

SPECIAL REPORT
**FAO/WFP CROP AND FOOD SUPPLY ASSESSMENT MISSION
TO AFGHANISTAN**

8 September 2004

Mission Highlights

- Agricultural production in Afghanistan once again suffered a sharp decline owing to reduced precipitation in some areas and drought in others. This is a real setback to the robust recovery of the past couple of years following a long period of devastating drought and crop failures in most of the country.
- Rainfed cereals, wheat and barley in particular, have suffered below average and erratic precipitation as well as a sharp decline in area planted compared to last year.
- Crop diseases, such as sunn pest and brown rust, as well as weeds have compromised significant areas of cereals particularly in the North, while fungal and viral diseases have devastated orchards in Central and East-central Afghanistan.
- Diluted and inappropriate cereal seeds, which had been distributed in some parts of the country without prior testing, proved disastrous for many farmers; many used resulting crops as fodder since they yielded no grains.
- Animal diseases are rampant throughout the country, causing significant damage to farmer's livelihoods and to nutrition for a majority of rural households.
- Most of the mineral fertilisers available in domestic markets are diluted and have insignificant nutrient content. Quality control is non-existent, so farmers show continued reluctance to use fertilisers and agro-chemicals that have no apparent effect on their crops.
- Aggregate cereal harvest in 2004 is estimated at 3.06 million tonnes, which is 43 percent down on the record harvest in 2003 and 18 percent down on 1998, when an average harvest was gathered. Crop failure in some parts of the country affected between 50 to 75 percent of area planted.
- Cereal import requirements for 2004/05 (July/June) are estimated at over 1.7 million tonnes. Commercial import capacity is estimated at 1.4 million tonnes, which leaves a deficit of 326 000 tonnes. Commercial import capacity does not necessarily imply capacity to access food, but rather the amount the private and public sectors can import.
- An estimated 35 percent of the rural population (more than 6 million people), including the vulnerable population targeted under the WFP's Protracted Relief and Recovery Operation (PRRO), are likely to face increased food insecurity and will require targeted assistance during the 2004/05 marketing year.
- In addition to nearly 4 million people who will have access to employment and relief through national programmes, WFP's PRRO will target a total of 2.3 million vulnerable beneficiaries, including the 1.4 million people targeted under the recent government/UN appeal. A total of 153 100 tonnes of mixed food commodities with a monetary value of US\$ 89 million will need to be resourced in order to assist 2.3 million people during the 2004/05 marketing year. This includes some US\$ 52 million to cover 80 000 tonnes of mixed food assistance for the additional 1.4 million affected by crop failure.
- Food aid imports will remain an option should food aid needs exceed domestic purchase possibilities.



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, ROME



WORLD FOOD PROGRAMME, ROME

1. **OVERVIEW**

A joint FAO/WFP Crop and Food Supply Assessment Mission (CFSAM), visited Afghanistan between 8 July and 7 August 2004, to estimate the 2004 cereal harvest and forecast cereal import requirements for the 2004/05 (July/June) marketing year. The mission was requested by the Government of Afghanistan following reports of widespread crop failures due to drought in most of the country except the Northern provinces. The CFSAM was preceded by an inter-ministerial drought assessment task force mission covering some of the affected provinces in the South and West of the country. The CFSAM worked in closer collaboration with FEWSNET and the Ministry of Agriculture and Animal Husbandry (MAAH).

This year, in contrast to the past couple of years, no national level data had been collected by any organisation in the country, while MAAH continues to lack the capacity to collect and tabulate the necessary data. It was therefore, necessary to make data collection a major part of the mission activities. The Mission developed relevant questionnaires at farm, village, district and provincial levels and provided two days of training to enumerators in Kabul. The enumerators were mainly employees of MAAH but also included FAO and WFP national staff. In addition, the mission teams included one member from each provincial agricultural department. The Mission used FAO's definition of eight agro-ecological zones and a team was assigned to each zone to collect data using pre-defined questionnaires. Harvesting in most of the country had been complete just before the mission began its activities.

The Mission held discussions with Government officials, UN agencies, multilateral and bilateral donors, local and international NGOs and made field visits to the West, East and North of the country. The recent deterioration in the security situation prevented the Mission from visiting a large part of the country, in particular the South, South-East, East and North-West. Unfortunately, these are also some of the worst affected zones. The local staff from MAAH managed to visit some of the areas, which were no-go zones for international staff and local staff employed by the UN agencies. The Mission significantly benefited from the FAO's agro-meteorological data, which is regularly collected from 108 stations scattered throughout the country covering all provinces. In addition, the mission reviewed and analysed satellite imagery normalised difference vegetation indices (NDVI), snow cover, depth and depletion curve from the United States Geological Survey (USGS).

Estimation of yield and cultivated area are post harvest and, by and large, depend on the responses obtained from farmers and the provincial departments of Agriculture, in addition to the agro-meteorological and satellite based data. The estimated yield and area could not be verified with planting survey data and observation of crops standing on the ground, which are the normal CFSAM methodology. Therefore, the reported figures have to be taken with caution. However, the Mission findings conform to agro-meteorological data and other reports from various national and international organisations active in several zones of the country.

In addition, the Government of Afghanistan (GOA) had conducted an inter-ministerial drought assessment survey in 12 worst affected Southern and South-western provinces under the leadership of the Ministry of Irrigation in May and June 2004. The result of the assessment was announced in a statement by the office of the president, which declared all 12 provinces as worst affected requiring emergency assistance. The assessment is similar to the Mission's findings.

The Mission found that, precipitation had been erratic and below average throughout the country, while drought conditions existed during the critical Spring and early Summer months in Western, Southern, Eastern and Central highlands. In some areas water tables have receded by a few meters and lack of drinking water has forced some villages to migrate to other areas in the country. Furthermore, temperatures were significantly higher than average during late winter and spring months in almost all parts of the country. Despite improved precipitation in the past couple of years, particularly in the North, the mentioned regions continued to suffer from reduced precipitation, therefore, the aquifers remained depleted. In addition, flash floods in the North-East, East and the Central highlands during the third week of July caused significant damages to agricultural land and property.

Pests, weeds and diseases have caused substantial damage, particularly in the North and Central Afghanistan. Sunn pest in the North and parts of Northeast had caused significant damages to crops, reaching nearly 40 percent in some districts of Faryab, Balkh, Sar-e-Pul, Samangan, Jawzjan and Baghlan. In some parts of Central Afghanistan plant diseases and hail have damaged more than 50 percent of the orchards, a major source of

livelihoods for many households in the region. Weeds and shrubs were also reported as one of the factors affecting cereal production this year and the main source of weeds was reportedly diluted seeds.

Overall, the Mission estimates aggregate cereal production at about 3.06 million tonnes, comprising 2.29 million tonnes of wheat, 220 000 tonnes of barley, 234 000 tonnes of maize and 310 000 tonnes of milled rice (the latter two to be harvested from September). At this level, cereal production is down by 43 percent compared with the record harvest in 2003, and 18 percent compared with the average production of 1998. As a result, the cereal import requirement in the 2004/05 (July/June) marketing year is estimated at 1.7 million tonnes, nearly 34 percent of total consumption. It is estimated that nearly 1.4 million tonnes of the import requirement will be commercially procured given a stable and high-growth economic forecast for the coming year and US\$4.5 billion of the international assistance pledges earmarked for 2004/05 marketing year. This will leave 326 000 tonnes of cereal deficit for the 2004/05 marketing year.

Summer crops, mainly vegetables and fodder, also suffered and production fell significantly. Except for the Northern and North-Eastern zones, a second crop, following wheat, was not possible as there was little or no irrigation water. Pastures and grazing lands have, by and large, been dry prompting distress slaughter and sale of livestock, hence, further reducing the already diminished stocks in the country. Consequently, very important and vital sources of nutrition and livelihoods have been eroded for a large number of producers and consumers.

Wheat prices are significantly higher (nearly 40 percent) than the low prices recorded at the same time last year. Market analyses in previous years indicate that wheat prices across the borders seem to move together, indicating market integration. Prices may stabilise following wheat harvest in the neighbouring countries and Kazakhstan. However, this does not seem to be the case in provinces where access to other provinces and bordering countries is difficult. Wheat prices in some provinces seem to have risen by almost 50 percent.

In addition to the current crop failure, a significant number of households remain vulnerable to food insecurity following years of conflict and drought, which have resulted in war-disabilities, loss of family members, displacement, substantial livestock losses, destruction of productive assets and debt accumulation. Therefore, timely, appropriate and effective food and non-food interventions to assist the poorest of the population in helping them rebuild an asset base for their livelihoods may be essential. A significant number of vulnerable households are largely food insecure and will remain dependent on humanitarian assistance in 2004/05.

Food aid in stocks and commitments, in the country and in the neighbouring countries, is estimated at about 85 729 tonnes of wheat and 11 160 tonnes of rice. In addition, the committed food aid and stocks include some 4 431 tonnes of pulses, 22599 tonnes of cooking oil, 3 894 tonnes of fortified biscuits and 936 tonnes of sugar. WFP in collaboration with the Government of Afghanistan is attempting to procure some 10 000 tonnes of wheat from the surplus producing provinces of Northern Afghanistan. Should there be any additional food aid requirements and domestic markets are unable to respond to the requirements, imports would remain an option.

Sustained investment in the agricultural sector, particularly the rehabilitation, upgrading and maintenance of the irrigation infrastructure as well as access to rural credit are also essential for a speedy and continued recovery of the Afghan economy in general and the rural sector in particular.

