

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

13 August 2003

Mission Highlights

- Agricultural production in Afghanistan continued its strong recovery for the second consecutive year in 2003 due mainly to improved and well distributed precipitation in major agricultural areas.
- Rainfed wheat, in particular, has registered significant area and yield increases in most parts of the country.
- Aggregate 2003 cereal production, estimated at 5.37 million tonnes, is the largest harvest on record. As a result, cereal import requirements for 2003/04 (July/June) are estimated at 392 000 tonnes, nearly a quarter of last year's. All are expected to be covered through commercial imports.
- Market prices for wheat have fallen sharply in some main producing areas; this may result in financial difficulties for farmers and reductions in area planted next season.
- Improved pasture has benefited the continued recovery of livestock. However, widespread reporting of animal disease outbreaks and the reduction of veterinary services and vaccination programmes may negatively impact both numbers and quality of livestock and livestock products.
- Despite the satisfactory harvest, a considerable number of Afghan people will continue to face food insecurity and will continue to depend on targeted food assistance during 2003/04. A multi-agency National Risk and Vulnerability Assessment (NRVA) is currently underway throughout the country to estimate the level and geographic distribution of humanitarian assistance requirements in 2003/04.
- WFP-Afghanistan's food aid stocks amount to 114 000 tonnes of cereals. Should there be any additional food aid requirements, local procurement will be undertaken, provided domestic markets are able to adequately respond to the requirements. The timing and amount of such purchases will be carefully considered so as not to overly inflate grain prices, thus placing cereals out of the reach of poorer households.
- Food aid imports will remain an option should food aid needs exceed existing stocks and local purchase possibilities.

1. OVERVIEW

An FAO/WFP Crop and Food Supply Assessment Mission visited Afghanistan from 15 June to 8 July 2003, to review estimates of the 2003 cereal harvest and forecast cereal import requirements for the 2003/04 (July/June) marketing year. The Mission relied heavily on data generated by the Nationwide Crop Output Assessment (NCOA) carried out by Ministry of Agriculture and Animal Husbandry (MAAH) together with FAO and with the support of the Ministry of Rural Rehabilitation and Development (MRRD) and WFP in 30 provinces of the 32 provinces of the country. The Mission held discussions with Government officials, UN agencies, multilateral and



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, ROME



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bilateral donors, local and international NGOs and made field visits to major crop producing northern and western provinces that allowed for some minor adjustments to NCOA data. The Mission also benefited from the United States Geological Survey (USGS) expertise in agro-meteorology. Available relevant reports and documents were reviewed and satellite based normalised difference vegetation indices (NDVI) and Snow Depletion Curves were analyzed.

The Mission found that, timely and well distributed precipitation in the current cropping season in major producing areas and increased use of fertiliser and improved seeds have resulted in a record cereal crop in both rainfed and irrigated sectors. Exceptions were provinces in the south and south-west where drought conditions have persisted. Effective control and low occurrence of pests together with timely distribution of agricultural inputs in needy areas also had positive impact on crop yields.

Overall, the Mission forecasts the 2003 total cereal production in Afghanistan at about 5.37 million tonnes, comprising 4.36 million tonnes of wheat, 410 000 tonnes of barley, 310 000 tonnes of maize and 291 000 tonnes of milled rice (the latter two to be harvested from September). At this level, cereal production is the highest on record and about 50 percent above last year's good crop. As a result, the cereal import requirement in the 2003/04 (July/June) marketing year is estimated at a reduced 392 000 tonnes, nearly a quarter of last year's volume. This requirement is expected to be covered through commercial imports.¹

The favourable precipitation also benefited other crops, such as vegetables. Improved pasture and better availability of feed also augur well for the livestock sector. However, the reduction in veterinary services and vaccination programmes has resulted in widespread animal diseases, particularly foot-and-mouth disease, hampering overall recovery. The supply of livestock and livestock products is yet to recover to the levels before the drought. The decline in supply is reflected in increased animal prices and the continued imports of animals from neighbouring countries.

In response to ample supply, average prices of wheat have fallen sharply in some surplus producing provinces such as Kunduz, Takhar, Bughlan and Balkh. In certain areas wheat prices are just above the break-even point with expectations that they may fall below the cost of production once the bulk of the harvest enters the market. Rising wage rates have also increased production costs this year significantly. Moreover, the terms of trade have shifted against these farmers as the prices of all other consumer goods relative to grain prices have increased. This implies that a bag of wheat today will fetch far less than what it did previously thus diminishing the purchasing power of farmers. In addition, the planned repair of the Salang tunnel, which is expected to result in its closure may further depress grain prices in northern Afghanistan while hindering the transfer of grain to the deficit areas in the south. Wheat prices in some markets recovered slightly towards the end of June following some rumours of local purchases.

The expected good harvest and lower prices, coupled with improved employment opportunities in both urban and rural areas arising from increased economic activities and growth are expected to improve food access for most households. However, depressed cereal prices, especially if they continue to fall below the cost of production, may serve as a disincentive to farmers and may push them further into debt. The limited storage and financial capacity of private traders observed in surplus producing areas, the lack of banking and credit facilities, coupled with inadequate infrastructure, such as roads, may hinder storage of grain for a long period and the flow of produce from surplus to deficit areas.

On the other hand, despite the increase in agricultural production in 2003 and better access to food through increased non-farm income and lower food prices, a significant number of vulnerable households remain largely food insecure and will remain dependent on humanitarian assistance in 2003/04. Years of conflict and drought have resulted in war-disabilities, loss of family members, displacement, substantial livestock losses, destruction of productive assets, accumulation of debts and inability to benefit from the agricultural revival or the increased economic activity in several parts of the country. A timely and effective food intervention to assist the poorest of the population in helping them rebuild an asset base for their livelihood is essential. A multi-agency national Risk and Vulnerability Assessment (NRVA) is currently underway throughout Afghanistan. The results of the

¹ Average commercial import of cereals to Afghanistan is estimated at more than half a million tonnes annually.

assessment, expected late-September/early-October, will determine the level and distribution of relief assistance requirements in 2003/04.

Food aid in stock, mainly wheat and rice, is estimated at about 114 000 tonnes. Should there be any additional food aid requirements, they will be procured locally if domestic markets are able to respond to the requirements. The timing and amount of grains purchased in such markets will be carefully examined so as not to overly inflate grain prices for the rest of the consumers.

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, being bounded by the Central Asian Plains and mountains of the CIS countries (Turkmenistan, Uzbekistan, Tajikistan) to the north, China to the north-east, Pakistan to the east and south, and the Islamic Republic of Iran to 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.

Over two decades of civil strife, and a severe drought from 1999 to 2001 have devastated Afghanistan. Physical infrastructure is severely eroded or ruined due to continuous neglect and destruction. Manufacturing and food processing sectors have also been virtually destroyed. Agricultural infrastructure was also damaged during the civil strife.

2.1 Macroeconomic situation

The Asian Development Bank (ADB) estimated Afghanistan's GDP in 2002 at about US\$4.4 billion resulting in a per capita GDP ranging between US\$170 to US\$200 depending on varying estimates of total population (see section 2.2). According to latest available estimates, the GDP consists of agriculture and forestry products (53 percent), followed by mining and light industry (28 percent), trade (8 percent), and construction (6 percent). Transport, communications, and services account for the remaining 5 percent.

