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ACCELERATING SUSTAINABLE AGRICULTURE PROGRAM



Samangan Province Agricultural Profile 2008



Prepared by the National Agriculture Information System (NAIS)/AgNet
for the Afghan Ministry of Agriculture, Irrigation and Livestock (MAIL)

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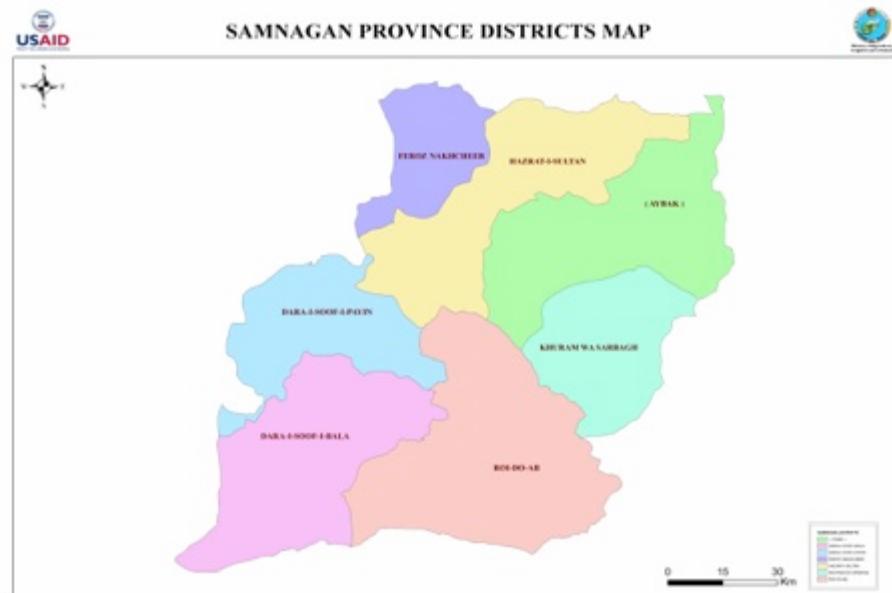
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Agriculture

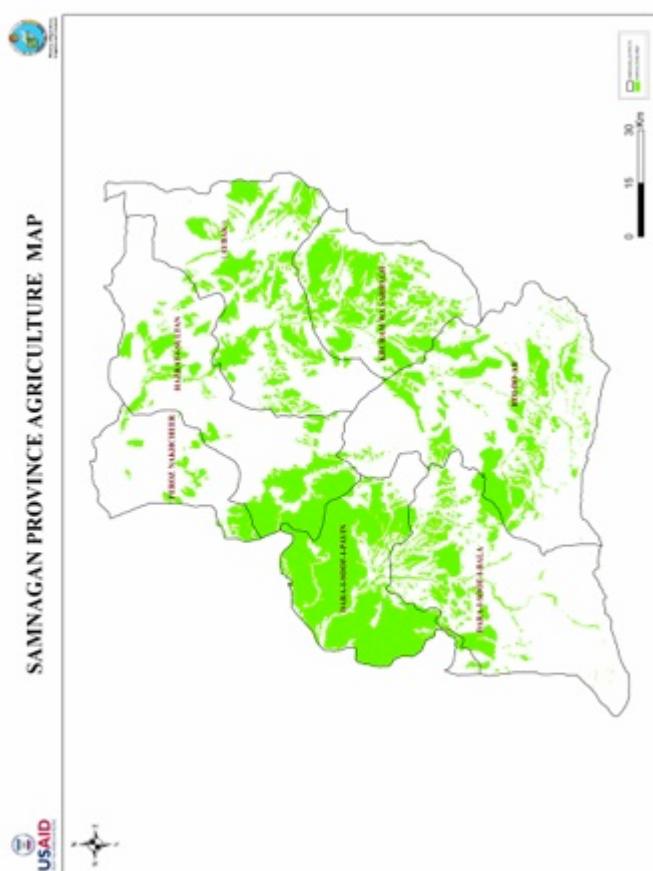
Profile and Data

In Samangan Province



Samangan Brief

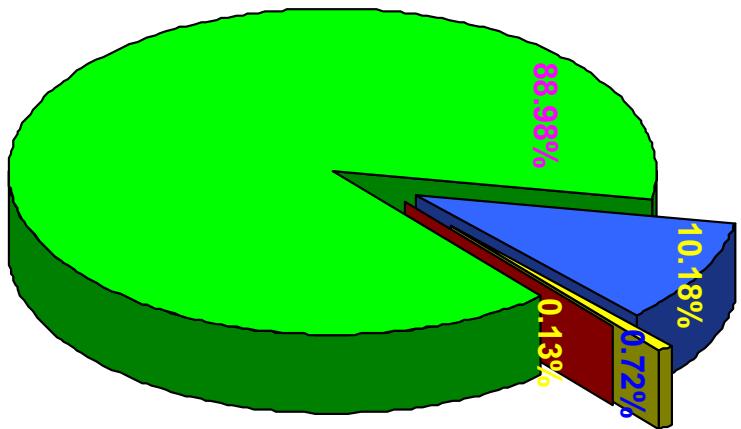
Samangan is located in northern Afghanistan between 35.35-36.64 degrees latitude and 66.87-68.57 degrees longitude. Samangan borders the provinces of Balkh and Kunduz to the north, Balkh and Saripul to the west, Baghlan province to the east and Bamyan provinces to the south. Samangan has 7 districts that encompass 13,651.17 square kilometers which includes 355,758 hectares of agricultural land. There are a total of 487 villages with an estimated population of 383,311 people as of 2008. Samangan is famous for producing almonds and pistachios. The majority of the Samangan residents are engaged in animal husbandry, especially sheep and cattle.



