

**AGRICULTURE AND FOOD PRODUCTION
IN POST-WAR AFGHANISTAN
A REPORT ON THE WINTER AGRICULTURAL SURVEY
2002-2003**

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Statistical Appendix

Table A.1
Coverage of the Winter Survey sample relative to total available arable land
A.1.1. Geographical coverage of the sample and composition of agro-ecological zones

Agro-ecological zone	Province	Districts in Winter Survey sample	Additional districts	Land Cover Atlas 1990-93 (hectares)			Estimated arable land 2002-03 (hectares)		
				Rain-fed area	Irrigated area	Total arable land	Non absent irrigated	Corrected rain-fed	Total corrected arable land
AFGHANISTAN				4,522,130	3,272,192	7,794,322	3,145,373	3,391,597	6,536,971
	Badakhshan	Fayzabad, Kishim, Baharak	Rest of province, except Shar-e Buzurg	366,549	57,593	424,142	57,593	274,912	332,504
	Takhar		Farkhar, Warsaj	25,024	7,950	32,974	7,950	18,768	26,718
	Baghlan		Khost wa Firing	4,089	12,611	16,700	12,611	3,066	15,678
2. Badakshan mountains	Herat		Cheshit Sharif	12,782	4,562	17,345	4,562	9,587	14,149
	Ghor	Chagcharan, Pasaband, Sahrak	Rest of province	134,963	71,513	206,476	71,513	101,222	172,735
	Bamyan	Bamyan, Panjab	Rest of province	16,860	34,978	51,838	34,978	12,645	47,623
	Baghlan		Tala wa Barfak, Kahnard	9,533	11,622	21,155	11,622	7,150	18,772
3. Central Mountains	Faryab		Kohistan,	46,163	2,844	49,006	2,844	34,622	37,466
	Ghazni	Ajristan, Jaghori	Malistan, Nawur	16339	50463	66,802	50,463	12,255	62,717
	Parwan	Ghorband	Sher Ali, Surkhii Parsa,	2578	14960	17,538	14,960	1,933	16,893
	Sare Pul		Balkhab	21735	6,251	27,986	6,251	16,302	22,553
	Uruzgan	Daykundi	Sharistan, Gizab	56,128	44,328	100,456	44,328	42,096	86,424
	Wardak	Markazi Bishud,	Day Mirdad, Jalrez, Behsud II	14,468	32,614	47,082	32,614	10,851	43,465
	Kabul	Mosahai, Qarabagh, Bagrami	Rest of province	4,114	4,114	8,228	4,114	3,085	7,199
	Kapisa	Nirjab, Kohistan	Rest of province	4,471	27,965	32,436	27,965	3,353	31,318
	Nangarhar	Khogiani, Kuz Konar, Rodat	Rest of province	25	99,313	99,338	99,313	19	99,332
	Nuristan	Wama	Rest of province	1,899	5,761	7,661	5,761	1,425	7,186
4. Eastern Mountains and Foothills	Parwan	Charikar, Bagram	Rest of province except Ghorband	10,884	45,897	56,781	45,897	8,163	54,060
	Lagman	Mitharlam, Qorghai	Rest of province	0	20,978	20,978	20,978	0	20,978
	Kunar	Asadabad, Chawkay, Pech	Rest of province	4,089	22,430	26,519	22,430	3,067	25,497
	Zabul	Mirzan, Sakhoj, Daychopan	Rest of province	4,841	103,480	108,321	103,480	3,631	107,111
	Wardak	Sayd Abad, Chak	Nirrh, Maidan Shar	1,497	29,906	31,403	29,906	1,123	31,029
	Logar	Mohamed Agha, Baraki Barak, Kulangar (Pul-e-Alam)	Rest of province	36,209	35,529	71,738	35,529	27,157	62,685
	Ghazni	Andar, Gelan, Qarabagh	Nawa, Muqur, Ab Band, Giro, Bahrami Shahid (Jeghatu), Jeghatu, Ghazni, Deh Yak, Zana Khan	32,206	195,955	228,162	195,955	24,155	220,110
	Pakiya	Sayed Karan, Gardez, Zurmat	Rest of province	10,574	68,424	78,997	68,424	7,930	76,354
	Paktika	Dila	Rest of province	2,480	63,842	66,323	63,842	1,860	65,703
	Khost	Mandozay	Rest of province	12,501	34,942	47,443	34,942	9,376	44,317

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A.1.1. Geographical coverage of the sample and composition of agro-ecological zones

Agro-ecological zone	Province	Districts in Winter Survey sample	Additional districts	Land Cover Atlas 1990-93 (hectares)					Estimated arable land 2002-03 (hectares)		
				Rain-fed area	Irrigated area	Total arable land	Non absent irrigated	Corrected rain-fed	Total corrected arable land		
6. Northern Mountains and Foothills	Takhar	Talukan, Yangi Qala, Rustaq, Chahab	Bangi, Iskamish, Kwaja Gar, Darqad, Chal, Kalafgan	503,503	66,659	570,162	66,659	377,627	444,286		
	Badakhshan		Shar-e Buzurg	40,060	505	40,565	505	30,045	30,550		
	Baghlan	Baghlan, Andarab, Nahrin, Pulikumri	Burka, Dahane Ghoori, Dushi, Khinjan	230,601	84,637	315,239	84,637	172,951	257,588		
	Balkh	Chaharkint, Sholgara	Kindisih, Cimal, Marmul	388,390	27,515	415,905	22,012	291,292	313,305		
	Samangan	Aybak, Khuram Wa Sarbagh, Ruyi Duab	Rest of province	364,463	21,225	385,689	21,225	273,348	294,573		
	Saripul	Saripul, Sang Charak, Sozma Qala	Sayyad, Kohistanat	445,514	43,474	488,988	43,474	334,136	377,610		
	Jawjizan	Darzab		91,432	3,485	94,917	2,614	68,574	71,188		
	Faryab	Pashitun Kot, Qaysar	Bileitrag, Almar, Maimana	433,574	63,025	496,599	55,147	325,180	380,327		
	Baghdis	Qadis, Qawlinaw	Rest of province	461,788	48,506	510,294	48,506	346,341	394,847		
	Herat	Kusk, Karukh+A26	Gulran, Kushi Kuhna, Karukh	313,133	23,887	337,020	23,887	234,850	258,737		
7. Turkistan Plains	Balkh	Balkh, Dawlat Abad, Khulim	Kahar Bolak, Dihdadi, Sortepa, Kaldar, Kwaja Du Koh, Fayzabad, Khamyab, Qarquin	25,583	286,290	311,872	229,032	19,187	248,219		
	Jawjizan	Aqca, Mardyan, Shibargan,		7,324	183,415	190,738	137,561	5,493	143,054		
	Faryab	Ankhoy, Shirin Tagab, Ankhoy	Kwaja Sabz Pos, Dawlat Abad, Qaramkol, Khani Carbag	146,270	75,635	221,905	66,181	109,702	175,883		
8. Herat-Farah Lowlands	Kunduz	Imam Sahib, Chahar Dara, Khan Abad	Rest of province	87,249	157,185	244,434	157,185	65,437	222,621		
	Herat	Injil, Shindand, Zindajan, Pashton	Rest of province except Kusk, Gulran, Cheshti Sharif, Kushi Kuhna, Karukh	56,666	224,217	280,883	224,217	42,500	266,716		
	Farah	Bala Buluk, Pust Rod, Farah, Gulistan	Rest of province	14,321	168,500	182,821	168,500	10,741	179,241		
9. Helmand Valley - Sistan Basin	Helmand	Garniser, Kajaki, Musa Qala, Nahri Saraj, Nawaji Barakzay	Rest of province	4,168	237,445	241,612	237,445	3,126	240,570		
	Kandahar	Panjway, Daman, Spin Boldak	Rest of province	53,524	277,958	331,482	277,958	40,143	318,101		
	Uruzgan	Tirin kot, Kas Urozgan	Kirjan, Shahidi Hassas, Dihrawud, Nesh	1,566	93,258	94,823	93,258	1,174	94,432		
	Nimroz		All the province	0	74547	74,547	74,547	0	74,547		

Notes:

1. Agro-ecological zones 1 (Wakhan Corridor and Pamir Knot) and 10 and 11 (Western Stony and Sandy Deserts) were not covered by the 2002-2003 Winter Survey. Farming areas in the Nimroz Province (most of which belongs to Agro-ecological Zones 10 and 11) were considered together with the Helmand Valley and Sistan Basin Zone for sample expansion purposes. Likewise, the few farming areas reported in Zone 1 by the Land Cover Atlas in the Wakhan district were considered as part of Zone 2.
2. Assigning a district to a zone does not mean that every part of the district belongs to that zone from an agro-ecological standpoint. Districts are assigned in this table to the **dominant** agro-ecological zone. The sample covered only villages actually belonging to the dominant zone, disregarding the residual areas.
3. When the "rest of the province" is assigned to a zone, it refers only to agriculturally active areas. The rest of the province may contain desert areas that are not actually part of the same zone in agro-ecological terms, but those zones usually have no significant agricultural activity anyway. Thus, substantial portions of Herat and Farah are actually part of the Western Deserts, though in this table the "rest" of these provinces is considered part of the Herat-Farah Lowlands agro-ecological zone. This has no consequence from the point of view of the survey, but must be taken into account when delimiting agro-ecological zones for other purposes.

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Agro-ecological zone	Province	Districts in Winter Survey sample	Additional districts	Land Cover Atlas 1990-93 (hectares)			Estimated arable land 2002-03 (hectares)	
				Rain-fed area	Irrigated area	Total arable land	Non absent irrigated	Corrected rain-fed	Total corrected arable land
4. Irrigated land includes orchards, and orchards include fruit trees, vineyards and gardens. The acreage of orchards has significantly changed from the time the Land Cover Atlas information was compiled in 1990-93. For instance, Wardak province seems to have now substantially more orchards than the 61 Ha estimated in the Land Cover Atlas and reflected in this table. In other areas the amount of orchards seems to have decreased due to the destruction or abandonment of fruit trees during the war, as in the Shomali Plains (Parwan). For the purposes of this survey, orchard land was added to irrigated crop land to form a single category.								
5. The Land Cover Atlas categorisation of irrigated land into "two crops a year" and "one crop a year" land may be misleading. Some lands allocated to one crop per year in 1990 were growing cotton, while now they are growing shorter-cycle crops allowing for two crops a year. Both categories are here subsumed under "irrigated".								
6. The amount of land classified as "rain-fed" is not supposed to be cropped simultaneously. It is estimated that at best 40% of that land would be actually cultivated in a given year. Most of the rest would be on fallow in a rotation pattern; some portions, however, are never cropped because of their slope or other characteristics, especially the rain-fed lands located in hilly terrain in the Northern Mountains and Foothills.								
7. Corrected arable land is based on field observations in 2002-03. Irrigated land has been corrected to take account of areas not represented in the sample, where farmers have abandoned the farms due to prolonged lack of water in the irrigation system, or abusive appropriation of water related to poor enforcement of water rights or poor water management. Irrigated land that has not been planted because of scarce water has been anyway considered as irrigated land. Rain-fed area has been corrected first to take account of areas designated as rain-fed in the Land Cover Atlas but not actually cultivable because of geographical features (steep slopes, gullies, rocky outcrops, etc.) or areas designated as rain-fed but actually used as grassland, and second, to account for encroachment of rain-fed cultivation over grassland in the 2002-03 agricultural year.								
8. Land acreage in the Land Cover Atlas has been taken from the district and province data in the Atlas, and may slightly differ from the values reported in the national table of the Atlas due to small discrepancies in the Atlas data, and due also to the fact that in some provinces the Atlas has left some small amounts of land not allocated to any individual district (those lands have been here allocated in the best possible manner).								

Table A.1
Coverage of the Winter Survey sample relative to total available arable land
A.1.2. Total area to sample area ratios and estimation of rain-fed and irrigated land by agro-ecological zone

Agro ecological zone	Available arable land, hectares (Corrected Land Cover Atlas)			Surveyed arable land, hectares (Winter Survey Sample)			Ratio of total available area to sample area			Estimate of arable land by expansion of sample by total arable land ratio		
	Rain-fed	Irrigated	Total arable	Rain-fed	Irrigated	Total arable	Rain- fed	Irri- gated	Total arable	Rain-fed	Irrigated	Total arable
2. Badakshan mountains	296,746	78,154	374,900	1,488	559	2,047	199	140	183	272,437	102,463	374,900
3. Central Mountains	248,662	274,135	522,797	615	930	1,545	404	295	338	208,148	314,649	522,797
4. Eastern Mountains and Foothills	19,112	226,458	245,571	101	884	985	190	256	249	25,139	220,431	245,571
5. Southern Mountains and Foothills	75,231	532,078	607,309	1,793	3,667	5,459	42	145	111	199,434	407,875	607,309
6. Northern Mountains and Foothills	2,454,343	368,667	2,823,010	9,031	1,837	10,868	272	201	260	2,345,843	477,167	2,823,010
7. Turkistan Plains	199,819	589,958	789,777	2,414	4,475	6,889	83	132	115	276,752	513,025	789,777
8. Herat-Farah Lowlands	53,240	392,716	445,957	56	1,005	1,061	951	391	421	23,549	422,408	445,957
9. Helmand Valley - Sistan Basin	44,444	683,206	727,650	747	3,224	3,971	59	212	183	136,868	590,783	727,650
Total	3,391,597	3,145,373	6,536,971	16,245	16,581	32,826				3,488,170	3,048,801	6,536,971

Available arable land is the corrected arable land (rain-fed and irrigated) obtained from adjusting the Land Cover Atlas according to field observations in 2002-03 (see Table A.1.1). Surveyed arable land is the amount of arable land (irrigated and rain-fed) in the sample of the Winter Survey.

The estimate in the last three columns is obtained by expanding the land in the sample by the ratio corresponding to **total arable land**. This ratio, multiplied by irrigated and rain-fed areas in the sample, gives an estimate of total irrigated and rain-fed areas.

Total arable land obtained with this procedure agrees with total available arable land, but not necessarily with irrigated and rain-fed land. The resulting total for rain-fed land is slightly larger, and that for irrigated land is slightly smaller, than the figure resulting from adjusting the Land Cover Atlas. No correction has been introduced to correct for this sample imbalance. Total rain-fed land or irrigated land at national level is reasonably well reflected in the figures obtained by the sample expansion, but in some regions may not agree with the estimates resulting from sample expansion.

Table A.2.					
Villages and farms in the sample by agro-ecological zone, province and district					
Agro-ecological zone	Province	Districts covered	Villages	Farms	
TOTAL AFGHANISTAN			514	4761	
Badakhshan mountains	Badakhshan	Fayz Abad	8	84	
		Kishim	5	61	
		Baharak	5	48	
Central mountains	Herat	Pashtun Zarghun	6	51	
	Uruzgan	Day Kundi	6	54	
	Ghazni	Ajristan	5	48	
		Jaghuri	5	49	
	Parwan	Ghorband	3	28	
	Wardak	Markazi Bihsud	5	48	
	Ghor	Chaghcharan	5	45	
		Shahrak	6	50	
		Pasaband	5	43	
	Bamyan	Bamyan	4	37	
		Panjab	5	47	
Eastern mountains and foothills	Kabul	Qarabagh	3	27	
		Bagrami	1	9	
		Musayi	3	24	
	Kapisa	Kohistan	3	25	
		Nijrab	3	28	
	Parwan	Chaharikar	6	48	
		Bagram	5	37	
	Nangarhar	Khogyani	6	58	
		Rodat	6	59	
		Bati Kot	6	58	
		Kuz Kunar	5	51	
	Laghman	Mihtarlam	6	59	
		Qarghayi	7	69	
	Kunar	Asad Abad	4	40	
		Pech	5	50	
		Chawkay	5	49	
	Nuristan	Wama	2	20	
	Southern mountains and foothills	Ghazni	Gelan	6	61
			Qarabagh	6	60
Andar			4	37	
Paktya		Gardez	4	37	
		Zurmat	5	46	
		Sayid Karam	3	30	
Logar		Puli Alam	5	44	
		Baraki Barak	6	53	
		Muhammad Agha	7	64	
Zabul		Shahjoy	5	42	
		Mizan	5	42	
		Daychopan	5	45	
Paktika		Dila	5	32	
Khost		Mando Zay	6	57	
Wardak		Chaki Wardak	7	59	
		Sayd Abad	6	50	

Agro-ecological zone	Province	Districts covered	Villages	Farms
Northern mountains and foothills	Takhar	Taluqan	7	80
		Rustaq	6	56
		Chah Ab	4	36
		Yangi Qala	4	37
	Baghlan	Baghlan	6	58
		Puli Khumri	6	58
		Andarab	3	39
		Nahrin	6	59
	Samangan	Aybak	12	118
		Ruyi Du Ab	2	19
		Khuram Wa Sarbagh	7	67
	Balkh	Sholgara	5	43
		Chahar Kint	4	38
	Jawzjan	Darzab	4	39
	Faryab	Pashtun Kot	4	35
		Qaysar	6	55
	Bagdhis	Qalay-I- Naw	6	48
		Qadis	7	50
	Herat	Kushk	6	48
		Karukh	6	50
	Sari Pul	Sari Pul	6	51
		Sangcharak	6	53
		Sozma Qala	5	41
	Turkistan plains	Kunduz	Imam Sahib	6	57
Chahar Dara			6	59
Khan Abad			5	49
Balkh		Dawlat Abad	5	50
		Balkh	6	56
		Khulm	3	24
Jawzjan		Shibirghan	6	49
		Aqcha	6	62
		Mardyan	3	27
Faryab		Shirin Tagab	5	50
		Dawlat Abad	5	41
		Andkhoy	5	39
Bagdhis		Murghab	5	45
Herat-Farah lowlands		Herat	Injil	5	42
	Zinda Jan		5	43
	Shindand		4	36
	Pashtun Zarghun		6	51
	Farah	Farah	3	31
		Gulistan	3	29
		Bala Buluk	3	27
		Pusht Rod	4	40
Helmand River valley and Sistan Basin	Helmand	Nahri Sarraj	5	49
		Kajaki	4	39
		Musa Qala	5	49
		Baghran	4	41
		Naway i Barakzayi	6	60

Villages and farms in the sample by agro-ecological zone, province and district				
Agro-ecological zone	Province	Districts covered	Villages	Farms
		Garmser	6	53
	Kandahar	Daman	6	54
		Panjwayi	6	54
		Spin Boldak	5	42
	Uruzgan	Tirin Kot	6	62
		Khas Uruzgan	6	61
	Nimroz	None	0	0

Note on totals in the tables.

In the following tables, totals are estimates based on the sample, expanded to all Afghanistan. Each farm in the sample is given a weight, in effect multiplying the information of that farm by that weight.

Weights or expansion factors are based on the relation between the arable land area covered by the sample and the arable land area existing in the country, including irrigated and rain-fed land. Application of these weights obtains a total arable land (irrigated and rain-fed) equal to the arable land measured by the Land Cover Atlas of Afghanistan (with some adjustments described in Annex I).

When one farm has missing information, the missing information is not reflected in the tables. For this reason, totals may vary slightly from one table to the next. The “total irrigated area” in one table concerning source of irrigation may not be equal to the “total irrigated area” of another table concerning land ownership, just because a few farms have not reported source of irrigation and some **other** few farms have not reported land ownership. Besides, expansion factors are not whole numbers, thus resulting in expanded totals with a fractional part that is rounded to the nearest integer. This also causes some variation in totals. The variability in totals resulting from these factors is usually very small and has no statistical significance.

