

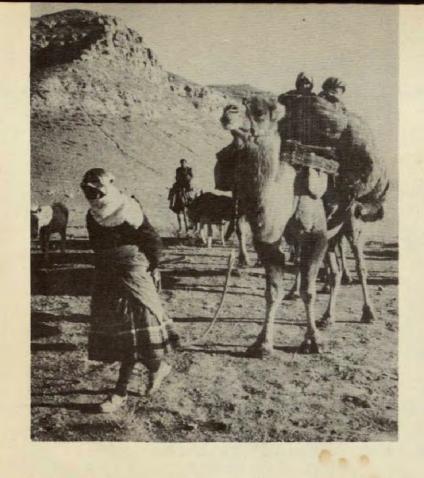
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The Turkoman and His Land

Historically, the Turkoman belongs to a nomadic group of horsemen and shepherds who arrived in Transcaucasia in the 11th century as Seljuk Turks. These people became separated geographically, but not linguistically, from the main body of Turks and moved eastward, pasturing their flocks over the broad ranges of Central Asia, southern Russia along the shores of the Caspian Sea and across northern Iran.

Under Reza Shah the Great, King of Iran (1921-1942), many of the Turkoman tribes were settled on Royal Lands to stabilize the northern frontier of Iran. This settlement is so recent that traces of the Turkoman's nomadic heritage persist.





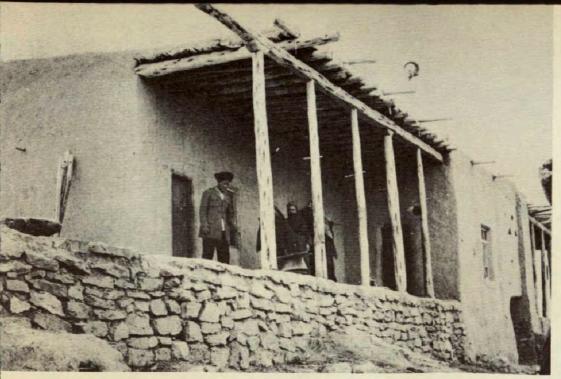
A Turkoman tribe moves - families, livestock, even houses made of felt and wicker for easy dismantling.







Iribesmen astride their horses still compete across the open plains as did their fathers before them ...



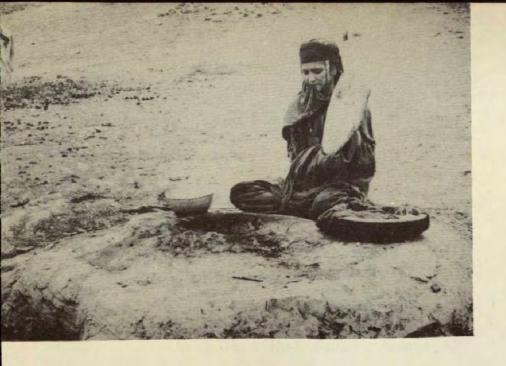


Today the wandering has ceased and clusters of mud dwellings rise beside the hills.





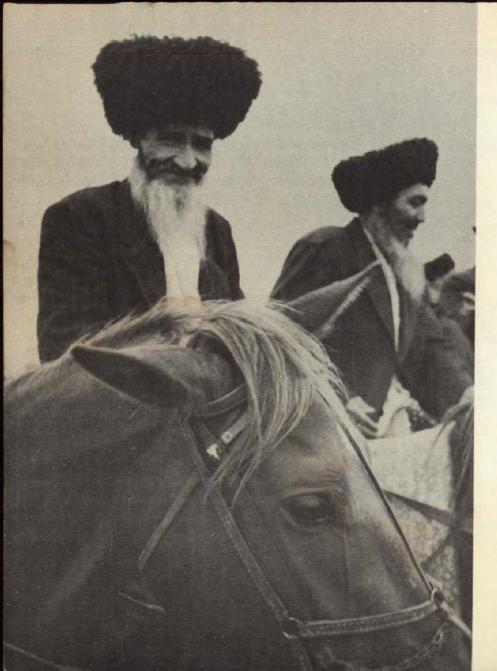
Some men have several wives-and the daughters marry early and bring handsome bridal payments ...







There is bread to be baked and beef to be butchered, while other hands weave centuries of brauty into carpets.



A second step in the permanent settlement of the Turkoman tribe was taken under the farsighted leadership of the son of Reza Shah the Great, His Imperial Majesty, Mohammad Reza Shah Pahlavi, the present ruler of Iran.

A special Bank, Bank-e-Omran Sherkate Taovoni (Bank for Development and Cooperatives) was established in 1952 for the purpose of organizing the land distribution and for providing credit and management guidance to the newly created owners of land.

By an edict in January 1951, His Imperial Majesty decreed that all lands in the Royal Estate be distributed among tenant farmers.

(A summary survey prepared by the Research Department of the Bank of distributed villages to-date is given in the tables of the appendix to this booklet.)



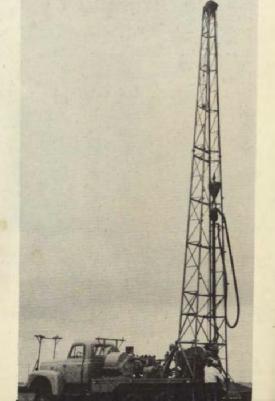


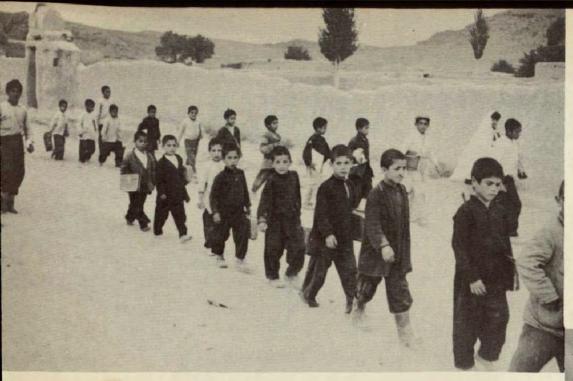
A generous ruler, the village elder, a religious leader and an American advisor come to a village where land is tobe distributed.





