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ACCELERATING SUSTAINABLE AGRICULTURE PROGRAM



Ghor Province Agricultural Profile 2008



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

<u>Indexes</u>	<u>Pages</u>
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➤ Agriculture Profile and Data	3
➤ Crop Production by Chart	4
➤ Grain Production	5
➤ Fruit Production	6
➤ Vegetable Production	7
➤ Fodder and Industrial Crops	8
➤ Household Livestock	9

Annexes

• Annex 1: Crop Surveyed by Hectares , production and Value	10
• Annex 2: Ranking of Production by Tons Surveyed Annually	11
• Annex 3: Harvest Season of Agriculture Crops Surveyed	12
• Annex 4: District Profile Summary	13
• Annex 5: Number of Household Animals and Poultry	14
• Annex 6: Land Use Status	15
• Annex 7: Crop Calendar	16

Maps

❖ Ghour Province Standard Map.....	17
❖ Ghour Province Agriculture Map	18
❖ Ghour Province Wheat Production Map	19
❖ Ghour Province Alfalfa Production Map	20
❖ Ghour Province Onion Planting Date Map	21
❖ Ghour Province Onion Harvesting Date Map	22
❖ Ghour Province Livestock Map	23
❖ Ghour Province Livestock (Sheep) Map	24
❖ Ghour Province Poultry Map	25

Agriculture

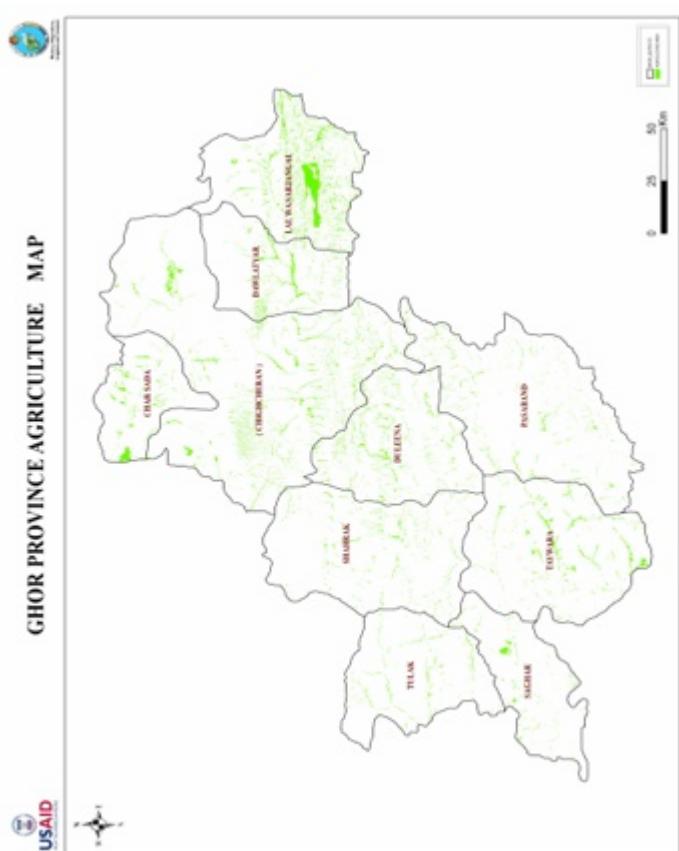
Profile and Data

Ghor Province



Ghor Brief

Ghor is located in central Afghanistan between 33.12-35.26 degrees latitude and 63.19-66.73 degrees longitude. Ghor borders the provinces of Saripul and Faryab to the north, Herat and Badghis to the west, Helmand and Farah to the south and Bamyan and Daykundi to the east. Ghor has 10 districts that encompass 37,947.56 square kilometers of which 124,227.27 hectares are used for agricultural purposes. The province has a total of 2,407 villages and an estimated population of 715,468 people (as of 2008). Ghor is famous for producing spices such as cumin, as well as nuts, cashmere and wool. The majority of those living in the province are involved in animal husbandry, mostly raising sheep, cattle and goats.

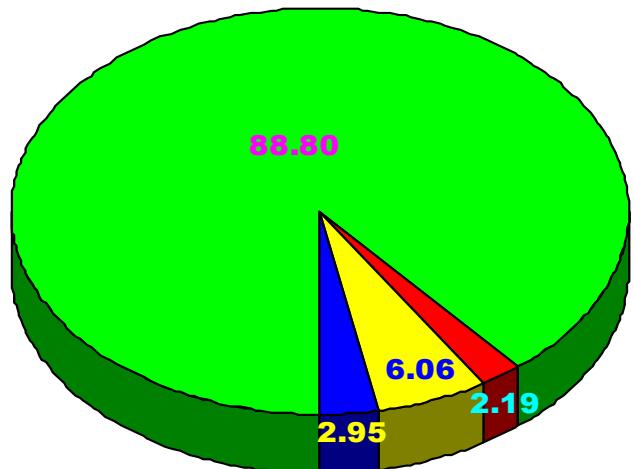


In 2008, farmers in Ghor grew 37 different crops on approximately 79,095 hectares of land (2.08 percent of total area). The province's cultivated area is mostly concentrated in the north-central and eastern districts where the land is flat and an abundance of natural springs are found. Twenty-seven percent of the cultivated land is concentrated in 4 of the 10 districts of Ghor. The remaining 6 districts are most suitable for raising livestock because of the higher elevations and mountainous terrain.

The districts of Ghor are:

1. Dowlina
2. Chighchiran
3. Charsada
4. Qadis
5. Dowlatyar
6. Saghār
7. Lal Sarjangle
8. Pasaband
9. Tolak
10. Shahrak

Ghor's total 2008 crop output was surveyed at 143,672 metric tons MT, mostly consisting of grains (88.8 percent) followed by vegetable (6.06 percent), and fodder/industrial (2.95 percent) and fruits (2.19 percent). The total market value of the 2008 harvest was estimated at \$88.78 million, before undergoing any value added processing.



