TRIBAL & ETHNIC GROUPS IN THE HELMAND VALLEY

by

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INTRODUCTION

The mosaic of tribal and ethno-linguistic groups inhabiting Afghanistan is complex and has been described by Dupree and others in some detail. For some specific areas, however, the situation is much more complex than can be recorded on a national ethnographic map or described in terms of its Pashtunization. The purpose of this paper is to outline the tribal and ethnic groups found in Helmand Province and to describe the nature of their distribution over the province. While this mainly descriptive task is not complete, it gives a clear picture of the complexity of the situation and should serve as a base upon which other studies can build. The data for some of the regions within the province are more complete than for others, reflecting the variation in the opportunities to collect supplementary data. Where possible (e.g., the Shamalan Region), more detailed analyses or case studies are presented of limited areas and of specific tribal or ethnic units to demonstrate the nature of the heterogeneity of the area and its political implications, i.e., the relationships between groups.

Helmand province appears as a microcosm of the national mosaic of ethnic groups reflecting a combination of indigenous Pashtun, Baluch and Brahui groups and the results of a major irrigation system constructed mainly since 1946. The irrigation system, with its storage dam, allowed for utilization of previously farmed land for more than one growing season per year and for the expansion into large areas of new, previously uncultivated land. With this development came an active land settlement program that recruited settlers from all parts of Afghanistan, although there was some bias in favor of the Pashtun tribal groups within whose territory the province rests.

In this paper the various Pashtun tribal groups will be discussed in the same manner as the ethno-linguistic groups since this clear distinction is also made among themselves. The purpose of any social identification, be it tribe, clan, ethno-linguistic or sect differences, serves the political purpose of defining the limits of the various groups that interact on the basis of this identification. These observed differences serve as the basis for social and political organization and action. Pashtun tribal affiliation is at least as significant a political identification in Helmand Province as is being Turkmen, Uzbek or Hazara.

The various tribal and ethnic affiliations correlate with a number of other factors which will be noted in this discussion. For example, settler versus indigenous households, land tenure patterns, length of time in the province, homogeneity of settlement pattern, all of which may relate to political influence and power, or the lack of it, on the local scene. In the context of the development of a major, modern irrigation system, this has many ramifications. An ethnically homogeneous area of long standing is able to present a unified opposition to proposed developments defined as disadvantageous by the farmers. In the same manner, such a group can petition government offices more effectively to receive early project benefits and services. The antithesis of this is the political impotence of a recently settled community of mixed tribal and ethnic origins. Tribal and ethnic identification frequently acts as a basis of political organization and division vis-a-vis each other and vis-a-vis the government, as will be discussed in the context of an example below.
There is no attempt to discuss in detail the origins of the various groups listed. While the province of origin, previous occupation and number of years in Helmand Province were recorded in the basic interview, that data will not be presented here in quantitative form. The statements of tribal affiliation were taken at face value. The interviewees in almost all cases readily identified their group affiliation. It was no secret and they were generally proud of their group origins. Small children could and did answer the affiliation questions as readily as adults. There are some group names, however, that are not familiar and may represent sub-classes of the more commonly known tribal names. The important point would seem to be how the individual visualizes and states his group identity.

BACKGROUND

Helmand Province is the largest province in Afghanistan (62,337 sq. km.) equaling ten per cent of the country. Geographically, the province is rocky foothills in the north blending into relatively flat, clay desert centrally, with more sand added to the south and east. This is cut roughly from north to south by the Helmand River whose flood plain is the focus of most of the population. Most of the province is desert with only about 2.5 per cent of the land irrigated and agriculture is generally not possible without irrigation. There are less than 7 persons per square kilometer but the settled population is concentrated along the Helmand River, in the foothill regions to the north and in small valleys with streams, springs or karez systems as their water sources. These foothill regions are noted for their out-migration over the past two decades at least, the result of falling water tables and a gradual drying of water sources. Most of the migrants have moved into the central Helmand area with its major irrigation system development and expanding opportunities for work and resettlement. Until the recent changes in governments, this movement was also aimed at temporary employment in Iran with its inflated salary scale.

The population of Helmand Province is estimated at about 397,000 people, 94 per cent of whom are considered rural. The ethnic composition of the urban centers of Lashkar Gah and Girishk will not be considered in this paper but they appear to follow the pattern of their regions. Lashkar Gah, the provincial capital, has a strong element of persons originating outside the province with its combination of civil servants, persons associated with - or hoping to be associated with - the land settlement program as well as those associated with the services in this farm-centered town.

As noted, the settled indigenous populations of Helmand Province are mainly Pashtun speaking tribal groups in the north and central regions and Brahui and Baluch speaking groups to the south with the blurred and mixed ethnic/linguistic border occurring south of Deshu in the region of Khanashin. There are exceptions to this indigenous settlement pattern, e.g., the Brahui village of Bagat in the Pashtun region of South Darwishan, and the last villages in the province along the Helmand River to the south, Landi and Palalak, which have Pashtun origins (Baretz or Barachi) and have been locate in the middle of the Baluchi speaking area for the past 200 years, according to local statements. The patterns of nomad tribal affiliation and area utilization will be discussed in a separate section, but they tend to follow an ethnic distribution pattern similar to that of the indigenous settled population.

"Indigenous" in this paper includes, among other elements, Pashtun groups settled in the Helmand region through land granted by Ahmad Shah in his attempts to settle and unify his young nation in the mid to late 1700s. Thus, most of these groups are of tribes of the Durrani Confederation and state their origins in the Helmand in terms of Ahmad Shah. Some of the first resettlement activities of the government in modern times began after the 1910 construction (or reconstruction) of the Saraj Canal.
opened new lands for agriculture in the Yakchal area near Girishk and farther south. Emigrants from the Russian revolution of Uzbek and Turkmen origins were among those settled. With the completion of the Kajakai Dam and the major irrigation networks of the Boghra, Shamalan and Darwishan Canals, a major resettlement program was developed in the 1950s and 60s with Afghan Helmand-Arghandab Valley Authority (HAVA) being the implementing agency. Between 1953 and 1973, 5,486 farm families were settled in the region and they represented many of the tribal, ethnic and linguistic groups in Afghanistan. The policy in this early period was to recruit and settle related families in a block as a single social unit with the settlement formalities being handled through a unit representative, e.g., 50 to 100 families of the same tribe or ethnic group that had previously functioned as a unit. The early emphasis of the program was on the settlement of nomadic groups. But, for a variety of reasons, many of the nomads had difficulty becoming irrigation farmers under harsh, desert conditions. Later, HAVA settlement regulations required settlers to have farming experience. These groups were assigned between 4 and 6 hectares of land per household, depending on the quality of the land and the regulations at the time of settlement. They also received a wide variety of settlement services such as housing, first year's seed, prepared irrigation systems, credit, food programs, etc.

Between 1973 and 1978 just over 4,000 families were settled in the province under an accelerated program. The apparent policy for many of these families was that they were to be settled in tribally and ethnically heterogeneous units in a given area. This was perhaps a move to break up the strong tribal group loyalties and political unity found among some of the previously settled groups and the indigenous population. But it has left some of these new groups at a political disadvantage vis-a-vis the government and the other groups. The recent settlers have received about 2 hectares of land per household and very limited services. And the land where they have been settled is of poorer quality than that received by previous groups. With the exception of the group settled on a past government seed farm in Darwishan, many recent settlers were required to level their own land and dig their own irrigation ditches - a time consuming task when using a shovel in areas previously uncleared and uncultivated, e.g., central Darwishan. As will be noted, the timing for the production of the first crop is critical when settler support services are minimal. Examples of the various sorts of settlement patterns will be presented in more detail below.

**METHODOLOGY AND SOURCES**

The basic data on tribal and ethnic group affiliation by region come from a farm economic survey (FES) conducted during the winter and spring of 1976. The results of this survey have been published and include some of the basic data presented here, but the report is not generally available at the present time.6

The FES sample was drawn from lists of landowners on file in the HAVA agricultural extension offices at the regional level. Thus, the quantitative data on the distribution of the tribal/ethnic groups represent the stable settled populations of the area and do not include the more mobile farm laborers and nomads. The total sample of usable, completed interview schedules was 801 and represents an estimated 3.5 to 4 per cent of the survey universe.

There were inaccuracies in the records being used to draw the sample, such as names of people who could not be located in the region and names of original landowners who were long dead and whose land had been divided. These problems were dealt with by using a supplementary sample list of farmers and by interviewing, in some cases, a descendant of the man listed. For the main purposes of this paper, the interview schedule and the length of the interview are not important since the paper will focus on only one item asked in the initial identification section, i.e., tribal/ethnic
group affiliation.

The eighteen interviewers were recruited from the offices of HAVA and their educational backgrounds ranged from college graduates in agriculture, economics and engineering to high school graduates. Several of them had previous field experience with the 1970 FES and a variety of smaller surveys in between. All received two weeks of training and practice in the use of the interview schedule. All were bilingual native speakers of Pashtu educated in Dari. The overall supervision and coordination of the research activities were provided by both HAVA and USAID personnel who were in the field with the interviewers all the time the interviewing was in progress.

The data on tribal and ethnic affiliation are arranged by region in Helmand Province. These regions do not in all cases represent geographic or cultural regions, but administrative units as defined by the HAVA Agricultural Extension Service. The Shamalan Region in this report varies from that used in the 1975 FES and is closer to the local definition of the region.

A simple description of each region is presented to place tribal and ethnic group distribution data in a more meaningful context. The tribal/ethnic mix of the various regions is a product of a combination of the available, developable natural resources (land and water), development activities and the land settlement program.