In 2008, Samangan farmers grew 30 different crops on approximately 144,454 hectares of land (10.58 percent of total area). The province's cultivated area is mostly concentrated in the northwestern and southeastern districts because of the vicinity to the Samangan River. Almost 70 percent of the cultivated land is concentrated in 4 of the 7 districts of Samangan. The remaining 3 districts are suitable for raising livestock because of the mountainous terrain. The districts of Samangan are as follows:

- | | |
|-------------------|---------------------|
| 1. Aybak | 5. Roi do Ab |
| 2. Dara suf bala | 6. Feroznakher |
| 3. Dara suf Paean | 7. Khoram & Sarbagh |
| 4. Hazrat sultan | |

Samangan's total 2008 crop production was surveyed at 292,286 MT, mostly consisting of grains (88.98 percent), followed by fruits (10.18 percent), vegetable (0.72 percent) and fodder and industrial crops (0.13 percent). The total market value of the 2008 agricultural output was estimated at \$253 million.



Of Samangan's 7 districts, Dara-i-soof-i-Payin was the most productive, generating 67 percent of the total 2008 agricultural output in 2008. The remaining 4 districts (Aybak, Roi-do-Ab, Dara-i-soof-i-Bala and Feroz Nakhcheer) have slightly variation in their production and accounted for 26.45 percent of all crops. Hazrat sultan and Khuram wa Sarbagh grew the least amount of products (5.9 percent) in all of Samangan during 2008.

Research Methodology

This report was prepared based on information provided by AgNet/NAIS system. In 2007 and 2008 AgNet Conducted two separate surveys (1) district profile survey and (2) agricultural statistic survey in 19 provinces of Afghanistan with the support of ASAP and MAIL at district level. During a period of 4 months each, more than 50 surveyors collected information related to the number of hectares land cultivated types of products produced number of livestock, crop calendar, sources of water and much more agricultural information. The information presented in this report is based exclusively in the area surveyed, not in the total farm land of the provinces. The AgNet/NAIS data base for Samangan is the most accurate database available in the country in spite there is not estimation rewarding the level of exactitude of the information. All data related to harvest amounts was checked in July 2008 by ASAP personnel (Prof. A. Ghani Taj Agricultural Information Specialist and former professor of Kabul University and Ahmad Jawid Abid Survey and Data Assistant) by comparing the national average productivity level of each products. Crop value information was determined on wholesale price in Farah and collected by Samangan AgNet officer Mr. Abdul Ghafoor and approved by director of Samangan Provincial Agriculture department Mr. Shahnawaz in November 2008.

Grains

Samangan's 2008 annual grain production was surveyed at approximately 260,066 MT with representing market value of \$155.7 million. Of this total, almost all (97 percent) consisted of wheat, which was valued at \$151.7 million. The remaining 3 percent comprised other grain crops valued at \$4 million.

Grain	Tons	Value USD \$
Wheat	252,902	151,741,020
Barely	5,685	2,615,252
Maize	52	29,120
Mung bean	40	24,000
Pea	1,293	1,293,000
Red bean	10	13,000
Millets	84	50,250
Grand Total	260,066	155,765,642

Wheat and barley are the main sources of grain in Samangan and are grown in all districts of the province. Peas were the third most cultivated crop and amounted to almost 1,300 MT of the total grain production in Samangan. Dara-i-soof-i-Payin district produced the highest amount of wheat (74.65 percent) and Roi-do-Ab produced more than half (53 percent) of all barley grown in Samangan during 2008.

	Wheat	Barely	Maize	Mung bean	Pea	Red bean	Millets
Aybak	19,180,000	421,680	52,000	40,000	-	10,000	80,000
Hazrat-I-sultan	691,200	451,800	-	-	1,050,000	-	-
Khuram wa Sarbagh	4,210,500	374,850	-	-	-	-	3,750
Dara-i-soof-i-bala	9,700,000	650,000	-	-	75,000	-	-
Dara-i-soof-i-Payin	188,800,000	650,000	-	-	168,000	-	-
Roi-do-Ab	12,000,000	3,030,000	-	-	-	-	-
Feroz Nakhcheer	18,320,000	107,000	-	-	-	-	-
Total	252,901,700	5,685,330	52,000	40,000	1,293,000	10,000	83,750

Fruits

Fruits	Tons	Value USD \$
Grape	1,353	1,353,000
Apple	307	245,600
Almond	3,314	26,514,000
Apricot	385	384,500
Peach	46	32,410
Walnut	16	47,100
Pistachio	6,148	61,475,000
Melon	13,625	4,632,500
W.Melon	4,513	1,083,060
Other Fruits	39	38,500
Grand Total	29,746	95,805,670

In 2008, Samangan farmers grew 29,746 MT of fruits with profits estimated at \$95.8 million. Melons represented 45.85 percent of the fruit harvest but were the third most profitable fruit for Samangan farmers (\$4.6 million). Pistachios led in terms of market value (\$61 million) and accounted for 20.67 percent of all fruits grown in 2008. Meanwhile, almonds generated \$26.5 million dollars in revenue during 2008.

Unlike grain production, fruit production is more evenly dispersed in throughout the province, especially apples, almonds, apricots, melons, watermelons and walnuts. Khuram and Sarbagh districts produced the largest amounts of almonds and apricots and Hazrat-i-Sultan accounted for the most pistachios and melons. Figures presented in the table below are in kg.