Taiwara was the most productive district in Ghor, contributing 40.88 percent of all agricultural products in 2008. Chighchiran district followed by producing 29.87 percent of the total harvest and farmers in Saghar district grew 10.38 percent of all Ghor crops 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 Ghour 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 Ghor and collected by Ghor AgNet officer Mr. Abdul Qadeer and approved director of Ghor Provincial Agriculture department Mr. M. Aslam Arianpour.in November 2008.

Grains

Ghor's annual grain production surveyed in 2008 was estimated at 76,334 MT with a representing market value of \$39 million. Of this total, almost all (92 percent) consisted of wheat and (valued at \$35 million) and the remaining 8 percent was made up of other grain crops valued at \$4 million.

Grain	Tons	Value USD \$
Rice	25	25,000
Wheat	120,288	79,389,882
Barely	5,764	2,766,720
Maize	1,377	660,960
Pea	43	43,300
Other grain	80	38,400
Grand Total	127,577	\$ 82,924,262

Wheat and barley production takes place primarily in all districts of Ghor and amounted to nearly all (98.8 percent) of the province's grains. Maize and peas were grown in four districts and accounted for 1.11percent of the total grain production in Ghor. Taiwara and Chighchiran districts produced the highest volumes of wheat and barley (75.3 percent and 30.34 percent, respectively) in 2008.

	Rice	Wheat	Barely	Maize	Pea	Other grain
Lal wa sarjangle	-	400,000	12,500	-	-	-
Chighchiran	-	35,162,500	805,000	-	16,000	80,000
Pasaband	-	6,490,000	200,000	20,000	-	-
Tolak	25,000	2,400,000	400,000	75,000	-	-
Taiwara	-	55,433,000	944,500	1,250,000	-	-
Charsada	-	733,000	40,000	-	4,800	-
Dowlatyar	-	793,200	50,000	-	15,000	-
Dowlina	-	3,130,000	72,000	-	7,500	-
Shahrak	-	4,926,000	240,000	32,000	-	-
Saghar	-	10,820,000	3,000,000	-	-	-
Total	25,000	120,287,700	5,764,000	1,377,000	43,300	80,000

Fruits

Fruits	Tons	Value USD \$
Grape	42	42,200
Apple	705	705,400
Almond	85	553,840
Plum	127	38,100
Apricot	794	397,200
Peach	230	183,629
Walnut	189	320,960
Melon	913	219,024
W.Melon	15	2,940
Other Fruits	40	40,400
Grand Total	3,140	\$ 2,503,693

Annual fruit production surveyed in Ghor province was estimated at 3,140 MT and valued at over \$2.5 million. Farmers in Ghor grew 705 MT of apples in 2008, generating \$705,400 in revenue.

Fruit production takes place in all provincial districts, with apples, almonds, apricots, peaches, melons grown in almost every district. Watermelon and grape production was limited to a few districts in 2008. Chighchiran produced high volumes of apples and melons; Taiwara district produced the most almonds; farmers in Saghar grew the highest volume of apricots and Tolak district was the greatest contributor of walnuts in 2008. The following chart presents the major fruit producing districts of Ghor province.

	Grape	Apple	Almond	Plum	Apricot	Peach	Walnut	Melon	W.Melon	Other Fruits.
Lal wa sarjangle	-	12,500	-	-	-	-	-	-	-	-
Chighchiran	-	400,000	4,500	51,500	12,000	22,000	50,000	503,600	-	-
Pasaband	-	42,000	-	-	24,000	5,000	-	8,000	14,700	-
Tolak	-	4,200	11,550	18,000	120,000	80,000	-	9,000	-	-
Taiwara	20,000	46,000	21,000	22,000	125,000	26,412	50,000	166,000	-	18,000
Charsada	-	24,000	9,570	-	37,500	33,000	52,800	48,000	-	-
Dowlatyar	-	23,000	15,000	-	3,600	-	-	-	-	-
Dowlina	-	25,000	10,000	-	6,300	4,224	-	18,000	-	-
Shahrak	-	30,000	7,500	1,500	42,500	4,500	36,000	160,000	-	-

Vegetables

Vegetable production surveyed in Ghor province during 2008 was estimated at 8,708 MT and was valued at an estimated \$2.7 million. Ghor farmers produced more than 10 different types of vegetables with potatoes accounting for the overwhelming majority (86.77 percent) of the total vegetable harvest in 2008. Onions and carrots represented 9.1 percent of the all vegetables grown in Ghor during 2008.

Vegetables	Tons	Value USD \$
Potato	7,556	2,266,800
Onion	406	89,365
Cauliflower	30	30,000
Mint	6	3,200
Round Red Reddish	85	42,300
White reddish	3	2,240
Carrot	387	154,720
Squash	75	37,500
Turnip	56	22,400
Other Vegetable	104	60,400
Grand Total	8,708	\$ 2,708,925

Farmers grew potatoes, onions and carrots in all districts of Ghor and these crops accounted for nearly all (95.8 percent) vegetables produced in this province in 2008. Lal Wa Sarjangle and Chighchiran districts produced 89.9 percent of all potatoes, 41.6 percent of all onions and 57.28 percent of all carrots in the province during 2008.