The Arghandab River area is not included because it was not covered in the 1975 FES and it rests to a great extent in Kandahar Province where HAVA has greatly reduced its interest and activities since the early 1970s, e.g., the Agricultural Extension Service now comes under the Kandahar provincial government rather than HAVA.

Finally, the more detailed data and case studies presented on specific areas, e.g., Shamalan, Khanashin and the Registan Desert are the result of a wide variety of small, project-related surveys, numerous field trips and recorded observations and conversations between March 1971 and April 1978.

NAWZAD REGION

This is a foothill region about 60 kilometers north of Girishk over an undeveloped desert track. It is a water-short area dependent upon very old karez systems for irrigation that have been in the process of drying up for the past 15-20 years. The average farm size (6.39 hectares) is near average for the province (6.92 hectares) but 55 per cent of the sample had less than 2 hectares. During the year an average of nearly 3 hectares per farm is left idle reflecting the limited availability of water; 23 per cent of the cultivated land is plowed by tractor. It is an area noted for considerable out migration as the water sources decline. Average household size (8.9 persons) is just below the provincial average (9.4 persons). There have been no settlers placed in this region.

Nawzad is a relatively homogeneous area of Durrani tribal groups: Isakzai - 45%; Barakzai - 11%; Alikozai - 11%. Five other tribal groups represented in the sample of 38 households are Popalzai, Mohammadzai, Achekzai, Zori and Sulimankhail.
Map No. 1
Surveyed Regions of Helmand Province

Dasht-i-Margo

Desert Pasture and Wells

Nawzad

Zamin Dowar

Kajakel Dam

Keshkenakhud

Registan Desert

Musa Qala

Marja

Sampin

Shampaian

Ag contested

Central Lashkar Gah

Lashkar Gah

Hazar Juft

Dara Khan

Helmand

Dakat Ganader

Landi Bagat

Khanashin

30 km.
MUSA QALA REGION

This is a foothill region to the east of Nawzad and receives its irrigation water from indigenous intakes off the Musa Qala River or wash and from karez systems. It is a water-short area noted for out migration. The roads in the area are undeveloped tracks. The average farm size (8.74 hectares) is slightly more than the provincial average, but just over 2 hectares per farm are left idle during the year. About 10 per cent of the farmers have more than this figure. Only 5 per cent of the land is plowed by tractor. Household size (10.9 persons) is above the provincial average. There have been no settlers placed in this region.

Musa Qala is the most homogeneous region of the province: Alizai - 93%; Achekzai - 2%. Three other tribal groups represented in the sample of 55 households included Ludin, Sadate and Sayed.

KAJAKAI-ZAMIN DAWAR REGION

This is an extension of the Musa Qala hills area and includes a small section of the Helmand River flood plain just south of the Kajakai Dam. It is an area irrigated mainly from karez systems and springs as well as from the Helmand River via traditional intakes and ditch systems. Except for the flood plain, this area is water-short and losing population. The average farm size (5.2 hectares) is less than the provincial average and 65 per cent of the farmers own less than 2 hectares. The average household size is 9.9 persons, near the provincial average. Some 2.9 hectares per farm are left idle during the crop year and none is recorded as having been plowed by tractor. There have been no settlers in this region.

Kajakai-Zamin Dawar follows the homogeneity of Musa Qala with Alizai - 90% and three other tribal groups represented in a sample of 31 households including nurzai, Popalzai and Mirzai.

SANGIN REGION

This region is on the left bank of the Helmand River and stretches from the village of Garm Ab (just south of the Kajakai area) to Haydarabad of Girishk. It is a narrow, flat, flood plain region. The market town of Sangin is about 40 kilometers north of Girishk over a good all-weather road that goes to the Kajakai Dam. The region gets abundant year-round water through traditional diversions and intakes off the river and from the Saraj Canal. The average farm size is the smallest for the province (3.22 hectares) of which only .46 hectares remain idle. Only 19 per cent of the land is plowed by tractor. In the process of maximizing income off the smallest amount of land, Sangin has been the center of opium poppy cultivation in this part of the country. The poppies are successfully double-cropped with the late planting of cotton which is very profitable if there is not an early frost. Household size (10.1 persons) is larger than the provincial average which compounds the economic pressures on the land. There have been no settlers placed in this region.

Sangin is somewhat less homogeneous than the areas to the north but is still primarily made up of Durrani tribal groups with Alikozai - 60%; Isakzai - 17%; Nurzai - 7%; Achekzai - 6%. Seven other tribal groups represented in a sample of 97 households were Shaik Mohammad, Barakzai, Yusufzai, Nas, Shadizai and Tokhi.

With adequate water but very limited land resources, there has been little opportunity or reason for the indigenous settlement pattern to be changed.
GIRISHK REGION

Most but not all of this region is located in the Helmand River flood plain. On the right bank of the river, it includes the area between the Musa Qala River junction in the north and Malgir in the south. On the left bank, it includes the area between Haydarabad, just south of Sangin, and the desert steppe areas of Yakchal, Malgir and parts of Nahre Saraj. The market center of Girishk is 48 kilometers northwest of Lashkar Gah over good all-weather roads and is located on the paved Kandahar - Jerat highway. This is the center of many government services (e.g., health and agricultural extension) for the large region north of the highway. It is also the site of a newly constructed cotton gin which is expected to take pressure off the gin located in Lashkar Gah.

Irrigation water for this area is furnished by the Boghra Canal, the Saraj Canal and several indigenous diversions off the river. The area is considered to have surplus water for agriculture but there are water problems south of the highway on the left bank of the river. The average farm size (6.87 hectares) is near the provincial average with only .55 hectares left idle. Thirty-nine per cent of the land is plowed by tractor. The average household size is the largest of the province with 11 people. Thus it is a highly populated, intensively cultivated area with little apparent room for expansion. These are characteristics shared with Sangin just to the north. Settlers amounted to 11 per cent of the sample and represent some of the oldest examples of land settlement in Helmand Province, as noted previously.

Girishk is an ethnically mixed area reflecting patterns to be found in the central Helmand Valley with Barakzai - 46%; Isakzai - 23%; Mohammadzai - 7%. Twelve other tribal/ethnic groups represented in a sample of 94 households included Andar, Khogyani, Baluch, Maku, Auraish, Tajik, Sayed, Alikozai, Ballossan, Nurzai and Tokhi.

NAD-I-ALI REGION

This region came into being as a result of the construction of the Boghra Canal and was opened for settlement on the previously uncultivated clay desert steppe in about 1954. Nad-i-Ali is located on the right bank of the Helmand River, about 17 kilometers west of Lashkar Gah over good all-weather roads. The region has a surplus of water and generally poor drainage. This is a result of the tight clay soil and an impermeable conglomerate at about 2 meters or less below the surface and complicated by over-irrigation. The farmers are all settlers and their land holdings are relatively consistent, averaging 6.2 hectares of which only .31 hectares are left idle during the year. The fields are homogenously set in a rectangular shape. Most settled in the area after 1973 received about 2 hectares of land.

Most of the early settlers were Pashtun nomads and were settled in relatively large groups of 50-100 households of previously associated tribal units under a representative/leader. The settlement services were fairly comprehensive, e.g., credit, farm size, ox, housing, extension services, credit, land preparation, first year seed and food programs. But in Nad-i-Ali, where one village completely abandoned, attrition rates were high. This was the result of a combination of marginal soils, misuse of water, inexperience in farming and the ecology of the land. The complete change in lifestyle, from tent-dwelling nomad to settled irrigation farmer, must have also come as a shock to many. The settlement pattern for Nad-i-Ali was in 7 government-contracted, centrally located villages with some farmers walking as much as 4 kilometers to their fields.

As the years passed, however, this region prospered via better farming practices, the introduction of high-yielding varieties of wheat, chemical fertilizers and increased wheat and cotton prices. Tractors are a common sight in use to crack the
hard clay soils with 74 per cent of the land recorded as being plowed in this way. 
At first glance, this package of modern farming practices suggests large incomes, 
and there are those who have been able to manipulate the system to make better than 
average gains by having access to larger amounts of land and investing in tractors 
that are in great demand for contract plowing both in Helmand and Nimroz Provinces. 
But this farming system is as expensive as it is necessary under the conditions in 
Nad-i-Ali with final net incomes not very different from those in the water-short 
areas of Nawzad and Musa Qala. The soils are better and the costs of farming are 
less (with the limited use of fertilizers) in the foothill areas.

The average household in Nad-i-Ali (7.8 persons) is the smallest for the province, 
perhaps reflecting what appear to be relatively high rates of off-farm employment.

Nad-i-Ali is the second most heterogeneous region in the province with Kharoti – 34%; 
Arab – 9%; Kakar – 8%; Achekzai – 6%; Nurzai – 5%; Baluch – 5%. There are 15 other 
tribal/ethnic groups represented in a sample of 78 households including Shaikhail, 
Hazara, Miyakhail, Sulimankhail, Turkmen, Mohammadzai, Daftani, Tajik, Uzbek, Mullah- 
Khail, Sayed, Ibrahimkhail, Niyazai, Nasir and Yusufzai. The Tarzi-Stephens Report 
recorded Taraki, Wardaki, Mahikhail and Molathail in addition.

