SPECIAL REPORT

FAO/WFP CROP AND FOOD SUPPLY ASSESSMENT MISSION TO LESOTHO

20 June 2005

Mission Highlights

- Domestic cereal production in 2004/05 is estimated at 119 000 tonnes, consisting of 92 129 tonnes of maize, 16 442 tonnes of sorghum and 10 339 tonnes wheat. The production is higher than last year by about 15 percent and represents 84 percent of the five-year average.
- Lesotho's cereal production appears to be on a downward trend, especially in the main producing districts of Berea, Butha-Buthe, Leribe and Maseru. This is cause for concern and should be fully investigated. Endemic soil erosion, weather-related disasters and the impact of HIV/AIDS pandemic are likely to be major underlying causes.
- Cereal import requirements for 2005/06 marketing year (April/March) are estimated at about 293 000 tonnes, of which 213 000 tonnes are expected to be imported commercially. With food aid stocks and pipeline as of 1 April 2005 at 61 000 tonnes, there remains an uncovered deficit of 19 000 tonnes (6 000 tonnes of maize, 13 000 tonnes of sorghum) which need to be covered by additional donor assistance.
- The Lesotho VAC estimate that 548 800 people will have a significant food deficit between June 2005 and March 2006 and will require food or cash assistance amounting to approximately 20 200 tonnes of maize equivalent.

1. OVERVIEW

During March 2005, a mid-season crop assessment was carried out by an agronomist at the request of FAO and WFP Country Offices. This was not the usual FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) which in addition to crop assessment evaluates the prospective overall food supply and demand situation and the food needs of vulnerable population groups. It was subsequently proposed that a full but relatively short CFSAM be fielded at near harvest time to update the crop assessment and to collect socioeconomic data for an overall food security evaluation. This was the task of the CFSAM that visited the country from 12 to 19 May 2005.

After two days of consultations in Maseru, the capital city, the Mission undertook a two-day field visit to the main cereal producing regions of the country, namely, central (the districts of Butha-Buthe, Berea, Leribe, Maseru) and southern (Mafeteng, Mohale's Hoek, Qacha's Nek, Quthing). The mountain region (Mokhotlong, Thaba-Tseka) was not visited as there was general agreement that no significant changes had occurred there since the mid-season assessment, in particular since early frost had not materialized as previously feared.



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The Mission was accompanied by government officials from the Ministry of Agriculture and Food Security (MoAFS), Ministry of Economic Planning, Disaster Management Authority/Early Warning Unit (DMA/NEWU), Bureau of Statistics (BoS), staff from the country offices of FAO, WFP and FEWS-Net, and an observer from USAID office in Pretoria, South Africa. Over 100 farmers along with district extension staff were interviewed and standing crops were inspected.

Area planted to cereals in 2004/05 is estimated at 208 200 ha, slightly higher than the 2003/04 official post harvest figure of 196 800 ha which was released by the government after last year's CFSAM report was published. This area figure is also slightly higher than the five-year average by about 6 percent. Although this season was better than last year, a combination of factors depressed the yields. These included late onset of rains and reduction in the use of improved seed and chemical fertilizers following the withdrawal of subsidies on farm inputs.

Overall, the estimated 2004/05 cereal production is 119 000 tonnes which is 15 percent higher than last year and 84 percent of the five-year average. There was a substantial increase in sorghum production, especially in the foothills of Maseru and Mafeteng districts. The late rains in March and April have encouraged the planting of winter wheat, peas, potatoes and various other vegetables which will contribute to the family diet and provide some cash income.

An examination of Lesotho's cereal production over the past six years indicates a steady decline. The decline is particularly marked in the central region which is the breadbasket of the country. This should be of great concern and should be investigated fully. Underlying factors are likely to include the endemic soil erosion, recurrent weather-related disasters (droughts, frosts, hailstorms) and the emerging consequences of the HIV/AIDS pandemic.

Cereal import requirement for 2005/06 marketing year (April/March) is estimated at 292 800 tonnes, of which 213 200 tonnes are expected to be imported commercially. With 60 600 tonnes on hand and in pipeline at the beginning of the marketing year, there remains an uncovered deficit of 19 000 tonnes, comprising 5 800 tonnes of maize and 13 200 tonnes of sorghum, which will need to covered by additional donor assistance.

A total of 548 800 people are projected by the LVAC in 2005 to have a significant food deficit and requiring food or cash assistance during the 2005/6 marketing year. Approximately 20 200 tonnes of maize equivalent will be needed to meet the deficit of the most vulnerable groups. The number of people in need is expected to increase from July into the hungry period. With a reported significant increase in sorghum production in certain districts, some of the relief food could be procured locally.

Chronic food insecurity is a major problem of poor households in Lesotho. Household food insecurity is caused by a number of factors including poverty, continued land degradation, reduced remittances due to retrenchments from South Africa mines, recent closures of textile mills and the effects of HIV/AIDS. WFP's bi-annual surveys show households in the southern lowlands of Lesotho to be experiencing the effects of chronic illness on their ability to engage in active agricultural production. Twenty-three percent of households surveyed lost three months or more of labour a year to chronic illness. Furthermore, households with chronically ill members eat poor diets compared to those not affected.

2. SOCIO-ECONOMIC CONTEXT¹

2.1. General

The Kingdom of Lesotho, a small, mountainous, landlocked country entirely surrounded by South Africa, was ranked 145 out of 177 countries in 2004 on UNDP's Human Development Index (HDI). More than 85 percent of its population of about 2.3 million live in rural areas engaged mainly in agriculture and informal sector activities. However, agriculture contributes only about 17 percent of GDP, the rest coming from industry (43 percent) and services (40 percent). About half the income of rural households comes from family members working in mines and other jobs in South Africa, but these remittances are declining with falling employment due to restructuring in the South African mines and changes in migration policies. Nevertheless, these earnings still constitute about 30 percent of Lesotho's Gross National Income (GNP). Only about 13 percent of the total land area is suitable for cropping. A notable development in recent years has been the growth of export-oriented manufacturing, led by the clothing and footwear sub-sector.

¹ Information and data in this chapter is from reports of Economist Intelligence Unit (EIU), World Bank, Central Bank of Lesotho, and the Common Country Assessment Report (December 204) by the UN System in Lesotho and 2005/06 Budget Speech read on 16 February 2005.

