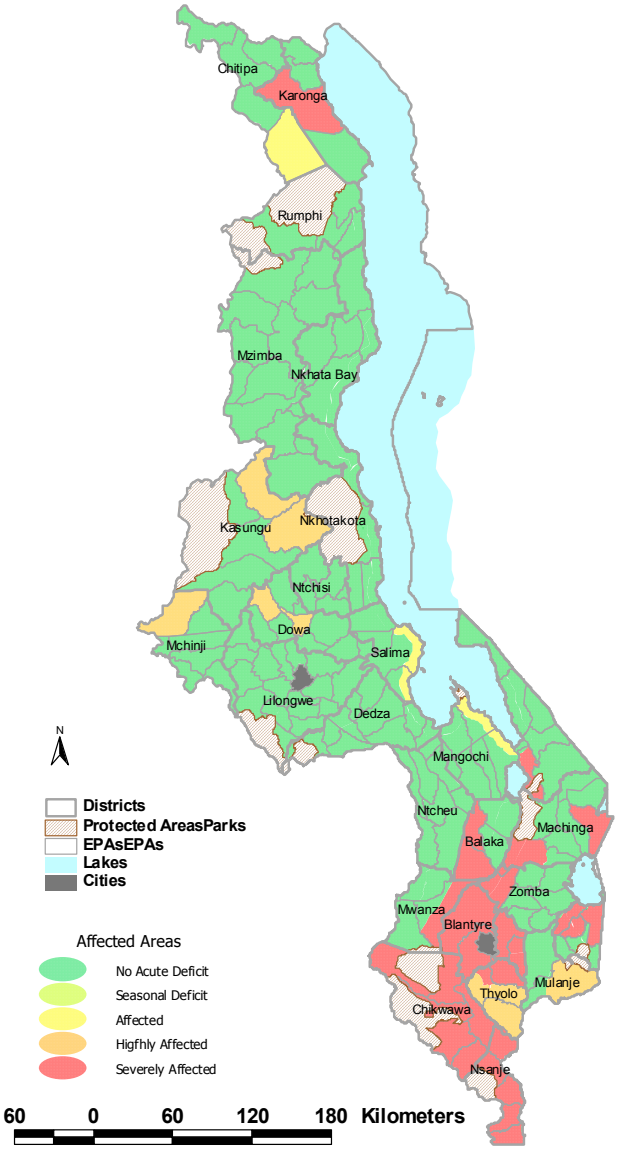
Food Security Monitoring Report

Malawi

January 2005

Food Deficit Areas: January 2005 – March 2005



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Executive Summary

In May 2004, the Malawi Vulnerability Assessment Committee (MVAC) completed a forecast of risk to acute food insecurity in Malawi, the aim of which was to provide an early warning for planners, decision- and policy-makers to develop contingency and response plans against severe food shortages, most of which were expected to occur later in the year.

Details of this forecast were published in a report (the MVAC Monitoring Report, May 2004); however, many of the factors affecting households' access to food were only estimated at the time. Therefore, scenarios were constructed that were based on assumptions, necessitating the testing and confirmation of these assumptions as events became clearer.

Using more accurate data drawn from a variety of secondary sources, the MVAC has adjusted the analyses, agreed on the most likely scenario for staple prices for the rest of the 2004-2005 agricultural consumtpion year (January to March) and updated all of the assumptions that were orginally used in deriving the scenarios.

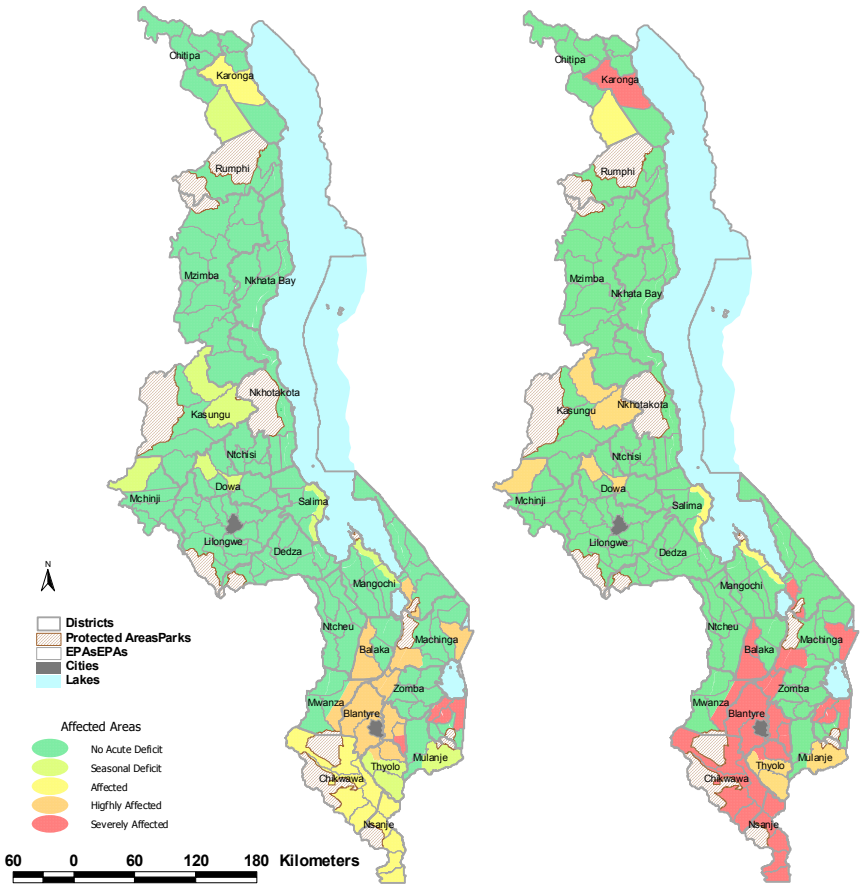
This report therefore fullfills the following two purposes:

- To obtain revised projections for the current period and to understand how the food gap will be filled
- To explore how the outcomes and conclusions correlate with other outcome data from independent sources, such as nutrition data and with surveillance-derived indicators or indices.

Principally, the modifications in the analysis include changes to the crop production figures, staple prices, *Ganyu*, cash crop prices, fishing (lakeshore area only) and self-employment. Details of these changes are shown in **Table II** on page 8 in as well as in **Table XI** on page 18 in **Appendix II**. The VAC did *include interventions* ***that have already taken place***. In May 2004, the MVAC did *not* include interventions that were planned or scheduled to take place up to March 2005; this was because it was hoped that MVAC information would be used as a tool for planning interventions. Food aid is the most significant intervention that has taken place and subsequently affected the analysis. Using MVAC information, WFP mobilized and distributed approximately 18,000 MT of commodities (approximately 15,000 MT of maize) from July to Dec 2004, which has had a significant effect on levels of vulnerability in the interim. The distribution of this food aid *has* been included in this analysis because it has had both a direct ***and indirect*** impact on household food security.

The analysis also looks at the current food balance sheet, in light of the changes in data brought about by new information on informal cross-border trade. When factoring this and food aid into the national supplies, the food availability deficit drops to a cereal equivalent of approximately 89,000MT (the figure may be lower than this, as some imports may not have been counted). If this quantity is to be imported into the country in the following months (probably informally), then exchange rates and trading access need to be stable.

Figure 0 - Maps of the Affected Areas



Acute Vulnerability, April '04 to March '05

Acute Vulnerability, January '05 to March '05

The new problem specifications have been used to calculate food energy deficits *over the whole year* for households in affected areas. This deficit is expressed as a percentage of the minimum average energy requirement, or 2100 kcal[1] per person per day. The cash required by each household to overcome its deficit is also calculated, as are the deficits for the shorter 'hunger period' of January to March 2005. Obviously, the deficits in the 'hunger period' are greater than the average for the whole year. Both of these deficit figures for each area are mapped in **Figure 0** on page 1, while a detailed breakdown of the deficits can be found in **Table IV**, page 11.

Table I - Missing Food Entitlements and their Cash Equivalents for Malawi during the Period April 2004 to March 2005

	Whole Year	Jan-Mar 2005
Overall Population Affected	1,319,970	
Missing Food Entitlements (maize equivalent)	37,914 MT	30,376 MT
Cash Equivalents to the MFE	MK 1.165 billion, US$ 10.88 million, € 9.17 million or £5.91 million	

As would be expected, household food deficits are higher in the last three months of the agricultural consumption year than averaged over the whole year. For some parts of the country, households may experience no average deficit for the year but in the 'hunger season' they have a deficit. Areas with this situation are described as having 'seasonal deficits'.