ADB observed that Afghan cities such as Kabul have shown strong recovery in 2002 particularly in the construction and service sectors, mainly due to the international community's spending and emergency assistance efforts. Provided the security situation improves, donor contributions continue and the government remains committed to sound economic management, ADB forecasts a surge in the Afghan economy in 2003/04, and suggested a growth rate of well above 10 percent. However, such rates can be expected given the low base and the easing of water shortages that followed the recent severe drought years.

Domestic trade is operational throughout the country, and cross-border trade with neighbouring countries, particularly with Turkmenistan in the north, the Islamic Republic of Iran in the west and Pakistan in the east and south, is quite brisk. However, poor transportation and communication systems hike the transaction costs and impede the full realisation of trade opportunities both domestically and with neighbouring countries.

In October 2002, the Central Statistics Office released its first Consumer Price Index (CPI) data since 1987 (the CPI covers only Kabul). After recording average monthly increases of about one percent in the early months of 2002, the CPI increased by 16 percent in September, 12.4 percent in October, and 22.7 percent in November 2002. These significantly higher inflation rates were mainly due to the depreciation of the exchange rate caused by speculation surrounding the introduction of unified new currency notes in October 2002. However, in December 2002 and January and February 2003, the CPI decreased by 4.4 percent, 3.8 percent, and 1.4 percent, respectively, reflecting turnaround appreciation of the new afghani currency. The new afghani currency, which exchanged 1 000 old afghani for one new afghani, had an initial speculative depreciation and was trading up to Af70 to US\$ 1 around the time of its introduction in October, but bounced back to around Af45 to US\$ 1 in December 2002 (similar to the pre-conversion rate in mid-September). In June 2003, the Afghani was trading at Af48 to US\$1.

Trade statistics have not been published by the Afghan authorities since 1992. A survey sponsored by the World Bank puts Afghanistan's total trade in 2000 at US\$2.5 billion, comprising about US\$1.2 billion in imports and about US\$1.3 billion in exports. However, a large percentage of the estimated total exports were re-exports of commodities to neighboring countries. Presently, fruits and nuts, carpets, wool, sheep skin, and cotton are exported to Pakistan, India, Belgium, Germany, Russia, and United Arab Emirates. Capital goods, food commodities (including grains, sugar, and vegetable oil), textiles, petroleum products, and tires are imported from Pakistan, Japan, Kenya, South Korea, Turkmenistan, and India.² In January 2003, the US made Afghanistan a beneficiary of the Generalized System of Preferences, eliminating US tariffs on a large number of Afghan products.

Total disbursements of international assistance have increased over the past year, reaching an estimated total of US\$1.3 billion in 2002. However, less than half of these funds went to reconstruction (as opposed to humanitarian relief), and most of the reconstruction funding did not go through government budgetary channels. One of the immediate challenges is to sharply increase reconstruction funding and the share of such funding going through government budget channels and in support of national priorities, while further improving the alignment of continuing humanitarian assistance with government leadership and the National Development Framework (NDF).

After some initial difficulties, the Government and donors have worked together to adequately fund the recurrent budget for fiscal year 2002/03, largely through the Afghanistan Reconstruction Trust Fund (ARTF). Domestic revenues have picked up from initially low levels early in the year and may well exceed the revenue target. However, efforts to bring revenues collected in the provinces under central fiscal control have not yet been successful. Budget implementation has been within the target, and payments of salaries to civil servants have become more regularized albeit still with delays in the provinces. But there has been virtually no non-salary spending in the provinces, resulting in a less effective interface between the government and population. Overall, the government has followed sound, conservative fiscal and monetary policies.

2.2 Population estimates

Population estimates vary greatly and range between 22 million and 26 million. However, the Central Statistics Office of the Interim Government of Afghanistan in 2003 undertook a review and estimated the current population at 22.2 million people comprising a settled population of 20.7 million and 1.5 million nomads.

2.3 Agricultural sector

About 12 percent of the country's total land is arable, 3 percent is under forest cover, 46 percent is under permanent pastures, and the remaining 39 percent is mountainous. Agriculture has been the mainstay of the Afghan economy although decades of war and three years of drought have depressed agricultural activities and contributed to the degradation of the natural resource base. 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. Potatoes, onions, and several fruit crops including melons, water melons, apricots, pomegranates and grapes are also produced both for domestic consumption and exports. Exports of dried fruits and nuts, mainly apricots and almonds, 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 percentage of the world market share.

² It should be noted that these statistics do not reflect either the cultivation of poppy or the production of narcotics known to be a major source of revenue.

2.4 Poppy production

The UN International Narcotics Control Board (INCB), in a report published in February 2003, stated that Afghanistan was again the world's leading producer of opium poppy in 2002 with a level of production estimated at 3 400 tonnes compared to 185 tonnes in 2001. A UN Office of Drugs and Crime (UNODC) report in May indicates that the 2003 opium poppy harvest in Afghanistan may be at least as large as that of 2002. High levels of household debt (much of it taken as advance payments on future opium crops) were indicated to have led to a significant number of households committing themselves to opium production for a number of years. As long as households continue to rely on opium as their major source of rural credit, interventions intended to eliminate opium poppy cultivation will be severely constrained making any significant reductions difficult to maintain. UNODC's full report on opium poppy cultivation in 2003 is expected soon.

3. FOOD PRODUCTION IN 2002/03

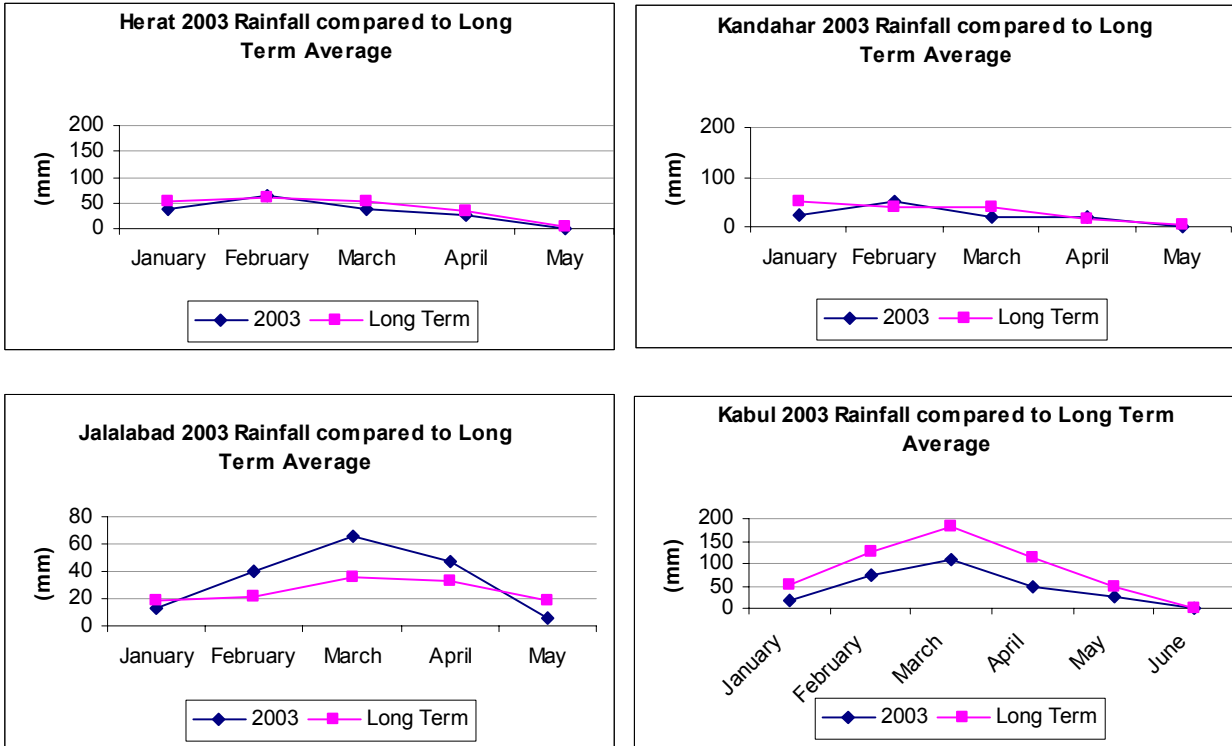
Afghanistan has not been self-sufficient in cereals since 1976, when production peaked at 4.5 million tonnes. From 1978, civil unrest contributed to a steady fall in production through the 1980s, reaching its lowest level in 1990 with only 60 percent of the 1976 production level. In the early 1990s, production climbed slowly and in 1998 registered the largest crop since 1978 due to a number of beneficial factors, particularly good rainfall and the improved security in the south and most parts of the east. However, severe drought conditions for three consecutive years (1999 to 2001) resulted in virtual total failure of rainfed agriculture and substantially reduced irrigated agriculture. Last year, overall cereal production recovered strongly due mainly to improved precipitation and continued its strong recovery for the second consecutive year in 2003 due mainly to well distributed precipitation in main agricultural areas.