	Potato	Onion	Cauliflower	Mint	R.R. Reddish	White reddish	Carrot	Squash	Turnip	Other Veg.
Lal Wa Sarjangle	4,800,000	9,000	-	-	-	-	2,000	-	-	-
Chighchiran	2,000,000	160,000	-	-	70,000	-	250,000	-	-	20,000
Pasaband	63,000	18,000	-	-	2,000	1,200	8,400	-	-	-
Tolak	100,000	18,100	-	-	3,600	-	10,000	28,000	-	-
Taiwara	150,000	10,605	25,000	4,600	-	-	60,000	47,000	50,000	74,000
Charsada	118,000	22,000	-	1,800	-	-	10,550	-	-	-
Dowlatyar	-	28,000	-	-	-	-	4,600	-	-	7,000
Dowlina	-	15,000	-	-	7,000	-	7,750	-	6,000	-
Shahrak	180,000	63,000	5,000	-	2,000	2,000	3,500	-	-	2,600
Saghar	145,000	62,500	-	-	-	-	30,000	-	-	-
Total	7,556,000	406,205	30,000	6,400	84,600	3,200	386,800	75,000	56,000	103,600

Fodder & Industrial Crops

Much of Ghor's territory is irrigated by the Murghab River and natural springs. Sugar beets and sunflowers are the only industrial crops grown in Ghor and are used exclusively for local household consumption. Alfalfa and clover is a good source of fodder for feeding animals in the province. The farmers produced 4,000 MT of both crops in 2008. The majority of Ghor inhabitants are herdsmen, making the cultivation of fodder a priority for locals.

Fodder & Indust.	Tons	Value USD \$
Alfalfa	2,419	241,850
Clover	1,573	157,250
Sugar beet	234	234,000
Sunflower	9	9,000
Other Industrial	9	6,160
Grand Total	4,244	\$ 648,260

Farmers grow alfalfa and clover in almost all 10 districts of Ghor. Sugar beets and sunflowers were grown as industrial crops in very small amounts for household use in 2008.

	Alfalfa	Clover	Sugar beet	Sunflower	Other Ind
Lal wa sarjangle	10,000	5,000	-	-	-
Chighchiran	1,980,000	1,100,000	210,000	6,000	8,800
Pasaband	7,500	18,000	-	-	-
Tolak	-	13,000	-	-	-
Taiwara	70,000	96,000	20,000	-	-
Charsada	28,000	11,500	-	-	-
Dowlatyar	112,000	75,000	-	-	-
Dowlina	54,000	125,000	-	3,000	-
Shahrak	45,000	54,000	4,000	-	-
Saghar	112,000	75,000	-	-	-
Total	2,418,500	1,572,500	234,000	9,000	8,800

Livestock

Province	District	Total livestock	Total Poultry
Ghour	SAGHAR	103,980	24,090
	TAYWARA	105,848	32,080
	LAL WA SARJANGAL	68,450	13,856
	DULEENA	51,834	16,546
	CHIGHCHERAN	157,300	13,793
	PASABAND	54,930	19,180
	TULAK	57,800	9,120
	SHAHRAK	50,046	9,678
	CHAR SADA	65,940	9,920
	DAWLATYAR	67,334	5,222
Total		783,462	153,485

Based on the 2008 statistic survey, farmers in Ghor province grew 37 different agricultural crops and raised 8 types of household livestock and poultry (See annex –V).

Household livestock maintained in Ghor numbered 783,462, not including 153,485 chickens, ducks and turkeys. Farmers in Chighchiran, Saghar and Taiwara districts raised 46.85 percent of livestock and the remaining 53 percent are found in the other 7 districts. Sheep and goats are the dominant household livestock in Ghor province.

Animals	Cow	Sheep	Goat	Horse	Donkey	Total	Chicken	Turkey	Duck	Total
Heads	166,497	303,046	179,663	7,105	127,151	783,462	121,759	31,132	594	153,485
%	21.25	38.68	22.93	0.91	16.23		79.33	20.28	0.39	100%

Cattle kept in the province are composed of oxen and dairy cows. The number of donkeys could be a good indicator for the development of transportation, (the higher the percentage, the worse are the conditions of the roads and more limited is transportation. Sheep and goats make up 82 percent of all livestock and this reflects the mountainous terrain and lifestyle of the people in the province.

Annex 1

Ghour province crop surveyed by Hec, Tons and USD

S,#	Crops	Hectares	Metric Tons	Value USD \$
1	Rice	10	25	25,000
2	Weath	73,309	120,288	79,389,882
3	Barely	2,805	5,764	2,766,720
4	Maiz	560	1,377	660,960
5	Pea	32	43	43,300
6	Potato	623	7,556	2,266,800
7	Onion	92	406	89,365
8	Tomato	10	21	8,400
9	pepper	2	1	1,000
10	Eggplant	5	15	6,000
11	Okra	10	23	13,800
12	Cauliflower	12	30	30,000
13	Mint	3	6	3,200
14	Round Red Redish	20	85	42,300
15	White reddish	2	3	2,240
16	Carrot	80	387	154,720
17	Leek	1	5	960
18	Squash	30	75	37,500
19	Turnip	23	56	22,400
20	Grape	12	42	42,200
21	Apple	139	705	705,400
22	Mullberries	10	18	18,000
23	Almond	36	85	553,840
24	Plum	31	127	38,100
25	Apricot	220	794	397,200
26	Pomegranate	2	22	22,400
27	Peach	68	230	183,629
28	Walnut	68	189	320,960
29	Melon	183	913	219,024
30	W.melon	7	15	2,940
31	Alfalfa	295	2,419	241,850
32	Clover	247	1,573	157,250
33	Sugar beet	17	234	234,000
34	Sunflower	8	9	9,000
35	Other grain	80	80	38,400
36	Other Vegetables	35	42	30,240
37	Other Industrial crops	8	9	6,160
Total		79,095	143,672	88,785,140