The deficits are then used to calculate the total **missing food entitlement**[1]. The missing food entitlement is the total amount of cereal (maize) that is needed to ensure that households are able to meet their *minimum* food energy requirements[2]. The national missing food entitlements for this year are given as 37,914 MT for the whole agricultural consumption year and 30,376 MT for the last three months (January to March 2005) as in **Table I,** above. The difference between these two figures, 7,538 MT, is the amount of food households in the affected areas were unable to get their hands on up until December 2004, even after receiving food aid. Households coped with these shortages by resorting to either destructive or extreme livelihood strategies.

Details of the total missing food entitlements and the cash required to replace them are given in Appendix II, **Table XII**.

The analysis by the MVAC excludes 'extreme' coping strategies. These are strategies that the household may embark on that will be detrimental to their health, their future livelihoods or to the environment (in as much as their livelihoods are sustainable). Examples of extreme coping are taking children out of school, engaging in risky income activities, reducing intake to well below the accepted minimum, etc. Without interventions, households will resort to extreme coping and the question perhaps should not be: "will people survive?" but rather: "at what cost will they survive?"

In May, the MVAC *forecast* a missing food entitlement of 56,030 MT for the whole year (**Scenario 1**); the current analysis has resulted in a substantial drop in this figure to 37, 914 MT (a decrease of 18,119 MT or 32%). The reasons for this decrease are as follows:

- Food availablity has been better than was expected, thanks to the steady stream of imports by the informal sector, mostly from Mozambique. This has increased resources for the redistribution of food (especially through *ganyu*).
- *Ganyu* availability has been quite good, partly due to stable food supplies (these in turn were influenced by increased food avaiablitiy) and good cash flows for the middle and better-off.
- There has been a coordinated and timely humanitarian response to the earlier MVAC forecast and this has had a double impact: it has provided direct resources to the poor (largely WFP/JEFAP food aid) and has helped stabilise household and village economies.

The lack of assets and low incomes continue to dog the poor and limit their options for coping with shocks or improving their standards of living.

An exercise of exploring the correlation between nutrition data (obtained through screening in areas identified previously by the MVAC as being at risk of food insecurity) and the MVAC's forecasts was conducted. The results were plotted onto a map (see **Figure 0**, page 1) of affected areas for January to March, 2005. While nutritional data of malnourished children and affected areas do not show any correlation, the proportions of children "at risk" appear higher in or close to the affected areas. It will be instructive to continue comparable MUAC screening in future.

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[1] The term 'missing food entitlement' is used rather than 'national deficit' because the latter term is usually associated with the *shortfall in production* or a *shortfall in availability* (as defined in the food balance sheet). The shortfall in production tells us how much food needs to be imported in order to meet local *average* consumption but it does not tell us whether people will be able to get their hands on that food. The missing food entitlement is the sum of all the food that is missing at household level, *after* households have exhausted all the options they have for obtaining it. It therefore represents the total missing calories from people's intake or consumption, rather than from their production.

[2] For simplicity, other nutritional needs such as proteins, micronutrients, etc. are not included in the calculations. This statement by no way implies that these needs are not also important.

Contents

Glossary of Terms and Abbreviations Used in this Document

AAH – Action Against Hunger
ADD – Agricultural Development Division – Spatial unit used by the Ministry of Agriculture, Irrigation and Food Security. It usually comprises two or three districts but is smaller than a region.
EPA – Extension Planning Area – sub-district spatial unit used by the Ministry of Agriculture, Irrigation and Food Security
FAO – Food and Agriculture Organization of the United Nations
FEWS-NET – Famine Early Warning System Network
GAM – Global Acute Malnutrition
Ganyu – Commonly used term for casual labour (Chichewa)
LZ – Livelihood Zone
MEP&D – Ministry of Economic Planning and Development
MK – Malawi Kwacha, the local currency in Malawi. At the time of writing US$1 = MK 107 and € 1 = MK 127
MoA – Ministry of Agriculture
MoH – Ministry of Health
MSF-L – *Medecins Sans Frontiers* (Doctors Without Borders) – Luxembourg
MT – Metric Tonnes
MVAC – Malawi Vulnerability Assessment Committee
NRU – Nutritional Rehabilitation Unit
NSO – National Statistics Office
RDP – Rural Development Programme, a spatial unit used by the Ministry of Agriculture, Irrigation and Food Security. RDPs are now equivalent to districts.
RVAC – Regional Vulnerability Assessment Committee
SAM – Severe Acute Malnutrition
SC-US – Save the Children (United States)
TA – Traditional Authority – an administrative sub-district spatial unit usually headed by a Chief or traditional ruler
UNDP – United Nations Development Programme
UNICEF – United Nations Children's Fund
VAC – Vulnerability Assessment Committee (see also MVAC, RVAC)
WFP – World Food Programme of the United Nations

Food Security Monitoring Report – January 2005

Outlook

Introduction

In May 2004, the Malawi Vulnerability Assessment Committee (MVAC)[3], a consortium of organisations working to assess and reduce vulnerability to food insecurity in Malawi, conducted an assessment that aimed at forecasting *acute* risk to food insecurity over the agricultural consumption year from April 2004 to March 2005.

This assessment drew on available data at that time. Available data included the latest round of crop estimates survey, VAC field data, commodity price time-series from the Ministry of Agriculture and remote sensing data. Where data was not available, assumptions and projections were made for many variables that affect households' access to food. These assumptions were grouped into two *scenarios*, the principle difference between them being the price rural households would pay for maize later on in the year.

The purpose of the exercise conducted for this report was essentially two-fold:

- To obtain revised projections for the current period and to understand how the food gap will be filled
- To explore how the outcomes and conclusions correlate with other outcome data from independent sources, such as nutrition data and with surveillance-derived indicators or indices.

This report does not contain the same detailed information on each livelihood zone that was included in the May 2004 report. Rather, it shows the important changes that have taken place and the links between outcomes predicted by the VAC and those measured using other methods.

For a description of the methodology used in this assessment, see the 'Food Security Monitoring Report – May 2004', pages 6-7, Malawi Vulnerability Assessment Committee, 2004.

Activities and Areas Covered in this Assessment

Activities: The MVAC used secondary-source data almost exclusively in this exercise, although input was gained from members who had recently completed field visits. The secondary sources were diverse and the data was prepared as follows:

- Data that were used as an 'input' in the calculations. Usually these data are used to define the 'hazard' or the changes (environmental, economic or social) that are taking place this year, compared with the reference or 'baseline'. These data are called 'problem specifications' and are usually expressed as a percentage, calculated by dividing the figure for this year by the baseline figure[4]. These problem specifications were then compared with those calculated or assumed in May 2004 and were updated accordingly. The new problem specifications were used to calculate household food energy deficits and cash equivalents to the deficits; from this the total missing food entitlements and the cash equivalents to the missing food entitlements were derived.
- Data that were used to compare the outcomes of the MVAC's analysis with other outcome indicators, in particular nutrition data and the food stress index. The latter is an index compiled from surveillance data.

The data, the data sources and the indicators used are summarised in **Figure 1**, **Appendix I** on page 17.

Areas Covered. This assessment covered the whole country, although a balance has to be struck between detail and coverage. Small pockets of food insecurity may still exist in isolated villages or sections of an EPA, which did not show in the more aggregated data (EPA-level) that was used by the MVAC. The MVAC recognises this and does not dispute such local variations.

[3] MVAC members include ministries from Government, Non-Government Organisations and United Nations agencies.

[4] For ease of calculation, the VAC expresses its percentage changes as a ratio, not as a difference ratio; for example, if this year's production is eight instead of ten units, the percentage change is expressed as 8/10 or 80%, rather than –20%.

Update of Previous Scenarios (Hazard Definitions)

In the context of the current analyses, a hazard is any event or factor, be it environmental, economic or social conditions that is likely to affect access to food or income at household level[5]. For the hazard to be incorporated into the analysis, it has to be expressed in quantitative terms, e.g. a 50% reduction in maize production, a 20% increase in maize purchase prices, etc. In May 2004, hazards were based on analysis of real data (largely crop production) where it was available, as well as assumptions that were defined by examining their causes and by looking at realities in previous years[6]. Assumptions had to be made because some of the important factors in households' access to food would only be determined by future environmental and economic conditions, which were not known at that time.

A key assumption that had to be defined was the price that households would have to pay for basic foodstuffs. For this, two possible scenarios were constructed:

- **Scenario 1** defined a situation where the staple purchasing price increased from the baseline at a *rate equivalent to the then prevailing rate of inflation* (which was just over 10%). This meant that the price would increase by nineteen percent from baseline (it was compounded over two years).
- **Scenario 2** defined a situation where the staple purchasing price increased from the baseline at a *rate equivalent to inflation plus 30 percentage points*, i.e. 49%.

