Thursday, March 03, 2005

Preliminary Production Forecasts of the 1384 wheat and paddy

Overview

October through February is an important period for the growth of winter wheat in Afghanistan. Satellite pictures of the precipitation data suggest that the cumulative rainfall in the period was well above average in all parts of the country. Ground precipitation data from the selected met stations for those five months period confirm well above normal precipitation in the said period. Snow maps indicate that the snow coverage was well above short-term (4 years) averages, but not so high as compared to the long-term averages. (Figure 1-4)

In 1383 virtually all wheat producing areas in the country were struck by drought conditions. The area sown to winter wheat this year has been reported to be satisfactory, thanks to generally favorable weather conditions. It has to be noted that weather is the most important factor determining area coverage under wheat, but other factors - prevailing market prices of wheat and other crops with comparative advantage, for example - also play a very important role in this regard.

For optimal performance the water requirement of winter wheat is about one-third of the Potential Evapotranspiration (PET) at the early and harvesting stages of the crop. The requirement is the highest (about 100-115% of PET) in the mid-stages of the crop's growth. Qualitative reports from field indicate that there has been no water stress in this year's winter wheat's development. Under the prevailing weather circumstances it is very unlikely that there will be water stress for this crop's development at the later stages also. Hence, under normal rainfall pattern in the ensuing three months (Figure 5-6), the 1384 wheat yield is expected to be quite good.

Overall weather condition is generally very conducive also to spring wheat planting this year. Following aspects and interventions need special attention:

- With FAO's technical assistance, donor support for supply of 2,538 tons of wheat seed for the 1384 spring planting is being sought,
- Spring campaign of MAAHF is going to be very important this year, including probable re-plantation scenario in the case of flood damage to standing crops,
- 1,200 tons of seed is being distributed by various agencies, including FAO, for sowing in the 1384 spring season,
- A total of 400 tons of spring wheat seed is being proposed to be purchased and distributed by MAAHF as part of its spring campaign.

Forecast

Area and yield prospects for the 1384 winter wheat are generally favorable. If favorable conditions prevail, rainfed wheat yield in 1384 may reach the level of the 1382 yield. More balanced rainfall was experienced in the north-eastern part of the country, which is a very important crop growing area in the country. On the flip side main adverse factors for the winter wheat crop this year have been frost/storm, and limited access to quality chemical fertilizer.

Forecasts for the 1384 wheat and paddy production are summarized in Table 1. The 1384 production of wheat crop is forecasted to be about 4 million tons, which is well above last year's production estimate for the crop. Overall production prospects of both rainfed and irrigated crops are good for the 1384. However, the 1384 wheat production reaching above or below 4 million tons level would depend on the (i) performance of the winter wheat crop in the remaining period, (ii) area to be covered under spring planting, which has a great potential for massive area expansion due to MAAHF's spring campaign and the government's strict policy on illegal poppy cultivation, and (iii) production prospect of the spring crop.

Paddy is yet to be planted, but its production is forecasted to be slightly above average due to favorable weather condition so far. Milled rice production in 1384 is forecast to be 325,000 tons.

Table 1: Wheat[1] and Rice Production for the latest years (1382-1384)

'000 tons

Crop	**1381[2] (2001/02)**	**1382[3] (2002/03)**	**1383[4] (2003/04)**	**1384[5] (2004/05) (Forecast)**
Irrigated wheat	2,110	2,854	2,062	2,744
Rainfed wheat	580	1,346	1,068	1,253
Total wheat	**2,690**	**4,200**	**3,130**	**3,997**
Milled Rice	260	291	310	325

Food Aid from the WFP from 2002 to 2005

WFP's total food aid deliveries in 2002 amounted to 551,900 tons. In 2003 the delivery was reduced to 230,117 tons, of which 219,039 tons (95%) was for emergency, and the rest for projects and programmes.