The main destinations of Lesotho's exports are the United States (76 percent - mostly textiles) and South African Customs Union countries (23 percent), while the main sources of imports are South Africa (73 percent) and Asia (24 percent).

2.2. Recent macroeconomic developments

Table 1 summarizes major indicators of Lesotho's economic performance in recent years.

Table 1 - Lesotho: Recent Economic Performance

Indicator	2000	2001	2002	2003	2004
GDP (US\$bn)	0.9	0.8	0.7	1.1	1.6
Real GDP growth (%)	1.3	3.2	3.8	3.3	3.4
Cons. price inflation (%)	6.0	6.9	10.5	6.1	5.1
Forex reserves (US\$m)	417.9	386.5	406.4	460.3	501.5
Exchange rate (M: US\$1)	6.9	8.6	10.5	7.6	6.5

The annual **growth rate of GDP** has been relatively low but steady at an average of about 3 percent over the past five years. This has not permitted significant growth in per capita income. For 2005/06 the growth rate is forecast at 2-2.5 percent, reflecting adverse developments in the textile industry. In particular, the imminent removal of textile quotas under the Multifibre Agreement on Textiles and Clothing has affected US orders for Lesotho produced clothes. Consumer price **inflation** fell from a high of 10.5 percent in 2002 to 5.1 percent in 2004 and is forecast to remain at this level through 2005. The country's **foreign exchange reserves** have steadily increased since 2001 and currently stand at around US\$500 million, enough for 5.2 months of imports of goods and services. The national currency, the Loti, which is pegged at par with the South African Rand, has been appreciating against major hard currencies since 2003. The **exchange rate** with the US dollar is currently averaging 6.4 maloti to the dollar. This is hurting exports but it is also helping to keep price increases moderate.

2.3. Population estimate

Official population estimates are projections based on the 1996 population census which indicated a population of 1.97 million. Applying an annual growth rate of 2.1 percent, the mid-2005 population is estimated at 2.35 million. This estimate does not take into account the impact of HIV/AIDS. However, available information indicates that currently Lesotho has a prevalence rate of 29 percent among adults of 15-49 years, the third highest in the world. It stood at 4 percent in 1993. Average life expectancy was estimated to have declined from 59.4 years in 1996 to 52.5 years in 2001. The high mortality in the most economically active population (15-49 years) is bound to have a significant adverse impact on the economy.

2.4. <u>Trends in cereal production</u>

Figure 1 below shows cereal production in Lesotho from1999/00 to 2004/05 as estimated by the Bureau of Statistics (BOS) and, for 2004/05, by the CFSAM.

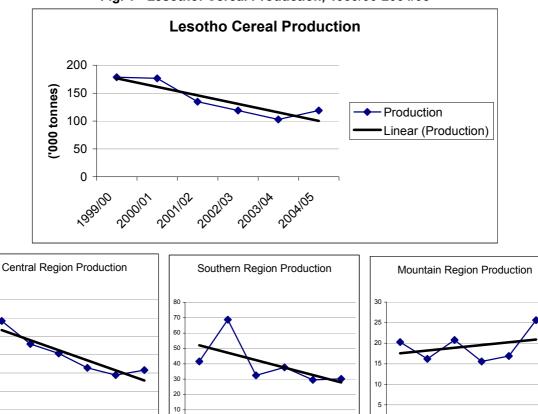


Fig. 1 - Lesotho: Cereal Production, 1999/00-2004/05

The graphs show that cereal production in Lesotho is on the decline nationally and in all regions except in the mountain region where there is a slight upward trend. The downward trend is steepest in the breadbasket central region consisting of the districts of Butha-Buthe, Leribe, Berea and Maseru, which on average contribute 57 percent of national cereal production. The southern region (Mafeteng, Mohale's Hoek, Quthing, Qacha's Nek) contributes 29 percent while the mountain region consisting of only two districts (Mokhotlong, Thaba-Tseka) contributes 14 percent. The declining production, particularly in the important central region, should be of great concern and needs to be fully investigated. Likely major factors at work include soil erosion which is endemic in Lesotho, recurrent weather disasters (droughts, frosts, hailstorms) and the impact of HIV/AIDS.

1999/00 2000/01 2001/02 2002/03 2003/04 2004/05

Production =

Linear (Production)

1999/00 2000/01 2001/02 2002/03 2003/04 2004/05

Production =

Linear (Production)

3. AGRICULTURAL PRODUCTION IN 2004/05

Linear (Production)

140

120

100

80

60

40

20

Production '

Although the agricultural sector makes only a relatively small contribution (17 percent) to the economy as a whole, its socio-economic importance is considerable as it provides livelihoods for more than 80 percent of the population. Crop production is virtually all rain fed. The most important crops are maize, sorghum and wheat, which occupy about 60 percent, 20 percent and 10 percent of the cropped area respectively. Other important field crops are beans and peas. Maize, sorghum and beans are mostly grown using the summer rains, whilst wheat and peas are winter crops, usually grown on late rains or residual moisture. Crop production in winter is dependent on good end-of-summer rainfall. The summer cereals are mostly grown in pure stands, but maize is also either intercropped with sorghum or beans and sorghum is also grown in mixture with beans. Monocropping predominates in all the agricultural regions and accounts for about 90 percent of areas planted with cereals. Sharecropping is practiced to offset the constraints related to access to land, labour and farm inputs. Most households plant a small home garden area with summer and winter vegetables, especially those who have access to water.

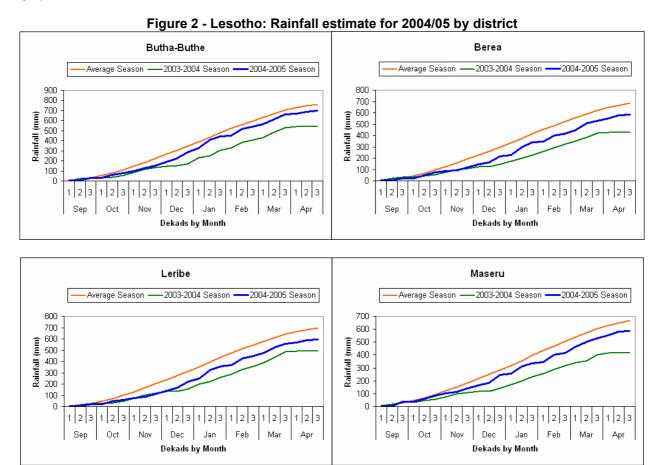
Despite an Agricultural Sector Adjustment Programme initiated in 2000, diversification and privatization in the sector has yet to become a reality. The limited area of good-quality arable land, land degradation, declining soil fertility and a series of droughts have contributed to continuing decline in the agricultural sector and

