



# Maize Market Assessment And Baseline Study for Malawi

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## **EXECUTIVE SUMMARY**

### **Background**

The maize market in Malawi can be described as partially liberalized. Because of maize being a staple crop in Malawi, the Government actively participates in the domestic market, seeking to protect Malawians against fluctuations in food production, prices and availability. GoM plays an important role in regulating the maize trade, through holding a buffer stock to influence supply and demand of maize and by using an export ban in time of perceived shortages. However, imports of maize are unrestricted though GoM has been the main formal importer in recent times. As a result, private sector players who have been periodically engaged in formal and informal cross-border trade have found it difficult to compete with the Government.

Malawi's commitments under the World Trade Organisation (WTO), Community for East and Southern Africa (COMESA) and Southern Africa Development Community (SADC) have significant implications on the country's maize trading policy. These commitments entail freeing regional trade through progressive reduction in tariffs and elimination of non-tariff barriers. Already maize imports into Malawi from COMESA, SADC and all other third countries are allowed into the country duty free and there are no license requirements. As already observed above, contrary to the spirit of regional integration, exports of maize are restricted, though there are clearly important political considerations in such a policy, given the last two years of significant maize shortages in Malawi.

There are also several factors that hamper maize trade such as market distortions arising from food aid and low private sector investment in the maize trading sector, which is primarily associated with market uncertainty. The other constraint has been restrictions by some neighboring countries on the maize trade to limit exports to Malawi as this is feared by local officials to undermine food security in the exporting country.

The Regional Agricultural Trade Expansion Support (RATES) project funded by the United States Agency for International Development (USAID) seeks to address the above regional maize market access challenges through the East Africa Community (EAC) and COMESA. The RATES project is being implemented by Chemonics International, in collaboration with COMESA.

This study has been commissioned by the RATES project to identify opportunities, issues and constraints facing maize trade in Malawi. The objective of the study is to start the process towards timely market information, forging linkages among maize traders in the region and facilitation of policy harmonization within the COMESA.

### **Purpose and scope of study**

The broad purpose of the study is to carry out a market assessment and baseline study for Maize in Malawi. A maize value chain analysis (VCA) has led to the development of strategic actions to improve the value and the volume of maize marketed in Malawi. Specifically, the study was aimed at accomplishing the following objectives: -

## Malawi maize sector value chain analysis

- Generating a maize Value Chain Analysis (VCA) for Malawi
- Analyzing the value chain at various market transfer points and assessing the value added by participants in the maize chain.
- Listing all categories of players along the chain by name, location, type of entity and contact information
- Identifying issues, problems, and constraints at each transfer point in the chain.
- Identifying the flow of maize volumes between sectors, in addition to the uses and consumption of maize and maize by-products.
- Analyzing the value change in the maize chain between transaction points.
- Identifying trade regulations that govern the exports and imports of maize
- Assessing the impact of trade policies and regulations on cross-country movement and cross-border trade of maize.
- Developing five-year baseline data for the maize industry in terms of volume, value, price and sales.
- Providing insights on issues and problems, as well as suggesting recommendations that may assist the maize industry to improve on the volume and value of maize.

### **Study findings**

#### **Production issues that impact on trade potential**

1. Poor access to agricultural inputs such as fertilizer and seeds, resulting in low productivity, primarily due to the cash problem of the farmer. Other constraints with respect to access to inputs include availability (especially in the current season a shortage of hybrid seeds), distance to supply points, timeliness of supply. In most cases, the use of maize inputs has been limited and inefficient reducing the potential for marketable surpluses and increasing the need for imports.
2. Land degradation. Land continues to be heavily degraded due to soil erosion, siltation of watercourses, water pollution, land fragmentation, decreasing land holding size, deforestation but above all declining soil fertility.
3. Over-dependence on rain-fed agriculture, whilst lately rainfall has been erratic, unreliable and drought occurrence frequency has increased resulting in failure harvests of maize and excessive swings in supply.
4. Predominance of subsistence farmers and limited commercial farmers with marketing skills meaning maize is not seen as a commercial crop but primarily as a staple crop. This results in limited trade potential as there is limited demand and purchasing power.

#### **Marketing/Trade issues**

1. Financing: Access to credit for the private sector to fund investment and working capital is being hampered by high nominal and real interest rates. This is huge disincentive for the private sector to store maize, even though enough storage capacity is available within Malawi
2. Infrastructure: Poor road infrastructure and costly and inefficient communication system, adds costs for the maize traders and makes some potential supply routes unreliable (Beira/Nacala corridors) and demand areas unreachable.
3. Market information: There is a lack of regional information on production, prices, and demand. The available information is disseminated poor.
4. Non Tariff Barriers: Barriers such as non-harmonized weight restrictions and insurance requirements, non-harmonized quality standards, non-harmonized documentation, and language barriers prevent trucks crossing the border adding cost, time and interrupting the free flow of trade.

5. **Accessibility of Government institutions and Standards Bureau** involved in import and export process. Currently those organizations are not easily accessible making it more difficult for the importer and exporter to gather the necessary documents adding cost and hassle and encouraging more informal trade.
6. Custom regulations: Competing regional trade regimes, too many regulations, slow communication of regulation changes and no clarity about duties result in confusion at borders and delays of trade.

**Policy issues**

1. Government's involvement in the maize sector discourages private sector investment in maize as potential profits are limited or perceived to be limited, resulting in inadequate private sector development.
2. High cost of intervention of Government in maize market. The costs of stock holding and decisions made have resulted in a high cost for the Government and contribute to the budget deficit and high interest rates
3. Decision making about allowing exports too slow/late as Government waits until the third round crop estimates in June.
4. High dependency on production estimations. Decision taking with respect to issuing export licenses but also on price setting issues by the Government, all depends on the quality of the estimations, which have not been sufficiently accurate in the past.
5. Declining role of ADMARC in the marketing of maize, affecting especially farmers and buyers in remote areas as no other traders take over their position as a result of the poor infrastructure.

## **Conclusion and Recommendations**

Regional trade holds the potential to reduce Malawi's vulnerability to supply shortages by making up for deficits through efficient and responsive regional trade. Whilst Malawi is likely to have a comparative disadvantage in maize production over its neighbors for years to come, when it does have excess production then there is a need to access potential export markets quickly and efficiently.

Stimulating exports of maize must first address the quantity of maize produced in Malawi and in particular the productivity of smallholders who are the dominant producers by far. Although food security is of primary strategic importance to Malawi, during surplus years Malawian maize did find export markets in mainly Mozambique, Tanzania, Kenya and even European countries such as Ireland and Switzerland. Guaranteeing a structural surplus will be hard due to climatic and economic reasons, but there are a number of recommendations mentioned by stakeholders with respect to production:

1. Improve access to inputs. Widespread availability of sustainable micro-credit will assist though the track record to date has not been good. Some respondents recommend abolishing the TIP and focus more on the accessibility of fertilizer and OPV seed, for example by subsidizing the price.
2. Setting up/strengthening farmer organizations that can promote maize as a cash crop instead of a food crop and organize farmers with respect to marketing. Farmers must also be encouraged to organize themselves in order to receive inputs at a more competitive price and consolidate loads for transport. This will give smallholders the chance to make better returns and make marketable surpluses available.
3. Communication of good husbandry and improved storage techniques to boost productivity and reduce post harvest losses.
4. Stimulating irrigation at all levels through donor programs, private initiatives and GoM programs

In general the economic circumstances of Malawi play a major role in the buying power of the local consumers for both fresh produce and processed goods. High interest rates will always hamper local investment and need to be brought down as soon as possible. Industry infrastructure such as electricity supply, telephone lines and roads need to be improved to reduce the costs of the processing and trading industry and make Malawi's products competitive versus other regional producers. Most of these cross-cutting issues affecting businesses are being addressed through the Growth Strategy for Malawi.

Furthermore, there seems to be good potential for formal and informal cross border trade with neighboring countries such as Mozambique, Zambia, Tanzania and Zimbabwe. For marketing year 2003, respondents mentioned potential export opportunities to:

- Tanzania, which is affected by unfavorable weather circumstances
- Zimbabwe, where production has declined and there are likely to be shortages for the short to medium term
- Zambia, which has regular shortages

Mozambique has a competitive advantage over Malawi with respect to maize production. Inputs are cheaper, land is plentiful, there is limited land degradation and some cultivated maize is even irrigated. Therefore, for the foreseeable future Malawi will continue import from Mozambique, but there are opportunities to export from other areas closer to areas of shortage (near Tanzania) whilst importing from countries like Mozambique to areas of

structural deficit such as Southern Region. There is also potential to re-export some of those imports of cheaper Mozambique maize as the exporting areas of Mozambique do not necessarily have easy access to markets other than Malawi.

Harmonization of quality standards and trade documentation will encourage freer movement of maize within the region. Other issues in this respect are:

- Clarification at borders with respect to duties and charges with up to date information on changes to be available more quickly
- Increase regional information regarding production, demand and price
- Increase credibility of international organization involved in quality control
- Increase accessibility of Government services involved in documentation
- Faster decision making by the Government whether to allow exports

With respect to policy, the value of Government intervention in the maize market is debatable. The price of maize has often been subsidized, which has led to in public versus private sector price differentials. Moreover, export is controlled and the Government is often the main formal importer of maize. All this intervention has resulted in additional cost for the country and deterred significant private sector investments. However, if Government simply withdraws from the market, the private sector might or might not step in and not necessarily smoothly and evenly spread. Because the social consequences cannot be foreseen with certainty and because it is such a sensitive issue, it seems highly unlikely that Government would take this step.

To reduce intervention seems to be a more reasonable option and by commercializing ADMARC, the first steps have already been taken. Several respondents mentioned the possibility of the installment of a minimum price for the farmers to protect the smallholders. However, this option would again result in a high cost for the Government and distort the signals to producers away from more profitable cash crops. It is therefore not recommended.

**The recommendation mentioned by respondent for the Government include: -**

1. More effective operation of the NSGR to ensure that interventions are cost effective and not distorting of the functioning of the market except in exceptional years. The Government will need to enforce strict oversight on the activities of the NFRA, to ensure no maize deficits occur due to wrong timing of exports and imports.
2. Further commercialization of ADMARC, in order not to disturb the natural price setting by supply and demand, whilst at the same time keeping its social role in remote areas.
3. Cautious approach to food aid from donors, as food aid lowers prices and deters maize production, the opposite to what is desired. Although donor aid is often of vital importance, it should not directly influence farmer's attitudes towards growing the crop and should be made available very selectively.

Overall, this research would suggest that the role of trade is potentially more significant than at present in smoothing areas of surplus and deficit within Malawi and between different countries in the region. Better trade flows of maize could and should be a key component in any maize security strategy, particularly given Malawi's likely ongoing vulnerability to deficit and the potential of our neighbours to produce regular surpluses. Better trade flows can only be to the advantage of the poor and the nation.

## **1.0 INTRODUCTION**

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The maize market in Malawi can be described as partially liberalized and partially government controlled. Since maize is the staple crop in Malawi, the government of Malawi (GOM) actively participates in the domestic market, seeking to protect Malawians against fluctuations in food production, prices and availability. GoM plays an important role in regulating the maize trade, through holding a buffer stock to influence supply and demand of maize and by using an export ban in times of perceived shortages. However, imports of maize are unrestricted though GoM has been the main formal importer in recent times. As a result, private sector players who have been periodically engaged in formal and informal cross-border trade have found it difficult to compete with the government, because of supply and demand policies.

Malawi's commitments under the World Trade Organisation (WTO), Community for East and Southern Africa (COMESA) and Southern Africa Development Community (SADC) have significant implications on the country's maize trading policy. These commitments entail freeing regional trade through progressive reduction in tariffs and elimination of non-tariff barriers. Already, maize imports<sup>1</sup> into Malawi from COMESA, SADC and all other third countries are allowed into the country duty free and there are no license requirements. As already observed above, contrary to the spirit of regional integration, exports of maize are restricted, though there are clearly important political considerations in such a policy, given the last two years of significant maize shortages in Malawi.

There are also several factors that hamper maize trade such as market distortions arising from food aid and low investment in the maize trading sector, which is primarily associated with market uncertainty. The other constraint has been restrictions by some neighboring countries on the maize trade to limit exports to Malawi, as this is feared by local officials to undermine food security in the exporting country.<sup>2</sup>

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### **1.1 purpose and scope of study**

The broad purpose of the study is to carry out a market assessment and baseline study for Maize in Malawi. A maize value chain analysis (VCA) has led to the development of strategic actions to improve the value and the volume of maize marketed in Malawi.

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<sup>1</sup> Maize flour has preferential rates for import from COMESA, SADC and South Africa.

<sup>2</sup> Whiteside 2001

Specifically, the study was aimed at accomplishing the following:

- Generating a maize Value Chain Analysis (VCA) for Malawi
- Analyzing the value chain at various market transfer points and assessing the value added by participants in the maize chain.
- Listing all categories of players along the chain by name, location, type of entity and contact information
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## 2.0 SUPPLY AND DEMAND ANALYSIS

### 2.1 Production

The area planted with maize in Malawi is estimated by the Ministry of Agriculture, Irrigation and Food Security (MoAI) to be 1.5 million hectares nationally. Estate maize production is very low, at an estimated 118,000 tonnes in 2002/03-crop year on 4.2% of land area (Source: MoAI). It is also worth noting that a significant amount of maize is intercropped with beans, pumpkins, peas, sorghum, etc. In general, farmers with small landholdings are compelled to intercrop, while those with enough land can afford to grow each crop separately.

