



## Results of the National Crop and Food Supply Assessment Mission

For the third consecutive year, drought conditions have severely affected agricultural crop production in Nepal. Following signs of early paddy crop failure and reports about farmer's inability to start planting, especially in the Eastern Terai, the Ministry of Agriculture and Co-operatives (MoAC) initiated a preliminary assessment of the paddy crop losses in August 2006, which estimated a decline in national paddy production of 850,000 Mt.

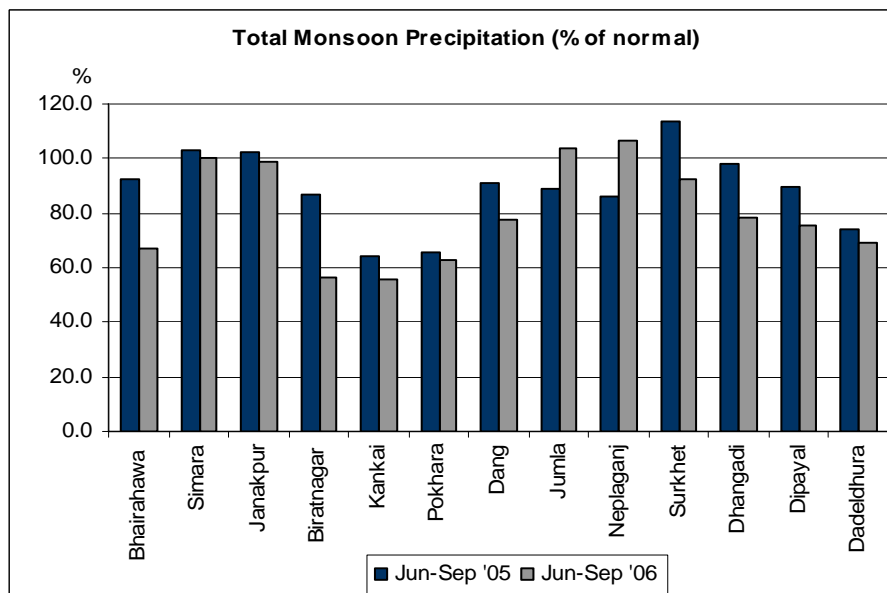
A more extensive crop and food supply assessment mission followed in November 2006, led by the MoAC and supported by the World Food Programme (WFP) and the Food and Agriculture Organization (FAO). This Crop Situation Update summarizes the outcome of that assessment. The full document is available from the MoAC through Mr Hem Raj Regmi, Senior Statistician, Agribusiness Promotion and Statistics Division, MoAC.

### Summer crop production

The overall rainfall during the summer planting and growing period was below normal (see Graph 1). Even worse was the variation in its spatial and temporal pattern; rainfall was too late or too early in some areas and too much or too little in others. This particularly affected crops grown under rain fed conditions. The Terai, known as the granary of Nepal, producing 56 % of the national grain supply, was particularly badly affected.

#### PADDY

Overall the paddy production decreased by 12.55% compared to last year. Taking the trend in annual paddy production since 1994/95, there is a gap of almost 1 million MT or 21% (see Graph 2).