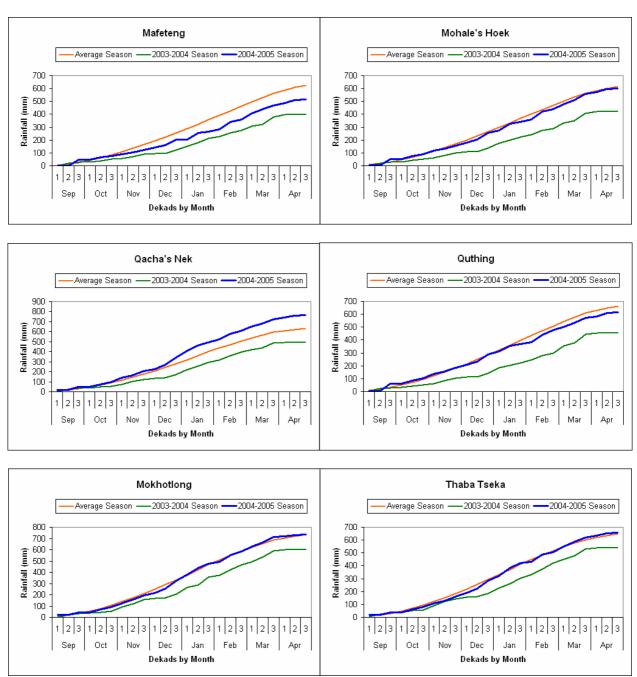
constrained its capacity to contribute to GDP. Most of the good farming land lies in the northwest lowlands, where the capital, Maseru is located. Much of the rest of the country is either too mountainous or normally too dry to produce high yields of cereal crops. In addition, many of these areas are characterized by fragile soils, where the pressures of increasing farming and grazing have led to degradation of fields and pastures. Loss of vegetative cover from firewood removal, animal browsing and overgrazing has led to obvious gulley erosion of hillsides, spurring the creation of a Ministry of Forestry and Land Reclamation (MFLR) in 2003. There is a growing recognition that the present problems with low farm productivity cannot be solved solely through soil conservation measures, nor through the use of improved seed and chemical fertilizers. The MFLR is now aware that what is needed is a holistic land husbandry approach that achieves synergies at farm level, through the adoption of improved crop, soil and rain mater management practices which offer both production and conservation benefits.

The livestock sector continues to provide a significant source of rural income, with cattle, sheep and goats equally important. Besides, meat, wool and mohair are important sources of revenue. Herd sizes do not appear to be shrinking drastically at present, despite pasture degradation and drought.

3.1 Agro-meteorological conditions

Rainfall estimates for 2004/05 are shown in Figure 2, derived from satellite data by SADC Remote Sensing Programme. The graphs show that in the central region (Berea, Butha-Buthe, Leribe and Maseru) cumulative rainfall was above last year but below average. It also started somewhat late leading to late planting in many areas. In the southern region (Mafeteng, Mohale's Hoek, Qacha's Nek and Quthing) rainfall was above average in Qacha's Nek, close to average in Mohale's Hoek and Quthing and below average but above last year in Mafeteng. In the mountain region (Mokhotlong, Thaba-Tseka), rainfall was normal throughout the season. These data are consistent with those of Lesotho Meteorological Services. Thus, overall, Lesotho's rainfall situation in 2004/05 was generally favourable for crop production, although less than satisfactory in the central region, the country's breadbasket. Moreover, there were no major incidences of early frost and dry spells.





Source: SADC Remote Sensing Programme.

Supply of agricultural inputs

3.2

<u>Seed:</u> The main source of seed for the majority of farmers is the home produced open pollinated varieties. Some farmers and especially the commercial farmers and master farmers use hybrid seeds. The use of hybrid seed is on the decline as illustrated by the number of farmers who reported using open-pollinated seed more frequently now than in the past.

<u>Fertilizer:</u> As was the case was last year, there was no government-subsidized fertilizer. As a result, a very low percentage of farmers used adequate amounts of purchased chemical fertilizers. However, some "commercial" farmers, who normally produce sufficient amounts of maize to market, are still purchasing fertilizers from private retailers. These farmers generally have access to tractors, which allows them to plough and plant on time to increase their returns from purchased inputs. Possessing these means for improved crop management was especially important this year due to the late onset of rains. Farmers who were unable to make use of or conserve moisture from the relatively insufficient early rains or plant immediately after the arrival of first rains, chose not to risk the time, energy and money in planting a maize crop this season. Some switched to planting sorghum and others left some of their fields fallow.

The decline in soil organic matter and nutrient levels is mainly due to overgrazing and feeding of the crop residue to livestock rather than incorporating it into the soil after harvest. The use of farmyard manure is limited and further made difficult by the fact that most of the livestock graze in the open field precluding the collection of manure and the fact that most of the manure collected is also used for fuel.

Fertilizer use among the vast majority of households that produce for home consumption was very limited. Some households mixed very small amounts of chemical fertilizers with some manure and applied them at well below optimal doses to their fields. These low doses, applied to nutrient deficient soils, are resulting in poor crop development and depressed yields.

<u>Ploughing:</u> The other major production cost is land preparation. Land preparation is predominantly (over 70 percent) undertaken by draught animals. In the higher-production areas of Leribe, Berea and Maseru, cultivation by tractor is available to some. There was a tendency this season to minimize land preparation costs by planting fewer fields, or leaving at least one field fallow. In areas where animal traction is the principal form of ploughing, dry soils were an additional constraint to good and timely planting as well as to good crop emergence and establishment.

Areas planted

The areas planted with cereals in 2004/05 compared to the five-year average are presented in Table 2.