	Grape	Apple	Almond	Apricot	Peach	Walnut	Pistachio	Melon	W.Melon	Other Fruits
Aybak	104,000	95,250	882,000	71,500	-	10,200	-	975,000	672,750	-
Hazrat-i-sultan	9,000	8,000	14,000	-	-	-	1,700,000	6,000,000	1,650,000	-
Khuram wa Sarbagh	-	63,750	2,250,000	150,000	17,500	-	-	-	-	7,000
Dara-i-soof-i-bala	-	40,000	48,000	28,000	12,800	5,500	720,000	2,200,000	840,000	-
Dara-i-soof-i-Payin	-	-	20,250	9,000	-	-	427,500	4,450,000	1,350,000	-
Roi-do-Ab	-	100,000	-	42,000	16,000	-	-	-	-	31,500
Feroz Nakhcheer	1,240,000	-	100,000	84,000	-	-	3,300,000	-	-	-
Total	1,353,000	307,000	3,314,250	384,500	46,300	15,700	6,147,500	13,625,000	4,512,750	38,500

Vegetables

Vegetable production surveyed in Samangan province during 2008 was estimated at 2,103 MT, with a value of almost \$611,000. Samangan farmers produced more than 7 different types of vegetables but only potatoes amounted to over 1,000 MT. Potatoes represented 67 percent of Samangan's total vegetable harvest in 2008.

Vegetable	Tons	Value
Potato	1,411	\$611,000
Onion	324	\$100,000
pepper	4	\$1,000
Eggplant	47	\$10,000
Carrot	127	\$20,000
Turnip	165	\$30,000
Other Vegetables	25	\$5,000
Grand Total	2,103	\$756,000

Farmers grew potatoes and onions in almost all districts of Samangan in 2008. Dara-i-soof-i-bala district produced over half (53 percent) of the province's potatoes and Aybak district accounted for 32 percent of all onions. Dara-i-soof-i-bala also produced 40 percent of all carrots and 54 percent of all turnips in 2008. Figures in the table below are in kg.

	Potato	Onion	pepper	Eggplant	Carrot	Turnip
Aybak	300,000	105,000	800	-	63,000	78,000
Hazrat-i-sultan	-	35,000	-	-	-	-
Khuram wa Sarbagh	105,000	90,000	3,000	40,000	-	37,500
Dara-i-soof-i-bala	750,000	45,000	650	6,600	32,500	4,200
Dara-i-soof-i-Payin	16,000	17,200	-	-	-	-
Roi-do-Ab	240,000	32,000	-	-	31,500	45,000
Feroz Nakhcheer	-	-	-	-	-	-
Total	1,411,000	324,200	4,450	46,600	127,000	164,700

Fodder & Industrial Crops

Animal fodder and industrial crops surveyed in Samangan province in 2008 totaled 371 MT and was worth just under \$600,000. Farmers grew \$24,000 worth of alfalfa in 2008.

Fodder & Industrials	Tons	Value USD \$
Alfalfa	120	24,000
flax	173	517,800
Sesame	78	28,080
Grand Total	371	569,880

Farmers cultivated flax in 4 out of the 7 districts of Samangan. Moreover, a very small amount of sesame was grown and almost exclusively for household consumption in 2008. Aybak district contributes all of Samangan's alfalfa.

	Alfalfa	Flax	Sesame
Aybak	120,000	-	-
Hazrat-i-sultan	-	-	-
Khuram wa Sarbagh	-	-	-
Dara-i-soof-i-bala	-	29,000	36,000
Dara-i-soof-i-Payin	-	72,000	42,000
Roi-do-Ab	-	60,000	-
Feroz Nakhcheer	-	11,600	-
Total	120,000	172,600	78,000

Livestock

Province	District	Total livestock	Total Poultry
Samangan	Aybak	270,277	51,203
	Dara-i-soof-i-bala	97,350	-
	Dara-i-soof-i-Payin	86,000	-
	Hazrat-i-sultan	230,250	7,100
	Khuram wa Sarbagh	48,400	-
	Roi-do-Ab	19,300	-
	Feroz Nakhcheer	67,620	25,500
Total		819,197	83,803

Household livestock present in Samangan totaled 819,197, not including 83,803 chickens, ducks and turkeys. Sixty-one percent of the province's livestock was found in Aybak and Hazrat sultan districts and the remaining 39 percent was kept in the other 5 districts of Samangan. Karakul sheep and goats are the dominant household livestock in Samangan province. Sheep and goats make 65 percent of all livestock and is a reflection of the hilly and mountainous terrain of the province.

Animals	Cow	Sheep & Karakul	Goat	Horse & Camel	Donkey	Total	Chicken	Turkey	Total
Heads	161,498	468,296	69,353	5,885	114,165	819,197	82,903	900	83,803
%	19.71	57.17	8.47	0.72	13.94	100%	98.93	1.07	100%

Cattle are composed of oxen and dairy cows. The high percentage of donkeys (13.9 percent) indicates that transportation in Samangan is underdeveloped.

Annex 1

Samangan province crop surveyed by Hec, Tons and USD

S,#	Crops	Hectares	Metric Tons	Value USD \$
1	Weath	122,820	252,902	151,741,020
2	Barely	4,400	5,685	2,615,252
3	Maiz	40	52	29,120
4	Mung bean	40	40	24,000
5	Pea	1,900	1,293	1,293,000
6	Red bean	10	10	13,000
7	Millets	105	84	50,250
8	Potato	450	1,411	423,300
9	Onion	62	324	64,840
10	pepper	8	4	5,340
11	Eggplant	12	47	18,640
12	Okra	4	8	3,850
13	Round Red Redish	2	2	1,840
14	Carrot	40	127	50,800
15	Cauliflower and Cabbage	7	15	9,240
16	Turnip	77	165	32,940
17	Grape	422	1,353	1,353,000
18	Apple	67	307	245,600
19	Almond	3,655	3,314	26,514,000
20	Plum	15	32	31,500
21	Apricot	72	385	384,500
22	Pomegranate	2	7	4,200
23	Peach	14	46	32,410
24	Walnut	25	16	47,100
25	Pistachio	6,250	6,148	61,475,000
26	Melon	2,350	13,625	4,632,500
27	W.melon	915	4,513	1,083,060
28	Alfalfa	20	120	24,000
29	Flax	420	173	517,800
30	Sesame	250	78	28,080
Total		144,454	292,286	252,749,182