ANNEX 2

ASAP/NAIS

Ranking of Ghour Province districts by tons surveyed annually

S.#	District	Hectares	Tons	Value USD \$	% total tons
1	Taiwara	24,742	58,729	38,302,943	40.88
2	Chighchiran	37,044	42,912	25,639,224	29.87
3	Saghar	4,755	14,906	9,077,920	10.38
4	Pasaband	2,787	6,922	4,482,470	4.82
5	Shahrak	4,178	5,841	3,681,640	4.07
6	Lal wa sarjangle	632	5,251	1,726,780	3.65
7	Dowlina	2,280	3,491	2,246,909	2.43
8	Tolak	1,624	3,315	2,108,692	2.31
9	Charsada	584	1,175	794,510	0.82
10	Dowlatyar	469	1,126	724,052	0.78

Annex 3 Harvest seasons for Ghour

Agricultural crops surveyed

Crops	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rice												
Weath												
Barely												
Maiz												
Pea												
Potato												
Onion												
Tomato												
pepper												
Eggplant												
Okra												
Cauliflower												
Mint												
Round Red Redish												
White reddish												
Carrot												
Leek												
Squash												
Turnip												
Grape												
Apple												
Mullberries												
Almond												
Plum												
Apricot												
Pomegranate												
Peach												
Walnut												
Melon												
W.melon												
Alfalfa												
Clover												
Sugar beet												
Sunflower												
Other grain												
Other Vegetables												
Other Industrial crops												

Annex 4

District Profile Summary for (Chaghcharan) Ghour

2008

DISTRICT PROFILE:		Chaghcharan	
1	DEMOGRAPHICS	7	Water
	Region: Western	Rain fed	30
	Province: Ghour	Kariz	0%
	District: cheghancharan	Canals	20%
	Villages: 304	Springs	5%
	Households: 16,463	Bored wells, #	5
	Estimated population: 131,711	Access/irrigated water	60%
2	Land	8	Infrastructure
	Sharecroppers, % 2%	Access/drinking water	30%
	Arable land, jeribs 151,225	Schools	120
	Arable land, hectares (/5) 30,245	Electricity costs, Afs/KWH 25Afs light bulb	
	Grazing land, jeribs 16580	Cell phone access awcc. Roshan	
	Geographic area, Km2 8784.441	Health clinic, #	
	Landowner, % 78	VFUs, #	0
	Irrigated land area, hectares 7,500	9	Livelihood
	Rainfed land in use,hectars 22,745	Agro-horticulture sector, % 45	
3	Primary Crops	Livestock sub-sector, % 40	
	Spring Wheat, hectares 33,995	Bussiness and Trade % 2	
	Fall wheat, hectares 1,680	Government and NGO % 7	
	Barley, hectares 800	Daily Labor % 6	
	Alfa alfa & clover, hectares 160	10	Small Enterprises
	Potato, hectares 100	General shops, #	
	Mellon & water mellon, hec 22	Food service,#	
	Other industrial crops, hec 24	Flour mills,#	
	Other grians, hectares 100	Shoe repair,#	
	Other vegetables,hectares 65	Blacksmith,#	
	Other fruits,hectares 158	Oil extraction,#	
4	Livestock	Butcher shops, #	
	Livestock owners, % 5	Carpet weaving, #	
	Dairy cows, # 8150	11	Agricultural Facilities
	Beef cattle & Draught oxen, # 13,350	Artificial Insimination no	
	Sheep & Goats, # 100,000	Rentable Ag Machinary yes	
	Donkey, # 33000	Improved wheat seed yes	
	Horses, # 2,800	Fruit Nurseries, #	
	Checkens & Turkey, # 12,793	Credit facility no	
	Camels, # 0	Poultry farm, #	
	Kuchi, (families),# 300	Agrochemicals, yes	
	Kuchi sheep, # 45000	Cool storage, #	
	Kuchi goats, # 5,000	Green houses, #	
	Camels, # 6,000	12	Household (HH) Indices
	Kuchi other, # 220	Arable land/HH, jeribs 9.185	
5	Transportation	Grazing land/HH, jeribs 1.007	
	Distance to center, km 700	Irrigated land/HH, jeribs 2.277	
	Time to center, minutes 8 hrs	Rainfed land/HH, jeribs 6.907	
	Cost to center, Afs 700Afs	Total livestock/HH, # 3.48	
	Truck cost to center, Afs 12000Afs	Sheep&goats/HH, # 6.074	
	District roads unpaved	Poultry/HH, # 0.773	
	Provincial roads unpaved	13	Checks
	Accessibility yes	Household/village 54.154	
6	Markets	Population/ HH 8	
	Provincial yes	School/ village 0.394	
	District, General, day all days	No. of Bored wells/ village 0.016	
	District, livestock, day always	No. of Enterprize/village 0	
	Traders/assemblers yes		

Annex 5

Household Animals and Poultry in Ghour Province

ASAP/Chemonics

2008

No	Province	Districts	Livestock						Total	Poultry					Total
			Oxen	Cow	Sheep	Goats	Horse	Donkey		Cock	Hen	Check	Duck	Turkey	
1	Ghor	Saghar	12,000	9,500	29,000	38,000	480	15,000	103,980	5,500	6,500	8,000	90	4,000	24,090
2		Taywara	23,000	20,200	12,000	18,000	1,000	31,648	105,848	5,000	6,700	8,300	80	12,000	32,080
3		Lal & Sarjangle	7,454	5,300	36,787	15,789	120	3,000	68,450	3,000	3,010	5,749	97	2,000	13,856
4		Duleena	6,000	5,748	18,968	11,564	70	9,484	51,834	5,100	3,200	5,284	88	2,874	16,546
5		Chighchiran	13,350	8,150	80,000	20,000	2,800	33,000	157,300	3,007	2,500	3,480	102	4,704	13,793
6		Pasaband	8,746	5,000	23,646	9,788	105	7,645	54,930	4,900	4,200	8,148	32	1,900	19,180
7		Tulak	6,000	5,400	26,600	13,600	200	6,000	57,800	1,600	3,000	4,000	19	501	9,120
8		Shahrak	6,000	4,520	24,701	8,714	100	6,011	50,046	1,800	2,850	4,350	28	650	9,678
9		Char Sada	3,490	2,000	22,550	29,850	1,660	6,390	65,940	1,002	2,714	4,434	30	1,740	9,920
10		Dowlatvar	7,600	7,020	29,701	11,259	570	9,073	67,331	3,120	750	561	28	762	5,222

