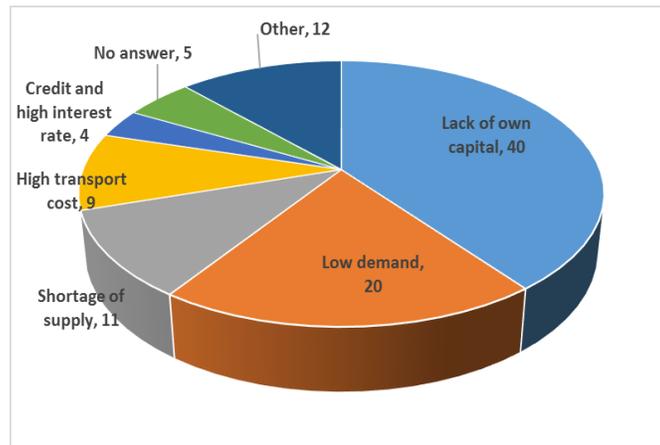
Table 13. Lead time to respond to 50% additional demand

	Can't promise	1week	2weeks	4 weeks	> 4 weeks	No answer
Big vendor	11.9%	40.5%	4.8%	7.1%	7.1%	28.5%
Medium vendor	20.7%	44.7%	13.8%	10.6%	5.9%	4.3%
Retailer	36.8%	33.6%	10.0%	5.0%	8.2%	6.4%

Source: Traders' survey, August 2014

Figure 14. Constraints to double business

The main constraints identified by the interviewed traders' to double the current business were lack of capital (40%), low level of local demand (20%), shortage of supplies (11%), transport related issues (9%) and other factors that include unpredictable price situation, storage facilities (Figure 15). During key informants' discussion with GTPA, the prevailing export ban and absence of coordination among market actors were also indicated as constraints to the market and grain trade in particular. Source: Trades' survey analysis, August 2014



Out of the the constraints, the markets that mentioned low demand as constraints would ideally be feasible for a cash intervention so long as the location is accessible and other market based response option requirements are met.

## 10. Key informant discussion

One of the comments on the 2013/14 market assessment was the absence of discussions with national and regional level market actors. This was conducted for this year's market assessment. The national level market actors' information provides the bigger picture of market functionality specifically on those products processed and distributed through national level market players. Contacted key informants were Government organizations and as well private companies. National Food Reserve Agency (NFRA) and ADMARC Ltd are the two Government organizations dealing with grains stock and distributions. The private companies are RAB Processors Ltd, TRANSGLOBE, Capital Oil Refining and KU-Distributor and Grain Traders and Processors Association. The first two private companies produce nutritious foods, CSB, CSB+ and other food commodities. As the name explains Capital Oil Refining does process cooking oil while KU-Distributor deals with grain including cereals and pulses. Furthermore, the GTPA chairperson was contacted to have wider picture of grain trade in the country. In order to make best use of information, the main findings of the interview is prepared as grain and processed food.

### 10.1 Grain marketing

NFRA has seven warehouses located (Bangula, Luchenza, Mangochi, Lilongwe, Mzuzu, Kazomba and Limbe) across the country with a total capacity of about 150,000Mt. The warehouses and silos located at the capital city, Lilongwe, stores about half of the total organizational storage capacity. NFRA allotted the capacity of warehouse for different purposes, 75,000Mt for humanitarian purpose, 25,000Mt for social purposes through ADMARC and about 20,000Mt as carry-over stock. The agency keeps the first and third volume of stock as the minimum level of stock at any point in time.

In 2013/14 consumption year, NFRA had 120,000Mt of grain stock of which 40,000Mt was released through ADMARC as Government maize market stabilization programme. The volume of maize released through ADMARC varies from year to year depending on the severity and shortage of maize in the market.

For instance, in the last three consecutive years, NFRA has distributed maize grain amounting to 70,000Mt, 27,000Mt and 40,000Mt continually through ADMARC. The prices of selling and buying through ADMARC is determined by the Government and the responsibility of the agency is simply keeping stocks, reportedly. The efforts made by the team to get information on how prices are determined was not fruitful.

The NFRA procurement plan for 2014/15 consumption year is about 115,000mt, reportedly. It is aimed to strengthen the capacity of the Government to respond to food insecurity issues related to staple grain. Normally, the agency purchases from traders, Commodity Exchanges and also from smallholder farmers at the warehouse locations. July to September are the peak procurement months for the NFRA, however, for the current season NFRA has not yet started to buy grains till this interview was carried out, July 18, 2014.

The agency has no experience in rotating stocks being the stock is released annually either for humanitarian or social purposes. However, higher volume stocks at any given year followed by good harvests in the consequent years requires ahead of stock rotation planning.

ADMARC is a Government run business organization to safeguard consumers from high grain prices. The organization purchases staple grain, maize and pulses, from local farmers for re-sale during the lean season (October-March) at subsidized prices. ADMARC has wider coverage in terms of availability of depots. There are 305 depots across the country with a total capacity of 250,000mt. The storage capacity varies among locations depending on local specific conditions. The management of ADMARC explained that 205 of the outlets are not profitable in terms of doing business.