A section of the village of Zargun Qala (one of the original 7 villages) may be 
cited as an example of the Nad-i-Ali settlement pattern. One of the tribal units 
that makes up this village is 80 households of settled Daftani nomads originally 
from the area of Ghazni who were settled about 20-25 years ago. They were given 
about 5.4 hectares of land per household. The tribal settlement representative 
at the time of original settlement later became a regional representative to 
Parliament. He has maintained his role as group representative, spokesman and 
leader through the years. He was an organizer of the petition for help with drainage 
problems that led to the selection of his development block for the initial con- 
struction of on-farms drains in Nad-i-Ali in 1975 under the Helmand Drainage Project. 
Within his immediate extended household and kin group rests the control of at least 
four of the settlement land parcels in the development block and he owns the 
only tractor. The water-master (mirab) for his block is a young member of this 
man's immediate kin group and there were no complaints of water shortage in the 
area. Virtually all the land in the block was plowed by tractor on a contract 
basis. Thus it can be seen that leadership and power are centralized in the settle- 
ment group and apparently have been, at least since the time of settlement, making 
group action, perhaps, less complicated.

Since 1973, five families of Kakar from the Kandahar region have been given land in 
this Daftani development block of plots, each just over two hectares. They were 
given plots of land previously settled by Daftani who had abandoned them. The 
Kakar families reside in the HCC village/town of Char-i-Anjir, which is closer to 
the land than the village of Daftani residence (Zargun Qala). It is not clear 
what happened to the village housing and accompanying garden plots of land of the 
original settled settlers.

Given the farming system described above which seems to produce a satisfactory 
level of household farm production, it is is yet unclear if the two hectare plots 
given the Kakar and other recent resettlement settlers in the region will be 
of an economically viable size.

As a side issue, the Helmand developments of the last two decades have drawn people 
from many other areas of the country, aside from the village. In 1978 a survey 
was conducted on 136 laborers who were employed to dig the drains in this 
development block of Nad-i-Ali as part of the Helmand Drainage Project. The idea
behind the hand-dug drains in this project, as opposed to machine-excavated drains, was to get supplementary incomes to the rural population, especially during the slack winter season. In short, 82 per cent of the laborers resided in the general project area, 12 per cent were from the settler households but only one man could be associated with a plot of land in the block being developed. Forty-three per cent had applied to be settlers. Thirty-four per cent were sharecroppers, 35 per cent were day laborers and 25 per cent were owners of land. This included the settlers. Of the non-settlers, half had small amounts of land outside Helmand Province (averaging just under one hectare) and most of the other landowners had land in the water-short areas like Musa Qala, Nawzad and Washir. Eighteen per cent had lost the use of their land through loans. Of the residents, 60 per cent originate from Helmand Province and 58 per cent of these are from the foothill areas of Musa Qala, Nawzad and Khair Khel. The others originate from a variety of neighboring provinces, e.g., Nimroz, Farah, Ghor, Uruzgan, Zabul and Ghazni. Of the non-residents (25 men), 68 per cent were from the same range of neighboring provinces noted for the residents and were products of the extant seasonal labor migration or transhumance nomadic movement. The remainder were mostly from the foothill regions of Helmand Province.

**MARJA REGION**

This region, like Nad-i-Ali, is the result of the construction of the Boghra Canal and was opened for settlement in 1959. It has a surplus of irrigation water and many of the soil/drainage problems of Nad-i-Ali. The population is all settlers, about half being of Pashtun nomad origin, the other half having been landless farmers. The settlement patterns vary from small settled villages to on-farm residents. This variation reflects experimentation in settlement that came out of the earlier Nad-i-Ali experience. The average farm size (5.33 hectares) is somewhat smaller than Nad-i-Ali, reflecting the search over time for the most economic farm size. Only .93 hectares (average per farm) is left idle during the year and 41 per cent of the land is plowed by tractor. The average household size is 8.3 persons.

Marja is recorded as being tribally and ethnically the most heterogeneous of all the regions with Nurzai - 26%; Alikozai - 18%; Daftani - 11%; Kakar - 6%; Wardaki - 6%. Fourteen other tribal/ethnic groups represented in a sample of 80 households included Niyazai, Sayed, Kharoti, Achezkai, Tajik, Nasir, Alizai, Mati, Hindu, Sahebzadah, Barakzai, Davi, Mohammad, Corugi, Sulimankhail and Ahmedzai. The Tarzi-Stepiens Report also reported Arab, Slemankhail, Ibrahimkhail, Safi, Shahikhail and Mohikhail. 14

**CENTRAL REGION**

This is a large, complex region in terms of soils, water sources, land use and ethnic groups. It represents an administrative unit rather than any sort of geographic area. It includes the left bank of the Helmand River from the area of Yakchal in Girishk to the village of Karez at the confluence of the Helmand and Arghandab Rivers, where stand the ruins of Qala Fist. This left bank includes desert steppe soil, water-short areas poorly irrigated by the lower reaches of the silted-up Saraj Canal, or by indigenous intakes off the river, and some areas along the Arghandab flood plain. One of the irrigation systems of the village of Karez is via an indigenous diversion structure on the Helmand River through a karez system that cuts under the river escarpment to fields at lower levels some miles to the east. Or the Helmand River's right bank, the region includes the flood plain at Babaji, with adequate water from the Boghra Canal. For the purposes of this paper, the areas of Bolan and Aynak have been included in the
Shamalan Region of which they are a geographical part. The Nahre Saraj area has suffered a loss of population over the years as the irrigation system, based on the Saraj Canal, became less effective through silting. Babaji, on the other hand, has become more affluent with the addition of the new water sources and a major drainage system.

Lashkar Gah is the provincial capital and market center for the region with a wealth of government services. This Central Region also includes Chah-i-Anjir, the home of the Helmand Construction Corporation (HCC) which is a major source of off-farm employment for large numbers of the local population.

The average farm size is 5.98 hectares with 1.50 hectares remaining idle and about 30 per cent of the land plowed by tractor. The average household size (9.3 persons) is almost exactly the provincial average. Thirty per cent of the population is recorded as settlers residing in Babaji, Chah-i-Anjir, Loy Manda (all closely related areas) and Nahre Saraj, an area of long-term settlement.

This Central Region retains the patterns of the indigenous population of the area: Barakzai - 43%; Achekzai - 8%; Popalzai - 6%; Isakzai - 4%; Nasir - 4%. Twenty other tribal/ethnic groups represented in a sample of 91 households include Alizai, Kakar, Shaikhail, Taraki, Sayed, Nurzai, Tajik, Alikozai, Waziri, Safi, Keshkai, Ismailzai, Baluch, Ander, Hazara, Sulimankhail, Hotaki, Arab, Mullahkhill and Bobakarkhail.

**SHAMALAN REGION**

This region is on the right bank and in the flood plain just across the Helmand River from Lashkar Gah. The region is irrigated from the Shamalan Canal via a network of indigenous laterals that pre-date the main canal. Before the modern developments in the Helmand in the 1950s and 60s, including the construction of the Shamalan Canal, this region was irrigated from a system of indigenous intakes and ditches off the river. When the new canal was constructed, a branch off the Boghra Canal, the old ditches were simply connected to it. This solved the problem of having to construct a new set of ditches across areas farmed for centuries with very complex and fragmented field configurations. It did not result, however, in a highly efficient irrigation system.

The southern reaches of the Shamalan Canal are into water-short areas, the result of recent land development and settlement beyond the canal's designed capacity, combined with over-use of water in the upper reaches. The older established farming areas near the canal are considered to have a surplus of water. The water supply for other areas depends a great deal on the distance from the source. A large segment of this fertile flood plain has been farmed for centuries.

The average farm size (4.96 hectares) is second smallest in the province, behind Sangin, with only .55 hectares idle during the year. This low level of idle land suggests adequate water generally. The indigenous land-holding patterns are complex, appear like a jigsaw puzzle on cadastral maps and are highly fragmented. They represent the majority of holdings and are located on the best land. Forty-nine per cent of the land is plowed by tractor. The average household size (9.2 persons) is near the provincial average. Twenty-six per cent of the sample households are settlers.

Shamalan presents a tribal/ethnic picture of a long inhabited region with an overlay of long term and recent settlers, each with its own pattern of settlement and land tenure. First the generalized description.
Map No. II

Shamalan Region with Ethnic Groups

- Achekzai
- Alkozai
- Alizai
- Barakzai
- Baluch
- Kharotki
- Nurzai
- Nasir
- Waziri

- Ozbek
- Sayed
- Popalzai
- Safi
- Shaikhail
- Turkmen
- Wardaki

5 km.
As Map II indicates, the dominant indigenous Durrani tribal groups in the area from north to south are Barakzai - 52%; Popalzai - 14%; Nurzai - 8% with a small 5% pocket of Achekzai near the river in a district called Shah Achekzai. There is also a pocket of Kharoti in lower Zarist but they are settlers of about 15 years ago.

There are 24 other tribal and ethnic groups identified in the region in a sample of 146 households including Ghilzai, Tajik, Nasir, Shaikhail, Mohammadzai, Uzbek, Turkmen, Waziri, Kakar, Karaish, Dartokhail, Wardaki, Mashikhail, Sulimankhail, Sayed, Safi, Laluch, Alizai, Alikozai, Hazarkhail, Numand, Alikhail, Omalkhail, Miyakhail.

SHAMALAN SETTLEMENT PATTERN EXAMPLES

More detailed data are available for Shamalan than for any other region. Illustrations will be drawn from these data to explain better the nature and composition of settlement patterns.

1. NORTH SHAMALAN

This is an example of indigenous settlement with nearly all the land belonging to members of the Barakzai tribe. See Maps III and IV. There has been no government land settlement in this area because, for all practical purposes, all available agricultural land is in use. Four plots belong to the government: Nos. 133, 139 (which is a ditch right-of-way), 196 and 197.