ANNEX 2

ASAP/NAIS

Ranking of Samangan Province districts by tons surveyed annually

S.#	District	Hectares	Tons	Value USD \$	% total tons
1	Dara-i-soof-i-Payin	83076	196,022	120,405,440	67.07
2	Aybak	18572	23,281	19,835,863	7.97
3	Feroz Nakhcheer	12410	23,163	46,200,020	7.92
4	Roi-do-Ab	9418	15,628	9,038,500	5.35
5	Dara-i-soof-i-bala	9002	15,229	15,284,100	5.21
6	Hazrat-i-sultan	5544	11,609	21,242,948	3.97
7	Khuam wa Sarbagh	6432	7,353	20,995,031	2.52

Annex 3 Harvest seasons for Samangan

Agricultural crops surveyed

Crops	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Weath												
Barely												
Maiz												
Mung bean												
Pea												
Red bean												
Millets												
Potato												
Onion												
pepper												
Eggplant												
Okra												
Round Red Redish												
Carrot												
Cauliflower and Cabbage												
Turnip												
Grape												
Apple												
Almond												
Plum												
Apricot												
Pomegranate												
Peach												
Walnut												
Pistachio												
Melon												
W.melon												
Alfalfa												
Flax												
Sesame												

Annex 4

District Profile Summary for (Aybak) Samangan 2008

DISTRICT PROFILE:		Aybak	
1	DEMOGRAPHICS	7	Water
Region:	Northern	Rain fed	60
Province:	Samangan	Kariz	
District:	Aybak	Other irrigated	25%
Villages:	123	Springs	5%
Households:	16,500	Bored wells, #	20
Estimated population:	103,383	Access/irrigated water	60%
2	Land	8	Infrastructure
Sharecroppers, %	7%	Access/drinking water	1%
Arable land, jeribs	282,895	Schools	45
Arable land, hectares (/5)	56,579	Electricity costs, Afs/KWH	18 Afghani
Grazing land, jeribs	6000	Cell phone access	yes
Geographic area, Km2	2314.628	Health clinic, #	yes
Landowner, %	43	VFUs, #	
Irrigated land area, hectares	7,554	9	Livelihood
Rainfed land in use,hectars	49,025	Agro-horticulture sector, %	24
3	Primary Crops	Livestock sub-sector, %	36
Spring wheat, hecarts	13,400	Bussiness and Trade %	5
Fall wheat, hecarts	3,100	Government and NGO %	3
Barley, hecarts	440	Daily Labor %	32
Milles, hecarts	100	10	Small Enterprises
Almond , hecarts	980	General shops, #	220
Mellan& water mellan,hecarts	265	Food service,#	470
Alfa alfa,hecarts	20	Flour mills,#	41
Other grains, hecarts	90	Shoe repair,#	25
Other vegetables,hecarts	117	Blacksmith,#	25
Other fruits,hecarts	60	Oil extraction,#	5
4	Livestock	Butcher shops, #	61
Livestock owners, %	10	Carpet shops,#	3
Dairy cows, #	5500	11	Agricultural Facilities
Beef cattle & Draught oxen, #	70,898	Artificial Insimilation	
Sheep,goats+qarqul,#	155,599	Rentable Ag Machinary	yes
Donkey, #	36165	Improved wheat seed	yes
Horses, #	1,962	Fruit Nurseries, #	yes
Checkens & Turkey, #	51,203	Credit facility	
Camels, #	153	Poultry farm, #	
Kuchi, (families),#		Agrochemicals,	yes
Kuchi sheep, #		Cool storage, #	yes
Kuchi goats, #		Green houses, #	yes
Camels, #		12	Household (HH) Indices
Kuchi other, #		Arable land/HH, jeribs	17.145
5	Transportation	Grazing land/HH, jeribs	0.363
Distance to center, km	15.7	Irrigated land/HH, jeribs	2.289
Time to center, minutes	30	Rainfed land/HH, jeribs	14.856
Cost to center, Afs	70	Total livestock/HH, #	16.38
Truck cost to center, Afs		Sheep&goats/HH, #	9.43
District roads	Unpaved	Poultry/HH, #	3.103
Provincial roads	Paved	13	Checks
Accessibility	12 months	Household/village	134.146
6	Markets	Population/ HH	6.265
Provincial	yes	School/ village	0.365
District, General, day	Mon& Thurs	No. of Bored wells/ village	0.162
District, livestock, day	Mon& Thurs	No. of Enterprize/village	6.91
Traders/assemblers	yes		

Annex 5

Household Animals and Poultry in Samangan Province

ASAP/Chemonics

2008

S.#	Province	Districts	Livestock statistics								Total	Poultry			Total
			Oxen	Cow	Sheep	Karakol	Goats	Horse	Donkey	Camel		Hens	Checks	Turkey	
1	Samangan	Aybak	70,898	5,500	142,059	5,237	8,303	1,962	36,165	153	270,277	43,783	7,420	-	51,203
2		Dara-i-soof-i-bala	12,000	7,000	21,000	-	7,350	97,85	50,000	-	97,350	-	-	-	-
3		Dara-i-soof-i-Payin	2,000	5,000	60,000	-	15,000	1,000	3,000	-	86,000	-	-	-	-
4		Hazrat-i-sultan	30,000	5,000	150,000	10,000	25,000	225,45	10,000	250	230,250	4,200	2,500	400	7,100
5		Khuam wa Sarbagh	4,900	7,500	24,000		6,000	2,000	4,000		48,400	-	-	-	-
6		Roi-do-Ab	7,500	1,600	7,000		1,700	500	1,000		19,300	-	-	-	-
7		Feroz Nakhcheer	600	2,000	45,000	4,000	6,000	71.12	10,000	20	67,620	15,000	10,000	500	25,500