Last year, 70,000mt of maize was aggregated and distributed to consumers. The monthly per person ration size is 10kg and there is no systematic way of reaching households rather a first come first served principle applied. It is likely that a person could buy repeatedly as there is no mechanism to check whether a particular individual has already bought his fair share or not. The management of the organization believes that the frequency of distribution ensures that households meet their monthly quota.

The target for that 2014/15 consumption year is to purchase about 50,000mt. Owing to the good harvest of the current year, the target reduced by about 28% as compared to last year's volume. In spite of the reduced volume, there are specific areas that are targeted for current year interventions where production was poor. These areas are Karonga, Lisungu, Shire Valley, Machinga and Misuku Hills. Furthermore, ADMARC supplies maize to institutions like hospitals, boarding schools and prison centers. The monopoly nature of ADMARC to supply maize to such big institutions can be seen as a constraints to enhance competition in grain marketing.

Like NFRA, ADMARC receives annual working capital from Malawi Government and till this interview was conducted, no budget was released for 2014/15 purchases. The organization has cash in its account which is sourced from sell of maize grain received from ADMARC and has purchased maize grain of about 4000mt. The delay to procure at peak marketing season by the organization makes ADMARC to pay high costs and at the same time contribute prices increase that impacts market dependent poor households.

Though the floor price of maize for 2014/15 was set at MK 100/KG, traders are purchasing maize grain far below the floor price (60-65Mk/KG). ADMARC is supposed to buy maize at or above the floor price set by

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the Government. Nevertheless, during the market assessment it was reported by traders that ADMARC was buying at MWK 70/kg at Pengapenga market in Ntcheu district. ADMARC's selling price of maize is uniform across the country. This situation benefits those areas which sell their product at higher prices to ADMARC while later on buy at subsidized prices. This system thus disproportionately benefits some locations over the others.

Generally, the capacity of ADMARC to purchase and distribute maize at the lowest administrative level (TA) safeguards poor and very poor households to access the minimum set quota. However, the untimely procurement of ADMARC relative to traders, lead the organization to buy at higher prices and sell at lower prices.

KU distributor is one of the private companies which operate in grain trading. It specifically trades in pulses and oil crops. The company is located in Blantyre and aggregates commodities from traders at their central warehouse. Big vendors at district and TA levels aggregate commodities and transport to the company delivery location. This company exports pigeon peas and groundnuts while supplies maize grain to local processors. The experience of channeling maize grain to consumers during the lean season through this company is not practiced. The owner of the company explained that 2013/14 production season performance was good in most areas including Southern region. It was reported that bad road conditions in remote areas where products are produced and aggregated is one of the major challenges for the development of grain market. The food has to be transported to major centers from remote locations ahead of the disruptive rainy season. The manager believes that there is high competition among grain traders at regional levels as compared to lower level markets. He further noted that big vendors are the ones who have the power to decide purchasing prices at lower level markets and to some extent selling prices too to the regional level grain traders.

## **10.2 Grain Traders and Processors Association (GTPA)**

Grain Traders and Processors Association has 202 member traders of whom 12 are big capacity processors and traders. The categorization of traders is based on their annual traded volume of commodities. Those with more than 1000mt trading volume per annum are considered as big traders while the remaining traders are considered as medium and small. The distribution of big traders are concentrated in major trading centers mainly Lilongwe, Blantyre and Mzuzu. In relation to maize, the big traders are primarily associated to supply institutions and their own processing factories. Of the total estimated traded volume per annum (300,000-400,000<sup>9</sup>Mt), GTPA has the greatest share estimated to be about 250,000-300,000Mt of grain, reportedly.

In the current marketing season, the big traders have stock of 40,000Mt (current purchases) and 28,000Mt carry over stock. The current year stock of maize is estimated to be the lowest due to uncurtaining about the procurement plan of NFRA and ADMARC. The beginning of 2014/15 lean season is about one month ahead of time and aggregation of maize might be compounded by many factors including stiff competition on transport facilities from the movements of fertilizer and grain as the planting season approaches. Furthermore, traders' maize purchase is crippled by the export ban in place and traders are not certain as to what to happen. Low level of purchases by traders lead to higher volume of post-harvest loss and

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<sup>9</sup> This figures are not assessment based rather estimation the chairperson for the GTPA.

quality deterioration while the commodity is kept in the hands of producers for long time. The export ban in place also trigger for more informal trade flows that has also an implication on foreign exchange earnings that that the country could have benefited.

The GTPA chairperson has indicated the importance of market based response options to stimulate the local economy. However, she believes to mobilize traders to avail maize and other grain on the targeted areas market subject to an agreement with implementing partners. It seems that the GTPA wants to have voucher option so that availability of commodities will be ensured in the markets. Otherwise, communicating traders through GTPA to mobilize grain traders to make commodities are available sufficiently in targeted markets seems challenging. Generally, there is a need to share information as to where market based response option will be implemented with GTPA. Export ban, storage and lack of coordination among market actors including Government, GTPA and humanitarian organizations are seen as main constraints that grain traders are facing at most. Furthermore, it was indicated that big traders have access to financial source but small scale traders are constrained by high interest rate on access to loan. The trade volume of small scale traders was indicated as one of the limitation factors to make attractive profit after payments of interest on loan.