3.1 Precipitation in 2003

Afghanistan is an arid/semi-arid country whose agriculture production depends either directly on precipitation or on irrigation. The current 2002/03 cropping season has generally received well distributed rains and heavy snowfall. As indicated in Figure 1 below, most parts of the country received rainfall levels comparable to the long-term average (LTA). In the previous three years (1999 -2001) of drought rainfall patterns were significantly below the long-term average (LTA).

Beginning in December 2002, an extensive network of meteorological stations was set up under the Food Security Surveillance Unit jointly managed by MAAH and FAO. The network comprises 41 rain gauges and 5 complete classical workstations throughout the country. This network has filled an important gap in meteorological information that was disrupted following the war and change in government in the last few years and subsequent looting of weather stations.

Figure 1. Afghanistan: Rainfall Pattern in Selected Areas Afghanistan, 2002/03 Crop Season



Further analysis of the weather data, collected with the newly installed network since January, indicate that in 2003, the heaviest rains (59 percent of the total amount for the entire season) fell between mid-February and mid-March with a maximum recorded for Kunduz (68 percent) and the minimum recorded in Farah (47 percent). Earlier precipitation in November and December 2002 were not portrayed in the analysis.

Snowfall, upon which most of the country's irrigated sector depends, was heavy in the winter months, mainly in February, with a high of 120 cm registered in Jabul Saraj (Parwan Province). On 17 February 2003 alone Mazar-I-Saharif, Hirat and Kabul registered 18 cm each while Logar registered 14 cm. Regionally, the snowfall was concentrated in Northwest, Central-east and extreme northeast with the maximum registered in the Central-East. Temperatures were below the LTA during the months of February and March and near to above average during the remainder of the year. Normalised Difference Vegetation Index (NDVI) profiles reflecting biomass levels on a regular 10-day basis from the beginning of the growing season in March to the end of May, suggest better vegetation than last year in the north, north-east and west provinces, these being the provinces contributing most to national rainfed cereal production

Localised hailstorms in early June in some north-western parts of the country, particularly in Hirat Province (Kohsan district) severely damaged crops. Severe winter frost in several parts of the country also seriously damaged fruit trees.

3.2 Area planted

In 2003, the overall area planted to cereals is estimated to have increased by 27 percent compared to 2002. Rainfed wheat has seen a significant increase of about 77 percent compared to 2002. In the Northern region in particular, the increase was nearly three times larger than last year. This was mainly the result of good and sustained rainfall, particularly in the main rainfed growing areas of the northern provinces and the cultivation of land left fallow for the last three to four years due to drought. Moreover, large encroachment of rainfed cultivation

into normally pasture area has been observed and is estimated to represent up to 15 percent of total rainfed cultivated area. Availability of agricultural inputs, such as seeds, was also adequate.

The area planted under irrigation is estimated to have increased slightly, about one percent, compared to last year. In northern Afghanistan, however, despite the good levels of rainfall, area planted under irrigation was found to be lower than last year mainly due to on-going changes in irrigation water management in the main rivers of Khulm, Balkh-ab, Ab-e-Safid and Shirin-Tagab. These changes increased the amount of irrigation water used at the head and middle sections of the system, and kept much of the tail uncultivated due to uncertainties over irrigation water availability.

Barley area, both irrigated and rain-fed, is estimated to have increased by about 17 percent while the area planted to the irrigated summer cereal crops, rice and maize, for harvest in September is forecast to increase slightly on last year due to the abundance of water at planting time in most river systems.

3.3 Agricultural inputs

Seeds

Secondary sources and successive Mission findings indicate that more than 90 percent of the 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, the farmers identify the seeds they prefer and select those samples that are suited to their situation and with which they are familiar. Seeds of wheat varieties released in the last decade or so are known to the farmers by name or by origin and include, among others, Kauz, Pamir 94 and Roshan 96. Such seeds have become established and were noted to be used in all provinces visited. They are recognized as being responsive to fertilizer applications provided water is available.

A winter agriculture survey carried out jointly by the MAAH/MRRD/FAO/WFP from December 2002 to January 2003 in 104 districts in 30 provinces of Afghanistan indicated that improved seeds are widely used. Amongst the sampled households, about 54 percent of wheat planted area in 2003 was sown with improved seed released in the last 10 years (28 percent from FAO seeds programme and 26 percent from other sources). The rest (46 percent) was sown with local seeds or improved seeds introduced more than 10 years ago, such as the widely used "Zardana" in northern Afghanistan. However, both the winter survey and the NCOA observed that the use of improved seeds is lower in the provinces Faryab, Sari Pul and Ghor.

Fertilizers and pesticides

The winter agriculture survey and Mission observations have indicated that most farmers in Afghanistan are well aware of the value and usage of fertilizers, and the quality of several fertilizers available in bazaars. Use of fertilizer amongst surveyed households increased in 2002/03 agricultural season compared to the previous year with 22 percent more land being fertilized. The survey has also shown an average use of combined fertilizer products of about 180 kg/ha and only on irrigated fields, mainly for wheat. The highest rates in 2002 were observed in the lowlands of Juzjan, Balkh and Samangan, with 309 kg/ha, and North-Eastern region with 275 kg/ha. And were closely followed by the Central and Eastern regions at 262 kg/ha. On the other extreme are the provinces in the South-West region with only 65 kg/ha which may partly be explained by the continued drought conditions. All in all, 78 percent of the surveyed farmers with irrigated wheat reported to have applied fertilizer.

Observed practice of fertilizer application is:

- 1 application of DAP at planting (equivalent to the seed rate - average 152 kg/ha).
- 1 to 2 applications of Urea in spring and at heading (again equivalent to the seed rate but sometimes twice the seed rate)

Farm power

The Mission observed that the demand for labour in June and early July, particularly in the main crop producing provinces of northern Afghanistan, was very high leading to increased cost of labour, nearly double compared to

last year. Planting and transplanting of summer (second) crops such as rice and maize, increased construction works and trade activities all add to the increased labour demand. Average daily wage rates across the country range from Afs90 (US\$1.9) to Afs250 (US\$5.2) per day depending on the location and type of work. In the rural areas labour demand is mostly seasonal; more regular work and higher wage rates are presently observed in the cities and areas close to the centres of the districts. However, it was noted that labour shortage did not affect significantly the harvesting of crops, but some delay in completing the harvest was noted in parts of northern Afghanistan.