Annex 6

Province: Ghor

Arable land survey cultivated, forest and pasture land in Hectare

2008

S.#	Province	District	No of villages	Cultivated land in Hact		Total	Orchar ds &viens	Vegeta ble and Furrow s crops	Cereal Crops	Forage crops	Forest land	Pasture land	Non-areable land	Mountai ns	Total Land area	
				rainfed	Irrigated											
1	Ghour	Lal & Sarjangle	650	16,900	7,020	23,920	-	1,560	23,797	1,073	1,244	2,316	3,041	6,840	37,361	
2		Chighchiran	304	22,745	7,500	30,245	670	1,600	30,995	2,200	4,944	3,316	9,421	22,380	70,306	
3		Shahrak	181	18,000	7,350	25,350	250	250	23,750	1,100	3,244	13,160	2,300	5,600	49,654	
4		Tualk	207	15,517	7,234	22,751	180	560	22,551	2,535	2,237	2,345	8,300	10,000	45,633	
5		Pasaband	314	15,957	6,206	22,163	160	250	22,763	2,150	1,243	2,305	4,000	3,241	32,952	
6		Taywara	274	11,196	8,242	19,438	260	267	19,588	3,300	2,231	2,320	3,221	5,431	32,641	
7		Char Sada	59	12,000	4,000	16,000	200	480	16,100	1,320	2,244	2,332	2,000	5,000	27,576	
8		Duleena	115	12,000	4,000	16,000	50	250	16,500	1,200	2,241	3,600	1,700	12,400	35,941	
9		Saghare	113	10,854	5,000	15,854	350	300	16,024	1,800	2,249	2,225	4,600	8,000	32,928	
10		Dowlatyar	191	17,000	7,000	24,000	30	600	23,100	1,600	2,044	3,400	1,800	10,100	41,344	
Total				2,408	152,169	63,552	215,721	2,150	6,117	215,168	18,278	23,921	37,319	40,383	88,992	406,336

Annex 4
Crop Calendar
2008

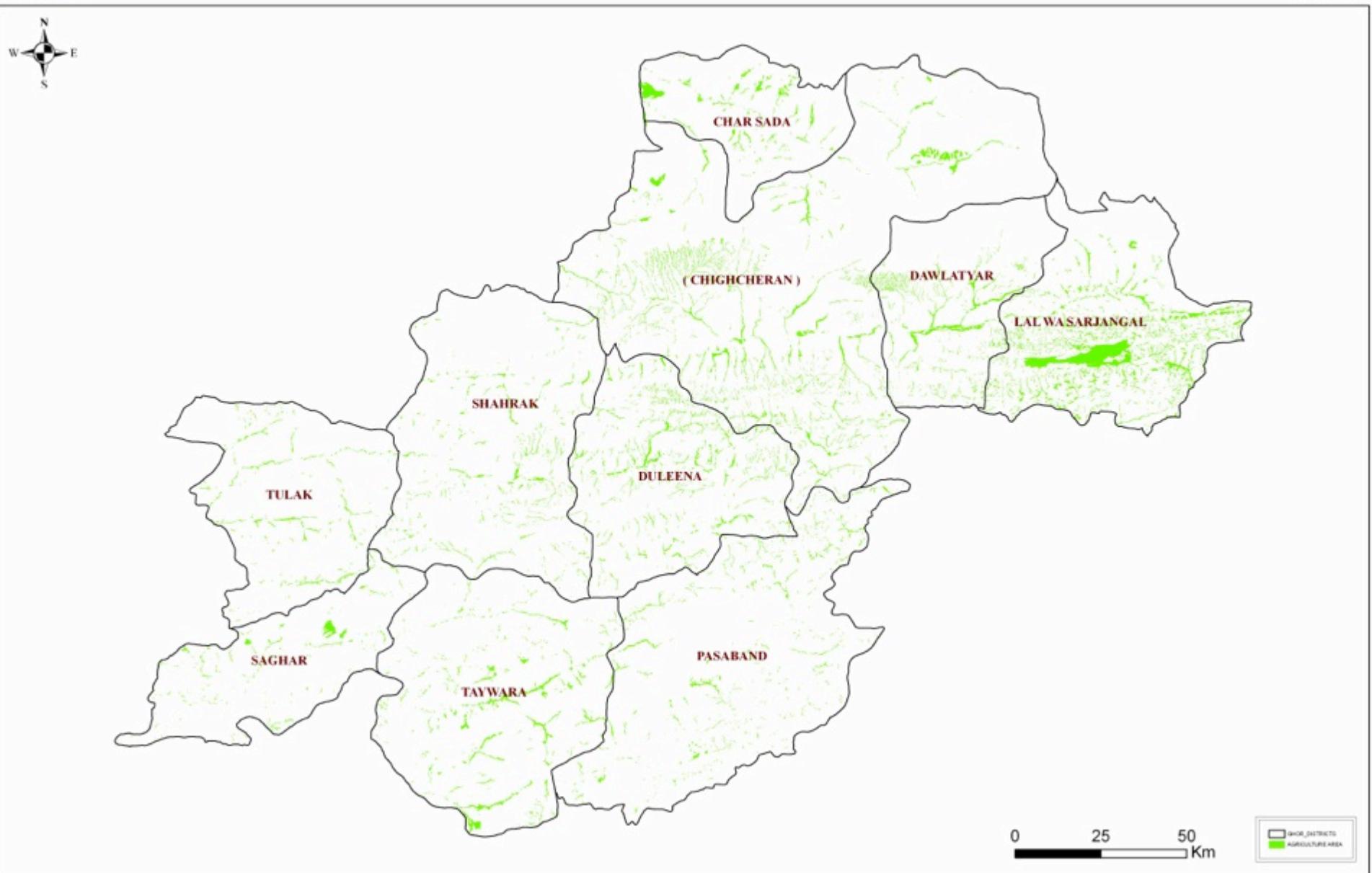
Activities	District	Center	Province	Ghour	Date	GPS HQ	Elev. HQ						
	seasons	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Planting=P;Harvest=H;Treat=T													
Fruit and Nut Crops													
Apple	Spring Fall												
Grape													
Pomagranate													
Apricot													
Peach													
Sure 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												
Rice	Summer												
Wheat	Spring Spring												
Corn	Fall Spring												
Mung Bean	Summer												
Flax	Spring												
Sesame	Fall Spring												
Cumine													
Sunflower													
Canoll													
Zafaran													
Pea													
	Planting					Harvesting							

