NAMIBIA EARLY WARNING AND FOOD INFORMATION SYSTEM

NAMIBIA

CROP ASSESSMENT REPORT

MAY 2001

INTRODUCTION

Namibia Early Warning and Food Information System (NEWFIS) undertook its second Crop Assessment Mission to the northern cereal producing areas. The mission was organised by the Directorate of Planning, MAWRD in collaboration with the Emergency Management Unit of the Office of the Prime Minister, and, the Namibia Meteorological Service of the Ministry of Works, Transport and Communication. In all the regions, officials from the Regional Governors' offices actively participated in the assessment mission. The Namibia Development Corporation (NDC) provided information of cereal production prospects for its various projects, while the Namibian Agronomic Board provided the results of a detailed survey of the hectares planted to coarse grain in the commercial sector. The Hardap Co-operative provided information on cereal harvest prospects for the commercial farms at the Hardap irrigation scheme.

The mission visited Caprivi, Kavango, Ohangwena, Omusati, and Oshana and Oshikoto regions to come up with the final cereal production estimates for the 2000/2001 season. The assessment was made in full collaboration with MAWRD agricultural extension staff who provided information on the hectares planted and early yield forecasts, where possible. The information was then reviewed and evaluated through field visits to selected areas in each of these regions. A cereal supply/demand balance has been prepared (Table 4) to give an indication of cereal import requirements for the 2001/2002 marketing year.

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OVERVIEW

Even though the first part of the 2000/2001 rainy season was not favourable in the crop growing areas particularly during the first three months, the rest of the season was marked by good and well-distributed precipitation. As mentioned in the March report, the first three dekads (ten-day periods) of January 2001 were virtually dry in both communal and commercial areas. However, in February and March, normal to above normal rains fell in Caprivi, Kavango and North Central regions (Ohangwena, Omusati, Oshana and Oshikoto) – see Table 1. In the Maize Triangle (Otavi, Grootfontein and Tsumeb) and other commercial cereal producing areas, rains started towards the end of January and continued favourably through March (Table 3). In April, normal precipitation was measured in most crop producing areas except for the Caprivi region, where only isolated and below normal showers were received for the month.

The cumulative amounts and percentages of normal rainfall for the whole country are depicted in Maps 1 and 2. As indicated, the Maize Triangle and many Northern Communal Areas received between 60 and 100 percent of normal rainfall for the period starting from 1 October 2000 to 30 April 2001, the bulk of which was recorded during the second half of the season. However, it must be noted that due to inadequate distribution of rainfall stations in the NCAs, the percentages shown in the maps may not be an accurate reflection of the actual situation on the ground.

A total of 270,400 hectares were put under rain-fed coarse grain crop in the northern communal cropping areas and the Maize Triangle. The commercial irrigation projects and schemes below Naute and Hardap dams in the South, and at Kombat and along the Kavango river planted a combined 1,000 hectares under white maize. This brings the total area under coarse grain crop to 271,400 hectares, comprising of 254,300 hectares of mahangu/sorghum and 17,100 hectares of white maize. The area is equivalent to 85 percent of last season (Table 2). The area planted to maize in the Maize Triangle (the most important production area of this crop) has been reduced sharply from 11,600 hectares planted last season to only 3,500 ha. This had a significant negative impact on the overall maize output from the commercial sector. The reduction in the area is attributed to late onset of the rain, which prevented some farmers from planting.

Several problems highlighted in the March report revolving around the late onset of rainfall, short supply of improved varieties of seed, tractor owners refusing to accept subsidy vouchers, among others, had somehow led to a reduction in the total cereal production this season. However, the negative effects of these problems were to a certain extent reduced thanks to a longer rainy season, which lasted up to the first week of May in most parts of the North Central regions.

There were severe cases of quelea birds most notably in areas under Ruacana Agricultural Development Centre (ADC) in Omusati region, but some measures were employed to control the situation. In addition, aphids on cowpeas, black smuts on sorghum crop, small outbreaks of armoured crickets, water logging most notably at Oshikuku and Okalongo ADCs in Omusati region, were amongst problems experienced in the North Central regions this season.

In Caprivi, apart from the late onset of rainfall, the dry spell in January has made the matter worse such that substantial portions of fields were not planted at all in this region. In addition, most river fields in the flood plains under Impalila, Kabbe, Itomba and Ngoma ADCs were destroyed by floods. Moreover, crop fields were also damaged by elephants and other wild beasts in areas around Chinchimani, Linyanti, Sibbinda and Ngoma.

In Kavango region, the negative impact on regional production caused by insecurity in areas along the river, the lack of draught power and shortages of improved varieties of seeds as highlighted in the March report, were aggravated by heavy rainfall in March and April which damaged crops in some areas.

At the time of the mission from the second week of May, stages of crops ranged from grain formation to maturity in the North Central and Kavango regions. In Caprivi, most crops were ready for harvest while the late-planted ones were still at flowering stage of development. At places, farmers have already started harvesting in all regions especially in Caprivi region. Generally, crops were in fair to good condition across the regions.