Production statistics obtained from MoAI show that production peaked in the harvesting years of 1999 and 2000. This was mostly due to the combination of good weather supported by the Starter Pack inputs. In 2000/01 and 2001/02 crop years, production decreased due to several factors:

1. Unfavorable weather conditions including drought and floods
2. Sharp increase in the price of fertilizer owing to depreciation of the Kwacha
3. Reduced contribution from free inputs (Starter Pack)

As can be seen in the table below, the area under maize cultivation is still increasing. Although the government tries to promote diversification, most people tend to keep growing maize to secure their own food supply. The fact that maize has been so expensive in recent years only encourages this action at the expense of cash and other subsistence crops, ultimately compounding poverty.

Table Production, Hectare and Yield, 1998-2003

Crop Years:	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03*
<b>Production (tonnes)</b>	1,772,392	2,478,058	2,501,311	1,713,064	1,556,975*	2,032,271
<b>Hectare (ha)</b>	1,371,355	1,446,773	1,507,088	1,506,528	1,499,654	1,552,254
<b>Avg. Yield (kg/ha)</b>	1,274	1,713	1,660	1,137	1,069	1,309

Source: Ministry of Agriculture and Irrigation

\* First round estimation

\*\* The figure of the MoAI is different from the figure FEWS used in the food balance sheet, e.g. 1,499,493 MT

The climate is one of the most important factors affecting the maize production. In Malawi there is one growing season<sup>3</sup> and production is heavily influenced by prevailing climatic conditions such as temperature, rainfall, wind and humidity. The timing and evenness of rainfall are the critical variables to the final yield. In addition to climate, access to inputs plays a significant role in determining production levels. A poor farmer who cannot afford fertilizer and certified seeds has very little potential of increasing his/her crop production.

With respect to seed, most farmers still use local varieties of seeds. Yet, the average yield achieved with local seeds in crop year 2001/02 was 674 kg/ha, which is considerably lower

<sup>3</sup> Rains from November to March. Dry season April to November, depending on location.

than lower than the average yield obtained with hybrid seed at 1,778 kg/ha (Source: MoAI) and its potential of 5-7 tonnes/ha. Local maize used to yield more than 1 tonne/ha until the 1990's, with hybrid seed down from over 2.5 tonnes/ha during the same time period (Source: MoAI). This yield reduction is mainly a result of declining soil fertility, which in turn reflects mono cropping, combined with poor soil management and conservation techniques<sup>4</sup> and poor access and use of fertilizers. Farmers now need more fertilizer to achieve the same harvest, but inorganic fertilizers are becoming more expensive whilst animal manure is in short supply because of low livestock holdings. Respondents mentioned various reasons for the high prices of fertilizer such as high transport costs, high costs of credit and the lack of open competition resulting in artificially high market prices.

In this context, the Starter Pack aimed at boosting production and reducing household food deficits, by restoring access to agricultural inputs. The Starter Pack was a free inputs pack of fertilizer, maize seed and legume seed for 0.1 ha. When the Starter Pack program began in 1998/9, coverage of poor households was universal, which combined with benign weather meant that Malawi enjoyed two years of surplus production. In 1998/1999, the Starter Pack was distributed to 2.8 million households. In 2000, the program was renamed to "Targeted Input Program (TIP)" and distributed to only 1.5 million households. In 2001, coverage was further reduced to 1 million households. How much this cut in distribution has contributed to the decrease in production from 2.5 million tonnes in crop year 2000/01 to 1.6 million tonnes in 2001/02 is not clear, however, the weather clearly had a major impact.

Starter Packs get traded, particularly in the border areas where the value of the pack in terms of increased potential yield from the same inputs is greater in Mozambique than in Malawi. There is also anecdotal evidence of some households washing the seeds to remove the dye and grinding them for consumption. Although having a positive effect for poor households, the Starter Pack is generally assessed not to be as significant a factor on production as weather and market conditions.

In the crop year, 2002/2003, the Starter Pack has been distributed to 2 million households at a total cost of MK 1,106 million (US \$12.3m). Preliminary crop estimations for the crop year 2002/03 indicate that the production will be around 2.0 million tonnes reflecting more conducive growing conditions after a late start to the rains. For more information about the Starter Pack, see Appendix 1.

Most respondents did have doubts about the Starter Pack/TIP in the long run. Although the packs have a positive effect on production in the short term, they also create dependency. Many farmers rely on the Starter Pack and appear to be taking 'the gift' for granted every year. According to the Starter Pack/TIP evaluation reports<sup>5</sup>, 16% of the smallholder harvest in 1999/2000 was attributable to the Starter Pack, around 350,000 MT. The contribution of the TIP in crop years 2000/01 was estimated at 80,000 MT and in 2001/02 at only 40,000 MT.

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<sup>4</sup> Burning of organic waste and for preparing fields is common practice and shortage of land can led to insufficient crop rotation

<sup>5</sup> Levy, Sarah, Barahona & Carlos: Target Input Programme: Main Report of the Monitoring and Evaluation Process and Main Report of the Starter Pack Evaluation Programme, 2000-2001

**Production by Area**

Table Maize Production by area, 2003 estimates

	<b>Hectares</b>	<b>Production</b>	<b>Yield</b>	<b>Region</b>
		<b>Metric Tonnes</b>	<b>Metric Tonnes</b>	
<b>Karongo</b>	39,621	56,906	1,436	North
<b>Mzuzu</b>	148,922	181,549	1,219	North
<b>Kasungu</b>	282,724	402,575	1,424	North
<b>Salima</b>	77,970	121,077	1,553	Central
<b>Lilongwe</b>	347,194	414,753	1,195	Central
<b>Machinga</b>	305,828	406,322	1,328	Central
<b>Blantyre</b>	242,264	316,578	1,307	South
<b>Shire Valley</b>	107,731	132,511	1,230	South
<b>National Total</b>	1,552,254	2,032,271	1,309	National

Source: MoAI

The Central Region produces nearly half of the maize cultivated in Malawi. The estimate for crop year 2002/03 is that it will produce 942,152 MT, more than 46% of the total production. The Southern Region is the smallest producer partly as a result of high population density and therefore pressure on land use. Moreover, the climatic conditions in parts of the South are not very favorable for maize, particularly the Shire Valley, which is too dry and the highland areas that are too wet (Thyolo/Mulange). Maize deficits are also most common in this part of Malawi. Various respondents mentioned that more than half of the maize available in the Southern Region comes from Mozambique.

**2.2 Maize Consumption versus Production**

Farming households consume most of the maize they produce themselves. In seasons following a poor harvest, as much as 50% of the maize is consumed as green maize, but following a good harvest, as little as 5% of the maize is consumed while still green. Sometimes the green maize is harvested, shelled, dried and then taken to the maize mill for flour. All the other maize is milled in local mills that serve a radius up to 5 km, although in very remote areas this might be a longer distance.

During the harvest season, the maize is pounded<sup>6</sup> first before milling into flour. As pounding reduces the volume of the maize by up to 35%, people tend not to pound the maize from October to March. After pounding, the products are the kernel and maize bran. The former can be processed in two different ways: It can be ground into flour right away or it can be soaked in water for 2-5 days, dried and then taken to the maize mill to be ground into flour. This form of flour is known as white flour and is the preferred form for most Malawians.

The maize bran can be kept for consumption during the hungry period, either after grinding into flour for own consumption or sold to people who cannot afford to buy maize. Others use the maize bran for feeding livestock such as chickens, goats and pigs, or it is sold by millers as livestock feed. Small quantities of maize are processed locally into sweet, non-alcoholic beer or by fermentation into spirit.

<sup>6</sup> Removal of maize seed coat (Maize bran).

Since farmers consume the bulk of their production in the period through to the next harvest, and there is only one growing season in most areas, the maize has to be stored for some time. The variety of maize is of importance with respect to storage as hybrid maize is more easily damaged by weevils if not treated and the harvest can be destroyed. Due to a lack of money, some farmers apply ash for protection from weevil damage. The maize is generally put in bags on a raised platform to reduce termite and rat attack. In comparison, local varieties are not shelled nor are the husks removed before storage to protect the maize from weevil, termites and rat damage. The maize used to be stored loose, without treatment for up to one year. However, the coming of the Large Grain Borer to Malawi recently, has reduced the storage period of local maize to approximately six months, before significant losses start to occur. On a national scale, the storage losses are estimated at 15%. However, at the farmer level, the losses could be significantly higher, since traders tend to have poor storage facilities and often lack enough money to treat the maize, and therefore likely to suffer relatively higher losses.

Because storage losses are higher with the hybrid seeds than with local varieties, smallholders tend to grow hybrid seed for sale and local varieties for storage and domestic consumption. It also important to note that households generally prefer the taste of local varieties over hybrid, which is reflected in the planting strategy often combining local and hybrid varieties and reinforces the preference for storing the local variety, which is more pest resistant.

#### *Food Balance Sheets*

The total consumption of maize is difficult to estimate due to the fact that the exact population is not known, though the last census in 1998 indicated 9.9 million people with an annual growth rate of 2.4% (estimate of 10.9 million in 2003). Since this parameter has a major influence on the food balance sheet, one should be very careful interpreting these sheets. In appendix 2, the food balances from 1998 until 2002 are presented, calculated with population estimates based on the census in 1998. In addition to the “population” parameter, food balance sheets should be interpreted as a guide only.

### **2.3 Maize Availability Calendar and Projections for 2002/03 Season**

The harvest months depend a lot on the climate circumstances. Late rains will result in late harvesting and vice versa. Since rains normally start in the South, the harvest season there starts the earliest, although the difference in timing is only a few weeks. The start of the harvest depends also on the farmers’ financial position. If the smallholder is very desperate for cash, s/he will harvest even before the maize is actually ready and dry (‘Green Maize’). The smallholder needs to dry it first but often tries to sell it as soon as possible. In most years, May is the best month to harvest in the South and for the Central and Northern Regions, the month of June is best. At that time the maize is dry and farmers can sell it straight to traders without storing.

Table Maize Availability Calendar Source: Ministry of Agriculture combined with own research

<b>Region</b>	<b>Harvest Months</b>	<b>Peak Trading Months</b>	<b>Production projections in MT</b>
<b>South</b>	March – June	April – July	449,049
<b>Central</b>	April – July	May – August	942,152
<b>North</b>	April – July	May – August	641,030
<b>Total</b>			2,032,271

## Malawi maize sector value chain analysis

Despite early rainfall being patchy in some areas and a drought spell in the Lower Shire, indications are that the 2003 crop at 2 million MT will be satisfactory for Malawi's consumption needs. Also because donor maize has been readily available in most affected communities, there will be less pressure than in previous years to harvest green maize. Average yield is estimated to be 1,300kg/ha, which is much higher than in 2002.

Table Projected maize deficit/surplus 2003/2004

<b>A. Net Production:</b>	<b>1,727,430</b>
Estimated gross production	2,032,271
Post-Harvest losses, 15%	304,841
<b>B. Stocks*</b>	<b>266,000</b>
<b>C. Domestic Availability</b>	<b>1,993,430</b>
<b>D. Total Utilization</b>	<b>2,065,335</b>
Food Use, Based on population of 10.9 million	1,850,335
Seed Requirement	40,000
SGR Replenishment	100,000
Animal feed and beverage industry requirement	75,000
<b>G. Domestic Food Balance</b>	<b>-71,905</b>
<b>H. Estimated Informal Imports</b>	<b>100,000</b>
<b>I. Estimated Formal Imports</b>	<b>N.A.</b>
<b>Projected Surplus 2003/2004 Growing Season</b>	<b>28,095</b>

Source: Own Calculation

\* Stock Strategic Grain Reserve as at 6th March (33,000 MT belongs to donors, 233,000 MT belongs to the Government)

With national consumption at 1.8 million tonnes and informal imports coming in, Malawi can expect to have a very small surplus in 2002/2003. Against this forecast, concerns are raised that the maize price might fall considerably. Prices for maize in Mozambique as at April 2003 were MK.8 compared to the official price in Malawi of MK.17 for new season maize. This suggests that there is potential for formal and informal trade if the official price is maintained. The food balance sheet will be further discussed later.

### 2.4 Maize Exports and Imports

The trade in maize can be categorized into:

- **Formal trade** by registered traders where information on quantities enters the national statistics. This trade goes through the official border posts.
- **Informal trade** by unregistered traders and information on quantities does not enter the national statistics. This trade might go either through the official border posts but can cross the border anywhere in Malawi, which is very easy.

#### Formal trade

The main border posts in Malawi through which maize trade takes place are as follows:

1. Songwe in the Northern Region at the border with Tanzania
2. Mchinje in the Central Region at the border with Zambia
3. Mwanza in the Southern Region at the border with Mozambique

## Malawi maize sector value chain analysis

At these border posts there are officials from Customs and MoAI staff to inspect the maize.

### *Imports*

During the period 1997-2001, formal imports hit the highest volume in 1998, a year of food shortages in Malawi. As we can see in Table 7, Zimbabwe has been the major source for imports of maize until 2000. However, in 2001 Malawi imported only 2.6% from Zimbabwe.

Table Formal Imports of Maize, 1997 – 2001, by country of origin

<b>Country</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
	Quantity	Quantity	Quantity	Quantity	Quantity
	MT	MT	MT	MT	MT
Bulgaria					1,120
Mozambique	2,953	28,581	5,731	5,439	3,298
South Africa	4,515	135,347	5,031	646	4,443
Tanzania		10,000		27	56
UK		687			
USA		4		500	
Zambia	23,846	338	800	316	10,110
Zimbabwe	40,832	141,979	16,601	8,455	288
Total	72,146	316,936	28,163	15,383	11,189

Source: Ministry of Commerce and Industry

Information from the MoAI (not in this table) shows that the government imported 334,671 MT in 2002. A part of this 102,234 MT was bought in 2001 at US \$260/tonne. The major part however, from the 2002/2003 marketing year, was bought at US \$290/tonne. This maize started coming in August 2002 and will continue to enter the country in 2003, depending on the outstanding contracts, mostly South Africa. Figures from the NFRA show that the quantity contracted versus the quantity delivered did not correspond. This is partly because the depth of the maize crisis was not as severe as anticipated and that the sales from ADMARC were lower than anticipated leading to a build up of stocks of around 200,000, which filled all the available storage capacity.