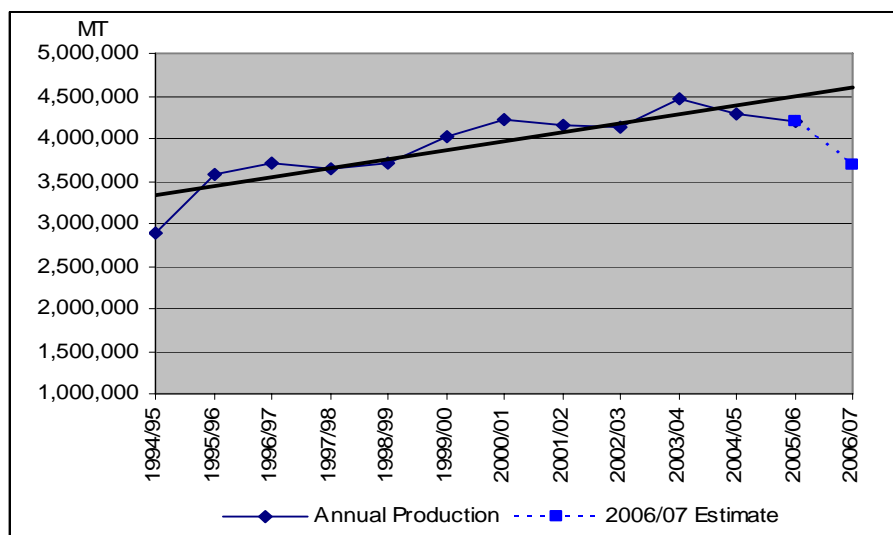


Graph 1 – Total monsoon precipitation, June – September 2006

Regionally, the Eastern Development Region was hardest hit by the drought, particularly the districts of Saptari, Siraha, Dhanusa and Udayapur, where output declined between 27% and 39% compared to last year. On average, yields in the Eastern Development Region were about 10% lower than last year and almost 15% of paddy land was left fallow. The Central Development region lost 9.4% in output compared to last year. The Western and Mid Western Development Regions lost 6.7% and

7.8% in output respectively. Production in the Far Western Development Region increased by 2.4% as more land was put under paddy cultivation and weather conditions in this region were favourable.

By ecological zone, paddy losses were highest in the Terai (14.4%), mostly due to inability of farmers to transplant paddy, leaving about 93,628 hectares of paddy land unplanted. Yields decreased by 6.5%. In the Hills and Mountains



Graph 2 – Trend in paddy production

paddy production declined by 6.6% and 7.7% respectively (see Table 1).

	Paddy		
	Area (Ha.)	Prod. (MT)	Yield (Kg/Ha)
Mountain	62,263	120,172	1,930
% Change	-3.70	-6.60	-3.00
Hill	367,710	933,852	2,540
% Change	-3.60	-7.70	-4.20
Terai	1,009,552	2,626,815	2,602
% Change	-8.50	-14.40	-6.50
<b>Nepal</b>	<b>1,439,525</b>	<b>3,680,839</b>	<b>2,557</b>
<b>Percentage change compared to last year</b>			
E. Region	-14.8	-23.4	-10.1
C. Region	-7.8	-9.7	-2.0
W. Region	-0.1	-6.7	-6.6
MW. Region	-2.4	-7.8	-5.5
FW. Region	2.4	2.6	0.2
<b>Nepal</b>	<b>-7.09</b>	<b>-12.55</b>	<b>-5.88</b>

Table 1

### MAIZE PRODUCTION

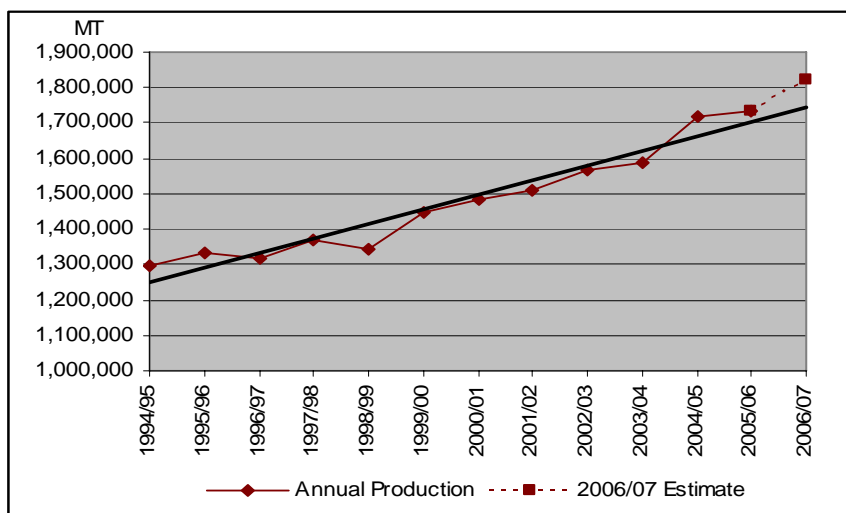
At the national level, the maize harvest was not affected by the drought and the maize production increased by 4.93% compared to last year.

Compared to the trend in maize production since 1994/95, there is a positive difference of 82,609 Mt (5%) more than the trend forecast for this year (see Graph 3).

