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THE MAQARIN DAM AND THE EAST JORDAN VALLEY

Social Analysis for the Maqarin Dam Project

By

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January 18 to March 13, 1979

Amman - Jordan

Contract AID/afr-C-1132

ACKNOWLEDGEMENTS

It would have been impossible for me, in the short time I have spent in Jordan, to complete this study had it not been for the support, trust, advice and criticism of all those I have met and who have been so willing to speak openly and candidly with me. My brief contact with the people of the East Jordan Valley has made me regret having to leave Jordan so soon. To them I give my very first thanks. To all the other individuals I have met, many of whom have become friends, I express my deepest gratitude. If some of their ideas appear in the report, I bear the full responsibility of any misinterpretations. I would like to particularly thank:

Dr. Munther Haddadin, Vice President of JVA, for his incredibly minute study of the report and his invaluable criticisms;

Mr. Abdel Munem Abu Nuwar, in charge of the Census in the Dept. of Statistics, for his numerous helpful suggestions and for supplying me with all the necessary figures from the various Census data as well as for his great support;

Mr. Aied Sweiss, USAID, for his unfailing support and for sharing with me his immense knowledge of the Valley in our many discussions;

Mr. Scheil Soliman, JVA, who accompanied me several times to the Valley, for exposing me to situations I could hardly have sensed on my own.

I thank all those of USAID, the JVA and JVFA who made my work not only possible but indeed more interesting:

1. Dr. Mohammad Adwan, JVA
2. Mr. Abdallah Ahmad, USAID
3. Dr. Mohammad Barhoum, University of Jordan.
4. Dr. Karim El-Husseini, JVA
5. Dr. Mohammad Kamal Haddad, JVFA
6. Dr. Edgar Harrell, USAID
7. Dr. John Hyslop, USAID
8. Mr. Tom Pearson, USAID
9. Mr. Fuad Qushair, USAID
10. Mr. Farid Salahi, USAID
11. Mr. Jim Shea, USAID
12. Ms. Carol Steele, USAID.

Last, but certainly not least, my warmest thanks go to Mrs. Dalila Kamal and Miss Shereen Shuwayhat for working under so much pressure so graciously and so professionally in typing this report. I also thank Miss Barbra Brant as well as Mrs. Pearl Hahn, Miss Faten Qubain, and Miss Hala Khader for helping out at the last minute.

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PREFACE

The little time allowed for the research and fieldwork for this report has not permitted an in-depth study of the many problems and characteristics described by others and ones which I may have touched upon myself. This report is therefore but a bird's eye view of a fascinating region which deserves far more serious theoretical and practical research.

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THE MAQARIN DAM AND THE EAST JORDAN VALLEY

INTRODUCTION

In 1961, the American consultant at the Department of Statistics of the Government of Jordan (GOJ) had written: "The people of the East Jordan Valley themselves seem to feel the need for good water supplies more keenly than any other need."^{1/} That very year, on October 16, the completion of the first stage of the East Ghor Canal (E.G.C.) was inaugurated.^{2/} It is not until 1978, however, that the remaining 18 km. extension of the Canal was completed, thus linking 96 kms between the Yarmouk River and the north of the Dead Sea. Today, in 1979, the people still express the same need as in 1961 with an even greater urgency, an even greater impatience. Indeed the construction of the Maqarin Dam will be a dream come true, a dream dating as far back as the 1930's, of which the people of Jordan have been constantly reminded not only by the observation of their own growing needs but by the numerous studies written about that project.^{3/}

^{1/} Hashemite Kingdom of Jordan, Dept. of Statistics, The East Jordan Valley: A Social and Economic Survey, Amman, 1961, p. 123.

^{2/} Claud Sutcliffe, 1973, p. 471.

^{3/} See Bibliography for some of these references.

The purpose of this paper is to discuss the social impact resulting from increased water availability through the Maqarin Dam. Waters from the Dam will be used for two purposes and have a two-fold impact: 1) the completion of stage II of the Jordan Valley Irrigation Project and, 2) potable water for the cities of Irbid and Amman. Because of the limited time available for the research, fieldwork and preparation of this report as well as the great importance and hopes the GOJ places in the agricultural development of the Jordan Valley, the present analysis will limit itself to the impact of the Dam on the East Jordan Valley and its population. In no way should the second purpose, which will probably be of a more obvious and immediate impact on the people, be diminished. Irbid and Amman literally cry out for water, assert their residents. The need and benefits of more and better water have also already been discussed in various documents from various sources. The present researcher, therefore, can but support the health, sanitation as well as economic benefits that the Maqarin Dam waters will have on these two cities.

WATER AND THE JORDAN VALLEY

"Water is life" said to me once a farmer of the arid Mandara mountains of northern Cameroon. In exactly the same spirit, a

farmer of the East Jordan Valley told me, "Without water there is no life. It is the sources of our riches today. It has changed the beduin into a farmer." Indeed, in the past ten years, the East Jordan Valley has literally sprung into life. Settlements have mushroomed, green fields covered with plastic houses begin to almost dominate the scenery where once were wild bushes. In spite of the Arab-Israeli wars, the border tensions, the Israeli destruction of 70% of East Jordan Valley houses and the damages it caused to the E.G.C. and the following exodus of the inhabitants of the Valley, now people are beginning to bustle in the area, in the fields, on the roads. There is a constant feeling of work yet having to be accomplished.

In 1974 an International Bank of Reconstruction and Development (IBRD) document had noted:

" The most important resources in Jordan are land and water. Out of the total area of 19 million hectares (sic) only 350,000 hectares or 1.8% is cultivated. More than 90% of the cultivated land is dependent on limited and irregular rainfall. There is little possibility of expanding the area which can be cultivated under rainfed conditions. Most of the 25,000 hectares of irrigated land, which accounts for 70% of agricultural production, lies in the Jordan Valley. The Valley has land and water suitable for expansion of irrigated agriculture. In order to accelerate its exploitation, the Jordan Valley Commission, with wide administrative and

executive power, was set up in 1972. The Commission, as a starting point, prepared for the Valley a three-year Development Plan (1973-75) within the overall concept of the National Development Plan. The plan emphasizes water development ... " 4/

In 1977, the Commission became officially known as the Jordan Valley Authority (JVA). With increased power, authority, organization and personnel, it expanded its development plans to 1982. It could well be said that the initial five purposes of the East Ghor Canal Project (EGCP) are still the backbone of the JVA village development and irrigation projects: 1) to provide farms in the area with water for field irrigation; 2) to consolidate land ownership and redistribute farm units; 3) to provide assistance to farmers for the modernization of the farms; 4) to increase agricultural output, and 5) to raise the standard of living in the project area.^{5/}

The sense of continuity in the conceptualization of the plans for the East Jordan Valley since 1958, the beginning of the construction of the E.G.C., to the hoped implementation of the last stage of the Maqarin Dam by 1984 is not only eminently

4/ IBRD, 1974, p.3. - It appears that a mistake has been made regarding the total area of Jordan in this IBRD report. According to the Department of Statistics in Jordan, it is 9,400,000 ha. (Mr. Abu Nuwwar).

5/ Hazleton, 1974, p.12.

important for the agricultural development of the area but also and most certainly for its socio-cultural and economic growth. Yet the flush of development observed today would not reach half of its hoped objective without significant increase in water flowing into the Canal soon. Thus becomes clear to us the significance of establishing a link between the various aspects of change presently taking place in the three Ghors^{6/} of the East Jordan Valley (EJV) and the future impact of this development from the Maqarin Dam: how will it change the area, what are the needs which might arise through it and who will most feel that impact.

A word of caution, however: Social dynamics are far too complex for easy predictions. Indeed, an individual initiative may well affect a whole group's approach to a new situation, the outcome of which having been theoretically expected to be different. In Jordan, the whole argument of drip irrigation

^{6/} The East Jordan Valley, extending from the Yarmouk River to the North of the Dead Sea, is 105 kms. long and varies from 4 to 16 kms in width. For practical purposes, vaguely coinciding with geographic differences, it is divided into three horizontal sections: the North, the Middle, the South. The three vertical sections are based on the very structure of the Valley: The Zor being the flood plain along the Jordan River, the higher bench, Ghor, the predominantly cultivated and now partially irrigated area, and the plateaux, setting the east boundary of the most extensive rift valley in the world.

versus sprinklers^{7/} is a case in point. Yet, what has taken place or is in the process of being established in the EJV due to the E.G.C. -- settlements, agricultural development, land reform, social infrastructure, housing, labor force, etc. -- is a basis for the understanding of what could be expected from the impact of the Maqarin Dam.

^{7/} See below p. 39-41

I. BACKGROUND TO THE GHORS: THE PEOPLE

The East Jordan Valley has been a settled and cultivated area for the past ten thousand years. Though its present population, from the Yarmouk to the Dead Sea, is estimated to around 82,000 inhabitants, archeological information indicates that from the 5th century B.C. to the 12th century A.D. more people lived in the Jordan Valley than today and that as far back as 5000 B.C., important irrigation projects were in existence.^{8/} These were even more expanded and linked to extensive commercial activities during Roman rule. After the decline of the Roman Empire, a general abandonment or deterioration of agriculture slowly took place, cities and villages disappeared, and the nomadic way of life began to predominate in the EJV. Towards the end of the Turkish rule, some interest in agricultural activities took place in spite of the unfavorable political and social conditions which prevailed. Between 1925 and 1933, musha' land, ownership by tribe or village, was distributed, village boundaries were drawn, though not with precision, and for the first time the rights of villages and tribes were clearly defined. It is not until after 1948 that development of the Valley became

^{8/} Harza, vol. II, p. B-25. and Social and Economic Survey of the East Jordan Valley, 1961, pp. 133-141 (A Historical Survey).

sustained by both expertise and actual settlements of the influx of Palestinian refugees in both West and East Banks of the Jordan River.

