

Food security improves with better supply and consumption of diverse foods

Key points:



Food security continues to improve as households enjoy better dietary diversity in most districts in monitored provinces



There is a marked increase in the share of households with high dietary diversity in Copperbelt Province



Groundnut prices plummet in Mafinga in Muchinga Province, Petauke in Eastern Province and Choma in Southern Province



Maize prices fall considerably in Nakonde in Mafinga Province, Petauke in Eastern Province and Kaoma in Western Province

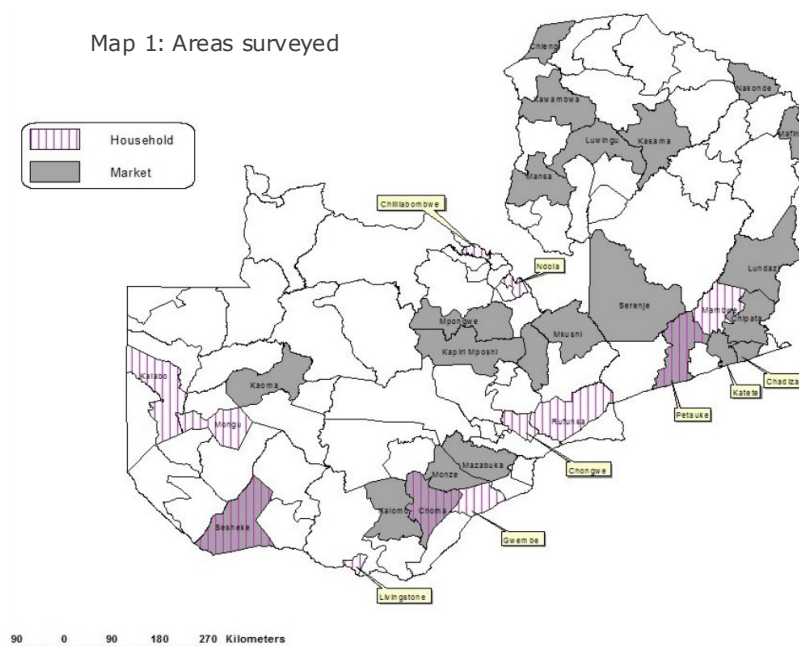


WFP/David Orr

Seasonal outlook

The seasonal food security outlook for May 2017 remains good although isolated pockets of acute food insecurity remain. The challenges are in part due to the outbreak of amyworms and stem borers, which has affected household food production, plus the fall in income from the sale of most legumes (especially cow peas and beans). Legume prices are far lower this year because of a boom in production which was triggered by last year's demand both within Zambia and across the borders in Zimbabwe and Malawi.

Map 1: Areas surveyed



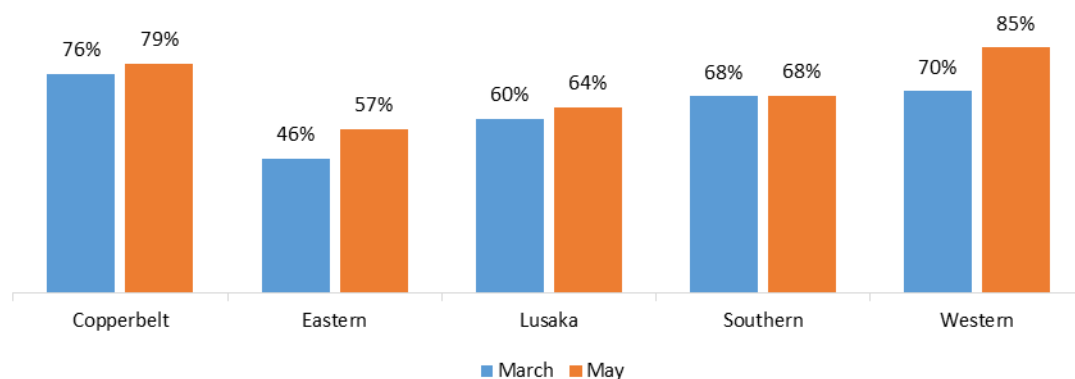


Better access to diverse foods

The mean Household Dietary Diversity Score (HDDS) improved in May for sampled households in all monitored provinces: on average households had consumed eight food groups in the 24 hours prior to the survey, compared to seven groups in March. This is attributed to good access to diverse foods thanks to the ongoing main harvest. The improvement in HHDS can be seen across the monitored provinces: the share of sampled households with high dietary diversity increased in May compared with March everywhere except in Western Province. The proportion of households with low dietary diversity fell in Eastern, Lusaka, Southern and Western provinces (**Figure 1**). In Copperbelt, the share of households with high and medium dietary diversity improved in May compared to March, largely thanks to better access to diverse foods from own production.¹

