

UNITED STATES GOVERNMENT

Memorandum

TO : Mr. Ronald A. Rogers, AD/DP

DATE: July 28, 1976

FROM : Richard B. Scott, Program Analyst

SUBJECT: The Socio-Economic Characteristics of On-Farm Drain Hand-
Laborers: Some Implications for Farm Drain Construction:
Nad-i-Ali, 1976.

The report referenced on the social-economic characteristics of the laborers hired to dig on-farm drains in Nad-i-Ali, has some specific implications for future farm-drain construction in the Helmand which I will outline in this memo. No attempt will be made to generally summarize the findings of the study since there is a summary attached to the report.

The main questions to consider in planning for an expanded labor force are: who works, and under what conditions? There are a number of socio-cultural groups represented among the laborers interviewed. Some groups will provide a more stable labor force than others.

Settlers:

There were only 16 settlers among 136 laborers at work on the Nad-i-Ali drains, and only one of these could be associated with a plot of land in the area being developed. Of the 16, 14 were also sharecroppers -- which suggests households with a need for extra income, and a labor surplus. The case of the settlers within the development block not working even for pay on their own land suggests households not in need of the income or labor-short households. While the second is possible, it is not likely that an entire block of households of long-term settlers falls into this category. Both the income and labor hypotheses can and will be checked in the analysis of the FES interview schedules completed on most of farmers in the development block. It is known that one of the farmers in the block owns a tractor.

As the project moves into areas of recent settlers, like the proposed Gowrdi area of central Shamalan where the settlers have yet to economically establish themselves on considerably smaller plots of land (10 versus 30 jeribs) than the earlier settlers, we should expect a greater participation of the settlers. They need the money. In this particular case, the only factor that might act to reduce participation is the combination of smaller plots to be affected by the larger on-farm drains, i. e., each farmer will sustain a fairly high proportion of his land lost to drainage right-of-way.



In terms of availability to work, settler households have labor obligations to their own land. This means that generally the settler labor force may not be available for work during the peak agricultural work seasons of planting and harvesting.

Besides the 16 settlers, 18 other laborers stated that they owned land. Six of these had lost the use of their land through debts; one stated his land was unplantable, and the others averaged 5 jeribs each. As a group, the labor force was mostly landless or very near it.

Sharecroppers:

Thirty-four percent of the labor force stated that they were sharecroppers. They were asked how they could be sharecroppers with the associated work obligations and work on the project at the same time. The responses were generally related to the slack work season resulting from the irrigation system shut-down for maintenance. Aside from plowing, planting and threshing a sharecropper's main activity relates to irrigation. Sharecroppers, once the work obligation is established, can be expected to add to the labor pool during shut-down and other slack labor periods. A long term, well paid labor demand, however, as seen associated with the drainage project, would likely draw laborers out of the sharecropper category.

Daylaborers:

Thirty-seven percent of the labor force were normally day laborers, i.e., generally in agriculture and with no long-term labor commitments. This group probably represents the best potential for a stable labor force, with the exception of those who are also seasonal labor migrants noted below.

Residence and Origins:

A few of the laborers were products of winter seasonal labor migration patterns into the Helmand from areas with harsh winters. Some laborers were trans-humance nomads in their winter camping area. But most of the workers were local residents. Eighty-four percent of the total labor force were residents in the immediate area (within 1 to 3 miles) of the project work. This reflects the very short-term and local nature of the recruitment activity in hiring. A broader recruitment activity could likely result in some shifts in laborer characteristics and perhaps greater work force stability.

Since the project area is a product of the construction of major irrigation structures and a government land settlement effort, the present residents are originally migrants from other areas of Helmand province and Afghanistan. Many of the laborers were drawn into the area by the increased work potential associated with the expanded irrigation system and the chance to become settlers, for which 43 percent have applied.

Work Force Stability:

The labor turnover rate was about 10 percent per week with only five of the first week's workers still on the job after three months. Some changes in the recruitment process could result in a more stable work force:

1. Recruitment information could be spread to areas other than the immediate vicinity of the project work.

2. Recruited laborers should have some assurances of the length of time they can expect to work. A stable work force can not be expected among men who simply work from week to week and do not know project duration.

3. If daily wage is continued, slight increases should be considered. The afs. 40 per day rate, when started, was below stated daily wage rates in the Helmand.