After 1948, the social structure of the Jordan Valley began to assume different characteristics. Two clearly defined and respectively homogeneous groups emerged. On the one hand, the original tribes which had gained title to the land during the British Mandate (such as the Adwan in the south and the L'Ighzawi in the north) were now landowners. On the other hand, the groups of individuals who were forced to migrate and settle in different villages along the Jordan Valley were linked by family ties and often settled in family-linked clusters. These Palestinian refugees were involved in both farming and commercial activities. Great differences in life styles existed between both groups yet strong cultural and religious ties were present. They were both Arabs, strongly patrilineal and both Muslims.^{9/}

^{9/} A minority of Christian Arabs were scattered in the Valley while a small concentration lived in South Shunah. However, the Christian Arabs were part of the socio-cultural and economic web of the area. Only one exception to that homogeneity existed in the EJY. A community of Bahai families, refugees from Iran, settled, some in Adasiyyah and others in Haifa, between the two World Wars. They bought land and cultivated it. "At the time of the recent land redistribution (1960), three-quarters of the land in Al'Adasiyeh were estimated to be owned by 15 persons living outside of Jordan, presumably all, or almost all Bahais. Additional land in the village may be owned by Bahais resident within the Kingdom." See Social and Economic Survey of the East

From being a mere 19 scattered settlements before 1947, the EJV had 48 settlements by 1973. Today, some 78 settlements are grouped into 33 development areas. In-migration has been sudden, unplanned and in 2 stages, 1948 and 1967. Few of the adults were born in the area, and approximately 51% of the population was under 15 years of age in 1973. Through them, the sense of rootlessness, of non-belonging to the land will gradually become eroded allowing greater participation of entire communities into development projects.^{10/} Yet, none

^{9/} Jordan Valley, 1961, p. 36. Harris (1958, p. 51) notes that the original tribes of the Jordan Valley were small in number. They are thought to be descendants of ex-slaves from larger tribes to the East or from Egypt or Nejd in Saudi Arabia. Most were tent-dwellers and many today have migrated to towns. -- The village of Tell el-Arbein, in the northern Ghor, is probably the only remaining closely-knit village of predominantly black settlers. It is interesting to note that only exceptionally are any of these villagers owners or even sharecroppers. Most are still laborers on the land owned by the numerous members of the L'Ighzawi clan. Managers for the farms are, however, from the trusted members of that group. A socio-economic and anthropological study of this village may be of extreme interest to a deeper understanding of social and economic relationships in the area.

^{10/} The 1961 Census (p. 108) had indicated that less than 5% of the total population of the East Jordan Valley had lived in their present dwellings for over 15 years. This impermanency is still apparent today and the numerous construction sites apparent throughout the region gives the added impression of "newness" to settlements. On the other hand, permanency was created by the numerous new migrants who brought with them the "desire to make a livelihood out of a land which had previously a much smaller population . . ." Ibid.

can deny that tribal elements still predominate as do clan and family ties or hamula and 'ashira. Though economic prestige may be beginning to slowly overshadow the importance of clan ties in the country, especially in urban cities, "who one's father is" is still a measuring stick of one's social worth and respectability. It is the basis of one's personal behavior and power if not also economic success. In no way should such attitudes be underestimated or even demeaned for they are important criteria in social stability and cohesiveness especially in face of the great and rapid social changes presently taking place. Yet it is when such values become the only binding force in a group or an institution over and above the individual and personal worth of those "others" also concerned that social unbalance becomes intolerable.

Hazleton, in support of Fernea, notes that family ties and place of origin "appear to provide the basis of social organization" of the in-migrants. He quotes Fernea:

" Every time I was witness to a meeting among previously unacquainted Palestinians in the Valley the first moments of conversation was devoted to establishing where the places of origin were and who might be discovered as a friend in common or even better, as a common kinsman. Clearly a sense of companionship and trust could be developed in the Valley by finding places and peoples in common outside the area" 11/

Such possibilities and attitudes should not be thought of as exceptional to the situation in the area or to its people. On the contrary, they should be considered as a continuation of socio-cultural norms in spite of the change in environment. Moreover, not only is it typical behavior but also a typical need for migrants

all over the world to search for such links. It is also a very characteristic trait of Arabs in general: the social and psychological necessity of overcoming a person's status of outsider to the group thus searching for his or her kinship or friendship ties. It creates a sense of security, solidarity and enlarges the group's power base.

Such a characteristic may indeed hinder the modern village community identity which is overshadowed by the first and immediate links of trust through family ('asheera) or clan (hamula) identity. People do not accept one another as part of one group due to the socio-cultural gaps between them.^{12/} Villagers may not trust the elected representative, Mukhtar or Mayor, if he also represents a different hamula. It is a matter of allegiance, if not a universal political astuteness.

Change has become embedded in the East Jordan Valley. Indeed, it would not be an exaggeration to say that it has occurred at a far greater rate than in the urban centers, such as Amman or Irbid. Here, within five years, the scenery has literally changed. All is in a state of becoming and expectations are high:^{13/} the ground

^{12/} See Barhoum, p.36 and study as a whole.-- There is also a two-fold reason for the tensions that exist between the newcomers to the East Jordan Valley and the old timers of the Valley, i.e. the Palestinians and the Jordanians; 1) Palestinians came with some technological expertise, education, knowledge and business acumen, yet, 2) Palestinians are rootless; they do not live within their ancestral, extended group and cannot claim to have socio-cultural roots in area. It may well be argued that this is not their

being levelled in preparation of drip irrigation; houses are being built for farmers and teachers; new schools are beginning to be used and, being the new pride of the area, are said to be better than those in Amman; electricity just lit the entire Ghors but T.V. antennas were seen before the completion of the works, in expectation of electric power; marketing centers are being built; private shops are being constructed; towns levelled to the ground such as Karama in 1968, are being replanned

The list of physical changes is endless. Yet, it should not be forgotten that none of this could have happened without the push towards agricultural development initiated by the JVA irrigation projects and especially since 1971, the end of political upheavals in the area. Water made the difference between a subsistence society in 1968 to an exporting agricultural society in 1978.

(12/ continued)

fault and rightly so. But it must also be understood that traditional, hence closed-in societies, have never, throughout history, been able, as a group, to intellectually rationalize or even righteously accept a group of outsiders thrown into their midst. It is through generations of contact, of intermarriage or commercial and educational exchanges that such a breakthrough may be possible. It is therefore difficult to accept Fernea's assumption (p.13) that if West Bankers were not trusted, it was because 'this attitude may relate to feelings of superiority on the part of older tribally related residents. The reasons, surely, are more deeply rooted in economics and power than in a superiority complex.

13/ This may well be the reason for the feeling of impatience with the government, with the authorities, with nature itself, so prevalent in the East Jordan Valley. See below discussion p. 38 .

II. AGRICULTURE IN THE GHORS

1. LAND REFORM

Since the breaking of the grounds of the East Ghor Canal, several amendments to the 1959 Land Reform Law have regulated land distribution in the East Jordan Valley (in 1960, 1962, 1963, 1965, 1966, 1972, 1974 and 1977). All these affected irrigable land while unirrigated land is still largely untouched by the laws. Thus, of the 605,840 dunums^{14/} in the EJV, approximately 121,000 dunums have already been redistributed in one way or another by 1977. Whereas 0.17% of inhabitants in 1955 had 18% of the land with an average of 10,000 dunums each, today, the maximum an owner is allowed is 200 dunums of irrigated land.^{15/} The land wholly or partially with trees is free from any restrictions.

^{14/} 1.0 dunum = 0.1 hectare. A farm unit is equivalent to 40 dunums and an owner may therefore have several farm units.

^{15/} The 1977 Law # 18 expropriates land from those who own anything above 50 dunums. Theoretically, practically everybody is hit (p. 18 of JVA Law 18):

<u>No. of Irrigable Dunums held prior to Expropriation</u>	<u>No. of Irrigable Dunums to be allotted to holder</u>
51 - 100	50 + 25% of rest
101 - 500	62 + 17% of over 100
501 - 1000	130 + 12% of over 500
1001 and over	200 only.

For a more extensive study of the laws, see James & Hazleton 1978, Hazleton, 1974 and 1978, Sha'rab, Haddad, Social and Economic Survey of 1973, and the laws themselves.

The intent of all these laws were basically the same and could be summarized into four points:

- 1) to encourage the emergence of owner-operated small family holdings;
- 2) to enable easier settlements for new owners;
- 3) to minimize hardships of old landowners with large holdings;
- 4) to diminish the power of large landowners who had the Valley subdivided among them.