Table A.3
Size of rural households and estimate of rural population

A.3.1. Households

	TOTAL	Household size (members)				
		2 to 5	6 to 9	10 to 14	15 to 19	20+
TOTAL	1,065,523	59,017	424,333	369,362	117,773	95,039
Agro-ecological zone						
Badakhshan mountains	35,346	2,930	14,102	8,791	5,860	3,663
Central mountains	167,168	6,091	62,603	59,558	24,365	14,551
Eastern mountains	177,322	4,988	63,098	79,059	19,204	10,973
Southern mountains	79,426	2,002	21,025	30,146	14,128	12,125
Northern mountains	281,308	21,819	127,537	80,262	32,209	19,481
Turkistan plains	74,857	6,534	20,634	21,895	9,629	16,164
Herat-Farah lowlands	146,759	11,354	53,405	51,723	12,195	18,082
Helmand River valley	103,338	3,298	61,929	37,927	183	
Region						
North	177,764	14,510	60,351	58,175	25,374	19,355
Northeast	164,134	10,020	81,401	37,449	18,688	16,576
West	196,371	18,107	73,925	67,048	15,831	21,459
West Central	75,463	2,369	30,456	27,072	10,152	5,414
Central	104,796	3,179	30,172	37,865	18,584	14,996
South	72,871	1,900	11,078	27,427	18,147	14,318
East	127,941	3,492	49,381	62,349	10,475	2,245
Southwest	146,183	5,440	87,568	51,977	522	677

A.3.2. Population

	TOTAL	Household size (members)				
		2 to 5	6 to 9	10 to 14	15 to 19	20+
TOTAL	12,103,964	258,086	3,300,295	4,172,089	1,901,258	2,472,236
Agro-ecological zone						
Badakhshan mountains	416,274	13,919	114,828	97,613	95,232	94,683
Central mountains	1,940,369	29,779	486,277	678,148	395,586	350,579
Eastern mountains	2,024,525	22,446	491,229	914,292	306,510	290,049
Southern mountains	1,070,254	8,677	164,637	345,182	230,270	321,488
Northern mountains	3,006,333	95,588	983,409	909,381	517,160	500,796
Turkistan plains	1,055,560	28,888	156,821	250,019	153,038	466,794
Herat-Farah lowlands	1,693,406	45,415	407,477	592,503	200,164	447,846
Helmand River valley	897,243	13,375	495,618	384,951	3,298	.
Region						
North	2,078,376	64,112	453,610	669,076	402,698	488,879
Northeast	1,894,579	44,930	645,339	418,320	304,548	481,442
West	2,198,617	74,767	563,586	762,119	258,348	539,797
West Central	848,023	11,167	234,509	311,325	164,799	126,222
Central	1,391,899	13,981	232,748	435,393	302,097	407,680
South	1,077,180	8,835	86,073	319,367	296,290	366,616
East	1,336,686	16,211	385,733	723,253	164,104	47,386
Southwest	1,278,603	24,083	698,698	533,235	8,374	14,213

A.3.3. Percent of households

	TOTAL	Household size (members)				
		2 to 5	6 to 9	10 to 14	15 to 19	20+
TOTAL	100.00%	5.54%	39.82%	34.66%	11.05%	8.92%
Agro-ecological zone						
Badakhshan mountains	100.00%	8.29%	39.90%	24.87%	16.58%	10.36%
Central mountains	100.00%	3.64%	37.45%	35.63%	14.57%	8.70%
Eastern mountains	100.00%	2.81%	35.58%	44.59%	10.83%	6.19%
Southern mountains	100.00%	2.52%	26.47%	37.96%	17.79%	15.27%
Northern mountains	100.00%	7.76%	45.34%	28.53%	11.45%	6.93%
Turkistan plains	100.00%	8.73%	27.57%	29.25%	12.86%	21.59%
Herat-Farah lowlands	100.00%	7.74%	36.39%	35.24%	8.31%	12.32%
Helmand River valley	100.00%	3.19%	59.93%	36.70%	0.18%	
Region						
North	100.00%	8.16%	33.95%	32.73%	14.27%	10.89%
Northeast	100.00%	6.10%	49.59%	22.82%	11.39%	10.10%
West	100.00%	9.22%	37.65%	34.14%	8.06%	10.93%
West Central	100.00%	3.14%	40.36%	35.87%	13.45%	7.17%
Central	100.00%	3.03%	28.79%	36.13%	17.73%	14.31%
South	100.00%	2.61%	15.20%	37.64%	24.90%	19.65%
East	100.00%	2.73%	38.60%	48.73%	8.19%	1.75%
Southwest	100.00%	3.72%	59.90%	35.56%	0.36%	0.46%

A.3.4. Percent of population

	TOTAL	Household size (members)				
		2 to 5	6 to 9	10 to 14	15 to 19	20+
TOTAL	100.00%	2.13%	27.27%	34.47%	15.71%	20.43%
Agro-ecological zone						
Badakhshan mountains	100.00%	3.34%	27.58%	23.45%	22.88%	22.75%
Central mountains	100.00%	1.53%	25.06%	34.95%	20.39%	18.07%
Eastern mountains	100.00%	1.11%	24.26%	45.16%	15.14%	14.33%
Southern mountains	100.00%	0.81%	15.38%	32.25%	21.52%	30.04%
Northern mountains	100.00%	3.18%	32.71%	30.25%	17.20%	16.66%
Turkistan plains	100.00%	2.74%	14.86%	23.69%	14.50%	44.22%
Herat-Farah lowlands	100.00%	2.68%	24.06%	34.99%	11.82%	26.45%
Helmand River valley	100.00%	1.49%	55.24%	42.90%	0.37%	
Region						
North	100.00%	3.08%	21.83%	32.19%	19.38%	23.52%
Northeast	100.00%	2.37%	34.06%	22.08%	16.07%	25.41%
West	100.00%	3.40%	25.63%	34.66%	11.75%	24.55%
West Central	100.00%	1.32%	27.65%	36.71%	19.43%	14.88%
Central	100.00%	1.00%	16.72%	31.28%	21.70%	29.29%
South	100.00%	0.82%	7.99%	29.65%	27.51%	34.03%
East	100.00%	1.21%	28.86%	54.11%	12.28%	3.55%
Southwest	100.00%	1.88%	54.65%	41.70%	0.65%	1.11%

A.3.5. Average household size

	TOTAL	Household size (members)				
		2 to 5	6 to 9	10 to 14	15 to 19	20+
TOTAL	11.36	4.37	7.78	11.30	16.14	26.01
Agro-ecological zone						
Badakhshan mountains	11.78	4.75	8.14	11.10	16.25	25.85
Central mountains	11.61	4.89	7.77	11.39	16.24	24.09
Eastern mountains	11.42	4.5	7.79	11.56	15.96	26.43
Southern mountains	13.47	4.33	7.83	11.45	16.3	26.51
Northern mountains	10.69	4.38	7.71	11.33	16.06	25.71
Turkistan plains	14.10	4.42	7.60	11.42	15.89	28.88
Herat-Farah lowlands	11.54	4.00	7.63	11.46	16.41	24.77
Helmand River valley	8.68	4.06	8.00	10.15	18.00	
Region						
North	11.69	4.42	7.52	11.50	15.87	25.26
Northeast	11.54	4.48	7.93	11.17	16.30	29.04
West	11.20	4.13	7.62	11.37	16.32	25.16
West Central	11.24	4.71	7.70	11.5	16.23	23.31
Central	13.28	4.40	7.71	11.50	16.26	27.19
South	14.78	4.65	7.77	11.64	16.33	25.60
East	10.45	4.64	7.81	11.60	15.67	21.11
Southwest	8.75	4.43	7.98	10.26	16.05	21.00

Table A.4
Age of farmers by zones and regions

A.4.1. FARMERS								
	TOTAL	Age of farmer						
		10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	Over 70
TOTAL	1065274	6138	75995	222659	306495	232994	158027	62966
Agro-ecological zone								
Badakhshan mountains	35346		1099	6959	8058	7326	8608	3296
Central mountains	167168		9137	37900	66326	40608	12182	1015
Eastern mountains	177072	249	9228	30925	48882	45141	29928	12719
Southern mountains	79426	556	4895	17020	20468	17687	15796	3004
Northern mountains	281308	3117	24157	61041	80003	55586	38703	18702
Turkistan plains	74857	459	6190	13068	17654	16278	13871	7337
Herat-Farah lowlands	146759	841	8831	30277	40369	34062	23549	8831
Helmand River valley	103338	916	12459	25468	24735	16307	15391	8062
Region								
North	177764	2277	15808	35253	42450	40433	28874	12668
Northeast	164134	519	10962	33867	49757	28626	25813	14589
West	196371	1620	13506	42225	53876	44192	30042	10909
West Central	75463		4738	16581	31809	19289	2707	338
Central	104796	222	7159	20114	27015	28985	16799	4501
South	72871	334	1673	13883	21846	17804	16664	667
East	127692	249	5986	22446	38906	29928	19952	10225
Southwest	146183	916	16163	38290	40834	23738	17175	9068

Excluded some few cases with no age declared

A.4.2. Percentage of farmers

A.4.2. Percentage of farmers								
	TOTAL	Age of farmer						
		10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	Over 70
TOTAL	100.00%	0.60%	7.10%	20.90%	28.80%	21.90%	14.80%	5.90%
Agro-ecological zone								
Badakhshan mountains	100.00%		3.10%	19.70%	22.80%	20.70%	24.40%	9.30%
Central mountains	100.00%		5.50%	22.70%	39.70%	24.30%	7.30%	0.60%
Eastern mountains	100.00%	0.10%	5.20%	17.50%	27.60%	25.50%	16.90%	7.20%
Southern mountains	100.00%	0.70%	6.20%	21.40%	25.80%	22.30%	19.90%	3.80%
Northern mountains	100.00%	1.10%	8.60%	21.70%	28.40%	19.80%	13.80%	6.60%
Turkistan plains	100.00%	0.60%	8.30%	17.50%	23.60%	21.70%	18.50%	9.80%
Herat-Farah lowlands	100.00%	0.60%	6.00%	20.60%	27.50%	23.20%	16.00%	6.00%
Helmand River valley	100.00%	0.90%	12.10%	24.60%	23.90%	15.80%	14.90%	7.80%
Region								
North	100.00%	1.30%	8.90%	19.80%	23.90%	22.70%	16.20%	7.10%
Northeast	100.00%	0.30%	6.70%	20.60%	30.30%	17.40%	15.70%	8.90%
West	100.00%	0.80%	6.90%	21.50%	27.40%	22.50%	15.30%	5.60%
West Central	100.00%		6.30%	22.00%	42.20%	25.60%	3.60%	0.40%
Central	100.00%	0.20%	6.80%	19.20%	25.80%	27.70%	16.00%	4.30%
South	100.00%	0.50%	2.30%	19.10%	30.00%	24.40%	22.90%	0.90%
East	100.00%	0.20%	4.70%	17.60%	30.50%	23.40%	15.60%	8.00%
Southwest	100.00%	0.60%	11.10%	26.20%	27.90%	16.20%	11.70%	6.20%

**Table A.5. Farms with irrigated and rain-fed land
TOTAL AFGHANISTAN**

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	1,065,523	2,255	118,707	619,099	325,462
Farm size in hectares					
Below 0.50 Ha	144,840	2,006	8,199	128,576	6,059
0.50-0.99 Ha	122,445		8,308	97,315	16,822
1.00-1.99 Ha	187,815		11,932	132,822	43,061
2.00-4.99 Ha	277,481		33,584	150,289	93,608
5.00-9.99 Ha	158,770		28,324	61,715	68,731
10.0-19.9 Ha	98,737		16,817	29,422	52,497
20.0-49.9 Ha	58,760		8,182	14,179	36,399
50+ Ha	16,675	249	3,361	4,780	8,285

Agro-ecological zone Badakhshan mountains

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	35,346		9,340	5,128	20,878
Farm size in hectares					
Below 0.50 Ha	183			183	
0.50-0.99 Ha	1,099		366		733
1.00-1.99 Ha	2,930		916	733	1,282
2.00-4.99 Ha	13,735		4,029	2,381	7,326
5.00-9.99 Ha	10,256		3,296	916	6,044
10.0-19.9 Ha	3,663		733	366	2,564
20.0-49.9 Ha	2,564			549	2,015
50+ Ha	916				916

Agro-ecological zone Central mountains

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	167,168		15,228	69,371	82,569
Farm size in hectares					
Below 0.50 Ha	26,733		5,753	19,965	1,015
0.50-0.99 Ha	27,072		3,722	13,874	9,475
1.00-1.99 Ha	45,007		2,707	14,889	27,410
2.00-4.99 Ha	41,284		1,692	14,551	25,041
5.00-9.99 Ha	15,228		1,015	2,707	11,506
10.0-19.9 Ha	9,814		338	2,707	6,768
20.0-49.9 Ha	1,354			338	1,015
50+ Ha	677			338	338

**Table A.5. Farms with irrigated and rain-fed land
Agro-ecological zone Eastern mountains**

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	177,322	1,995	2,743	160,363	12,220
Farm size in hectares					
Below 0.50 Ha	68,335	1,746	1,247	64,095	1,247
0.50-0.99 Ha	38,906		1,247	34,167	3,492
1.00-1.99 Ha	38,407		249	35,664	2,494
2.00-4.99 Ha	25,937			22,196	3,741
5.00-9.99 Ha	3,741			3,242	499
10.0-19.9 Ha	249				249
20.0-49.9 Ha	748			249	499
50+ Ha	998	249		748	

Agro-ecological zone Southern mountains

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	79,426			61,405	18,021
Farm size in hectares					
Below 0.50 Ha	13,349			13,015	334
0.50-0.99 Ha	10,790			10,457	334
1.00-1.99 Ha	16,352			13,571	2,781
2.00-4.99 Ha	17,465			12,459	5,006
5.00-9.99 Ha	8,677			4,895	3,782
10.0-19.9 Ha	4,783			3,337	1,446
20.0-49.9 Ha	4,672			2,781	1,891
50+ Ha	3,337			890	2,447

Agro-ecological zone Northern mountains

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	281,308	260	78,184	47,274	#####
Farm size in hectares					
Below 0.50 Ha	5,714	260	779	4,156	519
0.50-0.99 Ha	7,013		2,857	3,896	260
1.00-1.99 Ha	22,598		7,273	11,429	3,896
2.00-4.99 Ha	85,457		24,936	16,104	44,417
5.00-9.99 Ha	70,132		21,040	7,533	41,560
10.0-19.9 Ha	49,093		12,208	2,857	34,027
20.0-49.9 Ha	35,066		7,013	1,039	27,014
50+ Ha	6,234		2,078	260	3,896

**Table A.5. Farms with irrigated and rain-fed land
Agro-ecological zone Turkistan plains**

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	74,857		7,337	50,439	17,081
Farm size in hectares					
Below 0.50 Ha	3,324			3,324	
0.50-0.99 Ha	2,981		115	2,751	115
1.00-1.99 Ha	6,763			5,846	917
2.00-4.99 Ha	18,342		1,720	13,871	2,751
5.00-9.99 Ha	17,081		1,949	10,890	4,242
10.0-19.9 Ha	16,507		2,751	8,254	5,502
20.0-49.9 Ha	7,910		802	4,242	2,866
50+ Ha	1,949			1,261	688

Agro-ecological zone Herat-Farah lowlands

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	146,759		2,944	132,041	11,774
Farm size in hectares					
Below 0.50 Ha	20,605		421	17,241	2,944
0.50-0.99 Ha	21,026			19,344	1,682
1.00-1.99 Ha	33,221		421	29,436	3,364
2.00-4.99 Ha	46,677		841	42,892	2,944
5.00-9.99 Ha	18,082		841	17,241	
10.0-19.9 Ha	5,467		421	4,205	841
20.0-49.9 Ha	1,682			1,682	
50+ Ha					

Agro-ecological zone Helmand River valley

	TOTAL	Types of land in the farm			
		No arable land	Only rain-fed	Only irrigated	Both
TOTAL	103,338		2,932	93,077	7,329
Farm size in hectares					
Below 0.50 Ha	6,596			6,596	
0.50-0.99 Ha	13,558			12,826	733
1.00-1.99 Ha	22,536		366	21,254	916
2.00-4.99 Ha	28,583		366	25,834	2,382
5.00-9.99 Ha	15,574		183	14,291	1,099
10.0-19.9 Ha	9,161		366	7,695	1,099
20.0-49.9 Ha	4,764		366	3,298	1,099
50+ Ha	2,565		1,283	1,283	

Table A.6.1
Arable irrigated and rain-fed land by farm size (in hectares)
TOTAL AFGHANISTAN

	Total arable	Irrigated	Rain-fed
TOTAL	6,536,971	3,048,801	3,488,170
Farm size in hectares			
Below 0.50 Ha	52,583	48,647	3,935
0.50-0.99 Ha	84,384	72,580	11,803
1.00-1.99 Ha	254,858	207,088	47,770
2.00-4.99 Ha	880,542	588,104	292,438
5.00-9.99 Ha	1,087,828	553,714	534,114
10.0-19.9 Ha	1,290,979	559,789	731,190
20.0-49.9 Ha	1,695,166	574,148	1,121,018
50+ Ha	1,190,632	444,731	745,901

Agro-ecological zone Badakhshan mountains

	Total arable	Irrigated	Rain-fed
TOTAL	374,900	102,463	272,437
Farm size in hectares			
Below 0.50 Ha	256	256	0
0.50-0.99 Ha	809	76	733
1.00-1.99 Ha	4,251	2,127	2,124
2.00-4.99 Ha	45,023	17,589	27,434
5.00-9.99 Ha	69,119	18,500	50,619
10.0-19.9 Ha	45,858	15,347	30,511
20.0-49.9 Ha	74,318	37,836	36,481
50+ Ha	135,266	10,732	124,534

Agro-ecological zone Central mountains

	Total arable	Irrigated	Rain-fed
TOTAL	522,797	314,649	208,148
Farm size in hectares			
Below 0.50 Ha	8,832	6,599	2,233
0.50-0.99 Ha	18,619	12,528	6,091
1.00-1.99 Ha	62,400	37,900	24,500
2.00-4.99 Ha	125,275	81,215	44,059
5.00-9.99 Ha	103,550	45,007	58,543
10.0-19.9 Ha	119,183	68,119	51,064
20.0-49.9 Ha	32,825	12,521	20,304
50+ Ha	52,113	50,760	1,354

Agro-ecological zone Eastern mountains

	Total arable	Irrigated	Rain-fed
TOTAL	245,571	220,431	25,139
Farm size in hectares			
Below 0.50 Ha	23,538	22,939	599
0.50-0.99 Ha	26,954	25,158	1,796
1.00-1.99 Ha	54,141	52,195	1,945
2.00-4.99 Ha	84,174	79,834	4,340
5.00-9.99 Ha	28,582	28,233	349
10.0-19.9 Ha	2,494	1,995	499
20.0-49.9 Ha	22,346	6,734	15,612
50+ Ha	3,343	3,343	0

Agro-ecological zone Southern mountains

	Total arable	Irrigated	Rain-fed
TOTAL	607,309	407,875	199,434
Farm size in hectares			
Below 0.50 Ha	8,783	8,716	67
0.50-0.99 Ha	7,164	7,097	67
1.00-1.99 Ha	21,091	19,868	1,224
2.00-4.99 Ha	52,461	44,052	8,410
5.00-9.99 Ha	55,954	40,336	15,618
10.0-19.9 Ha	62,275	49,082	13,193
20.0-49.9 Ha	119,918	90,996	28,923
50+ Ha	279,661	147,729	131,932

Agro-ecological zone Northern mountains

	Total arable	Irrigated	Rain-fed
TOTAL	2,823,010	477,167	2,345,843
Farm size in hectares			
Below 0.50 Ha	1,646	1,283	364
0.50-0.99 Ha	4,935	2,753	2,182
1.00-1.99 Ha	31,559	18,624	12,935
2.00-4.99 Ha	285,995	101,002	184,993
5.00-9.99 Ha	479,013	118,170	360,843
10.0-19.9 Ha	637,026	112,593	524,433
20.0-49.9 Ha	1,010,330	103,911	906,419
50+ Ha	372,506	18,832	353,674

Agro-ecological zone Turkistan plains

	Total arable	Irrigated	Rain-fed
TOTAL	789,777	513,025	276,752
Farm size in hectares			
Below 0.50 Ha	1,384	1,384	0
0.50-0.99 Ha	1,983	1,846	138
1.00-1.99 Ha	9,058	8,049	1,009
2.00-4.99 Ha	55,610	43,114	12,495
5.00-9.99 Ha	115,197	80,806	34,391
10.0-19.9 Ha	218,002	128,426	89,576
20.0-49.9 Ha	224,134	140,244	83,890
50+ Ha	164,410	109,156	55,254

Agro-ecological zone Herat-Farah lowlands

	Total arable	Irrigated	Rain-fed
TOTAL	445,957	422,408	23,549
Farm size in hectares			
Below 0.50 Ha	5,908	5,235	673
0.50-0.99 Ha	14,667	14,163	505
1.00-1.99 Ha	42,908	40,049	2,859
2.00-4.99 Ha	140,575	135,109	5,467
5.00-9.99 Ha	119,192	113,137	6,055
10.0-19.9 Ha	70,226	62,236	7,990
20.0-49.9 Ha	52,480	52,480	0
50+ Ha	.	.	.