2. SOCIO-ECONOMIC SETTING

Afghanistan is a landlocked country of 652 000 square km. It is strategically located, bordering the Central Asian Plains and mountains of the CIS countries (Turkmenistan, Uzbekistan, and Tajikistan) in the north, China in the north-east, Pakistan in the east and south, and the Islamic Republic of Iran in the west. Only about 12 percent of the country's total land is arable, with 3 percent under forest cover, about 46 percent under permanent pastures, and the rest (39 percent) being mountains.

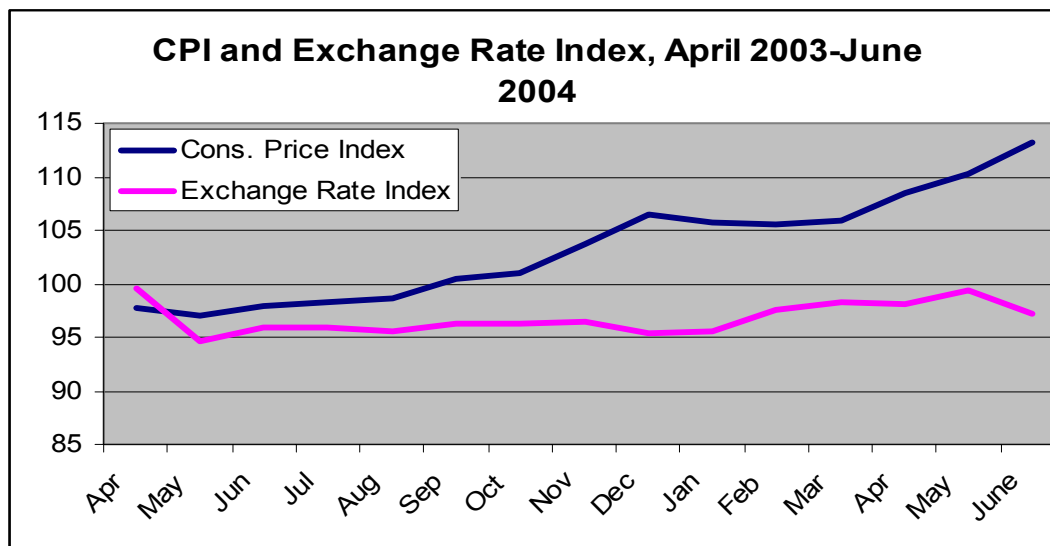
More than a quarter of a century of civil strife and severe drought from 1999 to 2001 and again in 2004 have devastated Afghanistan. Physical infrastructure is severely eroded or ruined due to continuous neglect and destruction. Agricultural infrastructure, manufacturing and food processing sectors have also been virtually destroyed or are in very bad condition. Social and economic institutions continue to be void of necessary human capital, while efforts are underway to reform the public sector.

2.1 Macroeconomic situation

The International Monetary Fund (IMF) estimated Afghanistan's GDP at about US\$4.7 billion in 2003 financial year (FY begins on March 21), resulting in a per capita GDP of US\$186 using a population estimate of 21.8 million (see section 2.2 on population). Agriculture (crop production, horticulture and livestock) accounts for about 52 percent of GDP and employs an estimated 80 percent of the economically active population. Industry and services each make up about 24 percent of GDP. GDP growth during the 2002/03 financial year was estimated at about 28.6 percent comprising of agriculture (27.7 percent), industry (21.1 percent) and services (39.5 percent). This is a significant but understandable growth rate from a deteriorated economic base. The IMF has projected that the GDP is likely to grow by about 20 percent in the current financial year given a strong growth in agriculture, construction and services. However, such a high growth rate is highly unlikely to be achieved this year given drought conditions and crop failures in a large part of the country.

The Kabul-based Consumer Price Index (CPI) compiled by the Central Statistics Office, shows remarkable stability following the initial surge in inflation when the new currency was introduced in October 2002. In view of the significantly large import content of consumer goods, inflation is heavily influenced by movements in exchange rate. The exchange rate has been stable at around Afs 47/48 to US\$1. The monetary stability has been achieved largely due to no deficit financing policy of the Afghan Central Bank (Da Afghanistan Bank) and the conversion of large sums of foreign aid into Afghani. Figure 1 below shows the CPI for Kabul and the exchange rate index.

Figure 1. CPI and the Exchange Rate Index, April 2003 – June 2004



Source: Central Statistics Office, Monthly Price Bulletin for Kabul, Afghanistan.

Domestic and cross border trade seem to be unhindered and most of the consumer goods, durable and non-durable, are imported through porous borders or identified checkpoints. Trade is rather brisk with Turkmenistan in the north, the Islamic Republic of Iran in the west and Pakistan in the east and south as well as China. However, poor transportation and communication systems continue to increase the transaction costs and impede the full realisation of trade opportunities both domestically and with neighbouring countries. Remittances from family members abroad and construction boom in the country are major sources of income and consumption for a significant number of households.

The IMF estimated aggregate exports, including re-export, at about US\$1.65 billion in 2001/02 and US\$2.36 billion in 2003/04 financial year (beginning 22 March). Aggregate imports were estimated at US\$2.53 billion in 2001/02 and nearly US\$4.4 billion in 2003/04 financial year. Principal exports are carpets, dried fruits, fresh fruits, medicinal plants and animal skins, while the main imports are machinery, equipment, household requisites, medicine, clothing and food. The main trading partners are Japan, India, Pakistan, China, South Korea, Germany, UAE and USA.

The government of Afghanistan (GOA) presented a comprehensive plan for reconstruction, *Securing Afghanistan's Future*, requesting US\$27.5 billion over seven years in an international conference in Berlin in early April this year. The pledges made in the Berlin Conference totalled some US\$8.3 billion over 2004/05-2007/08 fiscal years, including US\$4.5 billion for 2004/05 fiscal year. Coupled with prudent fiscal and monetary policies, these pledges are expected to go a long way in the reconstruction efforts of Afghanistan and create an enabling environment for the involvement of the private sector in pursuit of rehabilitation and further development of the country.

Despite significant achievements, security remains precarious and a major threat to stability and reconstruction efforts. The recent surge in attacks on the UN agencies and some international NGOs have made the rehabilitation efforts very difficult if not impossible in a large portion of the country, in particular the south and east of the country. Lack of security, inadequate security infrastructure and the breakdown of the rule of law have created an enabling environment for opium poppy cultivation and trade. Furthermore, planning and implementation capacities remain extremely deficient. Lack of capacity in the MAAH and other institutions is a major factor contributing to inefficacy of various programs and projects as well as hindering institutionalization of certain activities.

2.2 Population estimates

The last census was conducted in the country in 1979; no accurate census being conducted thereafter. Therefore, population estimates by various national and international organisations vary greatly and range between 21 million and 26 million. However, the Central Statistics Office of the Interim Government of Afghanistan in 2003 undertook a review and estimated the population at 22.2 million people comprising a settled population of 20.7 million and 1.5 million nomads. Population growth is estimated at 1.9 percent per year, resulting in a population estimated at 22.6 million in 2004. Since the last official census in 1979, population has almost doubled (the fertility rate at 6.8 percent is one of the highest in the world). Urban population is currently estimated at 20 percent of the total, with urbanisation rising at an alarming rate.

2.3 Agricultural sector

Agriculture is the mainstay of the Afghan economy accounting for more than 52 percent of GDP and supports over 80 percent of the population. However, this has not been the case in drought years and the relative recovery of the past two years seems to have been reversed throughout the country, except in some provinces in the North and Northeast.

Only about 12 percent of the country's total land is arable, 3 percent is under forest cover, 46 percent is under permanent pastures, with the remaining 39 percent being mountainous. Desertification, particularly in the South-West, and deforestation are rising at an alarming rate, while some of the pastures are cultivated when rainfall is plenty and left fallow the following year, causing some erosion and loss of grazing land. Given highly variable rainfall and concomitant variations in production from the rainfed sector, the irrigated sector traditionally provided a higher proportion of all crops. Land holding size and type vary both between and within provinces, with average farm size ranging between 1-2 hectares. Absentee landlords are common following emigration of families or family members to neighbouring countries and share-cropping is seemingly expanding in most provinces.

Wheat is the staple crop, accounting for about 70 percent of total cereal consumption in Afghanistan. Other grains include rice, maize, barley, and pulses. Several types of summer and winter vegetables and fruits including potatoes, onions, tomatoes, Okra, cauliflower, melons, water melons, apricots, pomegranates, apples and grapes are also produced both for domestic consumption and exports. Exports of dried fruits and nuts, mainly raisins, pistachio, almonds and apricots are still a significant source of foreign exchange but they are nowhere near the levels of the 1980s when Afghan dried fruits accounted for a significant share of the world market.

2.4 Poppy production

Afghanistan is the world's largest poppy producer, accounting for more than 70 percent of the world production in 2002 and 2003. Rampant poverty and the breakdown of the rule of law and a quarter of a century of civil strife have all contributed to such high production in the country. The United Nations Office on Drugs and Crime (UNODC) predicts that poppy production in 2004 may be up on the high output in 2003, which was estimated at 3 600 MT. However, in parts of the country, in particular Ningarhar province, some of the poppy crop is reportedly damaged by fungal and viral diseases. The mission did not endeavour to estimate opium output this year but noted that significantly larger areas had been planted this year compared with last year. Poppy cultivation has spread to provinces where the crop had never before been planted. The UNODC report, Farmers' Intention Survey, February 2003, lists the main reasons for poppy cultivation as poverty alleviation, unrivalled high expected income, access to credit and the purchase of luxury goods. In addition, the poppy crop can thrive on very little water, which could not support other crops, including wheat. The Mission noted that most of the poppy farmers do not only plant poppy but also wheat and other crops on land under their command. Raw poppy prices are usually very low right after the harvest, own food production gives the farmer the option to delay the sale of opium while prices are significantly low.