However, a strict interpretation of any of the amendements and the law did not prevail even though it appears that the earlier application of the law had a greater impact than had the later amendements. It must be stressed here that there are two ways at looking at the application of the law: (a) the theoretical or legal interpretation of the law which leads to the examination of deeds and titles in support of the requirements of the legal constraints; and (b) the socio-economic impact of the application of the law, affecting the actual acquisition of land by those outside the traditional economic and power structure. If in a village of the EJV a father with 13 sons transferred to each of his sons 200 dunums before or after the enactment of the law, it is not difficult to realize that the entire village or most of it,

i.e. their cumulative 2,800 dunums (father and 13 sons x 200 dunums), are still within the hold of the family, though many of the sons are or will become absentee landlords. This is, presumably, within their legal rights. Nevertheless, the socio-economic situation of dependency did not change because of the remaining limited land available in the Valley and the generally limited mobility of the traditional residents (see p.), hindering their ability or willingness of buying land elsewhere than in their village. There the large owners could not have made land available for sale to them as the land had been distributed within the nuclear or extended family. Thus, the reins of power remained unchanged.^{16/}

Yet, it seems that the impact of land distribution was for more noticeable in the Northern sector of the Valley where the first planned irrigated lands appeared. If the largest families in the North have not been heavily affected, nevertheless a greater predominance of small owners now does exist in the north rather than in the south. The reason for this difference was clearly explained by one of the farmers: land distribution was new to the people and

^{16/} The slowly growing tendency towards living as a nuclear family, rather than within the traditional concept of extended families, will gradually, with the years, change the emphasis of this power structure.

none had foreseen the impact the canal would have on the area. Moreover, the laws of the 1950's and 1960's came suddenly to most but even more importantly, none of these obvious and complicated development projects were linked with the land or apparent yet. The value of the land was not what it is today.^{17/} Nowadays, any new law or amendment will be foreseen and, indeed, owners of large unirrigated spaces, especially in the southern sector, will leave untouched their land even though they may have the means and will to irrigate it. They may even have redistributed themselves, by legally selling among their extended family and friends as a means of maintaining their power base, that virgin land in anticipation of any new laws. In fact, the JVA foresees a redistribution of land once the Maqarin Dam begins to be used for irrigation.

If the social reality of the application of the land reform laws does not quite coincide with their theoretical intent, it is

^{17/} In 1948, a large owner from Mashare' gave "practically for nothing" to the Government Wadi Yabis. In exchange of the refugee cards, the land was given to newly arrived refugees from Palestine, the Turkomen 'asheera. Wadi Yabis is often referred to as an example of hard work, good planning and fortitude. Yet, such magnanimity would be difficult to envision today. Land, even if unirrigated, is far too valuable. Indeed, whenever possible, large owners try to buy unirrigated land for future security.

nevertheless undeniable that an impact has been obvious and in particular to the sharecropper. The 1977 amendment changed the distribution priority to the benefit of the sharecropper from 5th to 2nd place, while the absentee landlord was given 4th and 5th instead of 2nd priority.^{18/} The real effect of the change will become apparent only after full utilization - through the Maqarin Dam - of the irrigable lands.

2. LAND TENURE: OWNERS, SHARECROPPERS, LABORERS

One of the East Jordan Valley's most outstanding characteristics, strikingly different from that in the rest of the country, indeed in the rest of the world, is its high percentage of sharecroppers. While the 1973 Census indicated that 47.2% of the EJV was entirely sharecropped,^{19/} the 1978 census, yet to appear, will most certainly project an even bigger increase. The success of the sharecropping

^{18/} Article 24, Law 18, 1977, JVA. The five priorities set for the Farmers' Selection Committee for the setting up of farm units are the following:

1. a) Holders in the Kingdom operating their own land on irrigated land at time of expropriation;
b) Holders in the Kingdom of unirrigated land at time of expropriation;
2. Holders in the Kingdom leasing or sharecropping land;
3. Professional farmers residing in the Jordan Valley;
4. Professional farmers not residing in the Jordan Valley;
5. Holders outside the Kingdom.

^{19/} Sha'rab, p.2.

system in Jordan has, in fact, destroyed the traditional theory of diminished agricultural output due to sharecropping. It may not be an exaggeration to say that sharecropping was a boost to agriculture in the East Jordan Valley. Studies and observations of recent years have been made to support this evidence.^{20/} It is therefore surprising that objections were raised in 1978 in support of farms being only owner-operated. The JVA objected to this in its Donors' meeting of April 1978:

" The Consultant has contended that unless all farms were owner-operation, the envisaged production levels might not be attained if a large proportion of farms was being exploited through share-crop - ping. The JVA questioned this contention ..." ^{21/}

The Harza - Dar el-Handassah report^{22/} notes four reasons for the increase and need of sharecroppers in the area in 1973:

- 1) 37% of landlords were not in the Valley (48% of these absentee landlords were in the North);
- 2) 15% of owners in the Valley were not farmers (employees, merchants, women who had inherited land);

^{20/} See Issi, Barhoum, Sha'rab, Hazleton, Fernea.

^{21/} JVA, Donors' Meeting, April 1978, p. 18.

^{22/} Harza Report, IV, p. G. 27; see also Sha'rab, p. 19.

- 3) 16% of owners leased land because their farms were too large for family-based cultivation (leasing being less expensive than hiring labor);
- 4) 33% of land owners found it more profitable to lease.

Other socio-economic factors, however, should be added to this list for they may well be the reason for the success of the system:

- 1) the majority of Palestinian refugee-farmers who arrived in two waves, in 1948 and 1967, did not have the ^{financial} means to buy land and thus worked as laborers and sharecroppers; if many are now owners, a majority of sharecroppers are Palestinians;
- 2) with the advent of irrigated agriculture in the early 1960's due to the East Ghor Canal and the greater need of labor, experienced hands were used, creating a new reliance, on the laborer who had become sharecropper; new incentives developed;
- 3) being a sharecropper carries more social prestige than being a laborer;
- 4) for trustworthy decision-making relationships regarding the land, an owner-sharecropper relationship is more successful than an owner-laborer relationship where the social gap is far wider and often more difficult to bridge.

Hazleton quite rightly points out that sharecroppers can be, at the same time and depending on the season, agricultural wage-laborers as well as have their own plot of land. But then he adds, "it is misleading to think of work and ownership categories as people. They are not necessarily people but are instead functional relationships which each individual selects so as to suit his own needs and situation".^{23/}

Such a theoretical appreciation of the socio-political and economic situation in the East Jordan Valley is in itself erroneous. Firstly, a functional relationship implies, as he says, freedom of choice and selection, as well as equality. As will be seen below, such is not always the case in the Ghors. Secondly, a functional relationship cannot be devoid of people as categories, for the relationship has affected people's lives, i.e. mutual social, psychological, economic, and cultural impacts appear. Indeed, the relationship itself should be studied in terms of how it has mutually shaped both groups, owners and tenants, their respective families, women, children, etc. The values developed through the function owner-tenant was an outcome of people and their times rather than of the function in itself. Hence, the very reason for the incentive leading to the successful

^{23/} Hazleton, 1978, p.31.

agricultural production of the sharecropper in the East Jordan Valley cannot be understood in terms of the "functional relationship" of owner-sharecropper or owner-tenant alone. The sudden presence of water, refugees, expertise on the one hand, and financial means and desire to retain power through land on the other hand is the more plausible reason for the type of relationship that developed. Consequently, several forms of relationships developed depending on circumstances of both owner and sharecropper (see footnote 25).

In spite of the profitable income produced from sharecropping, many sharecroppers prefer cash-rent arrangements while an overwhelming majority of landowners prefer sharecropping.^{24/} This has been confirmed by various fieldwork interviews and the preference is said to be recent. Theoretically, the cash-rent tenant incurs more risks and responsibilities than the sharecropper who has the owner share the risks with him in good and bad times alike. Today, more proficient and knowledgeable use of irrigation water has diminished the risks and increased incomes which sharecroppers now would prefer not to have to share! Besides,

^{24/} Sha'rab, p.33. This survey also noted that 92% of landlords preferred one year-leases while 65% of tenants desired more. The 1977 Law No. 18 imposes a minimum of a 3-year lease.

in "the case of sharecroppers who only have the know-how which they can offer in return for half or one-third of the net income, one can come to the conclusion that sharecroppers can be exploited easily by landowners".^{25/}

The sharing of land is not only a matter of profit for the owner but it enables him to maintain both prestige and power and, as one farmer recently said, "few of the older generation would easily give up this privilege." Yet, if some large owners have their farms entirely cultivated by sharecroppers, as in South Shuna, others refuse the system entirely and only hire a manager and laborers, as the owners of Tell el-Arbeini. Two systems chosen by sons of two powerful tribal groups, one dominating the South, the other the North. Labor, water, efficiency, power plus the social ties established are the basis for the different choices made.

^{25/} Barhoum, p. 30. -- It should here be noted that there are several percentage sharing systems agreed upon between owner and sharecropper: (1) the most common is the 50-50 system, in which case usually, the sharecropper may have to pay expenses of laborers he may wish to hire, and share equally in other expenses; (2) 67% for sharecropper who has responsibility of most expenses in this case; (3) 60% for sharecropper who pays, in return, 60% of expenses; (4) 33% and 25% being for sharecropper who only shares in equivalent expenses. (See Sha'rab, p. 33, and Issi, p. 9.)

Water from the East Ghor Canal has had an economic impact which has undeniably reshaped the traditional social structure without destroying it. It added to it new and tangential social classes: the owners, the commission agents, the sharecroppers, the laborers.