Agro-ecological zone Helmand River valley

	Total arable	Irrigated	Rain-fed
TOTAL	727,650	590,783	136,868
Farm size in hectares			
Below 0.50 Ha	2,235	2,235	0
0.50-0.99 Ha	9,253	8,960	293
1.00-1.99 Ha	29,448	28,276	1,173
2.00-4.99 Ha	91,429	86,189	5,240
5.00-9.99 Ha	117,221	109,525	7,695
10.0-19.9 Ha	135,916	121,991	13,925
20.0-49.9 Ha	158,815	129,426	29,389
50+ Ha	183,333	104,181	79,152

Table A.6.2
Total, irrigated and rain-fed arable land
by agro-ecological zone and region

	Total arable	Irrigated	Rain-fed
TOTAL	6,536,971	3,048,801	3,488,170
Agro-ecological zone			
Badakhshan mountains	374,900	102,463	272,437
Central mountains	522,797	314,649	208,148
Eastern mountains	245,571	220,431	25,139
Southern mountains	607,309	407,875	199,434
Northern mountains	2,823,010	477,167	2,345,843
Turkistan plains	789,777	513,025	276,752
Herat-Farah lowlands	445,957	422,408	23,549
Helmand River valley	727,650	590,783	136,868
Region			
North	2,384,953	569,267	1,815,686
Northeast	1,226,192	486,753	739,439
West	822,499	459,043	363,456
West Central	241,448	78,713	162,735
Central	158,130	135,927	22,203
South	653,309	436,459	216,850
East	162,671	147,508	15,163
Southwest	887,768	735,131	152,637

Areas in this and other tables concerning arable land reflect irrigated and rain-fed land that is actually cultivable, as explained in Annex I.

Table A.7
Farm households and population by condition of settlement
A.7.1. Households

	Total	Resident	Returnee	IDP
Total	1,065,523	1,033,598	27,236	4,690
Agro-ecological zone				
Badakhshan mountains	35,346	34,796	549	
Central mountains	167,168	164,123	2,707	338
Eastern mountains	177,322	164,852	10,724	1,746
Southern mountains	79,426	75,088	4,116	222
Northern mountains	281,308	275,074	5,974	260
Turkistan plains	74,857	74,398	459	
Herat-Farah lowlands	146,759	143,395	2,523	841
Helmand River valley	103,338	101,872	183	1,283

Table A.7
Farm households and population by condition of settlement
A.7.1. Households

	Total	Resident	Returnee	IDP
Region				
North	177,764	176,267	1,498	
Northeast	164,134	163,325	549	260
West	196,371	188,072	7,458	841
West Central	75,463	74,786	338	338
Central	104,796	101,292	3,281	222
South	72,871	69,757	3,115	
East	127,941	115,720	10,475	1,746
Southwest	146,183	144,379	522	1,283

A.7.2. Total farm population

	Total	Resident	Returnee	IDP
Total	12,103,964	11,779,092	276,726	48,145
Agro-ecological zone				
Badakhshan mountains	416,274	411,512	4,762	.
Central mountains	1,940,369	1,907,545	26,733	6,091
Eastern mountains	2,024,525	1,897,582	110,234	16,710
Southern mountains	1,070,254	1,020,084	47,834	2,336
Northern mountains	3,006,333	2,953,344	49,093	3,896
Turkistan plains	1,055,560	1,050,860	4,700	.
Herat-Farah lowlands	1,693,406	1,654,298	31,538	7,569
Helmand River valley	897,243	883,868	1,832	11,543
Region				
North	2,078,376	2,066,922	11,454	.
Northeast	1,894,579	1,885,921	4,762	3,896
West	2,198,617	2,117,170	73,878	7,569
West Central	848,023	839,225	2,707	6,091
Central	1,391,899	1,354,505	35,058	2,336
South	1,077,180	1,040,359	36,821	.
East	1,336,686	1,213,484	106,493	16,710
Southwest	1,278,603	1,261,505	5,555	11,543

A.7.3. Average household size

	Total	Resident	Returnee	IDP
Total	11.36	11.40	10.16	10.27
Agro-ecological zone				
Badakhshan mountains	11.78	11.83	8.67	.
Central mountains	11.61	11.62	9.88	18.00
Eastern mountains	11.42	11.51	10.28	9.57
Southern mountains	13.47	13.59	11.62	10.50
Northern mountains	10.69	10.74	8.22	15.00
Turkistan plains	14.10	14.12	10.25	.
Herat-Farah lowlands	11.54	11.54	12.50	9.00
Helmand River valley	8.68	8.68	10.00	9.00
Region				
North	11.69	11.73	7.65	.
Northeast	11.54	11.55	8.67	15.00
West	11.20	11.26	9.91	9.00
West Central	11.24	11.22	8.00	18.00
Central	13.28	13.37	10.69	10.50
South	14.78	14.91	11.82	.
East	10.45	10.49	10.17	9.57
Southwest	8.75	8.74	10.65	9.00

Table A.8
Land preparation techniques for irrigated land: Implements used before planting
(Number of villages reporting habitual use of each implement)

	Implements used before planting irrigated fields							Total villages reporting
	Iron plough	Wooden plough	Harrow	Hand tools	Mala	Other		
TOTAL	274	337	125	161	274	10	481	
Agro-ecological zone								
Badakhshan mountains	4	11	6	2	11	1	14	
Central mountains	25	59	21	17	37		69	
Eastern mountains	107	113	44	86	84	9	145	
Southern mountains	6	0	2	5	1		6	
Northern mountains	38	57	21	16	38	1	71	
Turkistan plains	21	29	9	9	25		43	
Herat-Farah lowlands	72	67	20	26	77		133	
Helmand River valley	1	0		0	1		1	
Region								
North	29	50	11	20	41		67	
Northeast	31	38	23	6	28	1	47	
West	78	88	26	26	88		160	
West Central	6	26	11	10	21		27	
Central	53	54	39	40	34	1	80	
South	5	0	2	5	1		5	
East	54	59	5	45	50	8	64	
Southwest	18	22	7	8	11		30	

The "mala" is a heavy wooden bar, drawn by oxen, used to level the terrain.

Table A.9
Land preparation techniques for rain-fed land: Implements used before planting
(Number of villages reporting habitual use of each implement)

	Implements used before planting rain-fed fields						Total villages reporting
	Iron plough	Wooden plough	Harrow	Hand tools	Mala	Other	
TOTAL	63	130	24	43	90		167
Agro-ecological zone							
Badakhshan mountains	4	14	6	3	12		16
Central mountains	11	24	1	6	14		31
Eastern mountains	12	13	3	4	8		17
Southern mountains	1	0	1	1	0		1
Northern mountains	20	44	12	13	36		55
Turkistan plains	4	23	2	5	9		25
Herat-Farah lowlands	10	10		10	10		20
Helmand River valley	0						0
Region							
North	9	40	6	17	30		48
Northeast	15	28	14	5	20		32
West	16	25	1	10	19		40
West Central	4	19		6	10		21
Central	4	5	3	4	1		9
South	1	0	1	1	0		1
East	8	8			7		8
Southwest	6	4			1		8

Table A.10
Land cultivation techniques: Implements used after planting
(Number of villages reporting habitual use of each implement)
A.10.1. Irrigated fields

	Implements used after planting				Total villages reporting	Total villages
	Wooden plough	Harrow	Mala	Other		
TOTAL	188	48	402		411	516
Agro-ecological zone						
Badakhshan mountains	14	3	13		14	19
Central mountains	21	6	65		67	74
Eastern mountains	58	18	140		140	147
Southern mountains	4	1	6		6	6
Northern mountains	27	7	67		69	80
Turkistan plains	18	9	38		43	50
Herat-Farah lowlands	46	5	72		72	138
Helmand River valley	0		1		1	1
Region						
North	30	4	66		67	78
Northeast	28	15	40		46	54
West	52	5	98		98	171
West Central	6	1	26		26	31
Central	38	13	80		80	82
South	4	1	5		5	5
East	20	5	59		59	65
Southwest	9	5	27		30	30

Table A.10
Land cultivation techniques: Implements used after planting
(Number of villages reporting habitual use of each implement)
A.10.2. Rain-fed fields

	Implements used after planting				Total villages reporting	Total villages reporting
	Wooden plough	Harrow	Mala	Other		
TOTAL	50	19	121		139	516
Agro-ecological zone						
Badakhshan mountains	12	4	13		14	19
Central mountains	2	2	26		27	74
Eastern mountains	5	1	11		16	147
Southern mountains	1	1	1		1	6
Northern mountains	20	4	47		51	80
Turkistan plains	3	8	17		24	50
Herat-Farah lowlands	5		5		5	138
Helmand River valley			0		0	1
Region						
North	21	5	40		46	78
Northeast	15	9	23		27	54
West	5	1	22		23	171
West Central	1	2	16		17	31
Central	5		3		6	82
South	1	1	1		1	5
East		1	8		10	65
Southwest	1		8		8	30

Table A.11
Land preparation techniques: Number of operations performed before planting (Number of
villages reporting)

A.11.1. Irrigated fields

	Total villages	Number of operations in irrigated fields					
		1	2	3	4	5	Not stated
TOTAL	515	51	177	146	47	22	72
Agro-ecological zone							
Badakhshan mountains	32		4	13	2		13
Central mountains	59	11	27	6	2	8	5
Eastern mountains	117	1	36	42	26	4	8
Southern mountains	59	9	4	29	1		16
Northern mountains	114	9	38	30	9	10	18
Turkistan plains	60	2	35	11	2		10
Herat-Farah lowlands	27	7	14	1	5		
Helmand River valley	47	12	19	14			2
Region							
North	105	6	49	17	5	10	18
Northeast	77	3	14	35	8		17
West	63	14	32	5	5		7
West Central	25		13	4	1	3	4
Central	65		31	23	5	2	4
South	49		3	29	1		16
East	52	1	5	19	21	2	4
Southwest	79	27	30	14	1	5	2

(*) Cases with four or five operations reported before planting may be mistakes, as there are normally less passes. Could refer to implements that are used in the village , even if not in the same field.

A.11.2. Rain-fed fields

	Total villages	Operations in rain-fed fields				
		1	2	3	4	Not stated
TOTAL	515	39	93	48	15	320
Agro-ecological zone						
Badakhshan mountains	32		17	11		4
Central mountains	59	7	16	2		34
Eastern mountains	117	3	9	4		101
Southern mountains	59	5	2	4		48
Northern mountains	114	13	31	21	15	34
Turkistan plains	60	8	18	4		30
Herat-Farah lowlands	27	2		2		23
Helmand River valley	47	1				46
Region						
North	105	9	31	16	11	38
Northeast	77	3	23	18	4	29
West	63	11	13	5		34
West Central	25	3	14			8
Central	65	3	6			56
South	49	5	2	4		38
East	52		3	4		45
Southwest	79	5	1	1		72

Table A.12
Land cultivation techniques: Number of operations performed after planting
(Number of villages reporting)
A.12.1. Irrigated fields

	Total villages	Number of operations after planting				
		1	2	3*	4*	Not reported
TOTAL	516	186	164	29	1	136
Agro-ecological zone						
Badakhshan mountains	19		11	1		7
Central mountains	74	40	16	4		14
Eastern mountains	147	59	53	15	1	18
Southern mountains	6	1	2	2		2
Northern mountains	80	36	24	5		15
Turkistan plains	50	19	21	2		9
Herat-Farah lowlands	138	31	36			72
Helmand River valley	1	1	0			0
Region						
North	78	30	32	3		13
Northeast	54	14	24	5		10
West	171	49	43			80
West Central	31	15	2	2		11
Central	82	28	34	11	1	8
South	5		2	2		2
East	65	31	19	4		11
Southwest	30	20	8	1		1

(*) Cases with three or four operations reported after planting may be mistakes. Probably refers to implements frequently used, though not necessarily in the same field and the same season.

A.12.2. Rain-fed fields

	Total villages	Number of operations after planting			
		1	2	3	Not reported
TOTAL	516	86	37	5	388
Agro-ecological zone					
Badakhshan mountains	19	1	9	3	6
Central mountains	74	20	1	1	51
Eastern mountains	147	15			132
Southern mountains	6	0	1	0	5
Northern mountains	80	31	17	1	31
Turkistan plains	50	19	3		28
Herat-Farah lowlands	138		5		133
Helmand River valley	1	0			1
Region					
North	78	25	19		33
Northeast	54	12	11	4	27
West	171	16	5		150
West Central	31	14		1	16
Central	82	5			77
South	5	0	1	0	4
East	65	10			55
Southwest	30	4	1		25

Table A.13
Use of tractor for ploughing land in two agricultural years

A.13.1. Farms

	TOTAL	Use of tractor in 2001/02		Use of tractor in 2002/03	
		No	Yes	No	Yes
TOTAL	1,065,523	656,330	409,193	579,103	486,420
Agro-ecological zone					
Badakhshan mountains	35,346	35,163	183	34,247	1,099
Central mountains	167,168	146,188	20,981	129,944	37,224
Eastern mountains	177,322	110,483	66,839	101,006	76,316
Southern mountains	79,426	24,807	54,620	18,911	60,515
Northern mountains	281,308	186,759	94,549	159,226	122,082
Turkistan plains	74,857	33,817	41,039	31,295	43,561
Herat-Farah lowlands	146,759	94,195	52,564	85,785	60,974
Helmand River valley	103,338	24,918	78,419	18,689	84,649
Region					
North	177,764	122,810	54,954	107,530	70,235
Northeast	164,134	95,526	68,609	79,575	84,559
West	196,371	131,599	64,772	123,448	72,923
West Central	75,463	75,124	338	69,710	5,753
Central	104,796	82,749	22,047	74,944	29,852
South	72,871	40,806	32,066	38,915	33,957
East	127,941	64,345	63,596	57,611	70,330
Southwest	146,183	43,372	102,811	27,371	118,812

A.13.2. Percent of farms

	TOTAL	Use of tractor in 2001/02		Use of tractor in 2002/03	
		No	Yes	No	Yes
TOTAL	100.00%	61.60%	38.40%	54.30%	45.70%
Agro-ecological zone					
Badakhshan mountains	100.00%	99.50%	0.50%	96.90%	3.10%
Central mountains	100.00%	87.40%	12.60%	77.70%	22.30%
Eastern mountains	100.00%	62.30%	37.70%	57.00%	43.00%
Southern mountains	100.00%	31.20%	68.80%	23.80%	76.20%
Northern mountains	100.00%	66.40%	33.60%	56.60%	43.40%
Turkistan plains	100.00%	45.20%	54.80%	41.80%	58.20%
Herat-Farah lowlands	100.00%	64.20%	35.80%	58.50%	41.50%
Helmand River valley	100.00%	24.10%	75.90%	18.10%	81.90%
Region					
North	100.00%	69.10%	30.90%	60.50%	39.50%
Northeast	100.00%	58.20%	41.80%	48.50%	51.50%
West	100.00%	67.00%	33.00%	62.90%	37.10%
West Central	100.00%	99.60%	0.40%	92.40%	7.60%
Central	100.00%	79.00%	21.00%	71.50%	28.50%
South	100.00%	56.00%	44.00%	53.40%	46.60%
East	100.00%	50.30%	49.70%	45.00%	55.00%
Southwest	100.00%	29.70%	70.30%	18.70%	81.30%

Table A.13
Use of tractor for ploughing land in two agricultural years
A.13.3. Area with crops (hectares)

	TOTAL	Use of tractor in 2001/02		Use of tractor in 2002/03	
		No	Yes	No	Yes
TOTAL	3,413,081	1,860,546	1,552,534	1,585,216	1,827,865
Agro-ecological zone					
Badakhshan mountains	187,314	186,728	586	182,186	5,128
Central mountains	316,774	263,645	53,128	215,119	101,655
Eastern mountains	184,512	93,143	91,369	87,805	96,706
Southern mountains	237,033	20,424	216,609	10,023	227,011
Northern mountains	1,532,622	931,849	600,773	764,986	767,636
Turkistan plains	387,565	198,204	189,361	180,791	206,774
Herat-Farah lowlands	215,345	132,420	82,925	121,402	93,943
Helmand River valley	351,916	34,134	317,782	22,903	329,013
Region					
North	1,128,068	785,682	342,385	665,603	462,465
Northeast	799,428	429,147	370,281	356,409	443,019
West	395,351	234,371	160,980	227,354	167,997
West Central	200,365	200,230	135	184,054	16,311
Central	74,518	58,942	15,576	52,604	21,913
South	206,178	18,016	188,162	15,958	190,220
East	144,733	55,932	88,801	53,339	91,394
Southwest	464,442	78,226	386,215	29,895	434,546

A.13.4. Percent of crop area

	TOTAL	Use of tractor in 2001/02		Use of tractor in 2002/03	
		No	Yes	No	Yes
TOTAL	100.00%	54.50%	45.50%	46.40%	53.60%
Agro-ecological zone					
Badakhshan mountains	100.00%	99.70%	0.30%	97.30%	2.70%
Central mountains	100.00%	83.20%	16.80%	67.90%	32.10%
Eastern mountains	100.00%	50.50%	49.50%	47.60%	52.40%
Southern mountains	100.00%	8.60%	91.40%	4.20%	95.80%
Northern mountains	100.00%	60.80%	39.20%	49.90%	50.10%
Turkistan plains	100.00%	51.10%	48.90%	46.60%	53.40%
Herat-Farah lowlands	100.00%	61.50%	38.50%	56.40%	43.60%
Helmand River valley	100.00%	9.70%	90.30%	6.50%	93.50%
Region					
North	100.00%	69.60%	30.40%	59.00%	41.00%
Northeast	100.00%	53.70%	46.30%	44.60%	55.40%
West	100.00%	59.30%	40.70%	57.50%	42.50%
West Central	100.00%	99.90%	0.10%	91.90%	8.10%
Central	100.00%	79.10%	20.90%	70.60%	29.40%
South	100.00%	8.70%	91.30%	7.70%	92.30%
East	100.00%	38.60%	61.40%	36.90%	63.10%
Southwest	100.00%	16.80%	83.20%	6.40%	93.60%

Table A.14
A.14.2. Varieties of improved seeds, 2001-2002 (Kg used)