Overall, the average yields for millet and sorghum were revised upwards from the March forecast, while those of maize either remained unchanged or revised downwards substantially. This revision is partly due to the fact that the late rains could not revive most of the late-planted crops, and partly because of widespread flooding of the fields in the flood plains of eastern Caprivi.

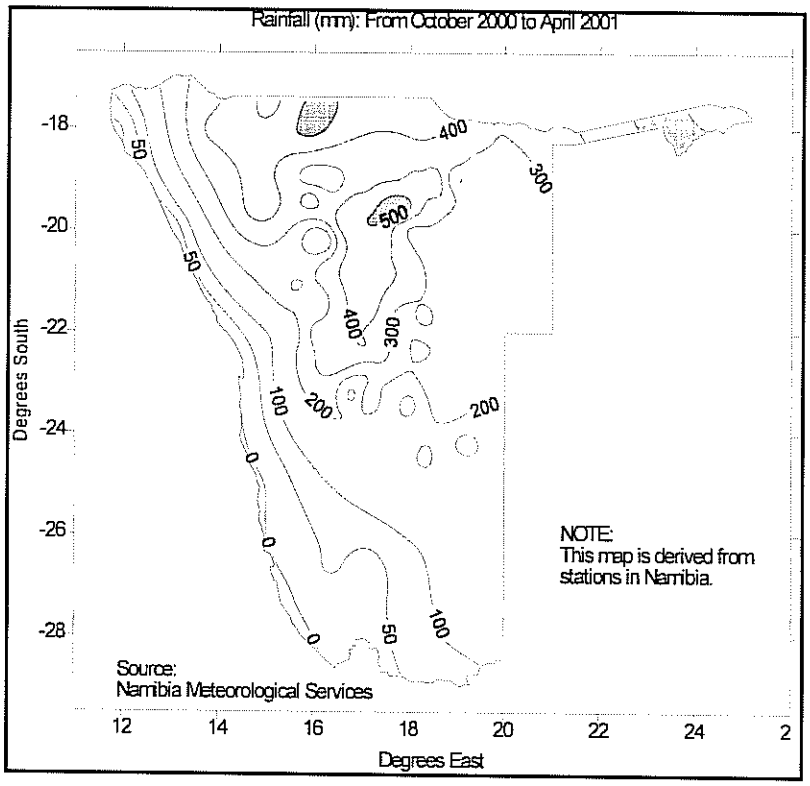
In total, the national production of the coarse grains is estimated at 92,200 tons, comprising of 73,200 tons of mahangu/sorghum and 19,000 tons of white maize. This output is 68 percent of last season's normal harvest of 135,500 tons (Table 2). For the 2001 winter wheat production season, it is assumed that the area to be planted under wheat will be similar to that of the previous years. If this materialises, the output is preliminarily forecasted at about 5,000 tons (see next bulletin for any changes). Winter wheat is produced at Hardap and Naute dams in the Hardap and Karas regions, respectively, and also at Shadikongoro project in the Kavango region.

However, in order to meet the national consumption needs, cereal imports will be necessary to supplement the domestic availability (Table 4). The forecasted cereal production together with operating stocks give a total cereal availability of 116,700 tons for 2001/2002 marketing year, comprising 66,800 tons of mahangu, 21,400 tons of white maize, 20,100 tons of wheat and 8,400 tons of sorghum. On the demand side, food consumption adjusted to the national population projection of 1.920 million and an average per capita cereal consumption of 135 kg, plus allowances for other uses and closing stocks, give a domestic cereal utilisation of 302,600 tons.

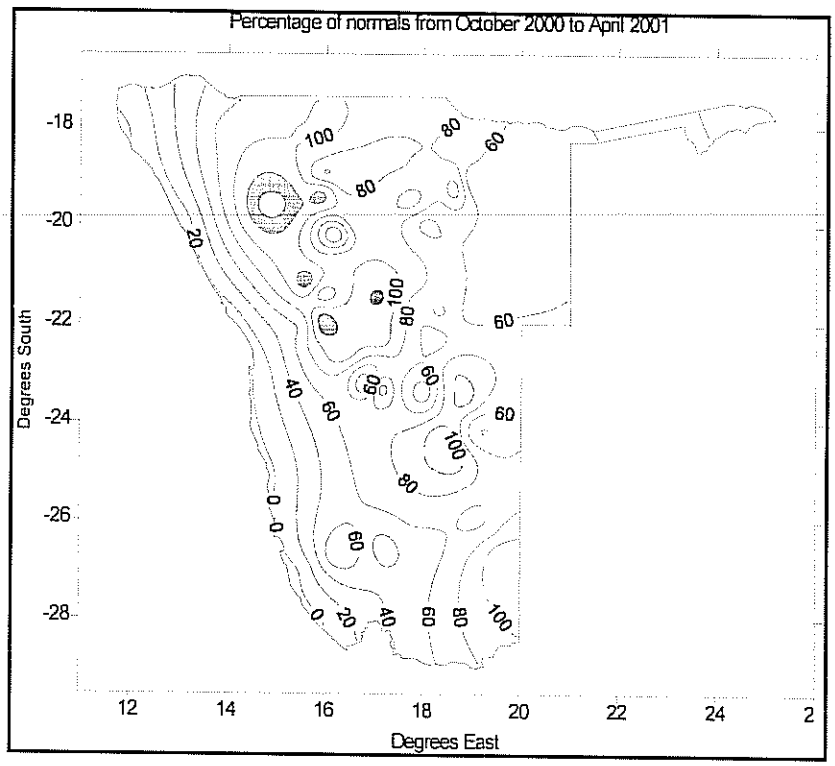
The cereal import requirement for the 2001/2002 marketing year, which is the difference between domestic cereal supply of 116,700 tons and a domestic utilisation of 302,600 tons, is calculated to be 185,900 tons. This is lower than the cereal deficit forecasted in March. The shortfall comprises of 57,400 tons of wheat and 128,500 tons of white maize. Under normal circumstances, this shortfall is always covered by commercial imports during the course of the marketing year. So far the commercial millers have reported planned imports of 42,300 tons of wheat (of which 8,300 tons were already delivered) and 54,000 tons of white maize (of