### **10.3 Processed food marketing**

There are three nutritious food processors in Malawi. Two of the processors are located in Blantyre and one in Lilongwe. The assessment team has discussed with two (RAB Processors and TRANSGLOBE) of the processors. These processors produce CSB but in small quantities unless purchase order are made by requesting agencies. Under normal circumstances, these processors allot about 5% of total plant production capacity for CSB while the 95% of the capacity is for other processed food production. Low volume of CSB production is associated with lack of demand for the products being expensive to be consumed by low income households.

The processors distribute their products through their own outlet depots and other distribution chains. RAB processor has wider coverage (22 in North, 34 in central and 24 in South) while TRANSGLOBAL has five depots (Blantyre, Lilongwe, Kasungu and Mzuzu). RAB processors do have extensive coverage due to the fact that they distribute Government agricultural inputs subsidy to farmers.

The estimated annual CSB production capacity of RAB Processors is about 30,000-50,000mt while for TRANSGLOBE ranges from 18,000-24,000mt. The package of CSB varies from 0.5kg to 25kg and can be packed at different volumes based on purchase order. In July 2014, the selling price for 25kg of CSB was MWK 10,250 (VAT inclusive) and the price varies during the year. As the lean season progresses, the processors are more likely to adjust prices. The good harvest of 2013/14 season for maize and soya bean was reported being favorable for the availability of raw materials throughout the year. The minimum stocks of raw materials kept by the processors lasts for about three months. The source of raw material is mainly local markets, except vitamins for fortification.

Given the perishable nature and short shelf life of CSB, processors would like to have confirmed purchases ahead of producing the product in bulk. This means that the processors prefer to have purchase orders or voucher system to produce and deliver at specific locations. RAB processors in particular prefer the

voucher system to distribute CSB directly to beneficiaries using the existing extensive depots across the country.

The Malawian Government Bureau of Standard urges cooking oil factories to enrich the products with vitamins. Cooking oil processors in the country are expected to fortify their products. Capital Oil Refining is one of the biggest factories operate in Malawi. It is located in Blantyre town (390km South from the capital). The factory produces cooking oil for local consumption with production capacity of 120mt cooking oil per day. The manager of the factory has reported that they produce below the total production capacity for various reasons. The exchange rate instability has had negative implications on the performance and production of cooking oil. It was reported that after seven years of low levels of production, the factory has started to produce about one third of its monthly production capacity, 1000mt of oil per month. This was achieved due to improvements in availability of foreign currency without long waiting time as compared to the situation before two years.

The minimum unit of package is 0.250 Ltr and the maximum is 25 Ltr. The stock of cooking oil at factory's warehouse lasts not over a maximum of seven days. This indicates the high demands for the product. The factory manager considers humanitarian organizations as a threat to the development of the sector as these organizations import cooking oil. He believes that local production is sufficient to meet the local cooking oil demands. Furthermore, cooking oil is supplied from Mozambique through informal trade which is cheap compared to locally produce cooking oil. This has also been cited as one of the main constraints the sector faces for its further development.

## 11. Conclusions and recommendations

The final objective of the assessment is to come up with suggestions on markets and traders that will respond to the induced demand of food insecure people that MVAC has identified as target groups. The analysis team has identified key variables that enable to measure and analyse the capacity of markets and traders vis-à-vis the expected requirements. The variables used for decision making on the type of modality are both quantitative and qualitative and are derived from the analysis of data and contextual factors collected by the assessment.

The key variables used for making the final decisions are the following: capacity of markets to supply maize against the demand; households' access to the market during the lean season; number of grain traders operate in the market during the lean season and competition on prices; capacity of traders to absorb additional demand; interconnectedness of markets to supply from source markets; one transfer modality per TA; possible risks, and evaluation reports of emergency intervention in previous years.

Thus, based on the above factors MVAC's analysis team proposed food interventions to 28 TAs from 13 districts. The total number of beneficiaries targeted for food is 276,075 that represents 43% of the caseload. The remaining beneficiaries in 34 TAs (15 districts) with a total beneficiaries of 363,934 are proposed for cash. This number of beneficiaries represents 57% of the total caseload for the 2014/15 consumption year. In spite of markets' and traders' capacity to respond to the additional demand in cash suggested TAs, Humanitarian Response Committee has indicated the likely scenario of funding challenges towards cash. As a result, MVAC was tasked to undertake prioritization process and come up with levels of confidence in the market.

Thus, the analysis team considered both quantitative and qualitative information to categorize TAs in to three. The categories reflect the level of confidence on the markets to provide adequate amount of food on time and favorability of contextual factors to cash interventions. The variables used for categorizations are market response capacity (volume of against induced demand), connectedness of the market, number and mix of traders in the markets and contextual factors as criteria. The prioritization is about relative comparisons within the cash proposed TAs.