	Takhar-96	Kauz-92	Pamir-94	Inqilab-91	Roshan	Ghori-96	Gul-96	Mazar-96
TOTAL	28,825,862	14,446,297	14,870,038	8,734,228	5,449,269	3,950,848	2,473,670	1,932,618
Agro-ecological zone								
Badakhshan mountains	6,016,279	0	5,458,623	128,197	0	494,840	12,820	32,049
Central mountains	0	11,844	3,314,262	281,885	0	16,581	0	0
Eastern mountains	13,966	5,387,487	1,070,165	3,124,952	260,122	0	0	0
Southern mountains	13,238	176,763	2,098,571	70,861	0	0	46,721	0
Northern mountains	22,510,350	717,686	2,436,703	2,554,889	2,852,042	3,436,217	2,229,164	1,348,096
Turkistan plains	272,029	1,157,930	128,391	2,573,444	1,112,993	3,210	152,465	458,999
Herat-Farah lowlands	0	147,180	363,323	0	1,224,113	0	10,513	20,185
Helmand River valley	0	6,847,409	0	0	0	0	21,987	73,289
Region								
North	1,070,237	1,259,751	597,498	4,191,679	2,575,337	932,331	1,617,967	726,281
Northeast	27,709,719	590,929	7,075,039	611,849	1,337,748	2,567,635	776,481	1,106,630
West	18,702	172,115	714,504	453,002	1,276,063	434,300	10,513	26,419
West Central	0	0	1,708,229	127,914	0	16,581	0	0
Central	0	36,285	4,135,749	317,559	0	0	0	0
South	13,238	176,763	269,427	52,172	0	0	46,721	0
East	13,966	5,363,046	298,529	2,980,052	260,122	0	0	0
Southwest	0	6,847,409	71,063	0	0	0	21,987	73,289

Table A.14.
A.14.2. Varieties of improved seeds, 2001-2002 (Kg used)

	Amu 99	Herat 99	Diana	Rana	Maxipak	Indian Red	Other improved	Total improved	Local varieties	Total wheat seed
TOTAL	819,278	752,645	85,276	31,538	10,854,713	3,386,069	56,064,659	152,677,008	135,668,504	288,345,512
Agro-ecological zone										
Badakhshan mountains	17,948	134,607	0	0	469,201	138,453	338,440	13,241,454	9,668,608	22,910,062
Central mountains	0	106,595	85,276	0	506,919	80,539	743,797	5,147,697	23,380,873	28,528,570
Eastern mountains	69,831	0	0	0	1,146,979	34,916	1,515,340	12,623,758	3,512,516	16,136,273
Southern mountains	0	18,689	0	0	229,714	143,279	534,182	3,332,016	14,534,591	17,866,607
Northern mountains	390,922	314,036	0	0	4,607,424	2,487,354	33,275,379	79,160,264	38,106,707	117,266,971
Turkistan plains	88,269	0	0	0	1,304,777	501,529	14,074,903	21,828,939	13,867,872	35,696,811
Herat-Farah lowlands	252,308	178,718	0	31,538	2,479,765	0	4,530,186	9,237,829	16,913,452	26,151,281
Helmand River valley	0	0	0	0	109,934	0	1,052,433	8,105,051	15,683,886	23,788,938
Region										
North	408,280	0	0	0	4,017,753	2,479,776	21,338,404	41,215,293	31,591,976	72,807,270
Northeast	88,859	365,523	0	0	1,745,447	538,466	25,639,646	70,153,971	22,189,133	92,343,104
West	252,308	261,838	0	31,538	3,097,967	109,094	5,240,859	12,099,222	24,775,529	36,874,750
West Central	0	23,688	85,276	0	97,120	80,539	172,921	2,312,268	14,882,706	17,194,973
Central	0	85,014	0	0	934,274	0	931,009	6,439,891	4,991,580	11,431,471
South	0	0	0	0	77,090	143,279	576,085	1,354,776	15,901,899	17,256,675
East	69,831	0	0	0	775,128	34,916	1,075,402	10,870,991	698,313	11,569,305
Southwest	0	16,581	0	0	109,934	0	1,090,333	8,230,597	20,637,367	28,867,964

Table A.15
A.15.1. Varieties used of improved seeds, 2001-2002 (percent of total wheat seed)

	Takhar 96	Kauz 92	Pamir 94	Inqilab 91	Roshan	Ghori 96	Gul 96	Mazar 96
TOTAL	10.00%	5.01%	5.16%	3.03%	1.89%	1.37%	0.86%	0.67%
Agro-ecological zone								
Badakhshan mountains	26.26%	0.00%	23.83%	0.56%	0.00%	2.16%	0.06%	0.14%
Central mountains	0.00%	0.04%	11.62%	0.99%	0.00%	0.06%	0.00%	0.00%
Eastern mountains	0.09%	33.39%	6.63%	19.37%	1.61%	0.00%	0.00%	0.00%
Southern mountains	0.07%	0.99%	11.75%	0.40%	0.00%	0.00%	0.26%	0.00%
Northern mountains	19.20%	0.61%	2.08%	2.18%	2.43%	2.93%	1.90%	1.15%
Turkistan plains	0.76%	3.24%	0.36%	7.21%	3.12%	0.01%	0.43%	1.29%
Herat-Farah lowlands	0.00%	0.56%	1.39%	0.00%	4.68%	0.00%	0.04%	0.08%
Helmand River valley	0.00%	28.78%	0.00%	0.00%	0.00%	0.00%	0.09%	0.31%
Region								
North	1.47%	1.73%	0.82%	5.76%	3.54%	1.28%	2.22%	1.00%
Northeast	30.01%	0.64%	7.66%	0.66%	1.45%	2.78%	0.84%	1.20%
West	0.05%	0.47%	1.94%	1.23%	3.46%	1.18%	0.03%	0.07%
West Central	0.00%	0.00%	9.93%	0.74%	0.00%	0.10%	0.00%	0.00%
Central	0.00%	0.32%	36.18%	2.78%	0.00%	0.00%	0.00%	0.00%
South	0.08%	1.02%	1.56%	0.30%	0.00%	0.00%	0.27%	0.00%
East	0.12%	46.36%	2.58%	25.76%	2.25%	0.00%	0.00%	0.00%
Southwest	0.00%	23.72%	0.25%	0.00%	0.00%	0.00%	0.08%	0.25%

Table A.15
A.15.2. Varieties used of improved seeds, 2001-2002 (percent of total wheat seed)

	Amu 99	Herat 99	Diana	Rana	Maxipak	Indian Red	Other improved	Total improved	Local varieties	Total wheat seed
TOTAL	0.28%	0.26%	0.03%	0.01%	3.76%	1.17%	19.44%	52.95%	47.05%	100.00%
Agro-ecological zone										
Badakhsan mountains	0.08%	0.59%	0.00%	0.00%	2.05%	0.60%	1.48%	57.80%	42.20%	100.00%
Central mountains	0.00%	0.37%	0.30%	0.00%	1.78%	0.28%	2.61%	18.04%	81.96%	100.00%
Eastern mountains	0.43%	0.00%	0.00%	0.00%	7.11%	0.22%	9.39%	78.23%	21.77%	100.00%
Southern mountains	0.00%	0.10%	0.00%	0.00%	1.29%	0.80%	2.99%	18.65%	81.35%	100.00%
Northern mountains	0.33%	0.27%	0.00%	0.00%	3.93%	2.12%	28.38%	67.50%	32.50%	100.00%
Turkistan plains	0.25%	0.00%	0.00%	0.00%	3.66%	1.40%	39.43%	61.15%	38.85%	100.00%
Herat-Farah lowlands	0.96%	0.68%	0.00%	0.12%	9.48%	0.00%	17.32%	35.32%	64.68%	100.00%
Helmand River valley	0.00%	0.00%	0.00%	0.00%	0.46%	0.00%	4.42%	34.07%	65.93%	100.00%
Region										
North	0.56%	0.00%	0.00%	0.00%	5.52%	3.41%	29.31%	56.61%	43.39%	100.00%
Northeast	0.10%	0.40%	0.00%	0.00%	1.89%	0.58%	27.77%	75.97%	24.03%	100.00%
West	0.68%	0.71%	0.00%	0.09%	8.40%	0.30%	14.21%	32.81%	67.19%	100.00%
West Central	0.00%	0.14%	0.50%	0.00%	0.56%	0.47%	1.01%	13.45%	86.55%	100.00%
Central	0.00%	0.74%	0.00%	0.00%	8.17%	0.00%	8.14%	56.33%	43.67%	100.00%
South	0.00%	0.00%	0.00%	0.00%	0.45%	0.83%	3.34%	7.85%	92.15%	100.00%
East	0.60%	0.00%	0.00%	0.00%	6.70%	0.30%	9.30%	93.96%	6.04%	100.00%
Southwest	0.00%	0.06%	0.00%	0.00%	0.38%	0.00%	3.78%	28.51%	71.49%	100.00%

Table A.16
Use of fertiliser on irrigated wheat, 2001-2002

A.16.1. Farms planting irrigated wheat and applying fertiliser, 2001-02

	Total farms	Farms with irrigated wheat	Farms fertilising irrigated wheat			
			Total	Urea	DAP	Other
TOTAL	1,065,523	848,795	684,051	624,180	621,784	9,357
Agro-ecological zone						
Badakhshan mountains	35,346	25,090	24,541	24,541	24,174	0
Central mountains	167,168	129,268	85,276	81,215	84,261	0
Eastern mountains	177,322	156,622	150,387	137,418	138,914	998
Southern mountains	79,426	65,744	54,731	52,061	50,281	222
Northern mountains	281,308	173,772	148,576	138,446	123,640	5,974
Turkistan plains	74,857	62,476	20,749	19,717	18,112	115
Herat-Farah lowlands	146,759	138,349	108,913	94,195	93,354	1,682
Helmand River valley	103,338	97,475	90,879	76,587	89,046	366
Region						
North	177,764	104,298	58,118	52,411	41,310	2,452
Northeast	164,134	129,507	117,565	116,786	109,552	0
West	196,371	165,882	127,095	107,702	108,419	5,319
West Central	75,463	58,881	19,965	19,627	19,627	0
Central	104,796	95,595	85,848	81,881	74,784	111
South	72,871	44,494	37,930	37,374	36,475	0
East	127,941	116,219	115,471	103,999	111,730	998
Southwest	146,183	133,919	122,057	104,400	119,886	478

Table A.16
Use of fertiliser on irrigated wheat, 2001-2002

	Area with irrigated wheat (hectares)		Fertiliser applied to irrigated wheat, Kg					Average rate (Kg/hectare)			
	Total	Fertilised	Urea	DAP	Other	Total	Urea	DAP	Other	Total	
TOTAL	1,242,425	995,944	98,136,066	78,335,699	1,129,193	177,182,779	99	79	1	178	
Agro-ecological zone											
Badkshsh mountains	65,197	64,575	8,408,432	6,920,067	0	15,328,499	130	107	0	237	
Central mountains	107,915	63,754	9,371,909	6,995,938	0	16,168,869	147	110	0	254	
Eastern mountains	108,164	101,330	15,506,045	9,322,482	19,204	24,716,797	153	92	0	244	
Southern mountains	91,774	71,217	7,749,360	5,781,220	24,473	13,549,603	109	81	0	190	
Northern mountains	290,971	271,827	32,334,439	25,718,897	570,928	58,624,264	119	95	2	216	
Turkistan plains	186,993	76,634	8,038,904	7,906,500	11,234	15,956,639	105	103	0	208	
Herat-Farah lowlands	173,798	139,694	9,606,198	9,845,050	477,703	19,928,950	69	70	3	143	
Helmand River valley	217,614	206,914	7,120,778	5,845,546	25,651	12,909,158	34	28	0	62	
Region											
North	190,179	94,175	8,118,838	6,434,487	414,884	14,968,210	86	68	4	159	
Northeast	337,656	307,951	39,737,712	32,917,431	0	72,655,144	129	107	0	236	
West	189,123	150,604	10,531,423	11,038,595	644,981	22,215,000	70	73	4	148	
West Central	53,230	11,573	2,037,151	1,192,088	0	3,212,658	176	103	0	278	
Central	59,801	52,475	9,723,026	8,380,627	15,574	17,912,390	185	160	0	341	
South	80,633	63,435	6,456,234	4,090,517	0	10,541,300	102	64	0	166	
East	80,555	79,483	10,986,213	6,255,141	19,204	17,154,065	138	79	0	216	
Southwest	251,247	236,249	10,545,468	8,026,813	34,551	18,524,015	45	34	0	78	

Fertiliser rates = amount of fertiliser used, divided by area of irrigated wheat in farms that applied fertiliser for irrigated wheat).

Table A.16
Use of fertiliser on irrigated wheat, 2001-2002

	Total used (metric tons)		Use of manure and fertiliser on irrigated wheat, 2001-02							
	Fertiliser	Manure	None used		Only manure used		Only fertiliser used		Both used	
			Area (Ha)	Area (Ha)	Area (Ha)	Manure MT	Area (Ha)	Fertiliser MT	Area (Ha)	Fertiliser MT
TOTAL	177,183	2,583,375	164,629	81,852	571,544	543,060	91,741	452,884	85,442	2,011,831
Agro-ecological zone										
Badakhshan mountains	15,328	157,581	623		0	37,946	8,188	26,628	7,141	157,581
Central mountains	16,169	712,884	3,249	40,912	415,535	19,086	4,749	44,668	11,420	297,350
Eastern mountains	24,717	281,121	5,911	923	8,105	56,227	13,984	45,104	10,733	273,016
Southern mountains	13,550	183,376	3,960	16,597	30,925	16,764	3,467	54,453	10,082	152,451
Northern mountains	58,624	663,944	14,104	5,039	26,261	101,302	25,420	170,525	33,205	637,683
Turkistan plains	15,957	27,914	106,381	3,978	23,099	73,332	15,047	3,301	910	4,815
Herat-Farah lowlands	19,929	496,100	26,114	7,990	55,297	84,313	13,522	55,382	6,407	440,803
Helmand River valley	12,909	60,454	4,287	6,413	12,322	154,091	7,365	52,823	5,544	48,133
Region										
North	14,968	234,979	88,291	7,714	40,678	68,355	11,462	25,819	3,506	194,301
Northeast	72,655	589,368	29,129	576	2,032	136,536	35,794	171,415	36,861	587,336
West	22,215	521,192	29,802	8,717	61,947	92,001	14,920	58,602	7,295	459,245
West Central	3,213	441,947	2,707	38,950	412,337	8,189	2,291	3,384	921	29,610
Central	17,912	304,784	5,951	1,375	10,350	18,286	6,057	34,188	11,855	294,434
South	10,541	144,434	1,958	15,240	25,613	6,441	710	56,994	9,831	118,820
East	17,154	218,797	474	599	4,115	43,108	9,572	36,375	7,582	214,681
Southwest	18,524	127,875	6,317	8,681	14,472	170,142	10,935	66,107	7,590	113,403

Manure originally expressed in donkey loads. Converted into metric tons assuming one donkey load = 50 kg.

Table A.17
Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.1. Farms applying fertiliser to irrigated wheat at different rates

	TOTAL	Total fertiliser rate (Kg/Ha)							
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg	
TOTAL	681,536	65,959	96,217	108,096	79,170	175,350	131,503	25,242	
Agro-ecological zone									
Badakhshan mountains	24,541	916	2,930	2,564	3,480	4,212	9,157	1,282	
Central mountains	85,276	338	4,061	16,920	17,597	17,597	17,935	10,829	
Eastern mountains	148,392	3,242	7,731	15,213	12,719	79,059	29,429	998	
Southern mountains	54,731	667	5,896	7,564	6,674	17,020	15,685	1,224	
Northern mountains	148,057	13,507	29,611	23,897	17,403	24,416	35,326	3,896	
Turkistan plains	20,749	3,095	2,522	2,178	802	1,261	10,776	115	
Herat-Farah lowlands	108,913	8,831	23,128	25,651	12,615	27,754	7,149	3,785	
Helmand River valley	90,879	35,362	20,338	14,108	7,879	4,031	6,046	3,115	
Region									
North	57,858	8,955	6,823	10,521	6,143	13,820	9,260	2,338	
Northeast	117,305	7,264	26,422	15,001	13,465	10,874	42,882	1,397	
West	127,095	10,130	24,946	28,768	14,693	32,949	10,266	5,343	
West Central	19,965		1,354	1,692	338	6,430	6,091	4,061	
Central	85,848	583	2,786	8,472	6,397	21,655	40,778	5,178	
South	37,930	334	3,119	7,389	12,933	10,818	3,226	111	
East	113,476	2,993	7,731	13,467	10,225	68,584	9,477	998	
Southwest	122,057	35,700	23,036	22,786	14,976	10,219	9,523	5,817	

Table A.17
Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.2. Area with irrigated wheat (in hectares) fertilised at different rates

	TOTAL	Total fertiliser rate (Kg/Ha)									
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg			
Agro-ecological zone	995,944	242,851	162,614	112,101	83,169	168,014	209,756	17,440			
Badakhshan mountains	64,575	5,751	10,036	5,751	8,241	12,014	20,951	1,831			
Central mountains	63,754	1,354	4,061	14,957	14,077	12,927	9,881	6,497			
Eastern mountains	101,330	4,240	2,793	8,068	8,243	60,579	17,109	299			
Southern mountains	71,217	834	20,335	11,324	9,789	17,231	11,013	690			
Northern mountains	271,827	41,482	51,171	25,949	21,975	30,469	98,185	2,597			
Turkistan plains	76,634	24,349	6,809	3,714	1,204	1,444	39,091	23			
Herat-Farah lowlands	139,694	22,203	39,486	26,324	13,667	28,385	7,023	2,607			
Helmand River valley	206,914	142,639	27,923	16,014	5,973	4,965	6,504	2,895			
Region											
North	94,175	34,671	10,788	8,657	6,512	19,469	12,052	2,026			
Northeast	307,951	34,754	56,449	24,912	23,142	22,094	144,746	1,854			
West	150,604	24,359	40,265	28,168	15,433	30,748	8,451	3,179			
West Central	11,573	.	541	1,692	271	5,617	2,640	812			
Central	52,475	761	2,272	5,387	4,414	10,882	24,294	4,464			
South	63,435	323	17,289	12,408	14,333	14,365	4,694	22			
East	79,483	3,990	2,793	7,021	6,946	55,217	3,217	299			
Southwest	236,249	143,993	32,217	23,855	12,118	9,621	9,662	4,783			

Table A.17
Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.3. Total fertilizer applied to irrigated wheat, at different rates (Total Kg applied at each rate)

	TOTAL	Total fertiliser rate (Kg/Ha)										
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg				
Agro-ecological zone												
TOTAL	177,182,779	5,887,878	11,731,561	13,662,525	14,400,012	40,870,145	77,901,603	12,729,055				
Badakhshan mountains	15,328,499	185,885	815,332	716,620	1,393,500	2,939,554	8,236,649	1,040,959				
Central mountains	16,168,869	33,840	295,082	1,855,008	2,468,269	3,071,631	3,901,042	4,543,997				
Eastern mountains	24,716,797	132,680	192,036	1,064,928	1,419,322	14,556,339	6,988,370	363,123				
Southern mountains	13,549,603	24,139	1,500,870	1,397,249	1,706,778	4,204,483	4,303,377	412,706				
Northern mountains	58,624,264	1,362,902	3,804,800	3,146,987	3,828,567	7,862,336	35,776,500	2,842,171				
Turkistan plains	15,956,639	617,081	519,183	449,370	211,846	388,384	13,757,937	12,839				
Herat-Farah lowlands	19,928,950	708,985	2,709,365	3,194,637	2,385,991	6,671,859	2,441,498	1,816,616				
Helmand River valley	12,909,158	2,822,367	1,894,892	1,837,726	985,740	1,175,559	2,496,230	1,696,645				
Region												
North	14,968,210	873,963	828,812	1,106,279	1,139,816	5,111,765	4,622,078	1,285,497				
Northeast	72,655,144	1,218,137	4,249,462	2,991,626	4,001,100	5,494,594	52,582,755	2,117,469				
West	22,215,000	782,754	2,770,406	3,409,709	2,678,987	7,255,774	3,007,751	2,309,619				
West Central	3,212,658	.	37,900	199,570	49,744	1,383,367	973,569	568,507				
Central	17,912,390	23,147	185,525	685,338	756,952	2,717,692	10,270,749	3,272,987				
South	10,541,300	6,230	1,252,265	1,530,112	2,562,579	3,450,520	1,720,906	18,689				
East	17,154,065	127,442	192,036	927,011	1,192,370	13,196,374	1,155,708	363,123				
Southwest	18,524,015	2,856,206	2,215,154	2,812,881	2,018,463	2,260,059	3,568,087	2,793,165				