When one speaks of the labor force in Jordan, foreign labor and shortage are implied:

" There is evidence of severe wage pressures and shortage of specific types of labour in agriculture. This shortage of labour manifests itself in various ways. Day laborers are available in the Jordan Valley, but at wages about three times those prevailing in 1974-75. In the Highlands, it is now difficult to find labor for the olive harvest, and most of this work is performed by women and children. However, it is in the more modern agricultural skills that the shortage is most severe. Qualified tractor drivers, farm machinery operators, and mechanics are in short supply. Most Government agencies are experiencing difficulty in finding and retaining technically-trained staff. Booming economic conditions in the Gulf, as well as in Amman, are attracting labor away from agriculture ..." 26/

In 1973, the situation may not have been as acute, but it was already felt especially that many of the East Jordan Valley's inhabitants had left since 1967. The 1973 Survey of the region indicated that only 1.5% of the Valley's labor force was considered unemployed, yet the census cannot express the reality

26/ British Embassy Report, 1977, p. A'2.3.

of unemployment or underemployment. Not only because many of the inhabitants have not yet returned to the Ghors since 1967 and are unemployed elsewhere, but also because these laborers in agricultural work are not employed all the time but may be so one-third or one-half of the year. There is an effective but hidden unemployment of Jordanians in the Valley.^{27/}

There are social and economic reasons for this situation which is not easy to either solve or deal with and should lead to further research:

- 1) Mobility of the Jordanian agricultural laborer, native inhabitant of the Ghors, is limited or psychologically restricted within the Valley, though many emigrate to the cities and outside of the country for work. Belonging to an sheera or hamula (family or clan) defines one's place of work and of living. These ties, regardless of the social strata involved, have developed mutual dependencies

^{27/} It is important to note that the greatest shortage of labor is in highly skilled workers in Jordan. Thus, it "seems that, despite low unemployment over all, that once unemployed many workers find considerable difficulty in obtaining a job, or conversely, that the unemployed are made up of the workers least desired by employees, least mobile, or least qualified." Salt and Kelly, p. 25. -- The "least desired workers" may well be simply those costing more than foreign labor. The above is strongly supported by Mr. Abu Nuwwar, in charge of the Census in the Department of Statistics.

and trust.^{25/} It may well happen that an unemployed lower-class L'Ighzawi of Tell el-Arbein seek and obtain work on the farms of another asheera or tribe but it still poses a social impediment. In no way does this imply that economic and labor needs may not create a new social fluidity, yet, today, a good number of the youth of Tell el-Arbein claim unemployment. Employment is available and owners and sharecroppers need hands. This leads to the second reason for hidden unemployment.

- 2) Expectations of the poorest man in Jordan have risen, and most especially those of the youth. Standards of living have greatly changed in the past 10 years in the East Jordan Valley, particularly because of the rural development projects of the JVA. Moreover, travelling opportunities have increased through work openings in richer Arab countries and within Jordan. Salaries have skyrocketed. Education of the youth

^{28/} Before becoming a sharecropper three years ago on the Zidan farm in New Damia (Middle Ghor), this native of Damia was a laborer on the Zidan farms. It was inconceivable for him to leave his area. He, his father and his father's father worked for Zidan and the latter's father before him. Besides, the relationship between owner and workers has greatly changed since the old days. The physical servitude has changed in nature. Today, the worker has more say on his land and, as a sharecropper, has more say in protecting his benefits.

has added a new social dimension. If two years ago the Jordanian laborer may have accepted a JD1.000 for his services, today he does not accept less than JD3.000 or JD4.000 per day. In Tell el-Arbein, the youth say they prefer remaining unemployed than working at the socially-demeaning salaries of the foreign laborers.

- 3) The foreign laborers are mainly Egyptians, Pakistanis and Koreans come to replace those who have left for other countries and to add to the seasonal shortages in the Ghors. While the Koreans are involved primarily in construction and arrive in organized groups and through Korean companies, living in camps of their own, the Egyptians and Pakistanis generally come to seek work on their own or through contacts of friends and relatives. Rare are those who come with their families, though some of the Pakistanis, having been here a long time, have their wives and children with them. These workers are at the extreme socio-cultural and economic periphery of the life in the Ghors. No social research is available on the migrants' living conditions but it appears that very little interaction exists between them and the inhabitants for whom they work. Their goal is to work and save and then return back home, even if some of them have been here ten years. Thus, if their social impact is not noticeable, their

impact on the economy and productivity level in the agricultural sector is obvious. Great controversy exists, however, on the quality and efficiency of the foreign laborer versus that of the Jordanian laborer. Yet, one thing all owners agree upon: the Jordanian laborer is far too demanding and it is easier to deal with the foreign laborer,^{29/} thus rationalizing first preference for foreign labor. The obvious reason is that the wages of the Egyptians and Pakistanis are less and no social tensions are created from them. Hence, the youth of Tell el-Arbein are considered either "lazy" or "struck with a superiority complex" because of their expectations and demands and their rejection of a feudalistic situation still prevalent in many pockets of the Ghors.

- 4) Education is also a basis for hidden unemployment in the Ghors. Those with even a vocational training diploma in

^{29/} The wife of an owner voiced a typical complaint: The Jordanian laborer not only wants to work at two jobs in the same day, thus working a shorter day for each owner and earning more than the Egyptian who works for less and longer hours, but he wants to have his cup of tea every two hours and rest for 15 minutes! Nowadays, the Egyptian has learned to imitate him!

agriculture shun working as laborers and if they do, it is because they are in a situation of financial despair. Nowhere in the world has education encouraged farmers' children to work on the land. It is not so much the fault of the farmer, who invariably wants a better life for his children, as it is the fault of the biased educational system, a point to which we will return later.

The Harza report estimates that it will be difficult to forecast future needs in the East Jordan Valley for much will depend on the availability of agricultural machinery. However, the report also projects a positive picture of full employment on possibly unrealistic assumptions that (1) each member of a family is going to work full-time on the farm; (2) where immigrants are concerned, it is assumed that they will be drawn from upland and desert irrigation schemes and, (3) Jordan's present population of less than 15 year old will gladly settle and work in agriculture.^{30/} These assumptions may not be unrealistic only if the following obtains: (1) that the educational and research systems apply to the needs of the area; (2) that the richer Arab countries curtail their own needs of foreign labor; (3) that farm labor laws be drawn to protect both worker and owner alike, giving the laborer

^{30/} Harza, Vol IV, G-8 and G-90 to 105, passim.

and sharecropper an essential feeling of security and equity. Labor laws exist in the country but none extend to farming conditions.

Ultimately, regardless of what the reasons for a continued shortage or pseudo-shortage of labor may be, all indications are that not only will there be in a growing reliance on hired labor for the JVA development plans but the intensification of agricultural planning will open greater needs for sharecroppers who may eventually reduce the labor shortage.^{31/} Contrary to what is happening in the rest of the world, and as already noted earlier, sharecropping presently is an essential asset to the agricultural economy but similar to the rest of the world, many of the sharecroppers remain indebted and under the control of the owner.

To ensure greater agricultural productivity, more water is needed in the East Jordan Valley. Yet, to ensure greater economic incentives for the two social classes taking shape, the sharecroppers and laborers, "it will be important to monitor the evolution of the tenancy pattern accompanying the implementation

^{31/} See Ennis and Hazleton, 1978, p. II-7.

of the new land reforms ..."^{32/} To this should be added the drawing up of new labor laws to cover the rights of both these potentially important groups.

3. SOCIAL CHANGE AND AGRICULTURAL DEVELOPMENT

A. New Breed of Farmers: Sharecroppers - Old and New.

As already mentioned above, the sharecropping system allowed a greater agricultural productivity with the new advent of irrigation waters from the East Ghor Canal. The real controversy surrounding sharecropping, however, is related to its continued effectiveness and efficiency in view of the growing needs and agricultural plans for the East Jordan Valley. Most of the arguments are based on theoretical assumptions and much field research needs to be undertaken, in context of the socio-political and economic particularities of the region, over a period of time, to solve the divergencies of opinions. Two opposing questions remain to be answered: Will the continuation of the sharecropping system lead to a feudal society and encourage an ever-increasing strata of absentee landlords too alienated from the land to express any interest in agricultural development, thus hindering progress? Or,

^{32/} Ibid.

will the socio-political context of the region lead to an agricultural and economic development particular to it, allowing incentives, rights, growth and advancement to the sharecropper?

More than 60 percent of the land is said to be sharecropped in the East Jordan Valley but this does not necessarily imply that an equivalent amount of owners are absentee landlords. Both sharecroppers and owners agree, as do most researchers, that "in most cases, except for the sale of produce, decision on choice of crops, land preparation, date of planting, quantity and kind of fertilizer, date of harvesting and methods of harvesting are made on the basis of mutual agreement between sharecroppers and landowners."^{33/} On the other hand, the decision-making process today is acquiring a new dimension with the introduction of varieties of fertilizers and pesticides, new irrigation techniques, experiments, etc. as well as greater expenses, much of which are heavily indebting the sharecropper. The very nature of the sharecropper's position is evolving along with the agricultural change taking place. It is in view of this change that the sharecropper's own socio-economic and educational standards

^{33/} Sha'rab, p. 41. See also Issi.

must also keep pace by allowing him improved education, incentives, rights. If not, his position may become equivalent to that of an "upper class" laborer, with greater reliance on the owner's or manager's initiatives, thus control.

A new breed of sharecroppers and cash-rent tenants are already appearing in the Ghors. They may not necessarily form a new social class but rather a new professional class. They are the few agricultural engineers who, though still working as Government bureaucrats behind desks in Amman, are now apparently working the land themselves in their free time.^{34/} They formed an agricultural cooperative, market and sell their produce directly to the Amman market, thus by-passing the middleman. The question may well be asked these new-type farmers: What is it that made them choose a hobby of multiple risks and hardships, that of agricultural rather than a "shadow" job in the commerce of some agricultural produce or input? Some say it is because of the boredom and lack of

^{34/} The limitation of time did not allow me, unfortunately, to interview any of these agricultural engineers. This is, therefore secondhand, information acquired through conversations with various well-placed and knowledgeable Jordanians.

incentives of government or desk jobs. If that were the case, three-quarters of the bureaucrats of the underdeveloped world, if not of the whole world, would be in the fields.