Markets categorized as **Priority One** are believed to be strongly supportive to cash in terms easy absorption capacity of induced demand with reasonable seasonal prices change, high competition on the market and absence of collusive behavior of traders, better road network connectivity and for having reliable supply sources. Most of the markets in Priority One category are located in surplus producing areas and at the same time most of these markets are maize supply sources to other markets. In Priority One, it is highly likely that markets and traders will respond to the additional demand. These Traditional Authorities served by these markets are the first to be considered for cash intervention during the 2014/15 consumption year. The number of beneficiaries in this category represents 36% (228,295 beneficiaries) of the total caseload of 640,009 beneficiaries.

Markets categorized as **Priority Two** are supportive to cash intervention. However, compared to Priority One, markets have lower response capacity, number and mix of traders operate in the markets are lower. Thus, subject to availability of cash funding, Traditional Authorities served by these markets could be switched to food intervention. The number of beneficiaries in this category represents 13% (83,606 beneficiaries) of the total caseload.

Markets categorized as **Priority Three** are the lowest in terms of markets capacity, number and mix of traders, reliability of supply sources as compared to the **Priority One and Two** markets. Thus, Traditional Authorities served by these markets are the first ones to be switched from proposed cash to food intervention.

The total number of beneficiaries proposed for cash as **Priority One** represents 36% of caseloads. Thus, assuming that funding will only be available to meet the priority on group 64% of beneficiaries indicated by HEA to be in need of assistance to meet their food security requirements in the lean season will be targeted for food assistance.

With regards to in-kind assistance, there are TAs with access challenges during the rainy season and the team has proposed prepositioning of food commodities ahead of the start of the rainy season. These TA are notably: TA Ngabu and TA Chapananga in Chikwawa, SC Juma EPA Kamwendo in Mulanje, TA Jenala EPA Tamani in Phalombe and TA Chauma in Dedza.

Table 14. Number of beneficiaries proposed for cash with scenarios

<i>Number of cash and food beneficiary</i>				<i>Beneficiary</i>	<i>%</i>
<i>Modality</i>	<i>Region</i>	<i>District</i>	<i>Traditional Authority</i>		
<i>Food</i>	<i>3</i>	<i>13</i>	<i>28</i>	<i>276075</i>	<i>43</i>
<i>Cash Priority 1</i>	<i>3</i>	<i>11</i>	<i>20</i>	<i>228295</i>	<i>36</i>
<i>Cash Priority 2</i>	<i>2</i>	<i>4</i>	<i>8</i>	<i>83606</i>	<i>13</i>
<i>Cash Priority 3</i>	<i>3</i>	<i>5</i>	<i>6</i>	<i>52033</i>	<i>8</i>
<i>Total</i>				<i>640009</i>	

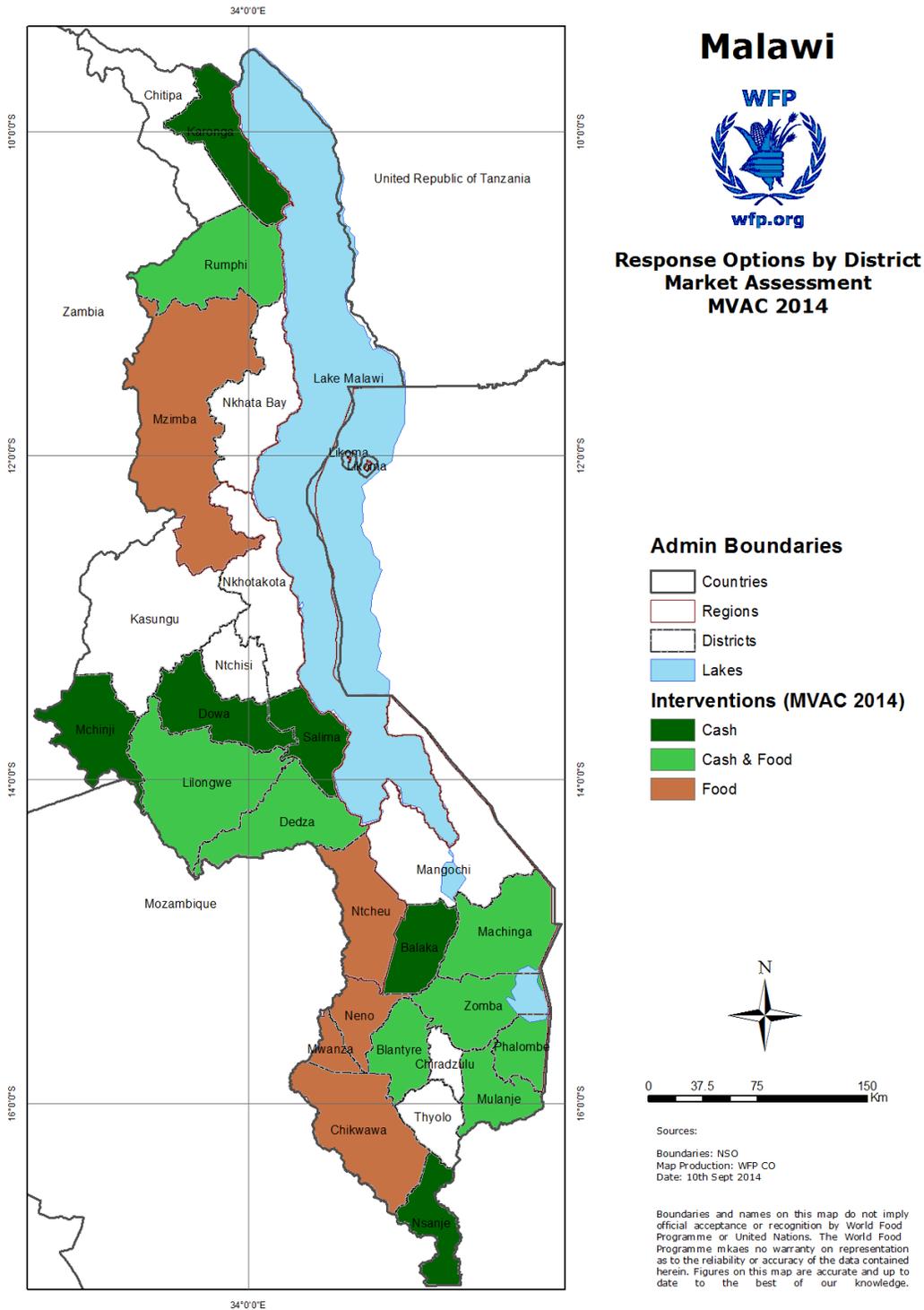
Table 15. List of Traditional Authorities proposed for cash by priority

