

Malawi's 2007 Bumper Harvest: Is everyone food secure?

The answer to the headline question based on this year's vulnerability assessment should have been an emphatic yes if it were not for nearly 520,000 people (about 4 percent of the population) whose year-round food security status for this consumption year is still uncertain. The vulnerability assessment was carried out by MVAC and an overview of the analysis now follows.

Data from the Ministry of Agriculture and Food Security show that this year Malawi will have the largest cereal harvest (at 3.2 million tonnes) on record. However, some isolated parts of the country, like Karonga in the North and the Lower Shire in the South were still unable to achieve normal production of food crops. The Malawi Vulnerability Assessment Committee (MVAC) conducted its annual assessment to find out whether households in such affected areas were likely to face food shortages as a consequence of the poor food harvest. The purpose of this year's vulnerability assessment was to look at how temporary events, like localised drought or floods, have impacted on households'



Probably a common sight this year...

abilities to obtain food for this consumption year.

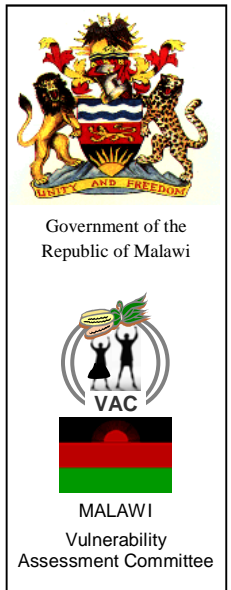
MVAC estimates do not show substantial transient vulnerability in the most parts of the country; however, around 519,200 people

whose year-round food security status is not assured need to be watched as adverse economic developments could mean that they would be unable to access adequate food. One of the main assumptions in these figures is that the *average* national price of maize will be around K30 per kg., although this will vary considerably across regions.

The table below shows details of the number of people to be watched by district. It is also important to know, even when people have adequate food, whether their eating habits promote healthy lives. This is what is called nutritional status and information on this part of the assessment is presented on page 3.

The figures in the table below should be used to inform the humanitarian response that should be made. While every attempt is made to produce information that is reasonably accurate, time and resources allocated for the annual vulnerability assessment and the areas of coverage often limit the extent to which detail can be collected. It is important, therefore, that agencies operating on the ground in each district determine the exact extent of food insecurity in the affected areas, villages, populations and the names of people in need of assistance.

Affected District	Population on 'Watch'
Balaka	16,100
Chikwawa	177,400
Karonga	62,600
Machinga	12,500
Mulanje	35,500
Mzimba	120,000
Nsanje	83,900
Ntchisi	11,200
Grand Total	519,200



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The 2007 forecast in brief:

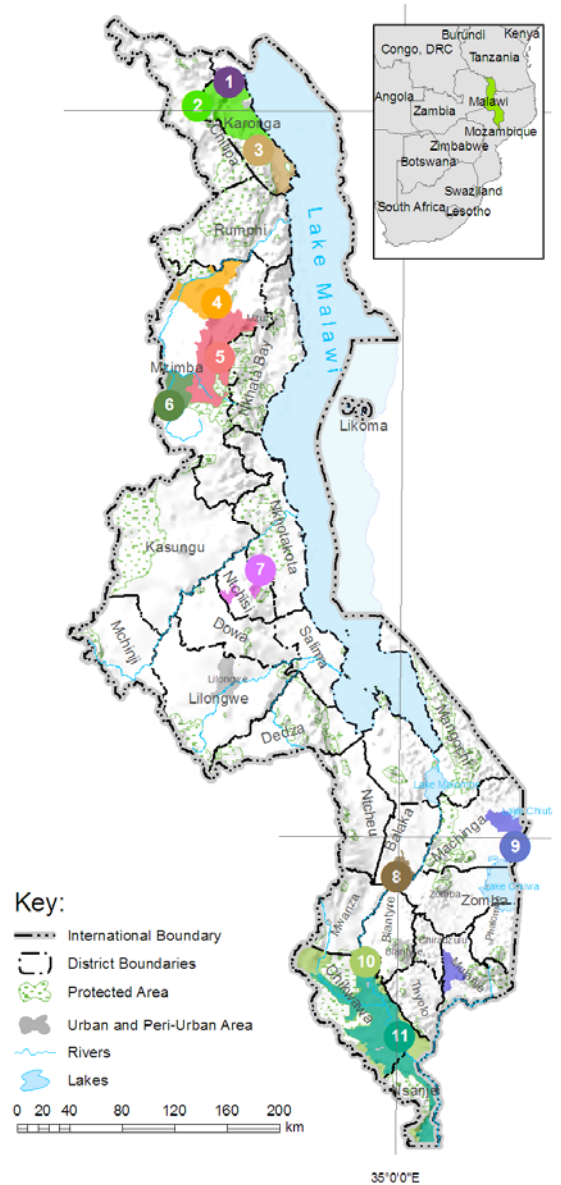
- Malawi expects a good food harvest this year (2007). Overall food production at the national level is **3.2 million tonnes** and this gives a surplus of **1.2 million tonnes**. There is no need to import maize, but may be to export.
- A number of isolated areas did not have a good season as expected, nevertheless **household access** to food has to a large extent been supplemented by better cash crop incomes.
- MVAC estimates that about **519,200 people** will need to be watched; worsening economic conditions such as a reduction in cash crop prices or high maize prices will push the 'watch' population's entitlements below their needs.
- The MVAC **could not find any significant missing food entitlements** arising as a consequence of any events related to the harvest or projected economic indicators. This does not preclude the existence of chronic missing food entitlements
- MVAC members also conducted a **nutrition survey** (at harvest time) and the **rates of acute malnutrition were very low** in all surveyed areas, while rates for chronic malnutrition and mortality are considered normal.

Key to Affected Areas in map, right

	District	EPAs	
1 High Concern	Karonga	South Kaporo	Dry spells led to poor rice performance but significant livestock holdings and low grain prices will assist with coping
2 High Concern	Karonga	Lupembe, Mpata	Dry spells led to reduced maize and rice yields, while floods affected cassava. Livestock sales and improved income with low cereal prices will support coping
3 High Concern	Karonga	Vinthukuthu, Nyungwe	Poorly distributed rains affected maize but cassava production normal
4	Mzimba	Malidade, Mpherembe	Poverty for poorest farmers, fertiliser supply difficulties and some waterlogging, offset by good tobacco prices
5	Mzimba	Emsizini, Njuyu, Es-wazini, Kazomba	Waterlogging and lack of fertiliser prevented good yields. However, better cash crop prices, livestock and availability of ganyu will compensate
6	Mzimba	Manyamula, Mjinge	Localised flooding, waterlogging, fertiliser supply issues reduced maize yields, offset by livestock holdings and good tobacco prices
7	Ntchisi	Chipuka, Chikwatula	Fertiliser delays and severe waterlogging reduced maize yields but good tobacco production and prices, ganyu, will assist coping
8	Balaka	Utale	Waterlogging and delays with fertilisers, offset by better groundnut production and cotton prices
9	Machinga, Mulanje	Nampeya (MHG), Thuchila (MJ)	Cereal production affected but pulses good, ganyu and fishing will help to meet needs
10	Chikwawa, Nsanje Shire Valley Uplands:	Kalambo, Mitole (part), Livunzu (part), Dolo (part), Mikalango (part), Makhanga, Zunde (part), Nyachilenda (part)	Food crops did very well but bird attack on sorghum and millet, cotton not grown
11 High Concern	Chikwawa, Nsanje Shire Valley Lowlands	Lowlands: Mitole (part), Mbewe, Dolo (part), Mikalango (part), Mogoti, Mpatsa, Zunde (part), Nyachilenda (part)	Flooding early on in the season, farmers switched from maize to sorghum/millet, winter prospects good

Potentially Vulnerable Areas in Malawi

Areas of Concern (areas with households having high initial deficits) and other areas with some initial deficits



Trends in Crop Production

This year's cereal production, attributed to favourable weather conditions and better access to inputs, is the highest on record. Maize, the largest component, stands at 3,218,850 MT. This is an increase of 25 percent over last year's output and 29 percent over the 1999/2000 output – the previous highest output year.