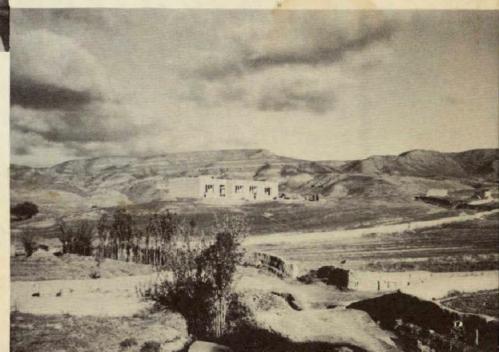
Now there is water for man and his animals, to be drawn from the earth and taken to the homes ...





and in the village
the boys find education a new
and valued privilege.

While in the hills a school is being built for the men,





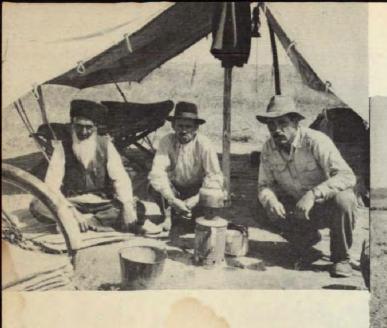
As they did a hundred years ago men still walk



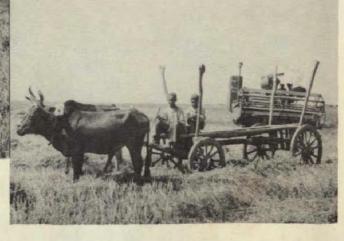
behind an ox-drawn harrow of logs and wooden pegs-and also today, men are learning to use the pull of a tractor ...



Other old ways of bringing life out of the soil are exchanged for new methods and machines.







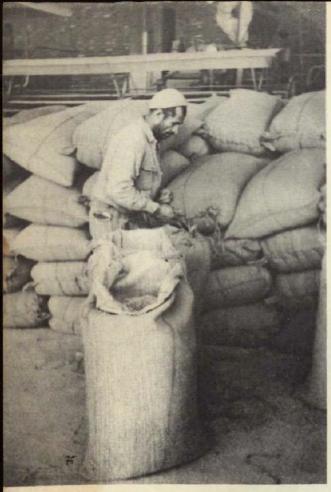


Proud landowners learn well how to use powerful machines, yet cannot forget the need for ox-drawn wagons or how to build an ancient storage bin ...





The Americans introduce a new crop, easy to grow, providing feed for the animals and giving fresh vigor to the soil.





For more food and greater revenue there is an improved variety of wheat seed being distributed among the villagers...



And the Turkoman is learning each day that enriched soil and a more fruitful seed make his land a good place in which to live.

DESCRIPTION OF PHOTOGRAPHS

Page 1

Tribe on the Move: All household goods, chattels, and children are readily movable for periodic migration. In these moves women do most of the work with the caravan, while the men watch the flocks and prepare the next camp site. (Picture is of a tribe moving through Turkoman lands).

A Traditional Yurt or Obeh: These huts were the homes of the migratory tribes. As villages are established, they are increasingly being used as storage and weaving sheds rather than as living quarters.

Spring Housecleaning: The felt and wicker huts (yurt or obeh) are easily disassembled and are thoroughly cleaned once a year.

Page 2

Racing Across the Plain: While the Turkoman no longer lives on horseback, a fine horse is a mark of prestige, and good horsemanship is displayed on festive occasions.

A Turkoman Home: There is no tradition of permanent settlement. Where homes are established, regional patterns develor depending on neighboring styles and available materials. This is in one of the northern valleys where rocks for foundation are readily available. The walls are of mud bricks plastered with mud. The beams are poplar, now being cultivated along the streams but which are becoming less available because goats eat the sapplings. Doors and windows are purchased in the nearest market town. This is one of the instances where the formerly self-sufficient life of the tribe breaks and becomes drawn into a regional market economy and thus into the national life of Iran! The mountain sheep skull on the roof wards of evil and protects the home.

Turkoman Village: In northern Iran it is difficult to find a village typical of Turkomans as a whole. This one is in an isolated valley near the Russian border. The slopes were heavily forested within living memory but have been stripped for home construction and fuel. On the open plains east of the Caspian Sea, villages are less clustered and are scattered without recognizable pattern.

Page 4

One Man's Family: The Turkomans are Moslem. Within their economic means they are permitted up to four wives. This man is a wealthy villager and the headman of his community. The traditional dress of Turkoman women and girls is made of dark red homespun and hand-loomed silk. The head dress of the same material is heavily ornamented with silver. These ornaments and silver jewelry serve as a display of wealth and as a store for savings. The fur hat is worn by all male Turkomans, but the coat, also of handwoven silk, is standard apparel in the more isolated areas, and is elsewhere restricted to use on festive occasions. These people are almost totally illiterate. Their language is Turkoman which has no written alphabet of its own, and only few of the villagers can communicate with government officials in Farsi, the national language of Iran.

Turkoman Girls: Carefree childhood years are short. From a very early age the girls help their mothers while the boys are free to play. These twins will soon be married. Among the Turkomans there is a substantial bride price, and Turkoman girls are thus considered less of a burden than in many non-western cultures.

Page 5

Baking: Each household has its own earthen

oven, and baking bread is a woman's daily chore. Bread is the main staple and in the poorer homes is eaten three times a day with tea and large amounts of sugar.