The use of tractors is significant and their increased use is observed in both the irrigated and rainfed sectors. The winter survey showed that, amongst the surveyed households in 2002/03, about 48 percent of their 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, particularly oxen, from the recent prolonged drought.

Pests and diseases

Outbreaks of Moroccan locust in some northern provinces were successfully controlled by combined resources of several agencies, including FAO and other NGOs such as GOAL by closely working with the MAAH. However, the Mission observed swarms of locust in the provinces of Samangan and Bughlan in late June 2003. No outbreaks of common diseases like yellow and strip rust were reported. Sunn pest is a common threat but was reported only in some localised areas. Aphids that were observed in large number of fields were generally controlled by natural enemies.

3.4 Cereal production 2003

In May/June 2003, FAO and the MAAH carried out a National Crop Output Assessment (NCOA) and gathered extensive data on factors affecting current season agricultural production in more than 100 districts in 30 provinces. The current Mission cross-checked the findings through further field measurements, farmer's interviews, discussions with local authorities and NGOs active at local level.

Wheat: Aggregate wheat production in 2003 is estimated at 4.36 million tonnes, some 62 percent up on last year due to improved wheat yields in both the rain-fed and irrigated sectors and a significant increase in rainfed wheat area. Average wheat yield in 2003 is estimated at about 1.9 tonnes/ha, compared to last year's 1.6 tonnes/ha.

Irrigated wheat production is estimated at about 3.02 million tonnes, about 43 percent up on last year. Average irrigated wheat yield is estimated at about 2.85 tonnes/ha, about 43 percent higher than last year's estimates. The production of rain-fed wheat in 2003, estimated at 1.35 million tonnes, represents an increase of more than a 130 percent compared to 2002. The rain-fed production has particularly increased in the North and North-East regions. In the West-Central and South-West regions, rain-fed wheat production has however decreased this year. National area and production estimates for the past five years for all major cereals are provided in Table 1 for comparison purposes. Wheat data, disaggregated by province is provided in Table 2. It is worth noting that rain-fed wheat production in 2003 represents some 30 percent of total wheat production compared to 21 percent last year.

Table 1. Afghanistan: Area ('000 ha) and Production ('000 tonnes) of cereals in 1999 – 2003

Crop	2003		2002		2001		2000		1999	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
Wheat	2 294	4 361	1 742	2 686	1 779	1 597	2 029	1 469	2 027	2 500
irrigated	1 059	3 017	1 045	2 110	1 156	1 514	1 189	1 329	1 196	1 988
rainfed	1 235	1 345	697	576	623	83	840	140	831	512
Barley*	276	410	236	345	87	87	124	74	180	216
Maize**	104	310	100	298	80	160	96	115	160	240
Rice** (milled)	145	291	135	260	121	122	130	105	140	188
Total Cereals	2 819	5 372	2 213	3 589	2 067	1 966	2 379	1 763	2 507	3 144

Note: Totals computed from un-rounded data.

*Combined rainfed and irrigated

**Irrigated summer season crops.

Source: FAO/WFP Crop and Food Supply Assessment Missions and MAAH/FAO National Crop Output Survey.

For the rest of the cereal crops, namely barley, maize and rice, regional level statistics are presented in Table 3 for comparison.

Barley : The total barley planted this year (irrigated and rain-fed) is estimated at 276 000 ha and the total production at 410 000 tonnes. At this level planted area has registered an increase of about 17 percent while production has shown an increase of about 19 percent compared to last year. Barley is mostly used as animal feed.

Paddy and Maize: As rice and maize harvests do not take place until September 2003, production figures are calculated based on previous yield and area estimates and the abundant water availability at planting time. The expected output of rice (milled) is forecast at 291 000 tonnes, some 12 percent higher than 2002. Paddy transplanting was underway during the Mission's stay. This crop is usually sold by farmers and not retained for own-consumption. The expected output of maize is estimated at 310 000 tonnes, some 4 percent higher than last year. Maize is cultivated mainly for animal feed.

A time series of cereal production since 1964 is given in Figure 2.

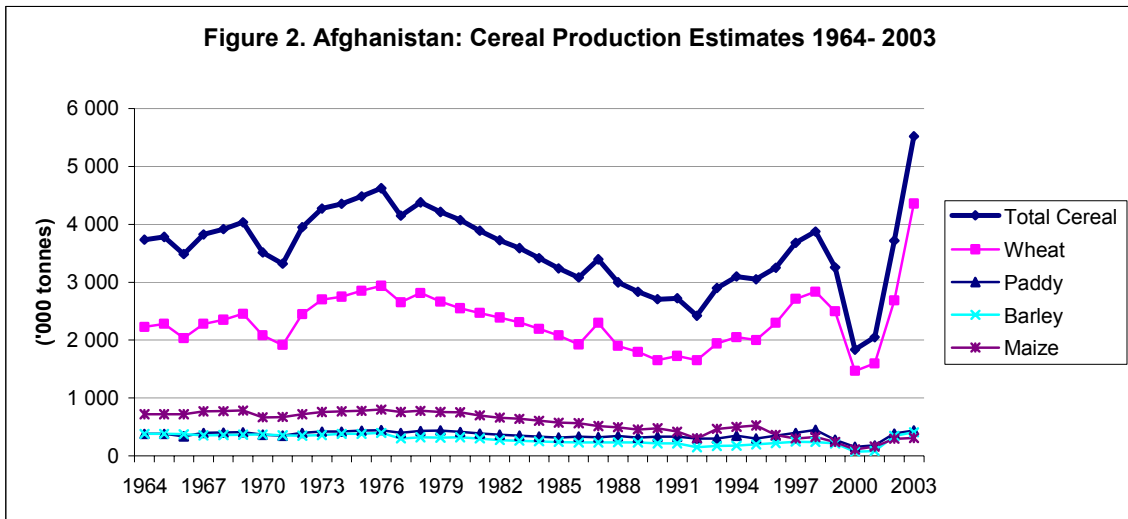


Table 2. Afghanistan: Irrigated and rainfed wheat production estimates* in 2003 by province**