CONCLUSION:

As we get more experience with the laborer issues, and continuously study the nature of the labor force and its recruitment, we will get a better understanding of the variables involved upon which realistic planning can be based.

**The Socio-Economic Characteristics
of On-Farm Drains Hand-Laborers:
Some Implications for Farm Drain Construction
Nad-i-Ali, 1976**

by

RICHARD B. SCOTT

**USAID
Office of Development Planning
July 1976**

THE SOCIO-ECONOMIC CHARACTERISTICS
OF ON-FARM DRAIN HAND-LABORERS: SOME IMPLICATIONS FOR FARM DRAIN
CONSTRUCTION
Nad-i-Ali, 1976

SUMMARY: This report outlines the socio-economic characteristics of 136 laborers interviewed during the fifth week of construction of on-farm drains in Nad-i-Ali, winter of 1976. The labor force was young -- a third were less than 20 years, about another third were less than 30 years and a total of 85 percent were less than 40 years. Fifty-five percent were married and they came from households averaging 7.1 persons. Forty-seven percent said they were head of their households. Most laborers (78 percent) now reside in the immediate project area but were born outside the Helmand area of large-scale irrigation structures. About 12 percent were residents of other provinces and were products of extant seasonal agricultural labor migration or transhumance nomadic movement.

The laborers came generally from landless households. The exceptions were 11 small landowners averaging 5 jeribs each, 6 who had lost the use of their land through debts, and 16 men from settler households with about 30 jeribs of land each. It is significant that all but two of the 16 settlers stated that they were sharecroppers, reflecting a need for more income.

During the first five weeks of the project, the drop-out rate was around 10 percent per week with only five of the first-week workers still on the job at the end of three months. About 42 percent of the men stated that they could work to the end of the project, with qualifiers -- but did not.

The work force generally comes from the lower socio-economic strata of the rural society as reflected in the characteristics above. But they represent a wide range of social groups (nomads, sharecroppers, day-laborers, settlers, students) each with its limitations of tenure on the job. If the work develops on a larger scale and appears to be long-term employment, a more stable work force might be expected.

INTRODUCTION: Beginning January 18, 1976, 35 workers were hired to dig on-farm drains in the Farm Drain Project Area of Nad-i-Ali, Zargun Kale, Block 3. The objective of the work, besides the actual construction of on-farm drains, was to experiment with the management of work crews and establish estimates of production levels per man-day. This activity was organized with an eye on the potential of using hand labor to excavate on-farm drains as opposed to the use of machine excavation.

This paper reports on a survey of the laborers involved in that work. The purpose of the survey was to attempt to identify some of the socio-economic characteristics of the laborers that would reflect the labor-pool from which an expanded hand-labor project could be drawn, men who were attracted to this work, and, given their status, how stable a labor force would they represent?

The frame of reference to keep in mind while considering the results of this survey is that the workers represent a variety of socio-economic groups present in the Helmand. Each group has its own distinct characteristics and is more or less reliable in terms of labor force stability through the seasons. The labor pool in the Helmand should not be considered one homogeneous mass reacting to all such variables (e.g. as harvest season) in the same way.

The Work: Using pick and shovel, the workers were expected to dig drainage ditches about two meters deep and from one and one-half to three meters across the top, sometimes under wet conditions beyond the one-meter depth. The rate of pay was afs 40 per day (considered a reasonable rate to attract workers but not too high to disrupt normal area agricultural pay levels) for six days' work -- seven hours per day Saturday through Wednesday, and five hours on Thursday (pay day) for which they received a full day's pay.

As noted, initially 35 workers were hired but the number of workers was gradually increased. By the end of the first week there were 51 men on the payroll; by the second week, 104; by the third week, 117; by the fourth week, 139; and by the end of the fifth week, 141.

The Survey: At the start of the fifth week of work (22 and 23 February 1976), a survey of the 136 workers present was completed. An English version of the interview schedule is Attachment A to this report. There were 15 interviewers and another 6 persons monitoring and supervising the field activities. The interviewers were mostly young HAVA technicians of the lower ranks, with B.A. degrees in either economics, agriculture or engineering. They had been selected and trained for interviewing for the 1976 Farid Economic Survey of the Helmand Valley. Each interview took about 15 minutes and was completed at the construction site during working time.