Annex 6

Province: Samangan

Arable land survey cultivated, forest and pasture land in Hectare

2008

S.#	Province	District	Villag e	Cultivated land in Hact		Total land	Orchard s &viens	Vegetable and Furrows crops	Cereal Crops	Forage crops	Forest land	Pasture land	Non- areble land	Mount ains	Total Land area	
				Rainfed Land	Irrigated Land											
1	Samangan	Aybak	123	49,025	7,554	56,579	86,843	7,500	-	33,000	100	1,200	-	-	57,879	
2		Hazrat-i-sultan	66	15,246	5,337	20,583	70,149	3,000	-	10,000	800	400	-	-	21,783	
3		Khuam wa Sarbagh	42	3,000	2,000	5,000	-	-	-	-	-	5,000	-	-	10,000	
4		Dara-i-soof-i-Payin	81	16,000	8,000	24,000	-	-	-	-	-	14,000	-	-	38,000	
5		Dara-i-soof-i-bala	86	12,000	6,000	18,000	-	-	-	-	-	12,000	-	-	30,000	
6		Roi-do-Ab	67	16,061	3,786	19,847	-	-	-	-	-	163,783	-	-	183,630	
7		Feroz Nakhcheer	22	4,494	1,922	6,416	-	300	-	300	50	8,000	-	-	14,466	
Total				487	115,826	34,599	150,425	156,992	10,800	-	43,300	950	204,383	-	-	355,758

Annex 7
Crop Calendar
2008

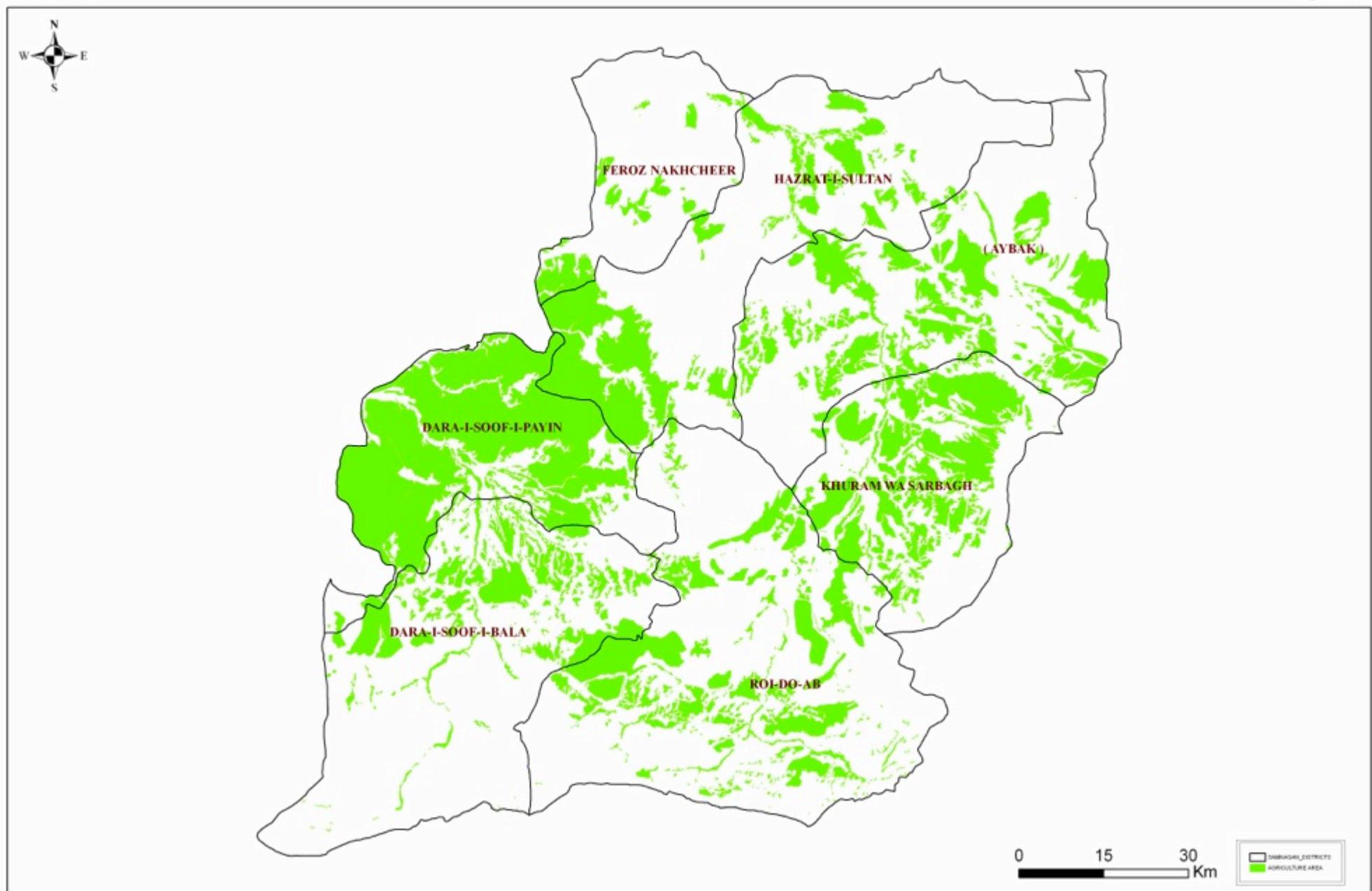
Activities	District	Khuram sarbagt	Province	Samangan	Date	GPS HQ	Elev.HQ						
	seasons	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fruit and Nut Crops													
Apple	Spring												
	Fall												
Grape													
Pomagranate													
Apricot													
Peach													
Sour Plum													
Almond													
Walnut													
Pistachi													
Mulberries													
Vegetable													
Tomato													
Potato	Spring												
	Fall												
Water Melon													
Melon	Spring												
	Summer												
	Fall												
carrot													
Okra													
Eggplant													
Cucumber													
Onion													
Cauliflower													
Spinach													
Cash Crop													
Cotton	Spring												
	Summer												
Rice													
Wheat	Spring												
	Fall												
Corn	Spring												
	Summer												
Mung Bean													
Cumine													
Sunflower													
Canoll													
Zafaran													
Pea													