In general, the political structure of the area is reflected in the landholding and settlement patterns. The larger landowners, the khans, are the centers of power around which villages are organized. Generally, in Shamalan, as in most other Helmand regions, these men are not absentee landlords, but men who have been born and raised in these villages where they live under the same basic conditions as their neighbors and relatives. A village will be referred to by the khan's name. The village residents generally will be the khan's sharecroppers, farm laborers, servants, relatives or other individuals with at least some type of political ties. This will include a large number of small landowners in the immediate area who commonly are members of what may be referred to as the khan's sub-tribe or clan, without necessarily implying any internal cohesion except in the face of the outside world. See Map III. Within the Shamalan Region at least, there are commonly marriage ties between khans' kin-groups, the extent of which is unmeasured, that reflect both the political structure and the desire to marry one's daughter to a social equal.

A khan may be officially recognized as the village headman or malih whose job it is to carry out any and all official government business. If he does not fill the role himself, one of his political subordinates will. There is one watermaster or mirab in this study area who is Barakzai - his father was mirab before him - and who maintains his position in agreement with the local khans. While the water distribution system is stated to be strongly democratic in principle, i.e., every man with land gets water in his turn, it operates at a more political level with many disputes about taking water out of turn and over too long a period of time. This is particularly a problem during the hot season immediately following a wheat harvest when everyone is attempting to get a second crop established as early as possible. Since a khan will have more land than his neighbors and thus have a right to more water, he will pay the mirab a greater total fee for the crop season. Payment to the mirab is on the basis of units of land irrigated by crop-season. He will also have more sharecroppers working his land. The result is that he will have greater influence in the selection of a new mirab than his neighbors and be in a position to extract a greater share or get a more timely distribution of the water, if necessary.
MAP No. III
CADAstral MAP
NORTH SHAMALAN
BARAKZAI HOLDINGS BY SUB-TRIBE

It should be noted that for the regions watered by the main canals of Boghra, Shamalan, and Darwishan, the government maintains control of the water until it leaves these canals, after which it is under the control of the indigenous systems of water distribution. There are no water charges as such. Farmers pay a token fee for the maintenance of the system, are responsible for maintaining the ditches off the main canal under the direction of the mirab, and they are sometimes required to work a few days per year to shovel some of the silt out of the main canals during the annual shut-down and maintenance period of 40 days during mid-winter. Most of the main canal maintenance, however, is accomplished by HCC heavy equipment under contract.

In some Shamalan districts the khan is also the mirab. Thus there is a tendency to centralize power and influence but it is one rarely fully realized among the easily fragmented Pashtun groups.

The definition of sharecropper is not so clear cut as it may be in some other areas of the world. A sharecropper may be of virtually any tribe or ethnic group found in the province or country. He may be the khan's relative. He may be contracted for one crop-season or he may have a long-term relationship with the landowner. He may be a landless migrant or he may be a small landowner with a household of surplus labor. A small landowner with a labor-short household may sharecrop his land and work along with the sharecropper to divide the share. A sharecropper may receive 20 per cent of the crop or 50 per cent or some fraction thereof, depending on the level of his contribution to the farming system, i.e., labor only, oxen and plow, seed and fertilizer, etc. Cash crops like melons, vegetables and cotton produce a cash share and higher percentages of the total because of the extra labor involved. Grain crops like wheat and corn are shared in kind. Sharecroppers in this area commonly work several different plots, alone or in cooperation with others, under various kinds of arrangements.

Under such a structure, the system of patronage for sharecroppers, farm laborers and other small landowners in the area is highly developed, complex, and is, if somewhat loose, the basis of political affiliation. The khan has the responsibility for looking after the interests of those who work for and politically support him, those of his community. He is expected to be pious and, in the name of religion, perform religiously defined good or pious acts (sewah) for the good of the community as a whole or for needy individuals, i.e., build and maintain a mosque, pay a lion's share of the expenses for maintaining the community prayer leader or muftah and aid the poor and destitute. To understand this structure in any given area, however, it is first necessary to have a picture of the tribal/ethnic composition as it relates to the land. That is the basis for organization. In the north Shamalan example, the non-Barakzai landowners (see Map IV) are not of very recent origins, 15 or more years, and are the result of either land sales or at sometime in the distant past were given land and asked to perform the religious functions for the community, i.e., the Sayeds. Since land sales are considered by the farmers as something approaching immorality in terms of not living up to one's responsibilities to one's ancestors and off-spring, the "grau" system of loans is a commonly found method for outsiders to encroach on an area with potential. Grau is a system of loaning which draws no forbidden interest but transfers the use of the land (the collateral) from the owner to the lender until the loan is repaid. It is commonly very difficult to retrieve the land having lost the means of rural production. Although these loans may be documented, as the generations pass, documents (of poorer families especially) get lost or destroyed and actual land ownership becomes disputed. Plot No. 202 is perhaps an example of this situation although the present Nurzai owner insists that he purchased the land and has papers to prove it. The descendents of the previous owner insist that the land was grau, not sold, and want to repay the loan, stating also that they have documents to support their
case. But no one makes the first move, being unsure of the end results. An unresolved conflict is better than a final, official loss. In this case, the Nurzai lives on the land with a large extended household numbering about 40 persons, which gives him a stronger case for maintaining possession. Political power and security are to some degree dependent on the number of people who will give support in time of trouble. This support can be tribal, religious, based on economic dependence, kinship (as in this case of this man with a large household moving into a predominantly Barakzai area), or a combination of the above. The Nurzai's Barakzai neighbors have apparently remained uninvolved in the dispute. His move onto the land from a nearby village came at a time of a planned major land development project which was to include land leveling, land consolidation and an improved system of ditches and drains. It was also a time of land speculation, increased prices of wheat and melons and a major increase in land values. At the same time, there were rumors of land reform activities to be associated with the land development project.

Within the area of Map III, there are 92 plots of land (177 hectares), 15 of which are houses or village sites. This excludes four government plots. There are 33 plots that have two or more owners (up to 8) listed in the cadastral records and many cases of individuals who have more than one plot or shares in several plots. There are 41 plots with single owners, excluding the government plots and house sites. Several of the owners have additional plots outside the survey area. This pattern of fragmentation and multiple ownership reflects various stages of the system of Muslim inheritance, among other things, as does the pattern of sub-tribe (a common ancestor) holdings. The average size multiple-owner plot is 1.8 hectares; for single owner plots it is 2.6 hectares. For an idea of relative size, Plot No. 142 is 22.8 hectares and Plot No. 180 is .5 hectares. Plot No. 172 (about 4 hectares) offers another variation of the tribal/landholding complexity. The cadastral records show 7 owners from 6 households. The plot is, in fact, broken down into smaller plots of a fraction of a hectare each, all of which are presently grau to a Baluch who lives in a nearby village. This has been the case for more than ten years. The Baluch has an Isakzai sharecropper who furnishes his own oxen for plowing and draws a 50 per cent share. The Isakzai works one or two other plots as well but under unknown arrangements. The plot is listed as a single piece of land with multiple owners probably because it is being worked as a single plot and because, in the past, one man paid tax on the total plot for the others. The individual listed in the cadastral records as the grandfather of the multiple owners is directly related to only two of the seven. He was of the same tribe, sub-tribe and residence, but his relationship to most was, at best, vague. He paid the land tax for the group before his death.

There are three Barakzai khans in the area that have an average of 17.3 hectares, not a particularly impressive farm size. The largest holding of the three totalled 30.4 hectares. There are khans in other areas of Shamalan with considerably more land than this but the point is that district influence and wealth is relative to the district and to tribal affiliation. The Nurzai noted above has more land than one of the three Barakzai khans, but he is a newcomer as well as an outsider and lacks the broad tribal support. Generally the older established Pashtun areas of Shamalan are the more highly fragmented in terms of land holdings. The khans tend to have smaller holdings and the political scene is more fragmented, too. There are some outstanding exceptions to this generalization. Other variables at work in the situation are: the amount of land with which the khan's ancestor started; how prolific the family has been through the generations; and if there has been opportunity realized to expand the holdings.
Map No. V
Cadastral Map
Sayedad Village - Aynak

Village

Dotted line indicates limit of Sayed land.
3. Crops

2. Owners

1. Kingroups

AYNak illustrations of land fragmentation

Notes:
- Melon, wheat, alfalfa
- Akbar, Haydar, Ayas, Abbas, Huseyin
- Lalo, Riza, Daud, Mod. Emin, Nur Ali, Jafer

Description:
- Each section represents a plot of land with various crops and owners.
- The diagram illustrates the relationship between the land owners and the crops they cultivate.
There were 59 sharecroppers identified working in the area representing 13 different tribal and ethnic groups including Barakzai, Nurzai, Popalzai, Alizai, Alikozai, Isakzai, Achekzai, Arab, Tajik, Baluch, Kakar, Sayed, and Sulimankhail.

There appeared to be no pattern of grouping of sharecroppers by tribe or ethnic groups on a given plot of land except in cases where members of the same family sharecropped a plot. For example, an Isakzai, a Tajik and a Sayed were found working a single plot and would share the results. About 83 per cent of the land in the area is worked under some sort of sharecropper arrangement. Thirty-four of the 59 sharecroppers (58 per cent) interviewed indicated that they were from the foothills area previously noted (but including a broader area than Nawzad, Musa Qala and Zamin Dawar) and most commonly gave the reason for having left their homes as reduced water sources and dried up fields.

2. AYNAK

At the point where the Nad-i-Ali wasteway enters the Shamalan from the desert, there is a village of Sayeds (descendents from the Prophet Mohammed) called Sayedad. Nearby is the tomb of Mir Salim who founded the village when he was given land and settled in the area some 400 years ago by the resident Barakzai tribe. He was the local Pir (religious leader or guide) and had a wide following. His tomb is a place of pilgrimage. His descendants presently inhabit the village and the highly fragmented nature of their land holdings reflects this heritage. They still serve their religious function with an old and respected patriarch taking the lead with much dignity, although presently being nearly infirm. Other members of this lineage stated that they make yearly treks to some of the northern provinces of the country where they receive religious dues from displaced Pashtun tribal villages that apparently accepted continued obligations of support for the role of the Pir after these many decades.