	District	Traditional Authority	Market Name	Beneficiary	Decision	Priority
North	Karonga	TA Kyungu-EPA Lupembe	Lupembe	12311	Cash	1
		TA Kyungu-EPA Mpata	Karonga Centre Wiliro	13759	Cash	1
		TA Mwillang'ombe-EPA Ny	Nyungwe	7821	Cash	3
	Rumphi	TA Chikulamayembe	Bolero Rumphi Centre	20973	Cash	3
Central	Dowa	TA Kayembe	Chinsepo Nambuma	19227	Cash	1
		TA Mkukula	Chankhungu Chimwaza Lumbadzi	16833	Cash	1
		TA Msakambewa	Dowa Boma	3945	Cash	1
	Salima	TA Kambalame	Ngozi	5686	Cash	2
		TA Ndindi	Chipoka Lifidzi	19838		
	Mchinji	TA Mduwa	Matutu Mikundi	18146	Cash	1
		TA Simphasi (TA Zulu)	Chiosya Kamwendo	12554		1
	Dedza	TA Kaphuka	Chimbiya Linthipe 1	4702	Cash	1
	Ntcheu	TA Makwangwala	Kampepuza Pengapenga	21100	Cash	1
	Lilongwe Rural	TA Kabudula	Nsaru	9570	cash	1
		TA Kalolo _EPA Chileka	Mkoko Namtete	10401	cash	3
		TA Kalolo -EPA Chilaza	Chibungo	12644	cash	1
		TA Malili	Chigwirizano	8789	cash	1
		TA Mazengera	Nkhoma	5647	cash	1
		TA Mtema	Mngwangwa	5957	cash	1
		TA Tsabango	Chilinde	9865	Cash	1
	South	Machinga	TA Kawinga-EPA Nanyumbu	Ntaja Mbanira	5615	Cash
TA SITOLA-(Replaced MPOSA)			Liwonde	5119	Cash	1
Zomba		TA Chikowi _EPA Ngwelerero	Dzaone	3691	Cash	1
Blantyre		TA Kapeni/Machinjiri-EPA Lunzu	Lunzu Mkwate	14178	Cash	1
		TA Nthilamanja-EPA Thuchila		11721	Cash	2
Mulanje		TA Nkanda -EPA Thuchila	Nkando/Luchila	8302	Cash	2
		TA Nkanda EPA Kamwendo		8681	Cash	2
		SC Juma _EPA Thuchila	Mulomba	12763	Cash	2
Phalombe		TA Mkhumba-EPA Waruma	Mlomba Phalombe	13067	Cash	1
		Nsanje	TA Mbenje	Sorgin	4802	Cash
TA Tengani _EPA Mpatsa			Tengani	7041	Cash	2
Balaka		TA Nsamala-EPA Phalula	Phalula	11576	Cash	1
		TA Nsamala-EPA Utale	Balaka Market	8036	Cash	3
	TA Nsamala-EPA Rivirivi	Balaka Centre Kankao	9574	Cash	2	

