

SPECIAL REPORT

FAO/WFP CROP AND FOOD SUPPLY ASSESSMENT MISSION TO ZIMBABWE

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Mission Highlights

- This year, the combined impacts of adverse weather and severe economic constraints in Zimbabwe have induced hardship and food insecurity among both rural and urban populations, especially in areas where the current season's production losses are greatest.
- National cereal production in 2007 is estimated to be 44 percent down on last year's government estimate, resulting in a significant national food gap. Those who lost their crops due to extended dry periods and below-normal rainfall in different parts of the country will be particularly affected.
- The Mission estimates a harvest of 799 000 tonnes of maize and 126 000 tonnes of small grains for the main cropping season of 2006/07. Maize output is estimated to be 46 percent lower than last year and 13 percent lower than the year before. Primary factors responsible for these declines, in addition to adverse weather, were shortages of key inputs, deteriorating infrastructure, especially for irrigation, and most importantly, financially unprofitable prices for most of the government controlled crops.
- A structural decline in national agricultural production over the last 6-7 years is also due to the inability by newly settled farmers to utilize all the prime land allocated to them. The settlement farmers were able to cultivate only about 30 to 55 percent of their total arable land owing to shortages of tractor/draught power, fuel, and fertilizers, under-investment in infrastructure/improvements, lack of incentive because of price controls, and absenteeism on the part of settler beneficiaries. Following the land reform programme, based on CSO data, the large-scale commercial sector now produces less than one-tenth of the maize that it produced in the 1990s. Large-scale commercial maize production now accounts for less than 5 percent of the country's total maize production.
- Based on the Mission's estimates, domestic availability of cereals for consumption in 2007/08 is about 1.287 million tonnes, and the total utilization of cereals 2.339 million tonnes including 1.928 million tonnes for direct human consumption using the GOZ/CSO projected population of 11.83 million. The resulting cereal import requirement is estimated at 1.052 million tonnes, of which maize deficit accounts for 813 000 tonnes.
- Hyperinflation has surpassed 3 700 percent mark and has drastically reduced the purchasing power of households, greatly limiting access to available supplies for low- and middle-income and vulnerable people. In parallel, the ever-plummeting exchange rate of the local currency in parallel markets has caused shortages of foreign currency and reduced the country's ability to import fuel, electricity and other capital goods.
- Given the acute shortage of foreign exchange, the dwindling export base, and current very high prices for maize in the region, the Mission estimates that total commercial cereal imports will amount to 700 000 tonnes, leaving an uncovered deficit of 352 000 tonnes of maize. Commercial imports include 400 000 tonnes maize which have already been contracted from Malawi, 217 000 tonnes of wheat, 22 000 tonnes of rice, and an additional 61 000 tonnes of maize is expected to be imported by individuals and petty traders through informal channels and in-kind remittances from South Africa, and possibly also from Mozambique and Zambia.
- As was done in an earlier crisis year, the Mission recommends that the food imports by private-sector be allowed, with a clear policy statement on government import plans to allow the residual imports by others to help offset food shortages in the country.
- The Mission also recommends that farmer-to-farmer grain sales be allowed in order to reduce transport costs and save on scarce fuel. In addition, an increase from 3 to 5 month consumption requirement for a family should be permitted through GMB distribution points to ensure that proceeds from the sales of large animals are not lost to inflation.
- The Mission estimates that 4.1 million people, both urban and rural, will require food assistance amounting to 352 000 tonnes of cereals in 2007/08. The Mission recommends this amount as an emergency food aid for population severely affected by the current crisis in the priority geographic areas. The mission also recommends an additional 90 000 tonnes of non-cereal food aid to meet minimum daily calorie requirement of 2 100 Kcal for the most vulnerable people. For people not included in relief assistance, it is assumed that the GMB supplies will function "normally" and households will use their own resources to access food at designated prices.
- The Mission also recommends government and international community assistance to supply good quality seed and fertilizer, and dipping chemicals for the control of tick-borne livestock diseases. Appropriate varieties of maize and small-grain seed also need to be sourced urgently for delivery in September 2007.

- To deal with the structural food deficit and chronic shortage, it is recommended that the international community and the Government enter into a policy dialogue to mobilize the economic and other assistance needed to promote sustainable food production and overall food security by way of development assistance for investment in farm mechanization and farm-level infrastructure (for example, improved tractor availability and rehabilitation of irrigation facilities) to enhance productivity and allow fuller capacity utilization by the newly settled farmers. In line with the economic liberalization policy goal announced by the Governor of the Reserve Bank of Zimbabwe in April 2007, the Mission also supports reforms of the grain marketing system, in order to protect farmers with minimum prices and to allow private sector participation.

1. OVERVIEW

Zimbabwe experienced severe dry spells and generally unfavourable rainfall during the 2006/07 cropping season, compounding devastating effects of the unprecedented decade-long economic decline. Half-way through the season the Government had declared 2007 as a drought year. Against this backdrop an FAO/WFP Crop and Food Supply Assessment Mission was invited by the Government to visit the country from 25 April to 18 May 2007 to estimate the 2007 production of the main cereals and pulse crops, assess the food security situation in the country and determine the food import requirement, including food assistance needs, for the current marketing year 2007/08 (April/March).

In Harare, the Mission held meetings with the Ministry of Agriculture and Rural Development (MoA), UNDP Resident Coordinator, FAO sub-Regional Representative and other FAO officials, WFP Representative and Country Director and other WFP officials, World Bank, FEWSNet, Zimbabwe Meteorological Department, Central Statistics Office, Commercial Farmers Union (CFU), Zimbabwe Commercial Farmers Union (ZCFU), Zimbabwe Farmers Union (ZFU), Selected Millers, fertilizer and agricultural input supply companies, and some of the international and national NGOs.

During field visits the Mission was accompanied by observers from SADC and FEWSNet. It was assisted and guided by senior specialists from the Department of Agricultural Research and Extension (AREX) and other staff of MoA, the Grain Marketing Board (GMB), Department of Meteorology and Ministry of Planning and Social Welfare along with four FAO staff members from the country and two staff members from WFP country office. The Mission, divided into four groups, travelled for about 10 days to all eight provinces covering 32 out of the country's 58 rural districts. The districts to be visited were carefully selected using a range of criteria including agro-ecological, marketing and vulnerability considerations. In each province and district, the teams met with administrative authorities (the Governor of the Province, and the AREX officials). After these meetings, the sub-teams travelled to 3 to 6 selected wards covering poor, average and good production potential and livelihood means. Brief observations on urban and peri-urban plots of crops were made in Harare and Bulawayo. Careful attention was paid to selected farms in all six sectors of farming covering the communal, resettled, and commercial farming areas as much as possible. The Mission also visited markets and interviewed some petty traders. The Mission also relied heavily on the remote sensing analysis and data on rainfall, vegetation indices and various interim assessment reports.

The Mission had access to the AREX's own pre-harvest crop assessment carried out in mid-March. This information was used as the basis for verification. Livestock conditions were observed and investigated en route and in the districts visited. Field assessments were made regarding household food security, vulnerability, coping mechanisms and social welfare programmes. The crop production and vulnerability situation obtaining this year was compared with previous years to get a relative historical perspective. Data and information received from secondary sources were reviewed against data, information and insights obtained during field visits in arriving at the estimates made by the Mission.

The Mission used national, provincial and district production data and combined this with information obtained from household and focus-group discussions. Potential income from cash crop and livestock production/sales was used to draw conclusions about status of food security and the corresponding impacts of the production failure.

The 2006/07 agricultural season was characterized by a late start of effective planting rains, frequent dry spells and generally below-normal soil moisture conditions gradually getting worse from the north of the country to the south. Farmers often had to replant on many occasions as previous plantings were largely destroyed due to lack of moisture. In many areas in the southern half of the country there was a total crop failure. Rains in northern provinces were favourable. Mashonaland Central and Mashonaland West, the two northern provinces, received normal to above-normal rainfall which was nevertheless below last year's good

rainfall. Rather heavy rainfall received in most parts of the country in late March-early April was helpful in saving some late-planted crops from failure, and in improving grazing conditions and water availability for livestock.

The area planted to various grains, including maize, in 2006/07 main season was down by about 6 percent but aggregate cereal yield was down by almost 40 percent resulting in total cereal production drop from last year's Government estimate by about 44 percent. Overall, the area planted in the communal areas to maize, the predominant crop in this sector, declined by over 8 percent. There was some increase in the area planted to crops in the large-scale and small-scale commercial sectors in 2006/07 as seed availability was relatively better for this category of farmers. However, the long-term decline in the large-scale commercial sector has been dramatic, mainly due to land reform activities. It is also striking to note that land utilization (i.e. cultivated land as a percent of total arable land) of the resettlement farms (old and new) is only about 30 to 55 percent. There are severe input, infrastructure and economic constraints that prevent new farmers from realizing the full potential of the basic land resource.

The Mission estimates the 2007 main cropping season harvest at 799 000 tonnes of maize and 126 000 tonnes of small grains. Maize output this year is estimated to be 46 percent lower than last year and 13 percent lower than the year before. Winter wheat is now being planted and is forecast to be slightly down to 128 000 tonnes compared to last year's 144 000 tonnes. However, the mission learned that the winter wheat planting was behind schedule and if the Government's plans to provide key inputs such as electricity and fuel for irrigation do not materialize the wheat harvest later this year could be severely compromised. Thus total cereal production (i.e., maize, small grains, wheat and a small quantity of rice) of 1.06 million tonnes is about 60 percent of last year's production. The reasons for the decline include reduction in both yield and area planted due to poor rainfall performance, lack of availability of key inputs such as fertilizer, fuel, tractor or oxen power for tillage, and most importantly, financially unprofitable prices for most of the controlled farm products including most cereals.

Based on the estimated main season cereal output, projected wheat production and an opening stock of 182 000 tonnes of all cereals, the total cereal import requirement in 2007/08 (April/March) is estimated at 1.052 million tonnes, of which maize constitutes 813 000 tonnes.

In view of low export earnings from tobacco (mainly due to lower production) and cotton, and considering the competing claims on the extremely limited foreign exchange by the critically needed imports of fuel and electricity as well as the servicing of the external debt, the Government's ability to import maize in 2007/08 is apparently very limited, and the sources of foreign exchange are severely stressed. It is understood that the Government has made a contractual agreement with Malawi to acquire 400 000 tonnes of maize. Given the priority accorded to food imports it is assumed that the Government will make every effort to import total requirements of wheat and rice. An additional 61 000 tonnes of maize imports are assumed, mostly as a residual item, by informal cross-border trade and some through remittances in kind. Thus the total commercial imports are assumed at 700 000 tonnes of cereals (comprising 639 000 tonnes of formal GoZ imports and residual 61 000 tonnes of informal cross-border imports) leaving an uncovered gap of 352 000 tonnes. The Mission recommends this amount as an emergency cereal aid, which reconciles with the estimated cereal assistance requirements of the vulnerable households. An additional 90 000 tonnes of non-cereal emergency food aid is recommended to reach the recommended 2 100 kcal per person per day. The calculated relief needs are based on vulnerability criteria, on the assumption that markets will function "normally" and households will use other resources to meet their own food needs. Consistent with food security and vulnerability analysis, relief beneficiaries will vary by season, starting at 2.1 million in July and reaching up to 4.1 million people at the height of the hunger season in January-March 2008.

2. SOCIO-ECONOMIC SETTING¹

2.1 The general setting

Economy: Zimbabwe's economic decline continues unabated. The country's economy has been shrinking each year for about a decade now with the real gross domestic product (GDP) shrinking by about 42 percent between 1998 and 2006. The key economic indicators since 2000 are presented in Table 1. Unemployment and under-employment are rampant, with urban unemployment especially becoming critical in recent years. Even before the 2002 crop failure, 75 percent of the country's population was classified as poor and about 42 percent as very poor. Poverty has become worse in view of the consecutive depressed harvests and a

¹ The Section is based on a variety of sources including publications and unpublished reports of FAO, UNDP, Government of Zimbabwe, and the Country reports of Zimbabwe by the Economist Intelligence Unit.

phenomenal rise in the cost of living relative to the Zimbabwe dollar. The poor include the rural population of small farmers, most of the informal sector workers, former farm workers, and the urban unemployed or under-employed. Successive crop failures, severely constraining people's coping mechanisms, have compounded people's deprivation. According to the policy statement by the Governor of Reserve Bank of Zimbabwe made on 26 April 2007 "the lack of balance of payment support, lack of investment flows and subdued tourism inflows" have had significant negative impact on the economy.

Inflation figures are shocking every time they are announced as they reach a new high every month. In January 2006 the consumer price inflation was measured at 613 percent; by April 2007, it had reached a new record of 3714 percent. The rise in monthly salaries, however, lags way behind the inflation consequently reducing purchasing power of incomes almost daily. The monthly salary of a teacher for example is about Z\$ 300 000 (about US\$ 10) when transport cost to work alone can be a significant part of that. The minimum wage rate for farm workers was Z\$32 000/month before 1st of May 2007; it has now changed to Z\$96 000. The wage rate offered by farmers to workers, however, is often not enough to cover the worker's minimum consumption needs. These workers are in some cases allowed to seek additional casual work elsewhere or perform overtime on the same farm.

The exchange rate story mirrors that of inflation. The Zimbabwe dollar was redenominated in August 2006 when the currency was devalued by 60 percent, three zeros were removed from the currency and the new official exchange rate with US\$ was set at 250:1. This official rate is still in effect, although different intermediate rates are allowed for certain purposes. The parallel market exchange rate has gone up from 1 500 in August 2006 to its current (mid-May 2007) rate of about 30 000. This anomaly has exacerbated the hard-currency shortages in the official system as much of the incoming foreign exchange finds its way into the parallel market.