which 4,500 tons were landed). This leaves for the remainder of the marketing year, uncovered requirements of 15,100 tons of wheat and 74,500 tons of white maize. This shortfall could be covered by additional imports.

Map 1



Map 2



Source: Namibia Meteorological Service

Table 1: Namibia Monthly Rainfall Data- Selected Sations in the Cropping Areas (mm)

	Oct	Nov	Dec	Jan	Feb	Oct- Feb	Mar	Apr	Oct-Apr
Ohangwena: Engela (17'27 S; 15'52 E)									
Long Term average	16.0	53.9	79.7	147.4	136.3	**433.3**	121.1	42.1	**596.5**
1997/98				102.0		**102.0**			**102.0**
1998/99						**0.0**			**0.0**
1999/00	0.0	95.3	164.8	32.0	15.0	**307.1**			**307.1**
2000/01									
2000/01 as a % of average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Omusati: mahenene (17'27 S; 14'47 E)									
Long Term average	11.7	46.9	59.1	114.8	119.1	**351.6**	117.7	23.9	**493.2**
1997/98	2.5	5.8	103.5	73.0	69.0	**253.8**	60.3	18.3	**332.4**
1998/99	7.5	12.4	81.7	124.4	28.5	**254.5**	145.0	0.9	**400.4**
1999/00	1.5	118.7	200.8	46.0	37.7	**404.7**	128.0	32.9	**565.6**
2000/01	6.2	0.7	24.6	63.2	118.7	**213.4**	111.0	110.0	**434.4**
2000/01 as a % of average	53.0	1.5	41.6	55.1	99.7	60.7	94.3	460.3	88.1
Oshana: Okatana (17'45 S; 15'43 E)									
Long Term average	13.8	49.4	64.8	112.6	122.0	**362.6**	113.1	26.3	**502.0**
1997/98	50.5	9.1	82.2	88.6	105.7	**336.1**	27.9	1.2	**365.2**
1998/99	23.0	23.6	90.0	128.2	75.3	**340.1**	110.3	20.6	**471.0**
1999/00	0.1	45.2	172.0	62.1	46.8	**326.2**	88.7	16.4	**431.3**
2000/01	1.0	5.4	16.2		212.1	**234.7**	143.5	104.5	**482.7**
2000/01 as a % of average	7.2	10.9	25.0	0.0	173.9	64.7	126.9	397.3	96.2
Oshikoto: Oniipa (17'57 S; 16'05 E)									
Long Term average	12.6	47.6	75.5	104.7	126.0	**366.4**	102.8	32.4	**501.6**
1997/98	21.7	21.9	89.0	131.7	134.5	**398.8**	25.4	14.3	**438.5**
1998/99	8.5	29.6	17.7			**55.8**			**55.8**
1999/00	0.0	28.4	160.8			**189.2**	86.0		**275.2**
2000/01				36.0	89.0	**125.0**			
2000/01 as a % of average	0.0	0.0	0.0	34.4	70.6	34.1	0.0	0.0	0.0
Kavango: Nkurenkuru (17'37 S; 18'37 E)									
Long Term average	13.9	52.8	65.0	134.7	115.6	**382.0**	86.4	33.4	**501.8**
1997/98	15.3	17.6	86.0	100.0	28.2	**247.1**	70.5	0.0	**317.6**
1998/99	9.0	56.9				**65.9**			**65.9**
1999/00	0.0	20.2		275.0	176.9	**472.1**	31.2	34.5	**537.8**
2000/01				4.5	100.5	**105.0**	102.7	97.4	**305.1**
2000/01 as a % of average	0.0	0.0	0.0	3.3	86.9	27.5	118.9	291.6	60.8
Rundu (17'55 S; 19'46 E)									
Long Term average	18.0	61.2	79.6	146.4	144.4	**449.6**	92.9	32.1	**574.6**
1997/98	43.4	19.1	22.5	100.1	21.0	**206.1**	31.6	4.3	**242.0**
1998/99	3.5	40.2	104.2	186.1	48.0	**382.0**	101.9	0.0	**483.9**
1999/00	16.0	46.4	160.9	257.0	114.4	**594.7**	70.5	20.6	**685.8**
2000/01	5.8	12.7	63.9	27.7	237.8	**347.9**	88.4	75.0	**511.3**
2000/01 as a % of average	32.2	20.8	80.3	18.9	164.7	77.4	95.2	233.6	89.0
Mashare (17'54 S; 20'06 E)									
Long Term average	14.8	57.1	76.8	141.2	128.6	**418.5**	86.5	32.7	**537.7**
1997/98	72.9	63.6	52.0	164.8	148.8	**502.1**	151.2	1.8	**655.1**
1998/99	10.9	26.2	43.9	38.2	64.8	**184.0**	150.1		**334.1**
1999/00	26.0	17.6	177.1	334.7	40.6	**596.0**	51.0	0.8	**647.8**
2000/01	1.3		46.8	38.3		**86.4**	52.3	93.3	**232.0**
2000/01 as a % of average	8.8	0.0	60.9	27.1	0.0	20.6	60.5	285.3	43.1
Caprivi: Katima Mulilo (17'28 S; 24'15 E)									
Long Term average	20.6	77.9	157.7	178.9	192.4	**627.5**	97.2	21.0	**745.7**
1997/98	56.1	27.8	91.5	268.0	42.8	**486.2**	32.2	0.0	**518.4**
1998/99	10.6	65.4	151.0	269.1	77.5	**573.6**	100.0	0.0	**673.6**
1999/00	0.0	39.1	66.8	138.0	237.1	**481.0**	147.6	0.3	**628.9**
2000/01	3.6	11.5	95.5	67.8	219.8	**398.2**	227.0	53.5	**678.7**
2000/01 as a % of average	17.5	14.8	60.6	37.9	114.2	63.5	233.5	254.8	91.0