Planting
Harvesting

SAMNAGAN PROVINCE DISTRICTS MAP



SAMNAGAN PROVINCE AGRICULTURE MAP

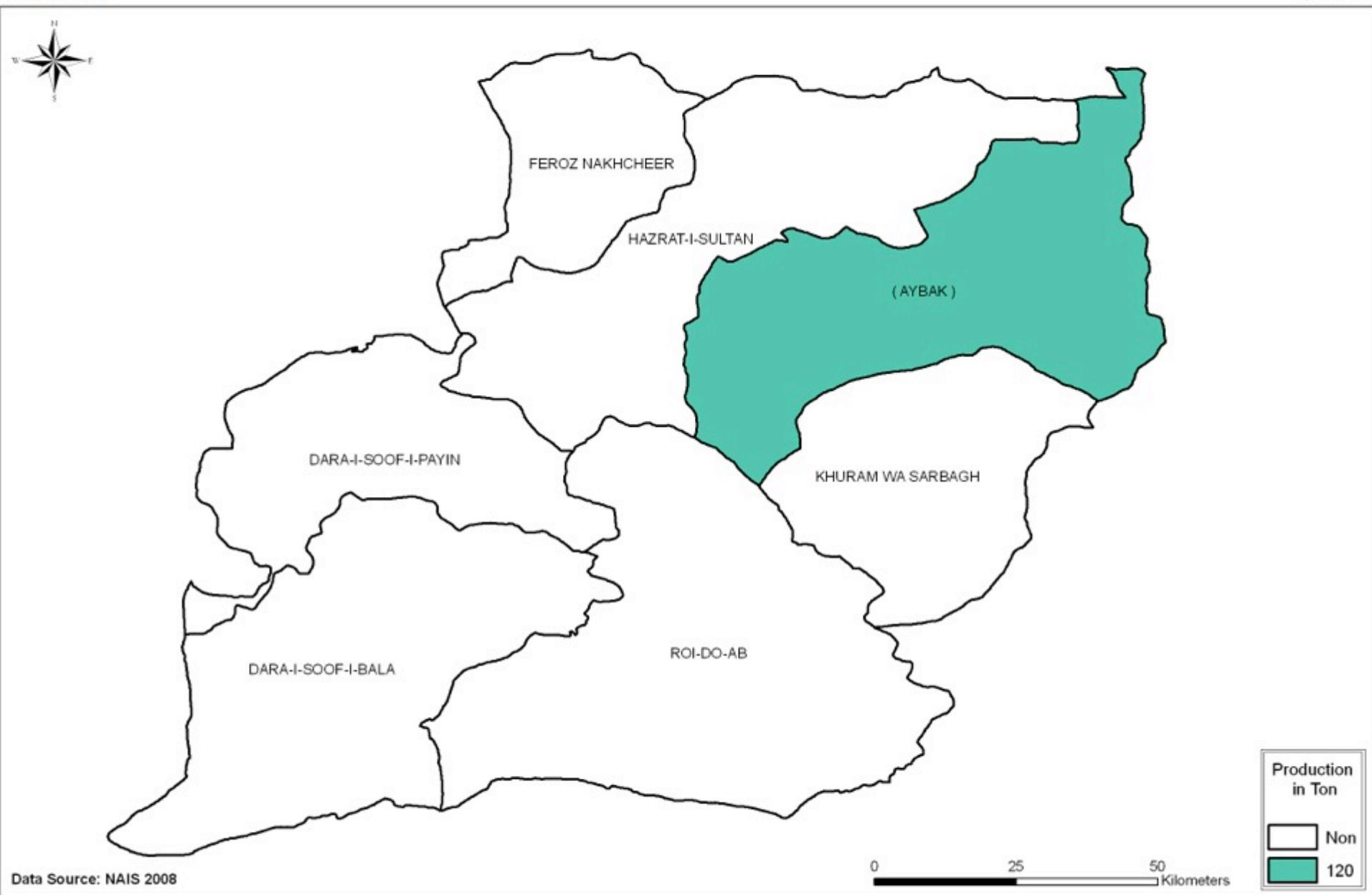


SAMANGAN PROVINCE CROP PRODUCTION MAP (Wheat)