3. FOOD PRODUCTION IN 2004

Cereal production in Afghanistan has not been sufficient to meet consumption requirements since 1976, when production peaked at 4.5 million tonnes. Civil unrest since 1978 has contributed to a steady decline in production through the 1980s reaching its lowest level in 1990 with only 60 percent of the 1976 production level. Improved precipitation and relative peace in much of the country helped a steady agricultural recovery during early 1990s, with production peaking in 1998, the largest harvest since 1978. However, severe drought conditions for three consecutive years (1999 to 2001) resulted in total failure of rainfed agriculture and substantially reduced irrigated crops. In 2003, overall cereal production recovered strongly due mainly to improved precipitation throughout the country. Rainfed cereals in 2003 were cultivated on a significantly large area of the country and overall production was considered a record despite below average precipitation in the South. This year, cereal production is significantly down throughout the country, particularly in the West, South and East, due mainly to highly reduced precipitation. In the North and Northeast of the country the decline in production were mainly due to a reduction in cultivated area, sunn pest, un-seasonal rains and shortages of farm power during cultivation.

3.1 Precipitation in 2004

Afghanistan is an arid/semi-arid country and its agriculture production directly depends either on precipitation or irrigation. Rainfall is erratic and varies from about 99 mm per year in Farah (West) and 1024 mm in South Salang (Central region). Rainfall occurs mainly during winter (December to late February) as well as in April when plants are flowering. Snowfall, very important for ensuring irrigation water availability during Spring and Summer months, occurs in winter in high elevations. Precipitation is normally not expected after mid May.

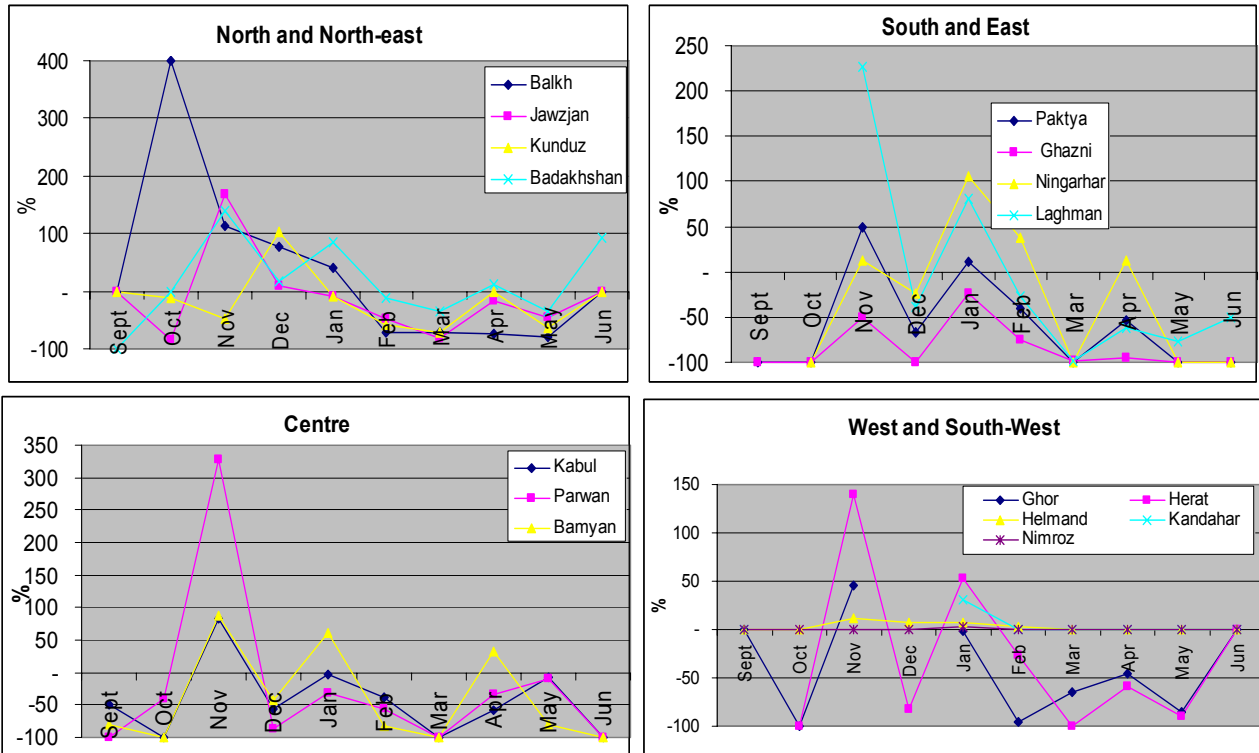
During the 2002/03 cropping season well distributed rains and heavy snowfall were recorded throughout much of the country, particularly in the North, following three consecutive years of drought (1999-2001) when precipitation was significantly below the long-term average (LTA). Despite good rains last year, the severely depleted aquifers in the South, Southwest and some parts of Central and Eastern Afghanistan were not adequately replenished.

Figure 2 below shows rainfall percentage change in 2003/04 cropping season over LTA in selected regions of Afghanistan. Heavy rains in the North and Northeast during September and October delayed cereal planting by almost a month. Well distributed and adequate rains and snowfall were recorded throughout the country in November, December and January, decreasing in February and almost no rains were recorded in March except in the North and Northeast. April is a rather critical period in the cropping calendar, which was also coupled with high temperatures and winds, increasing crop demand for water. Except the West, Southwest and parts of South, rains began to fall but in many regions it was too late for some crops.

Since December 2002, an extensive network of meteorological stations was set up as part of an information and policy unit (FAAHM), jointly managed by MAAH and FAO. The network comprises 108 observation sites, 25 of which are complete agro-meteorological stations with 19 classical stations recording 7 weather parameters and

6 automatic stations reporting about 20 weather parameters on a daily basis. In addition to agro-meteorological parameters, 80 sites also report on crop growth and conditions, thus filling an important information gap for monitoring crops and hence food security.

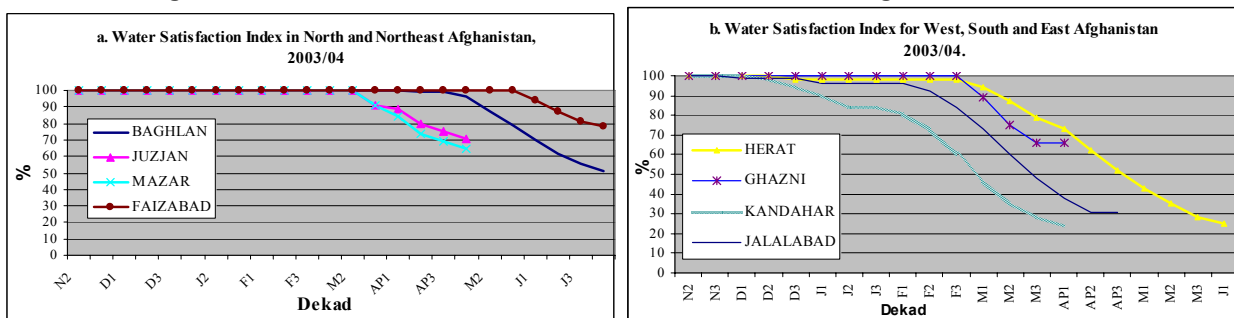
Figure 2. Percentage Change Rainfall in 2003/04 Crop Season Over LTA in Selected Zones, Afghanistan



Source: Agro-meteorological Unit, FAAHM, Ministry of Agric. and Animal Husbandry, Kabul Afghanistan.

Figure 3 below presents water satisfaction indices (WSI) for wheat in selected provinces. The WSI measures the ratio of water absorbed by wheat crop relative to its water requirement in percentage. Therefore, 100 percent WSI indicates that the crop's entire water requirement is satisfied. Panel a of Figure 3 shows that the WSI for wheat in the North and Northeast of the country this year was significantly better compared with the West, South and East of the country, shown in panel b.