Note: The blank space indicates that the data is not available
Where figures are available the current season's rainfall can be compared to the long term averages
Source: NMS and NEWFIU

Table 2: NAMIBIA COARSE GRAIN PRODUCTION (in Metric Tons)

Region and Type of Cereal	1996/97 Production Season			1997/98 Production Season			1998/99 Production Season			1999/00 Production Season			2000/01 Production Season		
	'000 ha	kg / ha	'000 mt	'000 ha	kg / ha	'000 mt	'000 ha	kg / ha	'000 mt	'000 ha	kg / ha	'000 mt	'000 ha	kg / ha	'000 mt
North Central Division															
Ohangwena Mahangu/Sorghum (Rain-fed)	89.7	350	31.4	85.0	150	12.7	85.2	190	16.2	75.3	312	23.5	71.5	250	17.9
Omusati Mahangu/Sorghum (Rain-fed)	91.8	350	32.1	64.3	140	9.0	64.2	150	9.6	78.0	185	14.4	70.3	295	20.7
Oshana Mahangu/Sorghum (Rain-fed)	39.0	330	12.9	31.2	150	4.7	37.1	160	5.9	41.0	284	11.6	36.9	255	9.4
Oshikoto Mahangu/Sorghum (Rain-fed)	66.0	380	25.1	52.8	170	9.0	56.1	150	8.4	61.2	400	24.5	58.1	296	17.2
Sub Total	**286.5**		**101.5**	**233.3**		**35.4**	**242.6**		**40.2**	**255.5**		**74.0**	**236.9**		**65.2**
Kavango															
Maize (Rainfed)	0.5	2 300	1.3	0.1	0	0.0	3.1	50	0.2	7.3	280	2.0	2.2	137	0.3
NDC/FSP Mahangu/Sorghum (Rain-fed)	4.2	900	3.8	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Subs. farmers Mahangu/Sorghum (Rain-fed)	22.0	365	8.0	10.0	120	1.2	18.2	330	6.0	15.0	380	5.7	10.2	318	3.3
Sub Total	**26.7**		**13.0**	**10.1**		**1.2**	**21.3**		**6.2**	**22.3**		**7.7**	**12.4**		**3.6**
Caprivi															
Maize	16.2	665	10.8	10.4	100	1.0	14.9	130	1.9	18.6	650	12.1	10.4	400	4.2
Mahangu/Sorghum	9.0	420	3.8	4.2	210	0.9	6.3	210	1.3	8.5	460	3.9	5.7	340	1.9
Sub Total	**25.2**		**14.6**	**14.6**		**1.9**	**21.2**		**3.3**	**27.1**		**16.0**	**16.1**		**6.1**
Commercial Areas															
Maize NDC-Naute (Irrigated)				0.1	4 400	0.5	0.1	6 500	0.7	0.1	6 000	0.3	0.0	3 500	0.1
Maize Hardap Co-op (Irrigated)							0.1	7 000	1.0	0.1	8 200	1.1	0.2	8 000	1.9
Mahangu (Rainfed)							0.2	1 000	0.2	0.2	860	0.1	0.5	779	0.4
Sorghum (Rainfed)							1.0	1 500	1.5	0.7	3 500	2.3	1.0	2 500	2.5
Maize (Rainfed)	12.9	2 600	33.5	12.9	330	4.3	9.8	1 500	14.7	11.6	2 600	30.2	3.5	2 290	8.0
Maize Kombat (Irrigated)	0.2	6 800	1.4	0.7	6 110	4.3	0.2	2 450	0.4	0.2	2 123	0.5	0.0	8 000	0.3
Maize NDC-Etunda (Irrigated)				0.2	4 400	1.0	0.4	5 000	2.1	0.5	5 000	2.3	0.2	6 000	1.3
Maize Shadikongoro (Irrigated)													0.2	8 192	1.3
Maize NDC-Kavango (Irrigated)	0.6	3 800	2.4	0.6	4 400	2.7	0.4	5 000	2.0	0.2	3 500	0.8	0.3	4 800	1.6
Sub Total	**13.7**		**37.3**	**14.6**		**12.7**	**12.2**		**22.5**	**13.5**		**37.7**	**6.0**		**17.4**
Total Coarse Grain	**352.2**		**166.4**	**272.5**		**51.3**	**297.3**		**72.1**	**318.5**		**135.5**	**271.4**		**92.2**