We would have already witnessed the much-awaited Green Revolution! The more plausible reason is that of the economic incentives newly available in the East Jordan Valley. It is not at all impossible to predict that more of such agricultural engineers will join their colleagues in the field as more opportunities arise with more waters from the Maqarin Dam.

The impact of this new breed of educated sharecroppers may be three-fold: (1) they may help solve, in practice, the theoretical controversy regarding the effectiveness of the sharecropping system; (2) the traditional sharecropper, especially the younger generation, may learn from them, through observation, immeasurably more than from a team of extension workers; and more importantly, (3) from their mere presence in the Valley, if they persist successfully, they may impress upon the youth of the Valley the importance of education for good agricultural productivity and the consequent social respectability that is linked with the profession.

B. Women in the Labor Force

" If this trend continues, our women will soon become like those in Iraq!" said the old landowner and sheikh with great disgust and chagrin, disrespectful of the Iraqi peasant women who work for pay in fields other than their families'. This remark also expressed the sudden change in the nature of the Jordanian women's participation in farming. Women always worked during all seasons with their fathers, husbands and brothers in the fields. Today, they work for pay in fields other than their family's. In 1973, 30.5% of the women were in the labor force of the East Jordan Valley while in the rest of the country, they were only 19.9%.^{35/} In 1973, this Social and Economic Survey of the East Jordan Valley stated that it was not clear what it is that the women did nor how much time they spent doing it, and it was added, "In economic terms, what can be considered as a working woman and a non-working woman?"^{36/} Today, not only would the percentage of women in the paid labor force be higher but the economic distinction between women working within the family and those gaining actual income would not be difficult to establish.

^{35/} Social and Economic Survey, 1973, p. 10.

^{36/} Ibid., Arabic text, p. 22.

The reason for the greater involvement of women in the agricultural labor force is essentially due to the exodus of men working outside of the Valley and outside of the country. This labor constraint is an important step towards the appreciation of the economic participation of women in the country's agricultural development, even if they are presently earning less than a third of what men earn.^{37/}

The women do not do the same sort of work as the men. Thus is justified their lower pay. But their reputation is better than that of the men: they are more reliable, it is frequently said.

Education, however, will make it difficult for the woman to accept working as a laborer. She may continue in her family's farm because this is part of the economic and social support expected of her but it would be demeaning for her to work as

^{37/} Since 1961, the women of Karama, as elsewhere, have worked in the fields. Yet, since 1968, new situations have emerged forcing them, as well as helping them, to support their families. For example, this widow lost her husband in the 1968 war (Karama battle) with Israel when the town was razed to the ground. The woman had 8 children which she helped support from paid labor in the fields. Today, she was able to buy land on which to build her house plus 5 dunums to cultivate, with some help of her eldest son and daughter-in-law. It is very little, of course, but it is also a small indication of increased self-sufficiency. "All our women work," I was told in Karama.

a field hand with laborer's status. Thus, a headmistress in the Valley may work, after school, with her husband, a teacher, on their small plot of land. They are able to add to their income, are proud to do so, and find it possible only because of the increase in water. It would have been impossible for them to accept doing so on somebody else's land. The same situation holds for young men also with some degree of education. Thus many of the graduates of the agricultural vocational schools in the Valley are unemployed or consider themselves unemployed if they work as laborers until they can find a more respectable job.

C. Changes in Agriculture

According to the Harza report, the agricultural production of the East Jordan Valley and in particular vegetable crops, doubled in a 7-year period (1971-78).^{38/} Yet, between 1956 and 1974, the contribution of the agricultural sector in the GNP of Jordan diminished from 27.8% to 14.03%.^{39/} This fluctuation is not only due to the wars and the internal political instability that existed until 1971 but also to the uncertain rainfall pattern. Even today, in spite of the East Ghor Canal, the scarce rainfalls of this winter are worrying

^{38/} Harza, Vol IV, G-17

^{39/} Haddad, p. 103

the farmers in the Jordan Valley.^{40/} Yet the Valley is the only large potential food producing area in the country and only "about one percent of the country can be cultivated successfully under dryland agriculture."^{41/}

In 1976, of the 60,589 hectares of the East Jordan Valley, 13,760 ha. had been developed under the East Ghor Canal Project, while 4,899 ha. were being surface irrigated and 3,301 ha. were being dry farmed. * Barely a third of the area is under cultivation, i.e. 21,960 ha. At ultimate development of Stage II of the Jordan Valley Irrigation Project (and use of Maqarin Dam), it is projected that 41,147 ha. will be supplied from Project sources.^{42/} It becomes clear that only additional sources of water will enable the present potential of the area to develop, thus any "increased level or production (can only be) based on increased area of irrigation and improved cropping practices."^{43/}

^{40/} The erratic rains are also worrying inhabitants of Irbid and Amman for it means that drinking water will be scarce this summer.

^{41/} Harza, VolV, G-34

^{42/} Harza, Vol. I, I-9 and II-1.

^{43/} Harman et al, p. xiii.

The cropping pattern has already changed through the beginnings of intensive farming now apparent in the Valley. Indeed, it has played an important role in raising farm incomes, in particular for the larger owners. The goal of the JVA development plans is to encourage intensive farming with the use of modern agricultural inputs for (1) the climate of the Valley is conducive to the production of early spring and late autumn crops which command high prices; (2) the potential of double cropping is more economic to apply "factor inputs at high level."^{44/} This was quickly picked up by many farmers yet the needed institutions of support were not ready or even set up to meet the sudden and increased demands (in credits, marketing, cooperatives, fertilizers, research, etc.). A gap presently exists between the impatient expectations of farmers and the ability of the various institutions, all with limited qualified personnel and most rather recently established, such as the Jordan Valley Farmers Association, to satisfy these demands. Moreover, many constraints exist, creating an imbalance in benefits, for only those with real financial means may be able to overcome them: (1) poor marketing conditions; (2) high cost of agricultural supplies; (3) high cost of credit; (4) scarcity or

^{44/} Harza, IV, G-66.

lack of efficient distribution of physical inputs (fertilizers, pesticides, etc.); (5) non-existent information system to give guidance in new agricultural technique; (6) high cost of labor; (7) the decline in use of animals in agricultural labor and the far costlier use of tractors in the fields.^{45/}

Now is the opportunity for traditional agronomic practices to adopt new techniques, the catalyst for which being the Maqari Dam and a controlled sprinkler irrigation system.^{46/}

If a great controversy existed among the farmers concerning the quality of the foreign agricultural laborers,^{47/} an even greater and far more serious controversy exists in relation to sprinkler versus drip irrigation. The JVA does not encourage drip irrigation and therefore will give out loans only for sprinklers. To date, only twenty sprinklers have been requested.

^{45/} Haddad notes, p. 49, that in 1967, 16,500 heads of mules and horses were used in agricultural work while in 1974, there were 11,200. Today, the recent census would certainly have a far lower figure.

^{46/} Harza, IV, G-66.

^{47/} See p. 26

Why the controversy and why the lack of success of the sprinklers? The most convincing argument for any farmer, and especially a traditional farmer, is to observe the success of a new initiative to be encouraged to follow in its steps. Through private investments, large owners were able to install drip irrigation and green-houses in the past 2 or 3 years. The impact was immediate for the yields were higher and the farmers' confidence in the procedure grew. It was also apparent to them that sprinklers were not as successful on their most marketable crops and there is presently great apprehension on the part of farmers regarding the government's intent to sell sprinklers. Anything coming from the government, without prior approval by the people, will meet opposition. The feeling which seems to prevail is that if it is a government project of which the people are not convinced, then it should be provided free to the people! In fact, some owners are openly antagonistic to the suggestion and declare that the only reason the officials are trying to sell the "stack of metal" is because "they do not know how to get rid of their mistake."

A mistake it may well be if serious study is not done regarding the benefits and mishaps of both systems in context of the soils and cultivation of the Valley. Indeed, the controversy

does not exist among the farmers of the Valley alone.

Scientific opinion is cautious in its own recommendation.

Thus,

There is a lack of tested and detailed viable packages for the crops under sprinkler irrigation in the Valley, and at this writing (1977) it appears risky to push sprinkling without providing the farmers with very explicit and reliable information on how to handle their three most important crops, tomatoes, cucumbers and squash. In fact, if for these crops a fool (sic) proof production package cannot be put together, then the JVC should advise the farmers to hold off sprinkling them.

And,

There are many and severe fungus and disease problems with the tomatoes and cucumbers. In addition, there are obvious nutrient problems ... With sprinkle irrigation and the emphasis for higher density plantings, the problems with pests and nutrition will be multiplied. 48/

An agricultural engineer in the JVA felt that the best way to sell the sprinklers is to set up different demonstration farms and encourage an increase in crops such as potatoes, onions and sugar beets. These are not harmed by the use of sprinklers. The first suggestion may indeed be invaluable for only by observation will most farmers be convinced. Yet, the second suggestion implies adapting the agricultural production to the sprinklers (because they are there!) rather than the other way around, a serious error in view of

^{48/} Keller, p. 7 and 9.

both local and export needs.

Great risks are also apparent with drip irrigation - a further result of farmers' tendency to imitate. The enthusiasm has been so great that there may be a drastic soil reaction to the overuse of the system which will hinder the needed deep reploughing of the land for renewal. It can be done but ignorance of the consequences and lack of organization are first to be overcome. The same problem is said to face the recent introduction of greenhouses. The risk of indiscriminating imitation will cause more harm than improvement, especially for the small farmer who may be misled into investing at great cost and loss. It is therefore important that at this crucial turning point - the acceptance of change - that a solution to the controversy be found.