[1] Including spring wheat
[2] CFSAM 2002 Estimates
[3] MAAHF estimates, updated in October 2004
[4] MAAHF estimates, updated in October 2004
[5] See Annex 2 for the split of these figures by province

Of the total food aid deliveries in 2003, about 179,000 tons (78%) was cereals. Amount of WFP wheat deliveries to Afghanistan in the period 2003 to 2005 is shown in Table 2.

Table 2: WFP wheat delivered[6] to Afghanistan in the period 2003 to 2005[7] ('000 tons)

Year	Wheat ('000 tons)	Wheat Floor ('000 tons)
2003	166[8]	--
2004	105	29
2005 (so far)	5	1

The amounts of additional wheat expected to be imported by WFP Afghanistan from External Hubs in the period February to June 2005 is summarized in Table 3.

Table 3: Wheat Expected coming into WFP Afghanistan from External Hubs in 2005[9]

Month Expected	**Vessel**	**Amount ('000 tons)**
February – March	Termez	23.8
March	Port Qasim	26.0
May	Karachi	18.5
June	Karachi	23.9
	Total	**92.2**

Caveat

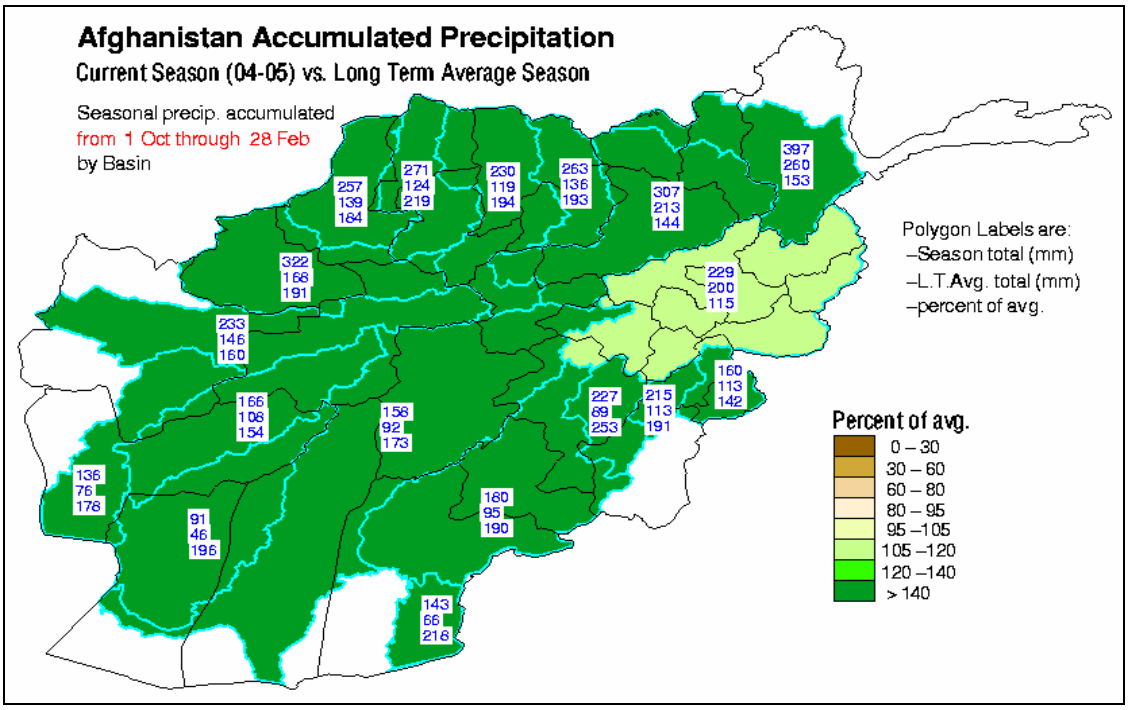
The crop production forecasts made here are based on information available from various sources. (Annex 1)

There is a lack of spatial data on adverse possible implication of excessive snow cover to standing crops. Past records of episodic events correlated to flood damages to crops are also lacking. The modeling of USGS indicates that 2004/2005 is indeed a year of abundant snowfall. However, as regards possible extensive floods damages, the study suggests that the results are preliminary and are still being checked. Given this, adverse possible affects of floods on winter wheat in coming months cannot be ascertained at the moment and have not been taken into account.