Table 15. List of Traditional Authorities proposed for food

Region	District	Traditional Authority	Beneficiary
North	Rumphi	TA Mwachenga	11710
		TA Mwalweni	2136
		TA Mzikubola-EPA Mbawa	2329
		TA Mzukuzuku-EPA Mbawa	4295
		TA Mbelwa-EPA MBAWA	25182
		TA Mzukuzuku-EPA Vbangelala	4486
		TA Mzikubola_EPA Vbangelala	3343
		TA Mbelwa-EPA Vbangelala	5648
Central	Dedza	SC Chauma	5623
		TA Kasumbu EPA Kanyama	3351
	Ntcheu	TA Goodson Ganya	19611
		TA Phambala	15186
		TA Masasa	5480
	Lilongwe Rural	TA Kalolo -EPA Mingongo	18206
South	Machinga	TA Chikweo_EPA Chikweo	19835
		TA Ngokwe_EPA Chikweo	6056
	Zomba	TA Mbiza-EPA Dzaone	4017
		TA Mbiza-EPA Ngwelerero	11106
	Blantyre	TA Kunthembwe -EPA Kunthembwe	6414
		TA Kuntaja -EPA Kunthembwe	9679
	Mwanza	TA Kanduku	10668
		TA Nthache	11860
	Mulanje	SC Juma_EPA Kamwendo	13987
	Phalombe	TA Kaduya_EPA Kasongo	15015
		TA Jenala -EPA Tamani	17769
	Chikwawa	TA Chapananga	13295
		TA Ngabu	2652
	Neno	TA Symon	7136

Figure 15. Intervention modality map



Source: WFP

## Recommendations

The assessment team has proposed a set of recommendations that may help improve similar assessments that MVAC will undertake in the future and next steps related to programming

- Given the markets assessment period (three months ahead of the lean season), there is a need continuously monitor markets (supply, prices and demand) situation in the proposed cash intervention areas.
- When the cash intervention is implemented, it is fundamental to monitor and understand changes in the markets (whether cash injection will lead to increased prices of staple food commodities). Furthermore, it is necessary to assess the response of traders in terms of increasing supply.
- The actual distribution of cash to beneficiaries is highly recommended to be done in non-market days to minimize the likelihood of artificial price setting by some of the traders.
- Share information about cash intervention Traditional Authorities to Grain Traders and Processors Association so that the association communicate members to supply grain during the lean season.
- Development of a market assessment framework and response options guideline. This brings together MVAC member organizations to follow synonymous decision making process.
- In-depth market assessment training for the MVAC members. Conducting market assessment over wider markets like the current one demands in-depth trained staffs within the assessment teams to improve and strengthen the quality of data and analysis.
- Inclusion of key market variables in EFSA and HEA. Identification of key markets for the assessment was identified by respective DADO and it would be beneficial also to have market related questions in the EFSA and HEA assessments specifically to aid in identifying the key markets used by affected households and community.
- Documentation and sharing of lessons learnt from previous market based response options.

## 12. Annexes

### 12.1 Terms of reference

#### **Background**

Malawi continues to face numerous challenges that are negatively affecting the general food and livelihood security status amongst the poor and vulnerable households in the urban, peri-urban and rural areas of the country. Extreme weather patterns, from flash floods to prolonged dry spells have been affecting crop harvests for the past decade or so. Reduced crop harvests coupled with the prevailing economic crisis (characterized by high inflation as a result of the devaluation and subsequent floatation of the Malawi Kwacha, high fuel and transportation costs), have resulted in surges in food and general commodity prices; resulting in increased livelihood vulnerability and food insecurity amongst the general population.

The 2013/2014 agriculture season was characterized by delayed onset of planting rains (by 3-4 weeks) in almost all districts. In addition, some of the districts experienced dry spells during the 2013 to 2014 agricultural production season. A joint FEWSNET/WFP/Ministry of Agriculture and Department of Climate Change and Meteorological Services food security monitoring mission in March 2014 observed that prolonged dry spells experienced from end February to March in some districts such as Karonga, Lilongwe, Kasungu, Mulanje, Chikwawa, Nsanje, Balaka, Blantyre, Zomba, Mwanza and Neno would result in reduction of crop harvests, especially for maize (the staple food) which might affect the food security situation for poor households. Reduced crop production during the 2013 to 2014 production season is expected to limit household food stocks and ganyu labour opportunities, which constitutes major livelihood sources and coping mechanisms amongst the poor and vulnerable households in most parts of Malawi. Furthermore, households' access to food is likely to be limited by low wages and high food prices.

While the Ministry of Agriculture and Food Security (MoAIWD) second round Agricultural Production Estimate Survey (APES) results suggest a national food surplus production of over 1 million metric tons, there are pockets of low production at Agriculture Extension Planning Area (EPA) level in some districts due to prolonged dry spells experienced in the 2013-14 production season. This has affected households in some Traditional Authorities (TAs). In addition, the national surplus production does not necessarily lead to equitable distribution of the food to all people. The affected food insecure populations need to access food (mainly maize) through markets. Food access becomes very challenging for the affected households that do not have reliable sources of income and where food market systems are not functioning properly to redistribute the food from surplus areas to deficit areas. As part of informing the design and implementation of any humanitarian food security assistance that may be required in the 2014 to 2015 consumption year, MVAC would like to conduct a market analysis exercise, to determine functionality of the food market systems (especially maize market system) and make recommendations to the humanitarian community on the most appropriate food security response modalities for the different areas during the 2014-15 consumption year. The market assessment will be conducted in districts that will be highlighted to be food insecure in the 2014/15 consumption season by the MVAC and some selected surplus districts to determine the best modality of food assistance. The assessment in the surplus districts will be mainly for mapping commodity flows to understand market connections and integration.