The Food Balance Sheet, Exchange Rates and Inflation –the Macro Picture

In order to determine which of these two scenarios occurred (or, indeed if the reality actually lies outside of both), it was necessary to first look at Malawi's overall food supply situation. Then, if imports were needed, this would imply that later on in the agricultural consumption year local prices would be determined by external prices and the exchange rate between the Malawi Kwacha and the major currencies. Factors to consider included whether Government (or private traders) imported maize from regional suppliers when prices were lower (usually around July) and whether the savings from doing so would be able to offset against storage costs.

The Food Balance Sheet issued by the Ministry of Agriculture in November 2004 predicted a domestic food balance of 256,781 MT of maize equivalents and a food gap of 189,886 MT of maize equivalents. The food gap was calculated after net imports and exports were considered. The latter figure did include some food aid, Government imports and formal commercial maize imports but did not consider informal imports and exports[7]. The WFP/FEWS-NET report on Informal Cross Border Trade for December 2004 modifies the latter figure down to 169,041 MT, based on data of *actual imports* gathered by enumerators located at most of the important border crossings[8]. The report also highlights that monitoring of informal trade began after the initiation of the agricultural consumption year[9] and this may account for an extra 20,000 MT or so[10]. Further, if food aid deliveries and planned deliveries are factored in as well, the food gap will then reduce by a further 65,000 MT, meaning that approximately 84,000 MT will still need to be imported from January to March in 2005[11].

Assuming that the bulk of this will come through the informal market and that the bulk of the informal source of food is Mozambique[12], then the exchange rate of the Malawi Kwacha to the Mozambique Metical will be a major factor in determining end prices for ordinary Malawians. Until recently, the Metical was more or less tied to the United States dollar but lately it has gained about 25%. The Kwacha/dollar exchange rate has been stable at around MWK 107 = USD 1.00, meaning that the stronger Metical poses a threat to food availability by potentially limiting the informal cross-border maize trade. However, it is also apparent that Malawi has goods that Mozambique citizens desire, and much of the trade is conducted in Malawi Kwacha anyway. Hopefully, prices inside Malawi should follow similar trends as those found in neighbouring trade centres. Supply on the Mozambique side has so far proved consistent, although there was a drop-off around November 2004. This may be due to a fall in demand rather than supply. Volumes have picked up again since then since then and food continues to cross the border.

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[5] The change may occur very rapidly or its onset may be slow and less immediately noticeable.

[6] For example, time-series graphs of indicators for previous years were used as a comparison.

[7] The national food balance sheet also does not consider constraints and differences in the distribution of this food *within* the country.

[8] FEWS-NET and WFP, "Report on Informal Cross Border Trade, December 2004", Appendix 3.

[9] The 'agricultural year' begins in April, when the harvest starts coming in and border trade monitoring began in July.

[10] FEWS-NET and WFP, *ibid*. page 5, section 3.0.

[11] It should also be noted that capturing all the volumes of informally imported maize is a daunting task. The likelihood is that there are still imports that are unaccounted for and that this 'final' food gap figure is actually lower. Nevertheless, this analysis highlights the usefulness of this monitoring project and it also provides a very good *idea* of how informal cross-border trade is affecting supplies and commodity prices.

[12] FEWS-NET and WFP, *ibid* page 2, section 2.1.

A sudden exchange-rate fluctuation could upset this trade significantly and it is imperative for the sake of food security in many of the affected areas that *every effort is made to maintain exchange-rate stability*, at least until the next harvest in Malawi.

Hence, the exchange-rate stability, coupled with the active informal market, has ensured a stable supply of food on local markets in most parts of the country. The only exceptions to this are where markets are located far from either an international border or a good road and where prices can be 20-30% higher than elsewhere. This is a pattern that repeats itself every year and needs to be addressed in the long term.

The New Problem Specifications

Important hazard definitions or problem specifications are given in **Table II** below, while more detailed changes are provided in **Table XI** in **Appendix II**. Some of the remaining assumptions are discussed in **Box 1**.

Table II - Changes to the Major Problem Specifications and Assumptions Defined in May 2004

Important Indicator	Changes to the Problem Specification for Current Analysis	Justification
Staple Price	Most areas have experienced a situation close to the Scenario 1 (some are below that)	Prices have remained in line with inflation.
Crop production	Where Round 2 Crop Estimate figures were used, these have been replaced with Round 3 figures.	Round 3 figures are generally considered more accurate.
Cash crops and fishing	Generally, production was better than was expected in May	Figures released by the Tobacco Control Commission, Cotton buyers and Fisheries
Agricultural *Ganyu* (food and cash payment methods)	*Ganyu* availability is better than what was expected and wage rates remain the same as expected in May (which is the same as a few years ago).	The current agricultural season is good and this encourages activity among the 'middle' and 'better-off' wealth groups, leading to more opportunities. There are ample supplies of food (for *Ganyu* payment) due to informal importations Food-For-Work projects have also increased local supplies and have made food payment rates buoyant.
Seasonal Timing	The current season has largely been on time, except for households that have been forced to replant due to the armyworm attacks and flooding.	Armyworm infestation in the North and floods in parts of the South and Centre.

Interventions So Far and Their Impact

In May 2004, the MVAC deliberately left out the impact of outside interventions from its analysis; this was because the interventions themselves were being planned and it was hoped that the analysis would *influence* those interventions. By the end of the year, however, many of these interventions had begun taking place, directly and indirectly affecting households' access to food.

The decision was therefore made to include all interventions that have been carried out but not those interventions that are still being planned, for the same reason that it is hoped that this analysis will influence those plans.

Food Aid: WFP has largely based the distribution plans for food aid this year on the findings in the MVAC May report, although they assumed a 'contingency' somewhere in between **scenario 1** and **scenario 2**[13].

[13] See the MVAC Report of May 2004 for an explanation of the scenarios.

Hence, a large proportion of WFP 'emergency' food aid has been programmed into the same areas identified and analysed by the MVAC, contributing significantly to households' sources of food. Approximate per capita rations were computed into food energy contributions and these were entered into the analysis. Contributions ranged from 5-25% of households' minimum *annual* food needs. Although the contributions may look small, it must be borne in mind that these food deliveries were made over a short period and larger per capita deliveries were planned towards the end of the year.

Box 1 – The 2004-2005 Scenario and the Remaining Assumptions

The deficits and resulting food gaps reported in this document are based on *scenarios* for the remainder of the agricultural consumption year, which are subject to many assumptions.

1. It is still assumed that households will maximise their opportunities to obtain income or food in order to meet their minimum requirements, i.e. they will not reduce intake instead or engage in risky practices to obtain food or cash.
2. As things stand, opportunities for labour (ganyu) in neighbouring countries have been normal and there has not been excessive emigration. It is assumed that this will continue as before.
3. The analysis here has considered that the exchange rate on the US Dollar will continue to remain stable. If a sudden devaluation occurs during this food-purchasing period (December to March), households will be severely disenfranchised. Given the importance of maize imported from Mozambique, the continuing rise of the Metical against the Dollar will need to be monitored, since it may have a depressive effect on imports to Malawi.
4. It is assumed that prices for most purchased commodities will continue to rise at the current prevailing inflation rate. This is 19% more than the price in the baseline marketing year, i.e. the agricultural consumption year April 2002 to March 2003
5. So far there has not actually been too much instability in the national supply of cereals, in a large measure due to informal imports. However, a break in these could seriously affect staple prices—so far the prognosis is that this is unlikely to occur before the harvest. Hence, in most areas, the staple price is expected to be in line with inflation (i.e. around MK 18-25 per kg) and the worst-case scenario (called "Scenario 2" in May) has not occurred. Some areas (notably, those around Lilongwe actually have purchase prices that are lower than the inflation-adjusted price, when compared with previous years. It is therefore assumed that this price stability will continue.
6. This analysis has included interventions, such as public works programmes, wide-scale income transfer projects and food aid, where actual significant amounts to affected households have been already been distributed. It has not included planned amounts, as it seeks to inform these interventions.
7. Population figures and the missing food entitlements are based on population extrapolations devised by the National Statistics Office, following the 1998 National Census. The MoAIFS' EPA population tables are also used. These may or may not reflect the actual numbers of people on the ground in 2004-2005.
8. Maize remains the preferred source of energy for households in the affected areas, although Government and other organisations are endeavouring to diversify the food basket.