Totals may not add up due to rounding
Source: NEWFIU

SITUATION BY REGION

Caprivi

In Caprivi, the improvement in the rainfall pattern, which prevailed in February, continued into March, with some ADCs recording in excess of 100 mm for the month. However, these favourable rainfall conditions somehow subsided in the subsequent month when some stations received less than 10 mm for April. The cumulative rainfall from October 2000 to April 2001 ranges from 500 to 700 mm across the region.

As reported in March, the late onset of the rainy season and the dry spell in January resulted in risk aversive farmers not to plant at all while those who planted did not finish ploughing their fields. Following the negative developments mainly the dry spells in January and floods, which occurred during the course of the season, the total area under crops in this region has been reduced from the provisional March forecast of 16,900 hectares to 16,090 hectares. This area represents 59 percent of the area put under crops in 1999/2000 production season.

While the maize, millet and sorghum planted early in the season were at maturity stage or ready for harvest, late-planted crops were still at flowering stages of development, with the former stage dominating. The condition of crops varies from good for the early-planted crops to fair for the late-planted ones.

Given the overflowing of the Zambezi river, most fields in the flood plains at Impalila, Itomba, Kabbe, Ngoma ADCs in the east were flooded. As a result, farmers did not manage to harvest, as crops were not yet matured. In addition, crop fields were damaged by elephants and hippos in areas around Chinchimani, Linyanti, Sibbinda and Ngoma.

The above-mentioned negative factors compounded by early cessation of rainfall in April hampered the realisation of high average yields of maize. As a result these yields remained at the same level as forecasted in March (400 kg/ha). By contrast, there was a slight improvement in the average yields for millet/sorghum, which increased from 310 kg/ha forecasted in March to 340 kg/ha. This is attributed to the fact that the two crops are more resistant to dry spells than maize. However, the millet/sorghum yields are lower than those of last year (460 kg/ha).

Based on the area of 10,400 hectares and the average yields of 400 kg/ha, the total maize production is estimated at 4,200 tons. In addition, the millet/sorghum harvest is put at 1,900 tons, which is a product of 5,700 hectares and 340 kg/ha. This gives the total regional coarse grain output of 6,100 tons. At this level, this year's coarse grain production is much below 16,000 tons produced last season. Given this season's below normal production, the region will have to acquire cereals elsewhere in order to meet its food needs before the next harvest.

Kavango

The positive climatic conditions, which brought productive and well-distributed rainfall in February, continued to prevail in March and April. Although most rainfall stations recorded high amount of rainfall in March, the distribution thereof was slightly unfavourable. By

contrast, April was characterised by good and well-distributed rainfall across the region, which continued up to the end of the month.
As farmers continued ploughing up to the end of March, taking advantage of the good rainfall received during the month, the area under crops has been adjusted upwards from 10,500 forecasted earlier to 12,400 hectares (10,200 ha and 2,200 for millet/sorghum and maize, respectively). However, this area is only 56 percent of the total area planted last season (22,300 hectares).

When the Crop Assessment Team visited the region on the second week of May, most crops were at maturity stages of development, followed by those at grain formation and few late-planted crops at flowering stages. Overall, the condition of crops was good across the region.

In addition to late onset of rainfall, insecurity situation in areas along the river, the shortage of draught power and the short supply of improved varieties of seed as highlighted in the March report, heavy rainfall received in March and April at few areas negatively affected crops.

The effects of dry spell in January and those of heavy rainfall were outweighed by the overall impact of good showers received in March and April. As a result, the average yields for sorghum and millet have improved and are estimated at 318 kg/ha compared to 265 kg/ha forecasted in March. By contrast, the average yields for rain-fed maize were reduced from 178 to 137 kg/ha.

Following the upward revision of the total area under sorghum and millet combined and an improvement in the yields of these crops, the regional output has been recalculated to become 3,600 tons, which is made up of 3,300 tons of millet/sorghum and 300 tons of maize. The above total regional coarse grain production is 46 percent of last season's normal production of 7,700 tons. This implies that the region will not be able to cater for all its cereal needs during the 2001/2002 marketing year.