The selection process for hiring workers should be considered when the results of the survey are used to generalize about the labor pool in the Helmand Valley for an expanded program. All workers were required to have a government identification card (Tazkara), or some other official document of identification issued for the purpose of this work. The possession of a Tazkara was generally the rule. Some men seeking work on this project did not have such documents and were not hired.

FINDINGS:

Age: The labor force was relatively young, with an average (mean) age of 26.9 years, which in itself is suspect, since few men know exactly how old they are. Thirty four percent (46) were less than 20 years old, and 64 percent (87) were under 30. The distribution by age group was:

<u>Stated Age</u>	<u>Number of Workers</u>	<u>% of All Workers</u>
Less than 20	46	33.8
20's	41	30.2
30's	28	20.6
40's	12	8.8
50's	2	1.5
60 +	7	5.1
TOTALS	136	100

Marital Status: There were 61 single men (45 percent) and 75 married men (55 percent). The distribution by age and marital status was:

<u>Stated Age</u>	<u>Total Number</u>	<u>Number Single</u>	<u>Percent Single</u>
Less than 20	46	37	80
20's	41	18	44
30's	28	5	18
40's	12	0	0
50's	2	1	50
60 +	7	0	0

In this society the expectation is that everyone in the rural area, at least, should be married by his mid-20s, if not earlier, with perhaps the exception of those with major physical or mental flaws. Marital status is to some extent a function of age. There are varieties of ideas associated with this expectation that relate to the establishment of a household labor force as early as possible in a man's life, and a recognition of human desire occurring with physical maturity in a society where sexual contact is expected

to occur only within marriage. Outside of marriage, sexual contact or an indication of the desire (gawking at village girls) can bring shame on a boy's family or, in the first case, be the basis for violence.

Given these social values, the single rates of the work crew are higher than expected, especially among the 20-30 age groups, although they parallel the national rural figures as reported by the SUNY studies, i.e., 55.5 percent and 17 percent of the rural men in their 20's and 30's respectively, were single. Relatively low marriage rates for young men reflect a low socio-economic status relative to bride-price. A man, or his father (who controls household economics) cannot afford to acquire and support a wife.

In this labor force the marriage rate for men in their 20's was about 10 percentage points higher than the SUNY national sample which may reflect slightly higher economic conditions in the Helmand relative to the rest of the country but the rates appear low when compared to other rural middle-eastern communities, e.g. Kurds in eastern Turkey.

Household Size: There were 860 people recorded, making up 122 families among the 136 workers. There were 14 instances where individuals in the work groups belonged to the same household. This makes an average household size of 7.1 persons. This is considerably smaller than the number of people in North Shamalan farm households in 1971 (my report: "North Shamalan - A Survey of Land and People"): owners/operators - 10.8; kashtagars - 12.4; and buggars - 8.3. (Definitions: kashtagars = 1/2 sharecroppers, buggars = 1/5 sharecroppers.) The 1976 Farm Economic Survey (FES) tentative tabulations for three project areas (Shamalan, Marja and Nad-i-Ali) indicate household sizes to be 9.2, 8.2 and 7.9 respectively. The 1970 FES gave an average farm household size of 9.5 for the Helmand area. The conclusion can be related to other statements in this report ("Status Within Households") , that is, the smaller household size likely reflects the lower socio-economic status of the household. Functionally, large extended households in agricultural areas serve a purpose of security for both the individuals and the unit, given the economic base of land. Among other things, small households tend to reflect either a lower socio-economic status, or in the case of settlement areas like Nad-i-Ali (at the time of original settlement), the break from an extended household at time of settlement.

Household Members by Age and Sex: There was a possible under-reporting of females for the 13 years and older group. This is not surprising in a society where females approaching or beyond puberty are not normal topics for conversation with strange men. If the number of women is increased to equal

that of men in the same age group, the average household size would be 7.6, still below previously reported household sizes in the area. The totals were:

Sex	Age Groups	
	0 -12	13 +
Male	194	271
Female	190	202

Status within Household: Sixty five men (47.8 percent) stated that they were the heads of their households, while 71 indicated that they were either a son (51) of the head, brother (13), or some other relation (7). Like marital status, these figures do not completely reflect the age grouping of the men. Eight of these household heads (17 percent) were under 20 years of age; 18 (44 percent) were in their 20's, and 20 (71 percent) were in their 30's. The percentage should increase as the men increase in age, but these figures are greater than normally expected in this society where the rural household is expected to be extended -- that is, includes more than the usual two generations of the western-simple or primary family. This means that on marriage, a young man moves his bride into his father's household, the father probably having put up the expensive bride-price which allowed the son to marry. The expectation is that a household will contain: a man, his wife or wives, his unmarried sons and daughters, his married sons with their wives and children. There may also be other kinsmen living within this unit -- the products of other broken or earlier family units, e.g. grandparents, aunts, uncles, and orphaned kinsmen. Thus, in the ideal, a large number of young household heads is not expected. Perhaps some of the young men are over-reporting themselves in this higher-status position, but it is also likely the numbers reflect reality when the other details of socio-economic status are noted, i.e. the low rates of early marriage noted above, and other elements to be presented below.

The extended family unit commonly breaks up earlier or never materializes among the lower socio-economic status groups, e.g., the landless. The larger units stay together for security, in this case economic security. The unit has a definite function. Without an economic base - land or animals - the larger unit is no longer functional. And household heads will, on the average, be younger.

Education and Literacy: Among the 136 respondents' households (860 people), 21 males were said to be literate -- and no females. There were said to be 36 males presently in school -- and no females. This translates into a literacy rate of about 4.5 percent for males or 2.4 percent for the total. These figures do not seem unusual for this part of the country; that is, Pashtuns have probably the lowest female formal education rates of any ethnic-linguistic group in the country, all other variables being equal. These figures are low when compared with SUNY sample rates of 16 percent literacy for rural males, and .6 percent for rural females.

A further question was asked on household members' educational background. It is not clear on the overlap between this and the "presently in school" question noted above, but the educational levels are probably not very typical for the nation. There were 23 males within all the households who had primary school training -- which fits with the literacy and school attendance levels. But there were three males on our labor force with high-school training (two of them could communicate in English) and two others within the households who had high-school training. Another seven household members (male) had attended secondary school, as had one laborer. One household member, a laborer's brother, was attending the University in Kabul. For a rural population work group, these figures seem high, but when the higher concentration of rural schools in Helmand is considered -- at least within the project areas -- it is understandable. On the longer term, high rates of school attendance should not be one of the expectations attached to the labor force. It appeared that for at least this element of the work group, there was a nucleus of young men with some spare time who wanted to pick up some extra cash.

Occupations: Sixty-three men (46 percent) indicated that they were some variety of farmer. Another 50 (37 percent) said they were day laborers. Thirteen stated that they were "unemployed." (?) Then there was a sprinkling of the odd jobs: 2 bricklayers, 2 mullahs, 3 students, 1 landowner and a fisherman. An examination of the questions on settlement, sharecropping and landholdings more clearly state the occupational patterns. But certainly the 37 percent of day laborers says something of usual occupations of our labor force, i.e., no long-term labor obligations.

Sharecroppers: Forty-six men (34 percent) stated that they were presently engaged as sharecroppers, and this normally involves about 20 jeribs (10 acres) of wheat responsibility. The term for a variety of sharecropper (buzgar) is sometimes used as a unit of land measure (about 20 jeribs) in the region.

The question was asked of these sharecroppers, how could they be sharecroppers at present, with the usual work obligations, and work on the drainage project at the same time? This was another attempt to get at the question of the stability of the work force. Not all men answered the question or gave answers that related to the question asked (interview error) but 25 stated that they could work because the irrigation system was shut down for maintenance and therefore there was no work to do in the fields. This was the winter growing season, when most fields were planted in wheat and, aside from irrigation, no work at this stage is required. Seven others stated that other persons, usually a relative, would work in their place. The point is that the sharecropping population will be able to work during "shut-down," the slack work season in any case, but cannot be depended upon to work outside this time.

Land Ownership: Thirty-four men (25 percent) stated that they were landowners, 16 of whom were settlers in the Nad-i-Ali area, with about 30 jeribs. Nine others indicated they had land outside Helmand Province: Ghor 5, Farah 1, Logar 1, Kandahar 2. Most of the others were from the Korez-watered areas in Helmand, e.g., Musakala, Nawzad, Washir. Of the 18 non-settler landowners, 6 had their land in "grau" -- that is, they had borrowed money on it and lost its use until the loan would be repaid. In our terms, the land has been pawned, and the men, for all practical purposes, were landless. One other stated that his land was not plantable, in Farah Province, water-short and amounted to only 2 jeribs in any case. Of the other 11 landowners, they averaged 5 jeribs (less than 3 acres) each. The labor force, aside from the 16 settlers, can be classed as nearly landless, if not in fact.