Province/ region	IRRIGATED Wheat 2003			RAINFED Wheat 2003			TOTAL Wheat 2003		
	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	217	2.52	548	670	0.91	608	887	1.30	1 156
Faryab	59	1.54	91	164	0.89	146	223	1.06	237
Juzjan	41	2.76	112	86	1.02	88	127	1.57	200
Sar-i-Pul	26	2.11	55	114	0.90	103	140	1.13	158
Balkh	79	3.12	247	172	0.93	160	251	1.62	407
Samangan	12	3.45	42	134	0.84	112	146	1.05	154
NORTH-EAST	224	3.26	731	314	1.54	482	538	2.26	1 214
Bughlan	52	3.74	194	73	2.09	152	125	2.77	346
Kunduz	100	3.37	336	12	2.05	24	112	3.21	360
Takhar	48	2.78	134	145	1.31	190	193	1.68	324
Badakhshan	25	2.75	68	84	1.38	116	109	1.69	184
WEST	139	2.55	355	204	1.14	232	343	1.71	587
Heart	91	2.47	225	104	1.06	110	195	1.72	335
Farah	23	2.79	65	0	0.00	0	23	2.79	65
Badghis	25	2.62	65	100	1.22	122	125	1.50	187
WEST-CENTRAL	35	1.82	64	39	0.45	18	74	1.11	82
Ghor	18	1.64	30	35	0.40	14	53	0.83	44
Bamyan	17	2.00	34	4	0.81	4	21	1.81	38
CENTRAL	107	3.60	385	5	0.72	4	112	3.47	389
Kabul	20	2.99	58	1	0.40	0.5	21	2.81	59
Parwan	31	3.64	113	4	0.80	3	35	3.31	116
Kapisa	9	3.16	28	0	0.00	0	9	3.16	28
Logar	23	3.97	93	0	0.00	0	23	3.97	93
Wardak	24	3.83	93	0	0.00	0	24	3.83	93
SOUTH	103	3.12	321	1	0.80	1	104	3.10	322
Paktya	18	3.07	54	0	0.00	0	18	3.07	54
Paktika	16	3.22	53	0	0.00	0	16	3.22	53
Khost	13	2.60	33	0	0.00	0	13	2.60	33
Ghazni	56	3.22	181	1	0.80	1	57	3.19	182
EAST	63	2.24	141	0	0.00	0	63	2.24	141
Nangarhar	40	2.15	85	0	0.00	0	40	2.15	85
Laghman	14	2.71	39	0	0.00	0	14	2.71	39
Kunarha	8	1.94	16	0	0.00	0	8	1.94	16
Nooristan	1.1	1.85	2	0	0.00	0	1.1	1.85	2
SOUTH-WEST	170	2.77	470	3	0.00	0	173	2.72	470
Kandahar	39	2.89	114	2	0.00	0	41	2.78	114
Helmand	74	2.83	211	0	0.00	0	74	2.83	211
Zabul	11	2.48	28	0	0.00	0	11	2.48	28
Nimroz	13	2.62	35	0	0.00	0	13	2.62	35
Uruzgan	31	2.64	83	1	0.00	0	32	2.64	83
TOTAL	1 059	2.85	3 017	1 235	1.09	1 345	2 294	1.90	4 361

* 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: MAAH/FAO National Crop Output Survey.

Table 3. Afghanistan: Estimates of area, production and yield for other cereals in 2003 by region

Region	Barley			Paddy Rice			Maize		
	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	132	1.31	173	7	3.00	21	8	3.00	24
North-East	77	1.75	135	77	3.00	231	24	3.00	72
West	44	1.80	79	10	3.00	30	12	3.00	36
West-Central	19	0.78	15	0	0.00	0	2	2.50	5
Central	1	2.61	3	3	3.00	9	23	3.00	69
South	1	2.14	3	0	0.00	0	0	0.00	0
East	0	0.00	0	26	3.00	78	25	2.98	74
South-West	1	2.20	3	22	3.00	66	10	3.00	30
Total	276	1.49	410	145	3.00	435	104	2.98	310

Note: Totals computed from un-rounded data.

Paddy rice of 435 000 tonnes is equivalent to 291 000 tonnes in milled basis.

3.5 Other crops

Vegetables

The winter agriculture survey indicated that 38 percent of the surveyed farming households have a vegetable garden, usually located inside the perimeter walls of farmers' residence. But together with the vegetables grown on farm plots, about 43 percent grow some vegetables. While the vegetable garden is chiefly for domestic use, vegetables grown in the farm are mainly for sale. About 21 percent of those producing vegetables indicated that they primarily produce for sale.

The main vegetables grown include onions, potatoes, tomatoes, carrots, pumpkins and okra. Garlic and leek are grown on about a fifth to a quarter of the gardens. Cauliflower, spinach and other vegetables are also grown but are relatively rare and area specific. Melons and water-melons, intercropped with sesame and planted in late spring, are major rain-fed crops but some are also irrigated as a cash crop for early and late production (i.e. using plastic tunnels in the West and South-West regions). In some districts, rain-fed melon/watermelon is more important than rain-fed wheat (e.g. Sayad district in Sari Pul province). Bumper production of melon/water-melon is expected this year, provided pests and diseases do not affect the crop (melon flies).

Fruits

The core of the traditional valley irrigation and open irrigation schemes contain a variety of fruit trees with apples, pomegranates, apricots, mulberries, grapes and almonds accounting for some 87 percent of the planting. The trees are regularly intercropped with alfalfa, pulses, vegetables or cereals. In the South and South-West region, orchards had died from lack of water during the drought.

Fruit production in 2003 was badly affected by lack of irrigation water in the South-West which resulted in further desiccation of orchards while in the northern, western and north-eastern parts of the country winter frost had seriously damaged fruits trees. Most of the fig and pomegranate trees in the North are cultivated in the Khulm oasis (mixed orchards). Closer to the Tang-e Tashkurgan, the pomegranate trees are less affected and still bear some flowers. These few orchards can be pruned and maintained. However, in lower parts of Khulm oases trees need to be replaced.

The spring frost has severely affected all fruits trees in North-East, North and West regions. The frost line for vineyard and mulberry appeared to have decreased west-ward from 1000 meters in Sar-i-Pul and 500 to 800 meters in Maimana and then to have increased to about 1000 meters in Badghis and Heart provinces. Walnut trees were also damaged in northern and western Afghanistan. South of the Hindu Kush mountains, the frost was less severe, however, walnut trees have been damaged above 2300 meters. A milder spring frost has also affected apple trees in southern Afghanistan.

The frost will impact significantly on the food security of the fruit growers, particularly in districts that rely heavily on fruit production such as Khulm in Balkh province, Sari Pul, Sozma Qalah, Sangcharak in Sari Pul province, Dawlatabad, Shirin Tagab in Faryab province, Injil and Guzaran in Herat province and Badakhshan

Cotton

With the collapse of the cotton industry over the past 20 years, cotton planting has declined to the level of cottage industry support in three northern provinces and Nangarhar.

3.6 Livestock and Pasture

A recent livestock census (March 2003) carried out by MAAH and FAO has indicated that there are an estimated 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. Despite such apparent increase in livestock population, the supply of livestock and livestock products is yet to recover to their levels before the drought. This is reflected in the increased meat prices and the continued imports of animals from neighbouring countries. Meat prices in June averaged between Afs70/kg to Afs100/kg for beef and Afs140/kg to Afs150/kg for mutton in several parts of the country. Last year average prices ranged at a quarter to a half below these prices.

The largest concentrations of the Kutchi 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. During the extended drought years about 60 percent of the Kuchi households are estimated to have lost their cattle and the remainder have suffered considerable losses. The majority of households are yet to recover and sustain their livelihood.

Improved rains this year have positively impacted on animal condition. The overall condition of livestock both in the fields and markets has apparently improved. However, the reduction of veterinary services and vaccination programmes have resulted in widespread reporting of animal disease outbreaks, particularly Foot and Mouth Disease (FMD) and Peste des petits ruminants (PPR) among others. Veterinary clinics are the highest development priority for the pastoralist population and remain high on the priority list for all settled farmers. FAO and UNDP established 255 veterinary field units in the mid nineties, however lack of funding, drought and wars have constrained the operational capacity of these units. 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.