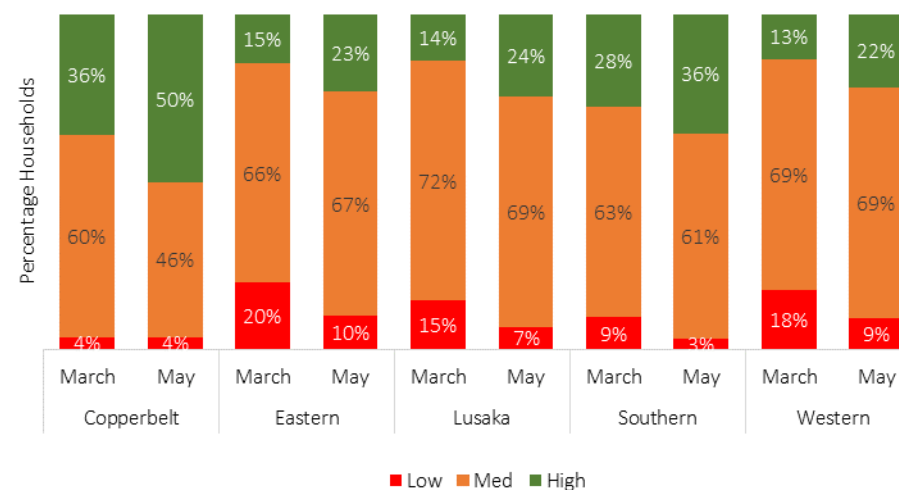
Dietary diversity remained stable among households headed by women between March and May, at seven out of twelve food groups. Households headed by men saw an improvement in their dietary diversity, from seven food groups in March to eight in May. A higher share of households in Copperbelt and Western provinces consumed iron-rich foods compared with the other provinces, in both March and May. Western Province is a livestock-producing region, accounting for higher meat consumption, while the Copperbelt districts monitored (Ndola and Chililabombwe) are bordering the Democratic Republic of Congo – a source of iron-rich foods thanks to cross-border trade. The share of households consuming iron-rich foods rose significantly in Eastern and Western provinces between March and May (**Figure 2**), possibly due to increased consumption of livestock products.

Figure 2: Percentage of households consuming iron-rich foods, by province



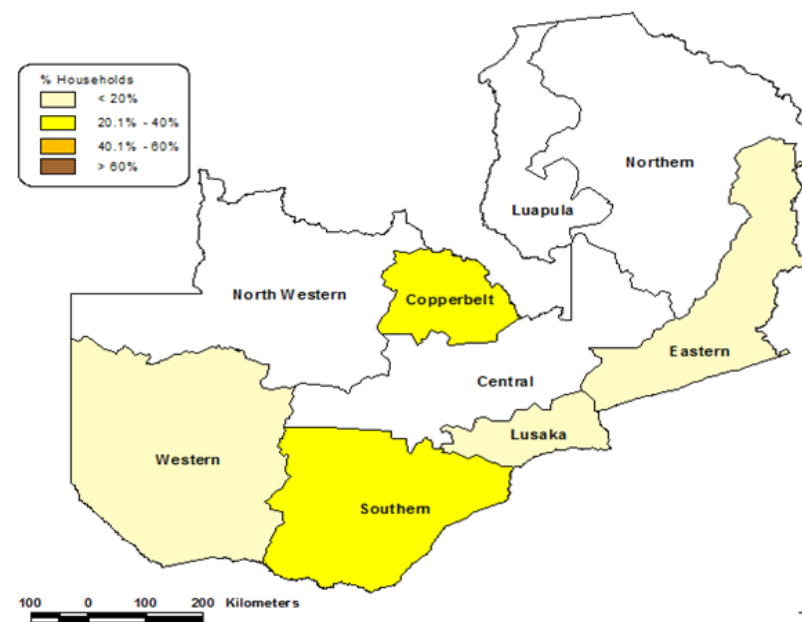
¹ In this analysis, a HDDS of 4.7 or lower is categorized as low dietary diversity; between 4.8 and 9 is categorized as medium dietary diversity; and a HDDS of 9 or higher is categorized as high dietary diversity.