Water and new agricultural techniques have brought about rapid change in the socio-economic structure of the East Jordan Valley, in its labor force and land utilization and even change in the people's food consumption habits. Expectations and new impatience have sprouted in relation to this change, and with the projected hopes of the availability of more irrigation water, all these changes and expectations will increase. Positive change must therefore be channelled through equitable and well-implemented laws, and a strong backing of social infrastructure

in support of education, applied research, production, credit, group action by farmers, agricultural planning and basic social benefits. In the case of the Ghors of the East Jordan Valley, such attempts have already been made, both with positive and negative effects.

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III. INFRASTRUCTURE SUPPORT FOR SOCIAL CHANGE.

The Jordan Valley Authority has stated that its objective for the Stage II of the Jordan Valley Irrigation Project is as follows:

" The primary objective of this Project is to maximize the agricultural production of Jordan in an attempt to obtain a balance of trade in food commodities. This can be achieved by utilizing the water resources of the Yarmouk River on one hand and by increasing the irrigation efficiency through sprinkler irrigation. The Project will also help raise the standard of living of some 25,000 families and will contribute to a better population distribution in the country." 49/

For this to happen,

" It is essential, therefore, to make the Valley a pleasant place to live in. Doing this has a dual advantage, it eliminates factors that cause migration out of it and into urban areas, and will attract people from the outside to come and settle in it." 50/

The aim of the Project is thus to attract people to the area by providing attractive incomes, above national average, and

49/ JVA, Jordan Valley Development Stage I, 1978, p. 53.

50/ Ibid, p. 86.

adequate living conditions. To meet the needs of the development plans, it was estimated that for a 5-year period, 1977 to 1982, 8,000 people a year would be needed in the Valley and by 1982, the target population would be 146,000 inhabitants.^{51/} The people attracted to the area would not only be the needed agricultural labor essential for agricultural development but also the government employees - school teachers, doctors, extensive workers, researchers, merchants, public servants, etc. - necessary to run the planned social infrastructure development of the Valley. Several donors are contributing to these Jordan Valley Village Development projects: USAID, IBRD, Abu Dhabi Fund for Arab Economic Development, Kuwaiti Fund, German Development Fund, Kreditanstalt Fur Wiederaufbau (KFW) and Japan. USAID's two-part contribution to the project - Village Development I and II - consists of various infrastructure development in 32 villages:

- a) construction of 49 schools, 24 health centers, 10 local government administration centers, one community center;
- b) provision of furniture, books and equipment for the units constructed;
- c) 300 housing units for government employees in the Valley;
- d) paving of 18 Kms of village streets;

^{51/} Jordan Valley Development Plan 1975-1982, p. 23-24

- e) grading and paving of 95 kms of farm roads;
- f) provision of U.S. \$4.0 million in home mortgage loan funds;
- g) potable water to be supplied to 22 villages.^{52/}

Most of the other donors have heavily invested in various irrigation projects. Thus, the JVA has established a close link between economic development through agriculture and social development through education, health and better living conditions. In other words, the entire gamut of projects in the Valley must be looked upon as a whole, an integrated rural development -- the success and continuation of which heavily relies on the ultimate completion of the Maqarin Dam and its related irrigation projects.

Following is a brief discussion of some of the most pertinent infrastructure support being provided or in the process of being so in the East Jordan Valley.

1. HOUSING

" Prior to the June 1967 war, the population of the Valley were housed in units of varying degrees of adequacy ranging from concrete to mud houses of different sizes, mostly financed from individuals' own resources. Because of the war and its aftermath, about 70 percent of the existing housing units were completely destroyed." ^{53/}

^{52/} USAID, Village Development II, Project Paper, Passim.

^{53/} Plan for Rehabilitation and Development of the Jordan Valley. p.39.

Housing is at the core of the social benefits plans of the Valley. Its purposes are many: (1) to help resettle all those who were left homeless; (2) to encourage those who have left the Valley to return to their villages; (3) to attract new inhabitants; (4) to generally upgrade the poor living conditions of the small farmers; and (5) to provide attractive and comfortable housing for various government employees.

The Valley inhabitants are now able to see what type of houses some of them will live in for several are close to completion. In August 1978, 500 applications were submitted even though no model homes were available for inspection, no land prices were yet determined and JD 50 were required for application deposits.^{54/} Today, it is said that over 2,000 applications have been received though only 2,100 units are to be constructed. The interest and demand are increasing and some people interviewed had even applied for a Housing Bank loan and paid the deposit without knowing exactly what the interest would be or the minimum or maximum years allowed for repayment of the loan.^{55/}

An immediate question needs to be answered: Who are the real beneficiaries of all these houses? The priorities set by the JVA and the AID-supported portion of the housing component are clear. The target groups are those whose skills are regarded as critical

^{54/} Hammam and Christian, p. 1.

^{55/} The interest in the loan is 7% if paid over a 20-year period or 5% with a 2% savings refund if loan is regularly paid in a shorter period of time.

to the overall development of the Jordan Valley. That is:

(1) those already in the Valley and in agricultural production; the small farmer; (2) those in substandard housing units; (3) government employees (schools, health clinics, etc.); and lastly (4) those to be attracted to the Valley.^{56/} Some are for sale and some, for government employees, are for minimum rent.

The applications for the housing units are in the process of evaluation and it will not be possible as yet to know how close to the priorities will be the ultimate distribution. It may be worthwhile, at this stage, however, to highlight some of the problems already observed and to realize what some of the Valley residents' attitudes are - factors essential in determining the extent of the impact of the Project for "in order to achieve the social goal, it is essential to know what the people want and what they need to raise their standard of living."^{57/}

Space and Privacy

" It has been said that the level of demand will be affected by the suitability of design rather than size per se. Privacy is particularly important to agrarian life-styles, as is the need for space to keep whatever livestock and poultry the families own. Of some concern is the fact that animals and poultry will not be allowed on the lots..." ^{58/}

^{56/} Hammam and Christian, p. 8. See report for general evaluation of housing project keeping in mind dates of the report: 1978.

^{57/} Barhoum, p. 3.

^{58/} Hammam and Christian, p. 21.

The problems raised of space, design and livestock have been differently perceived in my own fieldwork situation though privacy remains a similar concern. Indeed, the design was accepted, even if, in some cases, other preferences may have been expressed, and livestock posed no problem to most.^{59/} But absolutely everyone spoken to objected to the smallness of the units, to the closed-in feeling of the houses. "If the houses are destined for us," said a farmer, "what are our families to do? Kill our children to be able to fit in them?" That may well have been an extreme reaction but it brings up two important points: (1) Farmers have large households, a minimum of six or eight, because more than one related family unit live in the same house, and those families would expect to move together as a unit; (2) when people move to better housing, the expectations are that space, and thus personal privacy, should also be better. If neither of these conditions are possible, the preference is to remain where one is.

In assessing the adequacy of the traditional farmer's mudbrick house, it is very important to make the distinction between privacy

^{59/} Livestock is considered a nuisance by some farmers who do not have their children available any more to watch over them because of schooling. In the field the animals eat up the seeds or the neighbors' farms or trample on the vegetables. Moreover, if kept around the house, they trespass into the neighbor's yards and are a frequent source of quarrels between women. In fact, a welcome situation may well be the cooperative common space for livestock.

and space within and around the house, which makes it livable for the family as a whole, and the availability of services in the house. This distinction is very clear in any farmer's mind yet blurred to the outsider whose first appreciation is based on the number of rooms rather than on the size of the room.^{60/}

The availability of services, such as electricity, water, sewages, is indeed the first criteria for which choices were made^{61/} but the very realization of the constraint imposed by these blocked cubicle rooms are demoralizing to most farmers. Unlike traditional, urban Arab architecture, in which living is directed inwardly, with a central courtyard inside the house creating feeling of space within the enclave, the farmer in the Valley has his life directed towards the outside. The courtyard around the house, no matter how small, is usually fenced and is central to the family's social life. It should be considered as an integral part of the space to

^{60/} A worthwhile and practical exercise should be undertaken: to measure the exact living space of a typical farmer's house, the "social" space (space for gatherings in and outside the house) and the entire land area of the house and compare it with the present size of the new units. For example, this school-teacher lives in a two-roomed house of 105m² while the new house is 60m² divided into 3 sections. It is true that people can build an extra room to the new units but this is only a future prospect for them.

^{61/} See also PADCO, 1973, P. 72.

be measured. The general feeling is "that people will be living like in the city, in blocked apartments, looking in." To the typical farmer, his wife and five children, his mother and his eldest son and wife, the houses are not for him. To the headmistress, her husband, three children, her mother, brother and sister, the houses would not be an improvement in either space or privacy. As with the typical farmer, and the worker of Irbid who is returning to his village Tell el-Arbein, the choice between space for her furniture (her only material belongings) and space for the children is unsolvable. Several of those who had made the decision not to invest in the housing unit in their area would have preferred to pay more and be allowed more space, regardless of what their income is.

Lack of Information

Very few people in the various villages visited had a clear idea of what the conditions for the loans were. Contradictions and misinformation on loans and interest were common. Many gave up the idea because they thought they had to pay off the loan in 20 years and not less. Few objected to the principle of interest but most felt it was too high a price to pay. Thus this teacher of North Shuna preferred renting than having to pay 7% interest and this farmer of Tell el-Arbein calculated he could build his own house better and bigger for less money. All knew that added construction on top of the houses was prohibited making a farmer comment, "They tell me I can buy a house, but they forbid me to own it for I am not allowed to do what I want with it." Few knew

however, that they could add another room on the maximum land available for construction (162 m² maximum), though the plot itself is of 288 m². More seriously still, none of them were aware that their application had to first be approved before expecting to move into the house. The fact that the Housing Bank will soon open its branch in the JVFA building at Deir Alla may help solve the information dissemination problem.