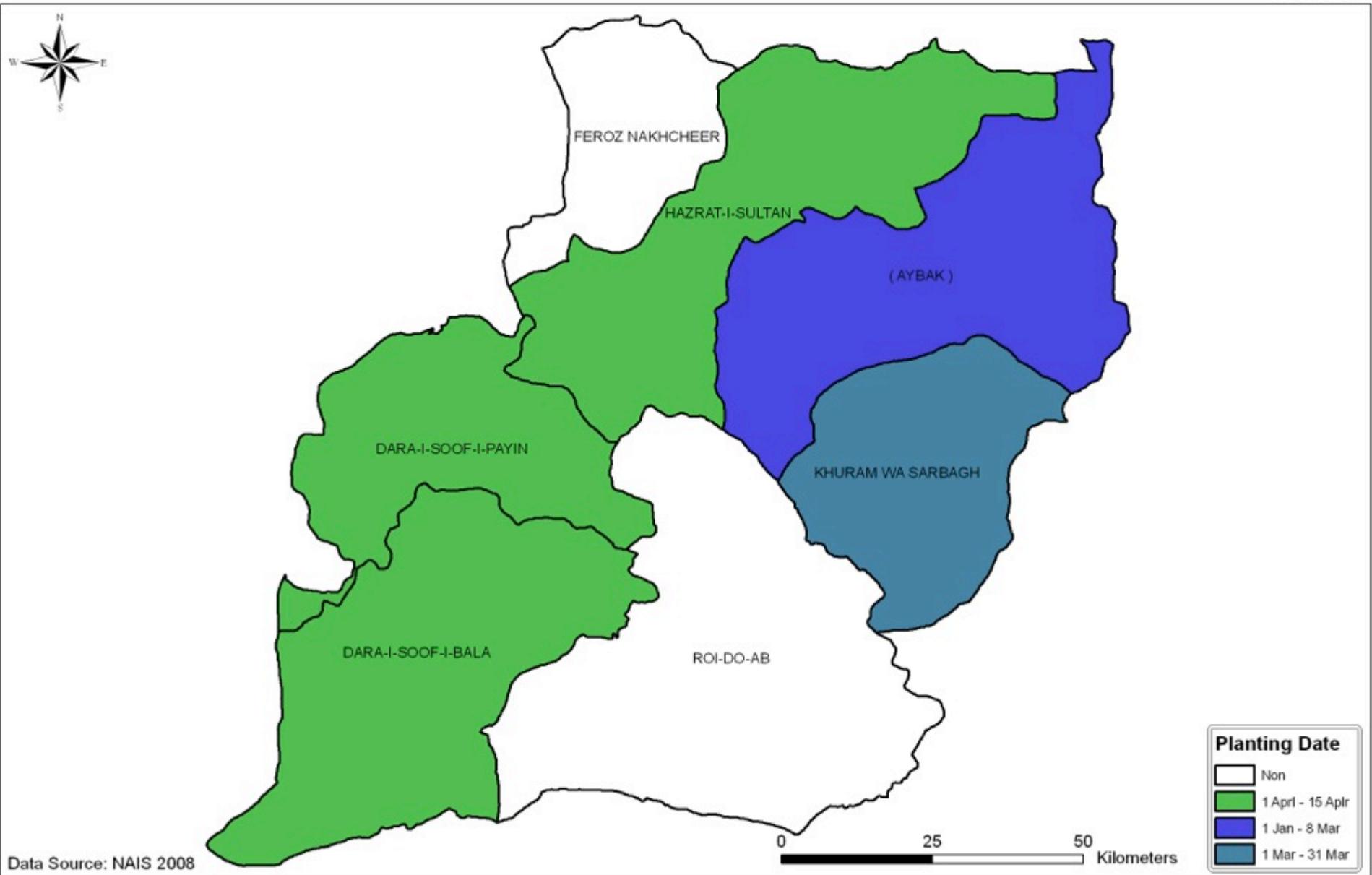


SAMANGAN PROVINCE CROP PRODUCTION MAP (Alfalfa)



