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ACCELERATING SUSTAINABLE AGRICULTURE PROGRAM



Badghis 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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Agriculture

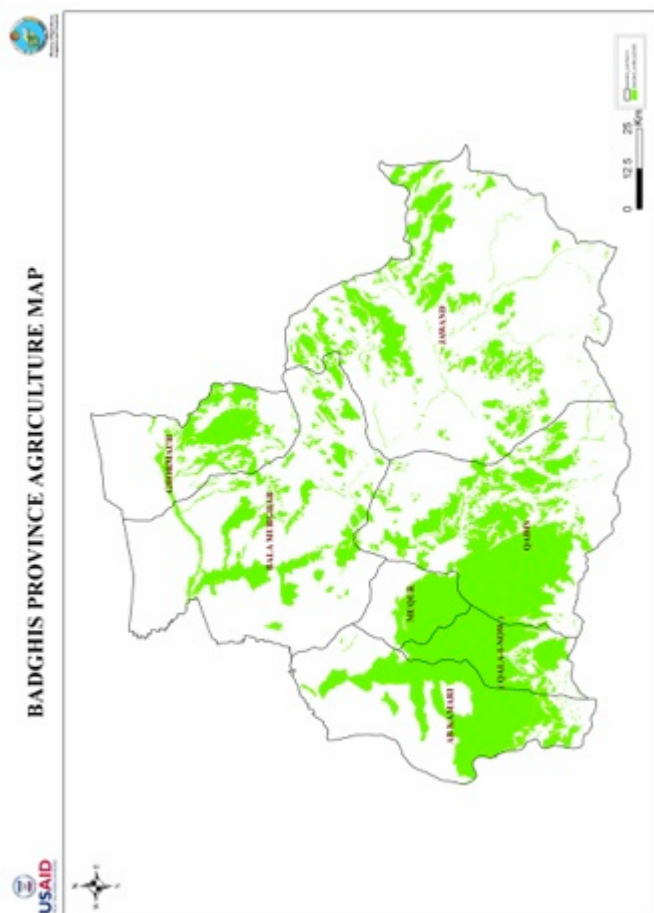
Profile and Data

Badghis Province



Badghis Brief

Badghis province is located in northwestern Afghanistan and belongs to the Murghab River Basin. Located between of 34.51-36.04 degrees latitude and 62.67-65.07 longitude degrees, Badghis borders Turkmenistan to the north, Faryab province to its east and Herat province to the southwest. Badghis has 7 districts that encompass 19,043.12 square kilometers of which 113,212 hectares are used for agricultural purposes. The province is home to 1,182 villages with an estimated population of 83,200 people. Badghis is famous for producing pistachios, cashmere and wool. The majority of its inhabitants raise sheep, cattle and goats.

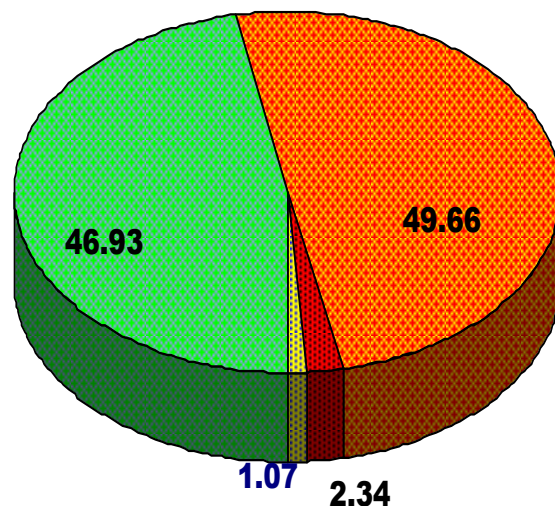


In 2008, farmers in Badghis grew 28 different crops on approximately 180,919 hectares of land (9.5 percent of total area). The province's cultivated area is concentrated mostly in the southwestern and northeastern districts because of the low and fertile land of the Farah Road River Basin.

Fifty-seven percent of cultivated land is found in 3 of the province's 7 districts. The remaining four districts are suitable for raising livestock due to presence of pastures and the hilly and mountainous terrain. The districts of Badghis are:

1. Abkamary
2. Balamurghab
3. Ghormach
4. Qadis
5. Maqur
6. Jawand
7. Qalha-e- now

In 2008, Badghis total crop production was 284,364 metric tons (MT), mostly consisting of fruits (49.6 percent), followed by grains (46.9 percent), vegetable (2.34 percent) and fodder and industrial crops (1.07 percent). The total market value of the 2008 agricultural harvest was estimated at \$242 million.



Grain 133,452 tons (46.93%)	Fruit 141,203 tons (49.66%)	Vegetable 6,667 tons (2.34%)	Industrial Crops 3,042 tons (1.07%)
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Maqur district led in terms of agricultural production, accounting for 30 percent of the 2008 production in Badghis. Abkamary district ranked second (18 percent of the total agricultural output) and Murghab and Jawand districts tied for third place, each producing 12 percent of all Badghis products in 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 Badghis 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 Farah AgNet officer Mr. Khodadad khan and approved by director of Badghis Provincial Agriculture department Mr.

Grains

Badghis's 2008 annual grain production was approximately 133,452 MT with a representing market value of \$93.8 million. Wheat made up nearly all (97 percent) of grains and resulted in profits of \$90.5 million. The remaining 3 percent comprised other grain crops valued at \$3.3 million.

Grains	Tons	Value in USD
Rice	512	921,600
Wheat	129,326	90,528,200
Barely	1,766	883,000
Maize	490	147,000
Mung bean	368	368,000
Pea	990	989,600
Total	133,452	93,837,400

Wheat and barley are the main sources of grain in the province, the production of which was almost evenly distributed throughout all provincial districts in 2008. Peas were the third most cultivated crop (990 MT) and farmers in Muqure district grew the largest volumes of wheat, barley, rice and peas (58,700 MT). Figures presented in the below table are in kg.