Table 2- Lesotho: Total cereal area ('000 hectares) in 2004/05 compared to 1999/00-2003/04 average

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DISTRICT	1999/00	2000/01	2001/02	2002/03	2003/04	5 year average	2004-05	2004/05 as percent of
								average
Butha-Buthe	12.5	6.0	6.6	10.2	9.7	9.0	9.1	101.1
Leribe	36.6	38.2	36.0	39.6	29.8	36.0	30.5	84.7
Berea	38.0	31.9	28.7	29.5	26.8	31.0	29.7	95.8
Maseru	29.6	33.8	26.6	31.8	30.6	30.5	30.2	99.0
Mafeteng	15.9	43.4	34.1	32.1	31.4	31.4	28.8	91.7
Mohale's Hoek	8.9	32.0	18.5	19.4	23.3	20.4	24.2	118.6
Quthing	12.7	11.9	8.4	11.2	15.0	11.8	14.0	118.6
Qacha's Nek	4.0	5.8	4.8	4.6	2.1	4.3	7.8	181.4
Mokhotlong	6.0	11.6	12.1	10.8	12.3	10.6	10.5	99.0
Thaba-Tseka	14.3	15.4	16.4	12.4	15.8	14.9	23.4	157.0
LESOTHO	178.5	230.0	192.2	201.6	196.8	199.8	208.2	104.2

Source: Bureau of Statistics

The figures show fluctuations in the total area planted over the past five years. Between 2000/01 and 2003/04 actively cultivated area varied from 230 000 ha to 196 800 ha.

The total land area under cereals in 2004/05 is estimated at 208 200 ha, slightly higher than last year's official figure of 196 800 ha which was released after last year's CFSAM report was published and is also slightly higher than the five-year average by 4 percent. Of the total area planted with cereals this year, maize occupies about 162 000 ha or 78 percent and was slightly higher than last year by about 3 percent, sorghum occupies about 36 000 ha or 17 percent and the proportion of land area planted was the same as last year. Wheat occupies about 11 000 ha or about 5 percent, slightly lower than last year by about 3 percent. While most farmers reported leaving at least one of their fields fallow due to the soil fertility problem (tired land), lateness of the rains, poor access to means of ploughing and high cost of inputs relative to producer price, the land area planted with cereals this year is slightly higher than last year and is above the five-year average by about 5 percent.

3.3 Crop yields

The average yield forecasts for each crop by district are presented in Table 3.

Table 3 - Lesotho: Area and yield of cereal crops in 2004/05 by district

DISTRICT		Maize	•		Sorghum		Wheat			
2.011	Area	Yield	Prod.	Area	Yield	Prod.	Area	Yield	Prod.	
	ha	t/ha	tonnes	ha	t/ha	tonnes	ha	t/ha	tonnes	
Butha-Buthe	7 492.3	0.57	4 270.6	1 422.5	0.47	668.6	172.0	0.70	120.4	
Leribe	26 204.6	0.82	21 487.8	4 118.0	0.52	2 141.4	140.0	0.80	112.0	
Berea	23 959.7	0.35	8 385.9	5 784.5	0.40	2 313.8	0.0	0.00	0.0	
Maseru	22 877.2	0.85	19 445.6	5 099.0	0.53	2 702.5	2 221.0	0.70	1 554.7	
Mafeteng	22 276.9	0.40	8 910.8	6 290.0	0.55	3 459.5	253.0	0.40	101.2	
Mohale's Hoek	17 043.1	0.35	5 965.1	6 312.1	0.40	2 524.8	833.0	0.65	541.5	
Quthing	9 802.4	0.30	2 940.7	3 308.0	0.30	992.4	927.0	0.60	556.2	
Qacha's Nek	4 485.0	0.41	1 838.9	2 125.6	0.35	744.0	1 201.0	1.30	1 561.3	
Mokhotlong	7 064.2	0.65	4 591.7	37.0	0.30	11.1	3 429.0	1.30	4 457.7	
Thaba-Tseka	20 417.1	0.70	14 292.0	1 607.3	0.55	884.0	1 334.0	1.00	1 334.0	
LESOTHO	161 559.5		92 129.1	36 104.0		16 442.0	10 510.0		10 339.0	

Source: Bureau of Statistics and CFSAM estimates

The yield estimates were derived from a sample households interviewed, time series data, consultation with staff from the Ministry of Agriculture, NGOs, visual observation on standing crops and physical examination of crops in the field, as well as the condition of the crop residue where crops had been harvested. The yield estimates were first made for each crop by district and by agro-ecological zone (lowland, foothill and mountain). The district yields are the average of the agro-ecological zones. The general conclusions from the survey conducted by the Mission are:

- this season was better than last year, and yields were also better although there are marked variations by district and agro-ecological zone.
- late onset of the rains, high cost of inputs, delayed ploughing and minimal use of both organic and chemical fertilizers have reduced the potential yields; some of the farmers were able to overcome these constraints through share cropping arrangement;
 - early frost did not materialize an crops escaped the possible damage of an early frost

3.4 Winter wheat

At the time of the Mission, some farmers were preparing fields and planting winter wheat that will be harvested in September/October 2005. Planting of winter wheat normally starts in mid-April, making use of the residual soil moisture and small amounts of rainfall. The late rains in April also helped land preparation and planting operations.

3.5 Cereal production in 2004/05

Table 4 shows the total cereal production in 2004/05 compared to last year and the past five-year average (1999/00 - 2003/04). The production figures for 2003/04 are the official post harvest estimates of the Bureau of Statistics.

For purposes of comparison and ease of presentation, production figures in Lesotho have been divided into three distinct agricultural regions, namely Central/Northern Lowlands (Butha-Buthe, Leribe, Berea and Maseru), Southern Lowlands (Mafeteng, Mohale's Hoek, Quthing, Qacha's Nek) and Mountain (Mokhotlong and Thaba-Tseka).

Table 4 - Lesotho: Total cereal production ('000 tonnes) in 2004/05 compared to five-year average

DISTRICT	1999/00	2000/01	2001/02	2002/03	2003/04	Five-	2004/05	2004/05
						year		as
						average		percent
								of
								average
Butha-Buthe	12.5	4.8	3.7	2.9	6.2	6.0	5.1	85
Leribe	36.6	29.2	31.2	34.3	23.7	31.0	23.7	76
Berea	38.0	25.5	23.2	13.3	10.4	22.1	10.7	48
Maseru	29.6	32.2	23.3	15.1	17.4	23.5	23.7	101
Mafeteng	15.9	31.9	19.1	16.2	13.1	19.2	12.5	65
Mohale's Hoek	8.9	24.6	6.0	14.2	9.6	12.7	9.0	71
Quthing	12.7	9.6	2.8	6.7	5.5	7.5	4.5	60
Qacha's Nek	4.0	2.6	4.5	0.6	1.3	2.6	4.1	158
Mokhotlong	6.0	6.8	10.7	6.2	6.5	7.2	9.1	126
Thaba-Tseka	14.3	9.4	10.1	9.4	10.4	10.7	16.5	154
LESOTHO	178.5	176.6	134.6	118.9	104.1	142.5	118.9	84

Source: Bureau of Statistics; CFSAM estimates.