Table 1: Zimbabwe - Key economic indicators, 2000–2007

	2000	2001	2002	2003	2004	2005	2006	2007 exp
Real GDP change (% year on year)	-4.9	-8.4	-5.6	-10.6	-4.2	-7.7	-4.4	-2.7
Agricultural GDP growth rate (%)	3.2	-3.9	-22.7	-1	-2.9	-9.5	-4	--
Consumer price inflation; avg (%)	57	75	135	385	381	267	1034	2200 ^a
Agricultural exports, (US\$ m)	857.9	832.9	646.6	516	384.2	335.9	372.7	--
Tobacco (US\$ m)	548.8	594.1	434.6	321.3	226.7	203.8	206.9	up
Sugar (US\$ m)	95.7	70	64.1	54.8	53.9	43.1	81	down
Horticulture (US\$ m)	125.4	119.1	126.7	118.7	84.1	75.9	61.7	-
Total Exports (US\$ m)	2 202.9	2 113.7	1 802.3	1 669.9	1 684.2	1 606.1	1 734.4	1 900 ^b
Total Imports (US\$ m)	1 907.3	1 791.2	1 820.5	1 778.2	1 989.4	1 994	1 965.7	2 100 ^b
Trade Deficit in million US\$	-295.6	-322.5	18.2	108.3	305.2	387.9	231.3	200 ^b
Total external debt (US\$ bn)	3.8	3.6	3.9	4.5	4.8	4.3	4.4	--

a. = The year-on-year inflation rate for April 2007 (CSO)

b. = The 2007 trade estimates from EIU.

Source: Trade statistics from the Reserve Bank of Zimbabwe; Others - Economist Intelligence Unit (EIU) and Central Statistical Office (CSO).

External trade and food import potential: Zimbabwe is currently in the grip of worsening crises due to shortages of fuel, electricity, and water. Production of tobacco, the country's main agricultural export commodity, reached an all-time low in 2006. Prospects for 2007 are somewhat improved with expected recovery in production. The sugar sector, on the other hand, is expected to perform poorly in 2007. The country's official foreign exchange reserve position is precarious. According to an unofficial estimate, the foreign currency reserves with the Reserve Bank of Zimbabwe are extremely limited, perhaps to the tune of merely US\$ 10 million with a possible import cover of about 12 days. It is clear that the foreign exchange crisis will persist during 2007/08 as the import demand will continue to be high in view of the need to import large quantities of fuel, electricity, and other essential capital and intermediate goods in addition to food and having to make payments on the mounting debt. Sluggishness in tourism and manufacturing sectors continues but the outlook for gross export revenues during 2007/08 is somewhat better, given the expectations of higher tobacco, platinum, gold and diamond sales. One source of foreign currency, remittances from abroad, seems to be favourable. Remittances are substantial; some estimates put them at

about US\$100 million per month. The Mission assumes, therefore, that the Government should be able to commercially import some of the needed food grains, essentially maize, wheat and rice, in 2007/08.

2.2 Agriculture in the national economy

Agriculture is the mainstay of the national economy. The majority of the country's population is engaged in agriculture that accounts for between 15 and 20 percent of the gross domestic product (GDP). It generates a large proportion of foreign exchange earnings, although the share of agricultural exports in country's total exports has come down from 39 percent in 2000 to 21 percent in 2006 (see Table 1).

Zimbabwe's land is divided into five natural zones on the basis of soil type and climatic factors. Natural regions 1, 2 and 3 are suitable for intensive crop cultivation and livestock raising, while regions 4 and 5 offer limited scope for crop agriculture but are suitable for livestock raising on a large scale. The bulk of Mashonaland (West, East and Central), Midlands and Manicaland Provinces are under regions 1, 2 and 3, while Matebeleland (North and South) and Masvingo Provinces are under natural regions 4 and 5. The three Mashonaland Provinces constitute the bread-basket of the country. Zimbabwe's farming sector can produce, and has produced in the past, exportable surpluses of maize and certain other food crops. But, as described earlier, severe constraints on prime land utilization have resulted in less than full capacity utilization of its natural resources.

Agricultural Policy: Current agricultural policy has adversely affected production of maize and wheat due to unintended market distortions. There seems little incentive for farmers to produce beyond their subsistence needs, given the lack of alternative marketing channel and price controls with static procurement prices in an environment of hyperinflation resulting. The Grain Marketing Board (GMB), a Government monopoly agency, buys and sells major cereals at controlled prices. The maize purchase price during 2006/07 marketing season at Z\$52 000/tonne (equivalent to about US\$ 5 per tonne at the parallel market exchange rate at the time) was below the prices in the parallel markets. Purchase prices are announced at or after harvest, not at planting time. There are often delays in receiving payment. The current price of Z\$3 million per tonne with a possible bonus of additional Z\$1.2 million (equivalent to US\$140/t at parallel market exchange rate of 30 000), announced on 26 April 2007, is lucrative for now. However, the hyperinflation, over 3 700 percent in April 2007, will quickly erode the value of maize sold to GMB and again farmers may not have enough capital or incentive to invest in applying fertilizer and other improvements come next season. Maize is also sold at subsidised prices in various locations but the GMB supplies are widely reported to be irregular and inadequate; consequently food prices vary widely from one part of the country to another.

It is almost impossible to set all prices at all times in a controlled way that is fair to producers and consumers even with good intentions by the authorities. Hence liberalization of the marketing systems is the preferred solution. To this end a monetary policy statement made by the Governor of the Reserve Bank of Zimbabwe on 26 April 2007 – "As Monetary Authorities, we wish to re-assure the financial and other sectors of the economy that, as stated before, we remain committed to the nurturing, propagation and speeded gravitation towards a market-based economy as the guiding ideology of our landscape" - is a welcome one. Whether this leads to real liberalization of agricultural product markets, however, remains to be seen.

2.3 The Land Reform Programme

At the time of Independence in 1980, land distribution was as shown in Table 2.

Table 2. Land ownership pattern in Zimbabwe at Independence in 1980

Sector	Million hectares	% of total
Large-scale commercial	15.5	39.1
Small-scale commercial	1.4	3.5
Communal	16.4	41.4
National parks and urban	6.0	15.2
State land	0.3	0.8
Total	39.6	100.0

Land distribution in Zimbabwe since independence in 1980 has remained highly skewed. A land reform programme was initiated following independence to increase the access of the indigenous people to land. The first phase covered the period 1980 to 1998; during which 3.5 million hectares of large-scale commercial farm land were acquired and 71 000 indigenous families were resettled on those lands. The second phase was initiated in 1998, but only a small area of 0.17 million hectares was acquired and 4 697 families were resettled. According to the Commercial Farmers Union data for 1995, the average size of large-scale

commercial farms (4 700 in total) was 3 000 ha as opposed to less than 30 ha for the communal and resettled area farms (862 000 in total). However, large-scale commercial farms being highly capital intensive and dependent on relatively low wage labour force (on average 40 workers per farm) contributed 80 percent of the national agricultural output. In July 2000, the “Fast Track” resettlement phase was launched to speed up land acquisition and resettlement. A law was enacted for the purpose, with compulsory acquisition and resettlement being the key focus. With the ongoing land reform programme, only about 500 or so large-scale commercial farms remain now. The large-scale farms are converted into smaller A.1 model farms (small subsistence farmers) and A.2 model farms (commercial medium and large farmers). These activities and processes have severely disrupted farming activities as many resettled farmers lack access to capital and other inputs or need time to settle down, contributing to severe under-utilization of land resource (see Table 3) and low production. They have also contributed to the significant decline in the national dairy and export beef herds.

Table 3. Agricultural land utilization, 2006/07 according to GoZ

Sector	No. of farmers	Arable land holding (ha)	Total arable land (ha)	Cultivated land (ha)	% land utilization
Communal	1 132 311	2.2	2 491 084	1 924 340	77
Old Resettlement	159 985	5	799 925	241 102	30
A1	145 000	5	725 000	357 134	49
A2	15 540	Variable	} 709 966	160 609	} 55
Small-scale commercial	29 902	Variable		115 636	
Large-scale commercial	920	Variable		112 541	
Total	1 483 658		4 725 975	2 911 362	62

Source: information provided by AREX

3. FOOD PRODUCTION IN 2007

3.1 Rainfall

Erratic rains in terms of both temporal and spatial distribution characterized the 2006/07 rainfall season. This can be attributed partly to the weak oceanic warming of the El Niño, which developed in the Eastern Equatorial Pacific in November, peaked in December, and continued till mid-February. Warming in the Eastern Equatorial Pacific Ocean is normally associated with low rainfall over the country.

The rains started rather earlier than usual in the first dekad of October, mainly over the Northeast, but the amounts received at this time were generally low, and most farmers had to wait until late November up to mid-December for effective rainfall for planting. Those who planted early were often obliged to re-plant or gap-fill, often several times, because of protracted dry spells at or following germination.

Rainfall variation within quite small areas in terms of temporal and spatial distribution was striking, and was reflected in a similar variation in crop performance. Many areas experienced long dry spells in January and February despite the fact that the average rainfall during these two months for the whole country was adequate. At the end of March there were heavy cyclone-related downpours in parts of the north of the country, but their arrival was too late to benefit any but very late-sown crops; they did, however, benefit pastures.

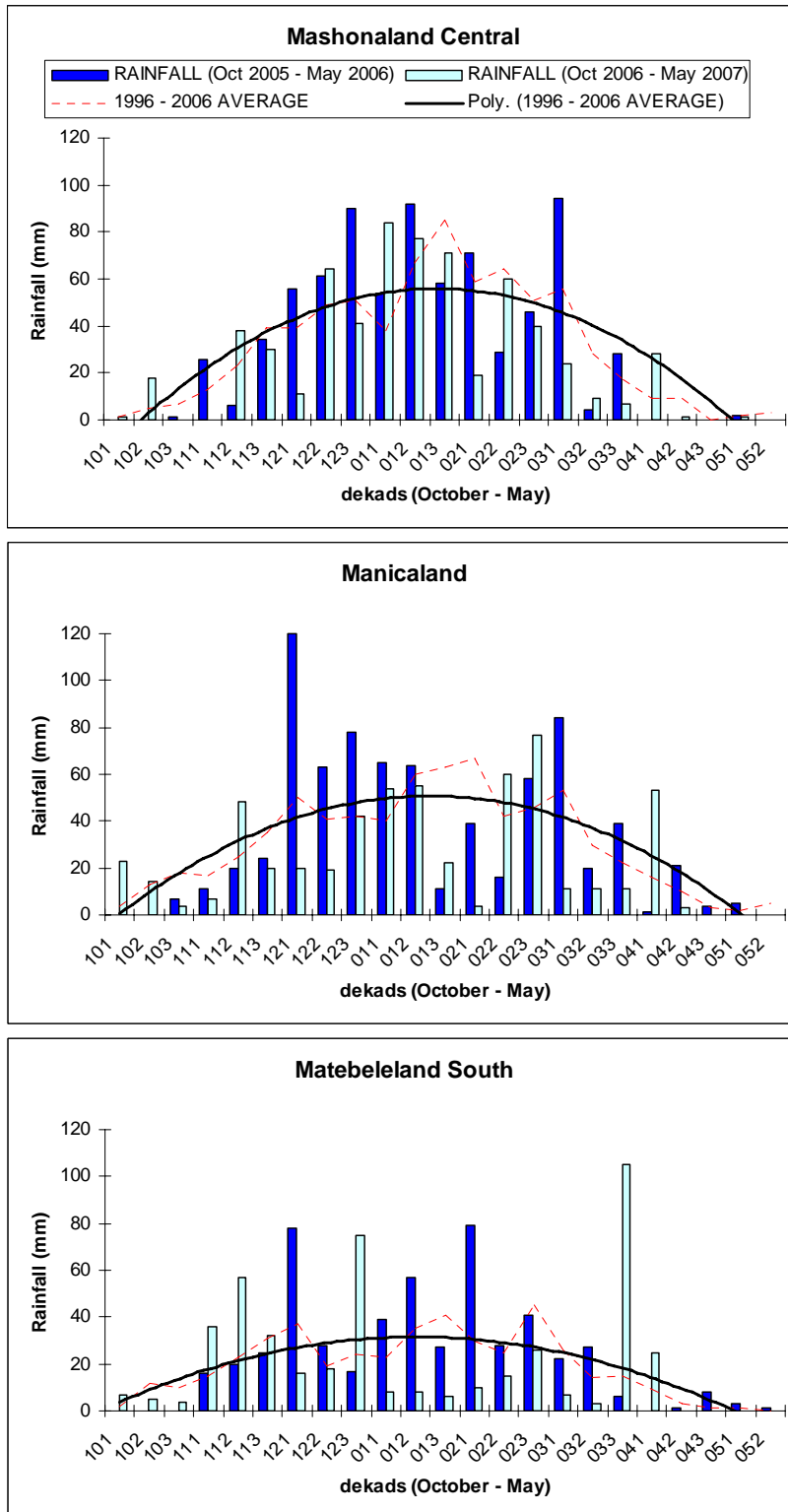
The averaged rainfall over the whole country between October 2006 and March 2007 was 556 mm compared with a long-term average for those months of 681 mm. Table 4 provides a comparison of average monthly rainfall amounts for this year, last year and the long-term average.