Cash Transfers: The existing cash-transfer programmes[14] have been designed as multi-year programmes and hence they are not tailored to respond to short-term acute food insecurity. Hence, the contribution of these programmes to the identified households' income sources is not significant enough this year to affect their acute vulnerability. If it is intended to have cash playing a more prominent role in addressing hunger and food insecurity, these programmes will need to have the addition of a more scaleable, fast action component with a national mandate. In such a component, the emphasis will need to be placed on the resource-transfer side of the operation, rather than the need for and the design of the works component (such as the road being built).

Other factors and Changes Affecting Food Security

Floods: During December and January 2005, flooding occurred in the following districts: Zomba, Phalombe, Nsanje, Chikwawa, Mangochi and Ntcheu. The flooding affected a total of 1,879.9 Ha of cropland and 3,739 households. The situation is currently manageable; however, the peak flooding period in most areas is February and therefore, there is strong possibility that there could be more extensive flooding over the next six weeks.

[14] The two most significant cash-transfer programmes are the EU/Public Works Programme and the Malawi Social Action Fund (MASAF). Both presently use cash-for-work as their primary mechanism for transferring cash to beneficiaries.

Some of the areas that experienced flooding have already been identified as severely vulnerable including the flooded areas in Nsanje (TA Mbenje), Chikwawa (TAs Ngowe, Maseya, Lundu and STA Ndakwera) and Phalombe (STA Jenala). In these areas, most of the food security problems households are currently facing are a result of last years poor growing season not the current flooding, although the flooding as obviously exacerbated the situation. In many places households are planning to replant during the winter cropping season, if this season is favourable, and the failure (or otherwise) will be reflected in the 2005/06 consumption season. If the winter cropping season experiences difficulties, the effects of the floods will also be reflected in next years harvest.

Linking this situation to the analysis, two impacts will be felt by affected households:

- There are immediate needs as a direct consequence of households losing their property. These needs have been listed in this report and are calculated according to the standard package provided by the Department of Poverty and Disaster Management Affairs (DoPDMA). The DoPDMA package consists of a one-off delivery of:
    - 50 kg maize
    - 5 kg beans
    - 2 blankets
    - 1 plastic pail
    - 4 plastic plates
    - 5 plastic cups
    - 10 m of plastic sheeting

  At current prices this package is worth approximately MK 3,100, an amount of money that will also buy 173 kg of maize. These two figures are therefore used as the immediate cash equivalents and missing food entitlements of households affected by flooding, as listed in **Table XII** on page 20 in **Appendix IV**.
- There will be medium and longer-term needs arising out of the impact of the floods on households' food security. The floods will affect their green maize during the hunger months (February to March) and, importantly, they will also experience a delay in their harvest. They may also be affected after the next harvest, or during the of 2005/06 consumption year

Table III - Flood Affected Areas: December 2004

District	Cropland damaged (hectares)	Houses damaged	Households displaced	Households affected	Deaths
Zomba TAs Chikowi, Chinamwali, Matawale, Malemia, Mwambo (Mpokwa EPA), Kuntumanji (Nsondole EPA), Villages around Khanda irrigation scheme, Mwambo, Namasalima (Malosa/Nsondole EPA)	358.3	276	6	1,417	4
Phalombe STA Jenala	881.2	6	-	441	-
Nsanje TA Mbenje	79	107	25	168	-
Chikwawa TAs Ngowe, Maseya, Lundu, STA Ndakwera	495.5	23	25	1,260	-
Mangochi EPA Luagwena	65.9	Approx 64		453	
Total	**1,879.9**	**476**	**56**	**3,739**	**4**

Army Worm Attacks: Close to 2000 ha of agricultural land has been affected by an armyworm attack in Chitipa, Karonga, Rumphi and Dedza. The report from the Ministry of Agriculture's Department of Crop Production indicates that the pests destroyed maize and plants in all the districts. The report further says some rice schemes were also destroyed in Karonga district.

The situation is, however, now under control and farmers have replanted damaged crop plants. Out of 40,000 Hectares in Karonga and Chitipa, around 3,000 hectares were affected and 80% of the attacked crop re-germinated, leaving only 20% that needed to be replanted.

Therefore, taking the whole picture into consideration, the effect of the attacks will not overly delay the harvest for most households in the two districts (there will be a few, however, that will face a delay)

Outcome

Food deficits in this report refer to the *missing* percentages of the annual energy needs for an average household. The energy needs are based on an average minimum requirement of 2100 kcal per person per day. Therefore, if a household is expected to face a food deficit of 33%, the household is missing one-third of its total minimum annual food needs –a very serious situation.

As in May 2004, the 'better-off' households in all areas of the country still do not appear to be facing a deficit in this agricultural consumption year (April 2004 to March 2005). Only one area now shows deficits for the 'middle' households – in the Lake Chilwa - Phalombe Plain livelihood zone.

Box 3 – A Note about Numbers

The figures below exclude households in unaffected areas that nevertheless may have some characteristic that would make them vulnerable, for example, a household whose productive members suffer from a chronic, disabling disease such as HIV/AIDS.

All figures reported here are only approximations and may be subject to revision at any time at the discretion of the Malawi VAC.

Table IV shows the household deficits for both the whole year and the 'hunger period', while population figures that correspond to each of the deficit areas can be found in **Table XII** in **Appendix IV**, page 20. What is clear is that for those households with large deficits (>15%), staple price increases that are substantially above the inflation rate do not drive up these deficits by much. This is explained by the fact that households with large deficits have low incomes; these households are unable to purchase grain at any price and so are not directly affected by staple purchase-price changes as others are. Price rises (especially sudden ones) will have an *indirect* effect of these households, however, as their main sources of income and food (*ganyu*, self-employment, begging, etc.) are dependent on other, richer households in the community. A sudden price rise could trigger a 'hoarding' response by these richer households, as they begin to fear that they, too, might not be able to afford their food needs. The net impact on the poor can be catastrophic. Households that are just able to meet their needs (borderline cases) and those that are facing low deficits will experience a larger increase food shortage when prices increase. These households have greater incomes than those with the high deficits; however, income is only useful when prices are stable.

Table IV – Food Energy Deficits by Districts, EPAs and Livelihood Zones for Each Scenario

Affected Area			*Deficits (Percentage of 2100 kcal)*			
			Whole Year		January-March 2005	
District	EPAs	Livelihood Zone	'Poor'	'Middle'	'Poor'	'Middle'
Balaka	Phalula, Bazale, Utale	Middle Shire Valley	15-30%		>60%	
Blantyre	Lirangwe, Chipande	Middle Shire Valley	15-30%		>60%	
	Ntonda, Kunthembwe	Shire highlands	15-25%		50-60%	
Chikwawa	Kalambo, Livunzu	Lower Shire Valley	5-10%		25-40%	
	Mbewe, Mitole, Mikalango, Dolo	Lower Shire Valley	5-20%		40-50%	
Chiradzulu	Thumbwe	Lake Chilwa & Phalombe Plain	35-50%	10-20%	>60%	>60%
	Thumbwe, Mombezi	Shire highlands	15-25%		50-60%	
Chitipa	Kavukuku	Chitipa Maize and Millet			5-10%	
Dowa	Bowe, Mponela	Kasungu Lilongwe Plain			10-25%	
Karonga	Lupembe	Central Karonga	5-15%		35-45%	
Kasungu	Kaluluma, Chasama	Kasungu Lilongwe Plain			10-25%	
Machinga	Chikweo, Nampeya	Lake Chilwa & Phalombe Plain	25-35%		>60%	5-10%
Mangochi	Maiwa	Shire highlands	15-25%		50-60%	
	Nasenga, Mbwadzulu	Southern Lakeshore			10-15%	
Mchinji	Mkanda	Kasungu Lilongwe Plain			10-25%	
Mulanje	Msikawanjala, Mulanje Boma	Thyolo Mulanje Tea Estates			20-30%	
Mwanza	Lisungwi, Mwanza	Middle Shire Valley	15-25%		>60%	
Nsanje	Nyachilenda, Mpatsa, Mogoti	Lower Shire Valley	5-20%		40-50%	
	Makhanga, Zunde	Lower Shire Valley	5-10%		25-40%	
Phalombe	Kosongo, Mpinda, Tamani	Lake Chilwa & Phalombe Plain	35-50%	10-20%	>60%	>60%
Salima	Thembwe, Chipoka	Southern Lakeshore			10-15%	
Thyolo	Khonjeni, Thekerani, Thyolo Boma, Masambanjati	Thyolo Mulanje Tea Estates			20-30%	
	Matapwata	Shire highlands	15-25%		50-60%	
Zomba	Chingale	Middle Shire	15-30%		>60%	
	Chingale, Ntubwi	Shire highlands	15-25%		50-60%	

When studying the baselines, it is clear that household incomes are very low for a great many Malawians. Baseline income figures range from around MK 8,000 to MK 25,000 (US$ 75 to US$ 234, € 63 to € 197 or £41 to £127) per

household per annum for the poorest third of most communities. At current prices, if *all the income* of a household from the lower end of the above range is put into staple purchase only, the household will get only 45% of its needs. Clearly, many households do not have the means to purchase their way out of any production failure –even for a short period. In addition, given that households have expenditure other than staple food, it becomes necessary for them to seek cash whenever they can. This means that they are forced to sell produce at harvest-time for a low price and then, if they get any more money, they will have to purchase it back again later on in the year at a high price. It is these low incomes, coupled with small or non-existent asset holdings that make the poor so vulnerable to even mild production or economic shocks.