Settlers: Sixteen men stated that they were settlers, but this included individual members of settler households, not necessarily the original settlers. Fourteen of them were in their 30s or younger, and 6 were in their teens, sons of the original settlers. Twelve stated their residence to be in Zargun Kale, the immediate village area of the on-farm drain project. The four others came from areas in Nad-i-Ali. All but two ("arabs") were of some Pashtun tribal group. It is significant that only one of the 16 settlers working on the project could be associated with a plot of land within the one square kilometer being developed.

The social characteristics of this sub-group in some respects are approximately parallel with the total group of workers, with some outstanding exceptions. All had about 30 jeribs of land, none was "grau," and all but five stated that their land was under full cultivation. The five indicated cultivating half or less of their settled land but unfortunately there are no further details.

All but two of the 16 settlers in the work group stated that they were sharecroppers. This could reflect at least two different situations of sharecropping by landowners, relatively common in the region:

1. While the man is the owner and receives the owner's share of the crop, perhaps four-fifths if he hires a buzgar, he may also work along with the buzgar and thus share that portion also, i.e., one half of the one-fifth share. This would occur only on the larger holdings where two buzgars are required to do the work, or, because of crop difference and increased workload, the share of the crop would be higher, e.g., cotton, melons.

2. A landowner with some extra labor within his own household may have a son, or may himself hire out as sharecropper to some household needing extra labor, thus increasing the total income.

There were eight workers who said their households hired one sharecropper (buzgar) each to work their land. All but one were among these settler households in the Nad-i-Alli area with about 30 jeribs. The one exception was a young highschool student, of a retired government official, visiting relatives in the area, whose home and land were in Wardak. This pattern of sharecropping suggests No. 1 above.

In statements of usual occupation, the settlers also differed from the other workers. Thirteen of the 16 said they were "farmers." The other three said "day laborers." Their average (mean) age was 27.5 and of these, five (31 percent) were unmarried. Half (8) were head of their household. The average household size was considerably larger for this settler group than for the total laborer group, i.e., 9.6 persons. This larger average household probably reflects the sound economic base of 30 jeribs of land. It also suggests labor surplus households. Their sharecropping rates noted above and work on the drainage project support the position that these households do have surplus labor.

When questioned as to their length of stay with the project, 13 stated they had been on the project at least three weeks of the total of five, but only four of the 13 men indicated that they would be able to stay with the project "to the end." Five men gave short-term replies (1-2 weeks), and others made duration statements relative to their farm workload demands, i.e., Three men stated they would stay and work until the irrigation water returned to the canals, which would occur in approximately one month, and four men would stay until the wheat harvest.

In summary, while these men from the settler group come from labor surplus households, they also come from households which have a demand for their labor during the peak work seasons, and thus could be depended upon to work on the drains only during the slack seasons.

Able to Work: Along with the questions to determine household size, the workers were asked how many household members usually worked in the fields -- in an attempt to get at household labor force. Of the 194 males in the 0 - 12 age group and 271 in the 13+ group, only 12 and 126, respectively, are reported usually working in the fields. The absence in the early ages is understandable: the respondents do not see young children as active members of the farm (field) labor force, although young children do get responsibilities assigned around a household and livestock at very early ages. There is likely some under-reporting for the older age group.

In a different question, counting the men interviewed, 182 individuals are recorded as doing off-farm work at present, most on this project or other manual labor. Twenty held jobs requiring different skills: 4 students, 2 watchmen, 4 mechanics, 1 driver, 1 shopkeeper, 1 muliah, 4 officials and 3 in the Army.

In summary: These questions give a hint of the size of the labor force available. In the 122 households there are perhaps 271 males over 13 years old, 27 of whom (8.6 percent) are too old to work, perhaps 182 already working (an overlapping figure), while 126 are said to usually work in the fields. As noted in various sections of this report, these numbers alone do not tell us about levels of under- and un-employment. The households of the different socio-economic strata in the society will have different rates of available labor.