The estimated national cereal production is about 119 000 tonnes which is higher than last year by about 15 percent and represents 84 percent of the five-year average. Of the total cereal production this year, the Central/Northern lowlands account for about 53 percent, the Southern Lowlands about 25 percent and the Mountain districts about 22 percent.

3.6 Other crops

Beans, which are a short season crop, are either intercropped with maize and sorghum or grown as a mono crop. Peas and lentils are grown in the mountain areas. Other minor crops include oats and barley. The small garden plots near the homesteads were not affected by the late onset of rains this year.

3.7 <u>Livestock situation</u>

The majority of rural households own livestock, mainly cattle, sheep and goats. Many households also have a horse, donkeys and chickens. From the Mission's enquiries it appears that animal numbers are generally holding steady, with a slight decrease in the number of cattle mainly due to stock theft and a small decrease in the number of sheep, goats, horses and donkeys.

Rainfall had been adequate to restore pasture to good condition in most areas.

4. CEREAL SUPPLY/DEMAND SITUATION, 2005/06

4.1. Cereal markets and prices

Overall, inflationary pressures eased considerably in 2004 compared to 2002 and 2003 (Fig. 3). Inflation was much higher in 2002 due a severe drought that hit the country during the 2001/02 cropping season.

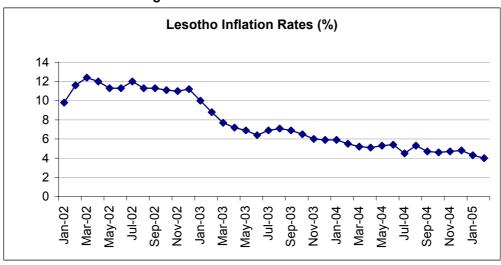


Fig. 3 - Lesotho: Trends in inflation

However, an examination of the consumer price index (CPI) for bread and cereals reveals that these items were more costly in 2004 than in 2003 (Fig. 4). A decline of 13 percent in cereal production between the two years largely explains the behaviour of the CPI.

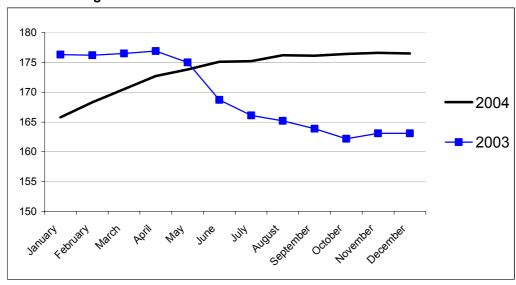


Fig. 4 - Lesotho: Bread and Cereals CPI in 2003 and 2004

4.2. Cereal supply/demand balance, 2005/06

The forecast of the cereal supply/demand situation in Lesotho for marketing year 2005/06 (April/March) is presented in Table 5. It is based on the following parameters and assumptions.

- A mid marketing year (September 2005) population of 2.3891 million projected from the official estimate of 2.233 million at mid 2002, using an annual growth rate of 2.1 percent.
- Opening stocks were provided by the Ministry of Industry, Trade and Marketing.
- Closing stocks are based on two weeks of maize and one month of wheat consumption.
- Per capita apparent consumption rates per year are 127 kg of maize, 42 kg of wheat and 12 kg of sorghum.
- Other uses are essentially seed use, and this is added to post-harvest losses.
- Commercial maize imports include 127 000 tonnes based on average imports by the two largest milling companies, Lesotho Milling and Lesotho Flour Mills, and an estimated 13 000 tonnes by small-scale millers and traders numbering around 100.
- Food aid stocks on hand and in pipeline at the beginning of the marketing year are those reported by WFP and C-SAFE (Consortium for Southern Africa Food Emergency).

Table 5 - Lesotho: Cereal Supply/Demand Balance 2005/06 (000 tonnes)

	Maize	Wheat	Sorghum	Total
Domestic availability	115.5	35.9	16.4	167.8
Opening stocks	23.4	25.6	0.0	49.0
Production	92.1	10.3	16.4	118.8
Total utilization	321.9	109.1	29.6	460.6
Food use	303.4	100.3	28.7	432.4
Losses and other uses	6.1	0.6	0.9	7.6
Closing stocks	12.4	8.2	0.0	20.6
Import requirement	206.4	73.2	13.2	292.8
Commercial imports	140.0	73.2	0.0	213.2
Food aid in stock & pipeline	60.6	0.0	0.0	60.6
Uncovered deficit	5.8	0.0	13.2	19.0

The balance sheet shows that there will be a deficit of 5 800 tonnes of maize and 13 200 tonnes of sorghum which will need to be covered by additional donor assistance.

5. HOUSEHOLD FOOD SECURITY AND VULNERABILITY ASSESSMENT

5.1 Main factors determining rural food security in Lesotho

Lesotho is confronting the triple threat of increasing chronic poverty, rising rates of HIV/AIDS and weakened government capacity. The triple threat takes a heavy toll particularly on the households of the rural poor in Lesotho, who are faced with a limited number of coping strategies to respond to the intensifying hazard. Fifty-nine percent of the population remain below the poverty line, and the UN Common Country Assessment reports that about 40 percent of the population of Lesotho fall in the 'ultra-poor' category. Studies indicate that HIV/AIDS is a leading factor in the drastic reduction of household income for much of the population. Against this background, falling agricultural production, trade constraints, and collapsing employment opportunities combine to increase the vulnerability of poor households to food insecurity.

The HIV/AIDS pandemic is chiefly affecting individuals in their economically productive years. For the Government of Lesotho, HIV/AIDS is not only an issue of health, but rather a development issue with social, economic and cultural implications. World Bank estimates predict that the GDP of Lesotho will be halved by 2015. The effect of HIV/AIDS on household food security is clear and ever present.