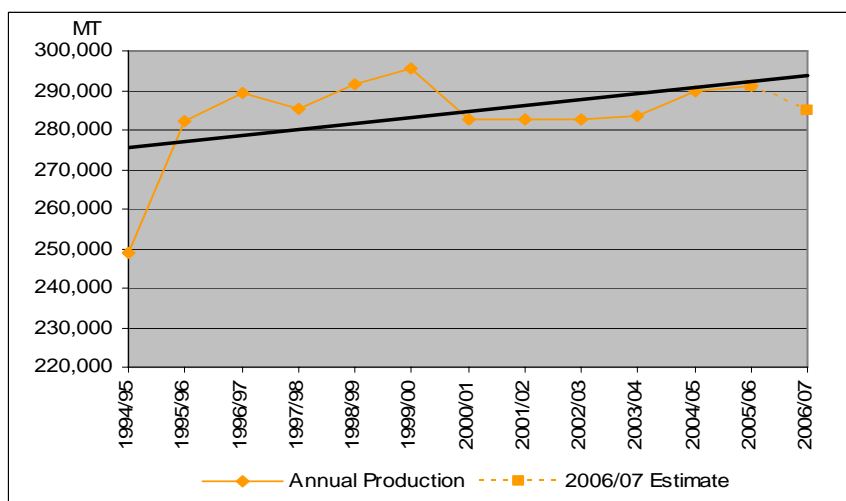
In the Western and Mid Western Development Regions, the growth in maize production (6.0% and 4.8%) was due to increased area under cultivation. Growth in the Eastern and Central Development Regions was 3.8 % and 2.6 %, respectively (see Table 2).

	Maize		
	Area (Ha.)	Prod. (MT)	Yield (Kg/Ha)
Mountain	88,288	163,609	2,000
% Change	-0.50	6.70	7.20
Hill	613,774	1,273,111	2,074
% Change	2.90	4.70	1.70
Terai	168,339	383,205	2,276
% Change	1.40	5.10	3.60
<b>Nepal</b>	<b>870,401</b>	<b>1,819,925</b>	<b>2,091</b>
<b>Percentage change compared to last year</b>			
E. Region	-1.2	3.8	5.1
C. Region	1.2	2.6	1.4
W. Region	5.4	6.0	0.5
MW. Region	6.0	4.8	-1.1
FW. Region	-0.8	Na	Na
<b>Nepal</b>	<b>2.29</b>	<b>4.93</b>	<b>2.58</b>

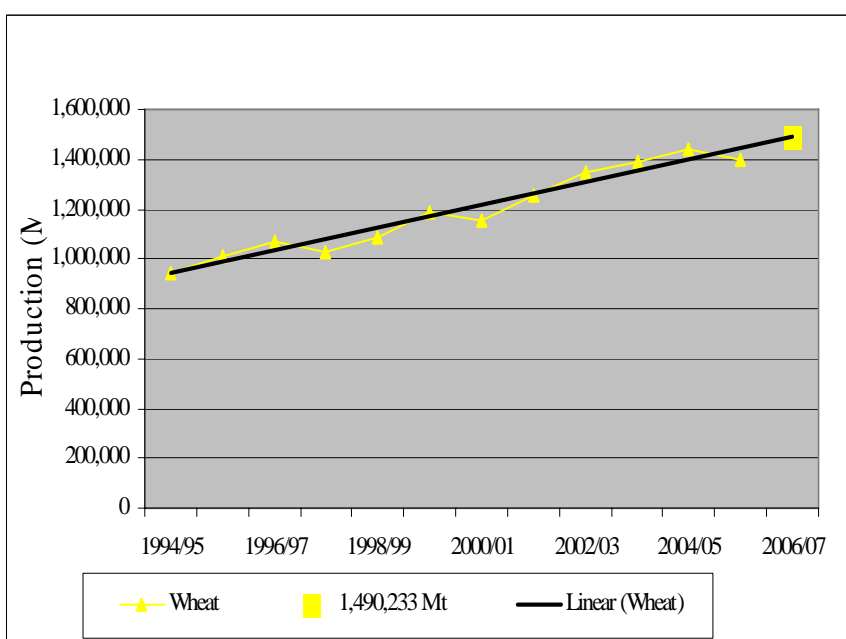
Table 2



Graph 3 – Trend in maize production



Graph 4 – Trend in millet production



Graph 5 – Trend in wheat production

### MILLET PRODUCTION

The total area under millet production increased slightly compared to last year (1.33%). However, the national production of millet decreased by 2.1% compared to last year. Compared to the trend since 1994/95 there's a negative gap of 8,880 Mt (3%) for this year (see Graph 4).