### *Exports*

Export of maize during the period 1997-2001 have been minimal and below 10,000 MT, except in 2000. This was mainly a result of a good harvest in this marketing year and the year before, but also because the NFRA sold off old SGR stocks. From 2001, exports of maize were banned as soon as it became clear that Malawi was facing a food shortage.

## Malawi maize sector value chain analysis

Table Exports of Maize, 1997 – 2001, by country of destination

Country	1997		1998		1999		2000		2001	
	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
	MT	MK'000	MT	'000 MK	MT	'000 MK	MT	'000 MK	MT	'000 MK
Ethiopia	212	587	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	0	5,600	46,440
Kenya	43	3,288	0	0	28	647	23,266	165,383	206	522
Mozambique	0	0	0	0	0	0	36,953	45,629	16	153
RSA	0	0	28	138	8	178	462	1,322	989	1,252
Tanzania	420	0	24	1,358	752	18,129	597	10,267	2,215	11,119
Zaire/DRC	0	0	0	0	0	0	32	127	0	0
Zambia	0	0	0	0	0	0	126	227	40	513
Zimbabwe	10	85	0	0	212	4,897	2,001	283	813	1299
Switzerland	0	0	0	0	0	0	4,256	31,866	0	0
Total	685	4,301	52	1,497	1,000	23,851	67,703	25,504	9,879	61,299

Source: Ministry of Commerce and Industry

The above data may overstate exports as it appears to be based on licenses granted, not all of which will have been fulfilled for a range of reasons. Data obtained from NSO show that there is no substantial trade in maize flour, except in 2000 when 1.6 million kg was exported to Mozambique.

### Informal trade

Most of the informal importation of maize is coming from Mozambique. Throughout the year, maize is brought to Malawi from Mozambique and to a lesser extent from Tanzania but the peak season is from April until July. The findings below are based on interviews at the two locations on the Malawi/Mozambique border and desk research<sup>7</sup>.

### Informal trade with Mozambique

The trade operates on many different levels:

**Large Mozambique-based operators** – There are a small number of these that are formally registered and trade tens of thousands of metric tonnes. They have their own trucks and warehouses, but may also hire. They buy direct from farmers, from intermediaries and at the warehouse door and choose from year to year where to sell, according to market conditions in Mozambique, neighboring countries and beyond.

**Medium-sized Mozambique district-based traders** – These have turnover typically from tens to several hundred tonnes that are orientated towards the Malawi or Mozambique market. They may operate on an import-export license or a less formal exporting permit. They buy direct from farmers and may sell to Malawian traders across the border or direct to bigger buyers such as RAB Processors and ADMARC further inside Malawi. A major constraint faced by these traders is seasonal finance and limited transport.

<sup>7</sup> Mainly report from Whiteside, Martin: Neighbors in Development: Livelihood Interactions between Northern Mozambique and Southern Malawi. 2002.

**Large and medium-sized Malawi-based traders** – These deliver to purchasers such as RAB Processors and Government institutions, or for sale in local markets. They may buy either direct from Mozambican farmers or from Mozambican medium-sized traders or set up buying operations on the Malawi side of the border.

**Small-scale Mozambican and Malawian traders** – These are people typically living near the border on either side and buying two to three bags at a time, transporting it by bicycle to Malawi and selling to buying points on the Malawi side of the border. They may buy at the ‘farm-gate’ or at local Mozambican markets.

**Malawian consumers** – They may cross the border and buy maize for their own consumption at a cheaper price than they can buy it in Malawi, transporting it back by bicycle or on their head. Often maize is earned by temporary (‘ganyu’) labor inside Mozambique

**Mozambican farmers** – who sell in Malawi to get a better price or because there are no buyers in their own village. In the latter case, farmers can carry produce from 60 km in the interior, but this tends to be a last resort.

Transport of maize from Mozambique to Malawi is by truck or by bicycle. At the border post of Milange, a smaller border post between Malawi and Mozambique, most of the maize is coming in by bicycle. Trucks are used up to the border in Mozambique and from the trading center on the Mozambique side to the border. However, to actually cross the border, the traders rent bicycle owners because of the high cost of crossing the border with a truck. The cyclist only needs a border-pass from the immigration office, which can be obtained at the border free of charge. There are always bicycle owners waiting to be hired to transport the maize into Malawi at a cost of MK 20/50kg bag. At Milange border post, traders pay MK 5 to the Mozambique authorities as an official tax charge for each bag crossing the border to Malawi. Traders gather to buy the maize or just to take over already ordered goods. From here the trucks leave to the destination in Malawi, which can be as far as the Central Region of Malawi. However, most of the maize is marketed in Southern Malawi, as this area usually has the biggest maize deficit. At the border post in Mwanza, the main border post between Malawi and Mozambique, more maize is coming in by trucks than bicycles. The reason for this could not be immediately determined.

Factors that influence cross-border maize trade are:

**Trade agreements:** Both Mozambique and Malawi are members of the SADC free trade area, which means most tariffs will fall gradually over the next eight years, though other sensitive items will take 12 years before tariffs end. Maize is already zero-rated, though there is an export tax charged by Mozambique of MK 5/50Kg bag.

**Agricultural export policy and practice:** National policies in both countries favor facilitating agricultural exports. However, maize is viewed as a strategic commodity in Malawi, with its export banned in times of perceived shortage. There is also some indication of local restrictions on the export of maize by local Mozambican officials and a requirement that the trade is conducted by Mozambicans.

**Border practices:** There is considerable flexibility practiced at border posts – enabling local populations to cross to attend markets, or to grind grain and cross back with limited quantities of produce, without paying duties or needing passports. Some Mozambican local authorities

consider the current flexibility as a temporary and unfortunate necessity and state quite openly that once commercial capacity is sufficiently developed on the Mozambican side this informal crossing will be stopped.

**Mozambique's Policy towards traders:** Export of maize from Mozambique to Malawi is officially unrestricted, but can in practice be restricted at the discretion of local officials. This includes the purchase of produce by Malawian traders from farmers and the movement across the frontier of Mozambican or Malawian Lorries. In Mozambique, getting a license as an import-export trader has been simplified, but can still be difficult.

In practice the following informal barriers discourage cross-border trade:

- 1) Movement of Lorries across the frontier is not cheap and trade regulatory requirements are beyond the reach of most small and medium cross border traders. Ferrying maize by lorry across the border automatically triggers enforcement of these regulations. In order to avoid this, maize is accumulated on the other side of the border (usually no-man's land) and then it is consigned across the border more invisibly by bicycle and loaded into Lorries on the Malawi side. This is an unnecessarily costly and time-consuming operation, though it provides considerable incomes to local bicycle owners.
- 2) Although the SADC transport protocol has been signed, in practice there are various barriers: Malawi is part of the yellow card insurance scheme, Mozambique is not; road user charges are not harmonized across the border; weight restrictions are different; restrictions on internal trade in neighboring countries reduce the opportunity for getting loads in both directions, and so on.
- 3) In addition, Malawian traders operating in Mozambique need to get a license in the Provincial capital – this seems to be an effective barrier in practice although Mozambican traders can get an export license and phyto-sanitary certificate at the district level.
- 4) Subsidizing production in Malawi through the starter pack schemes has reduced cross-border trade, though there has been a new trade in starter packs themselves, which are more valuable in the more fertile soils of Mozambique.

## Malawi maize sector value chain analysis

Table Variations in maize market demand and reasons

Season/Year	Cross-border market	Reasons
1996/97 crop year 1997 marketing year	Large volume, low prices	Shortages in S. Malawi and bumper harvest in Niassa. Malawian traders very active in N. Mozambique.
1997/98 crop year 1998 marketing year	Lower volume; remote farmers find it difficult to sell; prices rise at the end of year.	Generally poor harvests. Some local restrictions by Mozambique authorities on Malawian traders.
1998/99 crop year 1999 marketing year	Low prices, moderate volume – Mozambican farmers left with unsold maize.	Generally good harvests. Starter packs in Malawi increase domestic production and reduce demand for imports. Mozambique's withdrawal from COMESA reduces alternative marketing opportunities. Some local restrictions by Mozambican authorities on Malawian traders.
1999/00 crop year 2000 marketing year	Low prices, low volume – Mozambican farmers left with unsold maize.	Generally good harvests. Starter packs in Malawi increase domestic production and reduce demand for imports. Some local restrictions by Mozambican authorities on Malawian traders.
2000/01 crop year 2001 marketing year	High prices, low volume – Mozambican farmers with insufficient production to meet demand.	Poor harvests due to excessive rain followed by an early end to the rain. TIP has less impact than starter packs. Malawi sells strategic grain reserve to Kenya. Some local restrictions by Mozambican authorities on Malawian traders.
2001/2002 2002 marketing year	High prices, high volumes	Poor harvest and shortages in Malawi, resulting in high prices. TIP only distributed to 30% of the smallholders.
2002/2003 2003 marketing year	Low prices, high volume	Expected good harvested in both countries. Mozambique prices very low.

Source: Own Research and Whitehead Report

There were some warnings for the potentially negative impact of the introduction of the Starter Pack program on the market for Northern Mozambican smallholders. However, these appear to have been dismissed, because it was assumed that, even with the starter pack, there would still be a maize deficit in Southern Malawi and therefore still a market for Mozambican maize.

As it happened, the two years of the starter pack coincided with generally good harvests in both Northern Mozambique and Malawi due to both the weather and the starter pack inputs in Malawi. As a consequence, there was surplus production and the cross-border trade was constrained, both in terms of price and volume. Southern Malawian households benefited from additional home production, but Northern Mozambican farmers suffered from very poor prices, or a complete lack of buyers. More remote areas were left with unsold grain, some of which rotted.

## Malawi maize sector value chain analysis

For the 2000/01-crop year, the starter pack was scaled down to target about 50% of the poorer households in Malawi. Early rains, coupled with late delivery of the packs and then poor growing conditions later in the season, meant that the inputs had negligible impact on overall production. In crop year 2001/02, the starter pack targeted the inputs at around 30% of households. This affected the total production, along with climatic and government induced problems. Since Mozambique also had some production problems, the cross border volume was relatively low and as a result prices increased considerably.

For the 2002/2003-crop year, respondents expect an increase in the cross border trade as Mozambique expects a good harvest and is already offering maize at much lower prices than the official price in Malawi of MK 17/kg.

### **Informal trade with Tanzania**

In times of deficit in Malawi, informal maize trade from Southern Tanzania into Northern Malawi flourishes. Most of the maize is coming in by bicycle and distributed further to rural areas and as far as Lilongwe. In crop year 2002/03, Tanzania might face a shortage of maize and informal trade is expected to be less, or even from Malawi into Tanzania.

It is very difficult to make quantitative estimates of informal cross-border trade. A study carried out in 2001<sup>8</sup> came up with a figure of 100,000 MT in marketing year 1997, 40,000 MT in 2000 and 40,000 MT in 2001, for informal cross-border trade between Malawi and Mozambique. For last year, some respondents and supported by field research indicate at least a volume of 80,000 MT of maize coming into the country from Mozambique and 20,000 MT from Tanzania. However, research for this report concludes that this figure might be even higher. According to Malawi Revenue Authority (MRA) border officials, up to 10 bicycles pass every minute with a minimum of two bags of maize (50kg) at the relatively small border post of Milange during the harvesting season in Mozambique (April-June). This amounts to 5,000 bags or 250 tonnes daily. Even during periods of shortages in Malawi (December-February), three to five bicycles pass every minute totaling to around 144 tonnes daily. Taking the average of those and calculating on annual basis, results in a figure for informal cross border trade as high as 73,000 tonnes a year, just for this relatively small border post. One important conclusion one could draw from these figures is that there is an urgent need to better quantify the informal maize trade.

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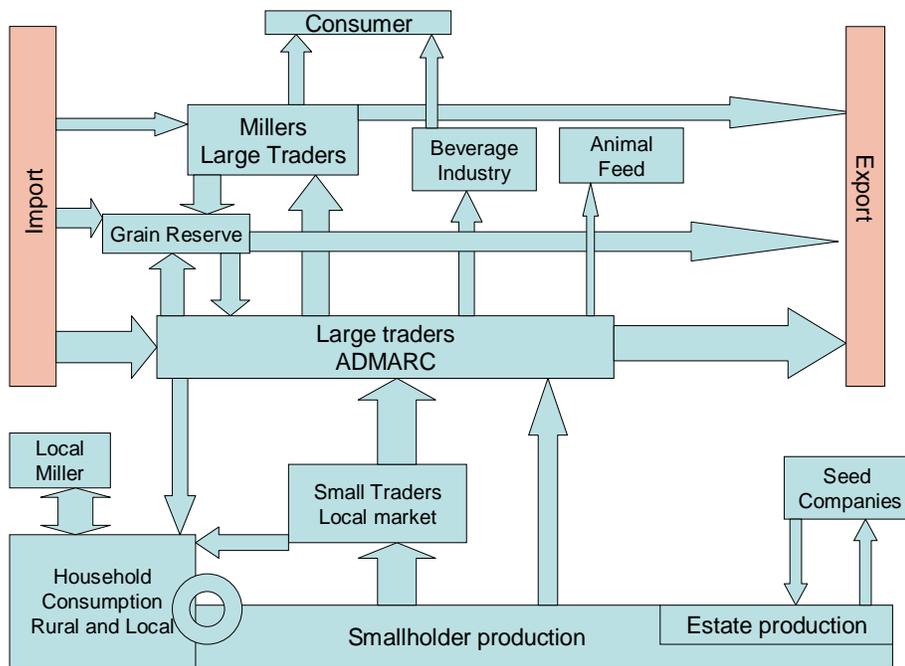
<sup>8</sup> Whiteside, Martin: Neighbors in Development: Livelihood Interactions between Northern Mozambique and Southern Malawi, 2002.