4. AGRICULTURAL SITUATION BY REGION

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

From an agro-ecological point of view the North region is divided into 2 major agro-ecological zones :

1. The Northern rainfed belt which extends from Badakhshan to Badghis.
2. The Northern irrigated oases

Most of the rainfed land is located in the north of the Afghan mountain ranges. A vast area of rolling hills carry huge layers of Quaternary loess deposited along the entire northern mountain slopes, from the Hari Rud in the north-west corner of Afghanistan to the foot hills of Badakhshan (Kokcha river). This loess are fine soil particles that are transported every year during the summer period by the Northern wind (*Shamal*) from the Central Asian plains and place them on the foot of the mountains where wind speed is frustrated by the relief. The abrasion of the wind and its deposits shape the relief in amazingly smooth undulating hills that even the rain erosion cannot cut sharp edges across the relief. 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.

This year much better rains from November and December encouraged farmers to significantly increase their areas under rain-fed wheat production. The rainfall was sustained from early winter throughout late spring. Customary practices and the enforcement of irrigation rights ensured that people at the head of the system, where the rivers are still rather narrow, do not divert too much water into their lands, thus allowing people in the middle and especially at the tail or outer reaches of the delta to have enough water. As it happens, however, farmers at the head of many systems (frequently under control of local commanders) have been using more water than their traditional share, to irrigate on a permanent basis what used to be intermittently cultivated land. Therefore, villages at the tail end of the system are left with water insecurity as to when and how much water is flowing in their irrigation canals. Without irrigation water security, those marginal lands are largely not cultivated and become simply part of the surrounding desert, with no possibility of cultivation. The land, theoretically under irrigation, becomes barren land in the desert or in some instances intermittently flooded land that produces grasses for livestock or to plant melons (*Kharbuza*) and watermelon (*Tarbuza*). Therefore, the good and sustained rainfall and river supplies did not necessary translate in an increase of irrigated area.

Total irrigated wheat production in 2003 in the North regions is estimated at 548 000 tonnes, 22 percent up on last year. The total rainfed wheat production in the region is estimated at 608 000 tonnes, more than double that of last year. The total wheat production in the North is estimated at about 1.16 million tonnes.

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

The North-eastern regions is one of the main production areas of Afghanistan. From an agro-ecological point of view the North and North-eastern Region is divided in to 3 major agro-ecological zones:

1. The Northern rainfed belt which extends from Badakhshan to Badghis.
2. The intensively irrigated scheme of the Qataghan zone (Buglan-Kunduz-Khanabad-Taluqan)
3. Valley floor irrigation up to high elevation

The situation in the rainfed area in the North-eastern region follows the same pattern in the North region. The intensively irrigated zone of the Qataghan zone is a major production area in Afghanistan. Two main rivers are feeding the intensive irrigated area; the Kunduz and Khanabad rivers, which take their sources from among the highest mountains in Afghanistan. These mountains are generally covered by snow until late summer, allowing for second crops (paddy or maize) after wheat harvesting in June.

The sustained rainfall and river supplies in 2003 did not translate into a significant increase in irrigated area this year in the North-Eastern region due to water logging. In the Qataghan lowest lands, the land remained wet due to early winter rainfall, cold weather and important river discharge. Planting was slightly late and some fields in the lowest elevation points were left for rice cultivation in the summer. Also, during the grain filling period, the flow of the Kunduz river was above average and resulted in water logging in specific lowest land that have negatively impacted on yield. The rivers in the North-Eastern region continued to flow and support a very productive agriculture. During the drought years the intensity and productivity of this riverine agricultural strip stood out in stark contrast to the desiccated, mainly rain-fed agricultural land, lying away from the river that had extremely low productivity. In Buglan and Takhar, these river systems support an intense double cropping, based on wheat as the main autumn sown crop, followed by rice on the better irrigated land and pulses (mainly mung beans) and maize, with other crops such as potatoes and various vegetables such as onions, as well as melons also cultivated, on the higher terraces at further distance from the river.

The irrigated wheat between Andarab, Khinjan and Doshi was amongst the very best in the country, with an exceptionally high percentage of improved varieties of high yielding potential. Yields up to 7 tonnes/ha were measured. There is a high concentration of FAO and now ICARDA contract seed producers and general standard of farming and know-how is very high. Nevertheless, in remote districts of Badakhshan, irrigated wheat productivity have sharply declined. This year the total irrigated wheat production in the North-East regions is estimated at 731 000 tonnes, 62 percent higher than last year. The total rainfed wheat production is estimated at 482 000 tonnes, nearly 3 times last year's production. The total wheat production in the North-East is estimated at 1.21 million tonnes.

4.3 West (Herat, Farah, Badgis)

The Western region comprises 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.

Overall, the Western region received good and sustained rainfall throughout the winter which resulted in an extension of rainfed wheat cultivation in Badghis and northern Herat compared to last year. However, some parts of Bala Murghab and Jawand districts have experienced less rainfall this year that have affected planting in these particular areas. In Herat, mechanised rainfed cultivation has encroached on flat lying pasture land with wheat and black cumin (zira).

The intensive irrigated plain of Herat lies along the Hari Rud river originating from the western slope of the Koh-e-Baba mountains in Ghor province. The irrigated perimeter of Herat allows one crop per year, however, at the head of irrigation structures and depending on water availability in early summer, a second crop is cultivated. At the time of the mission, the Hari Rud river had a good water supply that prompted the planting and transplanting of rice. In Herat, most of the paddy rice is sown directly as opposed to the Qataghan zone where it is transplanted.

The western oases are irrigated by short rivers (Adraskan Rud, Farah Rud, Khuspas Rud). These rivers flow into the Hamum-e Hilmand of the Seistan depression that lies across the Afghan and Iranian border. Due to water shortages an intermittent irrigation with frequent land rotation is practiced. All water systems in the western oasis had a good water supply this year and karezes and aquifers were replenished. However, in Lash-wa Joweyn district, sand dunes have encroached into irrigated infrastructure and disrupted production.

This year the Mission estimates that total irrigated and rain-fed wheat production in the West is 587 000 tonnes (355 000 tonnes and 232 000 tonnes respectively), an increase of 11 percent compared to last year.

4.4 South (Paktia, Paktika, Khost, Ghazni)

The South Region provinces comprise forest-pasture areas, irrigated farming land and rainfed production-pasture areas. The region is irrigated by short rivers including the Gumal and Kuram Rud that drain into the Indus river, the Sardeh wa Ghazni Rud that drain into the Ban-e-Istada lake and the upper part of Helmand in western Ghazni. Poor security conditions have limited this year's crop monitoring in these provinces but experienced agronomists from MAAH conducted the assessment. Early rainfall had positively impacted planting of winter crops in the South region. However, in some specific areas of Ghazni, planting was missed in the Karez and spring irrigated land as aquifer levels remain below average. Satellite imageries indicate a significant improvement in the vegetation indices compared to last year. This year the irrigated wheat production in the South is estimated at 321 000 tonnes, a significant increase of more than 3 fold compared to last year.

4.5 East Central (Ghor, Bamyan)

The provinces of Ghor and Bamyan, high in the Hindu Kush, are made up of networks of high valleys and vast pastureland plateaux. Irrigated agriculture is conducted in the valley floor and rain-fed agriculture on the high mountains. In Ghor a number of valley systems in high elevations (above 2600 meters) are not cultivated, but kept as summer pastureland for the Aimaq semi-nomadic camps. Simple canals have been built for the water to irrigate the pasture for the whole valleys. Rain-fed alfalfa is cultivated in Lal district of Ghor province. Thanks to its deep root system, rain-fed alfalfa is much more productive than indigenous grass species and produce 2 cut in a normal year and to remain established for a minimum of 15-20 years. Alfalfa fresh leaves are reportedly consumed in soup or salad in spring.