Ohangwena

Unlike the first part of the season (October, November, December and January), the second part was characterised by favourable and well-distributed rainfall, with most stations recording more than 50 mm during the last three weeks of March. In April, precipitation was exceptionally good as many Agricultural Development Centres in the region recorded above normal rainfall for the month ranging from 70 to 122 mm.

The favourable rainfall enabled farmers to continue with ploughing, planting and replanting activities up to the second week of March. As a result, most farmers managed to plough 95 percent of the area, which is normally planted (75,300). This is equivalent to 71,500 hectares under crops this season.

At the time of the mission, crops were at different stages of development, with maturity and grain formation stages dominating. However, crops planted during the first two weeks of March, were still at the flowering stage, making their chances of reaching maturity stage slim. Generally the condition of crops was good across the region.

The favourable rainfall pattern, which prevailed in March and the whole of April brought significant improvement on the development of crops. As a result, the average yields for millet/sorghum combined have been revised upwards to 250 kg per hectare from the March forecast of 176 kg/ha.
Given the above yields and the area of 71,500 hectares under crops this season, the regional coarse grain production is calculated at 17,900 tons, which is 76 percent of last season's output. At this level, the region should be able to meet its cereal needs.

Omusati

During March and April, all ADCs in Omusati region received above normal rainfall. While in March most ADCs received more than 80 mm, over 90 mm was measured at many stations for the month of April. This is in contrast with the unfavourable rainfall conditions, which prevailed during the first four months of the season. The precipitation, which was received in the above-mentioned two months, brought the much-needed improvement in the crop condition across the region.

Following good rains in March, farmers managed to plant their fields up to the second week of March. A total area of 70,300 hectares has been planted to crops in this region. This represents 90 percent of the area, which is normally cultivated in this region

During the second week of May, crops were predominantly at grain formation and maturity stages of development. However, millet and sorghum, which were planted during the first and second dekad of March were still at flowering stage. Overall, the condition of crops was generally good throughout the region.

A number of problems were reported at some ADCs, most notably outbreak of quelea birds at Ruacana, water logging in few areas around Okalongo, Etayi and Oshikuku and aphids on cowpeas. Despite these problems, the general crop situation improved following the good and well-distributed showers, which fell in March and April. However, the outbreak of quelea birds negatively affected the matured crops at areas around the Ruacana ADC.

The favourable weather pattern experienced in March and April supported the growth of crops in general and the late-planted ones in particular. This resulted in a widespread improvement of crop status, offsetting the negative impact of the problems enumerated above. Following these favourable developments, yield prospects in this region improved. Average yields for millet and sorghum are estimated at 300 and 200 kg/ha, respectively, compared to 170 and 120 kg/ha forecasted in March.

The total coarse grain production for the region is calculated at 20,700 tons, which is a product of total area of 70,300 hectares and average yields of 295 kg/ha for millet and sorghum combined. This production is 6,300 tons higher than last year's production and 64 percent of 1996/97 above normal harvest (32,100 tons). With this production, the region is expected to cover its cereal needs.

Oshana

The positive rainfall conditions, which were experienced during the first week of March continued to dominate up to the end of April. At the end of March, most stations recorded high total rainfall figures ranging from 90 to 170 mm. Similarly, in April some ADCs recorded above normal rainfall of 160 mm for the month.

In this region, the total area under millet and sorghum this season is estimated at 36,900 hectares, which is 90 percent of the last season's total area (41,000 ha) as estimated in May.

Crop stages in this region are mostly at maturity and grain formation stages of development. The condition of crops is generally good across the region, as a result of good precipitation in April.

There were no reports of serious pest outbreaks except for few incidences of quelea birds, water logging caused by heavy rains most notably in areas under Ondangwa and Ompundja ADCs, and aphids on cowpeas.

Following an improvement in crop condition, the average yields were adjusted accordingly and are now estimated at 260 kg/ha for millet and 200 kg/ha for sorghum.

The regional coarse grain production is estimated at 9,400 tons, which represents almost 81 percent of 1999/2000 production. At this level of production, no cereal shortage is expected in the region.

Oshikoto

As of the second week of March up to the end of the rainy season in April, the region continued to benefit from productive precipitation, which started in February. In March, most stations received more than 100 mm of rain. Likewise, April was characterised by above normal rainfall, when most stations recorded 50 mm and above. The cumulative rainfall from October to April ranged from 300 to 500 mm across the region.

In Oshikoto this season, farmers managed to cultivate an area of 58,100 hectares, which is about 95 percent of the normal area. The area increased slightly as a result of ploughing activities, which were carried out late in March.

Crops were mostly at maturity stage, followed by grain formation and flowering stages of development. At some places in the region farmers were already harvesting. The condition of crops is generally good.