**VALUE CHAIN ANALYSIS**

The primary research for this study was mainly carried out in the Southern Region of Malawi as most of the business activities take place here including many of the main trading and milling companies. However, the geographic coverage of this report and its data covers the whole country.

Figure 1 shows the value-chain for maize in Malawi.

Figure Maize Value Chain



Source: Kadale Consultants

It is important to note that the bulk of the smallholder production goes to self-consumption (approximately 70-80%) within the producing household and never enters the market other than for local milling into ‘Ufa’ (maize meal) flour for cooking into ‘Nsima’. There are a range of small and large-scale traders including the parastatal ADMARC that bring maize into the traded market. The maize may be traded through several organizations before being sold to a consumer or processor. It is then usually processed by large-scale millers into maize meal or for brewing and for animal feed, though some quantity is milled in the urban areas by the consumer. These processors then link into their own market chains to the final consumer or business user (animal feeds).

### 3.1 Market Players

#### **Production – Smallholders and Estates**

Smallholders produced more than 90% of Malawi's total maize production of 1.55 million MT in 2001/02. There are between 1.8 and 2 million smallholder farmers with average cultivated land holding at 0.95 ha/household. At the regional level, Central Region has the largest average cultivated land size of 1.13 ha/household, whereas in the Northern Region this figure is 0.92 ha/household and in the Southern region 0.72 ha/ household according to the Integrated Household Survey of 1998). Smallholders normally cultivate maize on small sub-plots of 0.2 or 0.3 ha/household. In general, they use local seeds to grow maize and buy fertilizer only once, resulting in low yields. The Starter Pack (see Appendix 1) has helped them to increase production to some extent, as many have devoted a further small plot of land to the higher yielding hybrid seed.

However, the logic of maize production in the smallholder sub-sector is not primarily determined by output prices, as most maize is for consumption rather than for sale. Although some smallholders sell some maize just after the harvest to buy other basic needs, they generally obtain more cash from sales of other cash crops than from sales of maize. Also, towards the end of the season, many rural households have to rely on buying maize for lack of adequate land, to cover their subsistence needs. Within Malawi, hardly any farmer organizations are active in the maize sector, as these organizations mostly deal with pure cash crops not dual subsistence/cash crops like maize.

Estate production is estimated at 125,000 MT in 2003 (Source: Ministry of Agriculture) but has fluctuated throughout the last 5 years from 100-130,000 MT and comprises growing maize for:

- Commercial sale
- Seed production
- For feeding employees

Only Press Agriculture has grown maize on a large-scale, and only in the Northern Region at Kasungu.

#### **3.1.2 Traders**

##### **ADMARC, Local Market Sellers, Private Traders (Large/Small)**

The farmers interviewed for this research stated that they only sold around 10% of their production to the market, however other respondents estimated a figure of up to 40% for some smallholders. Although it is difficult to estimate what percentage of maize production enters the market, as much of it is at a local market level and never recorded, 20-30% probably represents a realistic figure. Therefore, 70-80% of maize does not enter the trade circuit at all.

The 20-30% of maize production entering the market used to be sold primarily to ADMARC for historic regulatory and subsequently market dominance reasons, however private traders

and local markets have now generally taken over ADMARC's position in normal years.<sup>9</sup> According to the respondents, there are three main reasons for this change. The first is that the buying prices paid by ADMARC have been lower than those paid by private traders or at the local market. Secondly, ADMARC generally starts buying from farmers very late in the year, while private traders often start buying maize before the official start of the season, i.e. before operation of ADMARC markets and in some cases whilst the crop is yet to be harvested. Poorer farmers are more likely to be forced to sell early to obtain the necessary cash to repay loans or meet urgent cash commitments. A third reason, highlighted in a University of Malawi study<sup>10</sup>, mentions that ADMARC tends to run out of cash in the middle of the buying season, so it cannot continue buying.

The difference between local markets and private traders is very subtle. Local market refers to those trading locations where there are very small-scale buyers and sellers of agricultural produce and inputs. In a local market, farmers come to sell one or a few bags of maize, in most cases to people who come to buy in the same or smaller quantities. On the other hand, private traders, as companies or individuals, are involved in the business at a larger scale. Usually they have a vehicle or the ability to hire one and they usually have access to storage facilities as well. This enables them to purchase when the price is low immediately pre or post harvest and to release stocks as the price increases during the 'hungry season' from December to March of the following year. Whilst this concentrates profits in the hands of the traders, it does also act as a smoothing of supply so that higher prices in the market will call forward stored domestic supplies.

Depending on the facilities, traders can store maize and try to make advantage of intra-temporal price differences or they can transport it and try to make advantage of spatial price differences. It is estimated that 10-25% of the total maize production is traded for these reasons. In addition to buying from small traders and farmers, private traders also import maize directly from Mozambique, Tanzania and sometimes Zambia.

Many rural households, even smallholder growers usually need to purchase some maize at the end of the season. The focus group discussions indicate that ADMARC is an important source for this type of purchase. The main reason why people are buying maize from ADMARC and not in the local market or from traders is that the former tends to sell at a lower price than the latter at this time in the year as availability becomes tighter. Therefore, in areas where ADMARC is still operational, it functions as a price setter at the end of the season, level private traders generally have to follow if they want to have a share of the market.

The number of players in the small trading segment is enormous compounded by the fact that there are often several traders involved before the maize finally reaches the final buyer. To make an estimation of the number of small-scale traders would be speculative, but it may be in the region of 100,000, depending on the time of year and the availability of maize to trade.

With respect to larger traders, they also mill, export and import as part of their activities as well as producing animal feeds. They often buy from the small-scale traders to enable them to get larger volumes than making many small direct purchases from individual farmers.

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<sup>9</sup> In abnormal years ADMARC can take on a more strategic role as in 2001/2 & 2002/3 to control distribution and manage emergency stocks.

<sup>10</sup> Nhtara, K. Department of Economics, University of Malawi: "What needs to be done to improve the impact of ADMARC on the poor". July 2002.

Because these businesses often have access to sufficient and proper storage, they can take long-term positions. However, large traders mentioned that there is no real incentive to store maize for a long period of time, as the buying power of Malawians is limited, there is uncertainty about future prices and storage costs are very high as a result of high interest rates relative to the value of the crop.

### 3.1.3 Processors

Another option for the small-scale trader is to sell to the processing industry, including:

1. Commercial milling companies
2. Animal feed industry
3. Beverage industry

Out of the above three, the commercial milling companies process most maize, estimated at around 80,000 MT. In fact, the processing industry uses less than 10% of total maize production, within which this figure falls. . They mill the maize into flour products, mostly Super Cream of Maize<sup>11</sup>, Cream of Maize<sup>12</sup> or Whole maize meal<sup>13</sup>, but may also add soya, sugar and other ingredients such as iron, zinc and calcium. Large Milling companies usually purchase through traders or are traders themselves.

The animal feed and beverage industry use approximately 70,000 MT and 8,000 MT of maize, respectively. Maize makes up 60% of the ingredients for chicken feed. However, the latter has suffered over the last year from cheap import products from South Africa as a result of the exchange rate. Cattle are usually fed the maize husk.

The processing industry purchases in two ways: Traders make contracts with the processing industry and then try to find the cheapest maize, locally or from other countries mostly Mozambique; or traders find cheap maize and offer it to the feed and beverage industry.

Since the processing industry has storage capacity, they concentrate their purchases during the trading season of June-July to take advantage of the low prices. Milling companies in particular also buy direct and just store the maize in order to use and sell later in the season. If the subsequent price is too low, they always have the opportunity to process the food into flour or animal feed.

The major players in trading and milling are:

#### **ADMARC (Trader – Exporter – Importer)**

The Agricultural Development and Marketing Corporation (ADMARC) is a GoM parastatal participating in the following facets of agriculture and agri-business within Malawi: -

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<sup>11</sup> A product prepared from fully matured, sound, cleaned, dehusked and degermed kernel of maize from which bran and germ are removed, by a grinding process using a hammer or roller mill in which the grain is comminuted to suitable degree of fineness. In its preparation, coarse particles of the ground maize grain may be separated, reground and recombined with all of the material from which they were separated.

<sup>12</sup> A product obtained from fully matured, sound, cleaned, shelled and dehusked maize, from which no visible bran specks can be seen, by a grinding process using a hammer mill or other size reducing methods (except roller mill) in which the kernel is comminuted to a suitable degree of fineness.

<sup>13</sup> A product obtained from fully matured, sound ungerminated, whole kernel of white, yellow or a mixture thereof, from which a very small portion of the bran fractions have been removed by grinding process in which the entire kernel is comminuted to a suitable degree of fineness.

## Malawi maize sector value chain analysis

1. Supplies agricultural inputs to farmers
2. Purchases agricultural produce;
3. Markets agricultural produce for export and domestic consumption;
4. Plays a food security role in maize markets by acting as a buyer and seller in remote areas, providing grain storage across seasons and supporting a large marketing structure.

ADMARC has 343 markets across the country that sells inputs, purchase commodities from smallholders and sell food crops to farmers/consumers. ADMARC's total storage capacity is estimated at 468,000 metric tonnes or 14-20% of an annual harvest. These markets cost about MK 320 million to run in 2000/01, constituting around 25% of ADMARC costs (Source: World Bank<sup>14</sup>). The degree of small farmer dependence on ADMARC for the purchase of inputs and marketing of crops has declined steadily since the liberalization in late 1980s. Normally, ADMARC purchases up to 9% of national maize production, but over the last two years ADMARC did not buy any smallholder maize at all as a result of financial problems and limited availability of maize in the market. For the 2002/3 season ADMARC wants to start buying again and targets to buy 70,000 MT of which potentially 30,000 MT might be sold for export if the export ban is lifted. The purchasing price of the maize is often set by ADMARC itself, without direct influence of GoM, but the selling price is often still guided by GoM. Whilst there are strategic reasons for setting the selling price, this restricts ADMARC from operating as a truly commercial company.

ADMARC has been restructured several times in the past and the impact of these reforms has led to increased private sector activity in producer markets. However, inefficiencies in factor input markets, market information, credit delivery and inadequate infrastructure have all constrained the growth of the maize sub-sector and private traders have not always stepped in smoothly when the state market presence was removed. This is more apparent in the more remote parts of the country.

ADMARC continues to face uncertainty, as there are pressures from donors and others to privatize it. The cost of covering ADMARC's losses is a big strain on GoM finances and has led to pressure within Government to speed up commercialization of ADMARC's operations and separating out the cost of its social market function.

The major arguments for retaining a social role are:

1. *Market failures in remote areas:* ADMARC services poor, remote areas and cross-subsidizes these activities with resources from more profitable activities. There is concern that if remote markets are closed due to lack of efficiency, they are unlikely to be replaced by private traders because transportation costs are high relative to the returns.
2. *Food storage for lean seasons:* ADMARC is seen as a source of supply in times of scarcity. By maintaining warehousing facilities across the country, ADMARC can store purchased maize in secure markets in food-deficit areas or in a central location for transportation during the hungry season. However, there is evidence that ADMARC has had difficulties in meeting demand in times of low production, especially since government support has dwindled and restrictions on the quantity purchased have had to be introduced..

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<sup>14</sup> "Reforming Agricultural Markets in Malawi: A Case Study on Poverty and Social Impact Analysis"

The current view in GoM appears to be that ADMARC should be more commercial but not privatized, because of its social function. This is a very sensitive political issue as might be expected.

### **GRAMIL (miller)**

GRAMIL (Grain and Milling Company Limited) has been the largest grain milling company producing maize meal flour in Malawi. Its head office is located in Limbe, and has branches in Lilongwe and Mzuzu. In Limbe, GRAMIL operates a maize mill with an installed production capacity of 4.5 tonnes per hour, whilst in Mzuzu, it operates a maize mill with an installed production capacity of 3.5 tonnes per hour. This implies a national capacity of around 70,000 tonnes a year working full shifts. Currently, the capacity is severely underutilized as a result of a shortage of working capital. The company produces two main maize products namely, Super Cream and Cream of Maize. GRAMIL's biggest customers for these products are the wholesalers and retailers like PTC/McConnell, but GRAMIL also supplies NGO's, schools, the army and hospitals. The company's products constitute approximately 60% of the Maize flour market in Malawi, which is mostly sold to urban consumers. Since flour constitutes just a small percentage of the total national consumption, the company's main competitors are the various local millers and village hammer mills.

The GoM owns a 100% equity stake in GRAMIL, but is in the process of disposing of its shareholding to private sector investors. This should bring new investment, management expertise, as well as technological and marketing skills to the company.

### **TRANSGLOBE (miller, trader, importer, exporter)**

Transglobe is one of Malawi's largest agricultural commodity dealers with outlets in the Southern and Central Regions milling and trading maize and other commodities. Its total storage capacity is 60,000 MT in various depots. Some of the trading activities also concern domestic market trading, to take advantage of price and regional differences. If maize stocks cannot be sold, Transglobe processes maize into feed or flour. The milling capacity of Transglobe is currently around 45,000 MT a year but this will in the near future increase to 100,000 MT a year. They mostly mill for tendering and do not sell to the wholesale and retail market. On an annual basis they process 10,000 MT for animal feed and Likuni Phala meal (Maize flour mixed with Soya flour). Transglobe has been involved in both import and export of maize although the latter ceased in recent years as a result of the formal ban.