Figure 3. Water Satisfaction Index in Selected Provinces, Afghanistan 2003/04

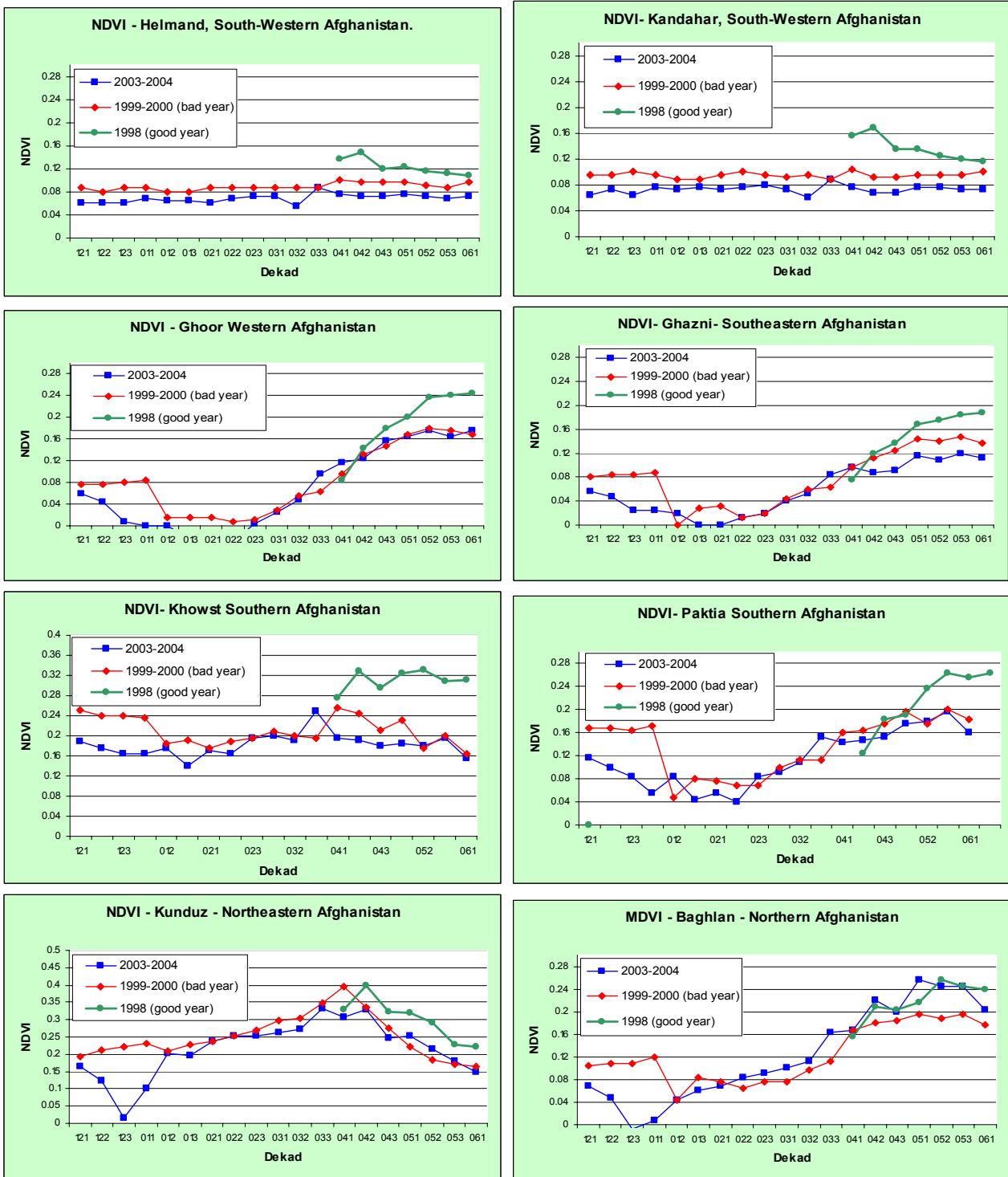


Source: Agro-meteorological Unit, FAAHM, Ministry of Agric. and Animal Husbandry, Kabul Afghanistan.

Above normal and erratic temperatures in late winter and Spring caused early snowmelt, increased demand for irrigation and subsequently water levels in many rivers feeding the fledgling irrigation systems have significantly decreased. In many provinces very little if any water is available for summer crops. Figure 4 below shows vegetation indices between December and June for selected provinces. NDVI for 2003/04 is compared with

1998, which is generally considered a good year, and 1999/2000, considered the worst recorded drought year. As depicted in figure 4 below NDVI in 2003/04 cropping season throughout the country is lower than the 1998 levels, indicating significantly lower vegetation mass this year compared to the good year in 1998. Furthermore, NDVI this year is lower than the worst drought year (1999/2000) in Western, Southwestern, Southern and South-eastern Afghanistan. NDVI in Northern and North-eastern Afghanistan this year is below 1998 but above 1999/2000 drought year. Therefore, crop conditions this year according to the satellite imagery in the West, Southwest and South of the country are similar to the severely drought affected crops of 1999/2000.

Figure 4. Normalised Difference Vegetation Index (NDVI) Afghanistan -2003/04, 1999/00, 1998



3.2 Area planted

Aggregate area planted with cereals in 2004 is estimated at about 2.2 million hectares, which compares with an area of about 2.82 million hectares planted in 2003 and some 2.76 million hectares planted in 1998. The decline

in area planted with cereals is mainly due to heavy rains during the planting season in the North and Northeast, and water shortages in the South and Southwest. In addition, wheat was substituted for cash crops, in particular poppy, and low wheat prices last year proved as a disincentive for farmers to grow wheat. In the Northeast, Kunduz, Baghlan and Takhar, many farmers left their land fallow, deferring wheat in favour of rice.

Irrigated wheat area decreased by about 9 percent compared with 2003 but was slightly above 1998. Rainfed wheat, however, declined by about 42 percent compared with 2003 but remained similar to area planted in 1998. In the West and some parts of the North, farmers had planted wheat and barley on areas similar to 1998 (average year) but erratic and lack of precipitation caused significant crop failures. In Faryab, Balkh and parts of Sar-i-pul provinces in the North, sunn pest and weeds were the main causes of crop failure in addition to erratic rainfall.

3.3 Agricultural inputs

Seeds

The Mission found that a number of international organisations had distributed untested and unsuitable wheat seeds in various parts of the country some of which have proved disastrous for farmers. FAO has assisted MAAH in the preparation of a seed code and seed strategy, which are yet to be ratified and subsequently implemented. In the absence of a seed code, unpleasant consequences may ensue affecting farmers and food production in general.

Farmers are well aware of the productivity and other characteristics of various seeds that have been introduced in the country during the past couple of decades, mainly through the FAO seed programme. However, farmers are highly sceptical about all new varieties, following crop failures using some of the new and untested varieties.

A great majority of farmers carryover seed from one year to the next from their own harvests, the simplest, safest and cheapest method of seed security. Localized borrowing of seed stock, or purchase from the local market are the next preferred options. In most cases, farmers identify the seeds they prefer and select those samples that are suited to their situation and with which they are familiar. Many of the farmers use 10th or 15th generation seeds, which are rather diluted and have lost much of their genetic qualities but are still referred to as high yielding improved varieties. This year, many farmers in the West, Southwest, South, East and parts of the North will not be able to carry over suitable seeds from their harvest mainly because of drought and sunn-pest in the North. Appropriate and timely assistance will be required this year to help farmers access adequate and suitable seeds.

Fertilizers and pesticides

The Mission observed that most farmers in Afghanistan are well aware of the value and usage of fertilizers, and the quality of several fertilizers available in bazaars. However, diluted fertilisers with reduced nutrient content, have been a major concern, to the extent that many farmers are reluctant to use fertilisers on their crops. Lack of any quality control in the country has led to a surge in the import and sale of diluted and infiltrated fertilisers. Two agricultural surveys conducted by FAO and MAAH in 2003 reported that nearly 78 percent of farmers had applied mineral fertilisers on irrigated wheat and other crops. The mission observed that in addition to mineral fertilisers, farmers in some areas were also using farmyard manure on irrigated crops. Mineral fertiliser use rate varies according to area and irrigation water availability. However, in general the observed mineral fertiliser use practice on wheat is one application of DAP at planting (equivalent to the seed rate - average 152 kg/ha) and one to two applications of Urea in spring and at heading (again equivalent to the seed rate but sometimes twice the seed rate). Mineral fertilisers are generally not used on rainfed cereals.

Farm power

In the rural areas demand for labour is seasonal while the recent construction boom and alarmingly fast growing urbanisation as well as trade activities have attracted significant number of rural labour. Last year labour shortages in the Northern parts of the country were noted during the cereal harvest in June/July. However, this year no labour shortages was noted as most of the rainfed cereals have failed and sufficient labour was available for rice transplanting and maize planting, the former being highly labour intensive activity. Average

daily wage rates across the country range from Afs80 (US\$1.7) to Afs200 (US\$4.2) per day depending on location, season and type of work.

The use of draft animals is continuously diminishing and being replaced by tractors throughout the country. Last year the FAO/MAAH agricultural survey showed that more than 48 percent of the cultivated land (both irrigated and rainfed) was cultivated using a tractor. The increased use of tractors may have been partly prompted by the low numbers and slow recovery of draught animals, as well as diminishing grazing lands and low vegetation in view of recurrent drought. This year shortage of agricultural machinery during the cereal planting season caused significant delays in planting, particularly in the North and North-east of the Hindu Kush mountains.

Pests and diseases

Sunn pest and other common diseases like yellow and strip rust were rampant in much of the Northern parts of the country while the Moroccan locust (desert locust?) had been successfully controlled by combined resources of several agencies, including FAO and some NGOs by closely working with the MAAH. However, the Mission observed swarms of locust in some provinces in the North of the country. If left uncontrolled, a serious outbreak with severe consequences for crops and livestock is a real possibility. Mechanical control of sunn-pest was ineffective in some provinces while appropriate agro-chemicals were reportedly inaccessible to farmers.

3.4 Cereal production in 2004

The Mission conducted a post-harvest survey between 8 July and 5 August 2004 and collected data from 32 out of 34 provinces. The survey data could not be checked against any pre-harvest survey or any other agricultural survey this year. Aggregate cereal production is estimated at about 3.06 million tonnes, which is about 43 percent down on the record harvest in 2003 and 18 percent down on 1998, which was considered an average year. Overall national cereal production is only down by about 18 percent compared with the average production, but crops have on average failed by more than 50 percent in the West, Southwest and South of the country. In some areas crops have completely failed, similar to the worst drought years in living memory, 2000/01.

Wheat: Aggregate wheat production in 2004 is estimated at about 2.3 million tonnes, some 47 percent down on last year's record harvest but only about 19 percent down on 1998, which was considered an average year. The record harvest in 2003 is mainly due to highly favourable weather conditions, increased area under cultivation and a record high yields throughout the country. Rainfed wheat area decreased from more than 1.2 million hectares in 2003 to about 0.8 million hectares this year. In addition, rainfed yields decreased from a high of 1.1 tonnes in 2003 to about 0.5 tonnes per hectare this year. In many provinces rainfed wheat completely failed.