The fields east of the village belonging to the Sayeds are in a very small area measuring about one-half a kilometer in width and three-quarters a kilometer in length. See Map No. V. This area represents the original holdings of Mir Salim after four centuries of the division of property among surviving sons, if not daughters. It includes 109 plots of land ranging from 3.2 hectares (the village) to .02 hectares, averaging .32 hectares per plot. It is one of the most highly fragmented areas in the Shamalan region, if not in the province. The area is intensively farmed with vineyards on 10 plots in the center, numerous plots of melons, and wheat in the larger plots around the edges. There were a few small plots of opium poppies before the government crack-down in 1973. Several of the larger plots on the periphery of the area are the results of more recent purchases. The neighboring villages are Barakzai.

A series of sketch maps and diagrams (on the following page) will serve to demonstrate the process of fragmentation and the resulting intensive land use. On Map No. V, the subject plots are outlined in darker lines and are located just below the village. Plot No. 1 is .58 hectares, Plot No. 2 is .45 hectares and Plot No. 3 is .54 hectares. The plots have already been divided beyond what is recorded in the cadastral records. In part, the division of the fields is related to the location of the irrigation ditches, e.g., Ayas' two melon fields are separated by a ditch.

At the present time there are about 15 households of Sayeds in the village, about 200 persons with an equal number of sharecropper (but much smaller) households. At least two households maintain houses and live most of the year in Lashkar Gah. Several households have moved permanently to Khashrud where they have land. Others have purchased land in other districts of Shamalan or have developed
"out-of project" lands on the desert escarpment to the south of the Nad-i-Ali wasteway. Many of these changes, purchases or developments represent not only the actions of the present generation, but are the results of long-term processes.

The village sits half on the desert escarpment and half on the land just below the escarpment, divided by the new (1972-74) Shamalan S-10.7 lateral which was part of the Shamalan Land Development Project. The move off the fields began about 15 years ago in an attempt to reclaim productive land. Among other things, the new lateral was designed to bring more water directly into the water-short Zarist area to the south and follows the alignment of the older and smaller Aynak ditch through the village. The alignment of this new lateral through the center of the village illustrates a point of the significance of tribal affiliation vis-a-vis government intervention.

The Sayed villagers did not want the new lateral to pass through the center of their village. They saw it as a major source of intrusion into their lives since a maintenance road would have to be built on each bank of the lateral. They also saw it as a potential source of danger for their small children with the combination of vehicle traffic and the relatively fast-flowing deep level of the water. They made formal and informal requests and protests to have the lateral routed around the village via the desert. To this point the lateral alignment had been following the edge of the desert escarpment in an attempt to limit the amount of agricultural land taken out by the right-of-way. The decision was made to maintain this alignment through the village. The final protests, headed by the two older sons of the old Sayed patriarch noted above, began with discussions with leading HAVA project and provincial officials; according to the reports, these developed into arguments, then insults, and ended in an overnight stay in jail for the leading spokesmen. The lateral construction was still several hundred yards short of the village at this time. The construction scheduled was altered to complete the through-the-village segment of the lateral immediately in an attempt to pre-empt any organized resistance and the approach segment was completed at a later date.

The next village to the south, about a quarter of a mile along the right-of-way, produced a different result. This village is Barakzai headed by a khan apparently with much influence and many relatives in the area. He stated that he would not allow the lateral to pass through his village as long as he was alive, a very strong stand with a conclusive statement. The alignment included the edge of a cemetery and a mosque which was to be rebuilt at project expense. After several weeks of construction delays, the lateral made a turn into the desert, missing the village. The official reason for the lateral realignment: excessive ground water.

One interpretation of this event, as implied, is that it demonstrates the relative power of key members (the khans) of the local indigenous Durrani tribal groups or the recognition by government officials of the potential for mobilizing what frequently appear to be, and are, highly fragmented units of political power vis-a-vis an unwanted intervention. This is viewed in contrast to the apparent impotence of a village of respected Sayeds in their attempt to divert the same unwanted government intervention. It says something about the potential support, or lack of it, the local tribes were willing to give to the Sayeds vis-a-vis the government, even in the case of the Khan who was next in line on the right-of-way and who took his stand a few weeks later.
Time to organize opposition may have been a factor and appeared to be a variable that the government technicians attempted to control with the change in construction schedule. Although the route of the lateral tended to follow the edge of the desert escarpment, there were some variations. No one was informed of the exact right-of-way until it became obvious on the ground. In the case of the Sayed village, as the opposition began to harden against the lateral, and, as it became more apparent exactly what the alignment would be, the technicians did not spend time attempting to convince the villagers of the necessity, but acted quickly instead. The segment of several hundred meters of unexcavated lateral before the village was bypassed to make the cut through the village as quickly as possible. Once the cut was made, the attitude of the villagers was that nothing more could be done. It was an accomplished fact.

These events can be explained and generalized as a tactic used by HAVA on other occasions as well where an intervention was thought to be potentially controversial. A group of influential khans from the area in question were called together for a meeting on the issue. The plan in general was explained to them without any specific details. Basic consensus or agreement was reached in principle, e.g., a lateral was to be dug following the line of the escarpment which would supply more water, especially to the water short areas to the south. The construction started and problems were handled on an ad hoc basis as they occurred. Detailed information was not given in advance and, where possible, quick action was used to pre-empt objections.

To return to the event in question, given the conventional wisdom relating to the potential power of the mullahs and other religious functionaries in Afghan society, this example of lack of support was somewhat surprising. Certainly, all the details of the relationships between the Sayeds and their neighbors are not known. The Sayeds in their religious role in the area are referred to in terms of respect. But the fact remains that the Barakzai tribal group that had brought the Sayeds into the area several hundred years earlier to act as the area's religious functionaries and continued to support them economically in return for their services, did not come to their aid in this case vis-a-vis the government project. A tentative conclusion would be that the Sayeds, in fact, have very little real power on their own but, on some occasions, the tribal political factions (the khans) use them to justify their political acts using the religious figures as rallying points in a society where there are so few rallying points. This is hardly an original observation and should not be generalized for Afghanistan as a whole, perhaps especially when considering Shiite political structure.

3. GOWARGI

In this central district of Shamalan, 122 families were settled on two hectares of land each (which included a house site in a new village area) in 1973-74. See Map No. VI. These plots of land are generally rectangular in shape and in an area of about 2.5 square kilometers. This is an example of the accelerated program of land settlement instituted after 1973. The area was previously unsettled because of its poor soils, bad drainage and had been given a Class Six classification (i.e., "Land that does not meet the minimum requirements of irrigable lands ") by the U.S. Bureau of Reclamation in a soils survey in the late 1960s. It had been used by the neighboring Barakzai villages as pasturage for the village herds of milk cattle. The area is cut by the largest concentration of major drains to be found in the province. They were built at the time of the Shamalan Canal in the late 1950s and early 1960s. These are now supplemented by a network of on-farm drains constructed by the Helmand Drainage Project in the mid-1970s (not shown on Map. No. VI). There was basically no government land preparation for
Map No. VI
Sketch of Gowarqi Settlement Area

Lot size not accurate or to scale. Several plots are irregular in shape or larger than shown due to geographic variations.
settlement in terms of smoothing for irrigation. Agricultural extension services were minimal and the settlers did not qualify for credit as they were technically landless. A common practice was to sharecrop one's land as a method of getting the necessary elements to raise a crop since most of the settlers do not own oxen or have the necessary capital to plant the initial crops. All but two per cent of the land in this block was plowed by tractor on contract or for a share of the crop. At least 8 of the original group had left by Spring, 1976.

Ethnically the area is very mixed, demonstrating the apparent change in government policy of earlier years to settle ethnically homogeneous groups together. This settlement block is not indicated on Map No. II. In total there were 31 tribal or ethnic groups identified including Kharoti, Uzbek, Tajik, Safi, Wardaki, Barakzai, Kakar, Nasir, Alizai, Nurzai, Hotaki, Laghmani, Popalzai, Murnand, Hazarakhail, Alikhail, Michakhail, Ommarkhail, Miyakhail, Iraqi, Mohammadzai, Worikhail, Wootkhail, Orakhail, Arab, Hazara, Shinwari, Gari, Sulimankhail, Sayed and Tarakhail.

The largest groups among these were the Laghmani, Tajik, Uzbek and Kharoti, in that order, with between 15 and 20 households each. The Tajik and Uzbek came originally from Takhar Province and the Kharoti, who were settling nomads, came from the area between Ghazni and Shah Jai.

The result of this combination of factors, including the lack of tribal/ethnic unity was political helplessness vis-a-vis the government and their neighbors. For example, the upper reaches of the irrigation ditch to which the settlers' system had been connected was controlled by a Barakzai mirab who, according to reports from the farmers, would not allow sufficient time or water to irrigate adequately the new fields. Abundant water is most important for the process of leaching during the first few years as new and salty land is being brought into production. Perhaps a unit of 122 households of Kharoti nomads would have been able to make themselves heard but the extant mixed group with a Tajik malik (some of his neighbors identified him as a Hazara which would have negative connotations in the region) as spokesman was faced with continuing difficulties.