Figure 1: Household dietary diversity by province, March and May 2017



Source: mVAM, May 2017

Map 2: Proportion of households with high dietary diversity, by province



Source: mVAM, May 2017



Dietary diversity improves for poorer households

There is a correlation between the proxy wealth indicators used in this report (wall and roof types of household dwellings) and dietary diversity scores. Low dietary diversity was more prevalent among the worst-off households (those with walls made of sticks) than among households with mud or concrete walls. Similarly, sampled households whose housing structures had thatched grass roofs (those worst off) had a lower dietary diversity score than those with iron or concrete roofs.

However, low dietary diversity prevalence fell from 29.1 percent in March to 15.3 percent in May among households with walls made of sticks. The proportion of households with low dietary diversity in the thatched grass roof category also fell from 35.6 percent in March to 21.3 percent in May, showing a gradually improving situation for the worst-off households.

Figure 3a. Dietary diversity by wall type

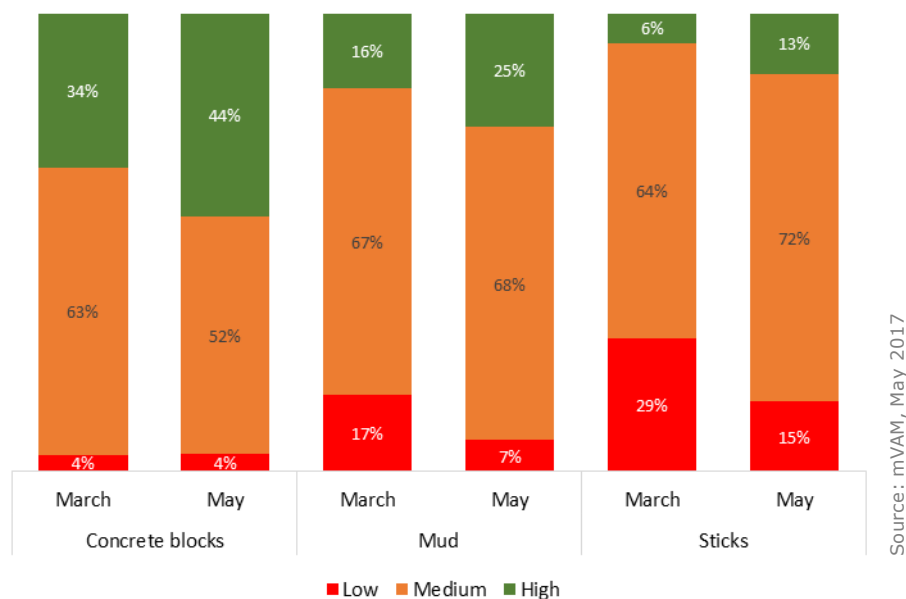
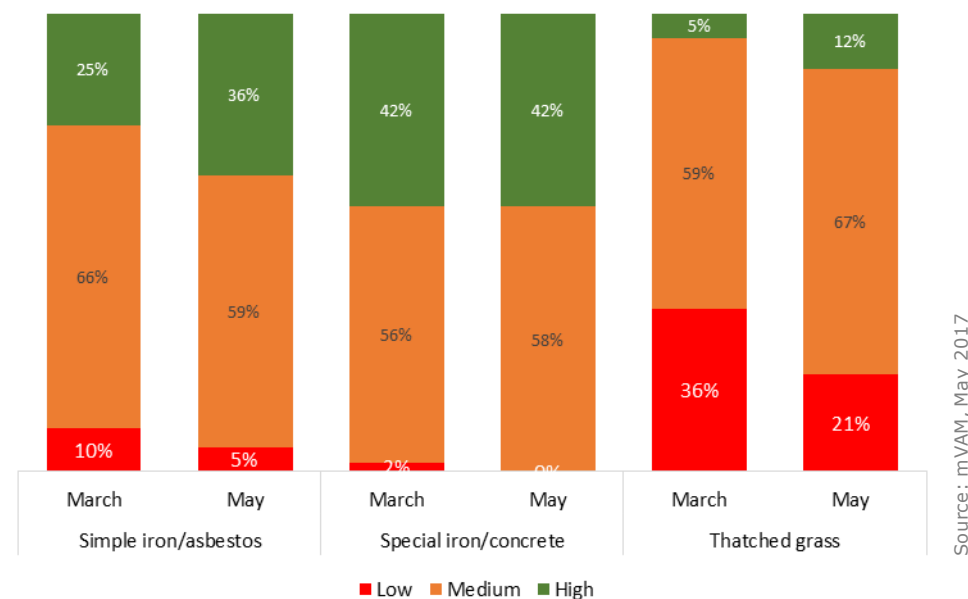