	Rice	Wheat	Barely	Maize	Mung bean	Pea
Abkamary	-	10,000,000	360,000	-	-	25,600
Jawand	-	20,988,000	234,000	-	-	-
Ghormach	-	14,336,000	300,000	-	-	-
Qadis	-	3,132,000	48,000	-	-	12,000
Murghab	-	16,620,000	440,000	-	48,000	-
Muqure	512,000	58,750,000	240,000	490,000	320,000	952,000
Qalha-e- Now	-	5,500,000	144,000	-	-	-
Total	512,000	129,326,000	1,766,000	490,000	368,000	989,600

Fruits

Fruits	Tons	Value in USD
Grape	520	520,000
Apple	5	4,000
Mulberries	388	388,000
Apricot	26	25,600
Peach	272	272,400
Walnut	132	264,000
Pistachio	38,400	115,200,000
Melon	37,880	15,152,000
W.melon	63,580	12,716,000
Total	141,203	144,542,000

The 2008 annual fruit production was estimated at 141,203 MT, with a market value of over \$144.5 million. Pistachios represented 27 percent of the fruit harvest and resulted in profits in the amount of \$115 million. Taken together, melons and watermelons accounted for 72 percent of all fruits grown in the province. The remaining of one percent of fruits generated \$2 millions for Badghis farmers in 2008.

Of all the major fruits, only melon and watermelon production were geographically focused in all provincial districts of Badghis province. Farmers grew pistachio in just in two districts (Abkamary and Muqure) while Jawand district produced only mulberries and walnuts. Muqure was the only district that produced each of the 9 major fruits in 2008.

	Grape	Apple	Mulberries	Apricot	Peach	Walnut	Pistachio	Melon	W.Melon
Abkamary	-	-	-	-	-	-	32,000,000	4,000,000	6,000,000
Jawand	-	-	288,000	-	-	80,000	-	5,600,000	7,680,000
Ghormach	-	-	-	-	-	-	-	6,000,000	8,400,000
Qadis	-	-	-	-	6,400	-	-	9,600,000	16,800,000
Murghab	-	-	-	20,000	10,000	24,000	-	5,480,000	12,000,000
Muqure	520,000	5,000	100,000	-	250,000	28,000	6,400,000	4,000,000	5,500,000
Qalha-e- Now	-	-	-	5.600	6.000	-	-	3.200.000	7.200.000

Vegetables

Vegetable production surveyed in Badghis province during 2008 was estimated at 6,667 MT and generated almost \$2 million. Badghis farmers produced more than 8 different types of vegetables but only 4 amounted to over 1,000 MT. Potatoes, tomatoes and spinach made up 73.97 percent of the total vegetable harvest.

Vegetable	Tons	Value in USD
Potato	2,480	892,800
Onion	896	268,800
Tomato	1,252	500,763
Eggplant	4	1,200
Okra	25	7,500
Spinach	1,200	240,000
Carrot	480	76,800
Turnip	330	33,000
Total	6,667	2,020,863

Onion and tomato are produced in many districts of Badghis which made 32 percent of all vegetables produced in this province in 2008. Maqur district produced almost all (96.7 percent) of the province's potatoes; 95.8 percent of tomatoes, all spinach and 90.9 percent of Badghis's turnips in 2008.

	Potato	Onion	Tomato	Eggplant	Okra	Spinach	Carrot	Turnip
Abkamary	-	16,000	8,640	-	-	-	-	-
Jawand	-	-	-	-	-	-	-	-
Ghormach	-	-	-	-	-	-	-	-
Qadis	-	100,000	24,000	-	-	-	-	-
Murghab	-	200,000	-	-	-	-	-	-
Muqure	2,400,000	500,000	1,200,000	4,000	-	1,200,000	400,000	300,000
Qalha-e- Now	80,000	80,000	19,200	-	25,000	-	80,000	30,000
Total	2,480,000	896,000	1,251,840	4,000	25,000	1,200,000	480,000	330,000

Fodder & Industrial Crops

Sesame is an important industrial crop grown in Badghis and is grown primarily for local consumption. Farmers grew \$496,000 worth of alfalfa and clover and more than \$1 million worth of sesame in 2008.

Fodder and indust	Tons	Value
Alfalfa	1,488	
Clover	694	
Cotton	80	
Sesame	720	
Sunflower	60	
Total	3,042	

Farmers cultivated alfalfa and clover in 5 of the 7 districts of Badghis. Muqure was the only district that major types of fodder and industrial crops in 2008.

	Alfalfa	Clover	Cotton	Sesame	
Abkamary	16,000	-	-	-	
Jawand	-	-	-	-	
Ghormach	-	-	-	-	
Qadis	40,000	48,000	-	-	
Murghab	500,000	400,000	-	-	
Muqure	900,000	240,000	80,000	720,000	
Qalha-e- Now	32,000	6,400	-	-	
Total	1,488,000	694,400	80,000	720,000	

Livestock

Province	District	Total livestock	Total Poultry
Badghis	Abkamary	60,837	19,685
	Maqur	96,747	23,195
	Ghormach	93,282	20,644
	Qalha-e-Now	61,769	22,605
	Murghab	98,386	20,534
	Jawand	99,240	20,604
	Qadis	131,043	45,000
Total		641,304	172,267

Household livestock present in Badghis is 641,304, not including 172,267 chickens, ducks and turkeys. Each district accounted for a relatively equal number of livestock (around 91 thousand each) in 2008. Sheep and goats are the dominant household livestock in Badghis province (91.89 percent) and chickens make up 90 percent of all household poultry in Badghis.