WFP's Community Household Surveillance and the FAO/WFP livelihood study show that chronic illness is negatively affecting agricultural production in Lesotho's rural households. WFP's bi-annual survey shows households in the southern lowlands of Lesotho are experiencing the effects of chronic illness in such a way that it affects their ability to engage in active agricultural production. Twenty-three percent of households surveyed lost three months or more of labour a year to chronic illness. Furthermore, chronically ill households eat poor diets, when compared to households that are not experiencing chronic illness. To meet shortfalls in their food needs, households are engaging in severe coping strategies to provide for their daily needs. Surveys show that households are resorting to begging, reducing the number of meals, depleting household assets and eating wild foods. In its rapid assessment of the agricultural season, a WFP/FAO survey shows that 50 percent of agricultural producing households were unable to meet their labour needs as a result of chronic illness.

The significance of agricultural production as a source of foodstuffs has severely declined in Lesotho. Per capita agricultural production has been falling since the 1970s. Where once production was a key food source, households today rely heavily on external sources to meet their food requirements (DRFNS, 2004). In 1980, cereal production contributed about 80 percent of the national requirements. By the 1990s cereal production was contributing about 50 percent of requirements. By 2004, however, cereal production was estimated to contribute only 30 percent of national cereal requirements.

Rural poor households are struggling to meet their basic food needs. The Lesotho Vulnerability Assessment Committee baseline assessment of 2003 indicates that poor households derive only 20 percent of their food energy requirements from own production. Households with middle and higher incomes derive 40 and 49 percent of their energy requirements from their own production respectively. As a result, households are forced to meet the majority of their food needs through accessing local markets. Even in a position of bountiful harvest, poor households are still obligated to meet up to 80 percent of the food needs by purchasing on the local market.

Rural Lesotho is facing a crisis of chronic and ever-deepening vulnerability. The collapse of the once buoyant migrant-labour opportunities in both South Africa and urban areas of Lesotho has reduced the number and value of remittances sent home to rural areas. Retrenchments from the South African mining industry and the closure of textile factories have undermined the ability of rural households to access food. With the backdrop of declining household income, reliance on external sources to meet food requirements is a precarious livelihood strategy for Lesotho's rural poor.

5.2 Method of assessment

The mission assessed vulnerability through both primary and secondary data. Primary data was collected through the administration of a household questionnaire and through interviews with key informants. The mission undertook field work in four out of the five livelihood zones in Lesotho, specifically the Northern Lowlands, Southern Lowlands, Foothills, Mountains and the Senqu River Valley. During the field work, a questionnaire was administered to 109 households across eight of Lesotho's districts. Data was collected in Butha Buthe, Berea, Leribe, Mafeteng, Maseru, Mohale's Hoek and Quthing. A semi-structured interview was undertaken with the head of households, or designate. In addition to the household questionnaire, mission members met with key informants such as the Bureau of Statistics, Ministry of Agriculture and Food Security, Lesotho Vulnerability Assessment Committee and UN agencies. Secondary data was collected from a number of sources, including current vulnerability studies undertaken in Lesotho. The Bureau of Statistics and the Food and Nutrition Coordinating Office provided supporting data.

Food-needs and caseload estimates are drawn from the empirical data from current and past Lesotho LVAC reports and from the primary data collected during the mission. WFP's Community Household Surveillance (CHS), a bi-annual survey that monitors food aid outcomes and acts as part of early warning system, provided guidance on the current vulnerabilities faced by rural populations in Lesotho.

Table 6 – Lesotho: Agro-Ecological and Livelinood Zones and Administrative Districts									
Agro-Ecological Zone	Livelihood Zone	Administrative District							
Lowlands	Northern Lowlands Southern Lowlands	Butha-Buthe, Berea, Maseru, Leribe Mafeteng, Mohale's Hoek							
Foothills	Foothills	Mafeteng, Butha-Buthe, Leribe, Maseru, Mohale's Hoek, Berea							
Mountains	Mountains	Mohale's Hoek, Butha-Buthe							
Senqu River Valley	Senqu River Valley	Quthing, Mohale's Hoek, Qacha's Nek							
	Peri-urban	Not captured							

Table 6 - Lesotho: Agro-Ecological and Livelihood Zones and Administrative Districts

5.3 General vulnerability indicators and current situation²

Food security is driven by many factors in Lesotho. Structural long-term factors combine with immediate and short term shocks to household food security. Households meet most of their food needs through food purchase. They use income derived from casual labour, remittances, and other transactions to purchase food. Crop production contributes as little as 10 to 50 percent of household food requirements..

The following structural factors inhibit household resistance to vulnerability:

- a) Households face limited access to productive assets such as land, capital for inputs, draft power, sickles, ploughs and other basic items.
- b) Rural communities are experiencing a reduction in their income and purchasing power due to the reduced receipt of remittance; as a result of job losses from the mines in South Africa and the recently closed textile industries in Lesotho.
- d) Households endure a decrease of their income due to illness and death associated with HIV/AIDS. HIV/AIDS affects communities and households through a reduction in the number of labour hours due to chronic illness.
- e) Declining per capita cereal production as domestic cereal production has been falling against a background of increasing population growth.

² The source for this section is various LVAC reports

- f) Reduced farmer support in terms of marketing infrastructure and extension services, long term soil erosion and lack of proper land management; and,
- g) Cereal price fluctuations within the Southern African region. Many households have benefited from the collapse in grain prices, yet in highland and mountain areas, prices of maize have remained high.

Significant regional differences exist in levels of vulnerability and food insecurity. Income sources and coping mechanisms vary considerably from district to district, and within agro-ecological zones. The 2005 LVAC analysis shows that most people in the Foothills, Northern Lowlands and Mountains are likely to meet their food needs from own production and purchases in 2005 due to a better agricultural season and improved availability of local employment. The Southern Lowlands and Senqu River Valley areas are acknowledged to be the most chronically vulnerable areas of Lesotho. LVAC and crop assessment of the 2004/05 season show that the populations in these areas have the highest food deficits in Lesotho.

In the Southern Lowlands, the poor derive at least 26 percent of their food from own production and as high as 50 percent for the better-off with purchases contributing to about 33 to 46 percent of their annual food requirement. The LVAC 2005 analysis indicates that own crop production contribute 14 percent and purchases 29 percent for the poor. A number of very poor people will not be able to meet their food needs irrespective of the stable maize and maize meal prices in most areas. In the Senqu River Valley, the contribution of agriculture to food sources has slightly increased compared to last year, but it is still poor at 18 kgs per capita compared to an average of about 70 kgs per capita. However, declining remittances due to retrenchments especially from the mines, and unavailability of piecework, will result in some of the poor households in the valley meeting about 22 percent of requirement from purchases (LVAC, 2005), and are likely not to be able to raise enough income to meet their purchases, which is normally 35 percent of requirements.