Figure 3b. Dietary diversity by roof type



Households remain positive about improved access to food

Most sampled households were optimistic about their food access following the main harvest. Post-harvest losses caused by poor or inadequate storage facilities pose a potential threat to household food security despite the surplus production. This challenge will remain for much of the 2017/18 consumption season.



Maize prices fall as consumption of own production increases

Maize prices have continued to fall in all monitored districts thanks to increased supply from the surplus 2017 production. Compared to April, maize was markedly cheaper in May in Nakonde in Mafinga province (down 34 percent); Mpongwe in Copperbelt (down 30 percent); Chipata (down 27.3 percent) and Petauke (down 27.1 percent) in Eastern province; and Kaoma in Western province (down 25.1 percent). Prices are expected to fall further in June as the harvest progresses.

The combined average maize price for the 24 districts monitored under the May trader survey is ZMK1.76/kg – 25 percent less than in April. Even so, the average price is still 12.8 percent higher than the national five-year average maize price for the period May 2011 to May 2016 (source: FAO GIEWS).

Map 3: Maize prices by district (ZMK/kg), May 2017

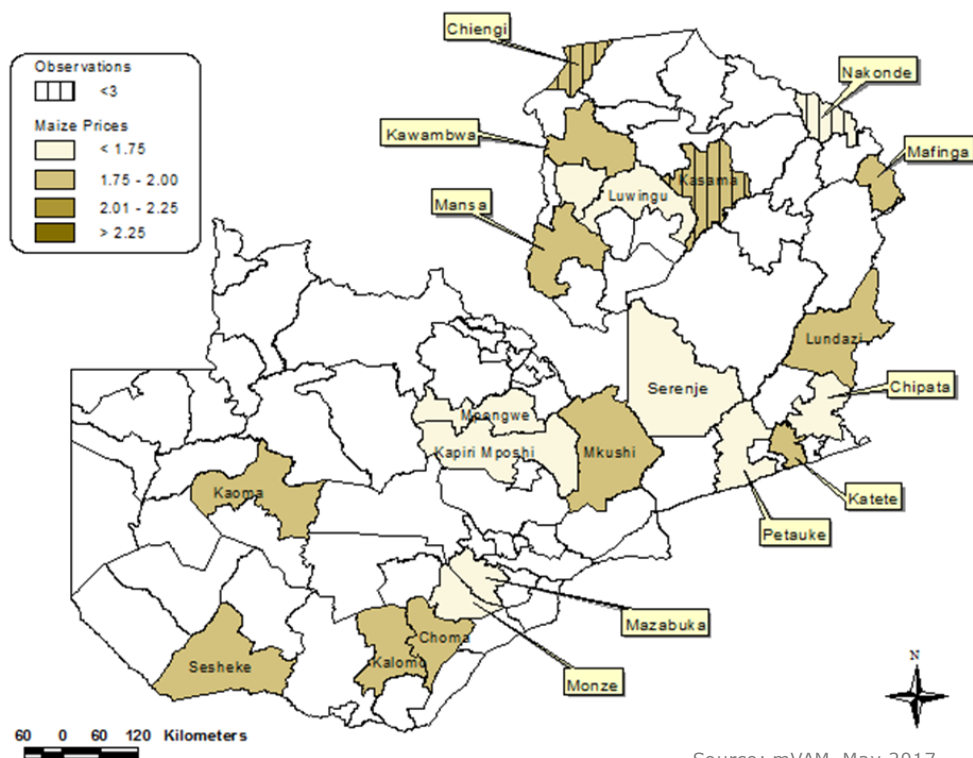
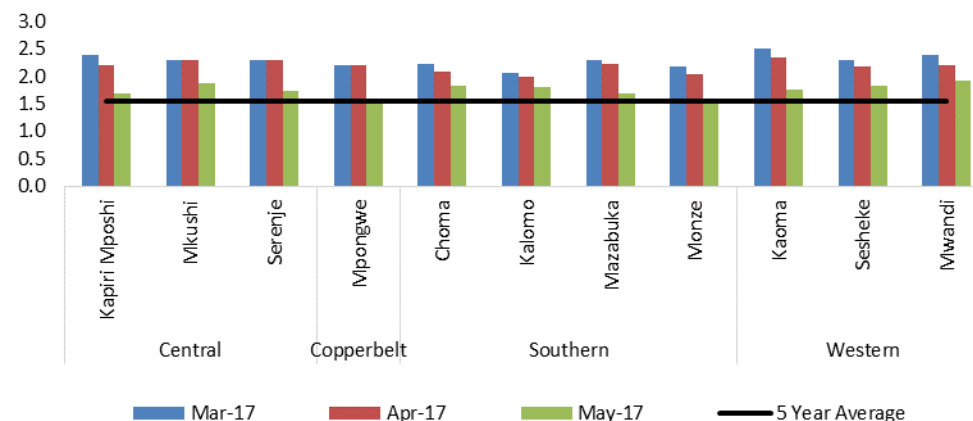
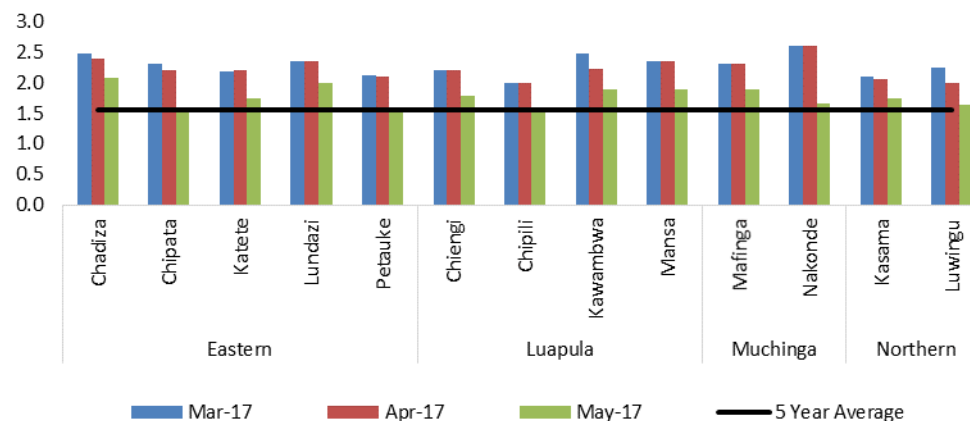


Figure 4a: Maize prices (ZMK/kg) in monitored districts within Central, Copperbelt, Southern and Western provinces



Source: mVAM, May 2017

Figure 4b: Maize prices (ZMK/kg) for monitored districts in Eastern, Luapula, Muchinga and Northern provinces