Irrigated wheat production is estimated at about 1.87 million tonnes, compared with 3.02 million tonnes in 2003. Area planted with irrigated wheat declined by about 8.5 percent this year compared with last year, mainly due to reduced water availability in the rivers in areas West and South of the Hindu Kush mountains. Yields decreased from an average of 2.85 tonnes per hectares in 2003 to about 1.9 tonnes per hectare in 2004, which is some 17 percent up on the average year, 1998.

Table 1 below presents irrigated and rainfed wheat production, area and yield by province and region. In the regions north of the Hindu Kush mountains (North and Northeast), production and yields this year are slightly up on 2002 and 1998, when production was considered average in both years. However, wheat production in the West, Southwest, South and East is significantly lower than in average years.

Table 1. Afghanistan: Irrigated and rainfed wheat production estimates* in 2004 by province**

Province/ region	IRRIGATED Wheat 2004			RAINFED Wheat 2004			TOTAL Wheat 2004		
	Area (000'ha)	Yield (t/ha)	Prod. (000' tonnes)	Area (000'ha)	Yield (t/ha)	Prod. (000' tonnes)	Area (000'ha)	Yield (t/ha)	Prod. (000' tonnes)
NORTH	208	2.08	432	310	0.47	145	518	1.11	577
Faryab	58	1.47	85	90	0.33	30	148	0.78	115
Juzjan	35	2.14	75	10	1.00	10	45	1.89	85
Sar-i-Pul	25	1.68	42	40	0.50	20	65	0.95	62
Balkh	78	2.44	190	60	0.42	25	138	1.56	215
Samangan	12	3.33	40	110	0.55	60	122	0.82	100
NORTH-EAST	209	2.23	466	305	0.72	220	514	1.33	686
Bughlan	50	1.96	98	60	0.75	45	110	1.30	143
Kunduz	85	2.33	198	20	1.00	20	105	2.08	218
Takhar	50	2.40	120	150	0.80	120	200	1.20	240
Badakhshan	24	2.08	50	75	0.47	35	99	0.86	85
WEST	135	1.82	246	140	0.37	52	275	1.08	298
Herat	91	1.74	158	60	0.33	20	151	1.18	178
Farah	20	1.90	38		-		20	1.90	38
Badghis	24	2.08	50	80	0.40	32	104	0.79	82
WEST-CENTRAL	33	1.85	61	24	0.21	5	57	1.16	66
Ghor	18	1.67	30	20	0.15	3	38	0.87	33
Bamyan	15	2.07	31	4	0.50	2	19	1.74	33
CENTRAL	83	2.11	175		-		83	2.11	175
Kabul	18	2.50	45		-		18	2.50	45
Parwan	20	2.50	50		-		20	2.50	50
Kapisa	10	2.00	20		-		10	2.00	20
Logar	20	1.60	32		-		20	1.60	32
Wardak	15	1.87	28		-		15	1.87	28
SOUTH	88	1.51	133		-		88	1.51	133
Paktya	18	1.22	22		-		18	1.22	22
Paktika	14	1.43	20		-		14	1.43	20
Khost	17	1.53	26		-		17	1.53	26
Ghazni	39	1.67	65		-		39	1.67	65
EAST	64	1.72	110		-		64	1.72	110
Nangarhar	37	1.68	62		-		37	1.68	62
Laghman	14	2.29	32		-		14	2.29	32
Kunarha	12	1.17	14		-		12	1.17	14
Nooristan	1	1.82	2		-		1	1.82	2
SOUTH-WEST	149	1.64	244	18	0.22	4	167	1.49	248
Kandahar	39	1.92	75		-		39	1.92	75
Helmand	74	1.65	122		-		74	1.65	122
Zabul	10	1.80	18		-		10	1.80	18
Nimroz	10	1.30	13	8	0.25	2	18	0.83	15
Uruzgan	16	1.00	16	10	0.20	2	26	0.69	18
TOTAL	969	1.93	1 867	797	0.53	426	1 766	1.30	2 293

* Note: Totals computed from un-rounded data.

** Names of provinces are spelt differently in different publications. The spellings followed here are from the publication of the Central Statistical Office of the Interim Government of Afghanistan.

Source: CFSAM Survey data, July-August 2004.

Table 2 below presents area and production of main cereals, wheat, barley, maize and rice for 2004, 2003, 2002 and 1998.

Table 2. Afghanistan: Estimates of area, production and yield for other cereals in 2004

Cereals Crops	2004		2 003		2002		1998	
	Area (000'ha)	Prod. (000' tonnes)	Area (000'ha)	Prod. (000' tonnes)	Area (000'ha)	Prod. (000' tonnes)	Area (000'ha)	Prod. (000' tonnes)
Wheat	1 766	2 293	2 294	4 361	1 742	2 686	2 186	2 834
Barley	180	220	276	410	236	345	200	240
Maize	90	234	104	310	100	298	200	350
Rice (milled)	185	310	145	291	135	260	180	300

Note: Totals computed from un-rounded data.

Paddy rice of 435 000 tonnes is equivalent to 291 000 tonnes in milled basis. Wheat and barley include both irrigated and rainfed.

Source: GIEWS/FAO database.

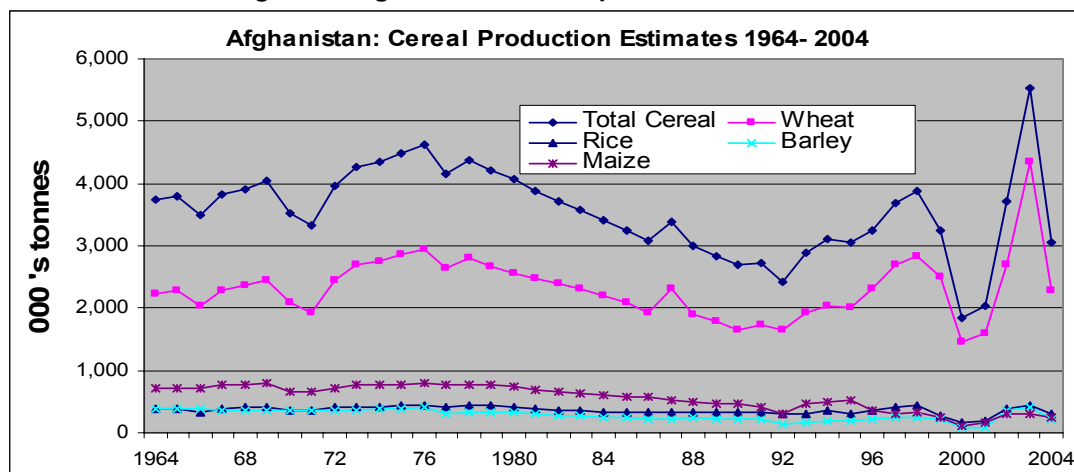
Barley : Aggregate barley planted this year (irrigated and rain-fed) is estimated at 180 000 ha and the total production at 220 000 tonnes. At this level planted area declined by about 96 000 hectares compared with 2003 and 20 000 hectares compared with 1998. Production this year is also down by a similar magnitude compared with the record harvest of 2003 and the average harvest of 1998. Barley is mostly planted on rainfed land and mainly used as animal feed.

Rice : Aggregate harvest this year is tentatively forecast at about 310 000 tonnes (milled), which is up by 10 000 tonnes even on the record harvest of 1998. The main reason is an increase in area planted with paddy in the Northeast, which replaced wheat and other summer crops. Rice is imported in large quantities and prices are high, which encouraged farmers to defer wheat planting in favour of paddy. Paddy is harvested in late winter.

Maize: Maize is a summer crop and usually follows winter cereals where water is available. This year aggregate harvest is forecast at about 234 000 tonnes, which is about 33 percent down on 1998 and some 24 percent down on last year. The reduced harvest this year is mainly due to water shortages in maize growing areas and reduced cultivated area. Maize is an important fodder crop as well as grains for human consumption. More than 15 percent of the maize crops are entirely fed to livestock before grains are developed, while crop residues are a very important winter feed after maize grains are harvested.

Figure 5. below presents a time series of cereal production in Afghanistan since 1964. The figure shows that 2003 was an exceptional year for cereal production in Afghanistan, while 2000 and 2001 were the worst year in living memory. 1998 is generally considered an average year, following two decades of destructive war. Wheat is by afar the most important cereal and accounts for a large proportion of the Afghan diet.

Figure 5. Afghanistan: Cereal production 1964-2004



3.5 Other crops

Vegetables

Last year (2003) the winter agriculture survey found that 38 percent of the surveyed farming households in the country had a kitchen garden, producing vegetables primarily for self consumption. However, in some areas almost all farmers have a kitchen garden either inside the perimeters of their houses or adjacent to the village. The Winter survey also found that more than 21 percent of the farmers producing vegetables reported to have exclusively produced for the market. The majority of farmers with relatively good access to towns primarily produce vegetables for sale.

The main summer vegetables grown include onions, tomatoes, eggplants, pumpkins, courgettes, garlic and okra, while the main winter vegetables are cauliflower, spinach, carrots, potatoes and lettuce. Other vegetables are also grown but are relatively rare and area specific. Melons and water-melons, intercropped with sesame, rapeseed, wheat and barley planted in late spring, are major cash crops for early and late production using different varieties to capture markets. Melon/watermelon is more important than cereal crops in some districts of the North and Northeast. Lack of sufficient and timely rains as well as diseases (mainly melon flies) have affected harvests this year, which is significantly down on last year's bumper harvest.

Fruits

Drought and diseases in much of the country have severely affected orchards further reducing the significantly diminished area under orchards following three consecutive years of drought. Almost all farming households in the rural areas have some fruit trees within the perimeters of their houses or a small garden attached to their house for self consumption. However, orchards are also a major source of income for farmers in much of the country and the majority of large to medium sized orchards are exclusively for markets. In some districts of Southern, South-western and Western provinces, lack of sufficient water did not allow for the planned rehabilitation and replanting of orchards. Crop diseases, hail and frost as well as drought severely affected orchards in central Afghanistan, where fruit production is the main source of livelihood for the majority of the rural households.