Beneficiaries and Social Impact

Who then will best fit in these houses? If things stand as they are they will be from the "petite bourgeoisie" class of the different villages, those with indirect links to the land (the father is a farmer,) the taxidriver of Shuna, the teacher who commutes,^{62/} this middle-aged couple with no children, those with large families but in a desperate need of a separate roof from the rest of the extended family, the sharecropper and his family who have built illegally on government land and has to pay JD 40 a year and still risk being kicked out ... and the middle and upper class of Amman! Or so the rumor goes.^{63/}

^{62/} The girls Preparatory School of Karama has a staff of 9: the Headmistress and 8 women teachers. Except for the headmistress all the teachers commute (2 from Amman, 2 from Suweileh, 2 from Ruseifa, 1 from Gebeiha and 1 from Salt). Most are said to be interested in the houses.

^{63/} As already noted on page 48, the final assessment of the applications and their ultimate acceptance is yet to be made. The rumors spreading and fears and disappointments of the people may well prove to be unfounded then.

Except for the last two categories, all those described are in dire need of houses. The general objective is not lost. Yet it appears that the first target, the small farmer, may be a minority resident in the new houses.

These housing projects will bring undeniable changes in the social and community structure of the village. How beneficial or destructive will be this change is very difficult to predict. Yet a dynamic evolution could well be foreseen: within the small block of houses may live the son of the village Mukhtar, i.e. the upper class, the teacher, the farmer, the young married couple -- all from different asheera or clans. Indeed, the closeness of living may change the very behavior pattern within the family unit which may have already begun to undergo change -- usually very gladly so by living away from the in-laws.^{64/} Moreover, the closeness of the social mixture as well as the very newness of the experience, may bring about a pride and a new sense of community living so difficult to create within a traditional context where living is centered first around the family.

^{64/} An interesting example is that of the young couple from North Shuna with 4 children ranging from 2 to 8 who were impatiently awaiting to move not because they lived in one room but because they will be independent from the in laws.

Though the enthusiasm and positive aspects of the housing project cannot be denied, it is still seriously and highly recommended that the small farmers' needs be allowed to be voiced and seriously studied, that consideration of choices be made (preference of building own house on allotted plot) and that the physical planning be rethought in new village construction projects. It is far more effective to have fewer and better units than many that will not fit the social and psychological needs of the majority. "Better living conditions" should not only imply change in physical conditions. Rather, the physical conditions must enhance the family's general well-being, an essential basis for social development.

2. SCHOOLS AND COMMUNITY CENTERS

The construction of schools has been the most positive aspect of the various projects in the Valley and will certainly be the ones to provide the deepest and most long-term impact on all levels of the society of the Ghors. It will be particularly beneficial for the girls who are hindered from pursuing either preparatory or secondary schooling because of the distances needed to go to the few schools available to them.

In 1973, the Social and Economic Survey for the East Jordan Valley showed that the educational level of the region was lower

than in the rest of the country, that 49.5% of males and 85.1% of females of ages 12 and higher were illiterate. Today, the 1978 Census will project a different picture, especially in relation to school attendance. Most children now go to primary school and there is a growing interest on the part of parents to send their children - boys and girls - beyond the primary level, especially the boys. A general belief is that education is the only way to raise the children's standard of living.^{65/} The enthusiasm in relation to the schools is therefore general, on the part of parents, children and teachers^{66/} even if it has been said that the plans did not always fit the needs of the villages concerned. The most significant and most obvious immediate outcome of the school buildings is that they provide a pleasant environment for both teaching and learning. Surveys upon surveys throughout the world have proven that the type of environment affects production levels. In

^{65/} See Barhoum's study contrasting two villages, Dirar and Kafrein, where parents in both villages had a great desire of sending their boys to the University (72.9% and 79.5% respectively); p. 18.

^{66/} Hammam and Christian, passim.

this case, from the teachers' own evaluation, the teaching performance has already improved in the new buildings now used. The incentive for schooling and teaching will be higher, if they are not so already.

The link between new schools and new housing is very important to teachers and parents alike. Not only is the commuting which is standard among most Valley teachers a burden and a danger,^{67/} but their continuous presence in the community in which they teach has important socio-cultural implications. This will only be possible if housing is available to them and indeed they should be considered as having the first priority among government employees.

Yet, no matter how beautiful a school building is, helping create enthusiasm and incentives for better all-around performance, it is the type of education itself which will be the vehicle of the impact expected. Will that education help the graduating young girls and boys participate in the development of their region and of their country? It is not

^{67/} See footnote 62 regarding teachers at Karama - cases typical to the rest of the Valley.

possible in the realm of this paper to discuss the very sensitive and difficult problem of the pertinency of the present national system of education versus national development needs. Indeed it is a problem that all under-developed countries are struggling with. It is enough to reassert that unless agricultural training in schools - both rural and urban - is given its full due of time and respectability,^{68/} the professional interest in the field will increasingly diminish. Girls and boys should be equally interested, particularly in the Valley, for it will be the only means by which to encourage them to work their own land.

Assumptions are made that if living conditions are good and economic prospects attractive, children of present Valley residents would like to remain in the Valley.^{69/} However, the assumption is not well founded for the question to really ask is: What will the children, once adults, do in the Valley, after having obtained the education available to them? It should not be expected or desired that all go into agriculture, but what

^{68/} In North Shuna, at the Preparatory School, students have 2 to 3 hours a week, and not every week, to work on the school garden which was in a pitiful state! The incentive was very low for agricultural activities in the school.

^{69/} Ellis and Hazleton, p. II-9.

percentage, on the basis of today's education, can be expected to get involved in it to effectively participate in the development process of the area and help solve the absentee landlord and labor problems?^{70/} This is, of course, a universal problem but in an area as small and as tangible as the East Jordan Valley, an attempt at a different and more effective educational replanning may be the crux to the success of the area's future.

Adult education is said to be very popular throughout the Valley, particularly amongst the women who often, out of the shame of not knowing how to read and the need of helping their small children with their homework, are pushed into faithfully attending classes whenever classes are held.

Community centers, very tentatively planned in the projects, are seen by all, however, as very positive and needed assets to the communities. In Karama, for example, a community center used to exist before 1968 when it was also levelled to the ground as was the rest of the village. There also was a movie house in the town attended by a clientele from various villages.

Community centers would have multi-purpose functions, one of which would be their use as a cultural center. The unemployed

^{70/} A rich farmer from Mashare' with 13 sons, two of whom are studying civil engineering in London, said, "My sons laugh at me if I asked them to work or help out in my farms ... their farms ! "

youth of Tell el-Arbein requested a "Cultural Center" for, they said, it would be a place for them to gather, to set up folk poetry and music performances (one of the young men was said to be known as a poet and singer in the area), and to have a place they can identify as their own.

A community-cultural center in the Ghors does not imply a tennis court or a swimming pool, but simply: a center with space for the encouragement of community activities. Television, education and travelling have brought about new incentives in youth. These should be channelled in more constructive behavior by allowing them to be involved in the community's adult education programs, health awareness programs, etc. If each center is expected to be staffed by a number of government employees for its running, it could well be expected that none will ever get off the ground because there is presently a lack of personnel available for all.^{71/} Efforts in devising a "grass-roots" approach should be considered for the project could be far more profitable and interesting in the long run for old and new inhabitants in the Valley than the proposed

^{71/} See Steele, A-12.

idea of setting up a laundromat in the Valley.^{72/}

3. SUPPORT FOR AGRICULTURAL DEVELOPMENT

A. Extension Workers

It has been suggested by the IBRD that extension workers, presently without adequate offices, use the Community Centers as their headquarters.^{73/} It is herewith suggested that before placing the extension workers of the 33 Development Areas of the JVFA in the centers that their position and very function be seriously rethought.

Theoretically, extension workers have two important functions:

(1) they serve as a vehicle of information dissemination of research data to farmers, and (2) they make facilities available to farmers. None of these functions can presently be pursued by them because of (1) inadequate training; (2) split allegiance between the Ministry of Agriculture and the JVA, (3) lack of

^{72/} The suggestion of a laundromat is not absurd. Yet, there are many other important priorities in the Valley that make the idea overwhelmingly biased for a very small minority. Indeed, I have seen a washing machine being sold in the Valley, at Sawalha, and those who want the machines will buy it. Yet, the overall impact of a community - cultural center would be far more meaningful than the problems to be created, after the first month, with the maintenance of the washing machine. It should not be forgotten that washing machines consume a great deal of water, a primary argument against their present generalized use. Besides, it is an idea that should be left to the numerous enterprising merchants in the region!

^{73/} IBRD, Annex 1. P-6.

research data or facilities offered them; (4) a generally weak linkage system and coordination, and, last but not least, (5) no transportation available to them.

The farmers' attitudes to the extension workers is devastating. They are considered useless, uncooperative,^{74/} inexperienced, and too struck with a superiority complex. On the other hand, the extension workers consider the farmers as ignorant, unwilling to accept advice, stubborn and too traditional. The attitudinal problems are very deep and embedded in both social, economic and psychological factors. Neither farmer nor extension worker reach out to each other in the attempt to understand each other's needs. The mutual lack of trust is very great.

In all fairness, many farmers have admitted to the need of guidance, especially in view of the recent methods, products and diseases new into the area.^{75/} But they have received no help from extension workers who themselves get no assistance from their Ministry.^{76/} Farmers are not to be

^{74/} Some farmers have complained that extension workers even refuse to come into their houses to have the traditional glass of tea, considered to be a highly insulting attitude.