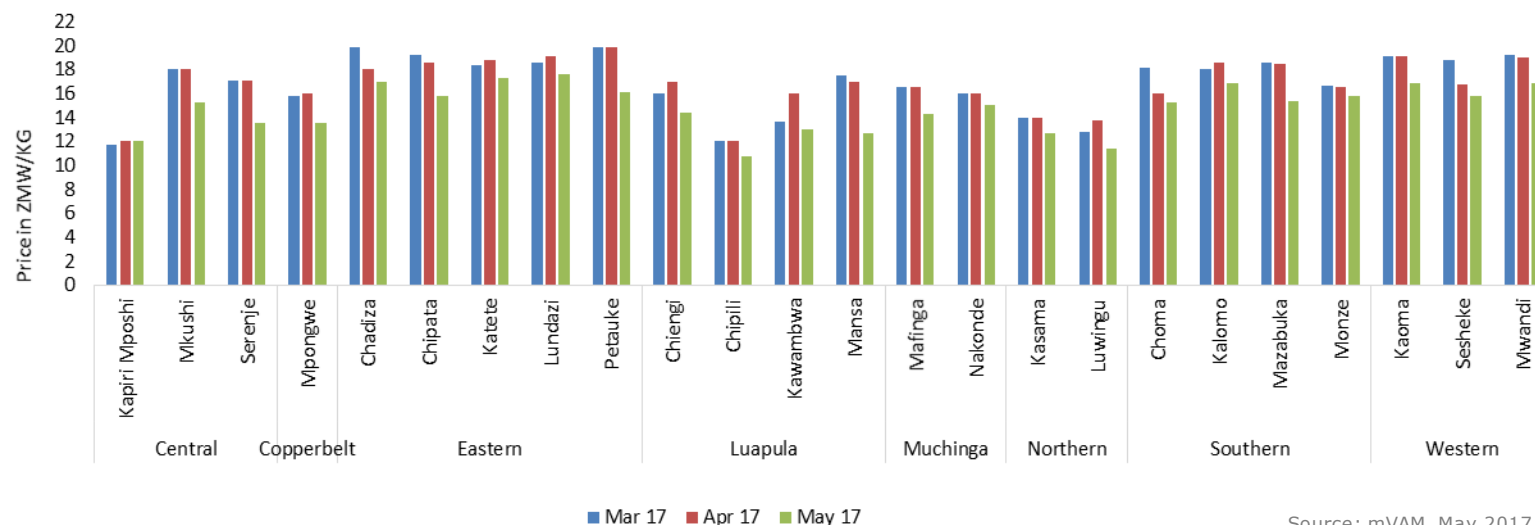
Source: mVAM, May 2017



Lower bean and groundnut prices as supply increases

Bean prices fell in all but one monitored district between April and May, thanks to increased supply (**Figure 5**). Prices varied across the districts with marked reductions in Mansa in Luapula (down 28 percent), Serenje in Central (down 20.2 percent), Kawambwa in Luapula (down 18.6 percent) and Petauke in Eastern (down 18.4 percent). Only Kapiri Mposhi in Central recorded stable bean prices between April and May, a situation likely to change as consumption of own produced legumes increases in June. The price stability in Kapiri Mposhi is attributed to increased demand as the district is a major transit point which most likely attracts buyers from outside the district.

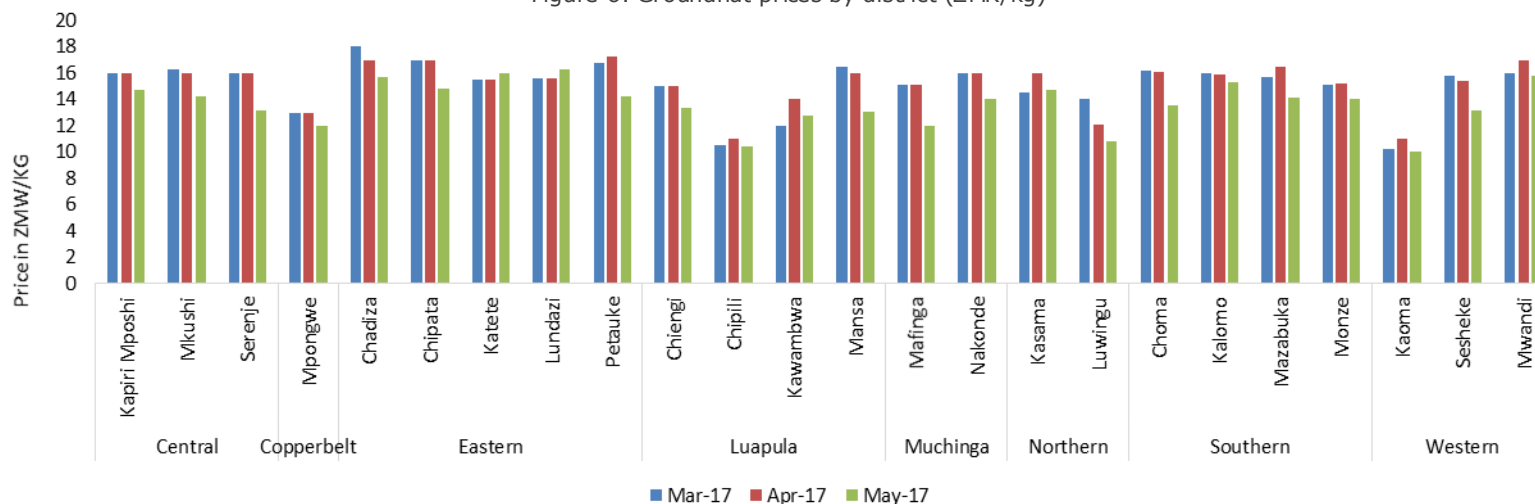
Figure 5: Bean prices by district (ZMK/kg)