Carpet Making: Persia is famous for carpets. Each region has its own distinctive design. The Turkoman carpet is characterized by the geometric elephant track design with deep red borders against a background of white, green or red. Among the Turkomans, carpet making is strictly a home industry done by women. The skill is passed on from mother to daughter. A first quality 6 by 9 foot carpet takes a team of three women three months to make, and it sells for around \$200

Butchering: Fresh meat is rare in the village To provide fresh meat farmers take turns in providing animals to be slaughtered. The usual meat is goat or sheep, with cattle and camels slaughtered when old or sick.

Page 7

The Shah Guides the Program of Land Distribution: His Imperial Majesty not only initiated the distribution of his Lands, but maintains the closest possible interest and continues to inspire the progress of the work. This picture shows His Majesty inspecting the survey maps of a village to be distributed

Point IV and Land Distribution: The Agriculture Division of USOM/Iran is fortunate in being associated in an advisory capacity with His Majesty's Land Distribution Program. Here Mr. Herman E. Hendricks, Chief of the Agriculture Division, discusses the distribution program with Development Bank Officials:

Mullah at Land Distribution Ceremony: The village religious leader takes keen interest in village welfare and participates in the ceremony when land titles are given to farmers.

Land Owner: This village elder has just received from the hands of His Majesty the legal ownership titles to holdings cultivated by villagers as tenants.

To carry out its responsibilities the Development Bank has created regional centers. The principal center serving the Turkoman area is located at Ghonbad-E-Gabous. This is a fairly major installation serving approximately 100 villages up to this time with a staff of 25 technicans. This regional office assists the farmers in developing their holdings and improving their way of life. For this purpose it encourages the farmers in organizing cooperatives and provides credit to such societies. Technical services in the distributed villages are provided directly to some extent by Bank staff—and equipment and growing support is given by the Agricultural Ex-

tension Service and field workers of other ministries.

Water over a large part of the area is critically short. There is urgent need to develop water supply to sustain both village life and crops. The Bank is active in helping the villagers in their search for water. Bank crews drill wells for joint use by villagers, and individual loans encourage credit society members to dig their own shallow wells.

Page 8

Artesian Wells: At a 100 meter depth an abundant water supply is tapped. Peasants from nearby villages haul the water by tractor or animal drawn carts for their own use.

Motor Pumps on Deep Wells: Where there is no artesian flow the Bank experiments with pumping installations. The farmers pay off the loans for this equipment on easy terms over long period of time.

It is a long way from nomadic life to modern mechanized farming. Development Bank credit and Extension Service skills combine to bridge the gap. Nuch of the area lends itself to mechanized operation, and modern equipment is introduced as funds permit and farmers can be trained in its use.

Page 9

Schools for Children: A progressive spirit is growing. More than their parents, these boys on their way to school will be able to mold their own future. Turkoman boys and girls are learning to read and write Persian and thus become part of Iranian national life.

Training Centers for Adults: Not all the training is individual. The Development Bank and ICA are building training centers throughout the distributed crown lands. The one being constructed will serve some 21 villages. Formal instruction will be given in agriculture, cooperative education, and health by specialists from pertinent organizations.

Page 10

Ox-drawn Harrow: It is hard work for the peasant and his team to break up the clods left by the wooden plow. The stubble left of the previous crop is not really made part of the soil for the new seed.

Tractor-drawn disk: Disking, after ploughing, is part of good seed-bed preparation. The disk-harrow breaks up the land more evenly and last year's stubble, chopped up by the disk, helps to mulch the soil, and to restore some fertility to land exhausted from continuous cropping.

Page 11

Using a Tractor-drawn Grain Drill: The grain drill seeds evenly, both in depth and horizontal spacing of seed. Seed requirements are 20 percent and more below those of hand-seeding, and more even stands of grain assure better yields.

Traditional practices only slowly give way to new methods. The peasants were not easily convinced of the merits of letting a machine plant their wheat. Now that 'drilled' seed has sprouted on some 1,250 acres, word is spreading fast through the Turkomans Plain that this is the best stand of grain ever seen in that area.

Seeding by hand: In hand-seeding, the seed is spread unevenly. This leads to waste of seed and uneven stands and results in poor yields of grain.

Page 12

Grain Storage: Some farmers have to settle their debts at harvest time. They deliver the grain directly from the field to the creditors and borrow again for current consumption and seed for the following year's crop. Others, more provident or more fortunate, can keep enough grain for their own needs throughout the year or for sale when prices are high during the off-season. Individually owned aboveground storage bins are cheap to build. In the type illustrated the grain is dump-

ed into the top and withdrawn from the openings at the bottom. When the bin is full the top is sealed shut for the season. This indigenous storage practice is not widespread, but illustrates that there are traditional ways of doing things which should be disseminated along with improvements from the outside.

Standing By for the Harvest: Again the old and the new overlap. The ox drawn wagon waits to receive the grain sacks from the combine.

Harvesting: With the settled pattern of agriculture wheat and barley farming has become so extensive that the traditional method of harvesting a small patch of grain with hand sickles has given way almost entirely to large combine operations. Most of these combines are not yet owned by the small holders. They are operated by contractors for a share of the harvest. The Bank operates ten combines in the distributed villages and is investigating the possibility of organizing farmer-owned equipment cooperatives.

Combine Crew: The combine operators camp in the fields during the two-month harvesting season. Each farmer is responsible for sacking his grain and thus becomes part of the crew while his field

is being harvested

Page 13

Putting Up Hay: In severe winters many animals die due to lack of winter feed. Alfalfa is a new crop to the Turkoman and its use is not yet widespread. Its many benefits as a soil builder and a feed are beginning to be realized.

Wheat Seed: The Ministry of Agriculture has developed improved varieties of wheat. The Development Bank has purchased 80 tons for distribution to selected growers in distributed villages. This amount of seed introduced will change the wheat variety in the entire area within a three year period.