Animals	Cow	Sheep	Goat	Horse	Donkey	Camel	Mule	Total	Chicken	Turkey	Duck	Total
Heads	13,310	227,370	361,939	3,998	28,980	5470	237	641,304	155,041	12,058	5,168	172,267
%	2.08	35.45	56.44	0.62	4.52	0.85	0.04	100.00	90.00	7.00	3.00	100.00

Annex 1

Badghis province crop surveyed by Hec, Tons and USD

S,#	Crops	Hectares	Metric Tons	Value USD \$
1	Rice	320	512	921,600
2	Weath	61,270	129,326	90,528,200
3	Barely	1,050	1,766	883,000
4	Maiz	350	490	147,000
5	Mung bean	260	368	368,000
6	Pea	1,830	990	989,600
7	Potato	310	2,480	892,800
8	Onion	110	896	268,800
9	Tomato	217	1,252	500,763
10	Eggplant	10	4	1,200
11	Okra	5	25	7,500
12	Spinach	10	1,200	240,000
13	Carrot	110	480	76,800
14	Turnip	106	330	33,000
15	Grape	100	520	520,000
16	Apple	5	5	4,000
17	Mullberries	220	388	388,000
18	Apricot	27	26	25,600
19	Peach	123	272	272,400
20	Walnut	230	132	264,000
21	Pistachio	48,000	38,400	115,200,000
22	Melon	29,700	37,880	15,152,000
23	W.melon	35,100	63,580	12,716,000
24	Alfalfa	350	1,488	297,600
25	Clover	156	694	138,880
26	Cotton	200	80	120,000
27	Sesame	600	720	1,080,000
28	Sunflower	150	60	30,000
Total		180,919	284,364	242,066,743

ANNEX 2

Ranking of Badghis Province districts by tons surveyed annually

S.#	District	Tons	Hectares	Value USD \$	% total tons
1	Muqure	86,071	44,245	69,702,800	30.27%
2	Abkamary	52,426	51,029	106,017,056	18.44%
3	Murghab	35,742	20,320	16,812,000	12.57%
4	Jawand	34,870	22,450	19,032,600	12.26%
5	Qadis	29,810	14,912	9,492,000	10.48%
6	Ghormach	29,036	20,190	14,265,200	10.21%
7	Qalha-e- Now	16,408	7,773	6,745,060	5.77%

Annex 3 Harvest seasons for Badghis

Agricultural crops surveyed

Crops	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rice												
Weath												
Barely												
Maiz												
Mung bean												
Pea												
Potato												
Onion												
Tomato												
Eggplant												
Okra												
Spinach												
Carrot												
Turnip												
Grape												
Apple												
Mullberries												
Apricot												
Peach												
Walnut												
Pistachio												
Melon												
W.melon												
Alfalfa												
Clover												
Cotton												
Sesame												
Sunflower												

Annex 4

District Profile Summary for (Qalhaye Now) Badghis 2008

DISTRICT PROFILE:		Qalhaye Now	
1	DEMOGRAPHICS		7 Water
	Region:	Westren	Rain fed 40
	Province:	Badghis	Kariz
	District:	Qalhaye naw	Canals
	Villages:	134	Springs 20%
	Households:	7,000	Bored wells, #
	Estimated population:	66,175	Access/irrigated water 10%
2	Land		8 Infrastructure
	Sharecroppers, %		Access/drinking water 5%
	Arable land, jeribs	63,190	Schools 31
	Arable land, hectares (/5)	12,638	Electricity costs, Afs/KWH 25 Afghani
	Grazing land, jeribs	10000	Cell phone access yes
	Geographic area, Km2	832.446	Health clinic, # yes
	Landowner, %	70	VFUs, # yes
	Irrigated land area, hectares	382	9 Livelihood
	Rainfed land in use,hectars	12,256	Agro-horticulture sector, % 70
3	Primary Crops		Livestock sub-sector, % 10
	Spring wheat, hectares	700	Bussiness and Trade % 3
	Fall wheat, hectares	1,900	Government and NGO % 12
	Barley,hectares	90	Daily Labor % 5
	Water mellan, hectares	3000	10 Small Enterprises
	Mellan, hectares	2000	General shops, #
	Carrots, hectares	10	Food service,#
	Turnap, hectares	6	Flour mills,# 10
	Other vegetables,hectares	31	Shoe repair,#
	Other fruits,hectares	12	Blacksmith,#
			Oil extraction,#
4	Livestock		Butcher shops, # 5
	Livestock owners, %	10	Other Shops
	Dairy cows and cattles #	1900	11 Agricultural Facilities
	Beef cattle & Draught oxen, #		Artificial Insimination
	Sheep & Goats, #	53,342	Rentable Ag Machinery yes
	Donkey, #	5527	Improved wheat seed
	Horses, #	595	Fruit Nurseries, # yes
	Checkens & Turkey, #	22,606	Credit facility yes
	Camels, #	400	Poultry farm, # yes
	Kuchi, (families),#		Agrochemicals, yes
	Kuchi sheep, #		Cool storage, #
	Kuchi goats, #		Green houses, # yes
	Camels, #		12 Household (HH) Indices
	Kuchi other, #		Arable land/HH, jeribs 9.027
5	Transportation		Grazing land/HH, jeribs 1.42
	Distance to center, km	50	Irrigated land/HH, jeribs 0.05
	Time to center, minutes	120	Rainfed land/HH, jeribs 1.75
	Cost to center, Afs	500	Total livestock/HH, # 1.203
	Truck cost to center, Afs	3,000	Sheep&goats/HH, # 7.6
	District roads	Paved	Poultry/HH, # 3.22
	Provincial roads		13 Checks
	Accessibility	12 months	Household/village 52.238
6	Markets		Population/ HH 9.45
	Provincial	yes	School/ village 0.231
	District, General, day	all days	No. of Bored wells/ village
	District, livestock, day	Thus & San	No. of Enterprize/village 0.111
	Traders/assemblers	yes	