[6] Source: WFP
[7] Details on these figures are available
[8] Includes wheat floor
[9] Source: WFP

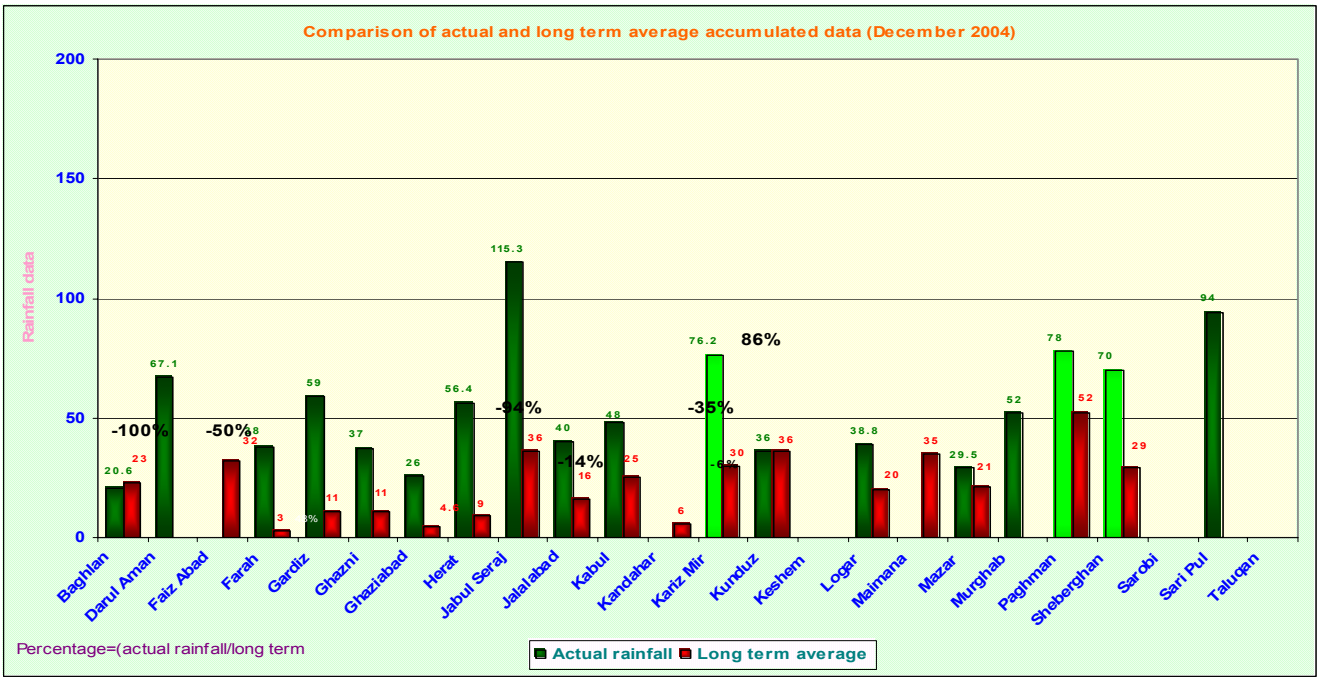
Spring wheat is being planted or going to be planted soon. Rice is also to be planted after some time. Good prospects of these crops are assumed. Briefly, since conditions may change rapidly, frequent fieldtrips and house-to-house surveys have been planned by FAAHM and Central Statistics Office (CSO). These trips and door-to-door surveys will be useful in updating and improving the production assessments made in this paper.