It is possible to calculate the amount of money a household from a particular wealth group will need to overcome their deficits. This can be called the 'income requirement'. In general, the larger the food deficit, the larger the income requirement will be. **Table XI** on page 19 in **Appendix III** shows the income deficits in each of the affected parts of a livelihood zone.

The deficits can be combined with population figures to obtain a 'missing food entitlement'[15] for particular administrative areas. This has been done and the summary for the whole country is presented in **Table V** below, while detailed breakdowns are available in **Appendix IV** on page 20 in **Table XII.**

Missing food entitlements are not a 'food-aid need'; rather, they are the amount of maize required to replace the energy deficits in the identified households. Food-aid needs will depend on many other factors as well, including (but not limited to) the amount of cash (income) the household receives from other interventions, the 'off-take' from the planned food rations, the actual food intake by the beneficiaries (including mis-targeted food) and the food requirements for households with other specific chronic vulnerabilities. Population figures and the percentages affected in each zone are based on those listed in the May Report.

Table V - Table of Main Food Security Outcomes: Missing Food Entitlements and Cash Requirements (with May 2004 projections)

		Scenario	Remarks	May 2004, Scenario 1
Total Population affected	**TOTAL**	**1,319,970**		**1,343,600**
Missing Food Entitlements (MT)	April-December	7,538	Note: Despite receiving food (and some other) aid during this period, this analysis shows that some households still experienced deficits. The deficits were usually quite small (on an individual daily basis) and were overcome by households by resorting to undesirable or extreme coping.	14,250
	January-March	30,376	The 'hunger season': although reduced there nevertheless remain deficits that need to be addressed	41,780
	TOTAL	**37,914**		**56,030**
Cash needed to Overcome Missing Food Entitlements	Malawi Kwacha (K)	1,165,000,000		1,260,000,000
	US Dollar ($)	10,880,000	Assumes an exchange rate of K107 to $1	11,700,000
	Euro (€)	9,170,000	Assumes an exchange rate of K127 to $1	9,900,000
	Pound Sterling (£)	5,910,000	Assumes an exchange rate of K198 to $1	6,360,000

As with the missing food entitlements, the total cash required to replace the food gaps can be calculated. The total is shown in **Table V** above and the breakdown shown for each district and livelihood zone in **Table XII** on page 20 of **Appendix IV**.

It is clear in **Table V** above that there is a missing entitlement of 7,538 MT for the period between April and December 2004. This figure **represents an entitlement that was missing even *after* food aid was delivered** (note: the deficits have been calculated taking the food aid delivered into account). This figure also, therefore, represents an *under*-delivery of humanitarian assistance. Since there is no evidence of mass starvation, we know that households 'coped' with their deficits but the coping was of an undesirable kind; they resorted to strategies that were detrimental to their future livelihoods, their environment and their health. The fact that many households are "borderline" survival is highlighted in the next section that shows the results of some nutritional screening exercises conducted in December 2004.

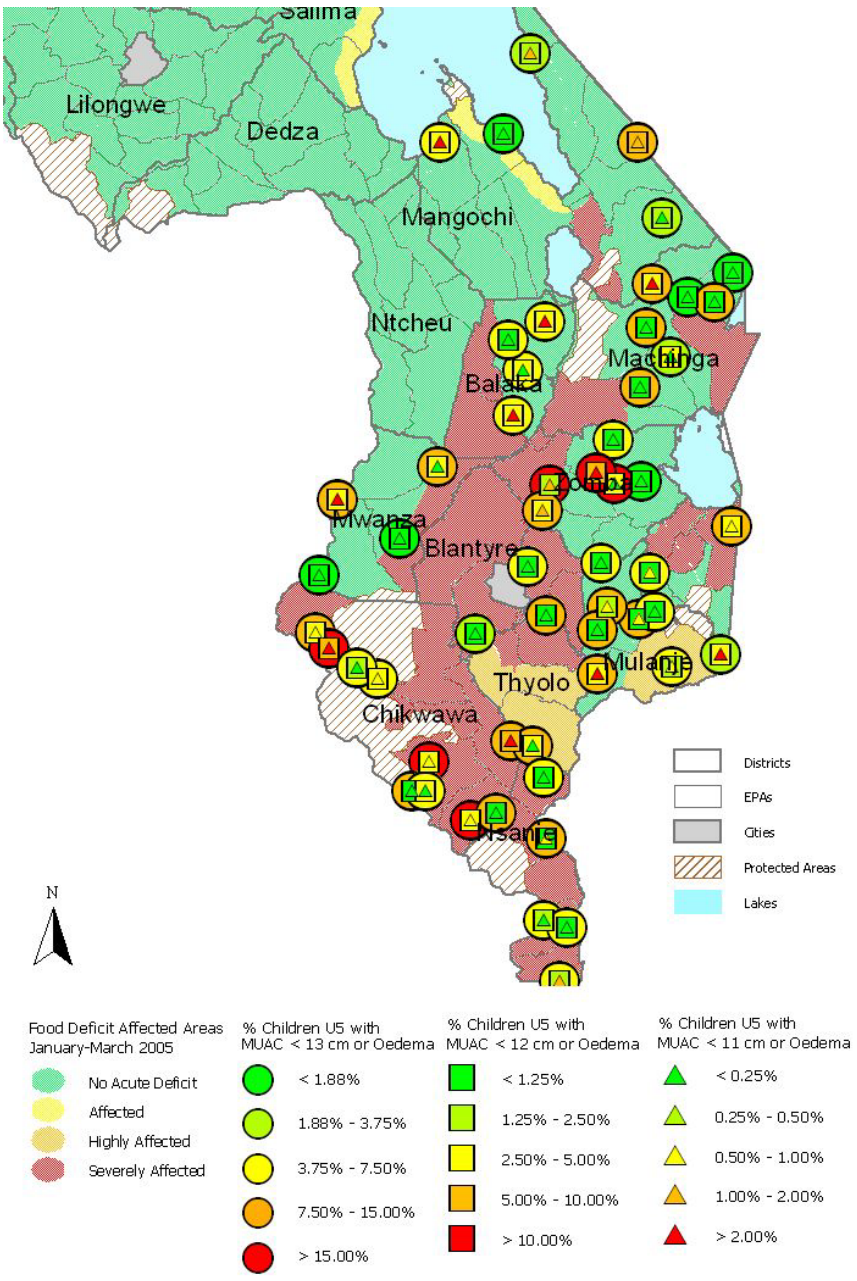
[15] More precisely, this should be referred to as the 'missing food energy entitlement', as the calculations have been based on energy calculations. While it is theoretically possible to factor in the other important components of diet (such as protein, fats, micronutrients) into the calculations, the added complexities (and the time and resources required for them) are not easily justified for this exercise, where *acute* (short-term and more severe) food shortages being experienced by households are the object of study.

Those comparing this outcome with that forecast in May 2004 will notice that the missing food entitlement has decreased from the figure given for the then "**scenario 1**" by 18,116 MT or 32%. The decrease has come partly as a result of:

- A stable economic situation that has allowed the import of food where needed; this, together with WFP/JEFAP interventions, has kept food prices and supplies stable.
- Better prospects for *ganyu* for the poor than anticipated in May, this is as a result of a combination of factors: including the good current season, no scares on the availability of food and competition from WFP /JEFAP Food For Work programmes.
- The humanitarian response that has taken place after the shortfalls that were highlighted in May 2004.

In short, the shrink in the missing food entitlements came about *because* policies and programmes were conducive to reducing it.

Nevertheless, without further interventions over the coming few months, household deficits are likely to remain, highlighting the need to continue with humanitarian interventions until the next harvest.