## Objective

The main purpose of the market assessment is to determine maize market functionality during the 2014 to 2015 consumption year and make recommendations on appropriate food security response interventions (based on proper response analysis) for the design and implementation of any food security responses (in the affected TAs/ Districts) by humanitarian actors during the 2014 to 2015 consumption period. Specific objectives include the following;

- Determine accessibility of markets to affected populations;
- Review price information for key commodities on local markets and how the prices will most likely change as the consumption period progresses to the lean period;
- Assess current and potential availability (volumes) of maize supplies for the specific TAs/ Districts as the season progresses;
- Determine ability of the markets to respond to increased demand for key commodities;
- Assess capacity of traders to supply the local markets during lean periods
- Analyze the maize market systems (normal and lean season market systems) and identify any possible market system intervention points that can support access to food for the poor and vulnerable households during the lean period.
- Assess cross-border trading activities associated with supply of maize in affected districts/ at national level
- Identify any potential inflationary risks associated with increased local demand arising from the use of cash transfers.
- Assess the interconnectedness on markets from the surplus to the deficit areas/ districts
- Project how markets will most likely respond during the lean period (from August 2014 to March 2015)
- Recommend on the most appropriate responses to food insecurity during the lean period

## Methodology

The MVAC Secretariat will coordinate the market assessment. WFP will lead in the facilitation and finalisation of the market assessment, with technical support from FEWS NET, Oxfam and MVAC member institutions. The activities will involve reviewing the assessment methodology and facilitation processes. WFP will be responsible for technical and financial issues for the assessment, while MVAC secretariat will ensure that all logistical support, including acquiring vehicles from MVAC member institutions to be used for field data collection, communicating with member institutions, and coordinating with district level Government offices to provide their support.

As part of the design and implementation of the market assessment WFP will review the assessment tools with support from MVAC, FEWSNET, Oxfam and other member institutions by incorporating lessons learnt from the previous market assessments so that last mistakes are not repeated in the current assessment.

The market assessment methodology and tools will have to be agreed upon by the MVAC secretariat before commencing field data collection. Training on the use of the methodology (to be facilitated by the WFP/FEWS NET) will be done for the research team before proceeding to the field for data collection. A data analysis, response analysis workshop will be done at the end of data collection, to inform the final

market assessment and response analysis report, with clear recommendations to the humanitarian response community on appropriate response modalities.

### Main Deliverables

- A market assessment report summarising the main findings from the secondary and primary data analysis, highlighting clear recommendations on the most appropriate food security response interventions (based on the market systems analysis, gap analysis and response analysis) for the specific areas of interventions (TA level/ district level).
- Tools/ methodology for the assessment developed and accepted by MVAC secretariat
- Research team trained on the methodology and helped to collect information using the methodology
- Facilitate a data analysis, response analysis workshop, based on assessment data collected by the research team

### Timeframe

The whole assignment is planned for a maximum of 35days (from the start to the finish day). This will cover the period from first week of August to the first week of September. The approved (by MVAC secretariat) market assessment report is expected to be ready for use by the humanitarian community by first week of September 2014.

An indicative schedule of activities is outlined in table below. Further reviewing may be considered to accommodate the proposed planning with the effective data collection and cleaning timing.

<b>Key Activities</b>	<b>Week1</b>	<b>Week2</b>	<b>Week3</b>	<b>Week4</b>	<b>Week5</b>
1. Background literature review (continuous)					
2. Agreeing on methodology and Tools with MVAC					
3. Training data collection team					
4. Data collection					
5. Analysis and report writing					
6. Review of comments on draft report					
7. Market Assessment Report final release					