Page 14

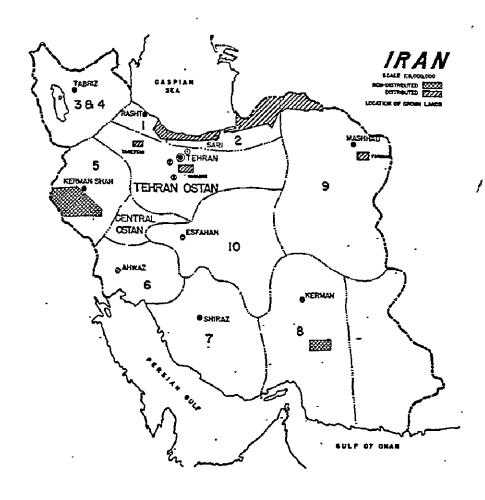
Seed Treatment: Extension Service specialists treat the improved seed at the Bank's warehouse in Gonbad-E-Gabous before distribution. Turkoman farmers wander in to watch the process, so incidentally the treatment process becomes an extension lesson.

Poor farming practices result in low yields. Fertilizers, better seed, and soil building crops such as alfalfa bring about dramatic improvements in yields. Here again, the Development Bank and Extension Service work together to help the new landholders to improve their livelihood.

"Selling" Fertilizer: Chemical fertilizer is new to the Turkoman and new to the land.

Page 15

Applying Fertilizer: This farmer has been convinced that fertilizer will increase his crop. yield.



Map of Iran showing distribution of Crown Lands.

APPENDICES

Notes:

Appendix A: Table 1 shows the progress of the distribution of Crown Land villages, from the beginning of the program in 1951 to the end of 1959.

Appendix B: Tables 2 to 7 show the summary of findings of a survey carried on in selected villages by the Research Department of the Development Bank in August 1959:

The location of these villages is shown both in Table 1 and on the map. The villages of Tables 3 to 7 are all located in the areas around Gorgan and Gonbade-Ghabus. This region is known as Dashte-Gorgan Plain; while the population in this area is mixed, villages inhabited by Turkoman predominate, especially to the north and east.

The survey of distributed villages is an on-going project which will eventually cover the entire Crown Lands program. Its purpose is to provide bench-mark information for a periodic re-evaluation of the effects of land distribution on the rural economy.

In presenting these statistical data, attention must be drawn to the difficulties of gathering this type of information. In Iran, this is pioneering work. Much care has been given to insure the reliability of the figures given. Nevertheless, a word of caution is in order. The data, especially in so far as they concern crop yields and livestock, involve an element of estimate, if not on the part of the interviewer, on that of the respondent.

All figures on areas of land are in hectares (one hectare equals 2.5 acres). Entries marked with an asterisk (*) indicate that no information was available, and the same asterisk is used for sub-totals incomplete because of lack of detailed information.

Items 6 (Landowners) and 9 (Individual Holding) refer to peasants who received land in the distribution and the size of the land unit they were given by His Imperial Majesty, the Shah.

Item 20 (Orchard and Woodlots) for the village of Takestan consists almost entirely of vineyards.

Item 25 (Donkeys and Camels) involves primarily donkeys; except in the village of Gomishan which has 1,600 camels and the village of Hajiabad which has 70, only a few camels are scattered throughout the area.

Appendix A

Crown Land Distribution by Year and Area

Year	Number of villages	Location@	Number of Farmers	Hectares
1951	1	Varamin	146	1,215
1952	-		-	
1953	13	Varamin, Roudihen.(1), Mohammadabad (2)	882	5,072
1954	2	Khanlogh (3), Takestan	1,750	11,600
1955	21	Gorgan, Gonbade-Ghabus, Fariman	2,203	20,301
1956	21	Gorgan, Gonbade-Ghabus, Varamin, Sari	3,594	18,593
1957	24	Gorgan, Gonbade-Ghabus	4,055	38,764
1958	21	Gorgan, Gonbade-Ghabus	2,764	9,764
1 95 9	115	Amol, Babol, Gorgan, Gonbade-Ghabus, Bojnurd	8,.218	185,675
	Total 218		23,612	290,984

[@] Numbers in parentheses refer to locations not otherwise identified on the map.