Table 4. Zimbabwe. Average monthly rainfall (mm), October - March

Month	2005/6	2006/7	Long-term
October	8	23	33
November	73	102	86
December	243	120	159
January	221	130	166
February	155	122	151
March	120	60	86
Total October - March	820	557	681

Source: Meteorology Department, Zimbabwe

Figure 1: Estimated dekadal rainfall for selected provinces, Mashonaland Central, Manicaland and Matebeleland South, in 2006/07 compared with 2005/06 and the 10-year average



Source: NOAA and FAO.

3.2 Inputs

For the past several years, supplies of maize seed in Zimbabwe have been adequate. In 2006 some nine seed houses produced a total of 43 675 tonnes consisting of 34 100 tonnes of hybrid seed and 9 575 tonnes of OPV seed. This year a tenth seed house entered the market and the total production is expected to rise to more than 50 000 tonnes, comprising 40 650 tonnes of hybrid and 10 000 tonnes of OPV seed. Farmers have access to seed through commercial purchase as well as on credit through Operation Maguta, GMB and

Agribank. In addition, large numbers of smaller farmers, especially in the communal sector, use retained seed, either solely or as a supplement to purchased or credit seed; this can often depress yields, particularly if progeny from hybrids is used. Table 5 shows the sources of seed used by farmers.

Table 5. Percentage of farmers getting maize seed by source, 2006/07

Province	GMB	Maguta	Agribank	NGOs	Own funds
Manicaland	4	19	1	6	70
Mashonaland Central	4	21	1	2	77
Mashonaland East	8	20	2	3	77
Mashonaland West	5	34	2	2	73
Matebeleland North	5	14	1	8	73
Matebeleland South	5	15	0	9	61
Midlands	7	18	0	11	83
Masvingo	3	26	0	13	77
Zimbabwe	5	21	1	7	75

Source: AREX

Note: Calculations computed from unrounded data.

The situation regarding fertilizer is less benign. National production of ammonium nitrate in 2006 was, at 250 000 tonnes, the lowest since 2002, and represented only 50 percent utilisation of capacity. Constraints were financial as the Sable factory depends on imported ammonia for its operations. 70 000 tonnes of fertilizer were imported from South Africa, and at least 50 000 tonnes of compound fertilizer from China. However, these imports were ordered late and arrived in the country after the beginning of the main cropping season with the result that in some areas it was already February before basal compound D was available. Therefore, not only were supplies very limited but much of the fertilizer that did eventually reach the agricultural areas was no longer of use for the current crop.

With the prevailing national pricing structures, fertilizer can often become a speculative commodity. With a high demand for fertilizer it can be more profitable for a farmer who has acquired fertilizer at the official price to sell it on at the black-market rate rather than to apply it to his crop. It appears that a lot of fertilizer that was received late may have been retained either for winter crops, for next season's maize, for cash crops with a higher value than maize, or possibly even for speculative purposes.

Operation Maguta, which is carried out by the army on behalf of the Ministry of Agriculture, provides inputs on credit to farmers who apply for it, and theoretically provides tillage services as well. Twenty-one percent of smallholder farmers availed of the scheme this year for seed and fertilizers, but partly because of the poor season and partly because of the late arrival of fertilizer, many will have difficulty repaying their loans. In several areas farmers express a reticence to apply to Operation Maguta because it is administered by uniformed soldiers.

Herbicides were not readily available this year, and those that were regarded as being prohibitively expensive. Herbicide use was therefore very low throughout the country and was largely confined to the larger farms, although under-utilisation was often very evident there too. It may be concluded that average maize yields were significantly compromised by weeds.

In 2000 there used to be about 20 000 operational privately owned tractors in the country and a further 2 000 with DDF. By 2005, the number of operational privately owned tractors had plummeted to about 2 000 and the number of DDF-owned ones had similarly fallen to about 200. By the beginning of the 2006/07 season it is likely that there were only about 2 000 operational tractors in the whole country. Measures were taken earlier this year to rectify this situation with the importation, financed through RBZ, of several hundred new tractors. An additional problem lies in the prevailing fuel price structure which militates against the use of tractors. Farmers can purchase diesel at 600 Z\$/litre, whereas other private consumers pay 30 000 Z\$/litre. It therefore becomes much more profitable for a farmer to sell on his cheap fuel to private buyers than to use it in his tractor.

With the decline in the country's tractor power, more reliance is placed on oxen for land cultivation. The slowness of oxen cultivation compared to cultivation using a tractor means, firstly, that a sizeable proportion of arable land goes untilled and reverts to fallow, and secondly, that tillage operations and planting are delayed. However, the recent announcement by the Governor of the Reserve Bank of Zimbabwe that "a total of 439 tractors, complete with their implements, and 19 combine harvesters have been imported into the country" should help reduce this constraint a little.

The difficulty of retaining good agricultural labour is sometimes cited, especially by A2 farmers, as a constraint to production. Until recently, the gazetted wage for farm labour was Z\$ 31 000 per month. Even when this rate was doubled at the farmer's own initiative and extras were added, such as meals, clothing and school fees, the package was unrealistically low. Where piecework is available nearby, farms regularly lose their wage labourers who find that they can earn in a day what they would otherwise earn in a month.

3.3 Pests and diseases

Crop pest and disease problems were mostly limited this year to a few localities, although relatively low incidences of maize stalkborer (*Busseola fusca*) were widely reported. In the Zambezi floodplain area of Muzarabani District in Mashonaland Central, much of the sorghum crop was devastated by the armoured cricket (*Acanthopplus discoidalis*), and there were also some reports of bollworm (*Heliothis armigera*) on cotton in the same area. Elsewhere, stinkbug was reported on cotton. An outbreak of armyworm (*Spodoptera* sp.) on maize in Guruve District, also in Mashonaland Central, was brought under control with damage restricted to about 300 ha.

Quelea birds are a perennial problem in many parts of the country, especially on sorghum crops, and wild animals, particularly elephants, frequently destroy crops planted near to game reserves.

The most commonly requested interventions by farmers that would bring about the most change are listed in Appendix II.

3.4 Area planted

Since the beginning of land reform, and particularly since the fast-track programme was introduced in 2002, there would appear to have been a general decline in the utilisation of arable land. Table 6 gives the Government's estimate of agricultural land utilisation by sector. This shows an overall utilisation of 62 percent across all sectors, which compares with a figure of 70 percent arising from a survey conducted by Agritex in 1984/85. However, it is the Mission's impression that the level of utilisation may in fact be even lower than is shown in Table 3, especially in the A2 and A1 sectors.

The several possible reasons for this decline include shortage of draught power, shortage of fuel, shortage of fertilizers, under-investment, lack of incentive because of price controls, and absenteeism on the part of settler beneficiaries. On A1 and, especially, A2 farms it is not unusual to find that the owner has a job in town or in the city, that he spends little time on his farm, and that the farm is regarded as being of secondary importance. Management on such farms is often far below the optimum, with the result that not only is a high proportion of the arable land unused but the productive part performs well below its potential.

This year, the maize and sorghum area was down slightly on last year, but the area under was less than 85 percent of last year's area. The erratic rainfall pattern and a shortage of tillage capacity were probably the cause of the overall reduction in cereal area. However, the greater reduction in the area under small grains appears to be attributed to a preference for maize despite the Ministry of Agriculture's encouragement of small grains in the drier areas that are more appropriate to their cultivation.

With regard to cash crops, the area under soya increased considerably this year to 60 000 ha from last year's 47 000 ha in response to the low price of maize. The proportional increase was greatest in the commercial sector which almost doubled its soya area from 10 000 ha to 19 000 ha. Tobacco and cotton have also registered small increases in area this year compared with last (see Figure 3) but it would appear that in the case of tobacco the increase is no more than a slight irregularity in a long-term downward trend.

3.5 Yields

The average national maize yield for 2006/07, at 0.49 t/ha, is significantly lower than the 0.87 t/ha achieved last year. Provincial averages ranged from a high of 0.82 t/ha in Mashonaland Central down to a low of 0.07 t/ha in Matebeleland South. Although maize yields were generally low throughout the country, there were very significant differences between provinces, not only with respect to yield *per se* but also with respect to yield reduction compared to last year. This trend strongly reflected the rainfall pattern. For example, the three south-eastern provinces, Midlands, Matebeleland North and Matebeleland South all had yields (see Table 7) that were less than 35 percent of those of last year, while the four provinces of the north and east - Mashonaland West, Central and East, and Manicaland - all had more than 60 percent of last year's yield. (Masvingo in the south-east had 54 percent.)

Sorghum showed a decline in average yield to 0.30 t/ha from the previous year's 0.38 t/ha. Pearl millet yields were similar to those of last year while those of finger millet were slightly lower. It is instructive to compare the average yield of pearl millet with that of maize in Matebeleland South. 52 000 ha of maize produced 3 600 t of grain, while 22 000 ha of pearl millet produced 6 600 t.

3.6 Estimated main season production

In estimating cereal production, the Mission used, with only some very minor modifications, the area figures obtained by AREX in its March 2007 Second Crop Assessment. For yields, the Mission took AREX's figures as a starting point and, where necessary, modified them in collaboration with AREX in the light of field observations.

Maize production for 2006/07 at 799 000 tonnes, was only 54 percent of the previous year's production. As can be seen from Table 6, the cropped area was only slightly smaller than in 2005/06, and yield was the main determinant of production. Production of small grains (sorghum and millets) was also substantially lower than last year; in this case, both cropped area and yield played a significant part in lowering production. Table 6 also shows the production figures for all summer cereals together, and Figure 2 shows the trends in national maize production over the last 14 years, using the FAO production data and alternatively using CSO data. CSO data in recent years has been controversial as it tends to overestimate production. The figure also includes respective regression lines that suggests significant decline in production since 1994, albeit with very large annual fluctuations.

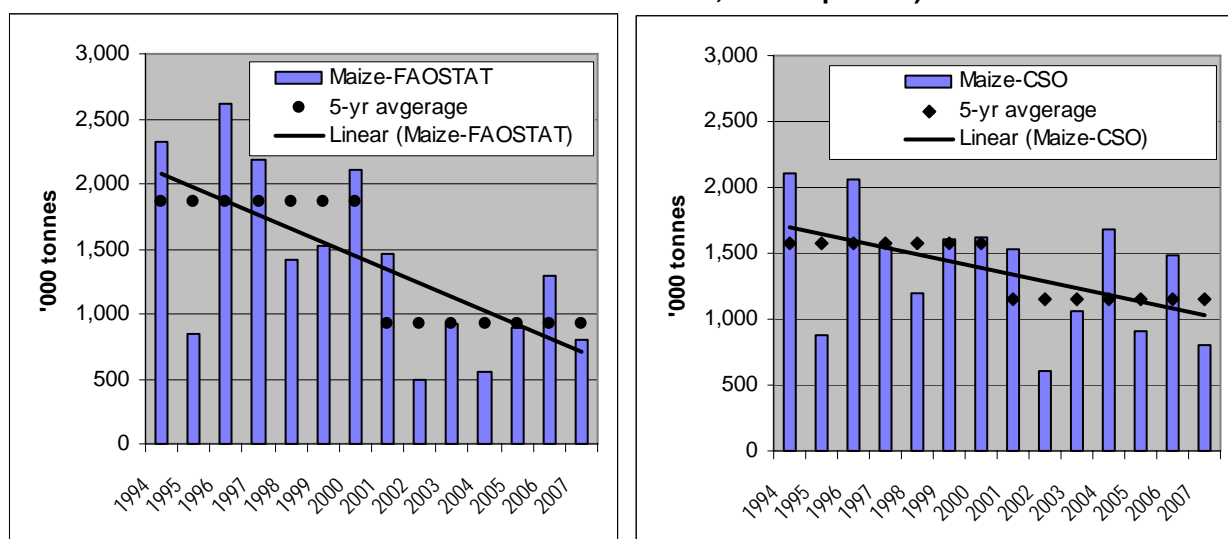
Table 6. Zimbabwe. Summer cereal production by crop, 2006/07*, and comparison with 2005/06

	Maize			Sorghum			Millet			All summer cereals		
	05/06	06/07	%	05/06	06/07	%	05/06	06/07	%	05/06	06/07	%
Area (000 ha)	1 713	1 626	95	265	255	96	233	194	83	2 211	2 076	94
Yield (t/ha)	0.87	0.49	57	0.38	0.30	79	0.27	0.26	95	0.75	0.45	60
Production (000t)	1 485	799	54	101	76	76	63	50	79	1 649	925	56

* A further 50 000 t of seed maize is expected to be produced commercially this year.

Note: Calculations computed from unrounded data.

Figure 2: Zimbabwe maize production 1994-2007 (as reported by FAOSTAT^{a/} in panel 1, and by the Central Statistical Office, GoZ in panel 2)



a/ Estimate for 2006 is from FAO/GIEWS and for 2007 from CFSAM Mission.

Table 7. Zimbabwe. Maize production estimates by province for 2006/07, and comparative figures for 2005/06*.