Table A.17

Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.4. Percent of farms using various fertilizer rates, among all farms fertilising irrigated wheat

	TOTAL	Total fertiliser rate (Kg/Ha)							
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg	
TOTAL	100.0%	9.7%	14.1%	15.9%	11.6%	25.7%	19.3%	3.7%	
Agro-ecological zone									
Badakhshan mountains	100.0%	3.7%	11.9%	10.4%	14.2%	17.2%	37.3%	5.2%	
Central mountains	100.0%	0.4%	4.8%	19.8%	20.6%	21.0%	21.0%	12.7%	
Eastern mountains	100.0%	2.2%	5.2%	10.3%	8.6%	53.3%	19.8%	0.7%	
Southern mountains	100.0%	1.2%	10.8%	13.8%	12.2%	31.1%	28.7%	2.2%	
Northern mountains	100.0%	9.1%	20.0%	16.1%	11.8%	16.5%	23.9%	2.6%	
Turkistan plains	100.0%	14.9%	12.2%	10.5%	3.9%	6.1%	51.9%	0.6%	
Herat-Farah lowlands	100.0%	8.1%	21.2%	23.6%	11.6%	25.5%	6.6%	3.5%	
Helmand River valley	100.0%	38.9%	22.4%	15.5%	8.7%	4.4%	6.7%	3.4%	
Region									
North	100.0%	15.5%	11.8%	18.2%	10.6%	23.9%	16.0%	4.0%	
Northeast	100.0%	6.2%	22.5%	12.8%	11.5%	9.3%	36.6%	1.2%	
West	100.0%	8.0%	19.6%	22.6%	11.6%	25.9%	8.1%	4.2%	
West Central	100.0%	0.0%	6.8%	8.5%	1.7%	32.2%	30.5%	20.3%	
Central	100.0%	0.7%	3.2%	9.9%	7.5%	25.2%	47.5%	6.0%	
South	100.0%	0.9%	8.2%	19.5%	34.1%	28.5%	8.5%	0.3%	
East	100.0%	2.6%	6.8%	11.9%	9.0%	60.4%	8.4%	0.9%	
Southwest	100.0%	29.2%	18.9%	18.7%	12.3%	8.4%	7.8%	4.8%	

Table A.17
Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.5. Percent of fertilised irrigated wheat area under each range of fertiliser rate

	TOTAL	Total fertiliser rate (Kg/Ha)									
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg			
TOTAL	100.0%	24.4%	16.3%	11.3%	8.4%	16.9%	21.1%	1.8%			
Agro-ecological zone											
Badakhsan mountains	100.0%	8.9%	15.5%	8.9%	12.8%	18.6%	32.4%	2.8%			
Central mountains	100.0%	2.1%	6.4%	23.5%	22.1%	20.3%	15.5%	10.2%			
Eastern mountains	100.0%	4.2%	2.8%	8.0%	8.1%	59.8%	16.9%	0.3%			
Southern mountains	100.0%	1.2%	28.6%	15.9%	13.7%	24.2%	15.5%	1.0%			
Northern mountains	100.0%	15.3%	18.8%	9.5%	8.1%	11.2%	36.1%	1.0%			
Turkistan plains	100.0%	31.8%	8.9%	4.8%	1.6%	1.9%	51.0%	0.0%			
Herat-Farah lowlands	100.0%	15.9%	28.3%	18.8%	9.8%	20.3%	5.0%	1.9%			
Helmand River valley	100.0%	68.9%	13.5%	7.7%	2.9%	2.4%	3.1%	1.4%			
Region											
North	100.0%	36.8%	11.5%	9.2%	6.9%	20.7%	12.8%	2.2%			
Northeast	100.0%	11.3%	18.3%	8.1%	7.5%	7.2%	47.0%	0.6%			
West	100.0%	16.2%	26.7%	18.7%	10.2%	20.4%	5.6%	2.1%			
West Central	100.0%	0.0%	4.7%	14.6%	2.3%	48.5%	22.8%	7.0%			
Central	100.0%	1.5%	4.3%	10.3%	8.4%	20.7%	46.3%	8.5%			
South	100.0%	0.5%	27.3%	19.6%	22.6%	22.6%	7.4%	0.0%			
East	100.0%	5.0%	3.5%	8.8%	8.7%	69.5%	4.0%	0.4%			
Southwest	100.0%	60.9%	13.6%	10.1%	5.1%	4.1%	4.1%	2.0%			

Table A.17
Fertiliser rates per hectare of irrigated wheat, 2001-02
A.17.6. Percent of total fertiliser applied at various rates

	TOTAL	Total fertiliser rate (Kg/Ha)									
		Under 50 kg	50-99 kg	100-149 kg	150-199 kg	200-299 kg	300-499 kg	500+ kg			
TOTAL	100.0%	3.3%	6.6%	7.7%	8.1%	23.1%	44.0%	7.2%			
Agro-ecological zone											
Badakhsan mountains	100.0%	1.2%	5.3%	4.7%	9.1%	19.2%	53.7%	6.8%			
Central mountains	100.0%	0.2%	1.8%	11.5%	15.3%	19.0%	24.1%	28.1%			
Eastern mountains	100.0%	0.5%	0.8%	4.3%	5.7%	58.9%	28.3%	1.5%			
Southern mountains	100.0%	0.2%	11.1%	10.3%	12.6%	31.0%	31.8%	3.0%			
Northern mountains	100.0%	2.3%	6.5%	5.4%	6.5%	13.4%	61.0%	4.8%			
Turkistan plains	100.0%	3.9%	3.3%	2.8%	1.3%	2.4%	86.2%	0.1%			
Herat-Farah lowlands	100.0%	3.6%	13.6%	16.0%	12.0%	33.5%	12.3%	9.1%			
Helmand River valley	100.0%	21.9%	14.7%	14.2%	7.6%	9.1%	19.3%	13.1%			
Region											
North	100.0%	5.8%	5.5%	7.4%	7.6%	34.2%	30.9%	8.6%			
Northeast	100.0%	1.7%	5.8%	4.1%	5.5%	7.6%	72.4%	2.9%			
West	100.0%	3.5%	12.5%	15.3%	12.1%	32.7%	13.5%	10.4%			
West Central	100.0%	0.0%	1.2%	6.2%	1.5%	43.1%	30.3%	17.7%			
Central	100.0%	0.1%	1.0%	3.8%	4.2%	15.2%	57.3%	18.3%			
South	100.0%	0.1%	11.9%	14.5%	24.3%	32.7%	16.3%	0.2%			
East	100.0%	0.7%	1.1%	5.4%	7.0%	76.9%	6.7%	2.1%			
Southwest	100.0%	15.4%	12.0%	15.2%	10.9%	12.2%	19.3%	15.1%			

Table A.18
Farms with some land left uncultivated in 2001-02: Reasons for not cultivating
A.18.1. Farms

	Farms affected	Why some land was left uncultivated							
		Lack of water	Lack of seed	Lack of labour	Lack of animal power	Land on fallow	Farmer absent	Soil salinity	Unexplained
TOTAL	522,605	452,961	152,705	31,848	3,018	2,647	364	1,557	18,780
Agro-ecological zone									
Badakhshan mountains	17,032	11,538	6,593	1,282					549
Central mountains	96,105	89,675	8,122	2,030					2,707
Eastern mountains	52,373	45,889	3,492	998		998	249		3,741
Southern mountains	64,298	61,739	10,345	1,001				1,557	1,446
Northern mountains	113,770	83,899	85,198	17,403	2,597				3,636
Turkistan plains	42,988	37,486	21,781	4,012			115		459
Herat-Farah lowlands	79,056	71,067	13,877	4,205	421				2,944
Helmand River valley	56,982	51,669	3,298	916		1,649			3,298
Region									
North	72,881	54,911	38,405	5,571			115		2,537
Northeast	65,583	46,842	44,516	7,256					1,329
West	114,382	102,237	44,527	14,076	3,018				3,723
West Central	26,057	23,011	6,091	1,015					677
Central	45,145	41,694	6,195	1,233			249		1,443
South	68,514	65,715	6,573	783				1,557	1,344
East	36,412	31,923	1,746	998		998			2,743
Southwest	93,630	86,629	4,652	916		1,649			4,985

More than one reason may be mentioned by the same farm, thus rows do not add up.

Table A.18
Farms with some land left uncultivated in 2001-02: Reasons for not cultivating
A.18.2. Percent of farms

	% Farms affected	Why some land was left uncultivated (% of all affected farms)									
		Total affected	Lack of water	Lack of seed	Lack of labour	Lack of animal power	Fallow	Farmer absent	Soil salinity	Unexplained	
TOTAL	49.0%	100.0%	86.7%	29.2%	6.1%	0.6%	0.5%	0.1%	0.3%	3.6%	
Agro-ecological zone											
Badakhshan mountains	48.2%	100.0%	67.7%	38.7%	7.5%					3.2%	
Central mountains	57.5%	100.0%	93.3%	8.5%	2.1%					2.8%	
Eastern mountains	29.5%	100.0%	87.6%	6.7%	1.9%		1.9%	0.5%		7.1%	
Southern mountains	81.0%	100.0%	96.0%	16.1%	1.6%				2.4%	2.2%	
Northern mountains	40.4%	100.0%	73.7%	74.9%	15.3%	2.3%				3.2%	
Turkistan plains	57.4%	100.0%	87.2%	50.7%	9.3%			0.3%		1.1%	
Herat-Farah lowlands	53.9%	100.0%	89.9%	17.6%	5.3%	0.5%				3.7%	
Helmand River valley	55.1%	100.0%	90.7%	5.8%	1.6%		2.9%			5.8%	
Region											
North	41.0%	100.0%	75.3%	52.7%	7.6%			0.2%		3.5%	
Northeast	40.0%	100.0%	71.4%	67.9%	11.1%					2.0%	
West	58.2%	100.0%	89.4%	38.9%	12.3%	2.6%				3.3%	
West Central	34.5%	100.0%	88.3%	23.4%	3.9%					2.6%	
Central	43.1%	100.0%	92.4%	13.7%	2.7%			0.6%		3.2%	
South	94.0%	100.0%	95.9%	9.6%	1.1%				2.3%	2.0%	
East	28.5%	100.0%	87.7%	4.8%	2.7%		2.7%			7.5%	
Southwest	64.0%	100.0%	92.5%	5.0%	1.0%		1.8%			5.3%	

First column: Percentages relative to all farms. Other columns: Percentages relative to all farms leaving some land uncultivated. More than one reason may be mentioned by the same farm, thus rows do not add up to 100.

Table A.19
Distribution of irrigated land according to actual use in 2001-2002
 (% of irrigated land in villages reporting each situation)

	Villages with irrigation:						Total
	Extent of irrigated land actually planted in the village in 2001-2002			All planted	Unknown	Total	
	No irrigated land planted	Partially planted					
	Less than one half	More than one half	More than one half				
Total	3.9%	58.1%	28.8%	8.9%	0.2%	100.0%	
Agro-ecological zone							
Badakhshan mountains			72.8%	24.6%	2.6%	100.0%	
Central mountains		60.8%	30.6%	8.6%		100.0%	
Eastern mountains		76.0%	13.8%	10.2%		100.0%	
Southern mountains	16.5%	47.6%	35.6%		0.3%	100.0%	
Northern mountains	1.3%	69.4%	19.2%	10.1%		100.0%	
Turkistan plains	1.4%	49.9%	30.0%	18.6%		100.0%	
Herat-Farah lowlands	0.9%	67.2%	31.9%			100.0%	
Helmand River valley	0.5%	73.8%	25.7%			100.0%	
Region							
North	1.3%	83.7%	13.8%	1.3%		100.0%	
Northeast		5.3%	57.0%	36.8%	1.0%	100.0%	
West	1.9%	56.2%	41.9%			100.0%	
West Central		76.4%	8.0%	15.6%		100.0%	
Central		84.3%	11.1%	4.6%		100.0%	
South	17.0%	45.9%	36.7%		0.3%	100.0%	
East		27.1%	29.5%	43.4%		100.0%	
Southwest	0.4%	77.9%	20.1%	1.6%		100.0%	

Table A.20
Villages reporting various irrigation constraints in 2001-2002

	No irrigation in the village	Insufficient irrigation water	Silting of canals	Losses of water	Damaged infrastructure	Poor water management	Salinity	Other irrigation constraints	Total villages reporting
Total	35	409	172	158	202	107	18	13	493
Agro-ecological zone									
Badakhshan mountains	9	15	5	6	10	5			25
Central mountains	2	50	11	23	17	6		6	56
Eastern mountains	3	98	26	39	44	29	2	3	116
Southern mountains		58	41	38	30	6	6		59
Northern mountains	12	83	19	20	27	40	2	1	106
Turkistan plains	6	35	22	25	30	20	2		58
Herat-Farah lowlands		25	12	1	9		1		26
Helmand River valley	3	45	36	6	35	1	5	3	47
Region									
North	12	66	16	19	28	27	1		100
Northeast	11	46	20	19	31	28	1		67
West	5	58	22	14	17	10	3	2	60
West Central	1	18	1	7	2				24
Central		64	7	28	16	14	2	1	64
South		48	33	38	24	6	6		49
East	3	34	19	11	28	15		2	52
Southwest	3	75	54	22	56	7	5	8	77

Some villages did not report anything in this regard. Table refers only to villages with information (493 out of 516). Villages may report more than one problem.

Table A.21
Villages reporting insufficiency of rainfall or insufficiency of irrigation in 2001-2002
by period in which the insufficiency existed

	Period of rainfall insufficiency				Period of irrigation insufficiency				Total villages in sample
	Autumn	Winter	Spring	Total villages reporting	Autumn /winter	Spring	Summer	Total villages reporting	
Total	183	169	306	364	165	231	362	450	516
Agro-ecological zone									
Badakhshan mountains	5	4	4	9	2	16	10	18	32
Central mountains	5	21	34	41	25	31	34	52	60
Eastern mountains	87	76	97	108	50	56	105	112	117
Southern mountains	40	23	49	49	48	30	52	56	59
Northern mountains	34	28	76	96	17	37	64	91	114
Turkistan plains	3	7	29	36	7	29	41	52	60
Herat-Farah lowlands	8	10	16	24	11	18	14	25	27
Helmand River valley	1		1	1	5	14	42	44	47
Region									
North	20	26	67	81	13	43	64	84	105
Northeast	10	11	25	38	4	27	42	56	77
West	21	17	44	58	27	40	26	58	63
West Central	1	12	18	23	7	10	12	21	25
Central	36	26	46	57	14	39	60	62	65
South	40	23	49	49	41	26	44	48	49
East	51	50	51	51	36	17	45	50	52
Southwest	4	4	6	7	23	29	69	71	80

Some villages did not report anything in this regard.. Villages may report insufficiency in more than one period

Table A.22
Phases of crops affected by water shortage in 2001-2002

	Phases affected						Total villages reporting shortages	Total villages
	Planting	Germination	Stemming	Flowering	Grain formation			
Total	59	79	190	300	202	475	516	
Agro-ecological zone								
Badakhshan mountains	1	3	4	24	17	26	32	
Central mountains	5	2	32	33	19	53	60	
Eastern mountains	18	25	49	60	40	103	117	
Southern mountains	5	18	45	37	30	59	59	
Northern mountains	15	24	23	73	31	107	114	
Turkistan plains	8	2	8	28	28	55	60	
Herat-Farah lowlands	4	2	15	23	13	27	27	
Helmand River valley	3	3	14	22	24	45	47	
Region								
North	12	13	13	61	45	97	105	
Northeast	5	15	12	42	30	67	77	
West	11	3	32	57	16	63	63	
West Central	1	1	13	4	4	22	25	
Central	9	7	11	26	34	52	65	
South		16	44	30	20	49	49	
East	9	18	38	34	6	51	52	
Southwest	12	6	27	46	47	74	80	

Table A.23
Percentage of wheat farms and area affected by pests and diseases

A.23.1. Irrigated winter wheat (percent farms affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	43.43%	38.50%	9.31%	8.75%
Agro-ecological zone					
Badakhshan mountains	100.00%	51.46%	40.47%	4.06%	4.01%
Central mountains	100.00%	53.61%	44.89%	0.48%	1.02%
Eastern mountains	100.00%	40.00%	33.43%	23.18%	3.39%
Southern mountains	100.00%	75.87%	19.18%	0.03%	4.92%
Northern mountains	100.00%	41.51%	37.10%	14.76%	6.63%
Turkistan plains	100.00%	48.61%	27.89%	14.71%	8.79%
Herat-Farah lowlands	100.00%	36.71%	43.48%	4.94%	14.87%
Helmand River valley	100.00%	29.11%	52.94%	2.83%	15.13%
Region					
North	100.00%	40.39%	26.12%	20.36%	13.14%
Northeast	100.00%	46.73%	38.23%	10.68%	4.36%
West	100.00%	36.86%	44.08%	4.72%	14.33%
West Central	100.00%	16.00%	80.00%	.	4.00%
Central	100.00%	31.67%	63.23%	1.73%	3.37%
South	100.00%	72.22%	23.92%	0.14%	3.72%
East	100.00%	42.83%	19.34%	34.67%	3.16%
Southwest	100.00%	35.22%	49.13%	2.44%	13.21%

A.23.2. Irrigated spring wheat (percent farms affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	34.23%	32.92%	5.33%	27.52%
Agro-ecological zone					
Badakhshan mountains	100.00%	51.21%	45.67%	1.38%	1.73%
Central mountains	100.00%	19.97%	26.87%	0.73%	52.42%
Eastern mountains	100.00%	50.00%	50.00%	.	.
Southern mountains	.	.	.	.	.
Northern mountains	100.00%	41.79%	32.75%	14.67%	10.79%
Turkistan plains	100.00%	47.93%	35.52%	2.76%	13.79%
Herat-Farah lowlands	.	.	.	.	.
Helmand River valley	.	.	.	.	.
Region					
North	100.00%	26.77%	26.50%	29.25%	17.47%
Northeast	100.00%	49.29%	39.24%	5.55%	5.92%
West	100.00%	.	100.00%	.	.
West Central	100.00%	19.61%	26.60%	0.74%	53.05%
Central	100.00%	50.00%	50.00%	.	.
South	.	.	.	.	.
East	.	.	.	.	.
Southwest	.	.	.	.	.

Table A.23
Percentage of wheat farms and area affected by pests and diseases

A.23.3. Rain-fed wheat (percent farms affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	39.95%	26.04%	22.38%	11.63%
Agro-ecological zone					
Badakhshan mountains	100.00%	49.44%	41.46%	7.16%	1.94%
Central mountains	100.00%	28.45%	9.29%	0.33%	61.92%
Eastern mountains	100.00%	65.17%	34.83%	.	.
Southern mountains	100.00%	100.00%	.	.	.
Northern mountains	100.00%	38.65%	24.46%	27.11%	9.78%
Turkistan plains	100.00%	51.12%	36.24%	7.26%	5.38%
Herat-Farah lowlands	100.00%	46.67%	26.67%	4.44%	22.22%
Helmand River valley	100.00%	.	100.00%	.	.
Region					
North	100.00%	38.97%	17.95%	32.85%	10.24%
Northeast	100.00%	43.99%	44.08%	5.90%	6.03%
West	100.00%	41.60%	51.56%	3.49%	3.35%
West Central	100.00%	24.84%	6.97%	0.37%	67.83%
Central	100.00%	87.15%	12.85%	.	.
South	100.00%	61.20%	38.80%	.	.
East	100.00%	68.24%	31.76%	.	.
Southwest	100.00%	47.10%	52.90%	.	.