Table 1

APPENDIX B

-Vagamin

								•	AMERICA										
1,	Asso of Village	Khatrabad	Oorgtapph	Poinsok	Salehabed	Mahoondabad	Khorien	Seadubad	Davoudabad	Rainbajaok	Rontanabad	Kesarbakack	Khatoonabad	Haftebed	Khanlogh	Roudiben	Mohomadabad	Takesten	-(Sub-Total) (17 Villages)
2,	Population .	910	499	979	368	282	635	241	1,100	760	145	211	169	287	560	1,450	198	15,250	24,344
3.	Literates	155	135	312	75	45	95	19	170	200	8	47	53	30	160	275	27	3,900	5,736
4.	Of Which Vopen	45	20	97	25	10	15	27	50	20	-	12	16	8	40	45	7	400	859
5.	Panilies	150	110	189	60	60	120	52	250	140	24	48	100	70	134	300	5 0	3,000	4,857
6.	Landowners	101	90	118	55	42	69	48	146	97	24	45	71	34	150	127	38	1,600	2,675
7.	Cultivated Land	835	540	955	258	311	600	399	1,300	750	345	364	430	352	1,410	149	283	11,700	20,972
8.	Of Which Irrigated	835	540	955	258	311	600	399	1,300	750	195	364	430	332	1,400	140	283	5,700	14,792
9.	Individual Folding	8.0	6.0	8.0	6.0	6.0	6.0	6,0	6,5	5.5	8.0	6.0	5.0	6.0.	8.0	1,0	6.0	6.5	
10.	Wheat .	206	90	234	75	67	1.00	80	400,	200	40	90	126	72	3/2	35	80	2,400	4,640
11.	Tons/Hactare	1.5	1,5	1.5	1,0	1,2	3.0	1,5	1.5	1.4	1.6	0.9	1.3	1.5	0.9	1.2	1.5	0.7	
12,	Barley	101	45	59	30	23	44	28	12	60	15	10	38	36	20	13	10	400	944
13.	Tons/Hectare	1,0	1.5	1.0	0.8	1.0	1.9	1,5	1.7	1.5	1.5	0.9	1.0	1.5	0.7	1.2	1.0	0.7	
14,	Cotton (Irrigated)	103	27	117	52	45	96	35	150	60	24	45	40	29	138	-	1	_	962
15.	Tons/Sectare	1.3	0.6	1.2	1.0	1,2	1.6	0.1	1.2	1.2	0.9	0.3	0.9	1.0	0.7	_	0.4		
16.	Cotton (Dry)	-	-	-	-	-	-	-		-	_	-	_	_	-	-	_		-
17.	Tons/Hectare	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	
18.	Other Field Crops	-	-	-	-	_	-	-	_	-	_	-	-	-	12	_	5	-	17
19.	Vegetable Crops	117	35.5	155	56	53.5	67	28	68	63	15	13	33	31	10	29	8.5	. 60	831
20.	Orchards and Woodlots	1	-	10	3	-	3	1.5	9	7.5	-	2	-	2	11	27	40	3,201	3,318
21.	Tractors	5	2	5	2	5	9	7	7	5	5	2	5	7	3	_	1	7	77
22.	Ozen	100	80	60	52	10	25	35	60	60	20	15	60	36	7	130	40	950	1,740
23.	Work Horses and Males	14	-	1	´-	3	4	-	6	5.	_	-	-	-	2	7	3	n	56
24.	Pleasure & Pack Horses	-	- `	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.	Donkeys and Camels	200	30	100	25	50	110	34	200	70	48	25	50	230	160	150	50	3,000	4,532
26.	Govs and Calves	300	90	140	100	- 100	200	50	150	250	30	3 0 .	100	30	30	400	80	2,000	4,080
27.	Sheep	1,000	150	1,200	600	850	4,100	240	790	1,500	200	250	250	2,350	600	4,000	250	6,000	24,330
28.	Goeta	500	150	650	400	150	400	100	250	600	120	150	140	700	700	500	100	4,000	9,610
29.	Poultry	400	150	700	240	150	1,000	150	500	700	100	150	400	300	2,000	2,000	570	14,000	23,180
30.	Schools	1_	_ 1	3	1	1	1	1	2	4	-	1	1	1	1	1	1	5	· 26
n.	Cooperatives	1	1	1	1	1	1	1	1	1	- 1	1	1	1	1	1	-	1	16

		Bendargas Area													Parian Area								
1.	Name of Village	Nodehkhandos	Modeho jilar	Toolan	Basten	Karkalateh	Oalest	Sangeetan	Shirabod	Kasho	Khandobin	(Sub-Total) (10 Villages)	Talour	Mokereteh	Masang	Metabashaleh	Abbannbod	Boraftan	(Sub-Total) (6 Villages)				
2.	Population	486	217	172	4,600	145	192	49	224	48	1,300	7,431	640	3,870	720	2,400	<i>L2</i> .0	1,200	9,250				
з.	Literates	14	סנ	21.	550	- 9	8	1	6	3	70	695	65	430	20	70	23	88	696				
4.	of Which Women	5	-	-	100	-	-	-	_	-	20	125	3	30	-	2	3	g.	46				
5.	Tarilies	150	44	32	700	30	41	n	50	13	321	1,395	100	750	120	400	70	210	1,650				
6.	Landowners	131	48	44	800	*	64	18	76	18	300	1,499	(1,400 _)	322	103	120	1,945				
7.	Cultivated Land	799	130	162	6,150	•	430	•	•	62	3, 770	11,503*	300	1,540	280	1,080	360	740	4,300				
8,	Of Which Irrigated	13	20	3	150	*	30		4	12	170	<u> 202+</u>		40	20	60	47	120	287				
9.	Individual Holding	6,6	2,5	3.5	2,2	•	4.2	3.5	2.5	1,5	5.5		•	•	٠	2,7	3.0	3.0					
10.	Wheat	560	50	20	1,000		•	330	•	-	1,600	3,680*	97	550	90	630	250	473	2,090				
11.	Tons/Esctare	1,2	1,1	0.5	1.3	•		1.2	•	-	1,6		1.0	0.7	9.0	1.0	1.4	1.1					
1 <u>2</u> .	Earley	40	10	-	50	•	10	•	-	-	100	2103	-	50	-	80	15	10	155				
13.	Tons/Hecters	1.4	1.1	-	2,2	•	1.8	4	÷	-	2.0		-	1.4	-	1.5	2.3	1.6					
14.	Cotton (Irrigated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	20				
15.	Tons/Sectors	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5					
16.	Cotton (Dry)	150	50	71	2,500	•	60	20	30	50	400	3,331	200	640	160	200	20	30	1,250				
17.	Tons/Hectare	1.1	1.4	3.0	8.0	•	0.8	0.7	6.8	0,7	1.3		1.1	0.6	1.4	1.0	0.5	9.0					
18.	Other Field Crops	13	10	3	270	•	30	9	4	10	140	489*	-	20	10	132	75	165	705				
19.	Vegetable Crops	30	-	30	111	•	30	-	-	-	•	201*	3	140	-	-	-	-	143				
20.	Orchards and Voodlots	0.5	4	1	50	2	2	-	2	-	2	63.5	16	79	3	1	-	-	101				
21.	Tractors	8	-	1	20	+	2	-	-	-	22	53	2	4	1	4	2	4	17				
22.	Одец	න	30	16	300	24	40	20	50	14	250	824	150	500	60	150	40	150	1,050				
23.	Work Horses and Holos	•	-	-	10	-	2	-	-	-	-	12	-	•	-	102	6	9	117				
24.	Pleasure & Pack Horses	35	10	7	150	9	10	4	14	3	90	332	12	100	9	20	12	20	193				
25.	Donkeya ami Camala	30	4	4	50°	7	1	-	-	-	20	116	-	-	-	50	30	50	110				
26,	Cows and Calves	150	18	50	600	90	40	50	60	8	400	1,466	300	1,500	60	150	40	150	2,200				
27.	Sheep	250	'n	490	6,500	140	250	-	80	-	800	9,524	400	1,900	450	1,800	270	800	5,620				
28,	Gosta	100	-	40	1,500	10	20	-	20,	-	200	1,890	50	200	50	200	50	200	750				
29.	Poolty	400	70	70	6,000	600	700	50	300	100	2,000	9,990	1,000	8,000	80	3,000	700	3,000	15,780				
30.	Schools	2	-	-	1	•	-		-	-	. 1	4	-	1	-	1	-	1	3				
IJ.	Gooperatires	-	+	2	-	-	-	-	-	-	2	4	1	-	-	2	2	1	6				