4. OTHER GROUPS

There are a variety of other tribal and ethnic groups settled in Shamalan and indicated on Map No. II. Each of these groups has its own set of settlement circumstances and problems. Only the basics will be listed here.

a. In the Aynak area there were 12 households of Uzbeks and 4 households of Turkmens settled as a group about 15 years ago. They are credited with introducing the commercial production of vegetables in the region.

b. In the undeveloped flood plain area near the Tabila area there are 10-15 households of Baluch established in a small traditional housing unit. Their legal status on the land is not clear since they are located in "out-of-project" land.

c. In the Hazar Asp/Kharabal area there are pockets of 40 households of Safi, 10 households of Shaikhail, 34 households of Wardaki and 14 households of Barakzai all settled about 18 years ago. This is an area noted for the consistent planting of the odd field of opium poppies before the 1973 shutdown.

d. In central Zarist there are 20 households of Nasir settled 25 years ago, and to the south, 40 households of Kharoti and an additional 13 households of Nasir settled about 15 years ago.
In the Baghrabad area, irrigated mainly from an overflow of the Marja wasteway, there are 38 households of Alikozai, 5 households of Alizai and 9 households of Waziri settled along the Zarist drain. This settlement occurred some 5 to 8 years ago. In 1974 an additional 150 households of unknown origins were to be settled in this immediate area but because of major drainage and salting problems, the groups apparently refused the offer of land.

In summary, the Shamalan Region is a fairly clear example of the tribal and ethnic mix that inhabits the province and of how the identities of the various groups combine with other factors of settlement and land ownership to produce a complex political structure. It has been possible to examine only a few details of this mix for illustration. The total Shamalan region is considerably more complex.

**DARWISHAN REGION**

This is a region on the left bank and in the flood plain of the Helmand River just south of Shamalan. It is an area which had been sparsely populated until 1973. It begins some 55 kilometers south of Lashkar Gah near one of the few bridges crossing the Helmand River at Hazar Juft. The roads through the area are generally all-weather service roads along the canal and drains. The area ends just north of Khanashin Mountain. The area is irrigated through a major government diversion structure and the Darwishan Canal constructed in the late 1950s. The ditches and laterals are mostly farmer constructed, with the exception of those at a government seed farm which was turned over to settlers after 1973. The water supply is generally considered adequate if not surplus.

Considerable resettlement has occurred in the region since 1973 on 2 hectare plots, but the indigenous land holdings tend to be somewhat larger in size. The average land holding of the sample is 9.2 hectares, the second largest average in the province. Nearly 50 per cent of the sample have between 20-100 hectares; none have more than 100. Only .72 hectares are left idle, which reflects the water availability, and 68 per cent of the land is plowed by tractor. The average household size is 9.2 persons, near the provincial average, but the difference between settler households (6.7 persons) and indigenous households (11 persons) is considerable.

Darwishan has become a tribally mixed area with Murzai - 32%; Alikozai - 24%; Andar - 16%. In a sample of 68 households 15 other tribal and ethnic groups were represented: Isakzai, Alizai, Achekzai, Sayed, Sadat, Shaikhail, Nasir, Hamadzai, Uzbek, Horyakhail, Baluch, Tajik, Shinwari, Hazara and Turkmen.

In areas of recent hurried and intensive land settlement, it must be assumed that the range of tribal and ethnic groups will be broader than that recorded at this time. Forty-one per cent of the sample population were settlers at the time of the survey but, since settlers on their land for a shorter time than the crop year surveyed were not included in the sample universe, the actual percentage of settlers in the population would be much greater. Some 1,777 families were said to have been settled in Darwishan during a 10-month period in 1974-75, for example, and the settlement program continued after that date.

The relatively high figure (68%) for land being plowed by tractor is a reflection of two things: a limited number of large landowners own tractors (two of the khangs in the region own two tractors each) and use sharecroppers to farm their cultivable land; and the large number of recent settlers who do not have oxen and, therefore, contract to have their land plowed. There were problems of contracting tractors to do this plowing, apparently the result of a negative response by the khans to the great influx of settlers.
In the southern part of this region there is a village of Brahui that represents an exceptional case in several respects. They are a non-Pashtun group in the middle of a Pashtun area. They are not government settlers and they are of recent origin in this area. The Brahui, who will be discussed in more detail under the Khanashin Region, moved into the village of Bagat as the result of a large land sale from the previous inhabitants who were Popalzai located in the area of Isakzai domination. The details of this change and settlement of a group of Brahui nomads are not known and could benefit from study. Land sales are rare and large land sales are rarer still. Since it was noted that the Popalzai owners moved out of the region to Kandahar, the changes could have resulted from inter-tribal conflict. The sale was said to have occurred in about 1331 or 1952, 25 years prior to this survey.

South of Bagat is mostly Isakzai territory, through the last village in the region, Landi, and as far as Deshu, described below in the Khanashin Region. To the north of Bagat, in the village of Banader, the landowners are mostly Nurzai with a mix of Pashtun and Baluch sharecroppers. It should be noted that, according to local statements, in Baluch and Brahui areas the sharecroppers are of these same groups, while in Pashtun dominated areas the sharecroppers appear as a mixture of all groups. In a sense this supports Barth's thesis on the maintenance of ethnic identity. The Pashtun areas allow for such a mix in the context of the sharecropper agreements. The agreements are less politically binding and thus not necessarily degrading in the Pashtun view. Each man retains his ethnic identity. But the sharecroppers in the more centralized political structure of the Brahui/Baluch areas were said to be of those groups unmixed with Pashtuns. More of this below.

Still further north, approaching Safar, there are blocks of settlers of the Andar tribe. Still further north come the indigenous Alizai and the Alikozai. There was another block of some 400 families of Achekzai reported to have been recently settled in central Darwishan, but on the Registan Desert side on land previously claimed and worked by a Baluch khan. No detailed information was available, however. An ethnic map of Darwishan has not been compiled like that for Shamalan but it will be meaningful as the unsettled areas come into use and the population becomes stabilized.

KHANASHIN REGION

This region is the least accessible of the regions surveyed, resting in the southern Helmand River flood plain between Darwishan and the Helmand Province border at the villages of Landi and Palalak, a distance of well over 100 kilometers. Parts of the region are on both sides of the river and motor transport is over undeveloped desert track, in places through areas of drifting sand dunes. The irrigation systems are indigenously constructed and maintained and much of the area cannot be irrigated every year, or at all, because of the lack of water through the limited systems. The water shortage generally precludes the use of high yielding varieties of wheat and fertilizer. While the average landholding is the largest for the province (38.2 hectares), the amount of land planted each year amounts to only a fraction of this figure. There is an average of 26.1 hectares left idle during the crop year. The percentage of the people living in the area that own land is not only relatively small but is unrecorded. The sample of landowning households in the region amounts to only 23. Settlers represent 35 per cent of the sample, but this is only 8 households. Fifty-eight per cent of the land cultivated is plowed by tractor.
The average landholding of 38.2 hectares does not reflect clearly the landholding patterns of the region which, in turn, are the results of the settlement patterns of the various tribal and ethnic groups. For example, the eight settlers in the sample have about 4 hectares of land each, having been settled in the area before 1973. Six of the eight settlers are Baluch, the dominant ethnic group in the region. The indigenous households in the sample have landholdings averaging as follows: Baluch - 88.6 hectares; Baretz - 59.2 hectares; Isakzai - 32.6 hectares. Thus the importance of the social variables of settler versus indigenous inhabitant and tribal/ethnic affiliation is demonstrated.

Generally the Baluch landholdings are much larger than the Pashtun holdings farther north, for example, in Shamalan. And the size of these Baluch holdings appears to increase as one looks farther south along the Helmand River, for example, the Charburjak area in the province of Nimroz. This is a reflection of the differences in the social and political structure of the Baluch as opposed to that of the Pashtun as noted by anthropologist Fredrik Barth. The Baluch are described as having a centrally focused chief/client political/economic structure (in this case, large landholdings with clients to work them) as opposed to the politically and economically more fragmented Pashtun structure with emphasis on individual autonomy (and smaller farm units). There is also a general tendency for landholdings to be slightly larger in indigenously settled water-short areas since there is less pressure for intensive utilization and less of a tendency to fragment the larger but more subsistence level holdings. This may also correlate with age of settlement.

The ethnic composition of the region is fairly homogeneous with Baluch - 48%; Baretz - 26%; Isakzai - 13% and settler households of Kakar and Nasir in addition.

The distribution of the dominant groups is roughly as follows: the southern Helmand River basin is basically Baluch territory. But the last two villages in Helmand Province along the river to the south, Landi and Palalak, are of Pashtun origins (Baretz tribe). They have been located in the middle of a Baluchi speaking area for the past 200 years, apparently under a land grant from the time of Ahmad Shah. This group is also reported to be found in the areas of Maydan and Quetta. The events that lead to the isolation of such small tribal units in Baluch territory and the processes of their maintaining their Pashtun tribal identity are not known and could profit from more detailed study.

Between these two Pashtun villages and lower Kwaja Ali is Baluch territory. The landowners in these villages are Baluch, distinguished locally as Rokshani, but the sharecroppers and attached shepherds were reported to be mostly Brahui.

The Brahui commonly identified themselves and are identified locally as Baluch unless specific enquiry is made, although they have a language of their own and have strong feelings of a separate identity. At least among the males, many can speak Pashtu, Dari, Brahui and Baluchi. The center of Brahui settlement is in the village of Kwaja Ali Ulya. This merges into the Pashtun area to the north with Isakzai as landowners in Deshu. The sharecroppers remain mostly Brahui and Baluch with some Pashtuns in the northern part of the region (mostly Isakzai). This tribal pattern extends into the districts of southern Darwishan, already noted. It was stated that the nomadic herdsmen between Palalak and Bagat in southern Darwishan are all Brahui ranging into the Registan Desert, the pastures of which they control to the Pakistani border. They also range as far north as the Arghand River. The tribal and ethnic composition of the groups that use the desert pastures of the Registan will be outlined below in the section on nomads.
There are several thousand families of tent-dwelling, sheep and goat herding transhumance nomads who migrate on a regular schedule over regular routes into Helmand Province in the late fall, going out again to summer pastures to the north in early spring. Generally these are Pashtun tribal groups. Others use the desert pastures of the Registan and maintain a migration pattern that does not take them out of the province. These are mostly Brahui and Baluch tribesmen.