It is not only maize that has done well this year. Rice output has also increased, from 92,226 MT last year to 110,568 MT this year. Pulse production has been increasing more rapidly than any other crop since the mid-nineties. This year's pulse production continues the trend and is the highest ever, at 411,752 MT – compared with 345,167 MT last year. This is an increase of 312% over 1995 levels. Groundnuts have a similar trend, although the increase follows a low period from 1989 to 1996; this year's production is 759% higher than that in 1995. The positive developments in crops other than maize indicates a significant improvement in the diversification of food crop production (though not necessarily consumption).

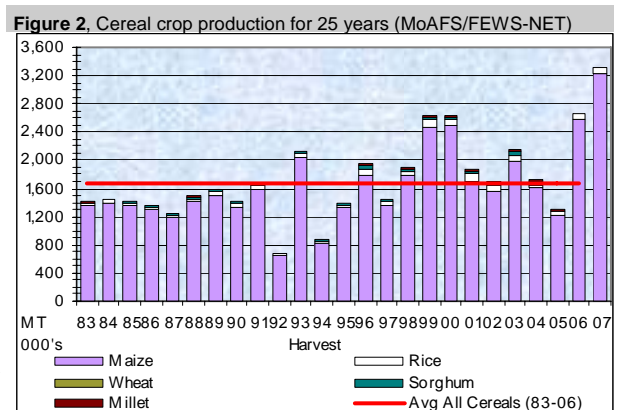
The production of most cash crops increased in the mid-nineties except for cotton, which quickly fell back to levels similar to the 1985-1995 period. Cotton production increased by one-third over the last five-year period. The production this year is estimated at 61,822 MT, compared with 38,463 MT in 1999/2000 and the 52,430 MT recorded last season.

Tobacco has, on average, slowed down its annual increase to around 10 percent over the last ten years. This year's tobacco, at 115,765 MT, is lower than the 121,600 MT recorded last year. The poor prices offered last year discouraged farmers and they responded by reducing the area for the crop. Surprisingly, the prices of tobacco have been the best this year.

In summary, pulses and groundnuts have increased more significantly than cash crops over recent years. Cereal

production has been erratic, with an overall increase being felt especially because of the good performance of the last two years.

Food grown is not necessarily the same as food eaten. With a decrease in returns from cash crops, farmers may prefer to sell their increased pulse and groundnut production, bringing in desperately needed income. This highlights the importance of plans to diversify the economy, generating off-farm income to support improved crop production and diversification.



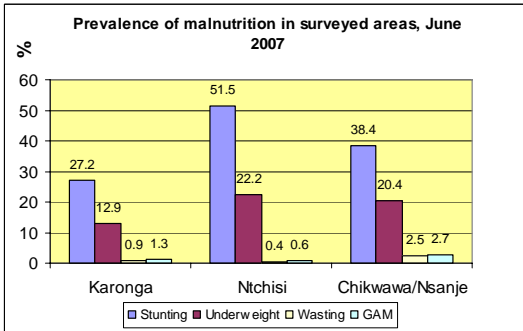
Nutrition

Measures of nutrition status help us to understand how well food is utilised by household members and their children. The nutrition assessment was conducted in selected EPAs:

Lupembe EPA in Karonga, Kalira and Chiphuka EPAs, in Ntchisi, Mbewe EPA in Chikwawa and Mpatasa EPA in Nsanje. It was conducted on 10-19 June 2007.

The surveyed EPAs had been identified as potentially food insecure, based on the national vulnerability assessment.