Figure 1: Accumulated Precipitation (October 2004 – February 2005)



Source: FEWS NET

Figure 2: Actual and LTA Precipitation in mm in selected met stations, December 2004



Source: ECU, FAO

Figure 3: Snow Cover/Depth in March 2005

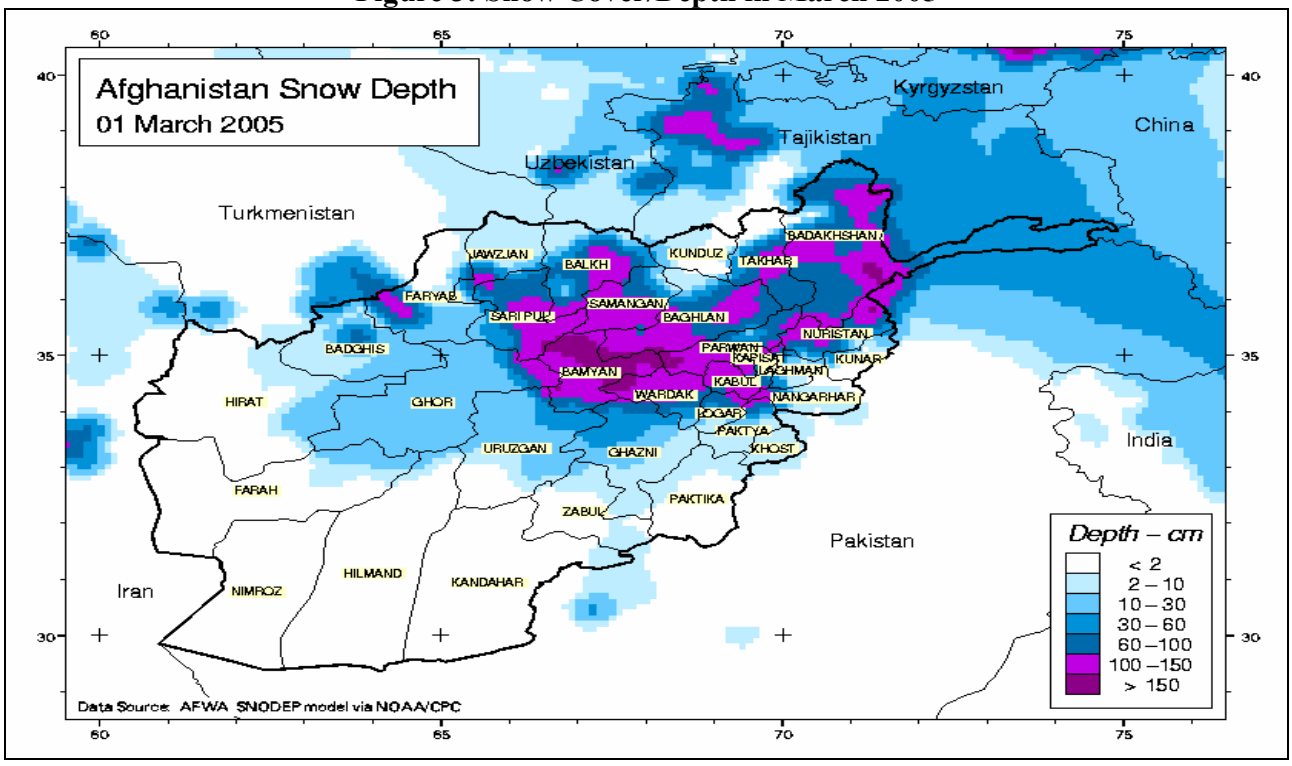
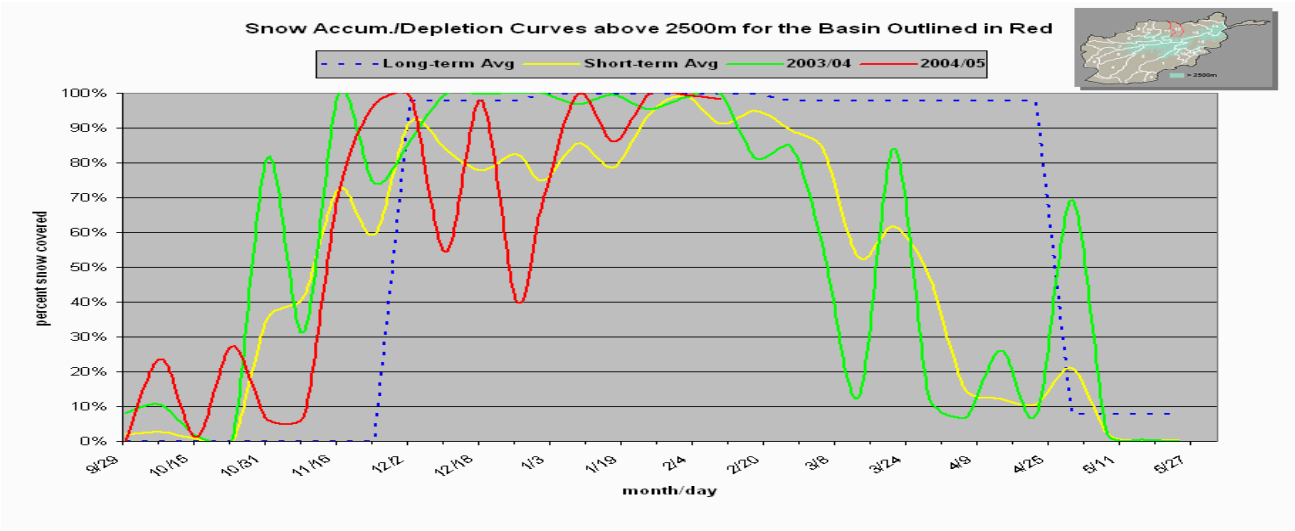