Comparisons of MVAC and Other Outcome Data

As this monitoring exercise has taken place in the middle of the hunger season, it is a useful exercise to see different outcome data sets together. Obviously, data collected in different ways will never completely correspond, especially as the different outcome data presented here are actually measuring quite different things. Nevertheless, the comparisons are still interesting and this pilot exercise has been conducted to explore linkages and map the different data sets

Nutritional Surveillance

Nutrition screening has been carried out during December 2004 in all the vulnerable TAs as indicated by the MVAC in May 2004. This was coordinated by AAH in collaboration with MOH, GOAL and Emmanuel International in the Southern Region and, in Karonga and Salima, by Malawi Red Cross Society, funded by UNICEF. In addition, nutrition surveys have been conducted in Thyolo by MSF (Luxembourg) and in Dedza by Concern Universal.

MUAC Screening in Southern Region (Health facility based). Mid-upper arm circumference (MUAC) was used as the screening tool as it indicates those children between one and five years of age at risk of malnutrition, morbidity and mortality. It is less accurate than weight for height (W/H) in measuring wasting and in children less than one year of age or less than 75cm in length. Hence, all patients identified with low MUAC (between 13.0 cm and 12.0 cm – at risk of malnutrition but not yet malnourished) should be referred for weight for height assessment before being admitted onto a targeted nutrition programme. If their MUAC is between 12.0cm and 11.0 cm, they are referred to the nearest supplementary feeding programme and if their MUAC is less than 11.0cm they are referred to the nearest nutrition rehabilitation unit (NRU). The screening also included assessment for bi-lateral oedema which is a diagnostic for severe acute malnutrition. All patients found with oedema are referred immediately to the nearest NRU.

Figure 0 shows the percentage of under five children identified as severe acute (MUAC <11.0cm) or moderate acute (MUAC <12.0cm) malnutrition or "at risk" (MUAC <13.0cm) at each site where screening was carried out. Most sites with between 3.75% and 7.5% "at risk" have little actual moderate malnutrition, while those with between 7.5% and 15% have slightly more. What is also clear is that at many sites within or close to the areas categorised by the MVAC as "affected" (or worse), the screening often shows more children "at risk", even if they are not yet actually malnourished[16].

Some sites show a relatively high rate of severe acute malnutrition, for example in Balaka and Mwanza districts, compared to their levels of moderate acute malnutrition. Kwashiorkor, manifested by bi-lateral oedema, is normally relatively high in Malawi compared with *marasmus* (wasting), particularly during the hungry season when malaria, diarrhoea and other illnesses occur more frequently. HIV/AIDS, inadequate child-care practices, a diet lacking in diversity and some isolated extreme food insecurity are possibly other contributing factors.

However, none of the sites demonstrates an alarming situation nor do they show any change from a "normal" hungry season. The situation could change if the feeding programmes already operational were terminated before the harvest or there is a break in supplies to the NRUs, supplementary feeding programmes and other relief programmes such as Food For Work.

MUAC screening in vulnerable TAs in Karonga District. The screening was conducted in outreach centres or gathering points in villages in TA Kyungu (Lupembe EPA)[17].

Of the 2,659 children aged one to five years of age, 14.5% were at risk (MUAC <13.0cm), 6.5% were moderately malnourished and 1.3% severely malnourished. These figures are "normal" in Malawi for this time of year.

MUAC screening in vulnerable TAs in Salima District. Similarly to Karonga district, screening was also conducted in part of TA Pemba (Chipoka and Tembwe EPAs)[18].

Of the 2,109 children aged one to five years of age, 8.9% had moderate malnutrition and 3.8% were severely malnourished. These higher rates are possibly due to the higher rates of morbidity found in Salima, particularly malaria and diarrhoea which were almost double that found in Karonga[19].

Nutrition Survey in Thyolo (MSF-L): Weight for height and oedema were used to assess severe and moderate acute malnutrition.

Global Acute Malnutrition (GAM Z-scores): 2.9%

Severe Acute Malnutrition (SAM Z-scores): 0.2%

These are 'normal' figures for the hungry season.

Table VII - Prevalence of Diseases in Karonga (Malawi Red Cross)

Disease	Percent (%)
Fever	17.32
Diarrhoea	26.96
Measles	1.43
Malaria	27.68
Other	26.61

Table IX - Prevalence of Diseases in Salima (Malawi Red Cross)

Disease	Percent (%)
Fever	5.93
Diarrhoea	43.08
Malaria	42.69
Other	8.30

[16] Disease (including HIV/AIDS) and inadequate child-care practices are possibly other contributing factors.

[17] The sites were not geo-referenced and so they cannot be plotted on a map.

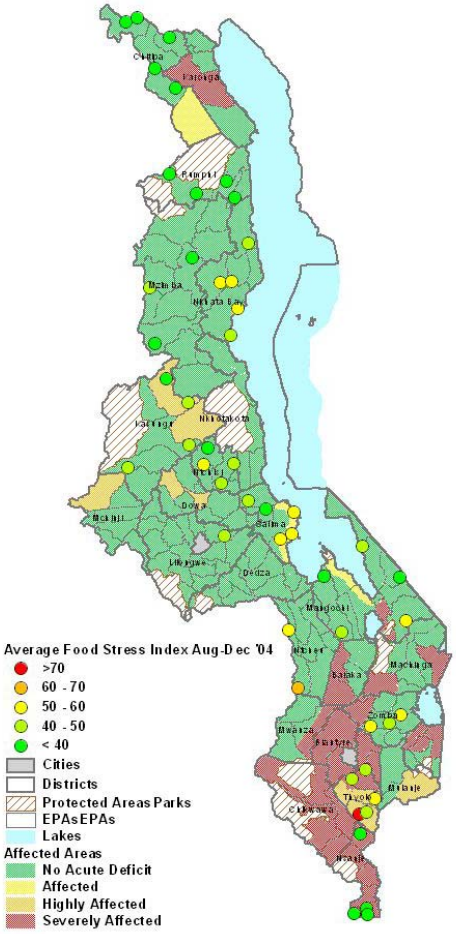
[18] These sites were also not geo-referenced.

[19] No figures are available for children "at risk".

Nutrition Survey in Dedza (Concern Universal): Preliminary figures indicate GAM 5.1% and SAM 2.5%. These prevalence levels are higher but are still within Ministry of Health guidelines of 3-5% at risk limits for GAM.

Food Stress Index

Action Against Hunger, in collaboration with the Ministry of Agriculture, regularly collects data on a number of Food Security indicators at a selection of sentinel sites across the country. These indicators are combined into an index and the average for each site of all months in this agricultural consumption year has been plotted onto the map of the affected areas forecast by the MVAC. This map is shown in **Figure 0**, right. The area around Nkhata Bay has high Food Stress Indices; this is because activities and consumption in this area is far more cassava-based and the Food Stress Index was not designed for more cassava-dominant areas.



Conclusion and Implications

Malawi has managed to avert a general crisis in food security in 2004, largely because of the influx of food that has come into the country, most of it from Mozambique. The presence of targeted interventions in the areas of greatest need have also contributed significantly to an improved outlook, when compared with previous forecasts. However, despite improvements in overall food security, compared with the previous forecast, the country remains in its 'hungry period' and many households are risk acute shortages of food.

Short Term Implications

There is a strong need to maintain the current economic stability at least until the harvest in 2005. This is especially true of exchange rates, as food still needs to be imported. The last thing the country needs is a maize-price shock and the consequent scare that will cut the poor off from food derived through *ganyu*, social ties and other redistributive mechanisms. Hence, there is a need to ensure that there remain no impediments to informal trade (at least until harvest). For those that monitor food security, an important factor to watch will be relative gains in neighbours' currencies against the Malawi Kwacha, a factor that will make imports more costly for Malawians.

Even with the informal cross-border trade, there are still a large number of households in the affected parts of the country who cannot get their hands on enough food. The vulnerability of these households, as identified in this report, is underlined by some of the nutrition data, where in most cases relatively high numbers of "at risk" children have been reported in the affected areas, while actual malnutrition figures still remain quite good. These vulnerable or affected households will need to continue to be supported, up until the next harvest.

As the informal cross-border trade taking place around the country has played a major role in stabilising food supplies, prices and *ganyu*, the efforts in understanding this trade have assisted considerably in addressing food insecurity. It is important that this valuable work continue and be supported by all partners engaged in food security and vulnerability analysis.

Longer Term Implications

Households in Malawi have very small asset bases and very, very low incomes. Malawi has a history of well-developed and successful cash-transfer oriented programmes; however, these programmes need to be given the capacity to scale up or down in different areas (spatial and longitudinal flexibility) and to be able to respond to acute vulnerability when the time calls for it. Being able to swing a large-scale cash-based programme into an area where people are facing acute shortages in their entitlements will not only provide people with a more fungible (interchangeable) resource that can be converted into a wider range of foodstuffs for consumption, it will also have the effect of stimulating demand for the products that the poor mostly produce: food.