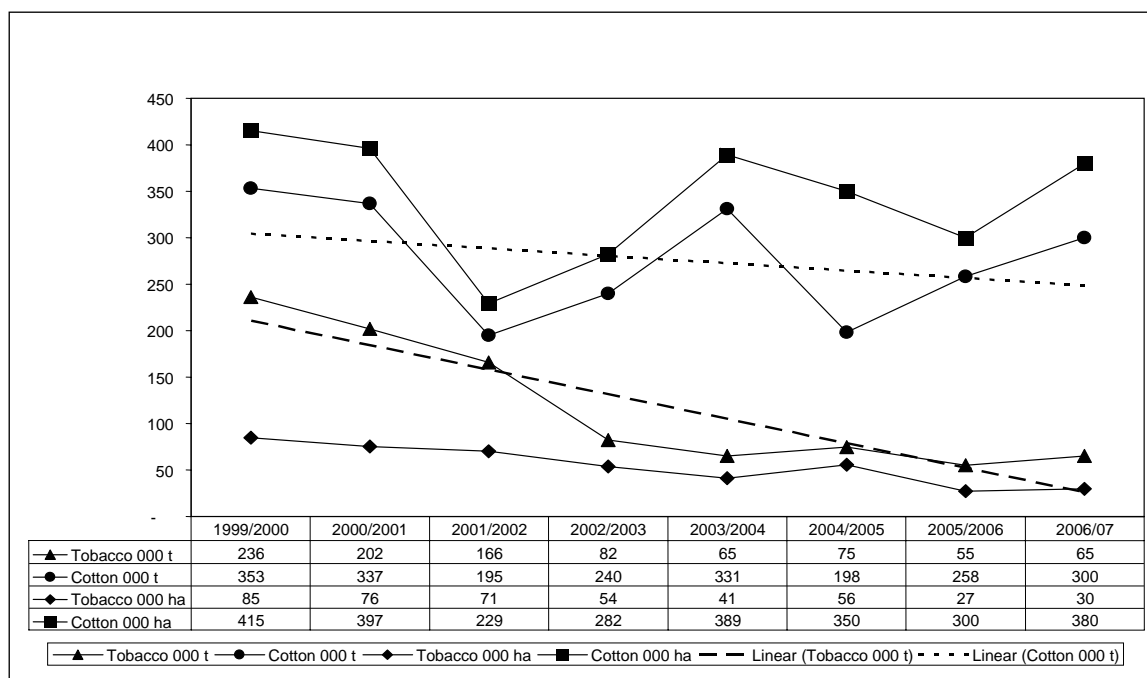
Province	Area (000 ha)			Yield (t/ha)			Production (000 t)		
	05/06	06/07	%	05/06	06/07	%	05/06	06/07	%
Mashonaland Central	202	207	102	1.15	0.82	71	234	170	73
Mashonaland West	199	216	109	1.05	0.72	68	208	155	74
Mashonaland East	245	281	115	0.84	0.54	64	206	151	74
Manicaland	292	237	81	0.88	0.57	64	258	134	52
Midlands	358	326	91	0.79	0.25	32	282	81	29
Masvingo	242	245	101	0.73	0.39	54	178	96	54
Matebeleleland North	93	63	68	0.73	0.13	18	68	8	12
Matebeleleland South	81	52	64	0.63	0.07	11	51	4	7
Zimbabwe	1 713	1 626	95	0.87	0.49	57	1 485	799	54

* A further 50 000 t of seed maize is expected to be produced commercially this year.

Note: Calculations computed from unrounded data.

Zimbabwe's two major cash crops, cotton and tobacco, showed a slight increase in production this year compared with last year. Figure 3 illustrates production of the two over the last eight years and includes regression lines. The trend of cotton has been fairly stable since 2000 but tobacco shows a steady decline.

Figure 3: Zimbabwe cotton and tobacco production 2000 – 2007



Production by sectors: The required information to generate estimates by sector for 2007 was not available. CSO estimates of area planted by different sectors for 2006/07 conflict with those of AREX. However, the CSO data clearly indicate that maize production by the large scale-commercial sector has gone down from about 800 000 tonnes in 1994 to 67 000 tonnes in 2006. The corresponding share of this sector in terms of national production also went down from 38 percent to 4.5 percent during this time. Conversely, the share of the communal and small-scale commercial sectors has gone up, although the absolute level of total production has gone down as shown earlier.

3.7 Winter season crops

Wheat is the main winter-season crop and 95 percent of it used to be grown on large-scale commercial farms having access to irrigation. The Government-owned ARDA farms produced about 5 percent, and some small areas were traditionally grown in communal areas. This year the principal constraints to production are

a shortage of fertilizer, low water levels in many of the reservoirs, especially in Mashonaland West, following the main season's relatively poor rainfall, and a looming shortage of electricity to power irrigation pumps. The latter constraint is to be addressed by Government through rationing of domestic electricity use in favour of agricultural use. These constraints are expected to reduce the area under wheat by about 20 percent compared with last year, giving a production of 128 000 t from 28 000 ha. The final date for sowing wheat is 31 May, but by mid-May only about 7 000 ha had been sown. The area under barley, which is produced under contract to breweries, is also expected to be slightly smaller than last year. Table 8 shows the production time series for wheat and barley from 1991 to 2007.

Table 8. Zimbabwe: Wheat and barley area, yield and production for 1991-2006 and forecast for 2007

Year	Wheat			Barley		
	Area (000 ha)	Yield (t/ha)	Prod. (000 t)	Area (000 ha)	Yield (t/ha)	Prod (000 t)
1991	44	5.9	259	5.6	5.6	32
1992	11.2	5.1	57	1.1	4.3	5
1993	48	5.8	277	6.4	5.2	33
1994	52.7	5.5	288	5.7	5.8	33
1995	13.9	5.1	70	2.4	5.3	13
1996	47.8	5.5	263	5.3	5.7	30
1997	55.2	4.5	250	10.7	4.3	46
1998	50	6	300	9.9	5.8	57
1999	57.6	5.6	324	3.1	5.4	17
2000	46.4	5.4	250	5.1	6.3	32
2001	45.5	7.1	325	4.5	5.5	25
2002	37.5	4.3	160	3	5.5	17
2003	26.5	4.5	120	12	5	60
2004	26.3	4.6	122	7.4	4.9	36
2005	28	4.8	134	8	5.4	43
2006	35	4.1	144	10	5.4	54
2007 forecast	28	4.6	128	9	5.4	48

Sources: 1991 - 2002 Zimbabwe Cereals Producers Association as cited by 2003 CFSAM
2003 - 2007 Commercial Farmers Union

3.8 Livestock

More than 90 percent of cattle in Zimbabwe are now owned by smallholders. As indicated in Table 9, numbers of cattle, sheep and goats in this sector have fallen in recent years, while the pig population has increased slightly. Table 10 shows the trend in smallholder cattle population between 1997 and 2006; from 1997, numbers grew to a peak in 2001 and have declined steadily since then.

Table 9. Zimbabwe: principal livestock numbers ('000) in the smallholder sector, 2002 and 2006

Year	2002	2006
Cattle	5 054	4 986
Sheep	643	333
Goats	3 380	3 138
Pigs	184	218
Poultry	na	30 000

Table 10. Zimbabwe: total cattle numbers in the smallholder sector, 1997 - 2006

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total number	4 800	5 668	6 069	6 186	6 432	5 054	5 297	na	5 159	4 986

There has been a dramatic decline in the number of pedigree cattle over the last seven years. In 2000, the commercial beef herd on large-scale commercial farms numbered 1.66 million head. With the fast-tracking of the land-reform programme in 2000, farmers began slaughtering their cattle when their farms were allocated for resettlement. By 2002 the number had fallen to about 5 000. The dairy herd has seen a similar decline, with prime dairy cows being slaughtered for meat, and milk supplies continuing to fall.

The quality of pastures was boosted in many areas by the late rains received at the end of March and the beginning of April. However, water for livestock may become a problem later in the winter in those areas that received particularly low rainfall.

Cattle in most parts of the country are in good condition. However, in the tsetse corridor of the Zambezi valley, mortality rates to trypanosomiasis were particularly high. Lumpy skin disease is common throughout, as are tick-borne diseases, especially in the more remote areas where dipping facilities and the supply of acaricides are often inadequate. The country has more than 3 560 smallholder dip tanks, but due to breakages and leaks not all are usable. The Department of Veterinary Services recently received 450 000 doses of anthrax vaccine, 150 000 doses of foot and mouth disease vaccine, and pledges of 100 tonnes of active ingredient for the manufacture of two to three years' supply of dip.

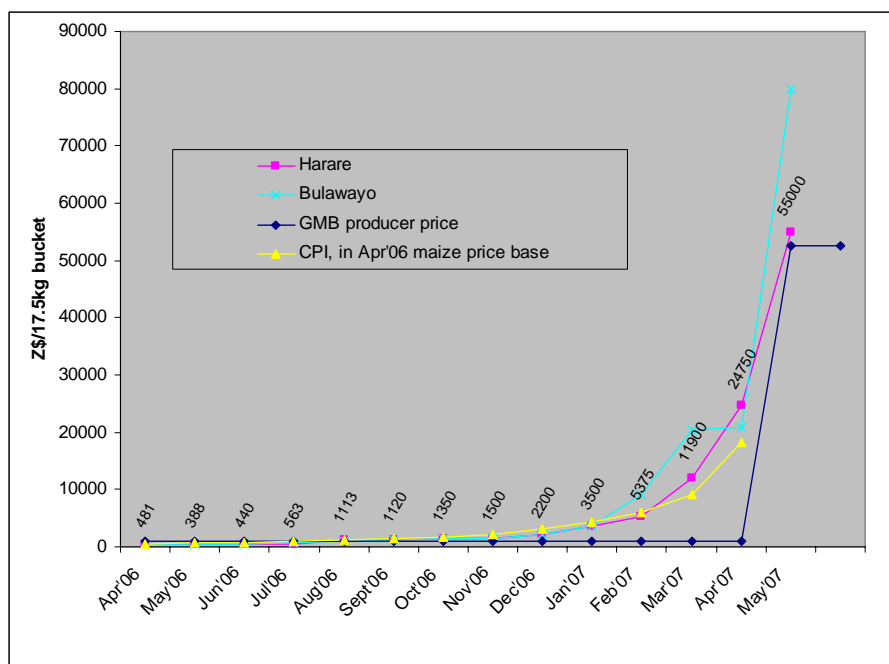
The agricultural situation by province is presented in Appendix I.

4. FOOD PRICES AND MARKET ANALYSIS

Prices of maize along with several other key commodities are controlled by GMB by setting buying price for farmers and selling price for millers, for vulnerable groups and commercial users (mostly as animal feed). Maize is traded in small quantities by farmers and petty traders at open market prices although those prices are guided by the GMB prices and supplies are highly irregular depending on the residual stocks after GMB procurement. As shown in Figure 4, the GMB procurement price has increased in discrete steps and has remained well below the parallel market retail prices (except for a short period when the new GMB price was announced and before the market had adjusted to it). Throughout much of 2006 the procurement price of maize was Z\$ 52 000/t (equivalent to about US\$5/t depending on the parallel market exchange rate) which made application of fertilizer and other purchased inputs financially unprofitable. A new price of Z\$ 3 million/t with a possible bonus of additional Z\$ 1.2 million/t was announced in April 2007. This new price of maize is very attractive, (equivalent to US\$140 at the parallel market exchange of 30 000) for the time being and would result in significant windfall revenue for farmers with marketable surplus from the current harvest, but whether the terms of trade (for example, price of maize over price of fertilizer and other key inputs) remain in favour of farmers come next agricultural season starting in October/November remains to be seen under the run-away pace of inflation and ever sliding Zimbabwe dollar with respect to the US\$. Thus the impact of the current upward jump in producer price on productivity increase next year is uncertain.

Price controls by GMB are administered also through sale of maize to millers at a fixed price who then are obliged to follow the GMB set prices for selling mealie meal (milled maize). In addition, GMB also sells mealie meal in urban areas and maize grain in rural areas at set prices. Although GMB prices are uniform nationwide, actual prices at selling or buying point vary as the transportation costs are borne by those who sell to and buy from GMB. Given the inadequate and irregular supplies of maize from GMB, the open market prices, which are a good reflection of local supply and demand situation, vary a great deal across the country. For example, maize price in the second week of May 2007 was Z\$40 000 per bucket in Masvingo (eastern part of the country with relatively good supply of maize at the moment), 50 000 in Harare and 80 000 in Bulawayo (city in the food-deficit south). In most rural areas, however, market prices are irrelevant when no maize or mealie meal supplies are coming onto the market.

Figure 4: Maize retail prices in Harare and in Bulawayo, GMB producer price and consumer price index



Source: WFP/VAM, Harare, and GMB price based on 1 tonne

As shown in Figure 4, prices over time in nominal terms have skyrocketed. For example, the price of maize in Harare went up from Z\$ 481 per bucket (17.5 kg) in April 2006 to 55 000 at mid-May 2007. There has been a 51-fold increase in April 2007 over April 2006 outpacing the year-on-year inflation which increased only 37-fold. In fact the retail real price of maize has been on the rise since November 2006 while the producer price, fixed in nominal terms, has been going down rapidly in real terms during this period.