5.4 Coping mechanisms

Lesotho's rural households employ a number of different coping mechanisms to meet their food requirements. The LVAC assessment reports that gifts, remittances and labour sales seem to be the major means of coping (LVAC 2003, 2004, 2005). Based on the field observation supported by the evidence from CHS, there is an indication that coping mechanisms employed by households since the emergency have become a daily part of their livelihood. WFP survey suggests the emergence of chronically vulnerable households who struggle to cope with the effects of HIV/AIDS, orphanhood and increasing poverty year-on-year.

The mission observed that landless households exercise the widest range of coping mechanisms to meet their food requirements. The households which reported no access to land for cultivation had a wider range of coping strategies (more than 5) including beer brewing, petty trade, gifts, sell their livestock mainly chickens and rabbits, and other coping mechanisms. Households with access to land for cultivation relied on gifts, migration, selling livestock and dropping out of children from school as their major strategy.

Many households view food aid as a means of meeting their needs. While food aid is not a coping mechanism, over the past three years it has prevented households from resorting to "negative" coping mechanisms. The mission did not witness the stress indicators that are common in emergency situations such as high malnutrition, mass migration, depletion of assets, and prostitution. However, nutritional surveillance data of children under five years of age shows that some peri-urban and mountain areas are experiencing increasing rates of underweight children. Surveillance officers report that this increase may be attributable to an inability of working mothers to provide care for young children and to inadequate health services in peripheral mountain areas.

5.5 Systematic analysis of household coping mechanisms

Lesotho's households may be divided into two groups: those who suffer transitory food insecurity and those who endure chronic food insecurity. Transitory food insecurity refers to a short-term household inability to access enough food. In Lesotho, transitory food insecurity may result from a reduction of family income, poor harvest and fluctuating food prices from the regional cereal market. A chronically food insecure household is one that continuously endures an inadequate diet resulting from lack of resources to produce or acquire food. The mission identified that a significant number of households have fallen into a chronically vulnerable status. Chronic food insecurity at the household level is a major problem of poor households in Lesotho.

Chronic food security is experienced by persons affected by HIV/AIDs, orphaned and vulnerable children, pregnant and lactating mothers, children under 5 and poor wealth groups. WFP surveys and field observations show that the asset-wealth of a household effectively indicates their food security status. Field observations indicate that the elderly-headed households tend to have access to land for cultivation, better resource bases and effective coping strategies.

5.6 HIV/AIDS and health and nutritional status

HIV/AIDS is having an unprecedented impact on the health and nutrition of much of the population. According to UN reports, the prevalence of HIV in Lesotho has risen from 4 percent in 1993 to the current estimation of 29 percent in 2004. The life expectancy rate is estimated at 39 years for males and 41 years for females. An estimated 55 percent of HIV/AIDS infected persons are female, and 45 percent are male. The prevalence of HIV and AIDS is much more pronounced among economically and sexually active persons. Young women aged 15 to 29 years old account for 75 percent of all reported AIDS cases. In 2001, about 10 percent of all new cases were among children. Child and infant mortality is also high. Infant mortality is estimated at 81 deaths per 1 000 live births and child mortality of 35 deaths per 1 000 births. For children under 5 years of age, the mortality rate is 113 deaths per 1 000 live births. Though the rates of mortality are high across the board they are much lower than for SADC countries by almost one-half.

During the mission's visit some households reported the direct impact of chronic illness and death on their livelihoods. Households reported loss of man hours due to chronic illness, high expenses associated with medication and funerals, loss of income earning opportunities as some of the members of the families who have been working in South Africa were retrenched on the grounds of ill health. Social custom has also resulted in a depletion of assets, as livestock are slaughtered at funerals or sale to meet medical and funeral expenses, some households using cultivation land or any other assets as collateral security for funeral expenses. Another added burden to the community resulting from HIV and AIDS is the increase in the number of orphans. A UNICEF survey in 1999 estimated that Lesotho had 117 600 AIDS orphans and recent estimates put the number of orphans at 92 000 (DMA/WFP)

Early indications from a recent FAO study on the impact of HIV/AIDS on rural livelihoods shows that HIV/AIDS is having a significant impact on the social landscape of rural Lesotho. The preliminary results show that crop production declined in households with HIV/AIDS infected members. There was indication of households with HIV and AIDS withdrawing children from school as a coping mechanism. Furthermore, the frequency and composition of food intake is not balanced in these households. This is supported by WFP CHS data that shows that households with chronically ill members have a significantly lower diet diversity than households without chronic illness members.

The Government of Lesotho has declared HIV/AIDS a national disaster and set a goal of cutting the adult prevalence rate from 31 percent to 25 percent by 2008 to 17 percent by the year 2015. The Government designed a cost-effective plan in June 2004 to provide anti-retroviral drugs to the population at affordable prices. In March 2004, universal HIV/AIDS testing for citizens of Lesotho was launched, but the first three dedicated testing centres were operational only at the end of April. The government's goal is to provide testing facilities in the 18 hospitals throughout the country. The international donor community is also providing valuable support in the fight against HIV/AIDS, headed by the Geneva-based Global Fund, which is donating US\$34 million to be spent on HIV/AIDS and tuberculosis (TB) programmes for the next five years. Other donors include, but are not limited to, the Irish Government, the United Kingdom's Department for International Development (DFID) and the United States.