A.23.4. Irrigated winter wheat (percent area affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	60.17%	55.33%	13.97%	11.58%
Agro-ecological zone					
Badakhshan mountains	100.00%	86.21%	67.24%	10.34%	8.62%
Central mountains	100.00%	71.20%	69.02%	1.09%	3.80%
Eastern mountains	100.00%	54.03%	42.99%	15.82%	2.99%
Southern mountains	100.00%	74.85%	38.04%	0.31%	2.45%
Northern mountains	100.00%	56.05%	51.37%	33.59%	11.52%
Turkistan plains	100.00%	75.38%	43.54%	22.82%	14.71%
Herat-Farah lowlands	100.00%	54.17%	64.17%	4.17%	25.00%
Helmand River valley	100.00%	49.58%	65.16%	2.55%	13.60%
Region					
North	100.00%	43.16%	36.19%	42.00%	13.93%
Northeast	100.00%	80.07%	62.73%	22.94%	11.06%
West	100.00%	53.34%	62.86%	3.68%	22.78%
West Central	100.00%	16.67%	83.33%	.	16.67%
Central	100.00%	47.66%	84.30%	2.94%	6.98%
South	100.00%	92.16%	51.56%	0.82%	1.35%
East	100.00%	51.61%	29.84%	19.76%	1.21%
Southwest	100.00%	60.46%	55.56%	1.82%	10.09%

Table A.23
Percentage of wheat farms and area affected by pests and diseases

A.23.5. Irrigated spring wheat (percent area affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	46.41%	46.52%	9.57%	36.75%
Agro-ecological zone					
Badakhshan mountains	100.00%	76.92%	75.00%	5.77%	5.77%
Central mountains	100.00%	28.97%	36.45%	2.80%	59.81%
Eastern mountains	100.00%	100.00%	100.00%		
Southern mountains					
Northern mountains	100.00%	61.76%	48.53%	25.00%	7.35%
Turkistan plains	100.00%	90.91%	81.82%	18.18%	27.27%
Herat-Farah lowlands					
Helmand River valley					
Region					
North	100.00%	63.37%	60.40%	59.80%	15.64%
Northeast	100.00%	71.13%	57.27%	12.13%	6.67%
West	100.00%		100.00%		
West Central	100.00%	26.21%	33.98%	2.91%	62.14%
Central	100.00%	100.00%	100.00%		
South					
East					
Southwest					

A.23.6. Rain-fed wheat (percent area affected)

	TOTAL	Pests and diseases			
		Smut	Rust	Locust	Other
TOTAL	100.00%	59.89%	45.86%	21.24%	17.76%
Agro-ecological zone					
Badakhshan mountains	100.00%	62.50%	71.87%	21.09%	6.25%
Central mountains	100.00%	46.67%	17.50%	0.83%	51.67%
Eastern mountains	100.00%	70.59%	41.18%		
Southern mountains	100.00%	100.00%			
Northern mountains	100.00%	61.13%	47.42%	28.23%	12.10%
Turkistan plains	100.00%	77.70%	61.15%	12.23%	12.95%
Herat-Farah lowlands	100.00%	83.33%	33.33%	16.67%	16.67%
Helmand River valley	100.00%		100.00%		
Region					
North	100.00%	64.67%	32.56%	39.29%	13.25%
Northeast	100.00%	65.59%	71.88%	13.64%	11.10%
West	100.00%	40.30%	64.89%	5.19%	3.76%
West Central	100.00%	32.98%	10.64%	1.06%	65.96%
Central	100.00%	80.28%	19.72%		
South	100.00%	100.00%	71.10%		
East	100.00%	75.00%	37.50%		
Southwest	100.00%	58.98%	46.92%		

Table A.24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.1. By agro-ecological zone and region
A.24.1.1. Total beneficiary Farms

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	97,706	83,705	49,016	60,576	5,851	4,039	6,462	4,088
Agro-ecological zone								
Badakhshan mountains	7,326	8,608	4,212	7,326	366	.	183	.
Central mountains	14,213	3,384	9,475	338	1,692	.	1,015	677
Eastern mountains	4,739	10,724	3,492	9,477	2,494	1,995	748	748
Southern mountains	1,669	2,447	890	1,001	.	111	1,224	334
Northern mountains	48,054	31,430	16,364	22,079	520	1,039	260	520
Turkistan plains	12,381	11,349	9,171	8,139	229	344	229	344
Herat-Farah lowlands	8,410	14,297	5,046	10,933	.	.	421	.
Helmand River valley	916	1,466	366	1,283	550	550	2,382	1,466
Region								
North	37,347	11,018	13,617	2,468	.	229	.	229
Northeast	9,633	34,653	4,961	32,478	596	894	412	374
West	29,190	20,012	16,215	13,531	520	260	680	260
West Central	2,030	677	677	338	338	.	338	.
Central	7,899	13,327	2,823	8,149	1,265	361	1,811	1,011
South	5,739	556	5,405	334	.	.	.	.
East	2,245	1,995	2,245	1,995	2,245	1,746	499	748
Southwest	3,623	1,466	3,074	1,283	888	550	2,720	1,466

A.24.1.2. Total arable land in beneficiary farms

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	948,696	648,069	475,213	423,155	17,249	16,632	21,051	14,292
Agro-ecological zone								
Badakhshan mountains	47,213	110,176	32,709	107,466	1,905	.	1,209	.
Central mountains	39,829	8,088	24,297	4,162	2,233	.	1,760	1,354
Eastern mountains	4,905	15,604	3,408	14,606	2,311	2,859	1,164	1,164
Southern mountains	28,825	9,703	25,844	7,767	.	222	1,268	289
Northern mountains	586,822	332,375	210,653	213,774	8,338	10,286	7,792	5,143
Turkistan plains	205,082	125,503	159,641	41,383	2,132	2,935	2,132	2,935
Herat-Farah lowlands	26,960	39,695	17,709	28,719	.	.	46	.
Helmand River valley	9,060	6,926	953	5,277	330	330	5,680	3,408
Region								
North	570,832	218,242	252,837	30,966	.	1,330	.	1,330
Northeast	65,865	315,836	38,529	310,253	4,037	7,527	3,341	2,384
West	229,379	73,670	129,346	50,122	8,338	4,364	7,839	4,364
West Central	11,539	4,230	271	4,162	135	.	135	.
Central	12,310	18,187	5,905	12,286	2,209	372	2,259	1,643
South	42,840	8,168	40,504	7,278	.	.	.	.
East	1,862	2,810	1,862	2,810	1,862	2,710	715	1,164
Southwest	14,068	6,926	5,961	5,277	668	330	6,763	3,408

Table A.24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.1.3. Area with irrigated wheat, 2001-02 in beneficiary farms, in hectares

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	100,745	120,241	70,967	101,749	6,079	5,690	9,933	5,293
Agro-ecological zone								
Badakhshan mountains	19,339	25,823	14,907	24,504	366	.	110	.
Central mountains	10,660	1,590	7,580	102	744	.	338	338
Eastern mountains	3,043	8,554	2,344	7,482	1,796	1,846	648	499
Southern mountains	5,896	3,838	5,028	3,093	.	67	645	111
Northern mountains	20,780	43,456	11,974	38,547	779	2,026	779	468
Turkistan plains	26,148	23,867	22,789	19,350	2,063	1,421	2,063	1,421
Herat-Farah lowlands	11,985	11,354	6,013	7,023	.	.	841	.
Helmand River valley	2,895	1,759	330	1,649	330	330	4,507	2,455
Region								
North	36,189	13,825	27,687	5,334	.	46	.	46
Northeast	21,922	77,580	17,646	75,950	2,430	3,194	2,173	1,635
West	20,141	13,094	10,351	8,139	779	208	1,620	208
West Central	1,387	169	68	102	0	.	0	.
Central	5,026	9,042	2,279	6,048	809	216	980	450
South	10,032	3,026	9,453	2,781	.	.	.	.
East	1,596	1,746	1,596	1,746	1,596	1,696	449	499
Southwest	4,452	1,759	1,886	1,649	465	330	4,710	2,455

A.24.1.4. Area with irrigated wheat, 2002-03 in beneficiary farms, in hectares

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	107,519	118,686	70,404	97,565	5,825	4,799	8,045	5,080
Agro-ecological zone								
Badakhshan mountains	14,212	21,684	10,219	20,731	403	.	110	.
Central mountains	12,115	1,252	7,715	34	812	.	271	406
Eastern mountains	2,768	8,205	2,170	7,133	1,671	948	574	449
Southern mountains	5,829	3,838	4,984	3,070	.	45	712	111
Northern mountains	28,053	43,352	13,637	36,858	545	2,078	520	260
Turkistan plains	30,115	25,105	25,289	19,786	2,063	1,399	2,063	1,399
Herat-Farah lowlands	10,471	11,732	6,097	6,728	.	.	168	.
Helmand River valley	3,958	3,518	293	3,225	330	330	3,628	2,455
Region								
North	45,766	16,956	30,082	5,949	.	23	.	23
Northeast	16,794	71,704	12,906	70,492	2,466	3,454	2,173	1,635
West	20,289	13,213	12,253	7,663	545	0	688	0
West Central	2,978	102	68	34	0	.	0	.
Central	4,152	9,325	1,819	6,602	826	194	997	517
South	10,505	3,070	9,904	2,803	.	.	.	.
East	1,521	798	1,521	798	1,521	798	424	449
Southwest	5,514	3,518	1,850	3,225	465	330	3,763	2,455

Table A.24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.1.5. Area with rain-fed wheat, 2001-02 in beneficiary farms, in hectares

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	207,133	114,588	75,587	75,322	5,356	3,304	5,076	2,239
Agro-ecological zone								
Badakhshan mountains	2,894	13,021	1,722	12,398	549	.	549	.
Central mountains	6,768	541	1,489	541	135	.	271	0
Eastern mountains	100	0	100	0	100	0	100	0
Southern mountains	0	0	0	0	.	0	0	0
Northern mountains	162,213	88,133	44,053	54,885	4,572	2,364	4,156	1,299
Turkistan plains	35,159	12,725	28,223	7,497	0	940	0	940
Herat-Farah lowlands	0	168	0	0	.	.	0	.
Helmand River valley	0	0	0	0	0	0	0	0
Region								
North	147,474	40,930	51,445	7,515	.	940	.	940
Northeast	12,686	63,104	3,254	60,590	549	1,325	549	260
West	40,105	10,013	19,299	6,676	4,572	1,039	4,156	1,039
West Central	5,414	541	135	541	135	.	135	.
Central	135	0	135	0	0	0	0	0
South	880	0	880	0	.	.	.	.
East	100	0	100	0	100	0	100	0
Southwest	338	0	338	0	0	0	135	0

A.24.1.6. Area with rain-fed wheat, 2002-03 in beneficiary farms, in hectares

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	218,035	100,468	88,261	69,922	3,278	3,198	2,930	1,707
Agro-ecological zone								
Badakhshan mountains	2,124	13,058	1,209	12,691	549	.	549	.
Central mountains	2,166	1,354	677	1,354	135	.	203	68
Eastern mountains	100	0	100	0	100	0	100	0
Southern mountains	0	0	0	0	.	0	0	0
Northern mountains	161,849	67,872	47,066	46,599	2,494	2,442	2,078	883
Turkistan plains	51,712	17,046	39,125	8,689	0	757	0	757
Herat-Farah lowlands	84	589	84	589	.	.	0	.
Helmand River valley	0	550	0	0	0	0	0	0
Region								
North	149,533	29,239	60,476	8,280	.	757	.	757
Northeast	11,527	56,244	2,456	52,791	549	1,818	549	260
West	54,709	13,083	24,552	7,498	2,494	623	2,078	623
West Central	1,624	1,354	135	1,354	135	.	135	.
Central	203	0	203	0	0	0	68	68
South	338	0	338	0	.	.	.	.
East	100	0	100	0	100	0	100	0
Southwest	0	550	0	0	0	0	0	0

A.24.2. By gross cereal balance category in beneficiary farms after the 2001-02 harvest

A.24.2.1. Total beneficiary farms

	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	97,706	83,705	49,016	60,576	5,851	4,039	6,462	4,088
Deficit households	51,699	37,433	23,280	20,939	3,399	918	4,387	2,550
About self-sufficient	13,817	11,940	5,864	8,770	973	499	741	366
Surplus households	32,189	34,332	19,872	30,867	1,479	2,622	1,334	1,171

Gross cereal balance for 2002-03 = Total cereal output from 2001-02 year, minus estimated cereal needs (150-249 kg per capita)

Table A.24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.2.2. Total arable land in beneficiary farms

Household cereal balance category	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	948,696	648,069	475,213	423,155	17,249	16,632	21,051	14,292
Deficit households	420,244	214,062	171,460	66,743	4,297	5,076	9,392	9,135
About self-sufficient	127,656	59,330	39,956	26,800	9,448	249	8,640	550
Surplus households	400,796	374,676	263,798	329,611	3,504	11,307	3,019	4,607

A.24.2.3. Area with irrigated wheat, 2001-02 in beneficiary farms, in hectares

Household cereal balance category	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	100,745	120,241	70,967	101,749	6,079	5,690	9,933	5,293
Deficit households	24,403	21,526	12,196	13,442	1,394	348	4,801	2,490
About self-sufficient	12,148	13,682	4,963	9,283	1,347	249	1,485	476
Surplus households	64,195	85,032	53,809	79,023	3,338	5,092	3,647	2,327

A.24.2.4. Area with irrigated wheat, 2002-03 in beneficiary farms, in hectares

Household cereal balance category	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	107,519	118,686	70,404	97,565	5,825	4,799	8,045	5,080
Deficit households	28,439	27,810	13,008	15,599	1,491	168	3,845	2,399
About self-sufficient	12,562	12,906	5,930	9,546	1,045	249	1,225	476
Surplus households	66,519	77,970	51,466	72,420	3,288	4,381	2,974	2,204

A.24.2.5. Area with rain-fed wheat, 2001-02 in beneficiary farms, in hectares

Household cereal balance category	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	207,133	114,588	75,587	75,322	5,356	3,304	5,076	2,239
Deficit households	75,400	36,851	21,922	7,024	785	1,131	920	1,131
About self-sufficient	32,441	7,464	8,382	6,520	4,572	0	4,156	0
Surplus households	99,292	70,273	45,283	61,779	0	2,173	0	1,108

A.24.2.6. Area with rain-fed wheat, 2002-03 in beneficiary farms, in hectares

Household cereal balance category	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	218,035	100,468	88,261	69,922	3,278	3,198	2,930	1,707
Deficit households	96,653	29,813	37,531	9,071	785	807	852	874
About self-sufficient	38,946	8,557	10,839	6,988	2,494	0	2,078	0
Surplus households	82,437	62,098	39,890	53,864	0	2,391	0	833

A.24.3. By total farm size of beneficiary farms (hectares of arable land)

A.24.3.1. Total beneficiary farms

Farm size (rain-fed + irrigated land)	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	97,706	83,705	49,016	60,576	5,851	4,039	6,462	4,088
Below 0.50 Ha	4,974	11,157	2,656	8,356	1,858	682	1,204	472
0.50-0.99 Ha	5,896	5,363	3,442	4,195	1,115	865	950	366
1.00-1.99 Ha	9,987	13,132	5,970	8,888	588	249	1,910	888
2.00-4.99 Ha	21,652	22,383	10,123	16,483	1,733	1,234	1,475	1,689
5.00-9.99 Ha	22,013	12,855	10,415	9,393	183	374	550	298
10.0-19.9 Ha	20,155	9,782	10,484	7,452	115	634	115	374
20.0-49.9 Ha	11,195	7,948	5,096	5,442	260	.	260	.
50+ Ha	1,835	1,085	830	366	.	.	.	.

A.24.3.2. Arable land in beneficiary farms

Farm size	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	948,696	648,069	475,213	423,155	17,249	16,632	21,051	14,292
Below 0.50 Ha	6,367	8,201	5,347	7,265	593	223	293	117
0.50-0.99 Ha	4,353	3,507	2,559	2,785	855	606	693	293
1.00-1.99 Ha	13,619	17,038	8,103	11,540	787	249	2,753	1,311
2.00-4.99 Ha	65,200	71,842	30,892	51,444	4,178	3,480	4,351	4,540
5.00-9.99 Ha	152,267	85,547	73,103	61,572	1,209	2,729	3,334	2,062
10.0-19.9 Ha	269,155	126,725	136,543	95,873	1,834	9,345	1,834	5,969
20.0-49.9 Ha	309,678	236,175	150,618	151,104	7,792	.	7,792	.
50+ Ha	128,057	99,034	68,049	41,572	.	.	.	.

Table A.24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.3.3. Area with irrigated wheat, 2001-02 in beneficiary farms, in hectares

Farm size	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	100,745	120,241	70,967	101,749	6,079	5,690	9,933	5,293
Below 0.50 Ha	3,666	5,754	2,800	4,969	390	173	975	45
0.50-0.99 Ha	3,143	2,687	1,962	2,142	755	506	468	257
1.00-1.99 Ha	6,646	9,782	4,020	7,099	335	150	1,788	795
2.00-4.99 Ha	15,425	28,613	9,396	23,734	1,875	1,673	2,514	2,128
5.00-9.99 Ha	17,515	23,232	11,338	19,832	110	825	1,576	486
10.0-19.9 Ha	23,026	17,041	18,030	14,986	1,834	2,363	1,834	1,583
20.0-49.9 Ha	28,285	29,045	21,800	25,508	779	.	779	.
50+ Ha	3,038	4,088	1,621	3,480	.	.	.	.

A.24.3.4. Area with irrigated wheat, 2002-03 in beneficiary farms, in hectares

Farm size	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	107,519	118,686	70,404	97,565	5,825	4,799	8,045	5,080
Below 0.50 Ha	3,531	5,313	2,800	4,663	458	223	279	117
0.50-0.99 Ha	3,143	2,580	1,995	2,036	730	506	487	257
1.00-1.99 Ha	6,303	9,926	4,174	7,590	285	150	1,760	795
2.00-4.99 Ha	13,678	25,645	8,103	21,306	1,888	703	2,469	2,073
5.00-9.99 Ha	18,778	26,275	13,258	21,077	110	1,062	696	463
10.0-19.9 Ha	25,952	17,729	18,347	13,675	1,834	2,155	1,834	1,376
20.0-49.9 Ha	29,802	27,239	16,300	23,849	520	.	520	.
50+ Ha	6,332	3,978	5,427	3,370	.	.	.	.

A.24.3.5. Area with rain-fed wheat, 2001-02 in beneficiary farms, in hectares

Farm size	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	207,133	114,588	75,587	75,322	5,356	3,304	5,076	2,239
Below 0.50 Ha	135	0	135	0	135	0	135	0
0.50-0.99 Ha	375	208	167	0	100	0	100	0
1.00-1.99 Ha	1,358	1,445	271	367	0	0	0	0
2.00-4.99 Ha	14,272	12,842	4,440	9,618	416	351	135	351
5.00-9.99 Ha	43,992	17,517	18,698	13,203	549	1,056	549	848
10.0-19.9 Ha	68,870	33,052	25,686	23,239	0	1,896	0	1,039
20.0-49.9 Ha	67,510	35,970	22,315	22,485	4,156	.	4,156	.
50+ Ha	10,621	13,554	3,874	6,410	.	.	.	.