### **RAB Processors (miller, trader, importer, exporter)**

RAB Processors Limited has been manufacturing and trading basic commodities and milled goods for export as well as local markets since 1983. The company's line of business includes trading in maize, maize milling, producing animal feed and supplying inputs (fertilizer, seeds, Starter Pack) to farmers. Throughout Malawi, RAB owns 24 depots from where they sell the inputs and buy the produce, although they also work together with traders. Distribution is taken care of by its own fleet of vehicles. RAB's milling capacity is up to 4,000 MT monthly (48,000 MT a year). The company produces two major products, Super Cream of Maize (Snow White) and Cream of Maize sold to retailers, but RAB also supplies wholesalers, NGO's, hospitals, schools, etc. The company imports and previously exported maize and sold maize to the government last year.

### **3.1.4 Millers and Traders - Middle Sized**

There are numerous middle-sized players in the maize milling industry, often combined with other activities, including maize trading. These companies usually do not have their own transport facilities. However, their storage facilities are normally sufficient. There are approximately 10-15 middle-sized maize millers in Malawi, two of which are described below to give a broad indication of their role.

#### *HMS Food*

HMS Food activities include export of non-traditional items, maize milling and rice milling. They produce Cream of Maize, Whole Maize flour and animal feed. The company mostly produces on contract for institutional buyers (schools, hospitals, hotels) and companies. The maize comes in through traders, who also take care of the transport. Their capacity is around 60 MT a day (20,000 MT a year with normal shifts) but the usage of this capacity depends on the contracts made. Last year, HMS Food was involved in selling maize to the government.

#### *Graintec*

Graintec, formerly Falcon Milling, is involved in grain milling of maize starch, Cream of Maize and whole Maize flour and processing animal feed. The maize is bought through traders and Graintec produces on contract only, mostly for NGOs. At the moment they do not fully use their capacity of approximately 20 MT a day, 7,000 MT a year with normal shifts. The partial collapse of the feed business (poultry) in Malawi in 2001, which occurred as a result of high maize prices due to the shortage in Malawi and cheap imports from South Africa, did have a negative impact on its turnover. Graintec is not currently involved in maize trading.

### **3.1.5 National Food Reserve Agency**

National Food Reserve Agency (NFRA) has a mandate to maintain adequate buffer stocks of grain, to protect Malawians against fluctuations in food production, availability and prices. NFRA was established as an independent trust in July 1999. Previously, the National Strategic Grain Reserve (NSGR) was managed by ADMARC, but it was decided that the national grain reserves should be run independently and on a cost recovery basis, although the latter has not been achieved yet. NFRA buys from ADMARC, private traders and imports maize whenever necessary.

Their sourcing depends mostly on availability of maize and in times of emergencies on availability of transport. During 2002/3, most of the maize was imported and was provided by foreign suppliers. NFRA rents warehouses throughout the country, four in the Southern Region, and two in the Central Region and two in the Northern region. The NSGR will be further discussed in Section 4.

**Value Change Based on Prevailing Prices as at March 2003**

Table Value change along the maize chain

Transaction Point	Buying Price (MK/kg)	Selling Price (MK/kg)	Value Added (MK/kg)	Value Added %
Mozambique farmer	N/A	8	N/A	N/A
Malawi farmer	N/A	10	N/A	N/A
Local Market Trader	8-10	12	+ 2 to 4	+ 25 to 50%
National Traders	12	14	+ 2	
Processing industry	14	Whole Maize flour: 27	+ 13	+ 93%
		Cream of Maize: 32	+ 18	+ 129%
		Super Cream: 40	+ 26	+ 186%
		Beverages: 24	+ 10	+ 42%
Grain Reserve	28-30 (Import)	17 (through ADMARC)	-11 to 13	- 40 to 45%

Source: Own research

Middlemen and traders together add a 25-50% mark up. Often, there are numerous middlemen involved and the added value for traders has to be enough to cover their transport and storage expenses. From the Mozambique border to Blantyre, transporters charge MK.40-45/50 kg bag, almost MK 1/kg.

*Prices*

In most years, retail market prices in Malawi are lowest after harvest in June/July, and rise up to 50-100% over the next six months. During these latter months, most people are dependent on markets to buy their maize to make up for short falls in their own food production. The average price in June 2002 was MK 13.8/kg but went up to MK 17.6 in December 2002, a price increase of 28%.<sup>15</sup> In 2001/02 prices increase up 200% between June to December, though starting from a lower base price.

Apart from price differences during the year there are also considerable price differences between the various districts. Looking at averages for the year it is also clearly shows dramatic price increases in the last two years of over 75% on the previous year.

<sup>15</sup> The price in December 2002 was the price set by GoM and did not reflect market conditions that would have suggested a higher price to the consumer.

## Malawi maize sector value chain analysis

Table Average retail price per region, in Malawi Kwacha per kg

Region	1998	1999	2000	2001	2002
Bangula	4.28	7.16	8.60	11.32	14.94
Chimbiya	6.41	7.10	6.09	12.23	22.26
Chitipa	5.67	7.70	4.39	8.31	15.12
Dowa	6.43	9.20	7.27	15.49	23.80
Karonga	6.27	7.51	6.25	9.06	15.10
Kasungu	6.34	10.25	7.21	12.42	18.19
Lilongwe	10.10	9.35	7.53	12.53	29.35
Limbe	11.33	8.62	N.A.	10.00	N.A.
Liwonde	6.51	9.28	7.11	13.48	22.10
Lizulu	6.10	7.02	5.49	11.38	17.81
Luchenza	7.64	8.89	5.83	11.05	17.84
Lunzu	8.25	9.21	7.13	13.94	36.04
Mangochi	6.35	7.08	7.10	13.45	20.22
Mchinji	5.65	10.15	7.24	13.25	28.00
Mitundu	5.35	6.21	5.18	11.51	19.09
Mzimba	5.71	8.42	7.79	15.38	21.23
Mzuzu	6.59	8.04	5.77	10.43	15.96
Nchalo	6.63	8.15	7.86	11.79	15.98
Nkhotakota	7.22	8.59	7.68	15.52	22.67
Ntaja	8.38	8.05	6.67	12.26	21.78
Ntchisi	8.13	10.99	9.19	12.35	22.28
Rumphi	4.88	7.78	4.44	9.60	16.92
Salima	6.49	8.54	5.51	10.84	24.03
Zomba	8.43	7.33	5.97	5.75	N.A.
Average	6.88	8.36	6.66	11.81	20.94

Source: FEWS

Small traders in Malawi face severe difficulties with respect to transport, storage and finance possibilities. The majority of the traders are very small with little capital and they only take in short term positions. Only the bigger traders have their own fleet, storage facilities and access to credit, as high real interest rates prevent small traders from investing in transport, storage and stock.

A general constraint for traders is the role of the Government in the maize market owing to the partial liberalisation of the maize market. Private traders are free to act, but the government influences the price setting. For example, in calendar year 2002/03, GoM has ensured adequate supplies and this supply has kept prices in most of the local markets to around the ADMARC fixed price of MK 17/kg. In calendar 2001/2, when there was no maize in ADMARC markets, private traders took advantage of the situation to raise prices to much higher levels.

## **4.0 POLICY AND REGULATORY ENVIRONMENT**

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### **4.1 Marketing policy**

The agricultural strategy pursued by the Government over the past half-decade focused on three key objectives:

1. Increasing food security through higher domestic production and storage of maize
2. Generating higher rural income growth, and
3. Creating a more diversified pattern of agricultural production and trade.

To achieve these objectives, the government progressively implemented the following key reforms and programs:

1. Repeal of the Special Crops Act that had prevented smallholders from growing the most profitable crops in the country (especially tobacco).
2. Elimination of production controls on smallholders.
3. Elimination of commodity price controls.
4. Elimination of barriers to private sector participation in marketing of agricultural commodities and inputs, including the elimination of seed and fertilizer subsidies and input price controls, and the partial commercialization of ADMARC.
5. Establishment of a maize price band to manage the country's NSGR. The maize price band was eliminated in December 2000 and the NFRA (see below) currently manages disaster relief efforts relating to food security.
6. Implementation of the Starter Pack Scheme (SPS) in 1998/99 and 1999/2000 and the TIP in 2000/01 and 2001/02 to facilitate free access to agricultural inputs.

Although most of the key reforms have been implemented, the objectives have not been fulfilled. Food security has been a major problem in the last two years and rural incomes have not increased.

In terms of future plans for 2003-2008, MoAI envisages “A nation with sustainable food security and increased agro-based incomes.”

To realize this vision, the Ministry’s mission is: “To promote and facilitate agricultural productivity and sustainable management and utilization of natural resources to ensure food security, increased incomes and the creation of employment opportunities”.

The stated mission is supported by various objectives and strategies, which are mostly focused on improvement of production and marketing. It is estimated by MoAI that Malawi requires US \$80 million (about MK.6.4 billion) to revive the agricultural sector through irrigating 120,000 ha of land to increase maize yield by 600,000 tonnes with double cropping over the next three years. GoM plans are that the MK 6.4 billion should be used for buying 300,000 treadle pumps, building 400 kilometers of canals and buying 2,000 motorized pumps.

### **NFRA and SGR**

The National Food Reserve Agency manages the Strategic Grain Reserve of Malawi, as mentioned earlier in this report. The SGR purchased 167,000 tonnes inside Malawi in 1999

at around MK 7.80/kg, although a proportion may have come informally from Mozambique. Between 2000 and early 2001, about 27,000 tonnes was exported to Kenya and some small amounts went to Mozambique, while the other 140,000 MT was sold on the domestic market. Realization of the likely lack of supply in mid 2001 caused maize prices to rise extremely rapidly. Concerns about an acute shortage of maize forced the NFRA to buy 150,000 tonnes from South Africa in September 2001 at around MK 15/kg and in 2002, NFRA imported more than 250,000 tonnes. Only a small proportion of this 2002 maize has since been sold and consequently the stock at the end of February 2003 is reported to be more than 200,000 tonnes. This is explained, at first by quantitative restrictions on buyers at one bag per person, and now because the official price of MK 17 is significantly higher than the market price as at April 2003.

NFRA tried to sell some of this surplus through ADMARC, which is the only institution allowed to buy the maize from the NFRA for sale to the public. ADMARC has been buying the maize at a fixed price of MK 14/kg and selling to the public at a fixed price of MK 17/kg in an effort to ensure the maize reaches as many people as possible at a reasonable price. This price represents a government subsidy of about 40%, as the landed cost of the imported maize is estimated at about MK 28-30/kg. However, the rate of sales has been low in the ADMARC markets for reasons explained already explained. As a result, current government maize stocks are higher than they have ever been at this time of the year, and concerns are mounting at the cost and ability to dispose of the stocks before market prices slump with the expected good harvest.

The government is now cautiously, bearing in mind that the production prospects can change, taking steps to increase ADMARC sales by removing a number of the original sales restrictions. For instance, allowing individuals to buy up to five bags (50kg each) per day instead of only one. The NFRA has embarked on the process of selling down these reserves to reach normal levels, agreed at as 100,000 tonnes. The proceeds of these sales will help to reduce Government funding requirements but the prices likely to be achieved through international tender for export may be lower than even the local subsidized price and losses can be expected. Provided funding is available, Zimbabwe may be the most likely destination for maize exports.

In addition, NGOs and other organizations that want to buy maize for their own programs can now buy maize from NFRA. It is important to keep in mind that although the NFRA needs to increase maize sales, it still needs to retain some carryover stock because the current projections for 2002/03 suggest that the country will only just have sufficient production.

NFRA is required to operate commercially, but is still expected to have a social role. So far, NFRA has not been able to intervene in the market with good results and the prospect for crop year 2002/03 is not favorable. Should the anticipated small maize surplus for this year materialize, careful management of the primary maize market will be needed to ensure no repeat of the disastrous collapse in maize producer prices which occurred when the country last enjoyed surplus production in 1999/2000.

## **4.2 Import/Export licensing**

Malawi operates a liberalized import and export licensing system under which very few commodities are subject to license. For maize, no import license is required. However, an export license must be obtained for exporting maize and maize meal including:

1. Dried maize, on or off the cob
2. Crushed maize
3. Maize grids
4. Maize cones
5. Maize offal
6. Hominy chop but excluding green maize on the cob.

In the marketing season, the MoAI recommends to the Government whether to give permission to export and if so, for which quantities. If the government decides to allow exports, any one can apply for an export license. As long as the agreed quantity is not fulfilled, this license should be provided easily, quickly and for no charge. However, respondents from the private sector mentioned that they experienced difficulties and delays in obtaining an export permit. The decision-making is centralized in Lilongwe to keep a good overview.

For 2003, no decision has been taken yet with respect to export permits. This decision will be based on the second round crop estimations, which will be available in the third week of June. According to the MoAI, there is little indication for a significant surplus and therefore exports might still be banned. Private Sector firms have criticized the open-ended nature of the ban, which creates a presumption against exports and may stay in place unnecessarily through failure to make a decision one way or the other. It also runs contrary to statements made by GoM at different times that encouraged firms to apply for export licenses only for these to be delayed until after the third crop estimate is made, usually in June. Up until this point, MoAI is not able to give a recommendation to GoM on the export of maize. Private sector players also raised concerns about the speed of processing such applications, which is partly due to the consultation process that takes place between Ministries and other Public Sector institutions. This could be more streamlined if Malawi is to respond quickly to surpluses to take them out of the domestic market and thereby earn foreign exchange.