5. CEREAL SUPPLY/DEMAND BALANCE, 2007/08

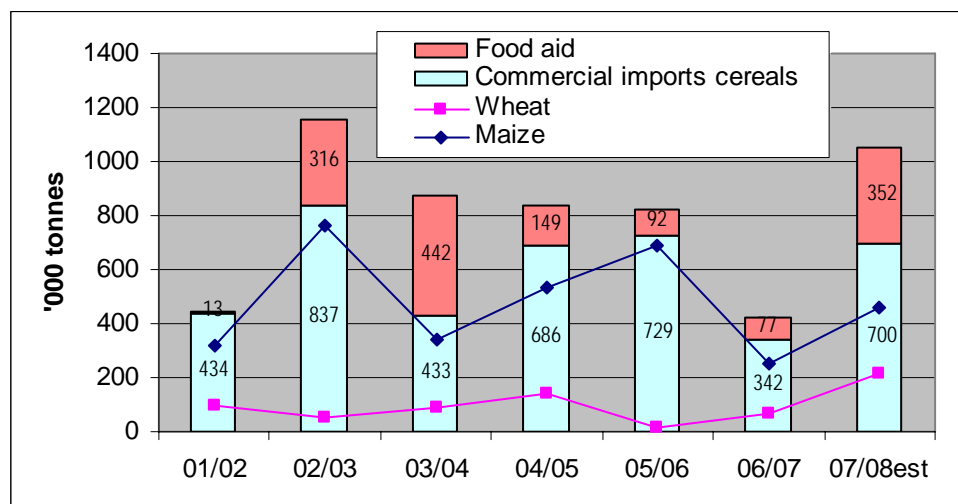
Zimbabwe's cereal supply/demand balance for the 2007/08 marketing year (April/March) is shown in Table 11 and is based on the cereal production estimates shown above and the following assumptions.

- Population Census 2002 records the population of Zimbabwe at 11.635 million as of 18 August 2002 growing at 1.1 percent per annum. CSO projection for 2007 puts the estimated population at 11.83 million. Reportedly there has been a significant out-migration from Zimbabwe into South Africa and overseas for the last five years but no reliable statistics on this are available. The Mission's efforts to get a revised figure from CSO or any other credible source were not successful. The IMF and the Economist Intelligence Unit, on the other hand, use population estimate of over 13 million. Hence, for this report, the official CSO population figure of 11.83 million is used. A mid-census assessment has been planned for later this year and a revised population figure may then be available. In that case a revised food balance sheet should be prepared to reflect more accurate consumption and import levels.
- The Government stock levels of important cereals were provided by the GMB. Given the relatively high level of opening stocks of maize, a slight stock draw-down is assumed for this year. Privately-held stocks (by farmers and traders) are assumed to be low, given the extreme shortages of maize during the past year. In any case, no change in private stocks, beginning versus ending, is assumed for all cereals.
- Per caput cereal consumption of 163 kg per annum, as previously assumed, is distributed across cereals as follows: maize 120 kg, wheat 28 kg, millet and sorghum 13 kg, and rice 2 kg. Over the last five years the apparent consumption of rice has increased to 2 kg/caput while that of wheat has gone down by about 8 kg. However, given that the reduction in wheat consumption is most likely due to food shortages and resulting rationing of bread, it was a consensus view of all Mission participants

that the wheat consumption target for 2007/08 should be maintained at the long-term average of about 28 kg/caput (reduced by 1 kg from the previous 29 kg to compensate for increased consumption of rice). At 163 kg of cereals per caput/annum, about 70 percent of the minimum calorie needs of a person (at 2 100 kcal/day) would be met, on average. The remainder, as usual, is expected to come from other foods such as potatoes, sweet potatoes, beans, groundnuts, meat, poultry, fish, vegetables and wild foods. The average cereal consumption is based on a long-term average, including surplus and deficit years. In 2007/08 there is a large gap between domestic availability and consumption requirements; even considering 163 kg per caput per annum, actual consumption may be slightly below the average level and thus import requirements somewhat overestimated.

- Use of cereals for animal feed is quite limited, given the large and widespread shortages of grains. Moreover, livestock numbers have significantly declined over the past years. However, for the use of dairy cattle and poultry the quantity of maize to be used as feed is estimated at 150 000 tonnes, similar to the past few years.
- Hybrid maize seed purchased from seed suppliers and supplied by Grain Marketing Board (GMB) are used almost universally in Zimbabwe. Hence, normally not much maize is set aside for seed. In the current balance sheet seed maize production is included in the total maize supply. Hence, appropriate seed requirements are calculated by using the recommended seed rates and forecast for area to be planted next year. Some 20 percent is added to account for potential replanting.
- Post-harvest losses are assumed at 5 percent of production of maize and other grains. This is a lower rate for maize than the one used in the last CFSAM report in 2004 because of this year's drastic reduction in cereal production.
- Government cereal import capacity determination: Government of Zimbabwe imported substantial quantities of food grains commercially during 2002/03, about 837 000 tonnes, according to GMB statistics. Since then commercial imports have varied with a low of 342 000 tonnes in 2006/07 (see historical trend in Figure 5). Given the acute shortage of foreign exchange, and the potential trade position and limited foreign currency reserves, as explained in section 2.1 of this report, the Mission estimates that total cereal imports are likely to be in the order of 700 000 tonnes. This includes GOZ imports of 400 000 tonnes of maize which have already been contracted from Malawi, 217 000 tonnes of wheat, 22 000 tonnes of rice and additional residual amount of 61 000 tonnes of maize imports by individuals and petty traders through informal channels and in-kind remittances, especially from South Africa and possibly from Mozambique and Zambia. Furthermore, in 2003 the Government allowed food imports by the private sector. This included an increase in the quantity of food individuals could import without a permit and duty-free importation of maize and wheat, by licensed traders. A similar policy should be enacted to deal with this year's food deficit.

Figure 5: Commercial imports of cereals and food aid – 2001/02 to 2006/07 and estimates for 2007/08



Sources: For 2002/03 to 2006/07 - Commercial imports from GMB, Food aid from WFP. For 2007/08 CFSAM Mission estimates. Rest FAO/GIEWS.

Table 11. Zimbabwe: Cereal Supply/Demand Balance, April 2007/March 2008 ('000 tonnes)^{1/}

	Maize	Millet/ Sorghum	Wheat	Rice	All Cereals^{2/}
Domestic Availability	1 003	131	151	2	1 287
Opening stocks	154	5	23	-	182
Production	799	126	128	2	1 055
Seed maize production	50				50
Utilization	1 816	131	368	24	2 339
Food use	1 420	154	331	24	1 928
Feed use	150	0	0	0	150
Seed use	48	4.5	5.3	-	58
Losses	40	6	6	0.1	53
Closing stocks	120	5	25	-	150
Commodity cross-substitution	39	-39	0	0	0
Total Import Requirements	813	0	217	22	1 052
Anticipated commercial imports (formal)	400	0	217	22	639
Anticipated cross-border imports	61	0	0	0	61
Uncovered deficit	352	0	0	0	352

^{1/} Although the resulting estimates represent the most likely scenario, given the uncertainty of each parameter in the balance sheet, there may be significant variation in the actual outcome. However, given the size and nature of the sample, showing confidence limits with certain levels of probability is not possible.

^{2/} Barley production is not included in this food balance sheet since most of it is used for commercial brewing purposes.

- Negligible or none.

Note: Calculations computed from unrounded data.

With the above supply-utilization account an uncovered national cereal deficit of 352 000 tonnes remains which needs to be covered with international assistance. Given that large numbers of households in different parts of the country either already do not have or will soon run out of food supplies, and that their coping mechanisms have been severely stressed, or exhausted, this year's food deficit needs to be addressed adequately, particularly targeting the most vulnerable people, including households severely impacted by HIV/AIDS, as outlined in the next section.

6. HOUSEHOLD FOOD SECURITY

6.1 Food security status and prospects

The context of food insecurity and vulnerability in Zimbabwe: A number of factors are contributing to food insecurity and vulnerability in Zimbabwe. There is a general consensus that the combined impacts of climatic and economic hardships are inducing severe food insecurity among both the rural and urban population, especially in areas where the current season's production shortfalls are greatest. This pushes vulnerable rural populations, including former commercial farm workers and their families, as well as the urban poor, deeper into food insecurity.

The principal cause of food insecurity and vulnerability in Zimbabwe is closely linked to the performance of the agricultural sector. As explained earlier, the overall performance of the agricultural sector has been very poor with a major drought in 2002/03 and another one this year. These affect the food security of a large number of the national population.

The Zimbabwe Vulnerability Analysis Committee (ZimVAC) report of May 2006 stated that in the relatively good cereal production year of 2006 "a cumulative total of 1.4 million people (2.9 million in 2005) which constitutes 17 percent (36 percent in 2005) of the rural population has not been able to meet household cereal requirements. Historically, food insecurity concentrates geographically in the rural areas of Matabeleland North (24 percent), Masvingo (20 percent) and Matabeleland South (20 percent) due to shortage of food and transport, unstable prices of most commodities, water and sanitation and health problems. The effects of the HIV/AIDS pandemic, and chronic poverty, have further aggravated food insecurity."

At present, an increasingly large number of the people in both rural and urban areas are being put under enormous pressure to cope with food supply shortfalls. Continued price rises as a result of hyperinflation have made life in general extremely difficult by drastically reducing the purchasing power of their meagre incomes. The plummeting value of the local currency along with a serious shortage of foreign exchange are leading to acute problems in importing fuel, electricity and other essential consumer and capital goods.

6.2 Health and nutritional status

The Zimbabwe Food and Nutrition Council (ZFNC) conducted a nutritional survey in November 2006, and its key findings show that the situation is relatively stable for both severe acute malnutrition and global acute malnutrition. However, chronic malnutrition, as measured by stunting, or height-for-age, increased from 23.5 percent in November 2004 to 28 percent in November 2005 and 31.7 percent in November 2006. The steady increase in chronic malnutrition is a cause for concern that should be addressed. The ZFNC study also found that in October 2006, 49 percent of the surveyed households had reduced their meal size and skipped meals and 44 percent consumed inadequate quantities of cereal. Another 17.8 percent of households reported sometimes going a day without any meal. The survey was carried out during the start of the hunger season, and corresponds with the typical response of households at that point in time. However, the reported conditions are expected to deteriorate during the current marketing season, particularly in areas where significant crop losses are recorded (i.e. extending beyond the normal hunger season).

Wasting is reported as 3.2 percent at national level with the highest levels reported in Bulilima (6.9 percent), Kariba (6.7 percent), Chitungwiza (4.9 percent) and Gokwe North (4.8 percent). These districts are characterised by poor 2006/2007 production and erratic provision of Grain Marketing Board (GMB) food supplies. The underweight percentage is reported at 16.2 nationally.

Government officials attribute the apparent low levels of acute malnutrition among children under five to wide coverage by supplementary feeding programmes, both in rural and urban areas. However, during its field visits, the Mission found that at least in some areas, for example Matebeland North and South, supplementary feeding programmes were not being administered in most of the province.. On the whole, there is insufficient understanding of the malnutrition trends and underlying factors in Zimbabwe. The Mission recommends a further investigation of this subject.

An estimated 1.6 million people in Zimbabwe are living with HIV/AIDS. Of this number, 115 000 are children under 15 years of age. Presently, an estimated one million children have been orphaned by AIDS (Zimbabwe National HIV&AIDS Strategic Plan 2006-2010) while an estimated 3 000 deaths per week are attributed to HIV/AIDS. Matebeleland South has the highest prevalence rate with 20.8 percent, followed by Manicaland with 19.7 percent. New evidence from the 2005-2006 Zimbabwe Demographic Health Survey has revealed a slight reduction in adult HIV prevalence (15-49 years) from 20.1 percent in 2004 to 18.1 percent in 2005-2006. However, it is possible that this reduction is due to the change in the measurement methodology as explained to the Mission by a CSO official. Overall, HIV/AIDS-affected populations are particularly predisposed to food insecurity.

6.3 Estimating household food access shortfalls

Approach to estimating food insecure population: The Mission used national, provincial and district production data combined with its field visit observations (including household and focus group discussions) to draw conclusions about food security and the impact of production failures². Map 1 illustrates the severity of food insecurity by district. Data underlying the geographic analysis of food insecurity include the following:

- District level production estimates by AREX combined with the Mission's updates on production, thereby estimating the extent of food self-provisioning from agricultural production;
- Livelihood profiles for each of the districts to inform the understanding of households' capacity to reduce the food shortfall through other means;
- Livestock ownership at household level;
- Incomes from cash crops (such as cotton, groundnuts, watermelon).
- Remittances and income from activities such as gold panning (these activities were reported to provide employment and income opportunities for some households in mining districts although recent legal measures are likely to reduce their scope).

² The Mission couldn't benefit from a prior household vulnerability study for the current season. A ZimVAC survey is planned during the coming month, and the Mission believes that some of the details on household level targeting will emerge from the study.

capacity to cope with hyperinflation and declining incomes. Adequate and sustained food supplies should be made available to these households through government and humanitarian assistance in order to avert increasing levels of malnutrition and loss of household assets due to economic distress.