GHOR PROVINCE DISTRICTS MAP





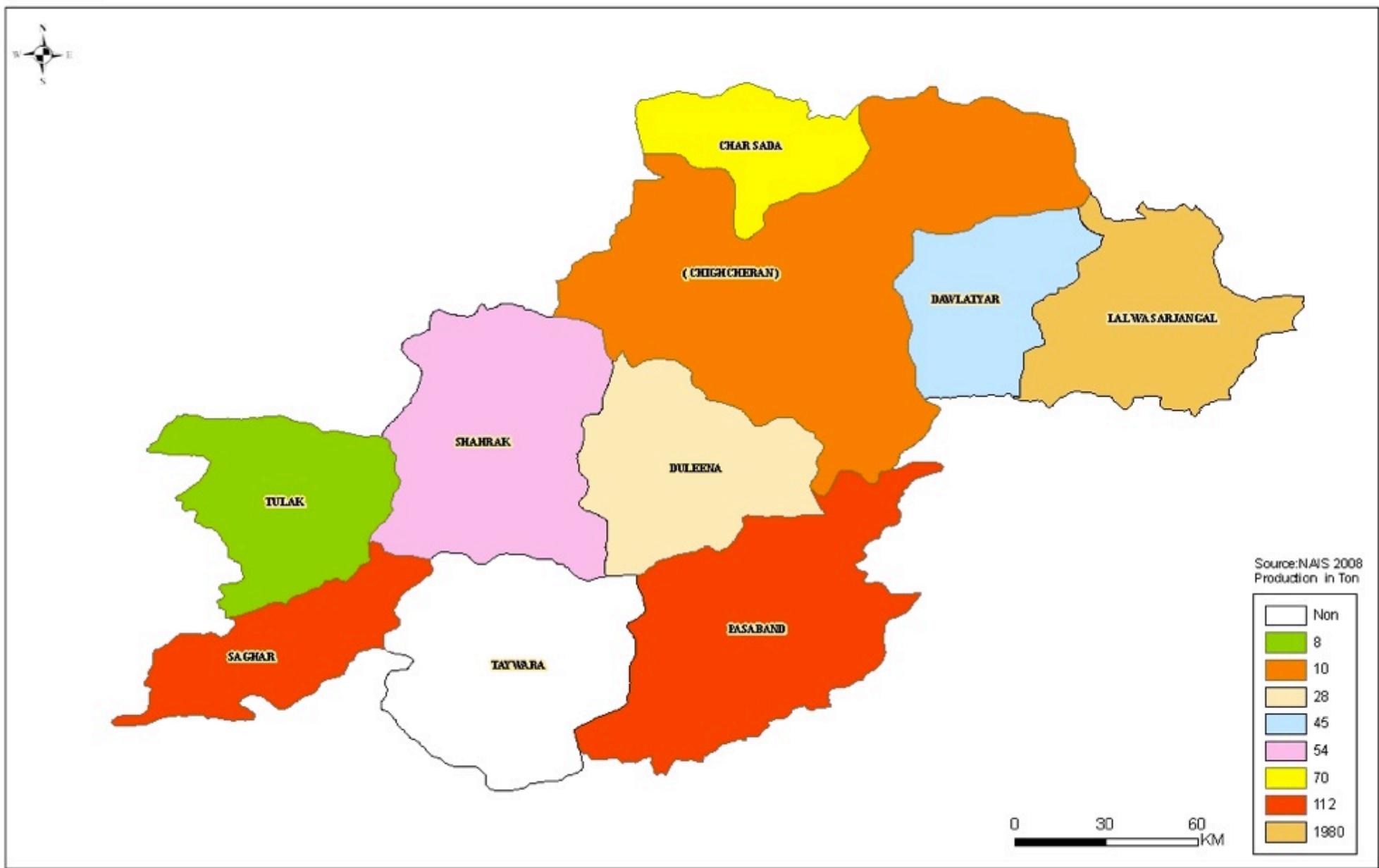
GHOR PROVINCE AGRICULTURE MAP



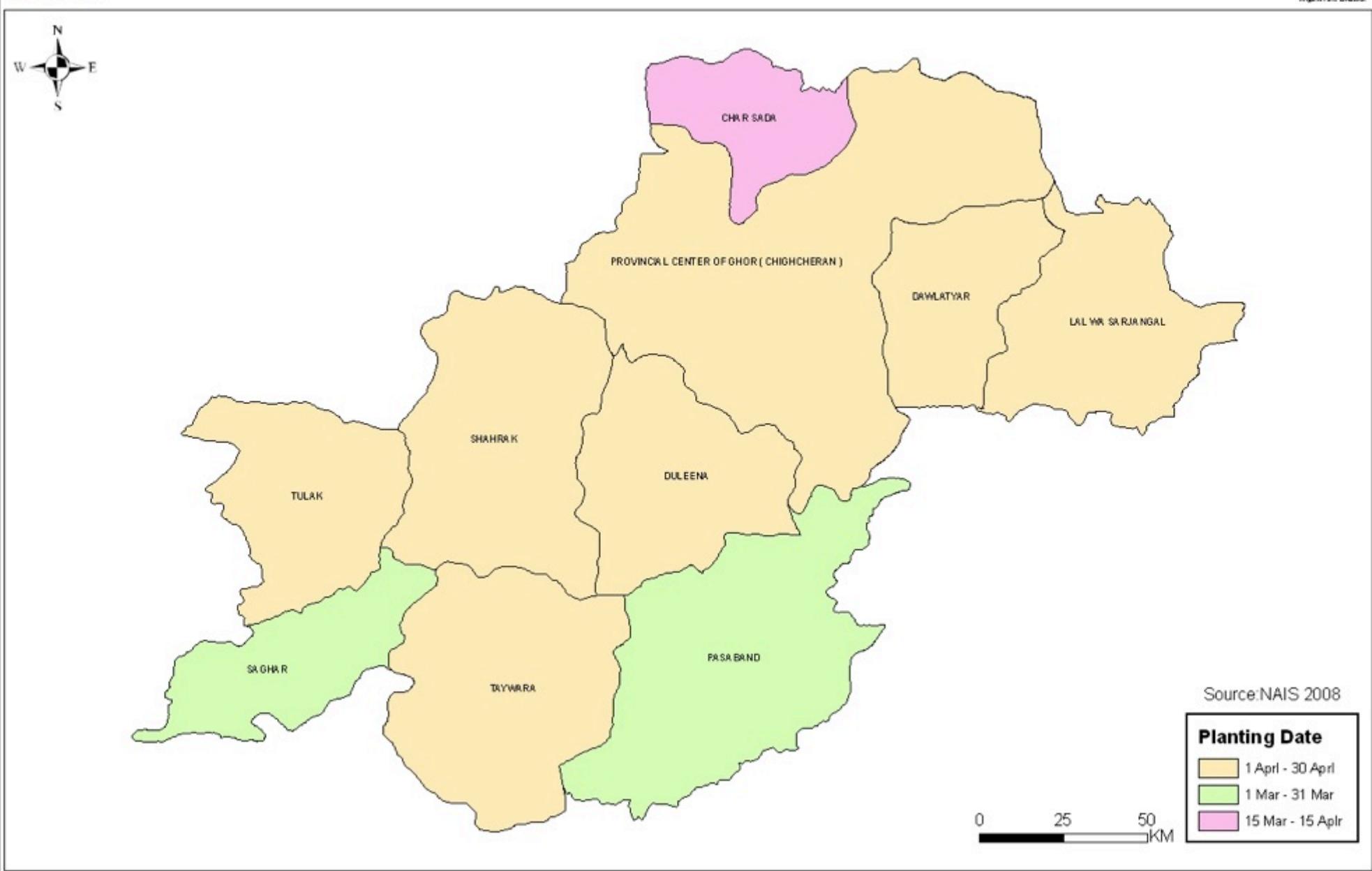