The Mission noted that up to 60 percent of orchards in some districts of Parwan, Kapisa, Wardak and Ghazni in Central Afghanistan, Helmand, Kandahar, Farah and Nimrooz in South-western Afghanistan, Saripul, Balkh, and Samangan in Northern and Badghis, Herat and Ghoor in Western Afghanistan have been affected by a combination of drought, diseases, hail and frost. The degree of damage was not uniform and varied across provinces and regions. The orchards are regularly intercropped with alfalfa, pulses, vegetables or cereals.

Cotton

Cotton production has significantly diminished over the past couple of decades in line with the collapse of the cotton industry. Large-scale cotton planting is no longer a scene on the rural landscape, in particular in the North, where cotton production was a major farming activity on a large scale. Cotton is still grown in some parts of the country but at a much reduced scale and mainly for domestic use.

3.6 Livestock and Pasture

The FAO and MAAH conducted a livestock census in March 2003, which estimated livestock population at about 3.7 million cattle, 8.8 million sheep, 7.3 million goats and 175 000 camels in Afghanistan. At this level a recovery in cattle and goat population is noted but the sheep population still stands at about half of the level of 1998 just before the start of the severe drought years 1999-2001. This year, except for the North and Northeast, where pastures have somewhat recovered, livestock numbers in much of the country, particularly in the West, Southwest, South and East of the country have diminished, thus reversing some recovery in livestock numbers noted last year. Distress slaughter, due to drought in the West and South-west was significant, which may have eroded farmer coping mechanisms in those areas. Livestock is a major store of value and a main buffer in times of food shortages.

The Mission noted some improvements in pastures in the North and Northeast of the country with some improvements in access to common pastures, particularly to pastoralist nomads (Kuchi). However, some restriction on access to pastures across provinces still remains a major concern to Kuchis. It is estimated that nearly 60 percent of the pastoralist nomad households have lost their cattle and the remainder have suffered considerable losses. The majority of households are yet to recover and sustain their livelihood. The largest concentrations of the nomadic and semi-nomadic pastoralist population of Afghanistan are in the provinces of Ghazni, Zabul, Kabul and Kandahar. Some households of Beluch nomads also reside in the sandy deserts of the southern provinces of Helmand, Kandahar and Nimroz. The North and Northeast of the country with considerable pastures also host a large number of nomadic pastoralist households.

The Mission noted widespread reporting of animal diseases, in particular Foot and Mouth Disease (FMD) and *Peste des petits ruminants* (PPR) among others, following the reduction of veterinary services and vaccination programmes over the past couple of decades. During the mid-nineties as part of the PROMIS programme FAO and UNDP established 255 veterinary field units. Most of these units operate far below capacity or are dysfunctional, following lack of funding, many years of drought and wars. A few of these units are being run by the MOA and some by the NGOs including the Dutch Committee, MCI, ADA, VARA, and PRB. Unfortunately, most units are dysfunctional and need rehabilitation and financial support to provide the services needed if animal diseases are to be brought under control. The Mission noted that animal health care remains a major concern and a top priority for pastoralists and for most farmers.

4. AGRICULTURAL SITUATION BY REGION¹

4.1 North (Faryab, Juzjan, Sar-i-pul, Balkh, Samangan)

The Northern region comprises of two major agro-ecological zones, namely the Northern rainfed belt, which extends from Badakhshan to Badghis and the Northern irrigated oases. Most of the rainfed land is located in the north of the Hindu Kush mountain ranges, a vast area of rolling hills and planes extending all the way to the Oxus river. The rivers (Khulm, Balkh-Ab, Ab-e Safid and Shirin Tagab rivers) that are taking their source from Northern Afghanistan above the Loess hills have a limited watershed. Therefore, the flow of these rivers is seasonal. Moreover, these rivers end their course in irrigation canals or desert sands when the rivers reach the open land of the Afghan Northern plain. Water storage is limited or non-existent and much of the precipitation is discharged in the form of flush floods causing significant damages but without improving soil moisture or recharging the depleted aquifers.

This year heavy rains between October and December (planting season) delayed rainfed and irrigated cereal planting by almost a month, which significantly affected yields. Rainfall was not only below average but also erratic and un-seasonal. In some districts rainfed cereals suffered significantly because of the erratic and below average rainfall. In addition, air temperatures were significantly high during early Spring and Summer increasing crop demand for water and causing early snow-melt. Irrigation water was rather limited during the early months of Summer when crop demand for water was highest, not only because of the stage of the crop growth but also because of the unusually high temperatures in the region. Furthermore, water is unequally distributed and many farmers with traditional rights to irrigation water have little or no access to water due to imbalance of power and insecurity.

A number of international organisations had distributed untested and inappropriate wheat seeds to farmers in various provinces of the North with unfortunate results. Mineral fertilisers and agro-chemicals are generally diluted with significantly reduced nutrient content. Farmers are, therefore, rather reluctant to apply mineral fertilisers and use newly introduced improved varieties. In addition, sunn pest was the main cause of crop failure in much of the North and in some districts of Balkh, Faryab, Samangan and Sar-e-pul sunn pest had damaged more than 60 percent of the wheat crop. Low wheat prices last year had discouraged some farmers this year to match the record high areas planted in 2003 (see figure 5).

¹ The zones/regions are not recognized administrative units or units used by other organizations. These are areas with similar agro-ecological characteristics or falling in a broadly defined watershed.

4.2 North-East (Bughlan, Kunduz, Takhar, Badakhshan)

The North-eastern region comprises of three distinct agro-ecological zones namely: the Northern rainfed belt which extends from Badakhshan to Badghis, the intensively irrigated scheme of the Qataghan zone (Bughlan-Kunduz-Khanabad-Taluqan) and the valley floor irrigation up to high elevation. The North-eastern region together with the North is one of the main cereal producing areas in Afghanistan.

The cereal production situation and the causes for the decline in output in the North-eastern region follows a similar pattern to those described for the Northern region. In Kunduz, Baghlan and some parts of Takhar, area planted with cereals on irrigated land declined by around 10-15 percent in favour of cash crops and rice, the latter planted in summer just before the wheat harvest. Cereals planted on rainfed areas decline significantly compared with last year due mainly to heavy rains during the planting season and reduced rains in March as well as low wheat prices in the previous season. However, sunn pest had damaged more crops in the North compared with the North-east. Rainfall was erratic but the aggregate rainfall during the 2003/04 cropping season was average, unlike the North where rainfall was erratic and below average. Weeds and diluted seeds were reported as the main causes of decline in cereal production.

4.3 West (Herat, Farah, Badghis and Ghor)

The Western region comprises of 3 different agro-ecological zones; 1. The western extension of the rain-fed belt, 2. The intensive irrigated plain of Herat and, 3. The Western oases.

Rainfall in the Western region was far below the long term average and nearly failed in March, which proved devastating for crops. When some rains came in April it was too late for some crops. Rainfed crops have, by and large, failed in many districts of Herat, Ghor and Badghis. The Hari Rud river, irrigating the fertile planes of Herat, was mostly dry during late Spring and Summer when crop demand for water was significant. The Adraskan Rud, Farah Rud, Khuspas Rud irrigating Farah and parts of Herat have been completely dry since winter, while rains had completely failed in Farah. In addition, desertification is increasing at an alarming rate in Farah and every year a large portion of agricultural land, irrigation systems and villages come under sand. In Ghor and Badghis, where rainfed cereals are the main crops have entirely failed in some districts.

Throughout the region Kareezes (an underground traditional irrigation system) provide some water at critical months when rivers dry up in summer, in particular for high value horticulture crops. This year, however, the Kareezes have also been dry and a second crop in the intensively irrigated planes of Herat has either not been planted at all or cover insignificant area. In addition to drought in Badghis and Ghor, there is a continuous struggle between man and rat for harvesting grains and many farmers dig rat holes to regain their lost grains. Pastures in Herat, Badghis and Ghor have been, by and large, dry, which has caused distress slaughter, further reducing the already diminished livestock levels. In view of the improved precipitation last year and the subsequent good harvest in Ghor and Badghis, the Masiakh refugee camp in Herat was vacated. The refugees might return if the affected zones are not appropriately assisted in a timely manner.

4.4 South (Paktia, Paktika, Khost, Ghazni)

The Southern provinces are mainly mountainous, much of which used to be covered by pine forests and pastures. Irrigated agriculture are usually in the lower valleys fed by short seasonal rivers including the Gumal and Kuram Rud that drain into the Indus river, the Sardeh wa Ghazni Rud that drain into the Band-e-Istada lake and the upper part of Helmand in western Ghazni. The Band-e-Istada used to be the biggest lake in the country and a major source of irrigation water for many districts in Ghazni, Wardak and Logar provinces, as well as a major breeding ground for migratory birds. The lake has been dry for a number of years, with severe consequences for the environment and the agricultural activities in the neighbouring provinces.

This year rainfall in the region has been far below average and the vegetation index (see figure 4) from satellite imagery is below the worst drought year in living memory (1999/2000). In addition frost in early Spring compromised significant areas of crops in Ghazni and Paktia. Security remains precarious and a major impediment to agricultural and rural rehabilitation in the region.

4.5 East Central (Bamyan, Daikundi, Parwan, Panjshir)

The provinces of Bamyan, Parwan and the newly created provinces of Daikundi and Panjshir are situated on the Southern flank of the Hindu Kush and made up of networks of high and narrow valleys as well as some pastureland plateaux. Irrigated agriculture, mainly cereals and orchards, takes place in the valley floor, with limited rain-fed agriculture on the high mountains.