Figure 4: Snow Cover/Depth in March 2005



Source: FEWS NET (similar pattern was noticed for other basins also)

Figure 5: Kunduz

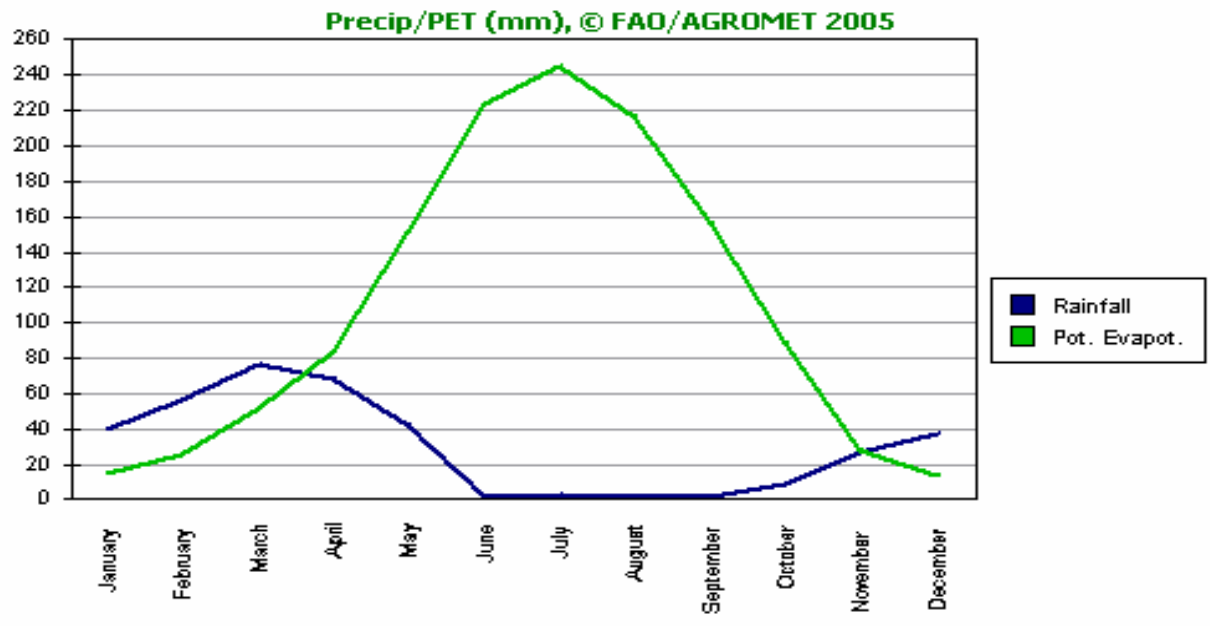
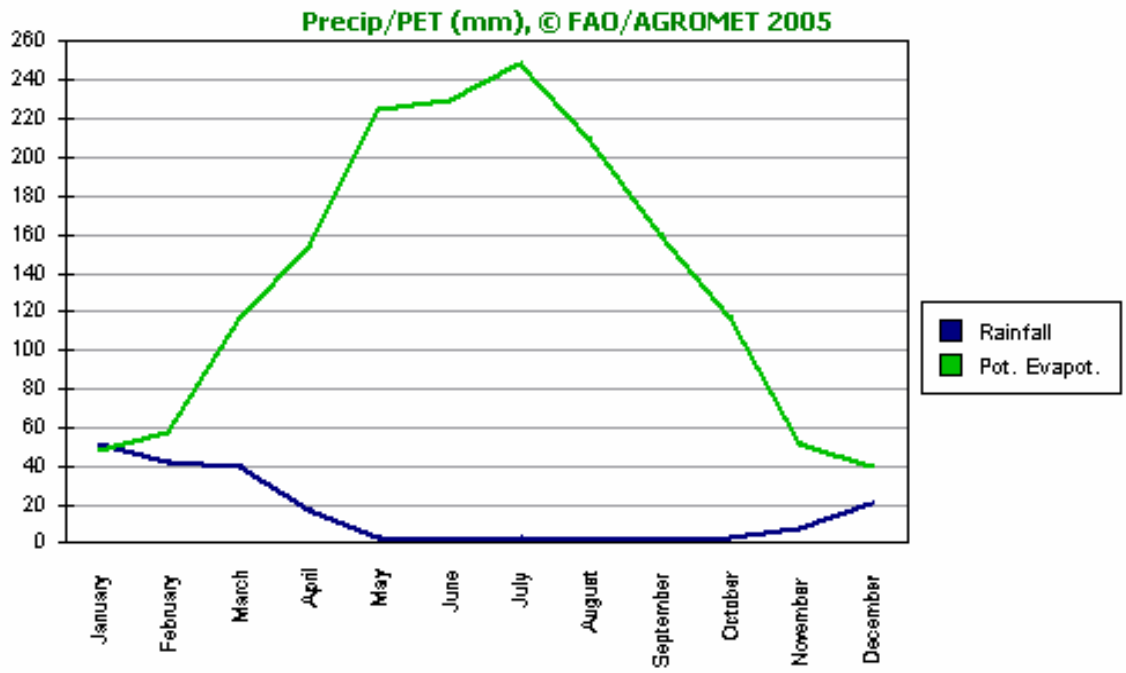


Figure 6: Kandahar



Annex 1: Area and Production of Wheat 2004/05 (Preliminary Forecast)
(1384)