Water is the determining factor in winter camp location. There are several patterns of winter camping in the province. Some nomads camp on government land along the edges of the settled areas like Nad-i-Ali and Marja, taking advantage of water sources that originate from the major irrigation channels and wasteways. Before 1973, these groups paid the government for the right to camp in these areas. These areas became very important during the drought of the early 1970s and attracted herders who originally winter camped on desert wells. Some were recorded as having come from as far as the provinces of Farah and Herat. For example, a group of 14 tents of Nurzai who normally winter camped at Bakwah (Farah) were found in the Khalaj area of Shamalan in late 1971. There were many other similar cases.

The Helmand River flood plains outside the agricultural areas were and are important winter camping areas. They were more crowded during the drought than they are at the present time. Camping in and around farm villages is also a common camping pattern and sometimes, but not always, involves groups of related tribal origins, e.g., Barakzai nomads camping in Barakzai villages. Some of the camp sites and camp site arrangements with villagers are of a long-term nature, i.e., the same tents could be found in the same locations every winter. One of the main sources of grazing in the agricultural areas is along the edges of the numerous ditches and drains. Herds are also grazed on fallow land of local khans and others, with the nomads sometimes being charged for the right. This pattern was said to add fertility to the soil. There were some examples of the village khan and/or maliks acting as representatives for the nomads on occasions where government contact was necessary. There were also situations of khan lending nomads money that was required to be repaid before the spring movement north. Outside the animal products, these Pashtun nomads did not appear to be involved in trade as is apparently found in other areas of the country. During the period of the drought (winter 1971-72) the relationship between farmers, especially the khans, and the nomads was nearly the reverse of that described by Ferdinand between the Pashtun nomads and the Hazaras. During this period the farmers of the Helmand were increasing their level of wealth through the rapid adoption of high yielding varieties of wheat and fertilizer combined with their stable source of irrigation water. They were producing bumper crops while other areas of the country were short. The reduction of the grass on natural desert pastures during this period required the nomads to reduce herd size. The price of sheep was considerably reduced. Farmers with a surplus, as well as some townsmen, purchased sheep at cut rates while some of the nomads bought forage items like corn stalks to feed their herds.

One of the traditional patterns of winter camping in Helmand Province is on desert wells. These wells are hand dug, commonly along the edges of large washes, but, in some cases, in the open flat desert. Most of them must have been dug some time in the distant past by an ancestor of the group now using them. They vary in depth from 60-150 feet in this region. There is a definite sense of well ownership and the water would be shared with some transient herd only under the most trying circumstances. Usually 15-20 tents of nomads, mostly relatives, camp a
Map No. VII
Southeastern Afghanistan Nomad Routes

Nimroz

Farah

Helmand

Ghor

Oruzgan

Arghandab River

Tarnak River

Kandahar

Ghazn

Zabul
quarter of a mile away from the well in established, long-term camp sites. In some cases there are nearby graveyards, suggesting the permanence of the site. To some degree the pasture for a particular camp group is defined by distance from the well during early winter before the rains. The herds must be watered at their home well every two days; this places a limitation on pasture size. The camp groups begin to scatter over larger areas as the rains begin to puddle water sources over the desert in February and March. About 85% of the yearly six to seven inches of rain falls between December and March.

A study of 12 wells located in the desert area north of Nad-i-Ali and Marja between the Boghra Canal and the Kandahar-Herat highway (see Map. No. 1) indicates the following tribal affiliation of each of the wells: Nurzai - 4 wells; Khani-khail - 3 wells; Barakzai - 2 wells; Isakzai - 1 well; Alikozai - 1 well and Dagai - 1 well.

Generally the nomads that are found in the upper reaches of the Helmand River are of the Durrani tribal groups, e.g., Nurzai, Isakzai, Barakzai, in much the same way as the indigenous farmers. Their migratory route (see Map. No. VII) is mainly north into Ghor and western Uruzgan provinces, most commonly in a mountainous area called Siyahband. But a few were found to remain in the Helmand basin where they worked as farm laborers (in their terms a degrading circumstance). These were usually tents or groups of tents that had faced some disaster with their herds which were reduced in size and they had found it uneconomical to move.

Farther south, e.g., south Shamalan, these Durrani tribal groups begin to mix with Ghilzai tribal groups, e.g., Alikozai, Taraki, Tokhi and, in some cases, Baluch. The Ghilzai move east and north via Kandahar and the Tarnak River into Uruzgan, Zabul and Ghazni provinces for their summer pastures. The greater concentration of these groups appears to be on the Registan Desert side of the Helmand River, which requires a separate description.

In the north central Registan there is an area of plain, in places broken with large washes and interspersed with dried up lake beds. It sits about 300 feet higher in altitude than the rivers that border it. This area has considerable permanent ground-cover of varieties of desert scrub and grass, especially after the spring rains. It is partially surrounded by a band of sand dunes - on the Helmand River side - perhaps 8-10 miles wide. In some areas long fingers of sand dune or ridges reach into the plain. The main breaks in this sand barrier are in the north from Koshkenakhud and in the west from Safar, which tend to be the major migratory routes into and out of the area. There are major expanses of sand desert to the south and west of this area. See Map. No. VIII as a sketch of the features.

As a side note, in the center of this northern area is the ruin of an old fortress (Hauz Qala) that, according to Balsan, dates from the time of the Ghaznavid Empire. Its location suggests a stopping-over place on a route from Kandahar to the southern Helmand regions that by-pass the Helmand-Arghandab bend of the rivers or a government presence in a rather remote but utilized area.

Although the north central plain is clearly a major spring grazing area for thousands of sheep, it is waterless except after the spring rains when the water collects in large volume in the lake beds and in catchment excavations referred to as nawer (pl. naweran). There are no wells in this northern area of the desert, which limits its use for grazing to the period following the rains. This limitation is perhaps what preserves the ground cover from over-grazing.
The naweran, excavations or watering tanks, have been dug by hand and some are noted for being quite ancient in origin. Recently some of the excavation work (mostly cleaning the old naweran) is being done by tractors belonging to khans who reside in the agricultural areas along the rivers. There are hundreds of these structures scattered all over the area, at least as far south as Banader in south Darwishan. There are clear concepts of water rights associated with particular naweran, many of which have been created by the agricultural khans noted above or their ancestors. These men have investments in sheep and also utilize the Registan pastures with the aid of these naweran but, apparently, on a slightly different schedule from that of the nomads, i.e., several weeks later.

The naweran vary in size and structure. Commonly they are elongated, horseshoe-shaped pits, 30 yards long and 10 yards wide, excavated three to four feet below the level of the surrounding terrain and frequently located in the hard clay of the dried up lake beds with the excavated earth piled around the edges with the open end facing up-slope. For example, the complex of naweran located in Gorestan lake bed some 30 miles due east of the village of Kuchnay, Darwishan, was used by a combination of Pashtun tribal groups. These groups come mostly from a camping area along the Helmand River and represent both Durrani and Ghilzai tribes mixed with Baluch and some Brahui families. The Durrani groups usually move on to their usual summer pastures to the north, as do the Ghilzai. The common Arghandab River crossing point for the Durrani tribal groups moving north out of the Registan is near Keshkenakhud. But in the spring, after the rains and as the snow begins to melt in the north when this movement usually occurs, crossing the Arghandab can be problematical. In the case of a high-water year, the move is from the nawer regions back to and across the Helmand River by the bridge at Hazar Juft, Darwishan, and then north to their summer pastures, some 30 days distant. The Baluch elements move back to the Helmand River where they pass the hot season. Farther east, some 50-55 miles east of the Darwishan bridge but only 10-20 miles south of the Dori River and Keshkanakhud, is another concentration of naweran along the edge of a great sand dune area (some 50 miles of it) that stretches to the east. Among these, for example, is a larger structure, Nur Mohammad Band, or nawer which includes a low earth dam perhaps 40 yards in length and 8-10 feet high with a large excavated catchment tank that is capable of holding a great quantity of water. The cleared and sloped drainage basin covers an area several hundred yards square to facilitate drainage collection. These naweran are mostly utilized by a combination of Pashtun nomads from the north of the mix already described and by Pashtun khans from the Kandahar region.

The final pattern of Registan Desert utilization by the various tribal groups is that based on desert wells, the most northern of which appear to be in Srehdab Chahan some 50 miles east of Safar. During the dry winter months it is the camping site of about 100 tents, a mix mostly of Durrani Pashtuns (Nurzai) with some Baluch and some Brahui. After the spring rains in March, they move north to carry on a variety of nawer including those at Gorestan. The Pashtuns move north into the usual summer pastures and the Baluch and Brahui move mostly to the south and west to the Helmand River for the hot season. They move back to the wells in the fall. Some 10 miles to the south and west of Srehdab wells is the well of Taghaz, which is used mostly by Baluch who follow the pattern of utilization noted for that group. Another 20-25 miles south of Taghaz there is an east-west line of several wells that are scattered over a distance of 50-60 miles from Chatok in the east to Hayat in the west. The groups using these wells are combinations of Baluch and Brahui. Chatok is mixed, with the Brahui becoming dominant at the wells to the west. Sirak in the center is Brahui territory. These groups do not move north into the nawer region but, as the rains end and
Map No. VIII
Sketch of Major Registan Desert Features

Location and number of structures and features are not exact.
the new grass appears, they break from the well encampments, scattering over the area, but still remain within range of the water source, the well. Sirak is said to date from Ahmad Shah's time and it furnishes water for 150-200 households during the winter months. These nomads spend the hot season (15 June to 15 September) on the Helmand River flood plain. Thus there is a sizable but unrecorded population that utilizes the wells and pastures of the southern Registan that could stand further study. No observations were made south of Sirak but the Brahui located at Kwaja Ali noted that their herds move six days into the desert in the early spring and remain there about three months. They utilize a combination of wells and naweran in conjunction with other nomad groups and list water sources as Chah-i-Suliman, Arba, Torsh Ab and Nalaaf. It should be noted that movement from the Helmand flood plain to the well area is mostly in a southeasterly direction.