Source: mVAM, May 2017

Groundnut prices fell in most monitored districts in May, except in Lundazi and Katete in Eastern Province (**Figure 6**). Prices fell sharply in Mafinga in Muchinga (down 20 percent), Petauke in Eastern (down 17.5 percent) and Choma in Southern (down 16 percent). These reductions are largely attributed to increased supply from 2016/17 production. Prices are expected to continue to fall as households consume more of their own produced groundnuts, thereby lessening dependency on markets.

Figure 6: Groundnut prices by district (ZMK/kg)



Source: mVAM, May 2017



Respondents are worried about not having enough food

"Food is difficult to have here because many people are unemployed and are lacking farming inputs" - Male respondent from Chongwe, Lusaka Province

"The food situation is okay because of the bumper harvest this year" - Male respondent from Mambwe, Eastern Province

"The situation is manageable and affordable. Vegetable prices are fair and one cannot sleep on an empty stomach"
- **Female respondent from Chililabombwe, Copperbelt Province**

*"There is food though it's not enough to an extent that it can even sustain people for the whole year" - **Female respondent from Sesheke, Western Province***

*"Food is not really a challenge due to the fact that people have harvested thereby reducing the prices of different products on the market" - **Male respondent from Livingstone, Southern Province***

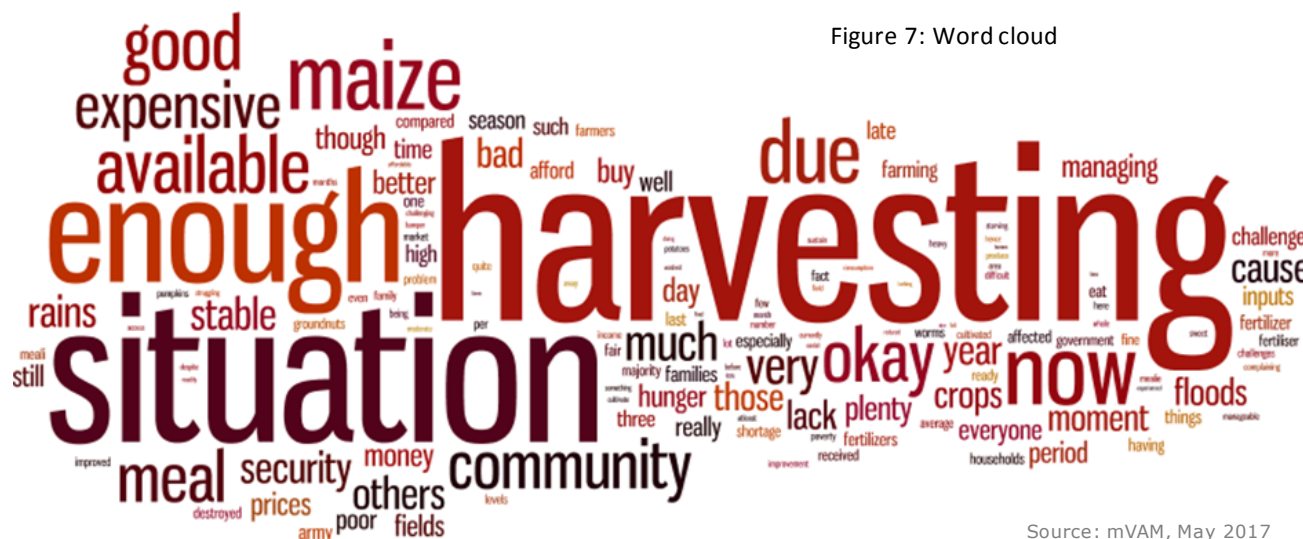


Figure 7: Word cloud

Source: mVAM, May 2017

Methodology

In January 2017, household food security data collection commenced in Zambia under WFP's mobile Vulnerability Analysis and Mapping (mVAM) initiative using Computer Assisted Telephone Interviews (CATI). Data was collected from 1,000 respondents from 12 districts in 5 provinces: Copperbelt (Ndola and Chililabombwe), Eastern (Mambwe and Petauke), Lusaka (Chongwe and Rufunsa), Southern (Choma, Gwembe and Livingstone) and Western (Kalabo, Mongu and Sesheke). Participants were randomly selected from a database of mobile subscribers. An airtime credit incentive of US\$0.50 (ZMK4.90) was given to respondents who successfully completed the survey.