## **4.3 Import/Export Regulations**

### **Customs clearance procedures and documents**

Customs require the following documents for exporting maize:

1. An Export License to control how much is exported and to which destination.
2. Exchange Control – CD I Form – is an exchange control document, which must be completed for all shipments that exceed MK 2,000. Copies are sent to Ministry of Commerce and Industry (MCI) and the Reserve Bank of Malawi (RBM). RBM will query the exporter at the end of the stated period to check if payment has actually been received.
3. Custom Transit Declaration Form for maize transiting Malawi.
4. Form 12 – Former Bill of Entry
5. Bill of Lading, when goods are shipped by sea

## Malawi maize sector value chain analysis

6. Commercial Invoice – The commercial invoice is completed to enable the importer to clear his goods in his country. It contains the name of the exporter, weight, value and description of goods.
7. Certificate of Origin establishes in the importing country the origin of the goods to ensure whether they are entitled to preferential duties or not. The Certificate of Origin is issued by MCI at a cost of MK 1,200.
8. The phytosanitary certificate assures that the materials being exported are free from diseases and pests (as explained below).

Maize imports are not subjected to licensing other than an import permit at MK 250, but subject to the above requirements such as Exchange Control, Invoicing, Bill of Lading and Bill of Entry, Certificate of Origin and Phyto-sanitary certificates

According to the interviewees, the access to the import and export requirements is good, although changes are often communicated properly. A general complaint is the number of documents involved. Moreover, there is a lack of harmonization between in trade documentation and competing regional trade regimes (COMESA, SADC, WTO) that have their own rules and documents. The language used in the documents (Portuguese in Mozambique) forms an extra barrier.

### 4.4 Tariffs

The import tariff for maize, as pointed out earlier, is zero. Other maize products attract some tariff, which vary according to the regional integration bloc and product.

Table Tariffs for Maize and Maize Products by Trade Area

% Tariff	Preferentia I*	COMESA	SADC	Non-Preferential	VAT
Maize	0	0	0	0	Exempt
Maize flour – fine	10	0	10	15	Exempt
Maize flour – not fine	25	0	25	30	Exempt

Source: Customs Department of the Malawi Revenue Authority

Respondents mentioned that whilst the importation process is clear, there is often no clarity of duties at border posts amongst MRA officials. This is a major problem for importers.

### 4.5 Phytosanitary requirements

Import permits are required by the Plant Health Inspection Services (PHIS) before maize imports are made. They are issued at a cost of MK 250. Inspectors are present at the border post in Mwanza, Mchinji and Songwe to ascertain that the declaration conditions called for in the import permit are satisfied. Declaration conditions are not standard, as they have not been published for the benefit of maize traders' knowledge. According to a sample of a few import permits scrutinized during the field survey, these conditions include: -

- Product is free of pest (phyto-sanitary certificate)
- Fumigated pallets have been used

- Packaging is in new (polypropylene) bags

Whenever any doubts arise about the quality of the maize, PHIS can request the Malawi Bureau of Standards to come and perform physical tests.

The PHIS is centralized with only three offices (at Research Stations of the MoAI) quite far removed for certain importers. The number of inspectors and their knowledge seems to be limited. Moreover, there appears to be a lack of facilities at the stations of the PHIS. These facts combined with the limited knowledge of the procedures of some of the importers, might stimulate informal trade.

Exporters have to apply for a phyto-sanitary certificate before exporting. The cost for the phyto-sanitary certificate is MK 500.

#### 4.6 Food Quality and Safety Standards

Maize imports are subjected to quality testing by Malawi Bureau of Standards (MBS). The essential composition and quality factors for maize according to MBS are:

Table Quality Standards for Maize, MBS

Moisture content	14 % m/m max
Aflatoxin content	3 ug/kg max
Limit of blemished (defective) grain	11.5 % max
Limit of other grains, foreign matter and filth	2.6% max

Source: MBS

The compositional and chemical requirements for maize flour according to MBS are:

Table Quality Standards for Maize Flour, MBS

Characteristic	Super Cream of Maize	Cream of Maize	Whole Maize flour
Moisture content, % (m/m)	14.0 max	14.0 max	14.0 max
Fat content, % (m/m)	2.0 max	3.2 max	3.5 min
Fibre content, % (m/m)	0.80 max	1.4 max	2.0 max
Ash content, % (m/m)	1.0 max	1.2 max	1.5 max
Protein content,% (m/m)	3.5 min	4.0 min	4.5 min
Particle size	> 99% of the flour shall pass through a 600um sieve	>96% of the flour shall pass through a 600 um sieve	> 90% of the flour shall pass a 600 um sieve

Source: MBS

The enforcement of maize standards is cumbersome and costly to importers, a fact that undermines the effects of the liberal maize import policy. The MBS does not have inspectors or facilities at the border and sends people only when a quality problem arises. By that time, the maize has entered a bonded warehouse on the expenses of the importer from which MBS draws samples for examination at the laboratory, situated at the MBS head office in Blantyre, followed by a report after a few days.

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For exporting maize, a certificate of MBS is not mandatory. The cost of an import inspection by the MBS is around MK 5,900 and for export around MK 8,900, but this includes a certificate.

The MBS is a member of the International Bureau of Standards. However, they seem not to co-ordinate closely together with similar organizations in nearby countries and the standards used regionally are different. Furthermore, there is a lack of credibility and trust between the organizations involved, despite efforts to work together. According to the interviewees, close cooperation of the different Bureau of Standards would ensure that a certificate of another country should be legal/sufficient for Malawi and vice versa.

The Ministry of Health does not have additional Food Quality and Safety Standards with respect to maize and maize flour.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

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### **5.1 Conclusions**

There are a number of highlighted constraints that hamper further development of the maize sector in Malawi. In summary, the following were the main issues as indicated by the various respondents and interviewees:

#### **Production issues that impact on trade potential**

5. Poor access to agricultural inputs such as fertilizer and seeds, resulting in low productivity, primarily due to the cash problem of the farmer. Other constraints with respect to access to inputs include availability (especially in the current season a shortage of hybrid seeds), distance to supply points, timeliness of supply. In most cases, the use of maize inputs has been limited and inefficient reducing the potential for marketable surpluses and increasing the need for imports.
6. Land degradation. Land continues to be heavily degraded due to soil erosion, siltation of watercourses, water pollution, land fragmentation, decreasing land holding size, deforestation and above all, declining soil fertility.
7. Over-dependence on rain-fed agriculture, when lately rainfall has been erratic, unreliable and drought occurrence frequency has increased resulting in failure harvests of maize and excessive swings in supply.
8. Predominance of subsistence farmers and limited commercial farmers with marketing skills meaning maize is not seen as a commercial crop but primarily as a staple crop. This results in limited trade potential, as there is limited demand and purchasing power.

#### **Marketing/Trade issues:**

7. Financing: Access to credit for the private sector to fund investment and working capital is being hampered by high nominal and real interest rates. This is a huge disincentive for the private sector to store maize, even though enough storage capacity is available within Malawi
8. Infrastructure: Poor road infrastructure and costly and inefficient communication systems increase the costs for the maize traders and makes some potential supply routes unreliable (Beira/Nacala corridors) and demand areas unreachable.
9. Market information: There is a lack of regional information on production, prices, and demand. The available information is disseminated poorly.
10. Non Tariff Barriers: Barriers such as non-harmonized weight restrictions and insurance requirements, non-harmonized quality standards, non-harmonized documentation, and language barriers prevent trucks crossing the border adding cost, time and interrupting the free flow of trade.
11. Accessibility of Government institutions and Standards Bureau involved in import and export process. Currently those organizations are not easily accessible making it more difficult for the importers and exporters to gather the necessary documents thereby increasing the cost and hassle thus fuelling more informal trade.
12. Custom regulations: Competing regional trade regimes, too many regulations, slow communication of regulation changes and no clarity about duties result in confusion at borders and delays of trade.

**Policy issues:**

6. Government's involvement in the maize sector discourages private sector investment in maize as potential profits are limited or perceived to be limited, resulting in inadequate private sector development.
7. High cost of intervention of Government in maize market. The costs of stock holding and decisions made have resulted in a high cost for the Government and contribute to the budget deficit and high interest rates
8. Decision making about allowing exports too slow/late as Government waits until the third round crop estimates in June.
9. High dependency on production estimations. Decision taking with respect to issuing export licenses but also on price setting issues by the Government, all depends on the quality of the estimations, which have not been sufficiently accurate in the past.
10. Declining role of ADMARC in the marketing of maize, affecting especially farmers and buyers in remote areas as no other traders take over their position as a result of the bad infrastructure.

**5.2 Recommendations**

Regional trade holds the potential to reduce Malawi's vulnerability to supply shortages by making up for deficits through efficient and responsive regional trade. While Malawi is likely to have a comparative disadvantage in maize production over its neighbors for years to come, when it does have excess production, then there is a need to access potential export markets quickly and efficiently.

Stimulating exports of maize must first address the quantity of maize produced in Malawi and in particular the productivity of smallholders who are the dominant producers by far. Although food security is of primary strategic importance to Malawi, during surplus years, Malawian maize did find export markets in mainly Mozambique, Tanzania, Kenya and even European countries such as Ireland and Switzerland. Guaranteeing a structural surplus will be hard due to climatic and economic reasons, but there are a number of recommendations mentioned by stakeholders with respect to production, namely:

5. Improve access to inputs. Widespread availability of sustainable micro-credit will assist though the track record to date has not been good. Some respondents recommend abolishing the TIP and focusing more on the accessibility of fertilizer and OPV seed, for example by subsidizing the price.
6. Setting up/strengthening farmer organizations that can promote maize as a cash crop instead of a food crop and organize farmers with respect to marketing. Farmers must also be encouraged to organize themselves in order to receive inputs at a more competitive price and consolidate loads for transport. This will give smallholders the chance to make better returns and make marketable surpluses available.
7. Communication of good husbandry and improved storage techniques to boost productivity and reduce post harvest losses.
8. Stimulating irrigation at all levels through donor programs, private initiatives and GoM programs.

In general, the economic circumstances of Malawi play a major role in the buying power of the local consumers for both fresh produce and processed goods. High interest rates will always hamper local investment and need to be brought down as soon as possible. Industry

## Malawi maize sector value chain analysis

infrastructure such as electricity supply, telephone lines and roads need to be improved to reduce the costs of the processing and trading industry and make Malawi's products competitive versus other regional producers. Most of these cross-cutting issues affecting businesses are being addressed through the Growth Strategy for Malawi.

Furthermore, there seems to be good potential for formal and informal cross border trade with neighboring countries such as Mozambique, Zambia, Tanzania and Zimbabwe. For marketing year 2003, respondents mentioned potential export opportunities to:

- Tanzania, which is affected by unfavorable weather circumstances
- Zimbabwe, where production has declined and there are likely to be shortages for the short to medium term
- Zambia, which has regular shortages

Mozambique has a comparative advantage over Malawi with respect to maize production. Inputs are cheaper, land is plentiful, there is limited land degradation and some cultivated maize is even irrigated. Therefore, for the foreseeable future Malawi will continue import from Mozambique, but there are opportunities to export from other areas closer to areas of shortage (near Tanzania) while at the same time importing from countries like Mozambique to areas of structural deficit such as Southern Region. There is also potential to re-export some of those imports of cheaper Mozambique maize, as the exporting areas of Mozambique do not necessarily have easy access to markets other than Malawi.

Harmonization of quality standards and trade documentation will encourage freer movement of maize within the region. Other issues in this respect are:

- Clarification at borders with respect to duties and charges with up to date information on changes to be available more quickly
- Increase regional information regarding production, demand and price
- Increase credibility of international organizations involved in quality control
- Increase accessibility of Government services involved in documentation
- Faster decision making by the Government to grant export permission

With respect to policy, the value of Government intervention in the maize market is debatable. The price of maize has often been subsidized, which has led to public versus private sector price differentials. Moreover, export is controlled and the Government is often the main formal importer of maize. This intervention has resulted into an additional cost for the country and deterred significant private sector investments. However, if the government simply withdraws from the market, the private sector might or might not step in and not necessarily smoothly and evenly. . Because the social consequences cannot be foreseen with certainty, and because it is such a sensitive issue, it seems highly unlikely that the government would take this step.

To reduce intervention seems to be a more reasonable option and by commercializing ADMARC, the first steps have already been taken. Several respondents mentioned the possibility of the installment of a minimum price for the farmers to protect the smallholders. However, this option would again result in a high cost for the Government and distort the signals to producers away from more profitable cash crops. It is therefore not recommended.

Recommendations made by respondents to the Government include:

## Malawi maize sector value chain analysis

4. More effective operation of the NSGR to ensure that interventions are cost effective and not distorting of the functioning of the market save for exceptional years. The Government will need to enforce strict oversight on the activities of the NFRA to ensure no maize deficits occur due to wrong timing of exports and imports.
5. Further commercialization of ADMARC, in order not to disturb the natural price setting by supply and demand, whilst at the same time keeping its social role in remote areas.
6. Cautious approach to food aid from donors, as food aid lowers prices and deters maize production, the opposite to what is desired. Although donor aid is often of vital importance, it should not directly influence farmer's attitudes towards growing the crop and should be made available very selectively.

Overall, this research would suggest that the role of trade is potentially more significant than at present in smoothing areas of surplus and deficit within Malawi and between different countries in the region. Better trade flows of maize could and should be a key component in any maize security strategy, particularly given Malawi's likely ongoing vulnerability to deficit and the potential of her neighbors to produce regular surpluses. Better trade flows can only be to the advantage of the poor and the nation.