Women: As expected, very few females were recorded as usually working in the fields, five under 13 years old, and 18 of the 13+ age group. In this region of the country, Helmand-Pashtun, the women are expected to work in the home; farm work, except as supplementary to the threshing (cleaning and some sifting of wheat) is not considered an acceptable occupation for women of households of any status. In recent years, with the increased cotton production, more women have become visible for that harvest. Before any conclusions are jumped to relative to general female participation in economic activities outside the home, simple field surveys to identify these women should be made. The situation is probably not exactly what it appears to be at first glance. Since status and thus household honor is being reflected in the answers, there is likely some under-reporting. Twenty-five women were noted as being too old to work.

Residence, Recruitment and Migration: Most of the laborers on the project reside in the immediate area of the project. Fifty six (41 percent) reside in Zargun Kala, 22 (16 percent) reside in other Nad-i-All settlements, 28 (21 percent) reside in Cha-i-Anjir, while another five reside in other nearby areas (Lashkar Gah, Bashiran, Shamalan). There were 17 from other provinces (Kandahar, Farah, Wartak, Ghor, Paktiya and Ghazni). The remainder were from Helmand Province.

In this section of the report and the section that follows, a distinction is made between residence and origin of the laborers. Residence refers to the place that the individual considers his home, where he normally lives with his family, his place of abode. There are some problems with this definition when dealing with transhumance nomads but not generally with agriculturally-based labor. A seasonal laborer ~~migrates for~~ example, records his residence as Ghor province where he has land, house and family. Origin generally refers to place of birth. Again, problems may arise on this question with nomads and perhaps children of civil servants (whose parents were outside their place of origin at the time of the children's birth) but generally the agriculturally based populations have no problem with the question.

Given the short term nature of the recruitment process, a matter of perhaps a week, the distribution by residence is not surprising. All were in the area at the time of recruitment and heard about the work in Lashkar Gah, Cha-i-Anjir, or one of the Nad-i-Alli villages. The actual locations where laborers first heard about the work were noted by some as: in the bazaar, at the mosque, at the construction site, and at home. Fifty said their information came from the HAVA officials and nine of these gave the men's names (at least one resides in Nad-i-Alli). The majority heard of the project informally through friends, relations or just other people.

There were indications, supported by past observation, that laborers migrate into the Helmand area every year during the winter months in search of work when their own areas are inhospitable in terms of climate. For example, there were six men in one work crew from Ghor province; they returned home shortly after being interviewed. All but one had land in their home village but four of the five had their land in grau (pawned out on a loan).

A second variation of potential labor migration is the yearly transhumance groups of Pashtun tribal sheep-and goat-herders who winter-camp in Helmand and move to summer mountain pastures in either south Ghazni province or the Siyahband area of Ghor-Oruzgan- Helmand provinces. While there were a small number of these men on the project, not clearly identified but perhaps as many as five or six, they should not be considered as a serious source of labor recruitment even during the winter months unless another drought occurs like that of the early 70s. Hard manual labor is not highly valued by sheep-herding nomads (sometimes referred to as "kochi" or kuchan and more politely maldaran). Hard manual labor would reflect a drop in status (aside from a young man wanting to pick up some extra quick cash) and, like sharecropping or other farm labor, would be indulged in only if the herd were reduced to an uneconomically viable unit.

In summary, an examination of usual residence of the laborers indicates that most of them are local recruits and a product of the short-term recruitment process. We should expect that a large proportion of any recruited labor group would follow this

pattern depending, however, on the present socio-economic status variables of the local population outlined in this paper. There are seasonal migrant laborers already coming into the Helmand, at least during the winter months, and with some recruitment activity this flow could likely be increased. But again, this may be a seasonal flow only. The true nature of the group that might be attracted through recruitment is a subject for speculation only, until the first results of an active recruitment campaign are studied.

Place of Origin: There are 111 of the 136 laborers (82 percent) who reside in Nad-i-All or the immediate area. Nad-i-All is a settler area, i. e., all land-holders are settlers, but only 16 of the laborers (12 percent) are settlers. There are 50 men who stated they were day-laborers; 46 said they were sharecroppers and 13 said they were usually unemployed. The labor forces represented here, mostly residents, are all migrants from other places, probably drawn in to the Helmand project areas over the years by the work provided by the expanded irrigation system. Most (67) came from Helmand province but from areas irrigated by korez systems (bringing ground water to the surface in hilly areas via gravity flow underground channels) e. g., Washir (12), Musakala (11), Nawzad (16). The last two, at least, are areas noted for drying up korez systems over the past 15-20 years. The others come from a variety of provinces: Ghazni-16, Farah-8, Ghor-8, Kandahar-6, Zabul -5, Oruzgan-5, Paktiya-4, Logar-4, Nimroz-3, Wardak-3, Kabul-1, and 7 stated that they were originally "kocht", i. e., transhumance nomads. In terms of origins, the labor force in the Helmand Valley is very mixed, if this group is at all representative.