REGION/ Province	Irrigated Wheat			Rainfed Wheat			Total Wheat		
	Area ('000 ha)	Yield (t/ha)	Production ('000 tons)	Area ('000 ha)	Yield (t/ha)	Production ('000 tons)	Area ('000 ha)	Yield (t/ha)	Production ('000 tons)
NORTH	**210**	**2.23**	**468**	**420**	**1.40**	**587**	**630**	**1.67**	**1,055**
Faryab	40	1.90	76	80	1.60	128	120	**1.70**	204
Juzjan	45	2.40	108	55	1.60	88	100	**1.96**	196
Sar-i-Pul	25	2.00	50	80	1.30	104	105	**1.47**	154
Balkh	85	2.40	204	115	1.30	150	200	**1.77**	354
Samangan	15	2.00	30	90	1.30	117	105	**1.40**	147
NORTH-EAST	**278**	**2.25**	**625**	**325**	**1.45**	**472**	**603**	**1.82**	**1,097**
Bughlan	80	2.30	184	80	1.80	144	160	**2.05**	328
Kunduz	120	2.20	264	15	1.30	20	135	**2.10**	284
Takhar	51	2.20	112	140	1.30	182	191	**1.54**	294
Badakhshan	27	2.40	65	90	1.40	126	117	**1.63**	191
WEST	**151**	**2.38**	**359**	**142**	**1.27**	**180**	**293**	**1.84**	**539**
Heart	96	2.40	230	60	1.90	114	156	**2.21**	344
Farah	20	2.40	48			0	20	**2.40**	48
Badghis	35	2.30	81	82	0.80	66	117	**1.26**	147
WEST-CENTRAL	**40**	**2.10**	**84**	**13**	**0.77**	**10**	**53**	**1.77**	**94**
Ghor	20	2.00	40	10	0.80	8	30	**1.60**	48
Bamyan	20	2.20	44	3	0.70	2	23	**2.00**	46
CENTRAL	**155**	**2.32**	**360**	**3**	**1.00**	**3**	**158**	**2.30**	**363**
Kabul	20	2.20	44	1	1.00	1	21	**2.14**	45
Parwan	40	2.40	96	2	1.20	2	42	**2.33**	98
Kapisa	20	2.00	40			0	20	**2.00**	40
Logar	35	2.40	84			0	35	**2.40**	84
Wardak	40	2.40	96			0	40	**2.40**	96
SOUTH	**129**	**2.35**	**303**	**1**	**1.00**	**1**	**130**	**2.34**	**304**
Paktya	20	2.40	48				20	**2.40**	48
Paktika	23	2.40	55				23	**2.39**	55
Khost	15	2.00	30				15	**2.00**	30
Ghazni	71	2.40	170	1	1.00	1	72	**2.38**	171
EAST	**57**	**2.32**	**132**				**57**	**2.32**	**132**
Nangarhar	32	2.40	77				32	**2.41**	77
Laghman	15	2.40	36				15	**2.40**	36
Kunarha	8	1.90	15				8	**1.88**	15
Nooristan	2	1.80	4				2	**2.00**	4
SOUTH-WEST	**179**	**2.31**	**413**	**0**		**0**	**179**	**2.31**	**413**
Kandahar	50	2.00	100				50	**2.00**	100
Helmand	70	2.40	168				70	**2.40**	168
Zabul	15	2.50	38				15	**2.53**	38
Nimroz	13	2.50	33				13	**2.54**	33
Uruzgan	31	2.40	74				31	**2.39**	74
TOTAL	**1,199**	**2.29**	**2,744**	**904**	**1.39**	**1,253**	**2,103**	**1.90**	**3,997**

Source: FAAHM/MAAHF

Annex 2: Sources of Information and data for this paper

(i) Provincial Departments of Agriculture
(ii) Extension Department, MAAHF
(iii) Participants of Provincial Training Programmes/Conference Organized by MAAHF
(iv) Reports on the field visits made by FAAHM staff
(v) FAO Agromet Group
(vi) FAO/EC Project Strengthening National Seed Production Capacity in Afghanistan
(vii) FAO Emergency Irrigation Rehabilitation Project (EIRP)
(viii) FAO Emergency Coordination Unit
- Rainfall data
- Fortnightly Crop Monitoring Information Sheet

(ix) FAO CFSAM
(x) USGS/FEWS NET
(xi) WFP