Prevalence of Global Acute Malnutrition (GAM) among children 6-59 months of age was 1.3% in parts of Karonga, 0.6% in Ntchisi, and 2.7% in the



Chikwawa/Nsanje. There were 2 children with Oedema in the Chikwawa/Nsanje and one child in the other two districts.

The acute malnutrition rates are very low in all the surveyed districts. Levels of malnutrition may increase later as household food security worsens towards the end of the consumption year.

Fever with chills (proxy for malaria), diarrhea and fever with difficult breathing (proxy of acute respiratory infection) are common illnesses that affect nutritional status of children. The prevalence of fever with chills was 47.1%, fever with difficult breathing was 17.2%, and diarrhea was 25.1%. Prevalence of fever with chills was highest in the

Chikwawa/Nsanje (52.1%) followed by Ntchisi (43.5%) and Karonga (37.6%).

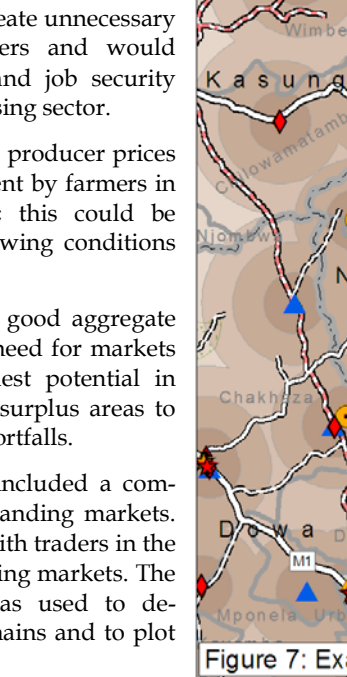
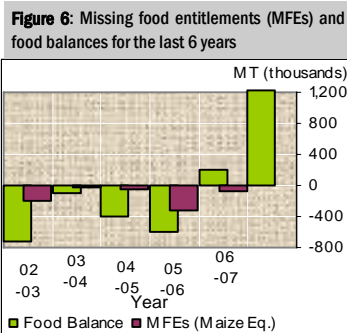
The crude retrospective mortality rates were similar in the three areas and ranged from 0.37 in Ntchisi to 0.43 deaths per 10,000 persons per day in Karonga, as shown in table 1. The under five mortality rate was highest in the Ntchisi (0.95/10,000/day). Based on the threshold classification, all the rates are below the alert threshold therefore both the crude and under five mortality rates are within normal.

Measure	Karonga	Ntchisi	Chikwawa/Nsanje
Mortality Rate	Under Five*	0.95 (0.53-1.37)	0.73 (0.44-1.03)
	Crude**	0.43 (0.23-0.64)	0.37 (0.24-0.49)

*Alert level = 1 death per 10,000 for Crude Mortality rate and 2 for USMR
 **Emergency level = 2 deaths per 10,000 for Crude Mortality rate and 4 for USMR

Markets and Trade

This year follows on from last year with another surplus in national maize production (see graph below). Given this healthy supply situation and the present low costs of most foodstuffs, Malawi does not need food imports (apart from a limited supply of luxury processed foods)



Importing food would create unnecessary competition for producers and would undermine investment and job security for workers in the processing sector.

There is concern that low producer prices may discourage investment by farmers in the forthcoming season; this could be exacerbated by poor growing conditions such as rainfall failure.

While the country has a good aggregate supply, there is still the need for markets to function to their fullest potential in moving food from local surplus areas to those with production shortfalls.

The MVAC assessment included a component aimed at understanding markets. MVAC field teams met with traders in the bomas and in some outlying markets. The information gathered was used to describe market flows or chains and to plot

out the locations of important markets for the main commodities bought or sold.

This information can be used to estimate coverage, to rank the importance of different markets to an area and ultimately it is hoped that estimates of

market capacity can be made.