5.7 <u>Nutrition</u>

The rate of malnutrition among women and children has increased in Lesotho over the past decade, according to the UN Common Country Assessment. Chronic malnutrition is estimated at 31 percent in 2002 and wasting at 3 percent. Table 7 shows underweight rates for selected districts in Lesotho

Table 7 - Percentage of Underweight (Growth Monitoring) Children Under 5 Years from Oct 03 to Dec 04

	Oct-	Nov-	Dec-	Jan-	Feb-	Mar-	Apr-	May-	Jun-	Jul-	Aug-	Sep-	Oct-	Nov-	Dec-
	03	03	03	04	04	04	04	04	04	04	04	04	04	04	04
Leribe	8.7	12.4	18.7	14.6	10.9	17.9	12.9	13.8	13.5	11.1	9.5	13.0	13.6	18.0	16.4
Mohale's Hoek	18.4	23.4	2.9	27.6	27.6	25.5	31.8	27.2	20.5	18.5	24.7	15.0	19.6	16.2	19.6
Berea	22.7	23.7	21.2	26.7	25.9	24.5	23.3	22.8	18.3	14.4	14.6	10.1	25.2	12.2	14.1
Butha Buthe	5.3	15.3	13.7	15.5	18.5	16.8	10.6	16.6	14.7	8.1	13.1	13.9	16.7	21.9	12.5
Thaba Tseka	21.4	19.1	15.5	19.1	22.1	16.7	20.4	27.7	25.5	20.4	13.4	24.6	25.4	15.9	22.5
Mafeteng	34.5	21.3	50.0	15.8	16.9	11.2	12.9	10.6	10.7	14.2	11.9	9.7	10.7		
Mokhotlong	19.4	15.4	12.5	14.7	13.2	11.9	14.2	13.6	14.1	10.1					

Source: Ministry of Health/UNICEF

5.8 Estimation of population in need and emergency food aid requirements

A total of 548 800 people are projected by the LVAC in 2005 to have between 2 to 3 months a significant food deficit of total food requirements. These households will require food or cash assistance during the 2005/06 marketing year. Approximately 20 200 tonnes of maize equivalent will be needed to meet the deficit of these most vulnerable groups. The number of people in need is expected to increase from July into the hungry period. The most affected areas are located in the Senqu River valley, the Southern Lowlands of Mafeteng, and Mohale's Hoek districts. The Northern Lowlands of Butha Buthe district, the Foothills of Leribe, Berea and Mohale's Hoek districts, the Mountain areas of Thaba Tseka, Mhotlong, Leribe, Qacha's Nek, Mohale's Hoek and Maseru districts and the peri-urban area will have a very low deficit of less than one month total food requirements.

Table 8 - Food Deficit by Livelihood Zone

Livelihood Zone	Population facing a deficit	Grain required to offset deficit (tonnes)	Average deficit (kgs/capita)
Southern Lowlands	240 800	8 778	36.5
Senqu River Valley	308 000	11 466	37.2
Total	548 800	20 244	36.9

Source: VAC 2004/05; CFSAM findings June 2005.

Chronically vulnerable households remain the most-at-risk in Lesotho. Based on the WFP CHS surveys, the most food insecure groups include the following:

- Asset Poor Households
- Households with chronically ill members
- Orphaned and Vulnerable Children
- · Pregnant and Lactating Mothers

5.9 Possible strategies for food assistance

Food assistance should be carefully targeted the most vulnerable geographical areas and specific vulnerable groups across the country, such as the chronically ill, orphaned and vulnerable children, pregnant and lactating mothers and children and poor households. To reduce the ever-increasing poverty in rural areas, consideration should be given to the creation of rural employment opportunities through Safety Nets. WFP, through the ongoing Protracted Relief and Recovery Operation (PRRO), is addressing food insecurity in Lesotho through the following activities:

Food-for-Work

Food-for-Work activities will continue to promote conservation farming in 2005/6, which include terracing, contour digging, soil and rainwater management are encouraged. The mission has observed that there are a number of constraints toward achieving conservation farming, as river and stream bank cultivation is rampant. Minimum efforts are being made by agricultural extension workers towards these activities. Extension workers should be encouraged to provide practical technologies and innovations to farmers.

Food-for-Work activities will continue to promote watershed management. Activities include tree planting, gully reclamation and community education. The food for work will target households without access to land for cultivation and livestock in order to provide them with a temporary safety net and at the same time prevent continued land degradation.

The watershed management measures coupled with the conservation farming measures are likely to contribute to increased agricultural productivity, thereby allowing farmers to provide increased employment for some of the landless. Cash for work can be used as an alternative to food for work, but its viability needs to be investigated.

Targeted Vulnerable Group Feeding

Vulnerable Group Feeding will be targeted to food insecure households, particularly people living with HIV/AIDS (PLWHA) The activities for PLWHA could include less labour intensive activities such as gardening, fruit tree planting, and animal husbandry. The production activities would improve access to micronutrient rich fruits which would greatly benefit HIV-infected people. Field observations have indicated that most of the fruits such as apples, apricots, etc that could be produced and marketed in Lesotho are mainly imported from South Africa. The planned training activities will help educate the population as currently there are only three testing centres in Lesotho

5.10 Overview of non-food needs

A number of programmes and projects have been initiated by the Ministry of Agriculture and Food Security. These include Special Programme for Food Security (SPFS) supported by FAO to increase livestock and crop production with an agreed annual budget of US\$140 000; The Sustainable Agricultural Development for the mountain areas aimed to improve food security and nutritional status of the rural poor in mountain areas of Thaba Tseka, Mokhotlong and Qacha's Nek, which started in 1999 and has been extended for another two years and is supported by IFAD; South to South Cooperation aimed at technical assistance for SPFS and is provided by India, the Lesotho Government and FAO; Irrigation projects aimed at making nine percent of the 300 000 ha arable land as efficiently productive as possible, supported by Canada, India and the Lesotho Government; Increased food production (KR2) aimed at supplying machinery and inputs for agricultural production; and The Livelihoods Recovery through Agriculture Programme (LRAP) covering five districts and aimed at improving vulnerable rural households to cope with shocks and stress. These projects are some of the initiatives in the country. Non-food interventions should aim to build on these existing initiatives.

The Lesotho LVAC suggested in 2004 that food aid should not be the automatic and only answer for vulnerable populations affected by food deficits in Lesotho. Given the low prices of grain and maize meal in this past year, programmes that inject cash into households could also help to alleviate some of the problems faced by households such as medical bills and payment of school fees and uniforms.

Programmes promoting the creation of productive household assets such as livestock, draught power and farm implements are encouraged, as this will reduce the man-hours required by households and improve agricultural production and food security. Other non-food programmes that should be promoted in conjunction with the already existing initiatives include; water catchment control combined with irrigation; forestation (for catchment area protection, provision of firewood and fruit trees); fisheries; rabbit, piggery and chicken projects.

To increase production in 2006, seeds and tools are required for some of the households who have not been making maximum utilization of the available land and labour.

This report has been prepared by Mwita Rukandema and Abdirazak Awale and Elliot Vhurumuku under the responsibility of the FAO and WFP Secretariats with information from official and other sources. Since conditions may change rapidly, please contact the undersigned for further information if required.

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