Annex 5

NAIS/ASAP

2008

The Number of Household animals and Poultry in Badghis province

No.	Province	Districts	Household animals							Total	Poultry					Total
			Cow	Sheep	Goats	Horse	Donkey	Camel	Mule		Kock	Hens	Checks	Duck	Turkey	
1	Badghis	Abkamari	2,100	33,000	24,000	582	800	320	35	60,837	2,953	3,937	10,826	591	1,378	19,685
2		Maqur	1,500	35,000	54,479	600	4,050	1,100	18	96,747	3,479	4,639	12,757	696	1,624	23,195
3		Ghrmach	1,750	32,500	53,473	490	3,895	1,100	74	93,282	3,097	4,129	11,354	619	1,445	20,644
4		Qalainow	1,900	7,870	45,472	595	5,527	400	5	61,769	3,391	4,521	12,433	678	1,582	22,605
5		Balamurgh	2,100	35,000	55,063	495	4,508	1,200	20	98,386	3,080	4,107	11,294	616	1,437	20,534
6		Jowand	1,960	30,000	61,552	536	4,600	550	42	99,240	3,091	4,121	11,332	618	1,442	20,604
7		Qadis	2,000	54,000	67,900	700	5,600	800	43	131,043	6,750	9,000	24,750	1,350	3,150	45,000
Total			13,310	227,370	361,939	3,998	28,980	5,470	237	641,304	25,841	34,454	94,746	5,168	12,058	172,267

Annex 6

NAIS/ASAP

2008

Province: Badghis

Arable land survey cultivated, forest and pasture land in Hectare

No.	Province	District	Village	Rainfed Land	Irrigated Land	Total land	Orchards &viens	Vegetable and Furrows crops	Cereal Crops	Forage crops	Forest land	Pasture land	Non-arable land	Mount ains	Total Land area
1	Badghis	Jowand	288	1,762	532	2,294	50	350	10,107	60	1,500	200	5,145	1,045	10,184
2		Ghormach	221	3,159	1,055	4,214	30	460	10,125	50	7,000	10,000	5,000	3,400	29,614
3		Qadis	165	38,486	1,521	40,007	120	750	5,057	700	1,750	2,100	3,800	3,500	51,157
4		Balamurghab	136	13,466	15,217	28,683	200	670	10,000	300	1,450	1,900	6,750	500	39,283
5		Maqur	106	12,257	382	12,639	-	270	150	30	1,500	1,200	-	-	15,339
6		Abkamari	136	22,256	482	22,738	70	5,635	5,003	1,000	75,000	9,000	2,000	3,000	111,738
7		Qalai now	134	12,256	382	12,638	50	4,718	4,511	200	5,000	2,000	3,009	2,000	24,647
Total			1,186	103,642	19,571	123,213	520	12,853	44,953	2,340	93,200	26,400	25,704	13,445	281,962