Given the recent developments in the Helmand: the expanded modern irrigation system which demands much labor to operate in the most general sense, plus the government program over the years of land settlement, the distribution of the laborers' origins is not at all surprising.

Aside from the 16 laborers who are already settlers, there were another 58 (43 percent) who had applied to become settlers. The stated results of these applications (made between 2 and 25 years ago) ranged from "nothing," "waiting," and "unknown," to stories of lost petitions, and representatives who collected money from the potential settlers to support the petition action and disappeared. At least originally, ethnic-tribal groups were settled in fairly large units (e. g., 50-100-200 families) and the processing of settlement petitions was done through group representatives.

Labor Force Stability and Dropouts: Weekly drop-out rates are important and likely reflect the stability of the labor pool. This was measured by an examination of the names on payroll records from one week to the next.

NUMBER OF LABORERS LOST BY WEEK (PAYROLL RECORDS)

<u>Week</u>	<u>Number of Workers</u>	<u>Number Lost</u>	<u>Percent Lost</u>
First week	51	5	10
Second week	104	3	3
Third week	117	13	11
Fourth week	139	20	14
Fifth week	141	*	*

*Fifth week list not checked against sixth week list.

It is possible that some workers lost during the first weeks could be back on the rolls in later weeks. The records were not checked against this possibility.

The stability of the work force was further checked, however, by asking each man how many weeks he had been working on the project.

WEEKS WORKED (WORKERS' STATEMENTS during 5th Week)

<u>Time on Project</u>	<u>Number of Workers</u>
First two days	16
1 week	10
2 weeks	30
3 weeks	25
4 weeks	46
5 weeks*	<u>9</u>
Total	136

* There was some confusion on numbers of weeks worked.

In summary, the turnover rate is relatively high, with about 38 percent less per week, and about 59 percent of the workers having been with the project between 3- 5 weeks, and 19 percent being with the project a week or less. Some of the socio-economic characteristics of this work force noted above help to explain this relative instability.

Records were further checked to see how many workers of the first and fifth weeks of work were still on the rolls about three months later (work-week 15 - 20 May). There were five of the original 51 first week workers still employed in May, and 17 of the 141 fifth-week workers remaining.

Briefly, these 17 are on the average a bit younger than the total sample (23.9 vs 26.9). They came from households slightly larger than the overall average (7.5 vs 7.1) and they have a higher percentage of unmarried (64.7 vs 44.8), a reflection of age. Forty-one percent head their own household as compared with 71 percent in the total group. Only one was a settler and five (29 percent) said they were sharecroppers. Nine listed their occupation as "laborer," four as "farmer," one as "mullah," and three stated they had no occupation. The one settler was from Zargun Kale and said he had 35 jeribs of land. The only other landowners owned four, two, and one-half jeribs in Musa Qala, Farah and Washier, respectively. Just over half (9) resided in Chi-i-Anjir (the largest local bazaar and home of HCC), four in Ned-i-All and the rest resided outside the area, e.g., Washeer, Nawzad, Zemindawar. Most (13) were of Pashtun tribal groups.

In summary, the characteristics of the workers who have remained with the project from the start, approach the theoretical "pure type" generalized from the total group. That is, they tend to be young, unmarried, with no particular obligations or experience in work, and from relatively small households, which about half say they head, with virtually no landholdings, and reside in a population center where recruitment for work may come from either the farm or the HCC construction activities.

Knowledge of Project: The laborers were asked what the project was trying to accomplish and what the expected results would be. There were a variety of answers relating to increasing crop production, improving fertility of soil, reduce salt levels and getting rid of excess water. There were only seven "don't knows". All expected results answers followed the same line -- they were positive; there were 11 "don't knows."