Crop planting in the central Highlands is usually later than in other regions due to altitude related delay in the arrival of spring. Up to an elevation of approximately 2500 meters, winter cereal dominates while above that spring cereals have an important share. Production figures are calculated based on previous yield and area

estimates and the abundant water availability at planting time. In 2003, irrigated wheat production is expected to be 82 000 tonnes, or 30 percent lower than in 2002. In Ghor province, the area planted with irrigated wheat has significantly decreased as compared to last year due to poppy cultivation. Moreover, the use of improved seeds and fertilizers has been recognised as being lower than in other provinces, resulting in a low anticipated yield. Also, failure of rain-fed wheat planted had occurred in part of the Ghor province since rainfall had ceased for few weeks in late spring, just after rain-fed land was planted.

4.6 Central (Kabul, Parwan, Kapisa, Logar, Wardak)

This region comprises six provinces surrounding Kabul city. Kabul as a major market influences the specialist production of apples and potatoes (Wardak), vegetables (Kabul) and raisins in the Shomali plain (Parwan and Kapisa). Cropping patterns are amongst the most diversified in the country and the highest irrigated wheat yields were also recorded in the region.

This year, the mission estimates an irrigated wheat production of 385 000 tonnes for the central region, which is 118 percent higher than last year. This is mainly due to the good rains and also indicates some agricultural recovery in the Shomali plains. However, large tracts of land on the Shomali plain remain uncultivated and many irrigation canals and orchards are in need of rehabilitation.

4.7 East (Nangarhar, Laghman, Kunar)

The eastern region is irrigated by several rivers - Kabul, Alsingar, Kunar – watered by the mountains of the Hindu Kush oriental and the Karakoram range, south of the Wakahn corridor. Due to sustained water availability, the region exhibits a higher cropping intensity compared to the rest of the country. The riverine farms, situated along valley bottoms of varying widths, produce a range of crops throughout the year. Double cropping is the rule rather than the exception and triple cropping is noted in lowland areas.

The East received good rainfall, but started later than other regions. However, the area planted in the region have increased by 10 percent compared to last year. Total wheat production in the region is estimated at 141 000 tonnes, an increase of 13 percent on last year. Cultivation practices as field water management and canal maintenance are noted to be superior in the region.

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

Comprising deserts, steppe and high cropping intensity irrigated river systems, the south-west is the largest and most arid region in the country. The southern deserts are covered with the fastest moving sand dunes in the world with an average of 15 centimetres per day (Bonn University, 1968-73 Seistan studies). Nonetheless, the irrigated zone in the South is an important production area in Afghanistan and depends mostly on two major rivers; the Helmand river and the Argandab river and a number of seasonal rivers in the east (Tarnac Rud, Arghastan Rud). Both the Helmand and Argandab rivers drain water far from the central Highlands and dams – the Kajaki and Dahla dams - are collecting the water in winter and spring and releasing it in irrigation canals along the crop cycles.

In 2003, both dams have collected average amount of water due to good winter and spring rainfall/snowfall. In 2002, due to slack water management, the sluices of the Dahla dam were opened which emptied the reservoir within a few days, leaving them without any water through June to September and resulted in crop losses. However, this year better water management was observed.

Aquifers have dropped significantly during the drought years and left spring, karez and shallow wells dry in most of the region. Wealthier farmers were competing until this last winter to deepen their tube wells to reach the ever deepening water-table to save their orchards while those who could not afford lost their orchards. The replenishment of the Dalha dam on the Argandab river this year and the flow of water in irrigation canals this spring came too late for many fruit growers in Kandahar province and karez and spring irrigated land remained below average. Water shortage is particularly severe in the whole of Zabul province and the Eastern part of Kandahar province this year where, many villages were abandoned.

This year, total wheat production, all irrigated, is estimated at 470 000 tonnes, or 18 percent above last year.

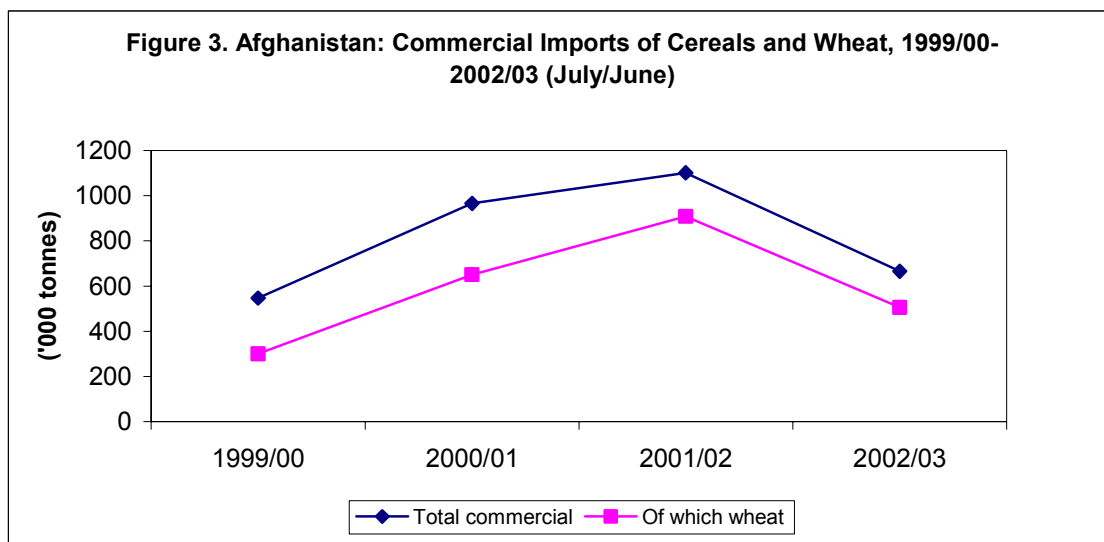
5. CEREAL SUPPLY/DEMAND SITUATION

5.1 Current market situation

In June 2003, market prices of wheat averaged between a low of Afs42 *per seer* (7 kg) (US\$0.12 per kg) in Mazar to a high of Afs55 *per seer* (US\$0.16) in Kandahar. Nominally, these prices are similar to June 2002 levels but are about 20 to 25 percent lower than the long-term average. However, farmgate prices of cereals are noted to be depressed in food surplus provinces such as Kunduz, Takhar and Bughlan. In certain areas wheat prices are just above the break-even point with expectations that they may fall below the cost of production once the bulk of the harvest enters the market. Rising wage rates have also increased production costs this year significantly. Moreover, the terms of trade have shifted against these farmers as the prices of all consumer goods relative to grain prices have increased. This implies that a bag of wheat today will fetch far less than what it did previously thus diminishing the purchasing power of farmers. Wheat prices in some markets recovered slightly towards the end of June following some word of local purchases.

The expected good harvest and lower prices, coupled with improved employment opportunities in both urban and rural areas arising from increased economic activities and growth are expected to improve food access for most households. This is encouraging news for the overall food security of households. However, such depressed cereal prices, specially if they fall below the cost of production, may be a disincentive to farmers and may push them further into debt. The limited storage and financial capacity of private traders observed in surplus producing areas, the lack of banking and credit facilities, coupled with inadequate infrastructure, such as roads, may hinder storage of grain for a long period and flow of produce from surplus to deficit areas. However, to the extent that local purchases are made, the timing and amount of the grains purchased needs to be carefully considered so as not to inflate grain prices for the rest of the consumers.