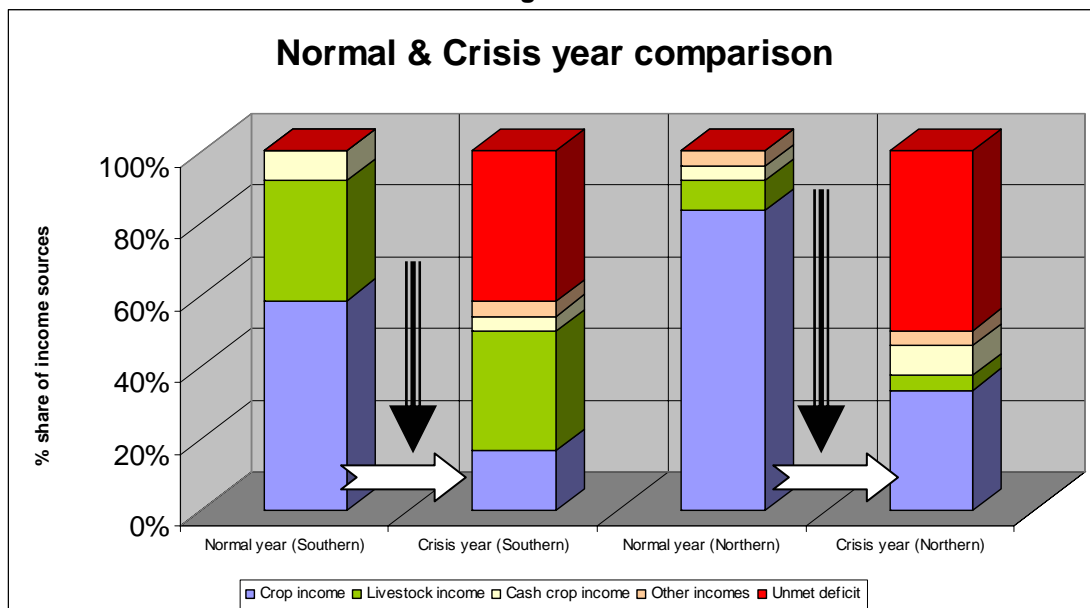
Households with sufficient command over purchasing power:

A slight majority of households in rural areas were observed to still command over sufficient access to food (i.e. have adequate purchasing power) at the time of the Mission's field visit, provided the supplies from GMB are sustained at designated prices. Households in this group include those who have produced fair to good cereal harvests, own livestock, have access to irrigated land and have other forms of cash income. However, if the GMB supplies became inadequate and irregular, food access for this group would likely to be compromised, and increasingly more people would fall into the relief category. Continuous monitoring of the grain supply chain through the GMB is therefore essential to devise the appropriate action as required.

6.4 Vulnerability and coping strategies

Household response options: For rural and peri-urban households, livestock ownership is the most important hedge against periods of hardship, such as the present crisis. While households who entirely dependent on crop production suffer most from the impact of crop failure, livestock-dependent households will also become increasingly vulnerable as more and more of them will have to sell, trade, or slaughter their livestock to cope with the current food crisis (see Figure 6). Particularly in livestock-dependent livelihood zones the food security status of households is contingent on adequate grain availability from the markets and the GMB, continued good conditions of pasture as well as water during the dry period and favourable animal prices. Significant proportions of livestock-dependent households are expected to meet their cereal consumption demands through exchange of livestock for grain. Price terms of trade of animals remained very favourable in all the districts at the time of the Mission's field visit provided grain can be purchased at government designated prices; on average a goat was exchanged for 150 to 248 kg of maize, depending on the location. At this ratio, a farmer who exchanges a goat, can meet 2-3 months of cereal consumption needs for a family of five. Many rural households indeed own 2 to 3 small ruminants, which can be sold to meet their needs, at least partially. However, grain supply shortages or restrictions can make this option untenable. The Mission recommends that restrictions on grain movement be removed, particularly farmer-to-farmer sales. In addition an increase from 3 to 5 month of consumption requirement for a family should be permitted through GMB distribution points, to ensure that sales proceeds including from larger animals are not lost to inflation.

Figure 6



Commonly reported income earning and coping options among the rural population include:

- Sale of goats, cattle, and chicken as normal sources of household income.
- Sale of agricultural produce such as cotton, groundnuts, watermelons, vegetables, and farmer-to-farmer sale of maize grain on a limited scale; firewood selling in some districts.
- Remittances from relatives, particularly from South Africa and Botswana, are reported as sources of income in many districts, particularly those along the border. In some discussions with households, however, it was noted that remittances are periodic, irregular, and limited to a few households in most village communities.
- Gold panning used to be an important source of income in some districts before *Operation Chikorokoza Chapera*, which made this activity illegal.

Other coping strategies are also employed. As noted in the March 2007 Community and Household Surveillance (CHS) survey by WFP, going an entire day without eating, gathering unusual amounts of wild foods, harvesting immature crops and sending household members to beg are reported. The CHS data shows that 52 percent of the sample households in Mashonaland West, 33 percent in Matabeleland South, 29 percent in Bulawayo and 9 percent in Midlands had gone an entire day without eating. In addition, 42 percent of households in Mashonaland Central and 32 percent in Mashonaland East reported gathering unusual amounts and types of wild foods for consumption. The Mission's observations corroborate the CHS survey's findings.

Rationing by GMB one bag of grain per two families in Matabeleland North was already observed at the time of the Mission's visit (at a minimum, each family should receive one bag per month). This is not necessarily the case in many other districts at this time, but may occur in the near future when household stocks from own production are exhausted and increasingly more households rely only on the grain supply from the GMB. Adequate stocks should be pre-positioned while also meeting the current consumption demand in order to minimise the impact of a potential pipeline breakdown.

Institutional response to food insecurity and vulnerability:

Department of Social Welfare

Institutionally, the Ministry of Public Service, Labour and Social Welfare is tasked with providing food assistance to the food insecure. Within this Ministry, the Department of Social Welfare is expected to deal with welfare-dependent cases and is an indicated partner of humanitarian organizations, including WFP. The Mission visited and discussed with several District Drought Relief Committees in which the Department of Social Welfare is a key member. From the team's observations, the Social Welfare Department is faced with enormous challenges in terms of financial and human resources to effectively provide assistance to social welfare cases. The Department will have to be made more effective through adequate resource allocations to improve its operational capacity.

Grain Market and GMB capacities

As a result of the regulated grain market, the normal functioning of demand and supply, particularly in facilitating grain movements to the traditional deficit regions of the south from the surplus producing central and northern half of the country has been disrupted.

The GMB has several customers: a) millers: millers purchase at regulated prices and in turn sell to the public for consumption; b) drought affected populations: the GMB sells cereal at reduced prices to rural households in drought affected areas when recommended by the district council through drought relief committees.

Prices of GMB-supplied commodities increased during the Mission's fieldwork. For example, a 50 kg bag of maize grain went up from Z\$8 400 in March to Z\$22 000 during the last week of April (a 260 percent increase) and Z\$175 000 with effect from 1 May 2007. The impacts of the 1 May 2007 one-time price change has been felt by all consumers, and the Mission notes that the price of maize has been adjusted downward for vulnerable groups (Z\$2.1 million/t which is Z\$105 000/50 kg) and for millers (Z\$3.1 million/t which is Z\$155 000/50 kg bag⁴) as a result of concerns expressed countrywide. The shop (unregulated) price is

⁴ For comparison purpose, maize grain for drought relief is sold at Z\$2100/kg, and Zim3100/kg to millers (GMB outlets), and Z\$15 000 at open market ("shops" in some markets in Matabeleland provinces). Open market supplies are limited and often unavailable. As an indication of the spiralling rate of inflation, exchange rates declined by Z\$10 000 during the Mission's visit from Z\$23 000 = USD1 in late April to Z\$33 000 = USD 1 by the end of the Mission in mid-May.

Matabeleland North and Matabeleland South

The Matabeleland provinces (North and South) are characterised as Natural Region IV and more of the Natural Region V is found in Matabeleland South. They frequently experience periods of dry spells, and drought conditions are not uncommon. Livestock is the backbone of the economy in this semi-arid zone and livelihoods are earned from the combination of crop and livestock farming. During the current marketing year, household production throughout the provinces is characterised as “poor” or “near-total loss”; this has expanded the traditional period of food shortfall from own supplies. In near-normal years, about 7 months of domestic consumption is met from own production for households in rural areas. However, the current season’s production is expected to meet up to two months of consumption demand for most households. A few households reported carryover stock from the previous season’s production.

The Mission estimates that up to 40 percent of households are likely to run out of own production starting in July. The remaining 60 percent households are expected to meet their food requirement up to end of September, and from October onwards the population in need will increase to about 60 percent, during the latter part of the season. The worst affected districts are Tsholotsho, Bubi, Hwange, Nkayi and Lupane in Matabeleland North and Bulilimangwe, Matobo, Gwanda and Beitbridge in Matabeleland South.

Mashonaland Central, Mashonaland West, Mashonaland East

The Mashonaland provinces fall mainly in the Natural Region IIA and IIB with a mean annual rainfall of 750-1 000 mm and Natural Region III, often associated with intensive crop cultivation and livestock farming on a large scale. In normal years, these provinces are the “bread basket” of the country where the surplus production are harvested. The zone forms part of what was formerly the Mashonaland Highveld Commercial Farming Zone. Natural Regions II, III and IV are characterised by “major maize production” whereas Natural Region IV is characterised by “poor maize production, suitable for livestock production, and small grains (sorghum and millet production)”.

Food shortages will be experienced in Muzarabani and Rushinga districts of the **Mashonaland Central** due to poor food and cash crop production. An estimated 45 percent of the households in Muzarabani will require assistance by July/August while 35 percent in Rushinga and 30 percent in Bindura and Mt Darwin will need assistance by October.

During the current season, the impact of poor crop production will be severe, combined with low purchasing power and rising grain prices. Severe food insecurity in the southern districts of **Mashonaland West** will be experienced in Kariba (75 percent) in August whereas 40 percent of households in Chegutu and Kadoma will require food assistance by October. Food secure districts visited such as Hurungwe and Makonde in Mashonaland West have pockets of communal areas that need to be monitored.

In Mashonaland East, the UMP district has some localised variation and pockets of food deficit even though the district overall shows surplus production. While Mudzi exhibits a 6-month food deficit, the Mission anticipates the deficit will be minimised through exchange of livestock and other forms of income earning strategies. However, as the hunger season advances, particularly from December to March, limited and targeted food assistance will have to be activated for some 800 families. A monitoring system should be put in place to detect changes in food security status.

Manicaland

Manicaland has an agro-based industry, which produces tobacco, citrus fruits, timber, tea and coffee. This province has the highest population density. The province is characterised by a mixture of Natural Regions IIA and IIB and normally enjoys reliable rainfall and rarely experiences severe dry spells. Furthermore, the eastern part of the district is situated in Natural Region I, where high rainfall is prevalent. This is where most of the crops such as coffee, bananas, tea and apples are being produced. The central part of Makoni district is where the A1 and A2 farming sectors produce maize grain on a large scale for sale to GMB.

Communal areas did not harvest enough maize to last up to the next season but they have the capacity to purchase cereal with incomes derived from cash crop sales. However, about 40 percent of the households in the Makoni communal areas falling in Natural Region 4 and 5 will experience cereal deficits by January. The hardest hit districts in this province by date and percentage of households in need of assistance are: (a) by July: 70 percent in Buhera; (b) by August: 20 percent in Mutare and Western Chimanimani; (c), by October: 30 percent in northern Nyanga; and (d) by December: 45 percent in Chipinge.

Midlands

The province experiences dry spells in Natural Region III hence variable production of maize, sorghum and groundnuts. Livestock provides the other half of the lowland rural economy. Incomes derived from cotton, groundnuts, sweet potatoes and horticulture are likely to enable households to purchase grain. Besides their production of summer crops, households rely on gardening, petty trade, casual labour, beer brewing and sale of curios. In the recent past gold panning was a major source of livelihood for rural communities, mainly in Zvishavane and Mberengwa districts.

Although the majority of households are consuming grain from their own harvest, there are some households that did not harvest at all; therefore, grain should be made available for these households to purchase through GMB or as drought relief. At the time of the Mission's visit, an emergency maize distribution was requested for the drought stricken areas.

The district most affected is Mberengwa (70 percent), which will have immediate food aid needs by July while 60 percent of the households in Zvishavane will require food aid by August. Some households, however, can meet their food requirement up to the end of September, especially areas in the southern parts of Gokwe South. Districts that will require food assistance from October (and the percentage of households) are Gweru (45 percent), Gokwe North (40 percent), Kwekwe (35 percent) and the northern parts of Gokwe South (15 percent).

Masvingo

The province is mainly in Natural Region V and most of the land is suitable for livestock rearing and extensive farming. The rainfall in this region is too low and erratic for reliable production even for drought-resistant fodder and grain crops. The typical middleveld pattern predominates in this region, with maize and millet and some lowland cash crops. A wide variety of small grains like soyabeans in the commercial sector and sugar beans, groundnuts and sweet potatoes are grown in the communal areas. Cash income to buy food comes mainly from casual work wages for the poor or from livestock sales for better-off households that own sufficient goats and cattle.

It is estimated that about half of the households in the province did not produce enough cereals to last the marketing year. The Mission estimates that 50 percent of the households in Chiredzi are likely to run out of own production by July, followed by Mwenezi (50 percent) in October. Other affected districts include Zaka and Chivi with 40 percent of the households requiring assistance in October.

6.6 Food security conditions for Urban and peri-urban populations

The Mission attempted to assess urban food insecurity using a recent urban study as well as its own observations in major urban centres (Harare and Bulawayo) and discussions with some NGOs. The urban ZimVAC study of November 2006 was used as a basis to draw preliminary conclusions; but it should be borne in mind that a detailed follow-up study is needed to provide deeper and up-dated insights into the effects of economic hardship and hyperinflation on the urban population's coping capacity. As an initial attempt, the Mission used poverty indicators in urban areas as well as changes in wage rates and food prices as a proxy for food insecurity among the urban population.

The November 2006 Urban ZimVAC points out that urban conditions are characterised by "relatively high levels of unemployment and underemployment, deteriorating quality and quantity of social services, hyperinflation, critical shortages of foreign currency and erratic supply of fuel, shortages of some basic household goods. A high prevalence of HIV and AIDS (19 percent) is causing a downward spiral in both household food security and vulnerability. The compound effects of these factors on an already vulnerable population have resulted in a bigger strain on the urban poor, made worse by the increased poverty and the unavailability of basic commodities at affordable prices on the local market".