While the purpose and result of the project appeared fairly clear in everyone's mind, knowledge of the project's duration was more vague. When asked how long the work would last, there were 72 (63 percent) "don't know." There were another 54 (40 percent) who gave answers indicating that they thought the work would last for another three to six months. The remainder gave short-term or qualified answers. The point is that in the recruitment process, work duration should be stated to the laborers. Some of the men did state that if they could depend on the work continuing, they would stay and work but if the duration of the work was uncertain, they would prefer to take other agricultural long-term arrangements. To have a stable labor force, the laborers must be able to depend on a continuing job. Expected work tenure was not clear to many of these workers.

Willingness to Work: There were 57 men (42 percent) who stated they would be willing to work for the project to the end. There were some qualifiers, e.g., if they were not fired, and if the salary was increased. One stated that he would work indefinitely if the wage were increased but, if not, just until the wheat harvest. Others (9) gave answers ranging from 3-5 months, and 26 (19 percent) gave answers relating to specific conflicting work obligations, i.e., until the water was back in the irrigation system (8), and until the wheat ripens (18). Thirty six men (27 percent) gave short-term answers, i.e., 6 weeks or less. The remainder were vague or gave no answer at all.

This range of responses is not surprising, given the wide range of types of people who make up this labor force. The questions are raised, if the 40 afs per day is the going daily wage, and could this relate to the instability of the labor force witnessed? A slight change in the wage could result in changes in the composition of the labor force and its dependability, if the laborers were certain of continued work.

Conclusions: This study tells us little of the availability of labor in the Helmand valley but it does ~~analyze~~ analyze the characteristics of the laborers who were recruited during the opening study phase of the hand-labor element of the drainage project. This labor force was made up of a variety of socio-economic groups. They were not a homogeneous mass. Their characteristics reflect the relative stability or instability over the long run of the elements that make up the labor force. There were groups that were definitely short-term in nature, e.g., transhumance nomads, students, seasonal migrant farm labor with other obligations at their place of origin, share-croppers and other area farm labor with local commitments. Many of these elements can be tapped each year during the winter slack work season and especially during the yearly maintenance shut-down period for the irrigation system.

Outside the long-term settlers in the areas of Nad-i-Ali and Marja, many of whom are well established farmers, the settlers themselves and household members, can be expected to participate more frequently in the work, e.g., the central Shamalan project site. While these groups will also have seasonal work demands, they are in greater need of extra income than are the older settlers.

There is a body of day-laborers floating in the region in search of work. The size of this force is unknown but it is likely the first tapped by the call for unskilled laborers in Iran. Men with reasonable levels of income (by their standards) are not likely to seek employment far from their families. Thus a relatively stable job opportunity in the Helmand Valley on the drainage project could slow the outflow of laborers to Iran, ignoring the large daily wage levels being reported. At least one laborer saw the purpose of the present work as being to stop the migration to Iran.

One of the main points of this analysis is that the labor force in the valley, and the region is not one homogeneous mass but made up of a variety of socio-economic groups, each with its own characteristic, commitments, values; that is, sub-cultures. Some of these groups are available for work only seasonably, others could work the full year, while still others are not available at all. Through experimenting with recruitment and the study of the results over time (without the work being delayed or effected in any way), we can learn about the available labor force rather than speculate about it based on regional population figures. As we learn, our planning can become more realistic. We should expect most of the labor for any particular project to come from the immediate project area, and the characteristics of the available labor force will vary by area.

16. Education:
- | | <u>Relationship</u> | <u>Years</u> | <u>Type school</u> |
|----|---------------------|--------------|--------------------|
| a. | | | |
| b. | | | |
| c. | | | |
17. a. Household land owned _____ jeribs. b. Location _____
c. land use _____ Number of bugars _____
18. Are you presently a sharecropper? Yes _____ No _____
Where? _____ Land cropped _____ Jeribs. _____

If yes, note relation between this job and sharecrop obligations. (How can you be a sharecropper and work on this project at the same time)

19. How many weeks have you been working on this project? _____
20. How did you learn about this work? Who? Where? _____
21. What is the purpose of this work? _____
22. Do you think there are drainage problems in this area? _____
23. What do you think the results will be? _____
24. Do you see this work as: long term, 3 to 6 months _____ short term,
1 or 2 months _____ Comment _____
25. If this work continued, until when (month) could you work? Comment _____
-
26. How many other household members are working on this project? Number and relationship.