[20] No figures are available for children "at risk".

The piloted efforts at linking nutrition screening and surveillance to the VAC studies should continue; and repeats of the screening exercise (in future affected areas) would be most welcome and will be incorporate din future analysis.

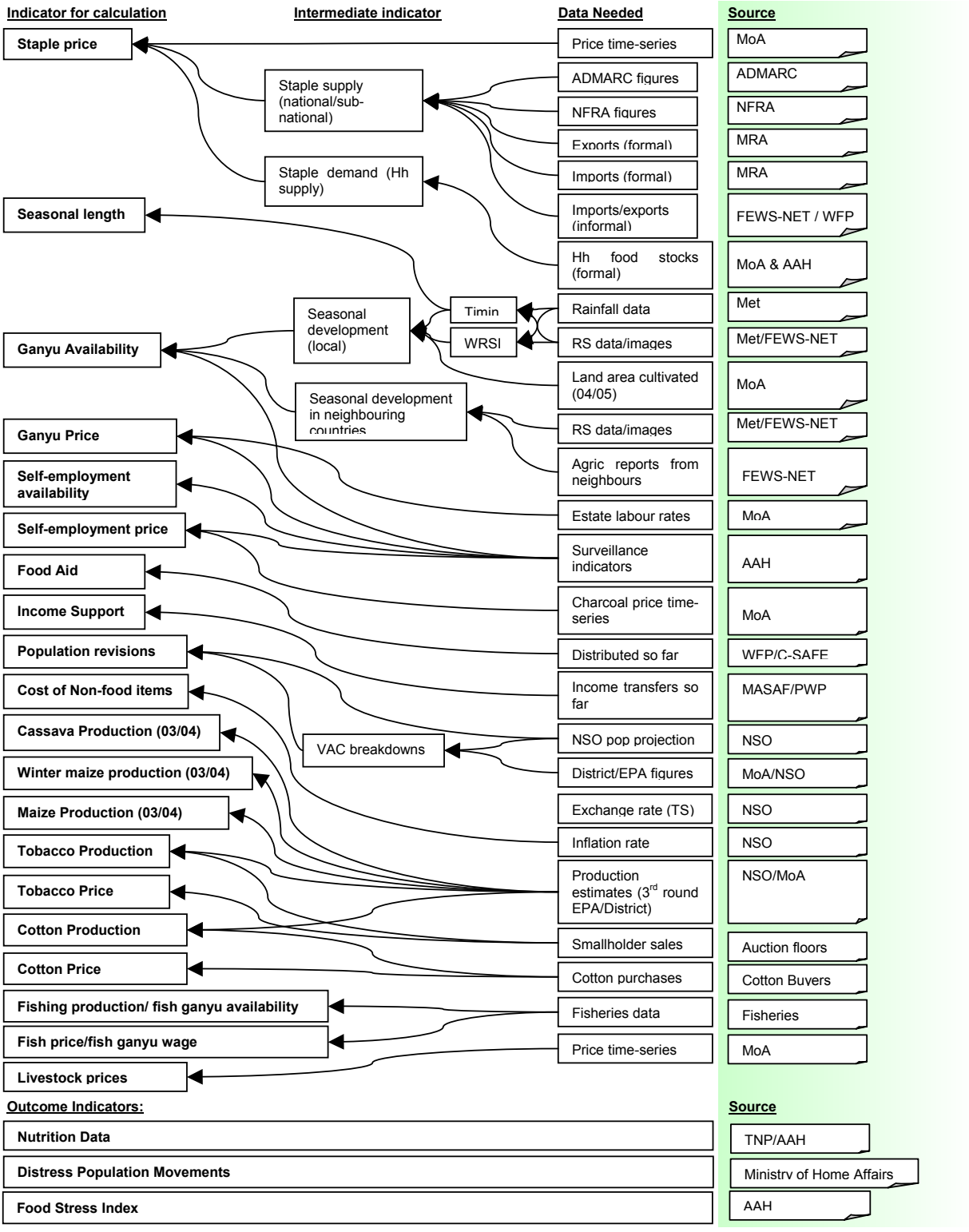
Finally, there is a need to better understand the causes of chronic vulnerability, food insecurity and malnutrition. The small but consistent deficiencies of food that so many households face each year need to be investigated more thoroughly. The Malawi VAC plans to conduct some studies and support for these activities would be most welcome.

Food Security Monitoring Report – January 2005

Appendices

Appendix I: Indicators and Data Sources

Figure 1 – Diagram Showing the Relationship between Indicators and Data Sources Used in this Analysis



Appendix II: Detailed Changes to Problem Specifications

Table XI - Detailed Changes in Problem Specifications

Indicator Used	Zones with changed problem specifications since May 2004	Value in May 2004	Value Now	Justification
Staple purchase Price	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	119%	The adjustments are based on trends from time-series data. Prices today (in Kwacha terms) are compared with those of early 2003 (i.e., two years ago).
	Kasungu-Lilongwe Plain (all EPAs)	119%	100%	
	Lake Chilwa-Phalombe Plain (Nampeya & Chikweo EPAs)	119%	110%	
Staple selling price	Kasungu-Lilongwe Plain (all EPAs)	119%	80%	
	Lake Chilwa-Phalombe Plain (Nampeya and Chikweo EPAs)	119%	100%	
Maize production	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	43%	Adjustments are made to figures that were originally calculated from the Round 2 Crop Estimates Survey data. Round 3 data were used instead
	Central Karonga	50%	27%	
	Kasungu-Lilongwe Plain (Bowe, Mponela, Mkanda, Kaluluma, Chasama)	61%	64%	
	Middle Shire (Lisungwi)	34%	57%	
	Middle Shire (Phalula, Bazale, Utale, Chingale, Lirangwe Chipande)	57%	39%	
	Lake Chilwa-Phalombe Plain (Nampeya and Chikweo EPAs)	59%	64%	
	Lower Shire (Kalambo, Livunzu, Mkanda and Zunde EPAs)	57%	50%	
	Lower Shire (Mitole, Mbewe, Mikalango, Dolo, Mogoti, Mpatsa and Nyachilenda EPAs)	19%	19%	Mitole, Mbewe, Mikalango and Dolo EPAs are now included in this group
Winter maize	Lower Shire (Kalambo, Livunzu, Makhanga and Zunde EPAs)	50%	100%	Lower Shire had a better-than-expected winter season this year
	Lower Shire (Mitole, Mbewe, Mikalango, Dolo, Mogoti, Mpatsa and Nyachilenda EPAs	50%	80%	
Rice production	Southern Lakeshore (Tembwe, Chipoka, Mbwadzulu, Nasenga EPAs)	30%	43%	Based on Round 3 Crop Estimates data
Fruits and vegetables production	Middle Shire (all EPAs)	30%	50%	
Tobacco price	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	110%	Based on average auction prices
Tobacco production	Kasungu-Lilongwe Plain (all EPAs)	80%	100%	Higher-than-expected production figures were reported at the auctions
Cotton production	Middle Shire (all EPAs)	60-175%	100%	Production was at least as good as a few years ago.
Ganyu-for-food availability[21]	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	80%	Good rainfall in the 2004-2005 season has encouraged the better-off to farm more intensively, increasing *ganyu* availability
	Central Karonga	40%	60%	
	Southern Lakeshore (Tembwe, Chipoka, Mbwadzulu, Nasenga EPAs)	30%	60%	
Ganyu-for-cash[22] availability	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	100%	

[21] This does not include Food-For-Work interventions

[22] This does not include Public Works or Cash-For-Work interventions

	Central Karonga	50%	75%	
	Southern Lakeshore (Tembwe, Chipoka, Mbwadzulu, Nasenga EPAs)	50%	75%	
Ganyu pay rates	Chitipa Maize and Millet	Not analysed	100%	Local *ganyu* rates remain unchanged since a few years ago.
Fishing *ganyu* availability	Southern Lakeshore (Tembwe, Chipoka, Mbwadzulu, Nasenga EPAs)	50%	67%	The amount of fish being caught has not decreased considerably in the last few years (fisheries data)
Season Length	Chitipa Maize and Millet (Kavukuku EPA)	Not analysed	+1 month	Delay in planting caused by army worm infestation
	Central Karonga	No change	+1 month	