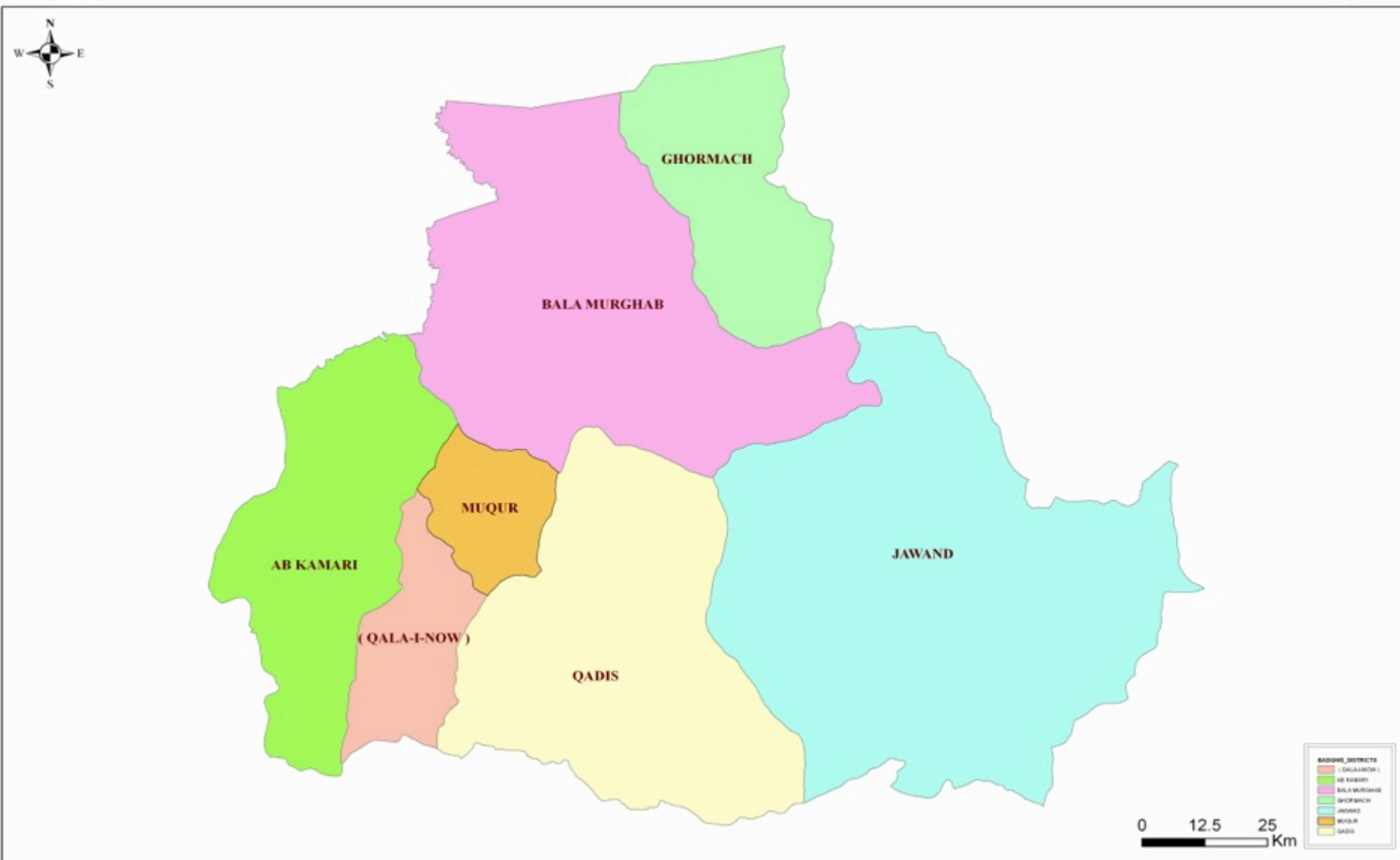
Annex 7

Crop Calendar

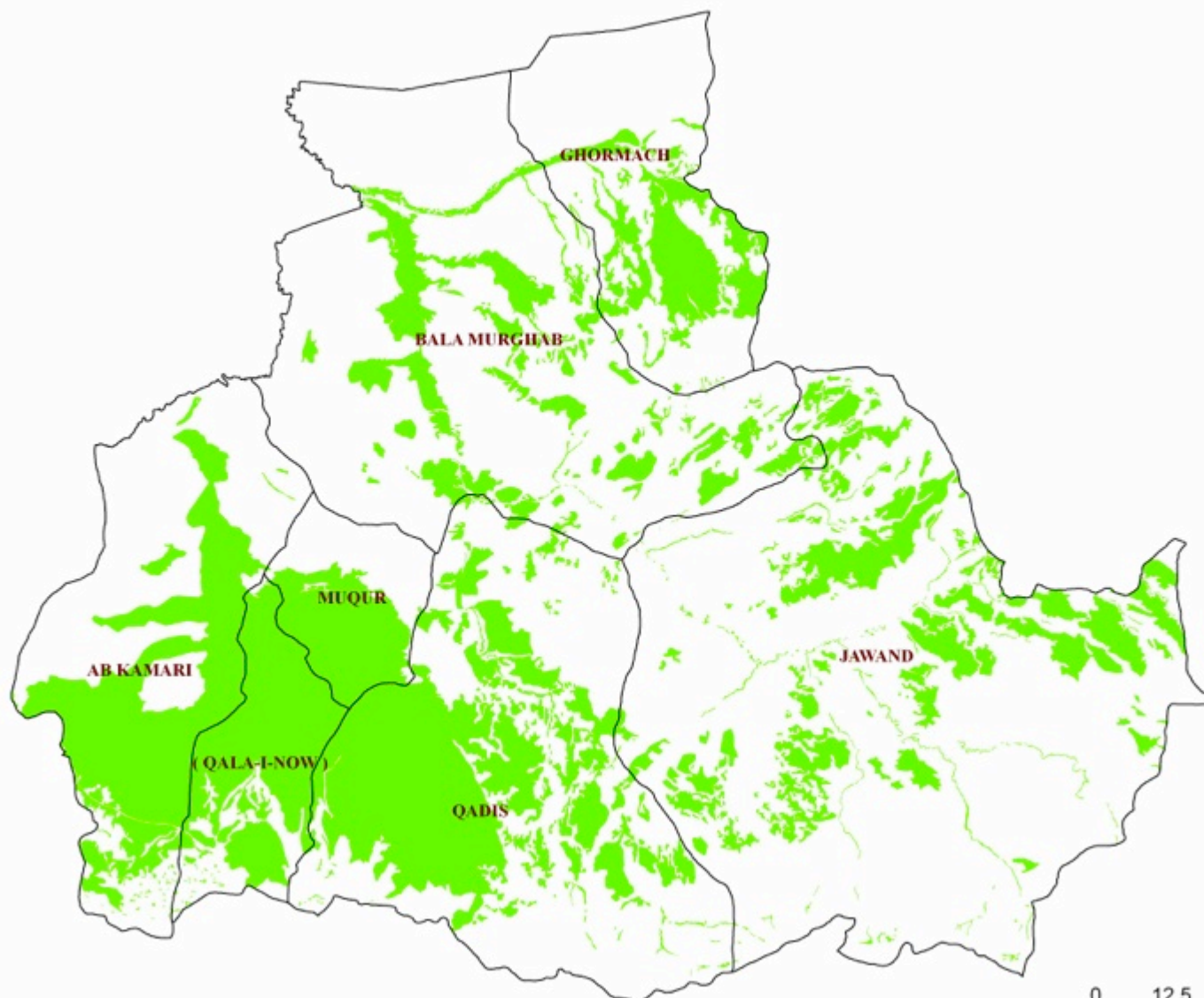
Activities District Qalha-e- now Province Badghis Date GPS HQ Elev.HQ