Although outbreaks of the armoured crickets were reported in some parts of the region, particularly areas around the ADCs in the east, no serious damage of crops was reported. According to farmers, the dry spell in January delayed the early appearance of armoured crickets, which normally pose serious problems to crop fields. In addition to armoured crickets, quelea birds damaged crops in the extreme eastern parts of the region, particularly millet fields under Okapya ADCs. Furthermore, aphid infestation on cowpeas was reported across the region.

Following the continuation of good rainfall up to the end of April, the average yield estimate has been adjusted upwards to 300 kg/ha for millet and 250 kg/ha for sorghum from 160 and 100 kg/ha, respectively.

The regional coarse grain harvest, which is a product of area planted and average yields for millet and sorghum combined of 296 kg/ha, is calculated at 17,200 tons, which represents 70 percent of last season's normal production (24,500 tons). With this production, the region will meet its cereal demand during the current marketing year.

Commercial Sub-Sector

The rainfall pattern continued to be favourable in March and April and most areas in this sub-sector recorded above average precipitation during this period. Accordingly, showers measured at the Maize Triangle (Tsumeb, Grootfontein and Otavi) were over 100 percent of normal rainfall and, hence, way above the long term average (Table 3). Elsewhere in the commercial sub-sector, precipitation has also been favourable especially to the rain-fed white maize, pearl millet and sorghum up to the end of the season in April.

The area planted under rain-fed white maize remained unchanged at a low of 3,500 hectares as forecasted in March and so are the yields at 2,290 kilogram per hectare, bringing the total production of rain-fed crop at 8,015 tons. Although this figure is subject to the final outcome of the assessment being carried out by the Namibian Agronomic Board, no significant change is anticipated to bring it near to the level of last year's production. As mentioned in the March crop assessment report, this low estimated output is a cause for serious concern since the national supply of maize will be negatively affected. Apart from the maize crop, a small area has also been planted to sorghum and millet (mahangu) in the commercial sub-sector, and a combined output of 2,900 tons is estimated.

The irrigation schemes at Naute, Hardap, Kombat, NDC projects at Omusati and Kavango regions and Shadikongoro project in Kavango region cultivated a combined area of 900 hectares under white maize. Average yields differ from one irrigation project to another, ranging from 3,500 to 8,192 kilograms per hectare. Hence, the output from these schemes is calculated at 6,500 tons, giving an aggregate white maize harvest from the commercial sector of 14,500 tons. This aggregate production is only 38 percent of last year's output of 37,700 tons. (NB: Production figures in the commercial sub-sector may be somewhat adjusted once the results of the survey conducted by the Namibian Agronomic Board are made known. Necessary changes, if any, will be reflected in the next bulletin)

For the 2001 winter wheat production, it is assumed that the area to be put under wheat will be similar to that of previous years. If this materializes, the output is preliminarily forecasted at about 5,000 tons. Winter wheat is produced at Hardap and Naute dams in the Hardap and Karas regions, respectively, and also at Shadikongoro project in the Kavango region. This brings the total cereal production to 22,400 tons in the commercial sector.

Table 3

Monthly Rainfall Data (mm) - Maize Triangle Area									
	Oct	Nov	Dec	Jan	Feb	Oct-Feb	Mar	Apr	Oct-Apr
Grootfontein									
Long-Term Average	15.5	58.8	67.4	142.7	132.6	**417.0**	105.7	47.9	**570.6**
1997/98	71.8	1.4	64.9	111.3	6.0	**255.4**	16.0	31.2	**302.6**
1998/99	16.4	25.9	67.3	37.8	77.0	**224.4**	89.9	38.1	**352.4**
1999/00	2.0	86.6	105.3	180.3	144.2	**518.4**	116.2	39.8	**674.4**
2000/01	87.0	7.2	39.9	67.9	127.6	**329.6**	113.3	144.8	**587.7**
2000/01 as % of Normal	**561.3**	**12.2**	**59.2**	**47.6**	**96.2**	**79.0**	**107.2**	**302.3**	**103.0**
Otavi									
Long-Term Average	15.2	50.5	59.3	134.0	152.2	**411.2**	96.8	32.7	**540.7**
1997/98	49.8	9.0	96.2	96.5	112.2	**363.7**	39.9	11.0	**414.6**
1998/99	15.6	19.8	89.6	109.3	59.9	**294.2**	43.5	1.0	**338.7**
1999/00	4.2	83.0	173.0	144.7	162.0	**566.9**	104.4	66.0	**737.3**
2000/01	42.5	7.5	72.0	53.5	108.5	**284.0**	111.0	164.0	**559.0**
2000/01 as % of Normal	**279.6**	**14.9**	**121.4**	**39.9**	**71.3**	**69.1**	**114.7**	**501.5**	**103.4**
Tsumeb									
Long-Term Average	19.0	59.5	71.6	128.7	126.3	**405.1**	84.7	31.7	**521.5**
1997/98	42.0	10.0	66.5	123.0	28.5	**270.0**	35.0	0.0	**305.0**
1998/99	17.5	5.0	101.0	140.0	74.0	**337.5**	79.0	0.0	**416.5**
1999/00	14.0	95.0	158.0	102.3	108.5	**477.8**	55.0	20.0	**552.8**
2000/01	5.0	15.5	21.0	26.0	115.3	**182.8**	168.5	102.5	**453.8**
2000/01 as % of Normal	**26.3**	**26.1**	**29.3**	**20.2**	**91.3**	**45.1**	**198.9**	**323.3**	**87.0**
Gaikos Farm									
Long-Term Average	16.1	49.8	55.8	126.9	121.4	**370.0**	81.9	37.5	**489.4**
1997/98	44.0	6.5	84.6	62.0	17.5	**214.6**	6.0	77.0	**297.6**
1998/99	20.6	14.9	115.6	112.4	37.5	**301.0**	98.6	0.0	**399.6**
1999/00	0.8	57.8	175.6	107.4	170.5	**512.1**	40.3	7.8	**560.2**
2000/01	38.4	22.6	62.0	36.5	86.0	**245.5**	105.5		**351.0**
2000/01 as % of Normal	**238.5**	**45.4**	**111.1**	**28.8**	**70.8**	**66.4**	**128.8**	**0.0**	**71.7**