Rain fall in the region was erratic and far below average. Rainfed cereals in the region entirely failed, while most of the pastures have been dry since early Spring this year. Frost and hail Spring compromised significant areas of annual and perennial crops. In some districts of Parwan nearly 80 percent of the orchards have been damaged by hail and diseases. Orchards are the main sources of livelihoods for many households in Parwan, Panjshir and some districts of Bamyan. The mission estimates that on average nearly 80 percent of the apples and vines and nearly 50 percent of the almonds have been damaged by hail and diseases in the region. The newly established Daikundi province, previously a district of Uruzgan, has been severely affected by drought and in some villages drinking water has also been inaccessible. In Bamyan, Waras and Saighan are worst affected by drought, in some villages most of the wells were dry, forcing some people to leave their villages.

Wheat seeds were reportedly distributed to some farmers in the region towards the end of the planting season and many farmers did not know the characteristics and requirements of the distributed seeds, which reduced yields significantly. In addition, these seeds had not been tested in the region or the country prior to distribution.

4.6 Central (Kabul, Kapisa, Logar, Wardak)

Most of the agriculture in this region is irrigated, land holdings are relatively small and orchards are common. Being in the vicinity of the capital and the largest city, Kabul, cash crops, horticulture and fruits, are commonly grown in the region. Part-time farming is common, while trade and construction boom in Kabul has provided employment opportunities for a large number of surplus labour in the region. Cropping patterns are amongst the most diversified in the country and the highest irrigated wheat yields were also recorded in this region.

This year, rainfall was erratic and generally below average. Temperature in Spring and early summer were unusually hot, increasing crop demand for water, while water levels in the rivers were significantly low and the Kabul river remains dry. In addition, hail and diseases significantly compromised production from annual and perennial crops this year. Uncertified and diluted seeds as well as fertilisers also affected crops in some areas.

4.7 East (Nangarhar, Laghman, Kunar and Nooristan)

Agriculture in the Eastern region is predominantly irrigated by several rivers - Kabul, Alishang, Alingar, Kunar – as well as several smaller seasonal tributaries. Double and triple cropping is common in areas fed by one of the main rivers. However, this year rainfall was significantly low and erratic in the region. The Mission noted that some districts experienced heavy floods during late Spring and early summer, while in the same districts access to drinking water was extremely limited as the water tables had receded by a couple of meters.

The districts in Nangarhar province lying above the Kabul river (Surkhrood, Khogyani, Hisarak, Sherzad, Chaprhar, Shinwar, Rodat and Achin) wheat yields were significantly low and in some districts crops had completely failed due to water shortages. A second crop in most of these district was not possible, while most villages from Achin have migrated due to lack of drinking water. In Kunar and Laghman provinces water levels in the main rivers were reduced but crops had received the minimum requirement for growth, thus production, though down on last year, was not significantly affected. Untested and uncertified wheat seed was distributed to a large number of farmers, which have, by and large, failed and farmers seemed reluctant to use newly introduced high yielding varieties. Animal and poultry diseases were rampant in the region and a major concern for farmers. Security concerns did not allow the Mission to visit Nuristan. However, agricultural land is very limited in Nuristan and the majority of the population depend for their sustenance on forests and livestock, which according to secondary information, have not been adversely affected this year.

4.8 South West (Qandahar, Helmand, Zabul, Nimroz, Urozgan)

The South-western region is the most arid zone comprising of deserts, steppe and high cropping intensity irrigated river systems in the country. Desertification is a major concern in Nimroze and some districts in Helmand and Kandahar. Nonetheless, the irrigated zone in the South is an important production area in Afghanistan and depends mostly on two major rivers; the Helmand and Argandab river and a number of seasonal rivers in the east (Tarnac Rud, Arghastan Rud).

This year water levels in both the Kajaki and Dahla dams were below average but ensured minimum water for crop growth in the irrigated districts of Helmand and Kandahar. However, insufficient water at the tail end of the irrigation systems caused crop failures in some districts of Kandahar and Helmand. Crop failure in Nimroz and much of Zabul was more than 80 percent. The worst affected districts are Spin Boldak, Reg and Shorabak in Kandahar, Kang, Chahar-Borjak, Khash-Rud, and Zaranj in Nimroz, Shinkay, Atghar, Shamulzay, Daychopan, Mizan and Arghandab in Zabul.

The main causes of reduced harvest in the irrigated areas of Kandahar and Helmand were mainly crop diseases and weeds as well as reduced water availability while in Zabul, Nimroz and Uruzgan water shortages were reported as the main causes of crop failure. Orchards were the main source of income and fruits used to be produced for both domestic and external markets, which have not recovered since the last drought decimated most of the orchards. Security in the region is a major concern and an impediment to the much-needed rehabilitation and development activities.

5. CEREAL SUPPLY/DEMAND SITUATION

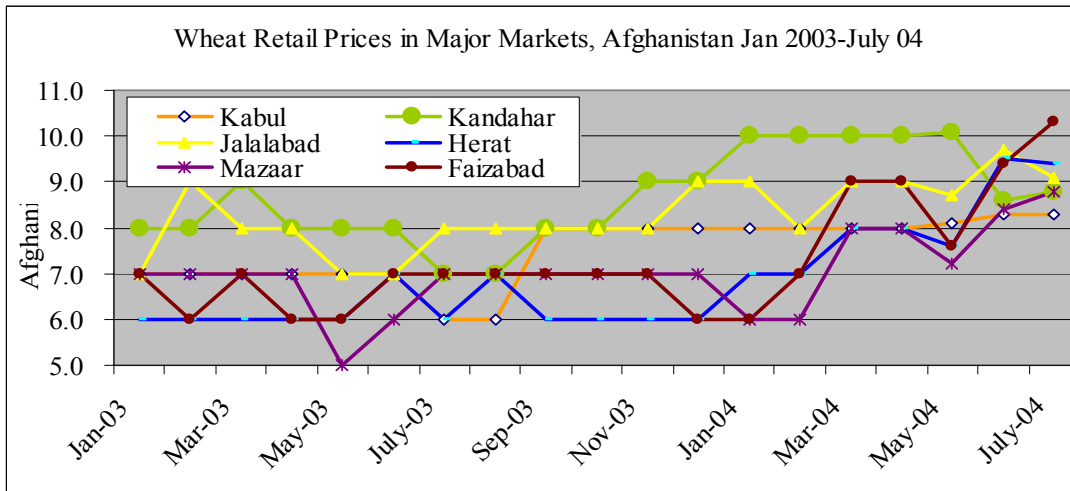
5.1 Current market situation

Cereal Prices

The most important crop and food item in the Afghan diet is wheat. Price hikes are detrimental for consumers, while low prices are equally detrimental for farmers. Farmer decisions on what and how much to grow are determined by the price levels for a particular crop in the preceding season. Prices of wheat in the Northern areas, the main wheat producing zone in Afghanistan, was significantly low during the 2003 harvest season. Wheat prices in the North, Northeast and West, as shown in Figure 6 below (the darker lines, Mazaar, Faizabad and Herat) were generally below Afs. 7 per Kg between January 2003 and February 2004, as prices in the Southwest and East were on average above Afs. 8 per Kg, highest in Kandahar during the 2004 cropping season. The low prices in the North were the result of a bumper harvest in 2003 and the closure of the tunnel on the main highway connecting Northern Afghanistan with the rest of the country. These, though favourable prices for consumers, penalised farmers and proved a disincentive for many to match areas planted with wheat in 2003. Below average production throughout the country this year has caused wheat prices to rise to levels usually experienced in lean winter months or just before harvest.

Since wheat is a major component of the Afghan diet and accounts for a large share of the household consumption, in particular for the poor, high prices may significantly limit access to food for the poorer and more vulnerable sections of the population. High wheat prices may also cause inflation to rise, hence further eroding the purchasing power of the poor households. It has to be borne in mind that farmers are consumers as well as producers and they have been doubly penalised by low production and high food prices.

Figure 6. Wheat retail prices in major markets in Afghanistan, Jan 2003 – July 2004



Source: WFP, Afghanistan (unpublished price data).

Despite high wheat prices this year, the terms of trade for farmers are deteriorating in the form of rising wage rates, high prices of farm inputs and consumer goods relative to farm-gate prices of agricultural produce. Price volatility because of the peak and trough in production is exacerbated due to lack of adequate storage facilities. The Mission observed that losses from stocks kept in farmer houses were significantly high. Except large farmers, who keep more food stocks than their annual requirement, most farmers do not keep stocks for more than 10 months of their annual requirements. Traditionally, traders in Afghanistan do not keep large amounts of food stocks, but rely on frequently revolving stocks.

Trade in wheat and wheat flour is unhindered and prices in Afghanistan seems to reflect prices in the neighbouring countries including Kazakhstan, a major producer in the region, which are in turn well integrated with other international markets. However, price volatility is noted just before the harvest begins throughout the country and in some inaccessible provinces. Security concerns in some parts of the country also hinder normal trade. Unfortunately, security is rather precarious in provinces where the effect of drought is severe (West, South-west, South and East).

The Mission observed that food was available in most of the provincial markets, except for some inaccessible district markets particularly in the South and Southwest. Therefore, food availability is not a major issue in most of the country, but access to food, in particular by the poor and vulnerable households, is of a serious concern. In addition to significantly reduced harvests and in some cases complete crop failures, the drought has had knock-on effects on the livelihoods of rural households in the form of reduced demand for agricultural labour, reduced income from livestock, increased medical bills and high food prices.