Planting=P;Harvest=H;Treat=T	seasons	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fruit and Nut Crops													
Apple	Spring												
	Fall												
Grape													
Pomagranate													
A pricto													
Peach													
Sour Plum													
Almond													
Walnut													
Pis tachi													
Mulberries													
Vegetable													
Tomato													
Potato	Spring												
	Fall												
Water Melon													
Melon	Spring												
	Summer												
	Fall												
carrot													
Okra													
Eggplant													
Cucumber													
Onion													
Cauliflow er													
Spinach													
Cash Crop													
Cotton	Spring												
	Summer												
Rice	Spring												
Wheat	Spring												
	Fall												
Corn	Spring												
	Summer												
Mung Bean													
Flax	Spring												
	Fall												
Sesame	Spring												
	Fall												
Cumine													
Sunflow er													
Canoll													
Zafaran													
Pea													
<div>Planting</div> <div>Harvesting</div>													

BADGHIS PROVINCE STANDARD MAP



BADGHIS PROVINCE AGRICULTURE MAP



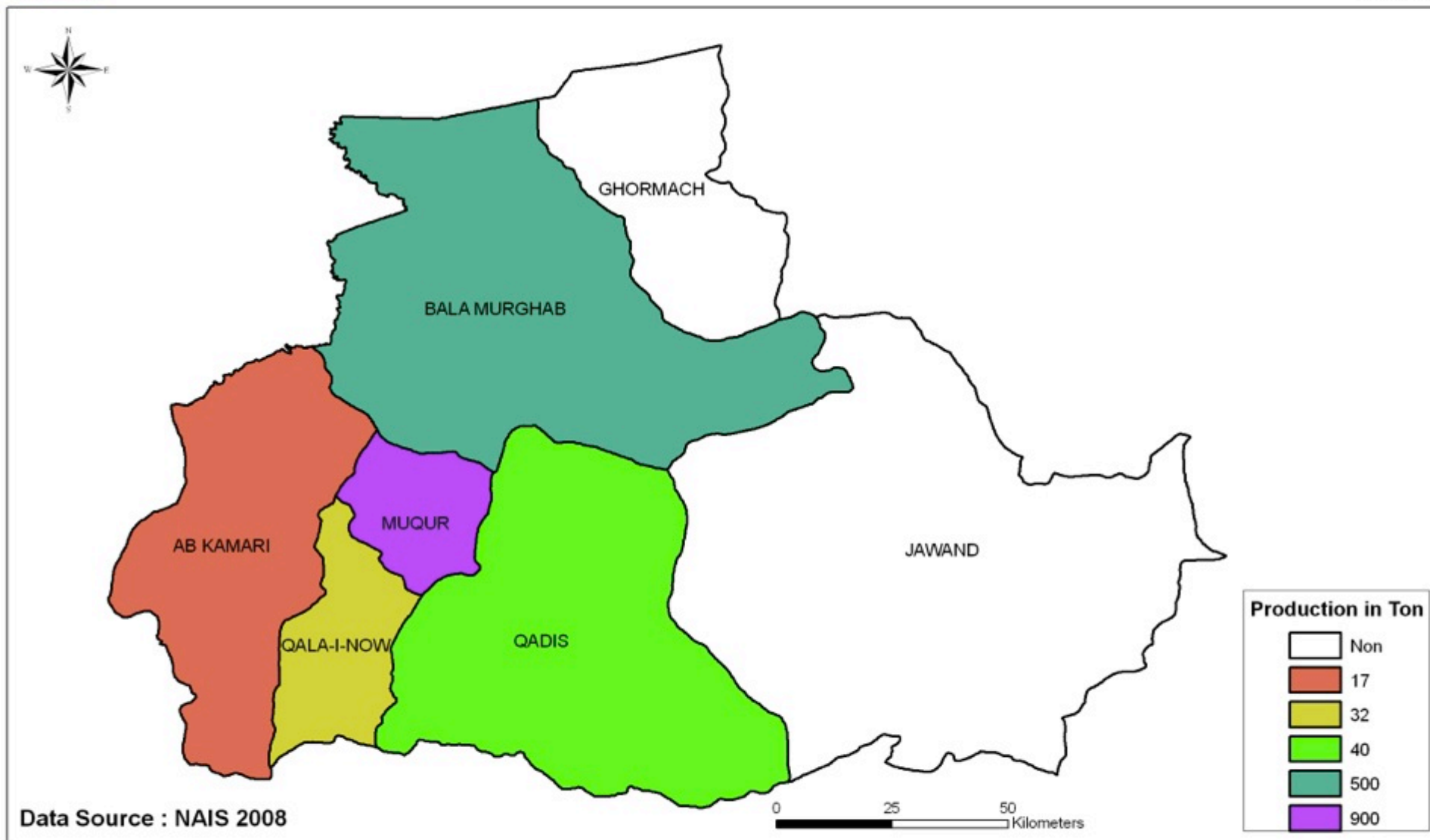
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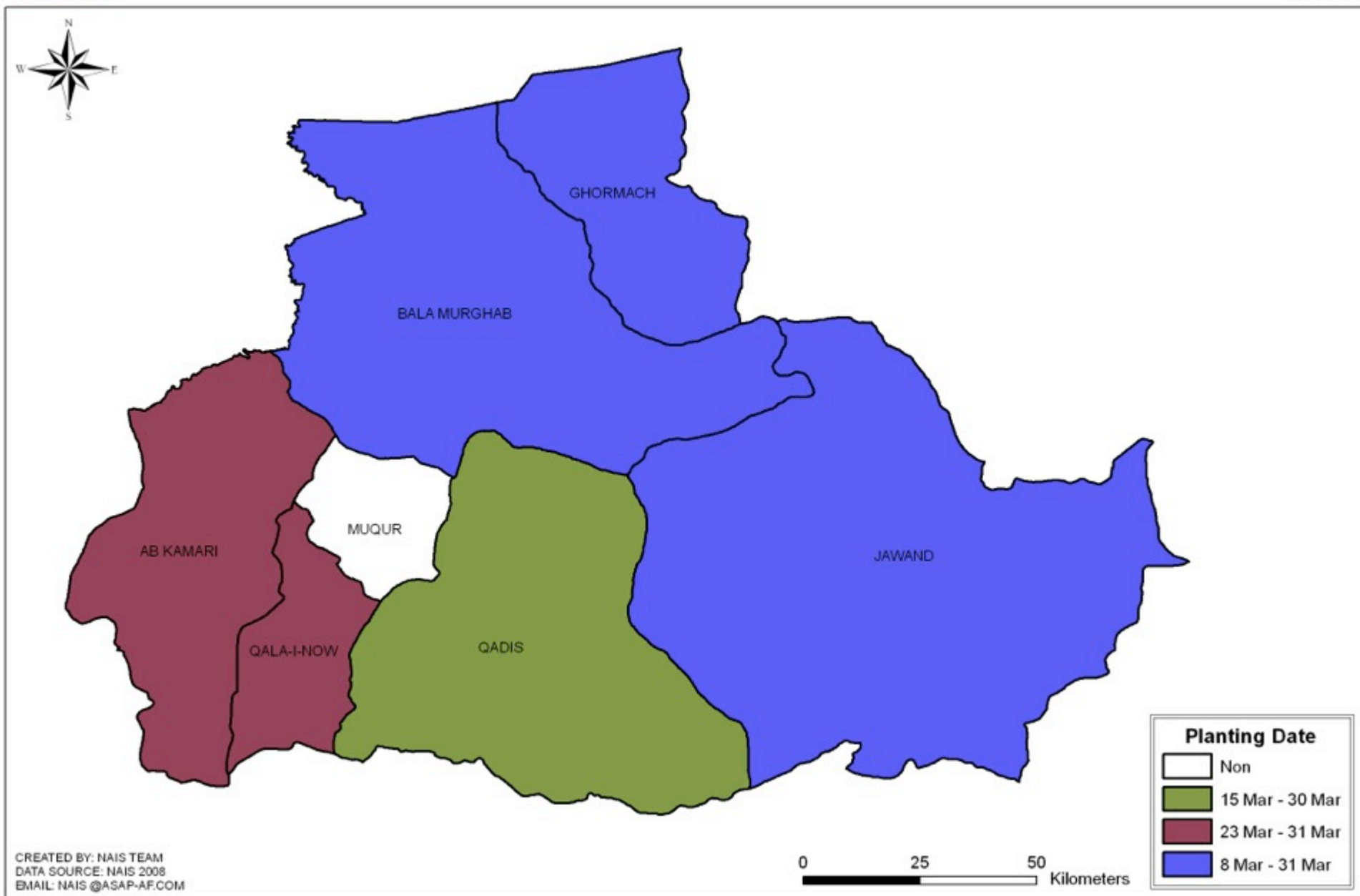
BADGHIS PROVINCE CROP PRODUCTION (Weath)