SUMMARY AND CONCLUSIONS

The indigenous tribal/ethnic composition of Helmand Province is basically Durrani Pashtun from the northern foothills into the central Helmand River basin. The southern part of the province is Baluch with a buffer zone of Brahui centered on Kwaja Ali and separating the Baluch from the Pashtun. There are Pashtun communities to be found in Baluch territory (Landi and Palalak) and at least one community of Brahui to be found in Pashtun territory (Bagat). The ethnic boundary is not clear-cut but there appears to be some overlap of Baluch households in Pashtun territories but not vice-versa.

The Pashtun tribal composition of the province ranges from very homogeneous areas of Alizai in the north (Musa Qala and Zamin Dawar) to mixed Isakzai and Alikozai concentrations in the west (Nawza'i) and into the lower and flatter terrain (Sangin and Girishk) of the Helmand River basin. The Achekzai and Nurzai are also represented. This blends into a Barakzai concentration in the central basin (Girishk and central Shamalan) combining with Popalzai and Nurzai in south Shamala and into Darwishan. Through Darwishan there are Alizai, Alikozai and Andar areas with Isakzai dominating the border area with Khanashin as far south as Deshu. Then, farther south the two villages of Pashtun Barezt are located in Baluch territory.

Superimposed on this already complex mosaic are large elements of numerous other tribal and ethnic groups from all parts of Afghanistan recruited by a large resettlement program. The dominant ethnic element among the settlers, however, is also Pashtun, perhaps because the original focus of the settlement program was on nomads. The largest concentration of settlers (100%) is found in the two desert steppe development regions, previously uncultivated, of Nad-i-Ali and Marja. Other areas also have large numbers of settlers, mostly in the central and lower river basin where the modern irrigation developments have allowed for the expansion of croplands. For example, Shamalan - 26%; Central - 30%; Darwishan - 41%

The areas of greatest tribal and ethnic homogeneity and little or no resettlement are to the north and to the far south where developable resources (land and/or water) are very limited.

The developing job opportunities in the central river basin with its expansion and construction activities, cash crops as well as the potential of acquiring free land, have drawn labor from regions both north and south. This has added to the more heterogeneous ethnic nature of the Central region.
In principle, tribal or ethnic homogeneity is one potential basis for organization, political influence and for extracting available government services over the years. In Helmand Province there is a geographic contradiction to this principle. The most homogeneous regions are in the foothill areas and upper reaches of the river where water and/or land are in short supply. Thus, there has been no influx of settlers or laborers to dilute the homogeneity and there has been no great increase in government activity or services because there is little potential for development. A similar observation can be made for the most southerly reaches of the Helmand River in Baluch and Brahui territory where, again, the population is ethnically homogeneous with a very strong centrally focused authority structure and land ownership is rather centralized. Available developable land is limited and there has been very little resettlement activity. The agricultural extension service and HAVA were originally established in the province to focus on new land development and the resettlement program.

The indigenous populations of the central regions of Helmand Province, e.g., the Barakzai, have had the advantages of being located on the best flood plain soils in the province; of having been there prior to all the recent developments; of being located near the new main market center (the provincial capital of Lashkar Gah was established after the dam and canal construction); and of having easy access to all the government services being developed. The dam, major canal and drainage construction affected these groups in a very positive way. They could not be ignored because they had resettlement groups as their neighbors. The indigenous groups had influence because their leaders were politically and economically well established and their goodwill, even if passive, was needed for the success of much of the program. The main disadvantage faced by the centrally located Pashtun groups, a feature of their tenure, is the highly fragmented nature of their land holdings.

The early settlers that were placed in large ethnically homogeneous units with recognized leadership had the advantages of unity and the many government services which were focused on their settlement. But they were commonly placed on poor land with bad drainage (Na’d-i-Ali and Marja) and they had the usual social and economic disruptive elements faced by all groups involved with the resettlement programs. These early settlers had the added disadvantage of not being farmers, but of being settled nomads faced with difficult farming conditions. The drop-out rate was high.

The more recent settlers (since 1973) frequently do not have the political advantages of ethnic unity or leadership. The settler services are minimal and the quality of much of the land for distribution is even more marginal than that in the past — or is undeveloped for irrigation at the time of settlement. The drop-out rate should be expected to be very high, assuming that the settlers have some place to which they may return or find employment. In some cases it was found that the settlers were going into considerable private debt in the attempt to establish themselves and felt that they could not afford to make another change by giving up the settlement process. Faced with their many problems, well articulated, most recent settlers appeared to be accepting the opportunity to acquire land of their own, bad as it might be.

In certain senses the nomads appear to be less affected than the settlers by the many changes that have occurred in the province in terms of their lifestyles. Their winter markets have improved. The opportunity for outside employment has multiplied many times in instances where households have found, for whatever reason, that migration is no longer a viable alternative, e.g., the loss of a herd. The alternative pasturage along the canals and drains of the irrigation
systems has added a new dimension to nomadism in time of drought. And for many, the opportunity to change their lives completely by becoming irrigation farmers has been an advantage. But for many others, who winter camp on the wells or along the river, moving into a wider desert pasture area as the rains allow or not, the movement and routes to the summer pastures and back are still to a great extent determined by factors of geography and weather. For these, the lifestyle details of sheep, goats and camels, wool and yoghurt, and fires of camel-thorn and dung remain little changed.

Finally, it is easy to generalize, in ignorance, about all the advantages of "Helmand farmers" as if they are some homogenous mass. There are many indigenous farmers of Helmand Province who are very well off thanks to the development activities of recent times. There are also indigenous farmers who are poorer now than a decade ago thanks to the changes in water tables, e.g., drying up in the foothill regions and waterlogging in some areas near main canals. The same kind of contrasts can be made of many settlers, new and old. The variables are many. Some of the details of the varying regional economies represented in this paper may be somewhat misleading. The total farm-economic picture should be studied carefully. For example, the high rates of tractor use, high-yielding varieties of wheat and fertilizer found in Nad-i-Ali appear advantageous until it is realized that given the hard and poor clay soils of the area, those agricultural innovations are necessary to produce a crop that will result in an average net household income no better than one in water-short Nawzad or Musa Qala where fields are plowei with oxen and the use of fertilizers and high-yielding varieties is not common. Helmand Province is full of such contradictions and requires more serious study. To generalize is to be wrong and regional development programs, like academic stereotypes of "Helmand farmers;" are normally based on such generalizations.

The starting point for understanding the complexities of Helmand Province is its tribal/ethnic composition which is the basis of most social, economic and political organization and action. In a rural society with limited basic trust between individuals and few formalized institutions to consistently enforce social agreements, kinship and its extensions - tribal and ethnic group identity - act as the basis for social identity, organization and action. But, as noted, this identity alone is not enough to allow one to predict with any accuracy the outcome of any given event or proposed action. The total social, economic and political context of the community to be affected must be known but, again, the starting point is the ethnic composition of the specific community.

While this paper may have raised as many questions as it has answered, hopefully it has added somewhat to a clearer understanding of the tribal and ethnic composition of Helmand Province and will stimulate an interest in future, more detailed studies of the area, if the opportunity again occurs. Unfortunately, it appears that many of the anthropologists (excluding Dupree) who have recently chosen to study in Afghanistan have chosen areas less accessible, more exotic, perhaps (on the surface) more traditionally oriented, less dynamic and certainly less complex than Helmand Province. This in turn has made their contributions to the mainstream of the development effort in Afghanistan over the past two decades of more limited applicability.
All opinions and conclusions presented in this paper are the sole responsibility of the author and do not reflect those of USAID under whose auspices and for whom all data was originally collected.

NOTES


3. Traditionally dug systems of wells with connecting tunnels located on sloping terrain by which ground water is brought to the surface by gravity flow. A variant of this tunneling is also found to allow channeled water to pass under ridges of higher ground. For illustration see L. Dupree, *AFGHANISTAN*, pp. 40-41. For a recent review of the geographic features of Helmand Province see *Helmand River Basin Soil and Water Survey Study Report*, USAID/SCS Afghanistan, 1976.

4. National Demographic and Family Guidance Survey of the Settled Population of Afghanistan, Vol. V, Helmand Province No. 23, 1975. These figures have been adjusted and rounded with an assumed 2.3% yearly increase and include an estimate 4,000 families settled between 1973 and 1978. They do not include an unknown number of nomads and semi-nomads that live and winter camp in the province.


18. It must be noted that the tactics and actions of public relations associated with this project were the sole responsibility of HAVA, and the foreign donor (USAID) was not allowed to participate. The monitoring of these events was done informally and unofficially.


22. Loc. cit.


26. Some of the information presented here is to some degree in conflict with that presented by Francois Balsan, "Exploring the Registan Desert," Journal of the Royal Asiatic Society, 1972, pp. 153-56, in terms of tribal distribution and desert pasture utilization. His observations of very limited pasture use in both the north and south Registan may reflect the time of year of his visits (the rainy season) and mode of transport (foot and camel) which limits the scope of the observations.