The following summary is based on the key findings of the November 2006 Urban ZimVAC:

- 29 percent households are classified as very poor, 55 percent poor and 16 percent non-poor. Poverty incidence is the highest in Bulawayo and lowest in Mashonaland East. The highest levels of food insecurity were in peri-urban centres such as Mt Hampden (60 percent), Harare South (50 percent) and Epworth (44 percent);
- Remittances are playing a significant role in the livelihoods of communities. A total of 28 percent of households had relatives who assisted from time to time;

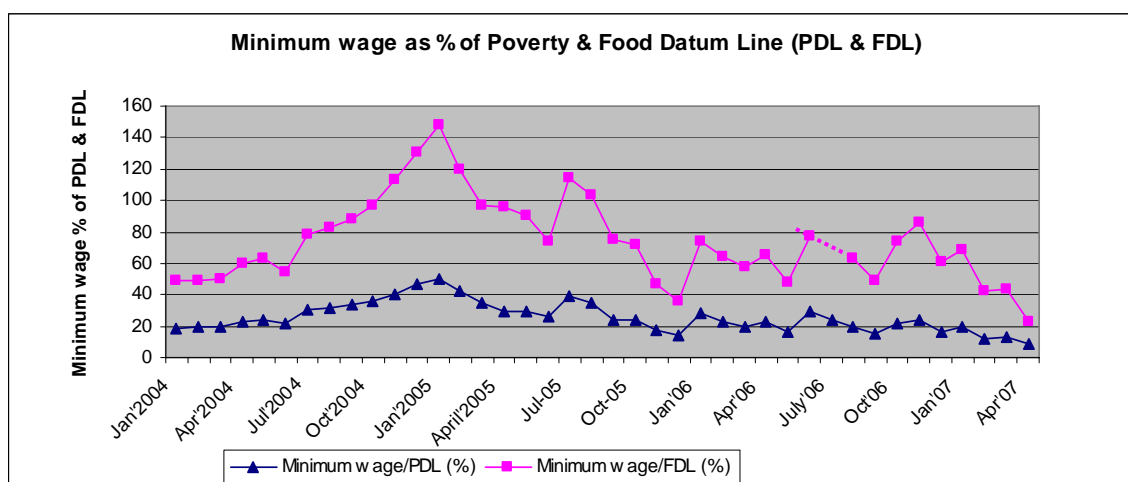
- Since 2003, non formal employment has increased significantly from 49 percent to 57 percent. About 60 percent of the surveyed households indicated that they had income from formal employment, 57 percent from non formal employment, 15 percent from remittances and 8 percent from other sources. Although there is an increase in non formal employment, formal employment remains the main source of income (45 percent) of the households followed by informal employment (35 percent)
- Households were spending most of their income on food (49 percent), transport (19 percent) and accommodation (10 percent).
- About 64 percent of the households were practicing agriculture on open municipal land (56 percent), their own urban stands (38 percent) and peri-urban farms (15 percent). Urban agriculture was found to contribute significantly to household food security. About 46 percent of households practicing urban agriculture were growing maize. Average household maize production for those growing the crop contributed up to eight months of household cereal requirements.
- The majority of households practicing agriculture tend to be headed by elderly people or people who have resided in one place for longer than three years. These households were generally larger in size (more than 5 household members) than households not engaged in agriculture.

Food security for the urban and peri-urban populations is a major concern even in normal times. Now, with hyperinflation and an unadjusted income base, these population groups are experiencing a severe erosion of household purchasing power that is limiting their ability to cope with rising prices.

One measure of economic wellbeing and food security trends over time is the ratio between minimum wage and both poverty datum line and food poverty datum line (using data provided by CSO). Based on these data minimum wage rates as percent of both reference lines have been continuously declining since the beginning of 2005. By April 2007 the minimum wage rate only represented some 10 percent of the income needed to reach the poverty line and just over 20 percent of the income needed to buy the minimum food basket (see Figure 7).

The Mission estimates that the number in need of assistance in urban areas coincides with the 29 percent of the urban “very poor”, particularly in major centres such as Bulawayo and Harare. These are preliminary estimates based on poverty criteria described above, and would benefit from further data gathering and analysis. The Mission also recognises the challenges of identifying and targeting the most vulnerable groups and recommends that additional investigations be undertaken to inform the design and implementation of urban and peri-urban relief programs. The ZimVAC can play an important role in this next step.

Figure 7



6.7 Emergency assistance requirements

The Mission estimates the food assistance requirements at 352 000 tonnes of cereals to be covered through emergency food aid. The recommended cereal assistance will need to be complemented by 90 000 tons of assorted food commodities in order to provide a humanitarian food basket equivalent to 2 100 kcal per

person per day. The relief needs are calculated based on vulnerability criteria discussed in sections 6.3 and 6.6. For much of the population outside the relief category, the assumption is made that grain supplies through GMB and markets will function “normally” and households will thus be able to meet their food needs from own resources. Consistent with the food security and vulnerability analysis, those in need of relief assistance will vary by season starting at 2.1 million in third quarter of 2007 and reaching up to 4.1 million people at the height of the hunger season during the first quarter of 2008 (see Table 12). These estimates are derived from triangulation of vulnerable population data district by district, and where information existed, ward by ward. The district estimates of vulnerable population aggregated at provincial level as well as seasonal distribution of humanitarian assistance needs are shown in Table 12.

The Mission expects that the in-country team (WFP, NGOs, ZimVAC, and relevant government departments) will fine tune the Mission’s estimates of beneficiary numbers, particularly the split between rural and urban areas. In the case of urban interventions, the Mission recognises the challenges of identifying and targeting the most vulnerable groups, therefore, a gradual increase of beneficiary numbers is expected to eventually reach the recommended one million at the height of the operation.

Table 12: Estimated number of people in need of assistance and projected food requirements (tonnes)

Province	Seasonal distribution of beneficiaries			Cereal Requirement	Total food commodities (cereals plus non-cereals)
	July - Sept	Oct - Dec	Jan - March		
Midlands	130 200	473 800	562 600	52 500	65 700
Matabeleland North	264 000	396 200	528 200	48 100	60 180
Matabeleland South	261 400	392 000	522 700	47 600	59 600
Manicaland	158 700	304 000	511 900	44 400	56 000
Masvingo	118 000	359 000	511 900	38 700	48 400
Mashonaland Central	60 200	211 900	211 800	19 600	24 500
Mashonaland West	20 000	165 700	165 700	14 000	17 500
Mashonaland East	-	-	800	100	120
Total (rural)	1 012 500	2 302 600	3 015 600	265 000	332 000
Urban population	1 073 000	1 073 000	1 073 000	87 000	100 000
Total (rural +urban)	2 085 500	3 375 500	4 088 600	352 000	442 000

The GMB will need to play a major role in importing cereals to meet the overall demand although constraints might be faced in terms of foreign currency shortages, limited supply of maize from traditionally surplus producing neighbouring countries (e.g. South Africa), rising world grain prices and transport capacity limitations. The Mission recommends that these conditions should be monitored continuously.

6.8 Assistance needs and response options

Food Aid response to food insecurity: As indicated above, a total of 4.1 million rural and urban people (at the height of hunger period) are recommended for humanitarian assistance for a period of 3 to 9 months. Priority provinces include Matabeleland (North and South), Masvingo, Manicaland and Midlands. Pockets of very high vulnerability also exist in the northern provinces of the country; the food security needs of these areas are also recommended to be met through humanitarian assistance. In many priority districts, food assistance should be made available as early as July 2007. It is expected that the food aid objective will be focused on saving lives and livelihoods, thereby averting an increase in malnutrition rates and further erosion of assets and productive resources. Therefore, food assistance should be provided through a combination of direct relief assistance, vulnerable group feeding (VGF), school feeding and assistance to specific groups including orphans and vulnerable children (OVC) and assistance to mobile vulnerable households in rural and urban areas. Existing VGF programme channels might be strengthened and expanded.

Authorities have expressed a desire for food-for-work (FFW) activities to minimise food aid dependency. However, given the limited time available to mobilise resources, strategically position them for distribution and mobilise the necessary capital support and technical expertise, FFW at this stage is not likely to be a major viable method to provide relief assistance. Such programmes should only be considered if technical expertise and time permit, and with careful consideration that FFW would not compete with labour demand in the agricultural sector.

Coordination of supply chain and distribution mechanisms: Due to the regulated grain markets in Zimbabwe, commercial sector trade has been incapacitated, as discussed in the previous section. This has meant that the principal food distribution pipelines are likely to remain those of the Government's Grain Marketing Board and the humanitarian agencies. The volume of food grain expected to be moved by GMB is very high. The humanitarian pipeline⁵ will need to cover the most vulnerable rural and urban populations. However, smooth operation of the GMB pipeline for supplies to the broader population is equally important.

It is imperative that a coordination mechanism be worked out between humanitarian agencies and the GMB, which in many cases distribute food in the same geographic area. There are very strong incentives for recipients to cheat in the various modalities of food distribution. As noted, the cereal deficit is huge, and both GMB and humanitarian pipelines will have to be coordinated and moved in a timely fashion.

6.9 Recommendations: follow up actions

In addition to the key recommendations on food aid, agricultural input aid and on policies relating to general improvements in food production/security presented earlier in this report, recommendations on information and follow-up analysis aspects are the following:

- It is crucial in the planning and implementation of a humanitarian programme that information be fully shared between the Government (GMB and the various operational departments) and the international community (through WFP as the UN food sector coordinator) with respect to food availability, including stocks, distribution plans at provincial, district and ward levels and import plans with corresponding logistical arrangements.
- The Mission recommends a detailed vulnerability assessment to inform more refined household level targeting and provide up-dates to this Mission's analysis and assumptions. As has been the practice in the past, the inter-agency Vulnerability Assessment Committee should be funded to carry out this function. It is noted that preparations are currently underway to field a ZimVAC; the needed financial and technical assistance should be extended to this exercise. Simultaneously, the initiatives to complete the classification of livelihood zones should also be supported.
- The Mission also recommends strengthening the already established food security monitoring system to help identify key changes in the economy so that adjustments to food security interventions can be made, thereby improving humanitarian response.
- Despite continued economic hardship and perceived reduction in people's access to food, the nutritional status appears to have remained stable with very low rates of reported GAM and SAM. Further studies/analysis should be carried to better understand the contributing factors.

⁵ WFP and C-SAFE pipelines, as has been the practice, will continue to be coordinated.

AGRICULTURAL SITUATION BY PROVINCE

Mashonaland Central Province

Mashonaland Central is a high-potential province with much of its land in natural region IIa. To the north and north-east the quality of land declines to natural region IV. This year there was a slightly late but otherwise normal start to the rains in the more productive parts of the province, with the first effective rains falling in November. The start of the season was more erratic in the north and north-east, and total amounts received were below average. Distribution was patchy throughout; both in time and location, and early dry spells often necessitated several re-plantings, especially in region IV. Prolonged dry spells occurred locally in late January and February, and different areas received their last rains as early as the end of January and as late as April. The rains that fell in late March or early April were often very heavy, and although they had little beneficial impact on crops, they did help the pasture.

The area under maize was similar to last year but yields were significantly lower. Yields varied widely between instances of near crop failure in parts of Rushinga and Muzarabani to over 6 t/ha in parts of Mazowe. However, even within these districts, yield variation was striking.

Seed availability was generally adequate and timely, though as in other provinces a lot of communal farmers used retained seed either alone or as a supplement to seed they had purchased or taken on credit. Access to fertilizer, however, was poor, and many farmers who depended on Operation Maguta for their inputs received both basal compound and top dressing as late as February. Weed infestation was severe in many crops, especially in some of the more productive areas, leading to significant yield reduction.

Several of the large-scale commercial and A2 farms in the more favoured parts of the province are producing well below their potential for various reasons including aging and unserviceable tractors and equipment, lack of investment, under-utilisation of land, and poor management. The province used to have an irrigated area of about 35 000 ha but only about 20 000 ha of this is currently in use.

In the Zambezi floodplain in Muzarabani District, much of the sorghum crop was devastated by the armoured cricket (*Acanthopplus discoidalis*). Quelea birds were also a problem on the sorghum crop at these lower altitudes, and there were some reports of bollworm (*Heliothis armigera*) on cotton. An outbreak of armyworm in Guruve District was brought under control with damage restricted to about 300 ha. Otherwise the province was relatively free of crop pests and diseases.

The cotton crop was poor in the drier areas of the province, with yields of less than 1 bale per hectare. Returns to growers were further eroded by what was perceived to be a discouragingly low producer price of about 5 000 Z\$ per kg. Many producers anticipated that almost all their production would be required to pay off their loans for inputs received. The areas under soya and tobacco increased this year in response to those crops' greater financial attraction compared with maize.

Livestock condition is generally good throughout the province, though there have been several instances of lumpy skin disease and tick-borne diseases. Dipping facilities are still inadequate, as is access to acaricides, although this is said to be improving. Pasture is considered to be in increasingly short supply in the north where cattle are an especially important part of the rural economy. Despite the late rains in certain areas, herds may face water shortages within the next three months or so.

Mashonaland West

Much of Mashonaland West lies in natural region IIa which is fringed by regions III, IV and V to the north and west. There was a poor start to the rains in most areas, and this was often followed by very erratic distribution and early termination. Planting was generally delayed, the delays often further exacerbated by a shortage of draught power for tillage. Prolonged dry spells in January and February occasioned several re-plantings in some areas. Rainfall was geographically patchy, with substantial differences in distribution between neighbouring localities. The central part of the province was most favoured with regard to rainfall. In the north of the province, Kariba District, which is regularly moisture deficient, was so again this year. However, Chegutu and Kadoma Districts in the south of the province, which usually report reasonable maize yields, were severely hit by drought this year and their maize production levels were well below normal.