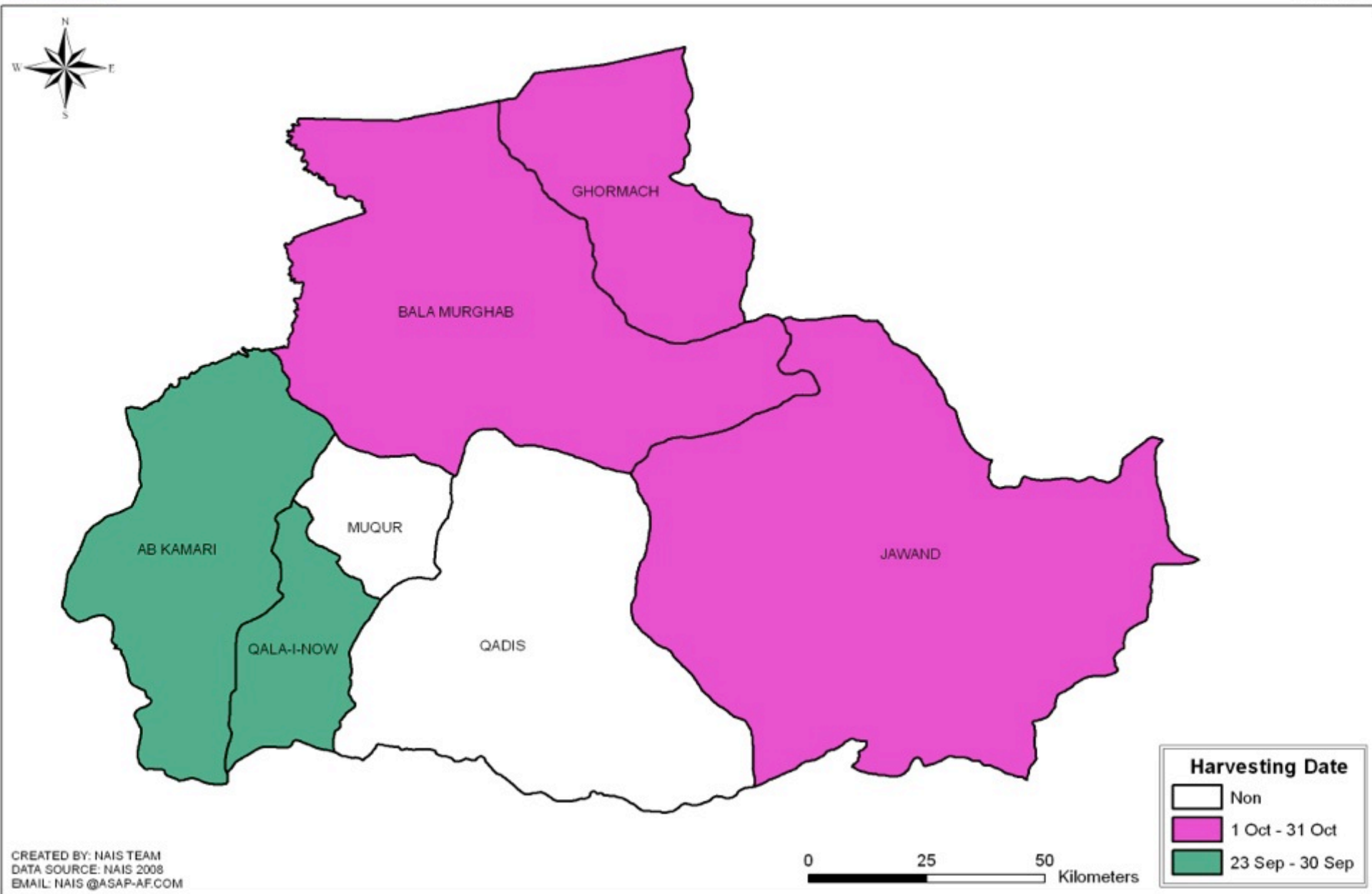
BADGHIS PROVINCE CROP PRODUCTION (Alfalfa)