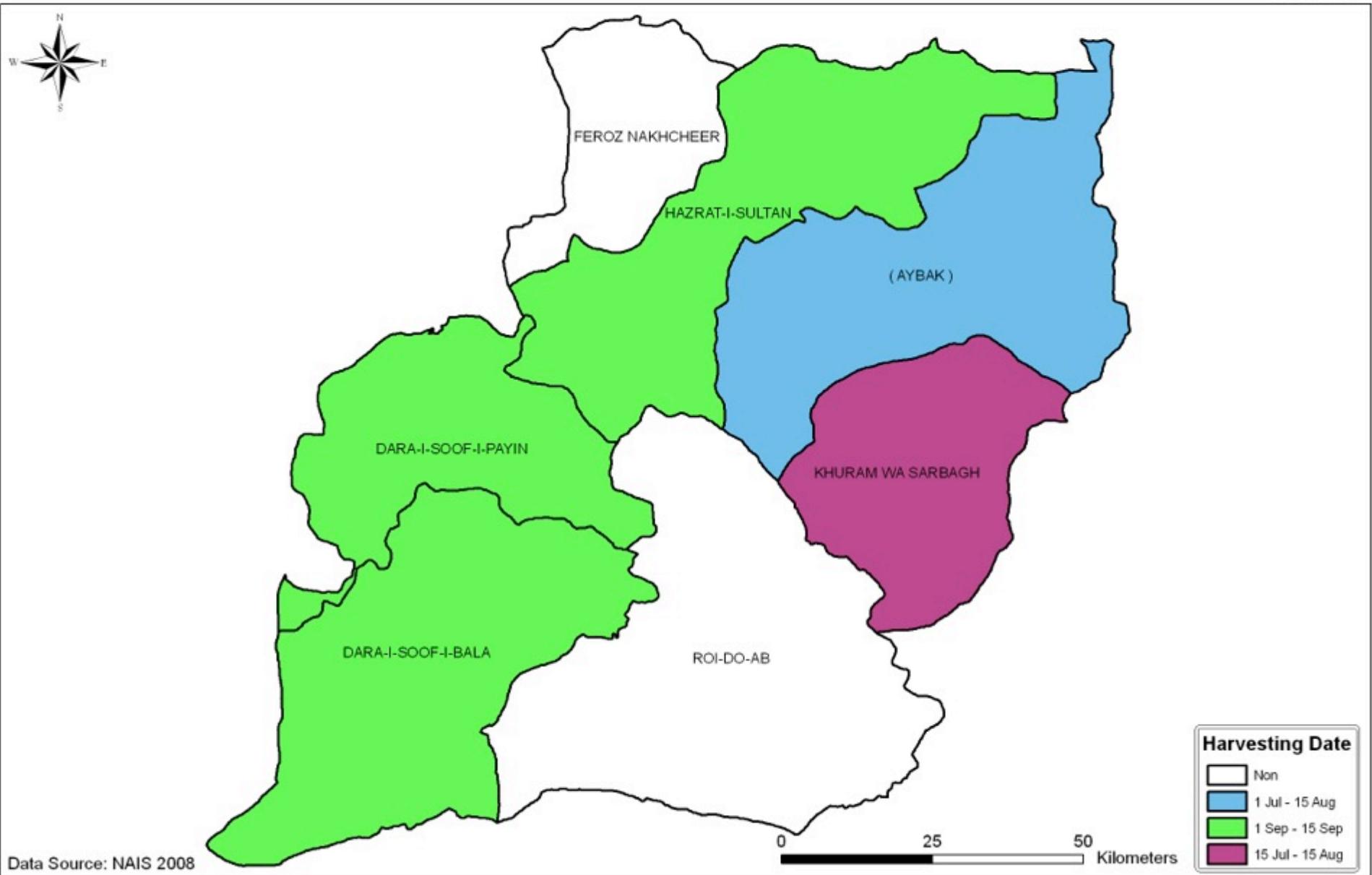


SAMANGAN PROVINCE CROP CALENDAR (Onion)

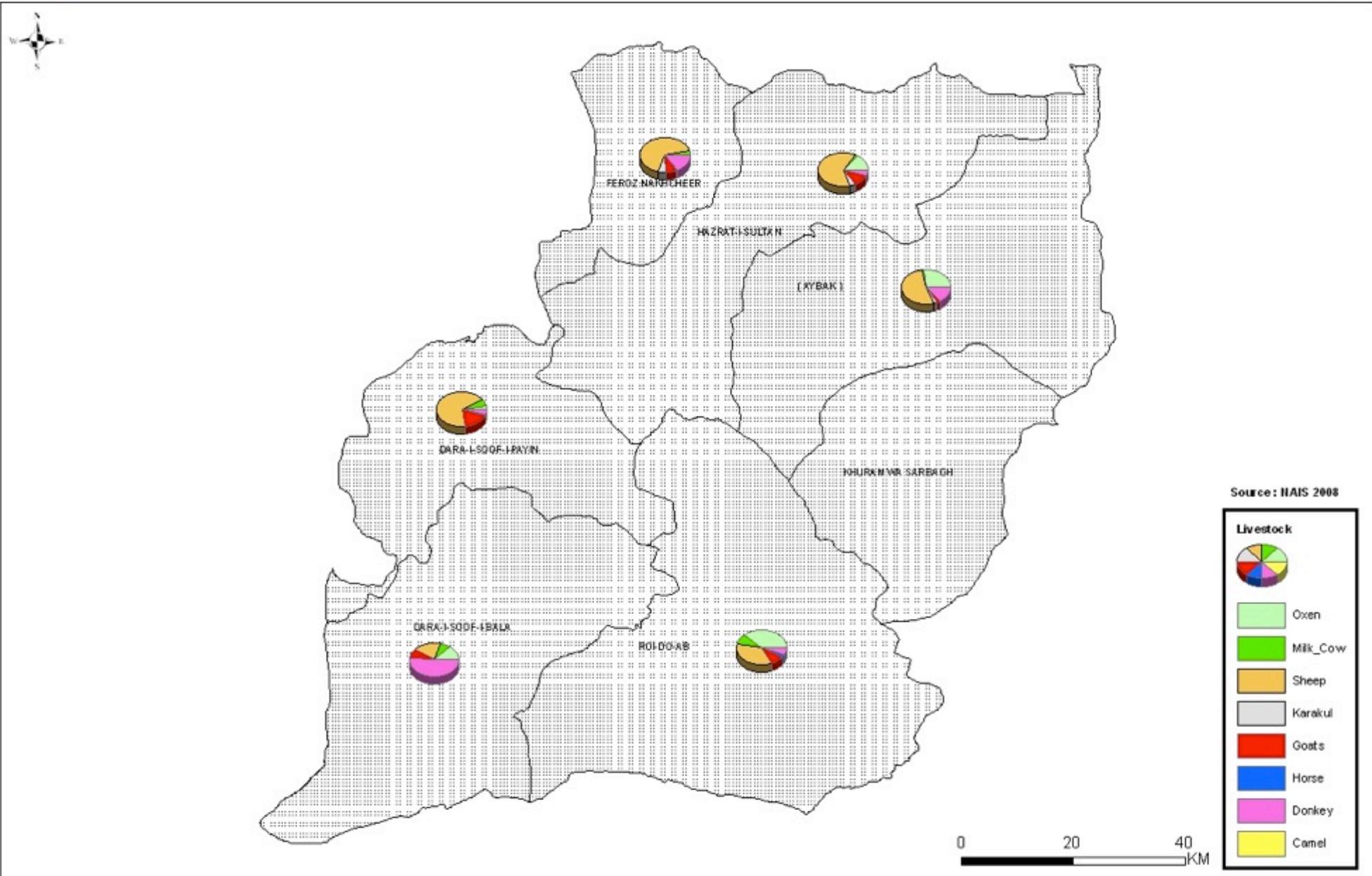




SAMANGAN PROVINCE CROP CALENDAR (Onion)



Samangan Province Livestock Map



Samangan Province Livestock Map (Sheep)



Samangan Province Livestock Map