Some, but not all, areas received unusually heavy rainfall at the end of January and the beginning of April. While these rains were of little benefit to most crops, they may have helped those that were especially late-planted; they were also of benefit for pasture..

A large proportion of land in this erstwhile highly productive province was under-utilised for various reasons, including a shortage of draught power, either oxen or tractor, and tillage implements. Several of the tractors that are present, including those owned by DDF, are not operational. Under-utilisation of land also resulted from farmer absenteeism, especially on the larger A2 resettlement farms.

Maize seed was generally available this year, either through Operation Maguta or commercially. In some areas however, seed from Operation Maguta arrived late, forcing farmers, especially those in communal areas, to use retained or purchased seed, or simply to plant less. There was a general shortage of fertilizer, and most of the fertilizer that was available, principally through Operation Maguta, came late; both basal fertilizer and top-dressing arrived as late as February in some localities and in many cases farmers have kept them for next season. In cotton-growing areas, fertilizers intended for one crop were often used on both cotton and maize because of the general shortage of fertilizer elsewhere.

There was no significant change in pest and disease status this year in Mashonaland West. However, some areas close to game reserves suffered substantial local losses due to wild animals, especially elephants. Maize stalkborer was troublesome in some localities, as were stinkbugs on cotton in Kariba District.

Several larger farms complained of the difficulty of retaining their labour force, but this can only be seen as a symptom of the unrealistic level of farm wages. Where there is the possibility of piecework, which pays in a day what a wage labourer can expect to earn in a month, it is understandable that piecework is the preferred option.

Mashonaland West is historically a highly productive province, but this year all districts produced less maize than last year. Nevertheless, the province as a whole has produced a surplus of maize (relative to its population's food requirement), despite the fact that the south in general has seriously under-produced. The provincial total of 154 600 t of maize represents a reduction of more than 25 percent on last year.

Because of the relatively poor rains, water levels in many of the province's reservoirs are low, especially in the south. This will significantly reduce the area of winter wheat that can be grown under irrigation.

The area under soya increased this year because of better financial returns than for maize. The cotton area also increased, but yields are very much below those of last year as a result of the poor rains. Tobacco has done well on some large-scale commercial farms.

Although cattle throughout much of the province are in good condition, there were some very significant losses to trypanosomiasis in the recognised tsetse areas close to game parks along the Zambezi valley. Slightly further south, losses due to tick-borne diseases were reported. There are local shortages of acaricides, vaccines and dipping facilities. The pasture situation in some areas that were badly affected by poor rainfall for their crops was somewhat redeemed by the heavy rains at the end of March.

Mashonaland East

Mashonaland East covers natural regions II in the centre, III in the south, and IV in the north. The districts bordering Harare are the most productive and their commercial potential is enhanced by their proximity to that large urban market. Almost half of the province is arable, and a wide range of both food and cash crops are produced. Most crops, apart from wheat and horticultural crops, are grown under rainfed conditions.

The season started late with most areas receiving their first effective rains from mid-December onwards. Rainfall was patchy in all districts, with long dry spells of 2-3 weeks in February and March. Normal rains received in late March and early April had little beneficial impact on crops that had already suffered from moisture stress during dry spells at critical stages of their development, but they may have benefited later-sown crops to some extent. The districts most affected by the poor rainfall conditions were Chikomba, Hwedza, Marondera, Mudzi, and UMP.

Seed was generally readily available either commercially or through Operation Maguta. In addition, many farmers used retained seed. Fertilizers, however, were in short supply, and those provided through Operation Maguta often arrived too late to be of much use. Under-utilisation of land resulted from a shortage

of draught power, tillage equipment and fuel. Between 50 and 75 percent of land was reckoned to be cultivated in A1 category, and only between 25 and 50 percent in A2 category.

Despite a 15 percent increase in cropped area, maize production, at 151 000 t, is expected to be about 74 percent of last year's production. Maize stalkborer was reported in the province.

The area under soyabeans and groundnuts has increased in response to lucrative prices and the lower nitrogen requirements of these crops. However, the area under paprika and cotton has diminished, mainly due to lower prices.

Livestock and pasture are currently in good condition, but water supply may be a problem later in the season. Although weekly dipping is recommended during the summer and every two weeks during the winter, most farmers dip their animals only once every two to three months, largely because of the shortage of dipping chemicals. Consequently there have been outbreaks of tick-borne diseases. Anthrax, lumpy skin disease and black leg have all been reported during the past year but all have been controlled. Some poultry flocks have been hit by coccidiosis.

Manicaland

Manicaland covers all natural regions (I to V) with natural region I in the east and natural regions IV and V in the south. A wide range of both food and cash crops are produced across the province. In the east of the province (natural region I) there are timber plantations, tea estates, smallholder coffee plantations and orchards.

Effective rains were received from late November in most areas. These were followed by a month of relatively dry conditions which put severe stress on the crops. Rainfall was patchy in all districts, with long dry spells and below-normal rainfall. Above-normal rains were received in the second half of February and early April which may have benefited late planted crops. The districts most affected by the poor rainfall are Southern Buhera, western Mutare, western Chimanimani, western Chipinge, northern Nyanga and northern Makoni.

Seed was generally available either through Operation Maguta or locally purchased; many farmers used retained seed. (need motorcycles, radios, computers, etc.). Fertilizer, however, was not readily available, and where it was available its price was prohibitively high. Draught power for tillage and fuel for tractors were also in short supply, leading to a lot of late planting. These constraints resulted in farmers, especially the A1s and A2s, under-utilizing their allocated lands. Approximately 50 to 75 percent of land was cultivated in A1 category and about 25 to 50 percent in A2 category.

The province's production this year of 134 000 t of maize represents only 52 percent of last year's production; both cropped area and yield were lower. Maize stalkborer was reported in the province.

The area under soyabeans and groundnuts has increased in response to lucrative prices and the lower nitrogen requirements of these crops. However, the area under paprika and cotton has diminished, mainly due to lower prices.

Livestock and pasture are currently in good condition, but water supply may be a problem later in the season. Although weekly dipping is recommended during the summer and every two weeks during the winter, most farmers dip their animals only once every two to three months, largely because of the shortage of dipping chemicals. Consequently there have been outbreaks of tick-borne diseases. Anthrax, lumpy skin disease and black leg have all been reported during the past year but all have been controlled. Some poultry flocks have been hit by coccidiosis.

Midlands Province

Much of Midlands Province lies in natural region III (semi-intensive farming) but areas of natural region IV (semi-extensive farming) are also covered. There were variations in the start of the rainfall season amongst and within districts, but in most places the first rains were received during late October and the first weeks of November. The rains tailed off in April with light drizzles. Average total rainfall for the province was near normal, but its spatial and temporal distribution was not always ideal. Some parts of the province had heavy downpours followed by long dry spells during critical periods of crop growth, and other areas received well below normal total amounts. Planting proceeded from as early as late October up to early January.

Most farmers used purchased or retained seed, though seed was also available through NGOs and Operation Maguta. Fertilizer was in short supply; some farmers complain that fertilizer is not good for the soil.

With 326 000 ha, Midlands has the largest area under maize of all the provinces. This area represents a slight reduction on the 2005/06 figure. Yields, however, were very low and included some total crop failures, for instance in parts of Zvishavane. Provincial production, which was the highest in the country last year, was the third lowest this year at 81 000 t.

Livestock condition is good, and pasture and water are currently adequate. However, farmers suspect that there might be pasture shortages in the coming months.

Masvingo Province

Masvingo Province is mainly in natural region V and most of the land is suitable only for livestock grazing and extensive farming.

Total rainfall this year was far below normal especially in the southern parts of Chiredzi, the northern part of Chivi, Mwenezi District, and the eastern part of Gutu. Rainfall distribution was extremely patchy both temporally and spatially. Planting took place from November to early January.

The area cropped on small-scale commercial farms increased this year but it decreased on A2s. Seed was available, and most farmers used a mixture of purchased and retained seed. Seed was also available through NGOs and Operation Maguta Maize. Smut was reported, especially on Pioneer seed. Fertilizers were not readily available when needed or else were prohibitively expensive. There is also a belief amongst some farmers that fertilizers destroy the soil. There was a shortage of tractors on A2 farms and of draught power in communal areas. Labour shortage was cited as a major constraint by large- and small-scale farms. The area under maize was similar to that of 2005/06, but yields, at 0.39 t/ha, were only just over half of what they were last year. Masvingo has the largest sorghum area of any province and this year the area was almost unchanged. Despite being slightly lower than last year, the average sorghum yield, at 0.41 t/ha, was marginally higher than that for maize.

Although there are 14 irrigation schemes in the province and 28 water bodies that could be used, only very small areas of crops are irrigated.

Livestock and pastures are in good condition, and drinking water is not expected to be a problem during the coming months. Tick-borne diseases, however, are prevalent, and farmers report that they are unable to afford the prescribed chemicals for their animals.

Matabeleland North Province

Matabeleland North is a predominantly dry-land area most of which is in natural region IV (semi-extensive farming), with cattle rearing being the most important economic activity.

Rainfall started late, at the end of November and early December, and continued erratically with extended dry spells in January and February. The erratic rainfall pattern led to as many as three replantings on some farms. Total precipitation was below normal, and in some locations the rains stopped prematurely. However, other areas received unusually heavy rainfall at the beginning of April. Much of the province's installed irrigation capacity is non-operational or under-utilised.

There was a shortage of animal draught power, tractors and fuel this year and access to seed was poor this year in some districts. Operation Maguta supplies were limited and late, and distribution points were often a long way away. Pannar seed was available but was considered to be prohibitively expensive. Consequently a large number of farmers used retained seed, but the viability of much of this seed was very low. Fertilizer was also in short supply or available too late to be of any use; however, considering the poor rainfall, fertilizer use would probably have been wasteful in many areas. Striga was a problem in some fields.

Crops this year performed very poorly and many farmers reported total and almost total losses. Provincial area and average yield of maize were both considerably lower this year than in 2005/06 and the resulting production, at 8 000 t, is as little as 12 percent of last year's production. On the other hand, the average yield of pearl millet (of which the province is the main producer) was virtually unchanged at 0.27 t/ha but only just over half of the previous year's total area was planted.

The province has vast livestock resources including cattle, goats, sheep, pigs, donkeys and chickens. In some districts 45 to 60 percent of households own an average of 4 to 5 cattle. These are mostly used as a store of wealth and are rarely disposed of.

Livestock are generally in good condition throughout the province. Pasture and water supplies improved significantly after the April rains. However, there is a shortage of dipping chemicals, which results in poor control of ticks and tick-borne diseases. Vaccines and antibiotics are either not available or prohibitively expensive.

Matebeleland South Province

Matebeleland South lies partly in natural region IV and partly in natural region V. The 2006/07 rainfall season started slightly late at the end of November 2006 in most parts of the province, and was characterized by long dry spells in February and March. Patchy distribution at the beginning of the season meant that farmers often had to replant or gap-fill several times. The season ended with heavy downpours at the end of March and the beginning of April 2007. These late rains may have contributed to a limited extent to the recovery of moisture-stressed late-planted crops. In some districts, however, such as Bulilima Mangwe, the rains ended abruptly in February. On the whole, the rainfall season was poor with below-normal precipitation that was poorly distributed in both space and time. The quality of the season in terms of rainfall was better in the north-eastern parts of the province (natural region IV) than in the south (natural region V). However, while the 2006/07 rainfall season was poor, it was not a major deviation from normal for most of the southern half of the province and residents are used to dealing with periods of drought. Much of the province's installed irrigation capacity is non-operational or under-utilised.

There was a shortage of animal draught power, tractors and fuel this year, and access to seed was poor in some districts. Operation Maguta supplies of both seed and fertilizer were limited and late. However, considering the poor rainfall, fertilizer use would probably have been wasteful in many areas. Labour shortage is cited as a constraint, especially on A2 farms. Crops were subject to damage by birds, wild pigs, porcupines and rodents.

Crop production was very poor. It is instructive to note the inverse relationship between area and yield for the province's three main cereals, maize, sorghum and pearl millet. Maize covered the largest area (52 000 ha) but returned the lowest yield (0.07 t/ha), whereas the agronomically more suitable pearl millet covered the smallest area (22 000 ha) but returned the highest yield (0.3 t/ha).

Matebeleland South is a predominantly livestock province. In districts such as Bulilima Mangwe, 60-70 percent of smallholder farming households own an average of 3 - 4 cattle. These are predominantly used as a store of wealth and are rarely disposed of. About 60 – 90 percent of rural households own goats, which are traditionally used as a hedge against difficult economic conditions. Livestock are generally in good condition throughout the province, and pasture and water are adequate in all except the more isolated parts of the southern districts. However, there is a shortage of dipping chemicals, and tick-borne diseases are common. Vaccines and antibiotics are either not available or prohibitively expensive. Isolated cases of pulpy kidney were reported in Bulilima Mangwe, and of lumpy skin disease in Beitbridge and Insizad.

APPENDIX II

LIST OF INTERVENTIONS COMMONLY REQUESTED BY FARMERS

- Restoration of existing irrigation infrastructure
- Development of new irrigation infrastructure
- Boreholes and solar-powered pumps for watering cattle
- New dams
- Assistance with tillage
- Improved access to draught power
- More tractors
- Improved access to fuel
- Assistance in obtaining inputs on time
- Ready availability of inputs in shops at affordable prices
- Repair of cattle dips
- Improved access to veterinary medicines especially dipping chemicals
- Access to credit