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## **APPENDIX 1: STARTER PACK AND TARGETED INPUT PROGRAMME**

In the early-mid 1990s, the Malawi Government came under pressure, linked to structural adjustment, to phase out subsidies on fertilizer and input credit. However, it proved uneconomic for most smallholders to buy sufficient expensive free market fertilizer to maintain maize production. By the late 1990s, it seemed as if Southern Malawi was facing a structural deficit in maize production and that famine was looming. An ambitious programme was conceived to distribute a starter pack of 0.1 ha worth of fertilizer and seed to every smallholder in Malawi. The main objective of the programme was to avert an immediate production crisis, although there were additional aims, including diversification through increased use of legumes and introducing smallholders to fertilizer use.

The 1998-99 and 1999-2000 Starter Pack campaigns (SP1 and SP2) aimed at increasing food security in rural Malawi by supplying smallholder farm households with packs of free inputs containing 0.1 ha-worth of fertilizer, maize seed and legume seed. SP1 and SP2 covered all rural smallholder households, providing 2.86 million packs each year. The Targeted Inputs Programmes (TIPs) replaced the universal free inputs programmes in the following two years, 2000-01 (TIP1) and 2001-02 (TIP2). TIP1 provided packs for 1.5 million beneficiaries, while TIP2 was further scaled down to 1 million beneficiaries.

TIP1 and TIP2 had a number of objectives that were the same as those of SP1 and SP2:

- Increasing national food production, in particular maize;
- Promoting the use of chemical fertilizer by smallholder farmers (to improve yield);
- Reducing household food insecurity, particularly for the poorest farm families; and
- Provision of legume crops to improve soil fertility and diet.

However, there were some key differences:

- The TIPs asked rural communities to target the poor;
- TIP1 replaced hybrid maize seed with the more sustainable OPV maize seed, which can be recycled for up to three years. It was the intention to continue using OPV in TIP2, but insufficient supplies were available, so many areas received hybrid; and
- The amount of fertilizer provided was reduced from 15 kg under Starter Pack to 10 kg under TIP on the basis that OPV maize seed requires less fertilizer than hybrid maize seed.

As a reaction to the maize crisis in 2001/2002, the government increased the number of the Starter Packs for the 2002/2003 season to two million smallholders.

**APPENDIX 2: FOOD BALANCE SHEET 1998 UNTIL 2002**

Assumptions:

- Population in 1998 9.8 million people, based on the national census 1998 and thereafter a growth rate of 2% annually.

- Maize contributes 72.4% to total food consumption in terms of calories.

- Informal trade is not calculated

Source: Fewes and own calculation

**FOOD BALANCE SHEET: 1998-99**

	Maize	Rice	Sorghum /Millet	Cassava	Consumption Balance: ME
<b>SUPPLY</b>					
Production (mt)**	1,772,392	68,823	61,101	411,263	
Post-harvest losses (%)	15.0%	38.0%	10.0%	10.0%	
Net production (mt)	1,506,533	42,670	54,991	370,137	
On-farm stocks (mt)	0	0	0	0	
Official stocks (mt)	12,266	0	0	0	
SGR stocks (mt)	0	0	0	0	
Total stocks (mt)	12,266	0	0	0	
Domestic availability (mt)	1,518,799	42,670	54,991	370,137	
Kilocalories/kg	3,450	3,660	3,430	3,180	
<b>Maize equivalent availability (mt)</b>	<b>1,518,799</b>	<b>45,268</b>	<b>54,672</b>	<b>341,169</b>	<b>1,959,908</b>
<b>DEMAND</b>					
Population+					10,260,000
KCal req./ person/day++					2,200
<b>Consumption requirement (ME)</b>	<b>1677502</b>	<b>78345</b>	<b>46085</b>	<b>251164</b>	<b>2,053,096</b>
Seed Requirement	23,825	2,400	1,380	0	
Seed Requirement (ME)	23,825	2,546	1,372	0	<b>27,743</b>
SGR Replenishment	60,000				<b>60,000</b>
<b>Total Requirement</b>	<b>1,701,327</b>	<b>80,891</b>	<b>47,457</b>	<b>251,164</b>	<b>2,140,840</b>
<b>BALANCE</b>	<b>(182,528)</b>	<b>(35,623)</b>	<b>7,215</b>	<b>90,005</b>	<b>(180,931)</b>
<b>TRADE</b>					
<b>Imports</b>					
Contracted	120,000	0	0	0	120,000
Received	0	0	0	0	0
Balance	120,000	0	0	0	120,000
<b>Exports</b>					
Committed	0	0	0	0	0
Actual	0	0	0	0	0
Balance	0	0	0	0	0
<b>Net Trade</b>	<b>120,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>
<b>FOOD AID</b>					
<b>BALANCE</b>	<b>(62,528)</b>	<b>(35,623)</b>	<b>7,215</b>	<b>90,005</b>	<b>(60,931)</b>

Source: FEWS and own calculation

Malawi maize sector value chain analysis

**FOOD BALANCE SHEET: 1999-2000**

	Maize	Rice	Sorghum /Millet	Cassava	MAIZE EQUIVALENT
<b>A. NET PRODUCTION</b>	<b>2,106,349</b>	<b>57,605</b>	<b>55,464</b>	<b>401,918</b>	
Gross Production	2,478,058	92,911	61,627	446,576	
Post-harvest losses (%)	15.0%	38.0%	10.0%	10.0%	
<b>B. STOCKS</b>	<b>7,711</b>	<b>0</b>	<b>0</b>	<b>0</b>	
On-farm stocks (mt)	0	0	0	0	
Official stocks (mt)	6,682	0	0	0	
SGR stocks (mt)	1,029	0	0	0	
<b>C. DOMESTIC AVAILABILITY</b>	<b>2,114,060</b>	<b>57,605</b>	<b>55,464</b>	<b>401,918</b>	
<b>D. KILOCALORIES/KG</b>	<b>3,450</b>	<b>3,660</b>	<b>3,430</b>	<b>3,180</b>	
<b>E. DOMESTIC AVAILABILITY (ME)</b>	<b>2,114,060</b>	<b>61,111</b>	<b>55,143</b>	<b>370,464</b>	<b>2,600,778</b>
<b>F. TOTAL UTILIZATION (ME)</b>	<b>1,818,702</b>	<b>84,858</b>	<b>49,759</b>	<b>256,188</b>	<b>2,181,901</b>
Food Use (ME)	1711052	79912	47007	256188	<b>2094158</b>
Seed Requirement	23,825	2,400	1,380	0	
Seed Requirement (ME)	23,825	2,546	1,372	0	<b>27,743</b>
SGR Replenishment	60,000				<b>60,000</b>
Projected Exports					
Projected Exports (ME)					
<b>G. NET IMPORT REQUIREMENT</b>	<b>295,358</b>	<b>(23,747)</b>	<b>5,384</b>	<b>114,276</b>	<b>418,877</b>
<b>H. PROJECTED COMMERCIAL IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Contracted	0	0	0	0	0
Received (Oct 31, 1998)	0	0	0	0	0
<b>I. PROJECTED COMMERCIAL IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>J. PROJECTED FOOD AID IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Proj/Prog Food Aid Imports	0	0	0	0	0
Emergency Food Aid Imports	0	0	0	0	0
<b>K. PROJECTED FOOD AID IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>L. FOOD BALANCE (ME)</b>	<b>295,358</b>	<b>(23,747)</b>	<b>5,384</b>	<b>114,276</b>	<b>418,877</b>

Source: Fewes and own calculation

**FOOD BALANCE SHEET: 2000-2001**

	Maize	Rice	Sorghum /Millet	Cassava	MAIZE EQUIVALENT
<b>A. NET PRODUCTION</b>	<b>2,126,114</b>	<b>44,412</b>	<b>50,676</b>	<b>371,747</b>	
Gross Production	2,501,311	71,633	56,307	413,052	
Post-harvest losses (%)	15.0%	38.0%	10.0%	10.0%	
<b>B. STOCKS</b>	<b>183,659</b>	<b>0</b>	<b>0</b>	<b>0</b>	
On-farm stocks (mt)	0	0	0	0	
Official stocks (mt)	16,605	0	0	0	
SGR stocks (mt)	167,054	0	0	0	
<b>C. DOMESTIC AVAILABILITY</b>	<b>2,309,773</b>	<b>44,412</b>	<b>50,676</b>	<b>371,747</b>	
<b>D. KILOCALORIES/KG</b>	<b>3,450</b>	<b>3,660</b>	<b>3,430</b>	<b>3,180</b>	
<b>E. DOMESTIC AVAILABILITY (ME)</b>	<b>2,309,773</b>	<b>47,116</b>	<b>50,383</b>	<b>342,654</b>	<b>2,749,925</b>
<b>F. TOTAL UTILIZATION (ME)</b>	<b>1,826,012</b>	<b>83,721</b>	<b>47,700</b>	<b>258,775</b>	<b>2,216,209</b>
Food Use (ME)	1728335	80719	47482	258775	2,115,311
Seed Requirement	37,677	2,830	220	0	
Seed Requirement (ME)	37,677	3,002	219	0	40,898
SGR Replenishment	60,000				60,000
Projected Exports					
Projected Exports (ME)					0
<b>G. NET IMPORT REQUIREMENT</b>	<b>483,761</b>	<b>(36,605)</b>	<b>2,682</b>	<b>83,878</b>	<b>533,716</b>
<b>H. PROJECTED COMMERCIAL IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Contracted	0	0	0	0	0
Received (Oct 31, 1998)	0	0	0	0	0
<b>I. PROJECTED COMMERCIAL IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>J. PROJECTED FOOD AID IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Proj/Prog Food Aid Imports	0	0	0	0	0
Emergency Food Aid Imports	0	0	0	0	0
<b>K. PROJECTED FOOD AID IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>L. FOOD BALANCE (ME)</b>	<b>483,761</b>	<b>(36,605)</b>	<b>2,682</b>	<b>83,878</b>	<b>533,716</b>

Source: FEWS and own calculation

Malawi maize sector value chain analysis

**FOOD BALANCE SHEET: 2001-2002**

	Maize	Rice	Sorghum/ Millet	Cassava	MAIZE EQUIVALENT
<b>A. NET PRODUCTION</b>	<b>1,456,104</b>	<b>57,753</b>	<b>51,498</b>	<b>447,275</b>	
Gross Production	1,713,064	93,150	57,220	496,972	
Post-harvest losses (%)	15.0%	38.0%	10.0%	10.0%	
<b>B. STOCKS</b>	<b>51,399</b>	<b>0</b>	<b>0</b>	<b>0</b>	
On-farm stocks (mt)	0	0	0	0	
Official stocks (mt)	3,450	0	0	0	
SGR stocks (mt)	47,949	0	0	0	
<b>C. DOMESTIC AVAILABILITY</b>	<b>1,507,503</b>	<b>57,753</b>	<b>51,498</b>	<b>447,275</b>	
<b>D. KILOCALORIES/KG</b>	<b>3,450</b>	<b>3,660</b>	<b>3,430</b>	<b>3,180</b>	
<b>E. DOMESTIC AVAILABILITY (ME)</b>	<b>1,507,503</b>	<b>61,268</b>	<b>51,199</b>	<b>412,271</b>	<b>2,032,242</b>
<b>F. TOTAL IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>G. PROJECTED COMMERCIAL IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Contracted	0	0	0	0	
Received	0	0	0	0	
<b>H. PROJECTED COMMERCIAL IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>I. PROJECTED FOOD AID IMPORTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Proj/Prog Food Aid Imports	0	0	0	0	
Emergency Food Aid Imports	0	0	0	0	
<b>J. PROJECTED FOOD AID IMPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>K. TOTAL FOOD AVAILABILITY (ME)</b>	<b>1,507,503</b>	<b>61,268</b>	<b>51,199</b>	<b>412,271</b>	<b>2,032,242</b>
<b>L. TOTAL UTILIZATION (ME)</b>	<b>1,880,863</b>	<b>81,583</b>	<b>49,409</b>	<b>289,279</b>	<b>2,301,134</b>
Food Use	1780863	78400	49210	289279	<b>2,197,753</b>
Seed Requirement	40,000	3,000	200	0	
Seed Requirement (ME)	40,000	3,183	199	0	<b>43,381</b>
SGR Replenishment	60,000				<b>60,000</b>
Projected Exports					
Projected Exports (ME)					<b>0</b>
<b>M. FOOD BALANCE (ME)</b>	<b>(373,360)</b>	<b>(20,314)</b>	<b>1,791</b>	<b>122,991</b>	<b>(268,892)</b>