## Annex 2. List of Traditional Authorities by key markets and maize sources

District	TA	Market	Source market
Karonga	TA Kyungu-EPA Mpata	Karonga Centre	Chitipa/Karonga
	TA Kyungu-EPA Lupembe	Lupembe	Mzimba/Rupmhi/Chitipa
	TA Mwillang'ombe-EPA Ny	Nyungwe	Chitipa
	TA Kyungu-EPA Mpata	Wiliro	Karonga/Local
Rumphi	TA Chikulamayembe	Bolero	Hewe-Rumphi
	TA Mwankhunikira	Chinyolo	Rumphi
	TA Katumbi	Katowo	Hewe-Rumphi
	TA Mwahenga	Mhuju	Rumphi/Chitipa
Mzimba	TA Chikulamayembe	Rumphi	Mzimba
	TA Mbelwa	Edingeni	Zambia/Edingeni
	TA Mzukuruzuku	Jenda	Jenda/Zambia
	TA Mbelwa	Kasichi	Kasichi/Zambia/Edingeni
	TA Mbelwa	Manyamula	Engalaweni/Local/Manyamula
Dowa	TA Mbelwa	Mzimba Boma	Mzimba
	TA Mbelwa	Chankhundu	Mchinji/Local
	TA Mbelwa	Chimwaza	Lumbadzi/Mzimba
	TA Kayembe	Chinsepo	Chinsepo
Salima	TA Msakambewa	Dowa Boma	Local/Dowa
	TA Mkukula	Lumbadzi	Dowa markets/Lumbadzi
	TA Kayembe	Nambuma	Kamwendo/Mchinji/Lilongwe/Local
Mchinji	TA Ndindi	Chipoka	Chezi/Dowa/Local/Nsundwe
	TA Simphasi (TA Zulu)	Chiosya	Local/Mitimba/Choitcha
	TA Mduwa	Matutu	Local
Dedza	TA Mduwa	Mikundi	Local
	TA Kaphuka	Chimbiya	Local
	TA Kaphuka	Linthipe 1	Local
Ntcheu	SC Chauma	Mayani	Local
	TA Makwangwala	Kampepuza	Local
	TA Phambala	Manjawira	Ntonda
	TA Goodson Ganya	Mpehpozinyai	Chimbiya/Local
Lilongwe Rural	TA Phambala	Mtonda	Local
	TA Makwangwala	Pengapenga	Mchinji/Lilongwe/Local
	TA Kalolo -EPA Mingongo	Chawantha	Mozambique/Local
	TA Kalolo -EPA Chilaza	Chibungo	Mchinji
	TA Malili	Chigwirizano	Local/Dickson
	TA Tsabango	Chilinde	Salima/Mitundu/Kasungu
	TA Kalolo -EPA Chileka	Mkoko	Local
	TA Mtema	Mngwangwa	Local/Lilongwe Town
	TA Kalolo -EPA Chileka	Namitete	Chawantha/Local
	TA Kalolo -EPA Mingongo	Ndaula	Local
Machinga	TA Mazengera	Nkhoma	Local
	TA Kabudula	Nsaru	Mchinji/Lilongwe
	TA Kawinga-EPA Nanyumbu	LIWONDE	TSANGANO
	TA Kawinga-EPA Nanyumbu	MBONELA	KASNGU/LILONGWE
Zomba	TA NKOOLA	MPILI	MPANIWA
	TA Ngokwe -EPA Chikweo	NGOKWE	MOZAMBIQUE
	TA Kawinga-EPA Nanyumbu	NTAJA	LOCAL/Mchinji
	SC Mbiza-EPA Dzaone	DZAONE	BLANYTRE
Chiradzulu	TA Chikowi -EPA Ngweleru	DZAONE	Local/LIMBE
	SC Mbiza-EPA Dzaone	JENALA	JENALA/Local
	TA NKOOLA	JENALA	KASUNGU
	TA Chikowi -EPA Ngweleru	MAYAKA	MAYAKA
Blantyre	SC Mbiza-EPA Dzaone	SUNUZI	KHOLOKIKO
	TA Chikowi -EPA Ngweleru	SUNUZI	CHILINGA
	TA Nkalo-Chiradzulu Di	CHIMWAWA	KATOTO/Goloto
	TA Nkalo-Chiradzulu Di	NAMITAMBO	LIMBE/Sitolo/Local
Mwanza	TA MACHINJIRI	CHIKAPA	TSANGANO/Local/Mponela/Zomba
	TA Kunthembe	CHIKULI	DOWA MARKET/LUNZU/TSABANGO
	TA Kapeni-EPA Lunzu	LUNZU	CHIPSA/Chimbiya/Tsabango
	TA Kuntaja	MOMBO	LUNZU
Thyolo	TA Nthache	Border Marke	Mwanza Border
	TA Kanduku	Mwanza	Mwanza
Mulanje	TA Thomas	Chizunga	Mozambique/Local
	TA Changata	Makwasa	Makwasa/Dedza
	Njema	Gawani	Mozambique
	Njema	Limbuli	Zumbila/Local
Phalombe	Mabuka	Mathambi	Mathambi/Chimbiya
	SC Juma -EPA Thuchila	Mulomba	Chimbiya
	SC Juma -EPA Thuchila	Mulomba	Ntcheu
	SC Juma -EPA Kamwendo	Namphungo	Limbe/Namphungo
Chikwawa	Mkhumba/Jenala/Kaduya	MALIRO	LIMBE
	Mkhumba/Jenala/Kaduya	MIGOWI	LILONGWE/Mozambique/Local
	TA Chapananga	Chapananga	Chapananga
Nsanje	TA Kasisi	Dyeratu	Chimbiya
	TA Lundu	Nchalo	Mitondo/Chimbiya
	TA Ngabu	Ngabu	Mozambique/Local/Kamoga
	TA Ndamera -Nsanje Dist	Mtowe	Mtowe/Ntcheu
Balaka	TA Mbenje	Sorgin	Machilika/Mozambique
	TA Tengani -EPA Mpatza	Tengani	Ngabu
	TA Nsamala-EPA Phalula	BALAKA CENTR	KATULI/Local/Nsanama/Pengapenga/Ntcheu/Tsabango
Neno	TA Nsamala-EPA Phalula	PHALULA	MZUZU
	Symon	Kammwamba	Mtonda Market
Neno	TA Kanduku	Mwanza	Mwanza/Mchinji
	Symon	Zalewa	Dedza/Chimbiya