Table 3

		Choinleo	Doharankban	Gharcashaond- 100	Pobabdullah	Bajgeer	Parenso	, de la company	s	Hirsabang	7	Cholltappoh	Joh	Hajilarghalo	45.
1.	Name of Village	å	Q	g F		Bal	Par	Pashash	Oghan		Golk gol	Ghol	God1 Joh	# F	(Sub-Total) (13 Villages)
2.	Population	239	259	3,200	123	200	98	<i>1,</i> 20	433	244	240	660	345	<u> </u>	6,905
3.	Idterates	24	20	320	5	8	5	35	10	37	8	10	24	5	533
4.	Of Which Women	-	-	20	-	-	-	-		3	-	-	-	-	23
5.	Fa <u>rili</u> es	60	57	600	27	30	17	100	90	38	40	150	55	70	1,334
6,	Landourers	64	<u></u>	265)	50	19	22],	80	71	46	103	91	123	1,133
7.	Cultivated Land	449	217	731	, 90	1,100	300	652	420	•	500	650	400	520	7,059*
8.	Of Which Irrigated	34	17	71	5	ĵω	-	52	70	500	80	340	50	70	1,080
9.	Individual Holding	4	(3.5 _)	4.5	8.0	4.0	5.0	6,0	4.5	5.0	4.0	4.0	
10.	Vheat	9 0	110	400	50	600	264	560	170		330	230	280	270	3,354*
n.	Tons/Hoctore	1.0	0.9	1.5	1.8	1.0	0-5	1,2	1.6	,	1.0	1.5	1.2	1.1	
12,	Berloy	30	60	40	30	90	10	40	60	20	50	50	20	120	68 C
13.	fons/Hectare	1.3	1.1	2,0	1.1	1.2	1.4	1,2	1.7	1.6	1.2	9.0	1.2	1.5	
14.	Cotton (Irrigated)	34	-	40	-	99	-	50	70	200	80	330	40	70	1,013
15.	Tons/Sectore	0.9	-	1,0	-	1.2	-	1.5	0.9	0.7	1.1	1.3	1.3	1.5	
16.	Cotton (Dry)	275	60	200	4	300	20	-	70	-	-	30	40	-	999
17.	Tons/Eactare	0.5	1.2	0.6	0.6	0,9	0,6	-	0,5	-	-	0.4	0,6	-	
18.	Other Field Crops	-	17	31	2.5	13	6	2	15	-	15	10	-	-	111.5
19.	Vegetable Crops	-	-	-	-	-	•	-	-	-	-	-	-	-	-
20.	Orchards and Voodlots	-	2	2	-	-	-	-	, 1	-	-	5	2	-	12
21,	Tractors	3	-	2	•	3	1	6	Ź	4	-	3	3	_	27
22.	Oxen	16	42	50	28	20	40	10	20	60	12	120	60	116	684
23.	Work Horses and Mules	*	4	5	-	-	•	20	-		-	-	4	12	45
24.	Pleasure & Fack Horses	14	10	50	19	8	12	50	20	20	8	10	30	30	281
25.	Donkeys and Camels	3	-	•	x	8	3	8	50	20	7	10	10	40	160
26.	Cows and Calves	100	60	10	60	200	30	300	750	150	30	500	103	200	2,53
27.	Sheep	150	100	250	400	1,900	250	900	1,000	350	300	1,600	1,000	850	9,050
28.	Goate	30	40	50	100	100	50	100	1,000	40	100	400	100	150	2,260
29.	Poultry	300	100	500	100	500	100	500	450	200	200	600	200	700	4,450
30.	Schools	1	-	1	-	-	-	1	-	1	-	-	1	-	5
л.	Cooperatives	2	1	1	1	-	2	1	1		1	1	1	1	13