Traditionally, traders in Afghanistan do not keep large amounts of food stocks, but rely on frequently revolving stocks. The Mission observed that there were no shortages of food and non-food commodities in the wholesale and retail markets at provincial, district, and village levels.



Source: FAO/GIEWS.

Commercial imports from neighbouring countries are currently coming in normally for wheat flour, rice, and wheat. As indicated in Figure 3, commercial imports of cereals peaked in 2001/02 at more than one million tonnes in response to the drought induced large shortfall in domestic production.

In addition to income from agricultural production, whether crop or livestock, wage labour, petty trade, localised brick-making, mining and poppy-opium trading, remittances from abroad (Pakistan, Iran and the UAE), constitute a significant part of household income. Average daily wage rates across the country range from Afs90 (US\$1.9) to Afs250 (US\$5.2) per day depending on the location and type of work. In the rural areas labour demand is mostly seasonal, more regular work and higher wage rates are presently observed in the cities and areas close to district centres.

5.2 Cereal supply/demand balance for 2003/04

The cereal balance sheet for 2003/04 (summarised in Table 4) is based on the following assumptions:

- Mid-year 2003/04 (December 2003) population is estimated at 22.626 million. This figure is based on the 2003/04 population estimate prepared by the Central Statistics Office (CSO). The figures reported by the CSO include 20.7 million settled and 1.5 million nomadic populations for a total of 22.2 million. This total was then projected forward using an annual growth rate of 1.92 percent—also used by the CSO.
- 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 213 000 tonnes of maize and 297 000 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, 30 kg/ha for rice, 35 kg/ha for maize, and 110 kg/ha for barley. Cereal area 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 the bumper crop this year a cereal stock build-up of about 200 000 tonnes is assumed.

Table 4. Afghanistan: Cereal Balance Sheet, 2003/04 (July/June) ('000 tonnes)

	Wheat	Rice (milled)	Maize	Barley	Total
Domestic availability	4 471	295	310	410	5 486
Food aid in stock (WFP end-June)	110	4	0	0	114
Domestic production	4 361	291	310	410	5 372
Total utilisation	4 749	409	310	410	5 878
Food use	3 620	385	45	23	4 073
Animal feed	0	0	213	297	510
Seed provision	275	4	5	28	312
Losses	654	20	47	62	783
Stock build-up	200	0	0	0	200
Import Requirements	278	114	0	0	392
Commercial imports	278	114	0	0	392

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

The total cereal import requirement in 2003/04 (July/June) is estimated at about 392 000 tonnes, nearly a quarter of last year's estimated requirements. The decline in the import requirement is primarily explained by the significant increase in domestic cereal production that is estimated to have increased from 3.59 million tonnes last year to 5.37 million tonnes.

Commercial imports of cereals, mainly wheat flour and rice, originating from Pakistan, Kazakhstan, Turkmenistan and other neighbouring countries are currently coming in normally. In the last few years private sector cereal imports were quite high and peaked at more than one million tonnes in marketing year 2001/02

(July/June). Hence, the private sector appears to have the capacity to import commercially the 392 000 tonnes of the import requirements.

Notwithstanding the above, food access will remain a serious challenge for many afghan households (see below). Total amounts of targeted food aid requirements in 2003/04 (July/June) will only be known once the results of the NRVA are available in September/October 2003. As of end-June 2003, WFP had about 114 000 tonnes of cereal food aid in stock. Should there be any additional food aid needs, they will be purchased locally provided that the markets are accessible.

6. TARGETED FOOD AID RELIEF ASSISTANCE REQUIREMENTS FOR 2003/04

Decades of conflict compounded by severe drought in recent years have left millions of Afghans very poor and vulnerable to food insecurity. Socio-economic infrastructure (including irrigation schemes) has been debilitated by deliberate destruction and years of neglect. Massive population displacements arising from both conflict and drought have led to disruptions of livelihoods for many Afghans. Many Afghans find themselves in a state of chronic poverty as a result of trying to cope with years of conflict and drought through sale of productive assets (including land and traction animals) and the pursuit of desperate adverse coping strategies (indebtedness, marrying off pre-pubescent daughters, sale of roof beams).

Since 2001, the achievement of relative peace and stability in much of Afghanistan and the generous assistance of the international community have helped prevent the transformation of a food security crisis into a full-fledged famine. Better rainfall and snow fall, combined with rehabilitation of irrigation infrastructure and improved access to fertilizer and improved seeds led to improved food production and availability by the end of 2002. While this led to a significant reduction in the level of food assistance requirements at national level, millions of Afghans continued to rely on food assistance through mid 2003. These included, millions of farming populations severely affected by drought, poor returnees (refugees and internally displaced persons), poor pastoral Kuchi that lost most of their livestock due to drought, Targeted food assistance also played a significant role in the recovery efforts of the government through the rehabilitation of irrigation structures (food for work), provision of improved seeds to poor farmers (food for seed), provision of food rations to school children and teachers and construction of schools (food for education).

At the end of the 2002/03 growing season, a national bumper harvest of cereals is expected as a result of good and well-distributed rainfall, improved availability of water for irrigated agriculture, and increased use of fertilizer and improved seeds. However, performance of the agricultural season at provincial and district levels varies from place to place. In the south, food insecurity is expected to improve only marginally due to continued conflict, slow recovery from drought and high cereal prices. The northern surplus producing provinces of Bughlan, Kunduz and Takhar expect major improvements in food security arising from exceptionally good harvest prospects. In the chronically food insecure areas of the Central Highlands (Hazarejat) and the north-eastern province of Badakhshan, many households will continue to rely on relief assistance. Elsewhere in the country, the picture is mixed: improved harvest and food security prospects contrasting with pockets of high vulnerability and food insecurity. Several areas have experienced localized harvest failures for both cereals and cash crops such as fruit trees due to adverse weather conditions (hailstorm, frost attack, water-logging, etc) commandeering of irrigation water by powerful upstream landowners, and crop damage by pests.

Notwithstanding regional differences, in general, medium to small size landowners and sharecroppers cultivating larger holdings will benefit from the good harvest this year. Furthermore, many rural households benefited from increased labour employment opportunities in harvest activities. Limited improved employment opportunities can also be anticipated in the reviving commercial and construction sub-sectors in urban and peri-urban areas, with a positive impact on household food security.

However, for the unemployed, landless and near-landless rural poor that cultivated and/or sharecropped very smallholdings, food security will remain a challenge. Food insecurity is also expected to persist among other vulnerable groups: poor returning refugees and IDPs, poor Kuchi pastoralists who have lost their livestock, labour-poor, female-headed households and vulnerable groups including the urban and rural poor. This is compounded by the fact that the food security of many Afghan households continues to be constrained by debt burden from the previous drought years and rising cost of living (non-cereal food and non-food expenses).

In conclusion, despite significant improvements in overall food security prospects in Afghanistan, a considerable part of the Afghan population will remain dependent on targeted food assistance in 2003/04. A multi-agency National Risk and Vulnerability Assessment (NRVA) is currently in progress throughout Afghanistan. The results of this assessment, due out in late September/early October, will determine the level and geographic distribution of humanitarian assistance requirements for 2003/04.

This report is prepared on the responsibility of the FAO and WFP Secretariats with information from official and unofficial sources. Since conditions may change rapidly, please contact the undersigned for further information if required.

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