A.24.3.6. Area with rain-fed wheat, 2002-03 in beneficiary farms, in hectares

Farm size	Seeds 2001-02	Seeds 2002-03	Fertiliser 2001-02	Fertiliser 2002-03	Tools 2001-02	Tools 2002-03	Other inputs 2001-02	Other inputs 2002-03
TOTAL	218,035	100,468	88,261	69,922	3,278	3,198	2,930	1,707
Below 0.50 Ha	135	0	135	0	135	0	135	0
0.50-0.99 Ha	443	376	100	168	100	0	100	0
1.00-1.99 Ha	1,453	1,589	84	523	0	0	68	68
2.00-4.99 Ha	17,814	12,882	4,989	8,928	416	443	0	443
5.00-9.99 Ha	50,755	21,079	20,570	13,097	549	1,300	549	573
10.0-19.9 Ha	77,572	28,653	35,600	21,984	0	1,455	0	623
20.0-49.9 Ha	54,549	26,376	24,044	18,812	2,078	.	2,078	.
50+ Ha	15,314	9,512	2,739	6,410	.	.	.	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4. Farms and area by origin of wheat seed
A.24.4.1. Farms with irrigated wheat, 2001-02

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received + Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	848,795	30,379	26,572	278,729	11,989	366,735	46,965	78,655	8,771
Agro-ecological zone									
Badakhshan mountains	25,090	366	366	3,113	1,465	8,058	2,930	2,747	6,044
Central mountains	129,268	2,707	1,354	19,627	677	83,922	13,874	6,768	338
Eastern mountains	156,622	10,225	998	63,347	249	60,853	2,993	17,707	249
Southern mountains	65,744	445	779	19,579	222	36,042	1,446	7,231	
Northern mountains	173,772	3,636	16,884	56,885	5,974	48,573	14,806	25,715	1,299
Turkistan plains	62,476	1,032	2,407	31,066	2,981	17,883	2,981	4,127	
Herat-Farah lowlands	138,349	7,569	3,785	23,549	421	84,103	7,569	10,513	841
Helmand River valley	97,475	4,397		61,563		27,300	366	3,848	
Region									
North	104,298	2,850	11,644	59,913	4,799	18,200	2,216	4,417	260
Northeast	129,507	1,665	1,000	26,216	4,063	47,743	14,864	27,393	6,563
West	165,882	8,089	10,798	28,484	1,979	92,674	11,206	11,292	1,361
West Central	58,881	338	1,354	4,738	338	46,360	2,030	3,722	
Central	95,595	8,937	1,416	11,346	810	59,726	5,362	7,410	588
South	44,494	111	111	6,341		28,043	7,876	2,012	
East	116,219	3,990	249	60,604		34,167		17,208	
Southwest	133,919	4,397		81,087		39,821	3,412	5,201	

A.24.4.2. Area with irrigated wheat, 2001-02, in hectares

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received + Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	1,242,425	32,685	17,814	341,630	20,193	549,703	77,702	178,734	23,965
Agro-ecological zone									
Badakhshan mountains	65,197	549	220	3,809	3,077	18,350	6,849	12,014	20,328
Central mountains	107,915	1,015	338	16,175	744	70,793	12,622	5,888	338
Eastern mountains	108,164	7,781	200	22,421	50	54,119	1,571	21,673	349
Southern mountains	91,774	222	400	15,674	222	59,036	8,477	7,742	.
Northern mountains	290,971	2,935	11,481	83,769	8,572	66,522	28,962	86,496	2,234
Turkistan plains	186,993	2,247	1,937	76,737	7,107	81,666	4,001	13,298	.
Herat-Farah lowlands	173,798	10,092	3,238	19,175	421	104,161	13,204	22,792	715
Helmand River valley	217,614	7,842	.	103,869	.	95,056	2,015	8,831	.
Region									
North	190,179	3,779	11,239	111,229	9,653	33,023	5,377	15,826	52
Northeast	337,656	1,796	554	49,995	8,142	128,086	31,292	95,592	22,199
West	189,123	10,248	5,082	22,266	1,382	109,590	16,347	23,181	1,027
West Central	53,230	135	338	2,369	338	43,315	2,470	4,264	.
Central	59,801	6,971	528	5,095	678	36,923	3,060	5,858	688
South	80,633	67	22	4,706	.	57,698	15,109	3,031	.
East	80,555	1,846	50	21,124	.	36,063	.	21,473	.
Southwest	251,247	7,842	.	124,846	.	105,005	4,046	9,508	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.3. Irrigated wheat area harvested 2001-02

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	1,196,126	6,878	17,814	327,489	20,193	543,402	77,702	178,734	23,913
Agro-ecological zone									
Badakhshan mountains	65,014	366	220	3,809	3,077	18,350	6,849	12,014	20,328
Central mountains	105,005	.	338	14,957	744	70,116	12,622	5,888	338
Eastern mountains	96,716	175	200	18,580	50	54,119	1,571	21,673	349
Southern mountains	89,594	156	400	13,827	222	58,769	8,477	7,742	.
Northern mountains	289,516	2,208	11,481	83,146	8,572	66,470	28,962	86,496	2,182
Turkistan plains	184,815	275	1,937	76,645	7,107	81,551	4,001	13,298	.
Herat-Farah lowlands	159,248	3,112	3,238	16,064	421	99,704	13,204	22,792	715
Helmand River valley	206,217	586	.	100,461	.	94,323	2,015	8,831	.
Region									
North	186,858	1,236	11,239	110,670	9,653	32,857	5,377	15,826	.
Northeast	337,317	1,457	554	49,995	8,142	128,086	31,292	95,592	22,199
West	174,418	3,268	5,082	18,999	1,382	105,132	16,347	23,181	1,027
West Central	52,418	.	338	2,369	338	42,638	2,470	4,264	.
Central	53,136	305	528	5,095	678	36,923	3,060	5,858	688
South	79,966	.	22	4,372	.	57,431	15,109	3,031	.
East	74,894	25	50	17,283	.	36,063	.	21,473	.
Southwest	237,119	586	.	118,707	.	104,272	4,046	9,508	.

A.24.4. 4. Farms planting received seeds for irrigated wheat, 2001-02

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	94,297	0	26,572	0	11,989	0	46,965	0	8,771
Agro-ecological zone									
Badakhshan mountains	10,805	0	366	0	1,465	0	2,930	0	6,044
Central mountains	16,243	0	1,354	0	677	0	13,874	0	338
Eastern mountains	4,489	0	998	0	249	0	2,993	0	249
Southern mountains	2,447	0	779	0	222	0	1,446	0	.
Northern mountains	38,962	0	16,884	0	5,974	0	14,806	0	1,299
Turkistan plains	8,368	0	2,407	0	2,981	0	2,981	0	.
Herat-Farah lowlands	12,615	0	3,785	0	421	0	7,569	0	841
Helmand River valley	366	0	.	0	.	0	366	0	.
Region									
North	18,918	0	11,644	0	4,799	0	2,216	0	260
Northeast	26,490	0	1,000	0	4,063	0	14,864	0	6,563
West	25,343	0	10,798	0	1,979	0	11,206	0	1,361
West Central	3,722	0	1,354	0	338	0	2,030	0	.
Central	8,175	0	1,416	0	810	0	5,362	0	588
South	7,987	0	111	0	.	0	7,876	0	.
East	249	0	249	0	.	0	.	0	0
Southwest	3,412	0	.	0	.	0	3,412	0	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.5. Irrigated wheat area planted with received seeds, 2001-02, hectares

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	46,852	.	14,160	.	5,324	.	22,179	.	5,189
Agro-ecological zone									
Badakhshan mountains	6,142	.	220	.	623	.	1,093	.	4,207
Central mountains	4,425	.	311	.	248	.	3,730	.	135
Eastern mountains	812	.	200	.	10	.	553	.	50
Southern mountains	1,995	.	400	.	48	.	1,546	.	.
Northern mountains	21,961	.	8,699	.	2,597	.	10,039	.	626
Turkistan plains	3,524	.	1,092	.	1,461	.	971	.	.
Herat-Farah lowlands	7,220	.	3,238	.	336	.	3,475	.	171
Helmand River valley	772	.	.	.	.	.	772	.	.
Region									
North	12,633	.	7,612	.	2,163	.	2,846	.	13
Northeast	14,818	.	554	.	2,167	.	7,371	.	4,726
West	11,397	.	5,082	.	689	.	5,361	.	265
West Central	1,460	.	311	.	59	.	1,090	.	.
Central	1,884	.	528	.	248	.	923	.	185
South	3,222	.	22	.	.	.	3,200	.	.
East	50	.	50	.	.	.	.	.	.
Southwest	1,388	.	.	.	.	.	1,388	.	.

A.24.4.6. Farms planting their own saved seed for irrigated wheat, 2001-02

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	498,643	0	0	0	0	364,366	46,965	78,541	8,771
Agro-ecological zone									
Badakhshan mountains	19,779	0	0	0	0	8,058	2,930	2,747	6,044
Central mountains	102,534	0	0	0	0	81,554	13,874	6,768	338
Eastern mountains	81,802	0	0	0	0	60,853	2,993	17,707	249
Southern mountains	44,719	0	0	0	0	36,042	1,446	7,231	.
Northern mountains	90,393	0	0	0	0	48,573	14,806	25,715	1,299
Turkistan plains	24,876	0	0	0	0	17,883	2,981	4,012	.
Herat-Farah lowlands	103,026	0	0	0	0	84,103	7,569	10,513	841
Helmand River valley	31,514	0		0		27,300	366	3,848	.
Region									
North	24,978	0	0	0	0	18,200	2,216	4,302	260
Northeast	96,563	0	0	0	0	47,743	14,864	27,393	6,563
West	116,533	0	0	0	0	92,674	11,206	11,292	1,361
West Central	49,744	0	0	0	0	43,992	2,030	3,722	.
Central	73,085	0	0	0	0	59,726	5,362	7,410	588
South	37,930	0	0	0		28,043	7,876	2,012	.
East	51,376	0	0	0		34,167		17,208	.
Southwest	48,434	0		0		39,821	3,412	5,201	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.7. Irrigated wheat area planted with own saved seeds, 2001-02, hectares

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		None reported	Received	Purchased	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	724,810	.	.	.	.	560,015	59,772	90,610	14,412
Agro-ecological zone									
Badakhshan mountains	48,554	.	.	.	.	21,830	5,514	8,379	12,832
Central mountains	84,562	.	.	.	.	71,807	9,057	3,563	135
Eastern mountains	70,343	.	.	.	.	57,684	1,474	11,035	150
Southern mountains	71,033	.	.	.	.	59,631	7,026	4,376	.
Northern mountains	130,020	.	.	.	.	66,581	20,986	41,465	987
Turkistan plains	90,189	.	.	.	.	81,610	3,106	5,472	.
Herat-Farah lowlands	128,733	.	.	.	.	104,671	11,366	12,387	308
Helmand River valley	101,377	.	.	.	.	96,201	1,243	3,933	.
Region									
North	43,190	.	.	.	.	33,933	3,603	5,602	52
Northeast	218,087	.	.	.	.	130,621	24,320	49,484	13,663
West	136,218	.	.	.	.	110,139	13,049	12,618	412
West Central	46,266	.	.	.	.	41,497	2,057	2,712	.
Central	48,669	.	.	.	.	43,049	2,593	2,742	285
South	72,365	.	.	.	.	58,639	11,493	2,233	.
East	46,936	.	.	.	.	35,988	.	10,948	.
Southwest	113,079	.	.	.	.	106,150	2,658	4,272	.

A.24.4.8. Farms planting purchased seeds for irrigated wheat, 2001-02

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	377,846	0	0	278,545	11,989	0	0	78,541	8,771
Agro-ecological zone									
Badakhshan mountains	13,369	0	0	3,113	1,465	0	0	2,747	6,044
Central mountains	27,410	0	0	19,627	677	0	0	6,768	338
Eastern mountains	81,553	0	0	63,347	249	0	0	17,707	249
Southern mountains	27,032	0	0	19,579	222	0	0	7,231	.
Northern mountains	89,873	0	0	56,885	5,974	0	0	25,715	1,299
Turkistan plains	38,059	0	0	31,066	2,981	0	0	4,012	.
Herat-Farah lowlands	35,323	0	0	23,549	421	0	0	10,513	841
Helmand River valley	65,227	0	0	61,380	.	0	0	3,848	.
Region									
North	69,274	0	0	59,913	4,799	0	0	4,302	260
Northeast	64,235	0	0	26,216	4,063	0	0	27,393	6,563
West	43,116	0	0	28,484	1,979	0	0	11,292	1,361
West Central	8,798	0	0	4,738	338	0	0	3,722	.
Central	20,154	0	0	11,346	810	0	0	7,410	588
South	8,352	0	0	6,341	.	0	0	2,012	.
East	77,812	0	0	60,604	.	0	0	17,208	.
Southwest	86,105	0	0	80,904	.	0	0	5,201	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.9. Irrigated wheat area planted with purchased seeds, 2001-02, hectares

	TOTAL	Origin of irrigated wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	490,702	.	.	378,676	14,692	.	.	88,826	8,507
Agro-ecological zone									
Badakhshan mountains	17,568	.	.	3,736	2,410	.	.	4,586	6,836
Central mountains	19,730	.	.	16,676	526	.	.	2,461	68
Eastern mountains	35,083	.	.	22,311	40	.	.	12,583	150
Southern mountains	20,630	.	.	15,549	174	.	.	4,906	.
Northern mountains	136,799	.	.	87,384	5,847	.	.	42,350	1,218
Turkistan plains	82,630	.	.	70,878	5,612	.	.	6,140	.
Herat-Farah lowlands	30,682	.	.	19,117	84	.	.	11,246	235
Helmand River valley	147,580	.	.	143,025	.	.	.	4,555	.
Region									
North	122,119	.	.	106,134	7,456	.	.	8,516	13
Northeast	110,849	.	.	52,727	5,793	.	.	44,401	7,927
West	34,711	.	.	22,253	703	.	.	11,404	350
West Central	4,392	.	.	2,396	309	.	.	1,687	.
Central	8,849	.	.	5,095	431	.	.	3,106	217
South	7,062	.	.	4,714	.	.	.	2,347	.
East	33,485	.	.	21,014	.	.	.	12,471	.
Southwest	169,236	.	.	164,342	.	.	.	4,893	.

A.24.4.10. Farms with rain-fed wheat, 2001-02

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	363,218	15,177	5,494	115,099	25,265	148,724	6,687	43,433	3,338
Agro-ecological zone									
Badakhshan mountains	30,218	733		3,113	183	18,863		6,959	366
Central mountains	75,801	1,692		1,692		68,356	338	3,722	
Eastern mountains	7,981	249		7,233		499			
Southern mountains	6,563	111		1,112		5,340			
Northern mountains	211,176	8,052	2,857	89,094	21,299	48,833	6,234	31,949	2,857
Turkistan plains	20,978	459	2,637	8,942	3,783	4,127	115	802	115
Herat-Farah lowlands	7,569	1,682		3,364		2,523			
Helmand River valley	2,932	2,199		550		183			
Region									
North	122,906	4,874	2,637	72,206	19,108	14,737	2,452	6,777	115
Northeast	101,283	3,070	260	16,995	1,222	45,397	1,039	30,856	2,444
West	45,752	2,981	2,597	15,313	4,935	14,212	2,857	2,078	779
West Central	60,235	1,692		1,354		53,128	338	3,722	
Central	1,265	0				1,265			
South	11,301	111		1,112		10,077			
East	7,731	249		7,233		249			
Southwest	12,745	2,199		888		9,658			

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.11. Area with rain-fed wheat, 2001-02, in hectares

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	1,244,305	33,312	4,099	456,867	89,097	418,912	25,647	199,865	16,507
Agro-ecological zone									
Badakhshan mountains	106,147	513	.	4,285	110	63,256	.	36,774	1,209
Central mountains	132,855	2,707	.	1,083	.	119,454	1,354	8,257	.
Eastern mountains	3,616	249	.	3,167	.	200	.	.	.
Southern mountains	33,016	445	.	3,404	.	29,168	.	.	.
Northern mountains	882,434	22,650	1,818	407,234	75,483	187,954	23,445	149,148	14,702
Turkistan plains	72,025	1,651	2,281	31,479	13,504	15,980	848	5,686	596
Herat-Farah lowlands	9,924	2,018	.	5,298	.	2,607	.	.	.
Helmand River valley	4,287	3,078	.	916	.	293	.	.	.
Region									
North	655,246	16,508	2,281	385,253	72,077	100,679	8,475	69,376	596
Northeast	323,462	7,110	312	36,654	4,578	139,602	3,455	117,816	13,936
West	91,823	3,213	1,507	26,390	12,442	29,517	12,364	4,416	1,974
West Central	123,989	2,707	.	1,015	.	110,656	1,354	8,257	.
Central	777	.	.	.	.	777	.	.	.
South	35,047	445	.	3,404	.	31,198	.	.	.
East	3,517	249	.	3,167	.	100	.	.	.
Southwest	10,446	3,078	.	984	.	6,384	.	.	.