Ghor Province Crop Production Map (Wheat)



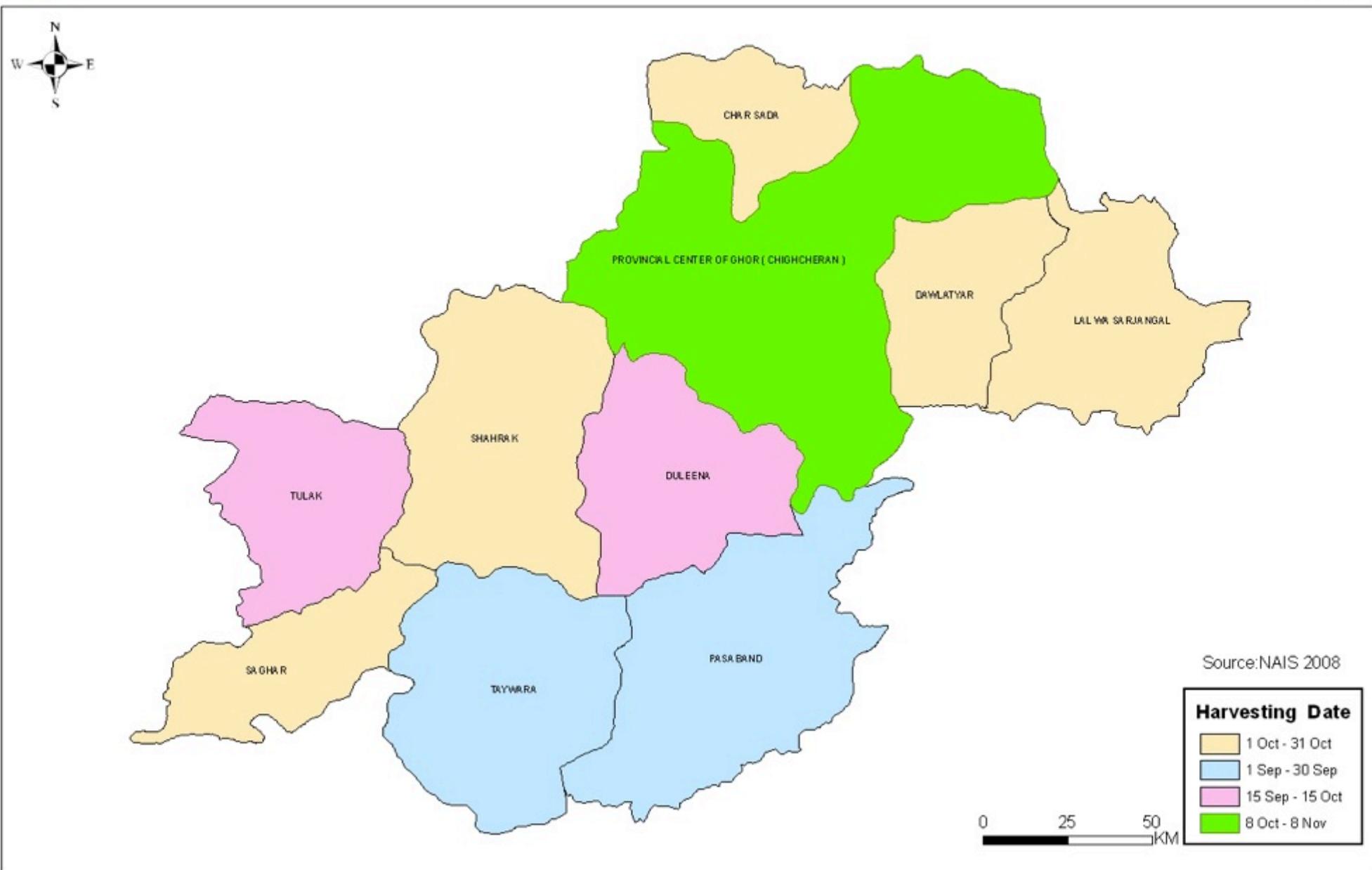
Ghor Province Crop Production Map (Alfalfa)