5.2 Cereal supply/demand balance for 2003/04

The cereal balance sheet for 2004/05 (summarised in Table 3) is based on the following assumptions:

- Mid-year 2004/05 (December 2004) population is estimated at 22.6 million. This figure is based on the 2002/03 population estimate of 21.8 million with 1.9 percent annual population growth rate prepared by the Central Statistics Office (CSO). The estimated population figure of 22.6 million includes some 21.1 million settled and 1.5 million nomadic populations.
- Per caput cereal consumption is estimated at 180 kg per year. This includes 160 kg wheat, 17 kg rice, 2 kg maize, and 1 kg barley.
- Feed use is estimated at 149 000 tonnes of maize and 144 000 tonnes of barley for cattle, horses, donkeys, and chicken.

- Seed use is estimated at 152 kg/ha for irrigated wheat, 92 kg/ha for rain-fed wheat, 105 kg/ha for paddy, 55 kg/ha for grain maize, 70 kg/ha for fodder maize, and 110 kg/ha for barley. Area planted with cereals next season is assumed as the average of the previous five years.
- Post harvest losses are assumed to be 15 percent for wheat, barley, and maize and 7 percent for rice.
- Following reduced harvest and high cereal prices this year, no cereal stock build-up has been assumed. However, an estimated 200 000 tonnes of stock drawdown mainly with traders and households from last year's bumper harvest has been assumed.

Table 3. Afghanistan: Cereal Balance Sheet, 2004/05 (July/June) ('000 tonnes)

	Wheat	Rice (milled)	Maize	Barley	Total
Domestic availability	2 579	310	234	220	3 343
Food aid in stock and Pipeline	86	0.01			86
Domestic production	2 293	310	234	220	3 057
Stock drawdown	200				200
Total utilisation	4 205	416	235	220	5 076
Food use	3 616	384	45	23	4 068
Animal feed			149	144	293
Seed provision	245	10	6	20	281
Losses	344	22	35	33	434
Import Requirements	1 626	106	1		1 733
Commercial imports	1 300	106	1		1 407
Uncovered Deficit	326				326

Note: paddy has been converted to rice at a conversion rate of 67 percent.

Source: Mission estimates.

The total cereal import requirement in 2004/05 (July/June) is estimated at more than 1.7 million tonnes, about 34 percent of the total consumption requirement. It is assumed that 1.4 million tonnes of the import requirement will be commercially procured, which leaves some 326 000 tonnes of uncovered deficit.

The commercial imports capacity is based on past imports and the relevant strengths of the national economy. During the 2000/01 marketing year, Afghanistan commercially procured some 909 000 tonnes of wheat at a time when the country was completely isolated and the economy was in ruins. A robust, stable and growing economy during the past couple of years and a positive forecast for at least the coming marketing year, 2004/05 (see section 2 above), are good arguments to assume that the country will be able to commercially procure a major part of the estimated cereal deficit. However, commercial import capacity does not indicate the capacity to access food by the households. It merely indicates that given a robust trade with neighbouring countries and increased economic activities throughout the country as well as a boom in remittances from family members abroad, the private sector will be able to commercially procure 1.4 million tonnes of cereals. How is that accessed in the country is not reflected in the capacity to import.

Notwithstanding the above, access to food will remain a serious challenge for many afghan households, in particular the rural poor and the vulnerable households in urban areas (see section 6 below).

6. TARGETED FOOD AID RELIEF ASSISTANCE REQUIREMENTS FOR 2004/05

This section is based on the analysis of data from the 2003 National Risk and Vulnerability Assessment (NRVA), which has been adjusted to provide estimates of rural food insecure populations in 2004². The vulnerability assessment has been conducted in close collaboration with the Vulnerability Analysis Unit (VAU) of the Ministry of Rural Rehabilitation and Development (MRRD), WFP, FAO, FEWSNET and other partners.

² See [Analysis of Drought Situation in Afghanistan 24 Aug 2004.pdf](#) on the website: www.mrrd.gov.af/vau

Table 4 below summarises the adaptation of the NRVA findings for 2004/05. The NRVA analysis reveals that 35 percent of the population or more than six million people are estimated to have a daily caloric intake of less than 2 100 kcal and will not be able to cover basic food and non-food needs due to drought and its negative impact on both agricultural production and employment. Nearly four million people will have access to employment through the National Emergency Employment Programme (NEEP), National Solidarity Programme (NSP), and through other national cash-based interventions. In addition to nearly one million people targeted under the WFP's current Protracted Relief and Recovery Operations (PRRO), an additional estimated 1.4 million people, severely affected by this year's crop failure, need emergency assistance.

Table 4. Estimated number of food insecure population by province, 2004/05 marketing year, in 000s

Province	Rural population estimates, CSO	% of population consuming less than 2100 kcal/capita/day	Average No. of months of food gap	No. of People consuming less than 2100 kcal/capita/day	Increase in food insecure population from 2003
Nangarhar	1 243	45	1.9	554	448
Faryab	947	53	2.3	499	188
Herat	1 304	34	1.3	448	104
Kabul	936	46	2.0	432	163
Kandahar	594	70	3.8	416	333
Ghazni	1 050	34	1.9	354	145
Badakhshan	908	27	1.7	244	199
Parwan	549	44	2.5	240	113
Hilmand	691	33	1.5	227	181
Kunar	383	56	2.4	214	142
Balkh	753	28	1.1	212	57
Sari Pul	505	40	2.0	202	107
Paktika	333	60	3.5	201	149
Wardak	481	38	1.7	184	31
Paktya	554	33	1.2	181	203
Logar	304	54	3.6	164	61
Ghor	628	26	1.2	164	47
Badghis	549	29	1.2	160	107
Uruzgan	637	23	0.9	148	175
Laghman	395	34	1.6	134	53
Nimroz	141	92	7.0	129	110
Zabul	220	57	2.6	125	98
Bamyan	281	43	2.0	121	73
Kapisa	382	27	1.0	104	79
Baghlan	708	13	0.3	92	41
Samangan	267	32	1.4	86	51
Takhar	708	11	0.3	77	39
Jawzjan	296	25	1.1	75	25
Khost	302	23	0.9	68	39
Farah	314	15	0.3	48	30
Nuristan	130	27	1.2	35	19
Kunduz	585			2	
Total	18 077	35	1.8	6 336	3 609

Estimates are based on rounded figures.

As the country advances further into the lean season, coping mechanisms will gradually reduce, placing increasing households at risk. On-going and planned food supported activities under the PRRO are already targeting food insecure households and must be maintained to preclude further deterioration of livelihoods and an increase in emergency assistance. Without food for work/training, take home school rations, and other food aid programmes, part of the current PRRO, the numbers in need of emergency assistance will significantly increase.

Current stocks and food arrivals will be sufficient only until October 2004 to meet ongoing programmes and additional estimated relief requirements. A total of 153 100 tonnes of additional mixed commodities, including 139 000 tonnes of wheat, 8 600 tonnes of vegetable oil, 5 000 tonnes of pulses and 500 tonnes of iodized salt will be needed to meet WFP's programme requirements until the next harvest in May 2005. A total sum of US\$ 89 million will be required to cover the costs of an estimated shortfall, including about US\$ 52 million for 80 000 tonnes of food for the population affected by crop failure on an emergency basis. The current PRRO ends in March 2005 and is expected to be extended until the end of 2005/early 2006.

The NRVA survey data for 2003 found that over and above the 20 percent of the population that could not meet their minimum 2 100 kcal/capita/day, a further 18 percent of the population consumed between 2 100 and 3 200 kcal/capita/day, but with very poor dietary diversity. This suggests that a large section of the population not considered food-insecure, using calorie intake as a measure, may be transiently food insecure this year as energy needs will not be met immediately after the harvest through cereal consumption from own production or cereals procured at low post-harvest prices. These households are consuming a range of food which is typical of those not normally meeting their basic energy needs, suggesting as the household moves away from the harvest and into leaner periods, both dietary diversity and energy consumption may fall below acceptable norms.

The NRVA survey also found that a large number of districts in various parts of the country have significant difficulty in accessing markets during the winter months, which is a good indicator of limited sources of alternative livelihoods, high prices of food and undiversified diets. In such cases, food assistance in kind may prove more effective. To this end, various options are being explored to ensure synergies between the on-going national cash based programmes and the use of targeted food and non-food assistance to reach the most vulnerable population in various parts of the country. Integrated planning exercises are being conducted with the Government and other partners, which will determine the final areas and target population for appropriate and timely assistance.

This report has been prepared by Aziz Arya and Scott Ronchini, 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.

Henri Josserand
Chief, GIEWS, FAO
Fax: 0039-06-5705-4495
E-mail: giews1@fao.org

Khaled Adly
Regional Director, ODC WFP
Fax: 0020-2-3500716
E-mail: Khaled.Adly@wfp.org

Please note that this Special Report is also available on the Internet as part of the FAO World Wide Web (www.fao.org) at the following URL address: <http://www.fao.org/giews/>

The Special Alerts/Reports can also be received automatically by E-mail as soon as they are published, by subscribing to the GIEWS/Alerts report ListServ. To do so, please send an E-mail to the FAO-Mail-Server at the following address: mailex@mailex.fao.org, leaving the subject blank, with the following message:

subscribe GIEWSAlertsWorld-L

To be deleted from the list, send the message:

unsubscribe GIEWSAlertsWorld-L

Please note that it is now possible to subscribe to regional lists to only receive Special Reports/Alerts by region: Africa, Asia, Europe or Latin America (GIEWSAlertsAfrica-L, GIEWSAlertsAsia-L, GIEWSAlertsEurope-L and GIEWSAlertsLA-L). These lists can be subscribed to in the same way as the worldwide list.