Source: FEWS and own calculation

Malawi maize sector value chain analysis

**FOOD BALANCE SHEET: 2002-2003**

ITEM	Maize	Rice	Sorghum/Millet	Cassava	MAIZE EQUIVALENT
<b>A. NET PRODUCTION</b>	<b>1,274,569</b>	<b>57,100</b>	<b>54,050</b>	<b>415,883</b>	
Gross Production	1,499,493	92,097	60,055	462,092	
Post-harvest losses (%)	15.0%	38.0%	10.0%	10.0%	
<b>B. STOCKS</b>	<b>28,120</b>	<b>0</b>	<b>0</b>	<b>0</b>	
On-farm stocks (mt)	0	0	0	0	
Official stocks (mt)	28,120	0	0	0	
SGR stocks (mt)	0	0	0	0	
<b>C. DOMESTIC AVAILABILITY</b>	<b>1,302,689</b>	<b>57,100</b>	<b>54,050</b>	<b>415,883</b>	
<b>D. KILOCALORIES/KG</b>	<b>3,450</b>	<b>3,660</b>	<b>3,430</b>	<b>3,180</b>	
<b>E. DOMESTIC AVAILABILITY (ME)</b>	<b>1,302,689</b>	<b>60,576</b>	<b>53,736</b>	<b>383,335</b>	<b>1,800,336</b>
<b>F. TOTAL UTILIZATION (ME)</b>	<b>1,913,642</b>	<b>94,313</b>	<b>53,674</b>	<b>290,234</b>	<b>2,351,863</b>
Food Use (ME)	1,816,446	84,834	49,902	271,968	2,223,150
Seed Requirement	37,196	3,564	422		
Seed Requirement (ME)	37,196	3,781	420		41,396
SGR Replenishment (ME)	60,000				60,000
<b>G. DOMESTIC FOOD BALANCE (ME)</b>	<b>(610,953)</b>	<b>(33,737)</b>	<b>63</b>	<b>93,101</b>	<b>(551,527)</b>
<b>H. TOTAL IMPORTS (ME)</b>	<b>74,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74,500</b>
<b>I. PROJECTED COMMERCIAL IMPORTS</b>	<b>58,000</b>	<b>0</b>	<b>0</b>		
Contracted	16,335	0	0		
Received	41,665	0	0		
<b>J. PROJECTED COMMERCIAL IMPORTS (ME)</b>	<b>58,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58,000</b>
<b>K. PROJECTED FOOD AID IMPORTS</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Proj/Prog Food Aid Imports	0	0	0	0	
Emergency Food Aid Imports	16,500	0	0	0	
<b>L. PROJECTED FOOD AID IMPORTS (ME)</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,500</b>
<b>M.COMMITTED EXPORTS (ME)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Contracted Exports	0	0	0		
<b>N. NET IMPORTS (ME)</b>	<b>74,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74,500</b>
<b>O. TOTAL FOOD GAP (ME)</b>	<b>(536,453)</b>	<b>(33,737)</b>	<b>63</b>	<b>93,101</b>	<b>(477,027)</b>

Source: FEWS and own calculation

### APPENDIX 3: ADDRESSES OF MAIZE STAKEHOLDERS

Company Name: H.M.S. Foods & Grains  
Contact Person: R. Lingaraju, General Manager  
Address: P.O. Box 5406, Limbe  
Telephone number: 01-657199 or direct at 01-657194  
Fax number: 01-657151  
E-mail: [hms@africa-online.net](mailto:hms@africa-online.net)

Company Name: Grintec/Falcon Milling Company  
Address: P.O. Box 51009, Limbe  
Telephone number: 01-674784  
Fax number: 01-652446

Company Name: Countryside  
Address: P.O. Box 3029, Blantyre  
Telephone number: 01-694334 OR 01-694489 OR 01-694911  
Fax number: 01-694348  
E-mail: [countryside@produce.globemw.net](mailto:countryside@produce.globemw.net)

Company Name: Grain & Milling Company Limited  
Contact Person: Raphael Kamoto, General Manager  
Address: P.O. Box 5847, Limbe  
Telephone number: 01-645055  
Fax number: 01-643342  
E-mail: [rkamoto@yahoo.co.uk](mailto:rkamoto@yahoo.co.uk)

Company Name: RAB Processors  
Contact Person: Mr. Sai Kiran Josyabhatla, Commercial Director  
Address: P.O. Box 5338, Limbe  
Telephone number: 01-645200/213 and 01-651713/439/810  
Fax number: 01-651815 and 01-644927  
E-mail: [rab@malawi.net](mailto:rab@malawi.net) or [cmrab@malawi.net](mailto:cmrab@malawi.net)

Company Name: Transglobe  
Contact Person: Mr. H. Singh/Mr. Mndalasina  
Address: P.O. Box 5035, Limbe  
Telephone number: 01-642 761 or 643614 or 643488  
Fax number: 01-642440 or 01-643620  
E-mail: [transglobe@sdpn.org](mailto:transglobe@sdpn.org) or [transglobe@malawi.net](mailto:transglobe@malawi.net)

Company Name: ADMARC  
Contact Person: Mr. Albert M.B. Kuthemba Mwale, Ass. General Manager  
Mrs. Marie. P. Chamanza, Marketing Manager  
Address: P.O. Box 5052, Limbe  
Telephone number: 01-640044 or 01-640500  
Fax number: 01-624625  
E-mail: [mwaleabmk@admarmw.com](mailto:mwaleabmk@admarmw.com)  
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## Malawi maize sector value chain analysis

Organisation: National Food Reserve Agency  
Contact Person: Patric Makina, General Manager  
Address: Private Bag B 450, Lilongwe 3  
Telephone number: 01-774555  
Fax number: 01-774703  
E-mail: [nfra@sdnp.org.mw](mailto:nfra@sdnp.org.mw)

Organisation: National Food Reserve Agency  
Contact Person: Mr. Nasinuku D. Saukila  
Address: Private Bag B 450, Lilongwe 3  
Telephone number: 01-641072  
Fax number: 01-641072  
E-mail: [nfra@sdnp.org.mw](mailto:nfra@sdnp.org.mw)

Organisation: Malawi Revenue Authority, Department of Customs  
Contact Person: Mr. Mzungu, Acting Commissioner of Customs  
Address: Plantation House, Private Bag 20, Blantyre  
Telephone number: 01-620844  
Fax number: 01-620048

Organisation: Malawi Bureau of Standards  
Contact Person: Martha M. Mtamba, Standards Officer  
Address: Moirs Road, P.O. Box 946, Blantyre  
Telephone number: 01-670488  
Fax number: 01-670756  
E-mail: [mbs@malawi.net](mailto:mbs@malawi.net)

Organisation: FEWS Net  
Contact Person: Sam Chimwaza, Country Representative/Evans Chapasuka  
Address: P.O. Box 30455, Lilongwe 3  
Telephone number: 01-754892  
Fax number: 01-754892  
E-mail: [schimwaza@fews.net](mailto:schimwaza@fews.net) or [echapasuka@fews.net](mailto:echapasuka@fews.net)

Organisation: Malawi Export Promotion Council  
Contact Person: Mr. L. Chaluluka  
Address: P.O. Box 1299, Blantyre  
Telephone number: 01-642907  
Fax number: 01-643013  
E-mail: [meptcotis@malawi.net](mailto:meptcotis@malawi.net)

Organisation: NASFAM  
Contact Person: Mrs. Cecilia Aipira, Marketing Operations Officer  
Address: P.O. Box 30716, Lilongwe 3  
Telephone number: 01-772866  
Fax number: 01-770858  
E-mail: [mops@nasfam.malawi.net](mailto:mops@nasfam.malawi.net)

## Malawi maize sector value chain analysis

Organisation: Ministry of Agriculture, Irrigation and Food Security  
Contact Person: Mrs A. Mchiela, Principal Secretary,  
Address: P.O. Box 301 34, Capital City, Lilongwe  
Telephone number: 01-789033 or 01-789252  
Fax number: 01-789218 or 788738  
E-mail: [mchielaa@malawi.gov.net](mailto:mchielaa@malawi.gov.net)

Organisation: Ministry of Agriculture, Irrigation and Food Security  
Contact Person: Dr. Malindi  
Address: P.O. Box 301 34, Capital City, Lilongwe  
Telephone number: 01-789033 or 01-789252  
Fax number: 01-789218 or 788738  
E-mail: [esmalindi@sdp.org.mw](mailto:esmalindi@sdp.org.mw)

Organisation: Ministry of Agriculture, Irrigation and Food Security  
Contact Person: Dr. Kabambe  
Address: Chitedze Research Station, P.O. Box 30797, Lilongwe  
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## Malawi maize sector value chain analysis

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## Malawi maize sector value chain analysis

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**APPENDIX 4: NOTES ON WORKSHOP held on 13 May 2003, at Hotel Victoria, Blantyre, Malawi**

**Workshop Objective**

To discuss and highlight the main issues affecting the maize trade in Malawi and the region.

**Background**

The RATES Center is mandated over the next five years to work closely with the private and public sector in selected countries to identify and address logistical and policy issues negatively affecting the cross-border trade of maize grain with member countries in the COMESA region. Through the RATES Center, the program will support partner organizations and other trade institutions to improve regional capacity to move commodities across borders. Results will be measured by increased agricultural productivity and rural incomes, increased volume of traded commodities, decreased numbers of people suffering from hunger and malnutrition, and reduced in flow of food aid and imports from outside of the region. To obtain knowledge of the Malawian maize market, RATES has contracted Imani Development/Kadale Consultants to write a Maize Market Assessment and Baseline Study for Malawi. This workshop will evaluate the report and solicit feedback on its finding. Moreover, consensus amongst the participants needs to be generated to prioritize the key issues raised in the report.

**Comments on report**

NFRA added and corrected price and quantity information with respect to purchasing and selling of maize for the SGR during the period 1999 up to 2001.

Discussion arose about the food balance sheets. Although participants only gave a rough picture of the food security situation, there are many uncertainties such as the population estimation and the contribution of maize to the total food consumption.

**Group discussions**

By means of group discussion, the main issues with respect to Marketing Challenges, Market Information Requirement, Phytosanitary Requirements, Quality Standards and Customs Regulations were covered. The discussions focused on highlighting the current problems in trading maize and will be added in the Maize Market Assessment and Baseline Study.

The subjects discussed and the various remarks made can be summarized as follows:

Marketing Challenges	Problems with importation and exportation maize	<ul style="list-style-type: none"> <li>- Decision food committee about allowing exports too slow (waiting for crop estimations in June)</li> <li>- Export system clear but implementation weak</li> <li>- Potential available to draw in maize from Mozambique and export or add value (grain to flour) and export</li> <li>- Process of importation okay but no clarity of duties at border posts</li> <li>- Informal trade should be tracked better</li> </ul>
	Problems buying maize locally	<ul style="list-style-type: none"> <li>- No maize grain standards, harvesting often premature</li> </ul>

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		<ul style="list-style-type: none"> <li>- Information lacking on surplus</li> <li>- Productivity very low in Malawi</li> </ul>
	Transport challenges	<ul style="list-style-type: none"> <li>- Local transport cartel: third country rule</li> <li>- Internal infrastructure: Remote areas difficult to get</li> <li>- Problems to use Nacala corridor from November until March</li> </ul>
	Storage challenges	<ul style="list-style-type: none"> <li>- Why buy and store? Uncertainty about prices and limited demand</li> <li>- Poor linkages transport with storage and marketing</li> </ul>
	Challenges in accessing finance	<ul style="list-style-type: none"> <li>- Collateral interest rates, storage less viable</li> </ul>
Market information requirement	What info is needed	<ul style="list-style-type: none"> <li>- Demand: domestic and regional</li> <li>- Weather: regional</li> <li>- Price: regional</li> <li>- Production estimation should be earlier and made available for Malawi and other countries in the region</li> </ul>
	Accuracy of government market info.	<ul style="list-style-type: none"> <li>- Not reliable enough</li> </ul>
	Options for disseminating info to farmers and traders	<ul style="list-style-type: none"> <li>- Very weak dissemination</li> <li>- Information difficult to obtain, even on request</li> </ul>
	Involvement of stakeholders	<ul style="list-style-type: none"> <li>- Private sector stocks not included in food balance sheet</li> </ul>
Phytosanitary requirements	Access to inspection services and import permits	<ul style="list-style-type: none"> <li>- Shortage of phytosanitary stations, too centralized</li> <li>- Not enough inspectors, not enough quality, open up the sector!</li> <li>- Lack of facilities (number and quality)</li> <li>- Inadequate government policy on licensing</li> <li>- Inadequacy of legal instruments in the regional context</li> <li>- Lack of regional phyto-sanitary information</li> <li>- Lack of awareness</li> <li>- Language (of documents) is barrier</li> </ul>
	GMO maize imports	<ul style="list-style-type: none"> <li>- No harmonized regional policy</li> <li>- How to protect physical movement</li> <li>- No understanding of implication</li> <li>- Difficult to police</li> </ul>
	Harmonization of phyto-sanitary requirements in	<ul style="list-style-type: none"> <li>- No SADC and COMESA phyto-sanitary standardization</li> </ul>

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	EAC and the region	
Quality standards	Awareness	- Awareness of standards very poor
	Problems in meeting standards	- Moisture content often too high - No grading locally carried out - Poor storage facilities - Need for centralized control mechanism
	Harmonization and enforcement of standards	- Different regional standards - Poor standards legislation - Poor capacity to negotiate regionally - Governance issues
Customs regulations	Customs clearance and documentation requirement	- Competing regional trade regimes have different rules - Lack of political will to implement regional integration and a lack of capacity to implement - Too many forms and duplicate copies (120 docs needed for truck going from Blantyre to Durban) - Language problems in documentation - Lack of harmonization of trade documentation - Consistency between countries very poor
	Access to customs requirements information	- Access to requirements is okay in Malawi, but changes not communicated properly - Poor communication between trade facilitation agencies - Management of clearing is poor and MBS is often called in too late
	Pre-shipment inspection	- Lack of credibility of organizations involved

In the above table, the main constraints affecting the regional maize trade are mentioned. The key issues filtered from all the issues raised during the discussions were:

- No harmonization of grading and quality standards regionally
- No harmonization of trade documentation regionally
- Lack of clarity at borders with respect to duties and charges
- Lack of local and regional market information regarding production, demand, price and information available is not correctly disseminated
- Limited awareness of phyto-sanitary requirements and quality standards
- Limited credibility of organizations involved in pre-shipment inspection and standard bureaus in other countries.
- Slow decision making on granting export permission
- Language barrier, especially concerning documents
- Low productivity resulting in less trade as most households produce for their own needs
- No incentives for storage as costs are high, prices are uncertain and demand is limited

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- Transport constraints internationally with limited availability of the Nacala corridor from November until March and locally because of third country rule.

Some of these issues can be addressed by RATES regionally during the policy harmonization process, others need to be addressed locally.

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**Participants of the Workshop:**

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