The map below shows the coverage of markets and important shops in Ntchisi district. The rings around each centre indicate distances of 3 km (roughly one hour's walk). It can be seen that nearly all of the inhabited part of the district is within 9 km (the third ring) from a market or shop.



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www.malawivac.net

The Malawi Vulnerability Assessment Committee comprises Government, inter-government, academic and non-profit member organizations that seek to provide information to inform public action. Participating MVAC members include:



The Ministry of Economic Planning and Development

The Ministry of Agriculture and Food Security

The Department of Poverty and Disaster Management Affairs
The Ministry of Finance

The National Statistics Office



Save the Children **unicef**

FEWS



World Vision



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Data from the following organisations were gratefully received and made use of:

1. The Ministry of Agriculture and Food Security (crop estimates, the food balance sheet and farm gate prices)
2. The Ministry of Economic Planning and Development (Economic data, inflation and GDP projections)
3. The Department of Poverty and Disaster Management Affairs (information on recently affected areas)
4. The National Statistics Office (Economic data, population figures and breakdowns)
5. Meteorological Service
6. United Nations Children's Fund (Nutrition assessment, nutrition-socio-economic correlations)
7. FEWS-NET (price data)
8. Nutrition and Food Security Surveillance System (Action Against Hunger/Ministry of Health/Ministry of Agriculture)

An Example of the Analysis: Central Karonga Livelihood Zone

The following analysis was carried out by modelling how households manage food production changes: by switching expenditure, decreasing sales of own-produced food, increasing (to acceptable limits) sales of non-food items and sourcing, and increasing access to other income and food.

Central Karonga livelihood zone has two extension planning areas (EPAs) - Lupembe and Mpata. It is a relatively productive maize and cassava zone that normally attracts migrant labour from other parts of the country. Livestock holdings, especially cattle, are high by national standards. Cash incomes are low, since the main cash crop, cotton, is not extensively grown and the zone is remote from larger urban markets. Most 'middle' and 'better-off' household income comes from selling rice or livestock (cattle and pigs), while the 'poor' depend on *Ganyu*, selling small stock and self-employment such as firewood collection and mat-making.

This year, dry spells that extended for close to four weeks from mid-February (the critical maize tasselling period) occurred in most parts of the district. This resulted in maize reaching only 44 percent of normal production. Rice transplanting, mainly in Mpata EPA, was also affected by the lack of water in the fields,

and so only reached 24 percent of normal production. Floods in January along some *dambo* areas caused tubers to rot.

Cassava, which normally survives dry spells and helps cushion cereal deficits, is 80 percent of normal production. Planting of new cassava and winter sweet potatoes was underway in areas with residual moisture.

The total area for cotton did not change when compared to 2005/06 season. However, yields were affected by the dry spell. The formation of cotton bolls requires water and this year's drought caused them to rot and drop. The price for cotton has improved and this will help smallholder farmers recover income from their reduced output.

However, the low crop production is unlikely to lead to reduced food access. The analysis indicates an *initial deficit* when only crop losses are considered. Purchases made with income, expected to be realised from selling cotton, livestock and *ganyu* (for the poor), will raise food entitlements beyond basic needs. In

addition, some households in parts of Lupembe also depend on fishing and self-employment (e.g. mat-making) for income, reducing their dependence on crop performance.

The critical assumption in the analysis is that maize will be readily available. People depend on ADMARC markets and they feel that as long as ADMARC has maize and opens additional selling points by September, there should not be any problem. Maize prices are not expected to rise substantially, owing to good availability in the country. The analysis assumes that maize prices will only increase at the average inflation rate.

Lower household maize supplies might, if external provisions are restricted, push prices up towards the end of the consumption year, reducing food purchases for poor households. There is need for monitoring of the prices and market flows for the cereal. It is also likely that food payments for *ganyu* will decrease or be substituted with cash.

The poor are expected to start seeking *ganyu* locally and in more distant areas. They may increase their sales of firewood. The 'middle' and the 'better-off' may increase sales of livestock to ensure they meet their needs.