A.24.4.12. Rain-fed wheat harvested area, 2001-02, hectares

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		None reported	Received	Purchased	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	880,787	24,389	3,939	215,031	88,577	359,978	25,231	147,136	16,507
Agro-ecological zone									
Badakhshan mountains	106,147	513	.	4,285	110	63,256	.	36,774	1,209
Central mountains	130,418	2,166	.	1,083	.	117,559	1,354	8,257	.
Eastern mountains	3,167	249	.	2,718	.	200	.	.	.
Southern mountains	33,016	445	.	3,404	.	29,168	.	.	.
Northern mountains	527,825	16,676	1,818	168,551	74,964	131,667	23,029	96,419	14,702
Turkistan plains	69,159	1,192	2,121	29,691	13,504	15,522	848	5,686	596
Herat-Farah lowlands	9,588	1,682	.	5,298	.	2,607	.	.	.
Helmand River valley	1,466	1,466	.	.	.	.	.	.	.
Region									
North	302,129	10,076	2,121	145,928	71,558	46,729	8,475	16,647	596
Northeast	321,857	7,110	312	35,507	4,578	139,143	3,455	117,816	13,936
West	88,733	2,877	1,507	26,390	12,442	27,179	11,948	4,416	1,974
West Central	123,447	2,166	.	1,015	.	110,656	1,354	8,257	.
Central	370	.	.	.	.	370	.	.	.
South	33,558	445	.	3,404	.	29,709	.	.	.
East	3,068	249	.	2,718	.	100	.	.	.
Southwest	7,625	1,466	.	68	.	6,091	.	.	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.13. Farms planting received seeds for rain-fed wheat, 2001-02

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	40,525	0	5,234	0	25,265	0	6,687	0	3,338
Agro-ecological zone									
Badakhshan mountains	549	0		0	183	0		0	366
Central mountains	338	0		0		0	338	0	
Eastern mountains	0	0		0		0			
Southern mountains	0	0		0		0			
Northern mountains	32,988	0	2,597	0	21,299	0	6,234	0	2,857
Turkistan plains	6,649	0	2,637	0	3,783	0	115	0	115
Herat-Farah lowlands	0	0		0		0			
Helmand River valley	0	0		0		0			
Region									
North	24,312	0	2,637	0	19,108	0	2,452	0	115
Northeast	4,965	0	260	0	1,222	0	1,039	0	2,444
West	10,909	0	2,338	0	4,935	0	2,857	0	779
West Central	338	0		0		0	338	0	
Central	0	0				0			
South	0	0		0		0			
East	0	0		0		0			
Southwest	0	0		0		0			

A.24.4.14. Rain-fed wheat area planted with received seeds, 2001-02, hectares

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	35,678	.	3,902	.	18,276	.	11,707	.	1,793
Agro-ecological zone									
Badakhshan mountains	322	.	.	.	55	.	.	.	267
Central mountains	118	.	.	.	.	.	118	.	.
Eastern mountains	.	.	.	.	.	.	.	.	.
Southern mountains	.	.	.	.	.	.	.	.	.
Northern mountains	29,371	.	1,470	.	15,665	.	10,762	.	1,474
Turkistan plains	5,866	.	2,432	.	2,556	.	826	.	52
Herat-Farah lowlands	.	.	.	.	.	.	.	.	.
Helmand River valley	.	.	.	.	.	.	.	.	.
Region									
North	23,766	.	2,432	.	14,703	.	6,578	.	52
Northeast	3,507	.	312	.	891	.	916	.	1,388
West	8,287	.	1,158	.	2,681	.	4,094	.	353
West Central	118	.	.	.	.	.	118	.	.
Central	.	.	.	.	.	.	.	.	.
South	.	.	.	.	.	.	.	.	.
East	.	.	.	.	.	.	.	.	.
Southwest	.	.	.	.	.	.	.	.	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.15. Farms planting their own saved seed for rain-fed wheat, 2001-02

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	198,327	0	0	0	0	144,869	6,687	43,433	3,338
Agro-ecological zone									
Badakhshan mountains	25,639	0		0	0	18,314		6,959	366
Central mountains	69,371	0		0	0	65,311	338	3,722	
Eastern mountains	499	0		0	0	499			
Southern mountains	5,340	0		0	0	5,340			
Northern mountains	89,613	0	0	0	0	48,573	6,234	31,949	2,857
Turkistan plains	5,159	0	0	0	0	4,127	115	802	115
Herat-Farah lowlands	2,523	0		0	0	2,523			
Helmand River valley	183	0		0	0	183			
Region									
North	24,081	0	0	0	0	14,737	2,452	6,777	115
Northeast	79,187	0	0	0	0	44,847	1,039	30,856	2,444
West	19,666	0	0	0	0	13,952	2,857	2,078	779
West Central	54,144	0		0	0	50,083	338	3,722	
Central	1,265	0				1,265			
South	10,077	0		0	0	10,077			
East	249	0		0	0	249			
Southwest	9,658	0		0	0	9,658			

A.24.4.16. Rain-fed wheat area planted with own saved seeds, 2001-02, hectares

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	537,286	.	.	.	.	416,761	14,100	100,279	6,146
Agro-ecological zone									
Badakhshan mountains	83,772	.	.	.	.	60,800	.	22,488	483
Central mountains	125,356	.	.	.	.	117,150	1,354	6,853	.
Eastern mountains	200	.	.	.	.	200	.	.	.
Southern mountains	29,435	.	.	.	.	29,435	.	.	.
Northern mountains	275,252	.	.	.	.	189,348	12,724	67,837	5,343
Turkistan plains	19,699	.	.	.	.	16,255	23	3,101	320
Herat-Farah lowlands	3,280	.	.	.	.	3,280	.	.	.
Helmand River valley	293	.	.	.	.	293	.	.	.
Region									
North	123,171	.	.	.	.	98,047	1,896	22,908	320
Northeast	217,171	.	.	.	.	141,318	2,538	68,320	4,995
West	41,660	.	.	.	.	30,320	8,312	2,197	831
West Central	116,591	.	.	.	.	108,385	1,354	6,853	.
Central	777	.	.	.	.	777	.	.	.
South	31,431	.	.	.	.	31,431	.	.	.
East	100	.	.	.	.	100	.	.	.
Southwest	6,384	.	.	.	.	6,384	.	.	.

Table 24
Beneficiaries of input distribution programmes in 2001-02 and 2002-03
A.24.4.17. Farms planting purchased seeds for rain-fed wheat, 2001-02

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	186,627	0	0	114,590	25,265	0	0	43,433	3,338
Agro-ecological zone									
Badakhshan mountains	10,622	0		3,113	183	0		6,959	366
Central mountains	5,414	0		1,692		0	0	3,722	
Eastern mountains	6,983	0		6,983		0			
Southern mountains	1,112	0		1,112		0			
Northern mountains	144,940	0	0	88,834	21,299	0	0	31,949	2,857
Turkistan plains	13,642	0	0	8,942	3,783	0	0	802	115
Herat-Farah lowlands	3,364	0		3,364		0			
Helmand River valley	550	0		550		0			
Region									
North	97,945	0	0	71,946	19,108	0	0	6,777	115
Northeast	51,517	0	0	16,995	1,222	0	0	30,856	2,444
West	23,105	0	0	15,313	4,935	0	0	2,078	779
West Central	5,076	0		1,354		0	0	3,722	
Central	0	0				0			
South	1,112	0		1,112		0			
East	6,983	0		6,983		0			
Southwest	888	0		888		0			

A.24.4.18. Rain-fed wheat area planted with purchased seeds, 2001-02, hectares

	TOTAL	Origin or rain-fed wheat seed, 2001-02							
		Origin not reported	Received only	Purchased only	Received+ Purchased	Own saved only	Own + received	Own + purchased	All three origins
TOTAL	661,099	.	.	467,324	70,198	.	.	114,673	8,904
Agro-ecological zone									
Badakhshan mountains	25,397	.	.	4,285	55	.	.	20,598	458
Central mountains	4,653	.	.	1,117	.	.	.	3,536	.
Eastern mountains	3,392	.	.	3,392	.	.	.	.	.
Southern mountains	3,537	.	.	3,537	.	.	.	.	.
Northern mountains	568,277	.	.	412,906	59,195	.	.	87,953	8,223
Turkistan plains	49,965	.	.	36,208	10,948	.	.	2,585	224
Herat-Farah lowlands	4,962	.	.	4,962	.	.	.	.	.
Helmand River valley	916	.	.	916	.	.	.	.	.
Region									
North	498,214	.	.	392,720	56,802	.	.	48,468	224
Northeast	111,994	.	.	40,071	3,686	.	.	60,429	7,808
West	38,392	.	.	25,571	9,709	.	.	2,239	873
West Central	4,585	.	.	1,049	.	.	.	3,536	.
Central	.	.	.	.	.	.	.	.	.
South	3,537	.	.	3,537	.	.	.	.	.
East	3,392	.	.	3,392	.	.	.	.	.
Southwest	984	.	.	984	.	.	.	.	.

Table A.25
Area with major staple crops, 2001-2002

	A.25.1. Area planted with major staple crops in 2001-02, in hectares									
	Wheat		Barley		Maize	Rice	Potato	Pulses	All cereals	All staple crops
	Irrigated	Rain-fed	Irrigated	Rain-fed						
TOTAL	1,242,425	1,244,305	81,833	197,889	145,572	147,020	24,454	69,377	3,059,046	3,152,877
Agro-ecological zone										
Badakhshan mountains	65,197	106,147	5,824	12,783	5,091	11,135	2,124	952	206,177	209,254
Central mountains	107,915	132,855	3,519	7,039	3,249	0	10,727	1,794	254,576	267,097
Eastern mountains	108,164	3,616	549	100	28,526	50,084	1,621	1,197	191,039	193,857
Southern mountains	91,774	33,016	434	9,233	5,907	67	3,749	578	140,431	144,759
Northern mountains	290,971	882,434	33,871	163,408	18,806	76,366	4,935	40,235	1,465,856	1,511,026
Turkistan plains	186,993	72,025	16,095	2,098	160	4,803	0	871	282,174	283,046
Herat-Farah lowlands	173,798	9,924	20,479	2,313	2,775	168	967	883	209,458	211,308
Helmand River valley	217,614	4,287	1,063	916	81,058	4,397	330	22,866	309,335	332,531
Region										
North	190,179	655,246	21,131	125,115	6,721	7,831	2,753	15,099	1,006,223	1,024,075
Northeast	337,656	323,462	33,776	48,187	16,947	83,954	3,735	11,011	843,981	858,727
West	189,123	91,823	21,362	7,300	3,165	688	1,539	16,832	313,461	331,831
West Central	53,230	123,989	2,572	6,903	1,827	0	8,697	440	188,521	197,658
Central	59,801	777	402	0	7,255	1,047	2,753	1,327	69,283	73,362
South	80,633	35,047	367	9,233	6,767	67	2,671	1,143	132,114	135,928
East	80,555	3,517	349	100	21,493	49,037	150	50	155,050	155,250
Southwest	251,247	10,446	1,875	1,051	81,396	4,397	2,157	23,475	350,413	376,046

Area planted does not coincide with area harvested. Especially with rain-fed wheat and barley, about 25% of the area was not harvested.

Table A.25
Area with major staple crops, 2001-2002

A.25.2. Area harvested of major staple crops in 2001-02, in hectares											
	Wheat		Barley		Rice	Potato	Pulses	All cereals	All staple crops		
	Irrigated	Rain-fed	Irrigated	Rain-fed							
TOTAL	1,196,126	880,787	78,122	161,983	138,381	142,120	23,737	61,409	2,597,519	2,682,665	
Agro-ecological zone											
Badakhshan mountains	65,014	106,147	5,641	12,783	4,945	11,135	2,124	952	205,664	208,741	
Central mountains	105,005	130,418	3,519	7,039	3,249	0	10,592	1,760	249,229	261,581	
Eastern mountains	96,716	3,167	449	100	25,538	46,573	1,571	898	172,543	175,012	
Southern mountains	89,594	33,016	423	9,233	5,885	67	3,704	578	138,218	142,500	
Northern mountains	289,516	527,825	33,871	127,822	17,923	75,275	4,831	35,638	1,072,233	1,112,702	
Turkistan plains	184,815	69,159	14,948	2,029	160	4,505	0	871	275,617	276,489	
Herat-Farah lowlands	159,248	9,588	18,208	2,061	2,775	168	841	631	192,048	193,520	
Helmand River valley	206,217	1,466	1,063	916	77,906	4,397	73	20,081	291,966	312,120	
Region											
North	186,858	302,129	19,984	90,136	6,721	7,169	2,753	14,710	612,998	630,461	
Northeast	337,317	321,857	33,593	47,771	15,917	83,227	3,683	11,011	839,682	854,376	
West	174,418	88,733	19,091	6,788	3,165	688	1,361	12,371	292,883	306,615	
West Central	52,418	123,447	2,572	6,903	1,827	0	8,561	406	187,167	196,135	
Central	53,136	370	302	0	5,510	599	2,680	1,078	59,916	63,674	
South	79,966	33,558	356	9,233	6,745	67	2,648	1,143	129,924	133,716	
East	74,894	3,068	349	100	20,251	45,974	150	0	144,636	144,785	
Southwest	237,119	7,625	1,875	1,051	78,245	4,397	1,901	20,690	330,312	352,903	

Area harvested includes all area planted in farms with nonzero production. Farms partially harvested are therefore considered as totally harvested. Farms with nonzero production include some farms with negligibly small production. Only total crop failures are considered as non harvested.

Table A.25
Area with major staple crops, 2001-2002

A.25.3. Percentage non harvested area of major staple crops in 2001-02, in hectares

	Wheat		Barley		Maize	Rice	Potato	Pulses	All cereals	All staple crops
	Irrigated	Rain-fed	Irrigated	Rain-fed						
TOTAL	3.7%	29.2%	4.5%	18.1%	4.9%	3.3%	2.9%	11.5%	15.1%	14.9%
Agro-ecological zone										
Badakshan mountains	0.3%	0.0%	3.1%	0.0%	2.9%	0.0%	0.0%	0.0%	0.2%	0.2%
Central mountains	2.7%	1.8%	0.0%	0.0%	0.0%		1.3%	1.9%	2.1%	2.1%
Eastern mountains	10.6%	12.4%	18.2%	0.0%	10.5%	7.0%	3.1%	25.0%	9.7%	9.7%
Southern mountains	2.4%	0.0%	2.6%	0.0%	0.4%	0.0%	1.2%	0.0%	1.6%	1.6%
Northern mountains	0.5%	40.2%	0.0%	21.8%	4.7%	1.4%	2.1%	11.4%	26.9%	26.4%
Turkistan plains	1.2%	4.0%	7.1%	3.3%	0.0%	6.2%		0.0%	2.3%	2.3%
Herat-Farah lowlands	8.4%	3.4%	11.1%	10.9%	0.0%	0.0%	13.0%	28.6%	8.3%	8.4%
Helmand River valley	5.2%	65.8%	0.0%	0.0%	3.9%	0.0%	77.8%	12.2%	5.6%	6.1%
Region										
North	1.7%	53.9%	5.4%	28.0%	0.0%	8.4%	0.0%	2.6%	39.1%	38.4%
Northeast	0.1%	0.5%	0.5%	0.9%	6.1%	0.9%	1.4%	0.0%	0.5%	0.5%
West	7.8%	3.4%	10.6%	7.0%	0.0%	0.0%	11.6%	26.5%	6.6%	7.6%
West Central	1.5%	0.4%	0.0%	0.0%	0.0%		1.6%	7.7%	0.7%	0.8%
Central	11.1%	52.3%	24.8%		24.1%	42.9%	2.6%	18.8%	13.5%	13.2%
South	0.8%	4.2%	3.0%	0.0%	0.3%	0.0%	0.8%	0.0%	1.7%	1.6%
East	7.0%	12.8%	0.0%	0.0%	5.8%	6.2%	0.0%	100.0%	6.7%	6.7%
Southwest	5.6%	27.0%	0.0%	0.0%	3.9%	0.0%	11.9%	11.9%	5.7%	6.2%

Table A.26
Reported performance of major staple crops, 2001-2002

A.26.1. Reported output of major staple crops, 2001-02 (MT)											
	Wheat		Barley		Maize	Rice	Potato	Pulses	All cereals	All staple crops	
	Irrigated	Rain-fed	Irrigated	Rain-fed							
TOTAL	1,646,337	490,538	71,443	111,337	176,542	235,076	144,586	42,035	2,731,272	2,917,893	
Agro-ecological zone											
Badakhshan mountains	104,205	59,269	7,066	8,553	6,835	27,699	10,544	1,133	213,629	225,306	
Central mountains	153,701	58,344	2,148	3,110	1,932	0	57,885	1,266	219,236	278,387	
Eastern mountains	204,051	1,185	687	136	61,151	61,630	23,531	642	328,840	353,014	
Southern mountains	113,483	13,825	818	7,190	7,244	121	25,708	1,036	142,681	169,425	
Northern mountains	468,248	307,135	33,982	87,131	14,812	124,572	22,659	17,191	1,035,881	1,075,731	
Turkistan plains	226,680	42,355	9,287	1,466	193	15,652	0	184	295,632	295,815	
Herat-Farah lowlands	178,644	8,131	16,350	2,651	3,265	67	4,185	252	209,109	213,546	
Helmand River valley	197,325	293	1,103	1,099	81,110	5,335	73	20,330	286,266	306,669	
Region											
North	212,175	147,889	13,090	52,919	5,633	8,105	7,441	4,700	439,811	451,952	
Northeast	559,970	206,967	36,451	40,593	15,636	158,904	24,406	9,115	1,018,520	1,052,042	
West	205,632	62,034	17,145	6,288	3,837	982	5,541	4,945	295,918	306,404	
West Central	69,966	55,940	1,587	3,082	875	0	45,169	399	131,449	177,018	
Central	107,598	152	376	0	7,845	1,065	27,502	977	117,036	145,515	
South	114,627	13,863	715	7,190	7,586	121	18,458	1,108	144,101	163,667	
East	154,750	1,081	548	136	53,758	60,565	3,413	0	270,837	274,250	
Southwest	221,620	2,612	1,532	1,128	81,373	5,335	12,656	20,789	313,600	347,045	

Table A.26
Reported performance of major staple crops, 2001-2002

A.2.6.2. Reported gross yield relative to planted area (MT/Ha planted), 2001-02

	Wheat		Barley		Maize	Rice	Potato	Pulses	All cereals	All staple crops
	Irrigated	Rain-fed	Irrigated	Rain-fed						
TOTAL	1.33	0.39	0.87	0.56	1.21	1.60	5.91	0.61	0.89	0.93
Agro-ecological zone										
Badakhshan mountains	1.60	0.56	1.21	0.67	1.34	2.49	4.96	1.19	1.04	1.08
Central mountains	1.42	0.44	0.61	0.44	0.59		5.40	0.71	0.86	1.04
Eastern mountains	1.89	0.33	1.25	1.37	2.14	1.23	14.52	0.54	1.72	1.82
Southern mountains	1.24	0.42	1.89	0.78	1.23	1.81	6.86	1.79	1.02	1.17
Northern mountains	1.61	0.35	1.00	0.53	0.79	1.63	4.59	0.43	0.71	0.71
Turkistan plains	1.21	0.59	0.58	0.70	1.20	3.26		0.21	1.05	1.05
Herat-Farah lowlands	1.03	0.82	0.80	1.15	1.18	0.40	4.33	0.29	1.00	1.01
Helmand River valley	0.91	0.07	1.04	1.20	1.00	1.21	0.22	0.89	0.93	0.92
Region										
North	1.12	0.23	0.62	0.42	0.84	1.04	2.70	0.31	0.44	0.44
Northeast	1.66	0.64	1.08	0.84	0.92	1.89	6.53	0.83	1.21	1.23
West	1.09	0.68	0.80	0.86	1.21	1.43	3.60	0.29	0.94	0.92
West Central	1.31	0.45	0.62	0.45	0.48		5.19	0.91	0.70	0.90
Central	1.80	0.20	0.94		1.08	1.02	9.99	0.74	1.69	1.98
South	1.42	0.40	1.95	0.78	1.12	1.81	6.91	0.97	1.09	1.20
East	1.92	0.31	1.57	1.37	2.50	1.24	22.81	0.00	1.75	1.77
Southwest	0.88	0.25	0.82	1.07	1.00	1.21	5.87	0.89	0.89	0.92

Table A.26
Reported performance of major staple crops, 2001-2002

	A.26.3. Reported net yield relative to harvested area (MT/Ha harvested), 2001-02										
	Wheat		Barley		Maize	Rice	Potato	Pulses	All cereals	All staple crops	
	Irrigated	Rain-fed	Irrigated	Rain-fed							
TOTAL	1.38	0.56	0.91	0.69	1.28	1.65	6.09	0.68	1.05	1.09	
Agro-ecological zone											
Badakhshan mountains	1.60	0.56	1.25	0.67	1.38	2.49	4.96	1.19	1.04	1.08	
Central mountains	1.46	0.45	0.61	0.44	0.59		5.47	0.72	0.88	1.06	
Eastern mountains	2.11	0.37	1.53	1.37	2.39	1.32	14.98	0.72	1.91	2.02	
Southern mountains	1.27	0.42	1.94	0.78	1.23	1.81	6.94	1.79	1.03	1.19	
Northern mountains	1.62	0.58	1.00	0.68	0.83	1.65	4.69	0.48	0.97	0.97	
Turkistan plains	1.23	0.61	0.62	0.72	1.20	3.47		0.21	1.07	1.07	
Herat-Farah lowlands	1.12	0.85	0.90	1.29	1.18	0.40	4.98	0.40	1.09	1.10	
Helmand River valley	0.96	0.20	1.04	1.20	1.04	1.21	1.00	1.01	0.98	0.98	
Region											
North	1.14	0.49	0.66	0.59	0.84	1.13	2.70	0.32	0.72	0.72	
Northeast	1.66	0.64	1.09	0.85	0.98	1.91	6.63	0.83	1.21	1.23	
West	1.18	0.70	0.90	0.93	1.21	1.43	4.07	0.40	1.01	1.00	
West Central	1.33	0.45	0.62	0.45	0.48		5.28	0.98	0.70	0.90	
Central	2.02	0.41	1.25		1.42	1.78	10.26	0.91	1.95	2.29	
South	1.43	0.41	2.01	0.78	1.12	1.81	6.97	0.97	1.11	1.22	
East	2.07	0.35	1.57	1.37	2.65	1.32	22.81		1.87	1.89	
Southwest	0.93	0.34	0.82	1.07	1.04	1.21	6.66	1.00	0.95	0.98	