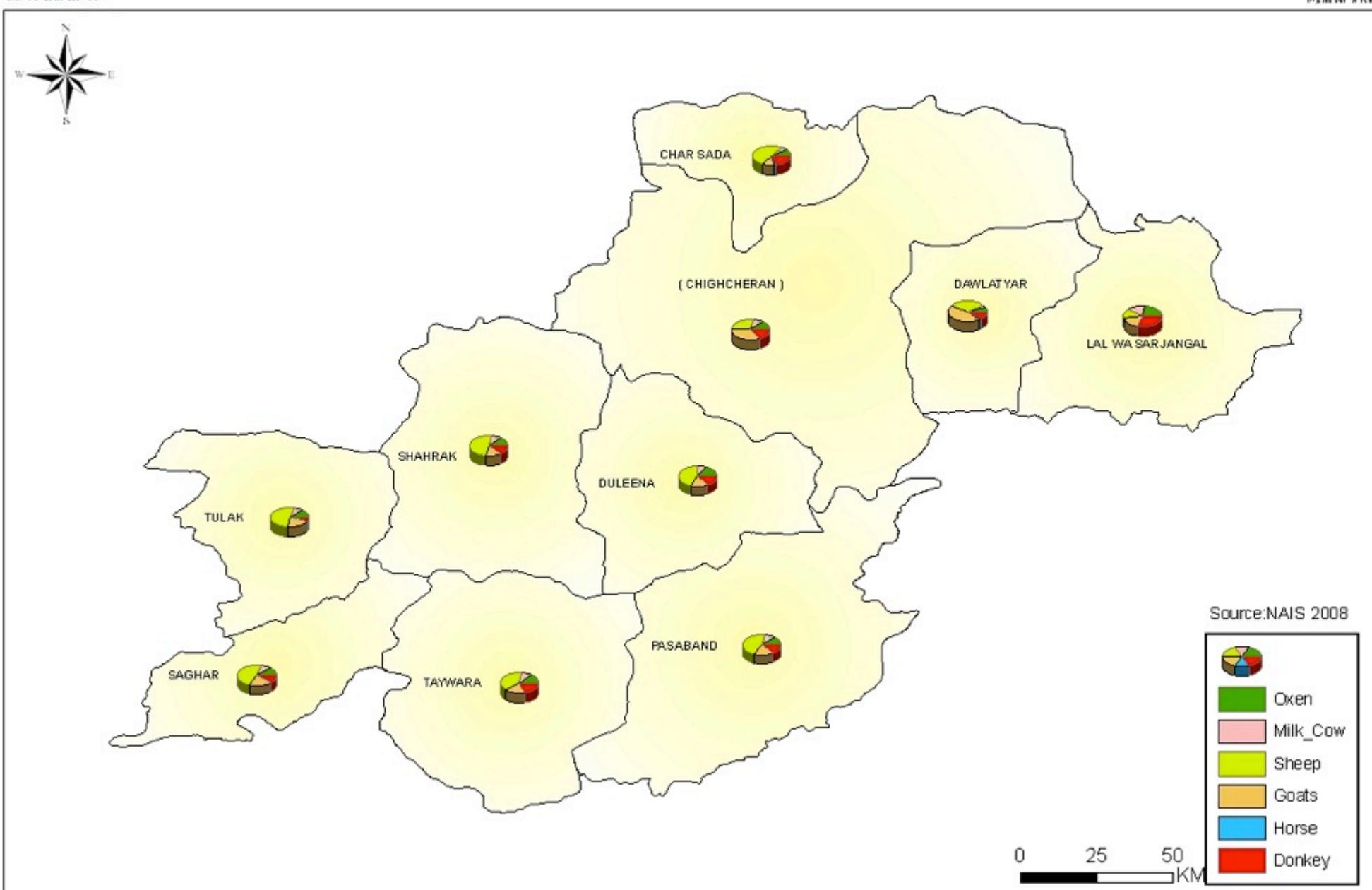
Ghor Province crop calendar Map (Onion)



Ghor Province crop calendar Map (Onion)



Ghor Province Livestock map



Ghor Province Livestock map (Sheep)



Ghor Province Livestock map