Note: The blank space indicates that the data are not available.
Where figures are available the current season's raifall can be compared to the long term averages
Source: NMS

CEREAL SUPPLY AND DEMAND FORECAST FOR THE 2001/2002 MARKETING YEAR

The final national cereal supply and demand forecast is presented in Table 4. The cereal harvest is estimated at 97,300 tons, comprising 65,800 tons millet (mahangu), 19,000 tons of white maize, 7,500 tons of sorghum and 5,000 tons of wheat.

As at 1st May 2001, the operating stocks of the millers are forecasted to be 15,100 tons of wheat and 2,400 tons of white maize, while on-farm mahangu and sorghum stocks are estimated to be 1,000 tons and 900 tons, respectively. The forecasted cereal production together with operating stocks give a total cereal availability of 116,700 tons for 2001/2002 marketing year, comprising 66,800 tons of mahangu, 21,400 tons of white maize, 20,100 tons of wheat and 8,400 tons of sorghum. On the demand side, food consumption adjusted to the national population figure of 1.920 million and an average per capita cereal consumption of 135 kg, plus allowances for other uses and closing stocks, give a domestic cereal utilisation of 302,600 tons.

In previous years, the annual per capita consumption has been based on historical trend values for apparent consumption rates derived from annual food balance sheets. This has always proved to be inaccurate at the end of the marketing year when the forecast becomes an actual estimate. This year, however, in an attempt to reduce the degree of inaccuracy, the per capita consumption figure has been worked out using the average derived from the historic actual consumption figures for white maize and wheat, which are closely monitored. Non-food use includes seed retained on-farm for planting in the subsequent season, post- harvest losses and other uses, calculated by using total rates of 5 and 15 percent for commercial and communal producers, respectively.

The cereal import requirement for the 2001/2002 marketing year, which is the difference between domestic cereal supply (total availability) of 116,700 tons and a domestic utilisation of 302,600 tons, is estimated at 185,900 tons. Under normal circumstances, this shortfall is always covered by commercial imports during the course of the marketing year. So far the commercial millers have reported planned imports of 42,300 tons of wheat (of which 8,300 tons were already delivered) and 54,000 tons of white maize (of which 4,500 tons were shipped). This leaves for the remainder of the marketing year, uncovered requirements of 15,100 tons of wheat and 74,500 tons of white maize.

Table 4

Namibia Cereal Supply/Demand Forecast (2001/2002 Marketing Year, May/April) ('000 tons)

	Wheat	Maize	Millet	Sorghum	Total
A. Total Availability	**20.1**	**21.4**	**66.8**	**8.4**	**116.7**
Opening stocks 1 May 2001	15.1	2.4	1.0	0.9	19.4
Forecast cereal production*	5.0	19.0	65.8	7.5	97.3
B. Domestic utilization	**77.5**	**149.9**	**66.8**	**8.4**	**302.6**
Food use**	67.2	138.5	47.0	6.5	259.2
Non-food uses***	0.3	1.4	9.8	0.9	12.4
Closing stocks 30 April 2001	10.0	10.0	10.0	1.0	31.0
C. Shortfall to be covered by imports	**57.4**	**128.5**	**0.0**	**0.0**	**185.9**
D. Planned imports for 2000/2001	**42.3**	**54.0**	**0.0**	**0.0**	**96.3**
Imports Received	**8.3**	**4.5**	**0.0**	**0.0**	**12.8**
Imports Expected	**34.0**	**49.5**	**0.0**	**0.0**	**83.5**
E. Exports Already Shipped	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
F. After Trade Surplus/Deficit****	**-15.1**	**-74.5**	**0.0**	**0.0**	**-89.6**
G. Current Stocks (31.05.01)	**11.9**	**4.7**	**0.0**	**0.0**	**16.6**

* Excludes cereal production for animal feed

** 1.920 million people, each consuming 35 kg of wheat and 100 kg of coarse grain per annum

*** Includes seed, waste and other uses; excludes animal feed

**** After Trade Surplus/Deficit = Planned Imports - (Shortfall + Exports)

Source: NEWFIU