Table 4

							_				כ					_		
1.	Ware of Village	Nozarabod- nant	Nezambad - faro	Hozenabad	Ohezaljeh	Halatgholl	Characheols- ech	Sarlinofia	Togk temosh	Sarliolia	Socrath to co	Aresmobused-	Kochokolom	Parrogh) Khanolom	Dachthalgheb	lla ji balkhan	(Sub-Total) (16 Villages)
2.	Population	103	£ 475	130	523	= 52	173	σ 445	155	375	ษั 275	₹ 181	213 213	168	302 ⊒	82 2	.≅ 325	4,027
э.	Literates	6	45	6	20	3	10	6	8	10	9	10	6	1	5		20	169
4.	Of Which Women	_	5	_		-	_	_	_	• _	_	-	_	_		_	_	5
5.	Families	13	100	16	95	9	28	50	25	70	50	27	50	35	50	25	70	703
6.	Landowners	(202		61	(72)	89	44.	91	(_ 1	n_)	66	62	76	20	72	968
7.	Cultivated Land	190	1,244	305	1,010	240	770	810	350	804	320	486	248	460	600	370	750	8,957
8.	Of Which Irrigated	14	118	5	50	-	70	130	30	154	-	- 44	100	60	150	70	320	1,315
9.	Individual Holding	(8	ب	10	(:	18)	8	8	8	(·	8	8	8	20	10	
10.	Wheat	140	750	220	720	150	530	600	220	500	170	350	100	310	360	220	300	5,640
11.	Tons/Esctare	1.4	1.3	1.1	1,2	0.8	0.6	1.3	1.0	1.4	1.1	1.0	1.7	2,2	1,6	1.1	1,6	
12.	Barley	22	40	1.5	200	80	100	20	70	150	15	90	40	170	40	50	100	1,222
13.	Tons/Eectare	2.2	1.5	1.3	1.2	0.8	1.1	1,6	1,3	1.8	1.0	1,3	1.7	2,0	2.0	1.4	1.7	
14.	Cotton (Irrigated)	12	15	-	50	-	70	130	30	120		Щ	90	60	150	70	300	1,141
15.	Tons/Rectare	1.1	1.4	-	1.2	-	1.5	1.5	0.6	1.2	-	1.0	1.5	1.2	1,3	1.0	1.5	
16.	Cotton (Dry)	15	450	60	35	-	40	20	60	-	1.5	-	- `	10	25	20	-	735.5
17.	Tons/Hectare	0.5	0.7	0°ö	0,5	-	0,5	0.5	0.5	_	0.7	-	-	0.4	0.6	0.3	-	
18.	Other Field Crops	1	50	2	-	-	-	-	-	2	-	-	-	-	-	-	20	75
19.	Vegetable Crops			4		-	12	-	-	5	-		-	-	5	6	-	36
20,	Orchards and Woodlots	0.5	1	-	-	-	-	-		-	0.5	0.5	-	0.5	2,5	0.5	3.0	8
21.	Tractors	2	4	1	2	-	1	2	2.	3	-	1	1	-	-	2	2	23
22.	Cren	10	120	14	20	8	10	40	20	50	. 20	30	30	40	40	30	100	562
23.	Work Horses and Knles	-	-	-	. 10	9	-	10	12	20	20	12	20	11	19	2	10	146
24,	Pleasure & Pack Horses	7	25	12	50	13	25	30	15	20	35	20	20	25	30	6	100	433
25.	Donkeys and Camels	1	40	3	20	-	15	20	10	30	11	20	50	20	30	• 3	150	423
26.	Cows and Calves	50	100	57	80 -	36	150	200	40	200	150	100	120	150	150	30	300	1,913
27.	Sheep	80	940	100	500	-	850	1,400	400	900	350	200	300	250	350	1,000	3,500	1,120
28	Goats	20	60	150	100	-	80	100	150	100	100	100	70	20	70	100	1,500	2,720
29.	Poultry	50	500	80	900	70	500	500	200	400	. 100	250	300	150	200	300	400	4,900
30.	Schools	-	1	+	1	•	ı		-	-	1	1	-	-	-	-	•	5
31.	Cooperatives	1	2	1	1	1	1	1	1	-	1	1	1	1	1	-	-	14

Table 5

1.	Hame of Village	Gontshun	Bangver-	Katoot	Arithonorg	Oberghi	Ghalleth	Pikhibaji	Obaraghachii	Contshit	Charatappeh	A rkhkochack	Kaporohal	Khojolar	(Sub-Total) (13 Villeges)
2,	Population	6,750	2,760	600	855	5,000	835	201	1,480	350	585	215	70	565	17,266
3.	Literates	1,500	500	50	70	150	22	5	95	37	87	2	1	58	2,577
4,	Of Which Vomen	100	-	-	-	-	2	-	-	-	2	-	-	-	104
5.	Parilies	1,100	450	go	155	343	200	30	230	57	65	32	15	90	2,217
6.	Landowers	972	375	60	235	230	145	(<u>(21)</u>	(90)	40	160	160	3,088
7.	Cultivated Land	10,500	3,960	340	2,500	850	1,300	350	2,100	600	910	400	350	784	24,944
8.	Of Which Irrigated	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Individual Holding	10	10	10	מב	10	10	<u>(</u>	10)	۲	10)	10	10	10	
10,	Wheat	3,700	1,100	98	850	355	290	190	950	360	450	180	100	240	8,663
11.	Tons/Hecters	0.5	0,4	0.4	0.5	0.4	0,5	0,5	0.6	0.8	0.7	1.0	0.7	0.6	
12.	Barley	4,000	2,100	190	1,150	395	870	140	800	160	300	140	200	300	10,765
13.	Tons/Hecters	0.8	0.9	8,0	0.9	o-s .	0.8	1.1.	1.0	1.2	1.1	1,3	1.2	1,1	
u.	Cotton (Irrigated)	-	-	-	-	-	-	-	-	-	-	•	-	-	-
15.	Tons/Hectare	· -	-	-	-	-	-	-	-	-	-	, -	-	-	
16.	Cotton (Dry)	1,800	712	-	500	100	140	50	250	60	120	80 -	50	60	3,892
17.	-Tons/Hectare	1.0	0.6	*	0,2	0.3	0,2	0.3	0.4	0-4	0.3	0.4	0.3	0.3	
18.	Other Field Crops	-	-	-	-	-	-	-	-	-	•	-	•	-	-
19.	Vegetable Crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.	Orchards and Woodlots	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.	Tractors	60	27	4	4	7	4	1	2	1	2	-	1	1	114
22.	Ozen	-	-	-	-	-	-	-	••	-	•	-	-	-	-
23.	Nork Horses, and Males	-	-	-	-	-	-	-	-	40	-	25	-	-	65
21.	Pleasure & Fact Horses	1,300	150	30	200	200	100	20	300	100	40	35	10	50	2,535
25.	Donkeys and Camels	3,500	120	44	55	150	145	15	700	50	20	35	12	50	4,896
26,	Cove and Calves	13,000	510	200	570	30 Ô	650	70	550	300	200	50	30	400	17,250
27.	Sheep	49,000	5,000	3,000	8,000	7,000	3,000	1,000	4,000	2,500	6,000	1,700	20	4,000	94,220
28.	Gomte	1,000	400	3.00	200	200	300	100	200	100	200	100	7	100	2,807
29.	Poultry	25,000	1,000	2,000	1,000	1,200	3,000	1,000	12,000	1,000	7,000	400	200	3,000	57,800
30.	Schools	3	2	1	1	1	-	-	1	1	2	-	-	1	13
я.	Cooperatives	10	4	. -	-	2	-	-	1	1	2	-	-	1	21