Millet contributes only 3.7% to the national cereal production, however it is a key crop in several Hill and Mountain districts including Mugu, Dolpa, Jumla, Baglung, Syangja, Rasuwa, Sindhupalchowk, Sindhuli, Okhaldhunga and Khotang. All Development Regions show a reduction in millet crop yields compared to last year (see Table 3).

	Millet		
	Area (Ha.)	Prod. (MT)	Yield (Kg/Ha)
Mountain	53,174	53,407	1,000
% Change	2.10	-1.70	-3.80
Hill	200,186	219,556	1,097
% Change	1.10	-2.20	-3.30
Terai	11,800	11,850	1,004
% Change	1.90	-2.10	-3.90
Nepal	265,160	284,813	1,074
Percentage change compared to last year			
E. Region	-1.6	-4.4	-2.8
C. Region	1.5	0.3	-1.2
W. Region	0.9	-2.8	-3.7
MW. Region	-0.3	-3.2	-2.9
FW. Region	na	na	Na
Nepal	1.33	-2.10	-3.39

Table 3

### EARLY PROSPECTS FOR THE WINTER WHEAT PRODUCTION

Early indications suggest that the planting of wheat has been timely. Due to late rainfall in December 2006, the soil is moist and the conditions for germination are good. Land left fallow for paddy cultivation will be used for wheat production and it is likely that the area planted with wheat will increase significantly in the drought affected districts. Given the above and assuming favourable weather conditions during the 2006/07 winter season, a positive scenario is assumed by following the trend in wheat production, with an expected output of approximately 1.5 million Mt (see Graph 5).

## Food grain shortage

With the winter season just on its way; it is still too early to make exact predictions about the food grain supply and requirement balance for the year 2006/07. However, assuming a wheat production of 1.5 million Mt, the total cereal shortage is expected to be nearly 190,000 Mt (Table 4).

Food grain production	4,753,340 Mt
Food grain requirements	4,941,089 Mt
Food grain shortage	187,749 Mt

Table 4

### FOOD AID REQUIREMENTS

The shortage in food grains will lead to an increase in prices. This in turn will lead to an increase in formal and informal private imports by traders taking advantages of the price difference. An increase in food grain imports will offset in part the food grain shortage. However, the poor will find it increasingly difficult to acquire sufficient food through the market channels as higher food prices will further erode their already limited purchasing power. The MoAC estimates that about 60 thousand Mt of food grains are required for market supply and price stabilization purposes.

The mission estimated that around 900,00 people are at risk of food insecurity as a consequence of the drought and other adverse weather conditions. Targeted food aid assistance to these affected people will be required. A three month support programme to bridge the gap between harvests is recommended. Taking a food grain requirement of 500 grams per person per day, food aid imports of 40.5 thousand Mt will be required.

## Recommendations

- MoAC seeks immediate food support for 900,000 food insecure people.
- In order to address continued food insecurity experienced by drought

affected communities in the Far and Mid West, it is recommended that WFP continues its targeted emergency food assistance operations in these areas.

- For affected districts in the Eastern Terai (Saptari, Siraha and Udayapur) it is suggested that a targeted food for work mechanism be applied as a condition for food distribution to drought affected people.
- The availability of improved seeds remains a problem and cereal seed distribution to vulnerable households needs to be considered.
- Nepal Food Co-operation's role as a food safety net provider needs to be strengthened. As per MoAC's estimate, an additional 60,000 Mt of food grains are required for market supply and price stabilization.
- Where access to markets are difficult, the setting up of community managed grain banks for bridging lean periods needs to be explored.
- In order to better monitor the crop situation and to provide early warning information, the MoAC's crop monitoring system needs to be strengthened.
- More agricultural land needs to be brought under irrigation, through rehabilitation of existing irrigation schemes, and development of surface, shallow and deep tube wells.

Crop Situation Updates are produced by WFP Nepal as part of the Food Security Monitoring and Analysis System, supported by DFID and OFDA.

For more information please contact the Food Security Monitoring and Analysis Unit  
 United Nations World Food Programme  
 Patan Dhoka Road, Lalitpur  
 PO Box 107  
 Tel 5542607 ext 2420-5