In May, data were collected on household dietary diversity instead of food consumption and coping strategies. The data were weighted by the number of mobile phones owned by the household and district population estimates. WFP Zambia's in-house call centre – operational since May 2016 – also conducts telephone interviews with traders to collect weekly information on the prices of foods including maize, rice, groundnuts, cassava and beans, as well as information on general food availability and market accessibility. The surveys are carried out with a sample of 51 traders across 24 districts. Phone surveys contain inherent response biases; therefore, the bulletin reports patterns and trends rather than precise estimates.

Table 1. Bean, maize and groundnut prices in surveyed districts (ZMK/kg)

Districts	Beans			Maize			Groundnuts		
	Current	17-Apr	% Change	Current	17-Apr	% Change	Current	17-Apr	% Change
Kaoma	16.80	19.15	-12.27	1.76	2.35	-25.11	10.00	11.00	-9.09
Sesheke	15.78	16.73	-5.68	1.82	2.17	-16	14.60	15.40	-5.19
Kapiri Mposhi	12.00	12.00	0	1.69	2.20	-23.18	14.75	16.00	-8
Mkushi	15.28	18.00	-15	1.88	2.30	-18	14.20	16.30	-13
Serenje	13.56	17.00	-20.24	1.74	2.30	-24	13.11	16.00	-18
Chadiza	17.00	18.00	-5.56	2.08	2.40	-13.33	15.68	17.00	-8
Chipata	15.82	18.52	-14.58	1.60	2.20	-27.27	14.78	16.92	-12.65
Katete	17.33	18.80	-7.82	1.75	2.05	-14.63	16.00	15.50	3.23
Lundazi	17.60	19.09	-7.81	1.99	2.40	-17.1	16.33	15.57	5
Petauke	16.15	19.80	-18.43	1.53	2.10	-27.14	14.25	17.28	-17.53
Chiengi	14.40	17.00	-15.29	1.78	2.20	-19	13.40	15.00	-11
Chipili	10.70	12.00	-10.83	1.60	2.00	-20	10.38	11.00	-5.64
Kawambwa	13.02	16.00	-18.63	1.89	2.23	-15.25	12.76	14.00	-8.86
Mansa	12.64	17.50	-28	1.88	2.30	-18.26	13.09	16.50	-21
Kasama	12.65	14.00	-10	1.75	2.05	-14.63	14.75	16.00	-8
Luwingu	11.35	13.76	-17.51	1.64	2.00	-18	10.85	12.08	-10.18
Choma	15.25	16.00	-4.69	1.82	2.09	-12.92	13.53	16.10	-15.96
Kalomo	16.87	18.60	-9.30	1.80	2.00	-10.00	15.33	15.90	-3.58
Mazabuka	15.36	18.43	-16.66	1.70	2.23	-23.77	14.11	16.47	-14.33
Monze	15.80	16.50	-4.24	1.54	2.05	-24.88	14.00	15.20	-7.89
Mpongwe	13.50	16.00	-15.63	1.55	2.20	-30	12.00	13.00	-8
Mafinga	14.25	16.50	0	1.88	2.30	-18.26	12.00	15.00	-20.00
Nakonde	15.00	16.00	-6	1.65	2.50	-34.00	14.00	16.00	-13
Mwandi	16.85	19.00	-11.32	1.93	2.20	-12.27	15.75	17.00	-7.35



For further information

Allan Mulando allan.mulando@wfp.org
Arif Husain arif.husain@wfp.org
Andrew Odero andrew.odero@wfp.org

mVAM Resources:

Website: http://vam.wfp.org/sites/mvam_monitoring/
Blog: mvam.org
Toolkit: <http://resources.vam.wfp.org/mvam>



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