		Kongoor	Amankhojeh	Chaygoshan	Dohamoh	Soften	Ohereghozi	Malikali tapoh	Ajighoshan	Kingiik	Cheratapoh- shalkh	Chatel	Ghaparolia.	Chepansofie	Pasheh	Hadiback	Gharesneed	Research 1 sh-	Agha Jigho- aban	Kolibalander	Gogethek	Ганог	(Sub-Total)
1.	Hamp of Village	No.	릗																				(21 Villages)
5.	Population	320	130	1,500	690	550	618	992	1,650	560	195	68	222	164	238	563	120	162	500	222	404	250	4,817
3.	Literates	34	12	26	25	22	20	19	30	20	5	2	5	2	2	2	3	1	3	2	10	15	260
4.	Of Which Vomen	4	-		-		-	-	-	-	-	-	- ·	-	1	-	-	-	-	-	-	-	5
5.	Families	50	20	200	100	82.	100	120	265	රිට	30	16	35	30	40	60	17	20	30	30	45	35	1,425
6.	Landovners	49	19	300	75	88	77	266	430	121	12	19	48	37	50	130	20	33	54.	7 1⊥	80	53	2,112
7.	Cultivated Land	1,000	370	3,010	2,202	1,200	990	3,900	4,300	1,120	900		•	•	*	*	600	•	568	750	950	650	21,610*
8.	Of Which Irrigated	400	120	-	2	-	50	-	-	-	-	15	-	-	-	-	-	-	В	10	20	-	625
9.	Individual Holding	10	10	10	10	10	10.2	70	10	10	10	6.0	3.9	5.0	6.0	10	10	8.4	10.4	•	10	×	
10.	Sheat	540	190	2,000	1,600	900	800	1,700	2,000	720	400	•	•	•	•	٠	500	*	400	•	430	450	12,630
11.	Tons/Hectare	1.4	0.5	0.6	0.7	0.5	0.5	0.6	1.0	0.6	0.5	•	•	٠	•	•	0.7	*	0.5	٠	1.0	0.7	
12.	Barley	60	44	1,100	600	300	150	1,300	2,300	400	500	•			•	•	100	•	160	*	500	200	7,714*
13.	Tons/Hoctare	1.9	0.9	0.9	0.9	, ò'3	0.8	0.6	1.9	0.9	1,0	•	•	•	•	•	0,9	•	0.9	٠	1,7	0.9	
ц.	Cotton (Irrigated)	400	136		2	-	39	-	-	-	•	15	-	-	-	-	-	-	8	10	20	-	630
15.	Tons/Sectore	0.5	3,0	-	0.2	-	1.9	-	-	•	-	0.5	-	-	-	-	-	-	1.0	0.4	1.2	-	
16.	Cotton (Dry)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.	Tons/Sectare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18.	Other Field Crops	-	-	-	-	-	1	- -	-	-	-	-	~	-	-	-	-	-	-	-	-	-	1
19.	Vegetable Crops	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3
20.	Orchards and Moodlots	0,5	1,0	-	2	-	-	-	-	•	-	-	1	-	-	-	-	-	-	-	-	-	4.5
21.	Tractors	1	-	5	2	1	-	-	-	-	*	-	-	-	-	-	-	-	-	-	Ż	1	9
22.	Oren	30	-	20	80	120	100	75	60	40	TO	18	40	35	40	30	30	30	10	40	100	12	920
23.	Vork Horses and Males	-	-	12	-	-	-	17	20	3.0	2	-	-	-	-	. -	-	•	-	-	8	4	73 ,
24.	Pleasure & Fack Eorses	20	10	20	15	20	10	5 0	30	20	12	3	10	15	15	40	5	5	4	6	30	12	352
25.	Donkeys and Gamels	Ì5	6	65	20	100	60	, 100	165	30	20	16	20	15	20	4	10	20	20	20	150	51	921
26.	Cours and Celves	60	100	100	10 0	200	100	1,400	220	90	4	20	300	100	,110	200	20	30	100	100	250	140	3,744
27,	Sheep	1,000	200	4,000	500	900	500	1,300	2,100	150	•	-	120	120	200	240	-	-	100	100	850	150	12,530*
28,	Gosta	40	20	200	50	100	100	200	200	80	-	•	30	80	70	, €0	-	-	30	29	150	50	1,480
29.	Poultry	240	150	940	300	500	140	1,000	1,300	200	50	40	-	70	40	۷,0	-	-	-	50	300	500	5,860
30.	Schools	2	1	1	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	9
л.	Gooperatives	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-

PHOTOGRAPHS AND TEXT BY JAMES T. HEGLAND AND FRANK J. MOORE, AGRICULTURE AND NATURAL RESOURCES DIVISION, USOM/IRAN.