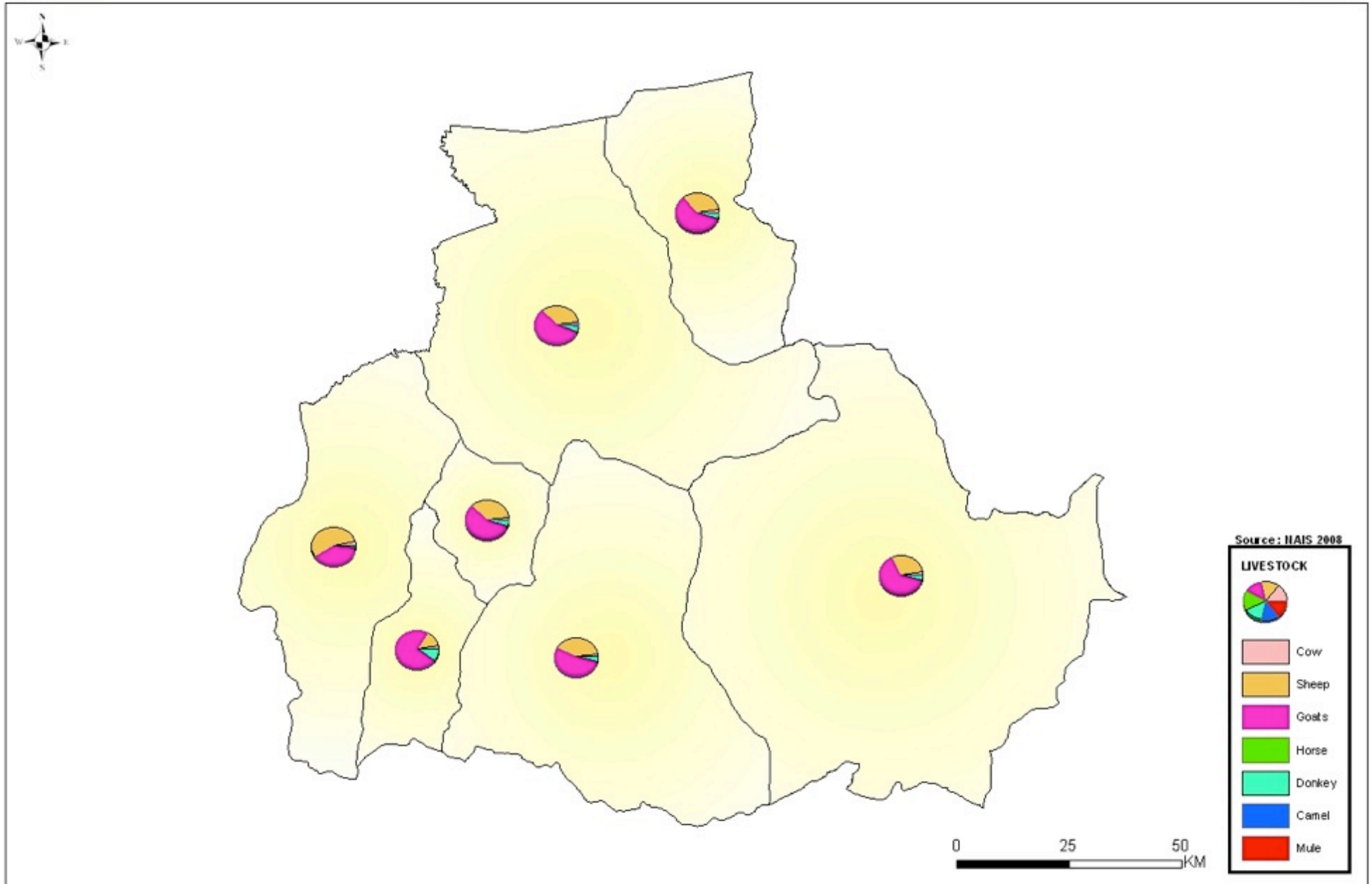
BADGHIS PROVINCE CROP CALENDER (Onion)



BADGHIS PROVINCE CROP CALENDER (Onion)



Badghis Province Livestock Map



BADGHIS PROVINCE LIVESTOCK (Sheep)



Badghis Province Livestock Map