Appendix III: Household Cash Required to Overcome Deficits

Table XI - Cash Requirements to Alleviate Deficits

Affected Parts of Livelihood Zone	*Household Yearly Incomes (MK) Required to Overcome Deficit*	
	'Poor'	'Middle'
Thyolo Mulanje Tea Estates	6,411	
Kasungu Lilongwe Plain – Dowa, Kasungu, Ntchisi & Mchinji	2,359	
Lower Shire Valley – Nyachilenda, Mpatsa & Mogoti EPAs	2,957	
Lower Shire Valley – Chikwawa district and Makhanga & Zunde EPAs	2,040	
Middle Shire Valley – Lisungwi & Mwanza EPAs	5,215	
Middle Shire Valley – Blantyre, Balaka & Zomba districts	5,941	
Lake Chilwa & Phalombe Plain – Phalombe district	10,943	4,219
Lake Chilwa & Phalombe Plain – Machinga district (R2)	7,030	
Shire highlands	4,837	
Southern Lakeshore	2,087	
Central Karonga	2,277	
Chitipa Maize and Millet	562	

Appendix IV: Missing Food Entitlements and Cash Equivalents to the Missing Food Entitlements

Table XII – Matrix of Vulnerable Populations, Missing Food Entitlements and Cash Requirements by District and Livelihood Zone

District	District Population 2004	Data Type	Livelihood zone												Flooded Areas	District Total
			Lake Chilwa & Phalombe - Kosongo, Mpinda, Tamani & Thumbwe	Thyolo Mulanje Tea Estates - Msikawanjala, Mulanje Boma, Khonjeni, Thekerani	Lower Shire - Nyachilenda, Mpatsa, Mogoti, Dolo, Mikalango, Mbewe	Lower Shire - Kalambo, Livunzu, Makhanga, Zunde	Middle Shire - Lisungwi	Middle Shire - Lirangwe, Phalula, Utale, Bazale, Chingale, Chipande	Lake Chilwa & Phalombe - Chikweo, Nampeya	Shire highlands - Thumbwe, Mom, Ntonda, Kun, Maiwa, Chin, Ntubwi, Mata	Southern Lakeshore - Chipoka, Tembwe, Mbwadzulu & Nasenga	Central Karonga - Lupembe EPA	Chitipa Maize & Millet - Kavukuku EPAs	Kasungu Lilongwe Plain - Bowe, Mponela, Mkanda, Kaluluma, Chasama		
Balaka	295,623	Affected Population						60,038								60,038
		Missing Food Entitlement: (MT)						3,101								3,101
		Equiv Cash Reqm't: (K million)						71.3								71.3
Blantyre	349,427	Affected Population						88,385		60,279						148,664
		Missing Food Entitlement (MT)						4,566		2,545						7,110
		Equiv Cash Reqm't: (K million)						105.0		58.3						163.3
Chikwawa	425,080	Affected Population				161,530									6,930	168,460
		Missing Food Entitlement (MT)				2,871									218	3,089
		Equiv Cash Reqm't: (K million)				65.9									3.9	69.8
Chiradzulu	273,893	Affected Population	83,404							55,980						139,385
		Missing Food Entitlement (MT)	4,853							2,363						7,216
		Equiv Cash Reqm't: (K million)	112.4							54.2						166.6
Chitipa	152,691	Affected Population											9,864			9,864
		Missing Food Entitlement (MT)											16			38
		Equiv Cash Reqm't: (K million)											1.1			1.1
Dedza	582,289	Affected Population														0
		Missing Food Entitlement (MT)														0
		Equiv Cash Reqm't: (K million)														0.0
Dowa	469,924	Affected Population												34,406		34,406
		Missing Food Entitlement (MT)												325		325
		Equiv Cash Reqm't: (K million)												16.2		16.2

District	District Population 2004	Data Type	Livelihood zone												Flooded Areas	District Total
			Lake Chilwa & Phalombe - Kosongo, Mpinda, Tamani & Thumbwe	Thyolo Mulanje Tea Estates - Msikawanjala, Mulanje Boma, Khonjeni, Thekerani	Lower Shire - Nyachilenda, Mpatsa, Mogoti, Dolo, Mikalango, Mbewe	Lower Shire - Kalambo, Livunzu, Makhanga, Zunde	Middle Shire - Lisungwi	Middle Shire - Lirangwe, Phalula, Utale, Bazale, Chingale, Chipande	Lake Chilwa & Phalombe - Chikweo, Nampeya	Shire highlands - Thumbwe, Mom, Ntonda, Kun, Maiwa, Chin, Ntubwi, Mata	Southern Lakeshore - Chipoka, Tembwe, Mbwadzulu & Nasenga	Central Karonga - Lupembe EPA	Chitipa Maize & Millet - Kavukuku EPAs	Kasungu Lilongwe Plain - Bowe, Mponela, Mkanda, Kaluluma, Chasama		
Karonga	230,026	Affected Population										1,800				1,800
		Missing Food Entitlement (MT)										48				48
		Equiv Cash Reqm't: (K million)										0.8				0.8
Kasungu	589,019	Affected Population												64,327		64,327
		Missing Food Entitlement: (MT)												607		607
		Equiv Cash Reqm't: (K million)												30.3		30.3
Machinga	417,594	Affected Population							98,828							98,828
		Missing Food Entitlement (MT)							2,703							2,703
		Equiv Cash Reqm't: (K million)							52.1							52.1
Mangochi	711,179	Affected Population								14,154	40,203				2,492	56,849
		Missing Food Entitlement (MT)								597	268				78	943
		Equiv Cash Reqm't: (K million)								13.7	16.8				1.4	31.9
Mchinji	395,171	Affected Population												22,378		22,378
		Missing Food Entitlement (MT)												211		211
		Equiv Cash Reqm't: (K million)												10.6		10.6
Mulanje	506,598	Affected Population		59,742												59,742
		Missing Food Entitlement (MT)		863												863
		Equiv Cash Reqm't: (K million)		76.6												76.6
Mwanza	162,739	Affected Population					21,524									21,524
		Missing Food Entitlement (MT)					956									956
		Equiv Cash Reqm't: (K million)					22.4									22.4
Nsanje	223,278	Affected Population			48,158	36,688									924	85,770
		Missing Food Entitlement (MT)			1,230	652									29	1,911
		Equiv Cash Reqm't: (K million)			28.5	15.0									0.5	44.0
Phalombe	280,043	Affected Population	56,154												2,426	56,154

District	District Population 2004	Data Type	Livelihood zone												Flooded Areas	District Total
			Lake Chilwa & Phalombe - Kosongo, Mpinda, Tamani & Thumbwe	Thyolo Mulanje Tea Estates - Msikawanjala, Mulanje Boma, Khonjeni, Thekerani	Lower Shire - Nyachilenda, Mpatsa, Mogoti, Dolo, Mikalango, Mbewe	Lower Shire - Kalambo, Livunzu, Makhanga, Zunde	Middle Shire - Lisungwi	Middle Shire - Lirangwe, Phalula, Utale, Bazale, Chingale, Chipande	Lake Chilwa & Phalombe - Chikweo, Nampeya	Shire highlands - Thumbwe, Mom, Ntonda, Kun, Maiwa, Chin, Ntubwi, Mata	Southern Lakeshore - Chipoka, Tembwe, Mbwadzulu & Nasenga	Central Karonga - Lupembe EPA	Chitipa Maize & Millet - Kavukuku EPAs	Kasungu Lilongwe Plain - Bowe, Mponela, Mkanda, Kaluluma, Chasama		
		Missing Food Entitlement (MT)	3,267												76	3,267
		Equiv Cash Reqm't: (K million)	75.7												1.3	75.7
Salima	308,882	Affected Population									33,220					33,220
		Missing Food Entitlement: (MT)									221					221
		Equiv Cash Reqm't: (K million)									13.9					13.9
Thyolo	539,610	Affected Population		208,185						6,319						214,504
		Missing Food Entitlement (MT)		3,006						267						3,273
		Equiv Cash Reqm't: (K million)		266.9						6.1						273.0
Zomba	558,132	Affected Population						18,757		17,508					7794	44,059
		Missing Food Entitlement (MT)						969		739					245	1,953
		Equiv Cash Reqm't: (K million)						22.3		16.9					4.4	43.6
Total Affected Population			139,558	267,927	48,158	198,218	21,524	167,179	98,828	154,240	73,423	1,800	9,864	121,111	18,140	1,319,970
Total Missing Food Entitlement (MT)			8,120	3,869	1,230	3,523	956	8,636	2,703	6,511	489	67	16	1,144	646	37,914
Total Equiv Cash Requirement: (K million)			188.1	343.5	28.5	80.9	22.4	198.6	52.1	149.2	30.6	0.8	1.1	57.1	11.5	1,164.7