^{75/} See also Keller's interesting appreciation of the farmers ("There is good evidence that the farmers and/or farm management decision makers in the Valley are quite innovative and capable.") and their expressed need of training through demonstrations (p.5-7).

^{76/} See Jensen et al, p.21-22, on expected functions of extension strategy in the JVFA

underestimated. They know what is available to them and how to use it to their advantage. In relation to the extension workers, they see nothing there to their advantage. Farmers are convinced by demonstration and the extension workers have yet to prove their knowledge to them.^{77/}

In two instances in the Harza report, it is noted that (1) sharecroppers, usually younger men, are more efficient than older landowners because they are in closer contact with extension workers and, (2) "existing extension agents have been hindered by the prevalence of share-cropping."^{78/} The contradiction is obvious but the point to make here is that there is a heavily biased theoretical appreciation of the effective impact of the extension workers without an understanding of the extent of their real-felt presence in the Valley.

In 1967, in a report on the impact of the East Ghor Canal, Abdul Wahab Jamil Awwad made eight recommendations regarding the upgrading and better use of extension workers. It has been

^{77/} In more than one instance farmers said to me: "All the extension workers have is book knowledge. I have been working 20 years in this land and my practice is more important than their knowledge."

^{78/} Harza, Vol. I, p.V-16; and Vol. IV, p.G182.

over ten years now and yet, except for the recommendation regarding the relocation of the extension workers in different development areas, all the other points still hold. A brief listing of them may be of interest here:

- "2. Coordinate the activities of research, teaching and extension ...
3. Train professional workers in agriculture and all its related branches as rapidly as resources permit ...
4. Provide in-service training for extension workers on the job ...
5. Strengthen agricultural information services^{79/} provide visual aids ... and other mass media materials:
6. ...
7. Train and provide experience enough for extension workers to be able to make recommendations ... in all factors involved ..."

^{79/} A similar recommendation is made by Jensen et al, p.20: "research results would be made available promptly to farmers and others through appropriate publications," except that no provision is made for the high illiteracy levels of these farmers in the East Jordan Valley!

"The extension system is a misnomer in East Jordan Valley," said an agricultural engineer. Indeed, in a situation such as that which obtains in Jordan, where research facilities are still unavailable to nourish the system, a new title and a new function for the extension workers may best be given to be more appropriately descriptive of their role and function. Extension workers who presently refuse any other mode of transportation but a car, ^{80/} not even a motor scooter, have a problem of identification regarding their own status and function vis-a-vis the farmer.

A recycling of attitudes and education is needed. However, an understanding of the lack of incentives provided the extension workers is also necessary; their salaries are low, their work and living conditions inconvenient. If the JVA has an aim to provide better living conditions and more alluring salaries to government employees as a means of retaining them in the Ghors, similar efforts should be made for the employees in that most important supporting institution for agricultural development: those who provide guidance and information to farmers.

80/ Extension workers have told me that three years ago, scooters were provided to them but they were left unused because they considered them too demeaning to their professional and social status! -- It would be unfair to generalize about all extension workers for it is also said that some are indeed qualified, and overworked and make every attempt to reach the farmers.

Development in agricultural techniques is projected to coincide with increased water from the Maqarin Dam. It appears, therefore, urgent to seek an effective and practical solution that fits the needs of the region and can be implemented by using the capabilities available.

B. JVFA

Much has been written already on the Jordan Valley Farmers Association, its inception, function, and growth problems, ^{81/} It will not be necessary at this stage to return to these points but an attempt will be made here to present a few impressions and attitudes perceived during my field work situation.

Article 12 of Jan 19, 1974, sets three objectives for the Association:

- 1) To provide loans and agricultural inputs required by its members for agricultural productions, including agricultural equipment, tools, materials...
- 2) To undertake agricultural operations common to all or some of its members, such as pest and insect control, harvesting and transportaiton of crop to assembly and marketing centers, including their sorting packaging and preparation for marketing ...
- (3) To sell and market the agricultural crops of

81/ See Ellis and Hazleton: Hazelton: Fernea: Sayage, Jensen, etal.; USAID Jordan Credit for JVFA: Issi: Jan 19, 74, GOJ: Barhoum, Harman et al. It is important to keep in mind that all these reports coincided with the inception of the development projects taking shape in the region. They cannot be taken as indicators of criteria of ultimate performance of the various organisms involved. They are significant as springboards in the understanding of their beginnings and problem. More important now is further indepth analyses of what has happened since as the projects are proving their impact, as in the JVFA. The aim of such analyses would be a means of providing a constructive monitoring system to the institutions concerned.

its members in wholesale markets inside the Kingdom and marketing centers abroad.

The obvious aims are the centralization of the marketing system, the setting of standards in production, the direct support to farmers and the hoped elimination of the much hated middle-men or commissionjiyyah..

Though these objectives were set in 1974, it was not until June 1977 that the JVFA began to take shape, by having its Director General appointed. Meanwhile, and till now, farmers' expectations for immediate action and help remained high.

Owners and sharecroppers, big and small are all cynical about the effectiveness of the JVFA, the development areas and their impact. Their complaints are clear: 1) the Farmers' councils in the JVFA and the development areas are merely on paper, 2) elections were "routine," though, admittedly, realistically expressing the power structure within each area;^{82/} 3) there has been no action taken to help the farmer.

^{82/} The 33 development areas within the JVFA are a theoretically important decentralization effort. Each has an extension worker who is its secretary, 3 to 5 elected council members with one president and various members from the owners in the area concerned. However, each development area, roughly of 8,000 dunums, has its own socio-economic characteristic for it appears that each was based on a cohesive grouping of clans, carefully avoiding the inclusion of feuding or opposing elements. Just as the JVFA's 10 local members on the Board of Directors are the power elite and representatives of the 10 big clans in the region, so is each development area presided by the most important landowner of the area, theoretically, the one who protects and understands the interest of his people. The real danger, of course, is that the manipulation of self-interest may be the outcome of these councils once the organization begins to effectively function. It should be noted that every 2 and 4 years, elections are made for the members of the Board of Directors who cannot be re-elected but after the expiration of two years of non-membership.

If the farmers' criticism of the extension workers are real, it must be admitted that their complaints regarding the JVFA are hasty. There is a pervasive feeling that "it is fashionable to criticize," without constructively helping in presenting either alternative or taking effective action or, more important, personal initiative.

The JVFA is in the process of taking possession of its aims, of appointing its needed personnel, of establishing a functioning system of contact with its membership. Maybe, the most important impact to date of the JVFA is that all have heard of it and all have expectations for it. The responsibility of the leadership is great for it must not let down these expectations or make them wait without using the impatience that exists for its own advantage: to implement change and innovation. Farmers councils, development areas, marketing centers are new concepts to the region. Easy acceptance is not to be expected.

However, the farmers' complaints are also real: 1) the benefits of membership have not yet been seen at the grass roots level for the small and middle-level farmer, 2) the "pact of big landlords" still exists, in effective land and income distribution; 3) privileges for the large owners are still taken for granted by the rest of the population as long as they are at the core of the decision-making process in the JVFA council and development areas; 4) none doubt that the middlemen will still control the marketing system to be established as long as they will be the ones ultimately to buy the produce from the wholesale centers^{83/} 5) request by small or middle level farmers for fertilizer, etc. are not responded to as swiftly, it is also said, as those made by the big owners.

^{83/}The JVA asserts that the danger will be diminished through the regulation of prices, grading and marketing.

The JVFA is too new and too important an institution to undermine. Its future impact -- for we can only speak in terms of the future today -- will be very important in regulating the information, the production and marketing systems. But, its most important immediate role will be to break the nascent mistrust and establish a bridge of understanding and cooperation. This can only be done if the small farmer is reached, is brought "into the fold", so to speak, rather than wait for him to come. Thus, the JVFA does not only have an economic function but a social role to play as well. The socio-psychological respect it will be able to project will be the basis of its success. On the other hand, socio-psychological problems in the region of the East Jordan Valley are complex. They are intertwined with the social levels of clans, tribes, refugees, owners, laborers and power divisions.

In view of establishing this needed trust through mutual understanding and cooperation, it is recommended that serious thought be given to the creation of a temporary (or permanent) position which should be established in the Deir Alla offices of the JVFA: a combination of anthropologist/social worker/researcher. That person, preferably a Jordanian or an Arab familiar with the people and the life in the area; would have the status of a consultant not a

government employee. ^{84/}. The function of that person would be that of a liaison between the people and the JVFA, not a public relations officer but the problem-solver of social relationships, between farmers and employees, the one to define attitudinal approaches for extension workers or their equivalent, the one to whom farmers and employees may come to defuse tensions. The farmers' real complaints have always been that no attempts have been made by employees to participate in the joys and tragedies of their lives. To understand what are these joys and tragedies which affect his productive life and define his needs can only be of benefit to the JVFA.

The research component in the position is essential for it will enable the anthropologist/social worker, to deal with problems in a controlled and analyzed manner rather than routinely and haphazardly. The person would be able to freely relate to the people as a researcher and not as an employee; be able to create a trust and interest while also finding practical means to best project development needs to

^{84/} The distinction to maintain is important for two reasons: (1) the position should first be tested, (2) if the position is to be filled by a social worker who is a government employee, the outcome will unavoidably be similar to that of the extension workers: a low salary, lack of incentive, lack of interest.

the farmer in context of the socio-political and cultural situation of that region. Similarly and maybe even more importantly, that person should have the ability to analyze and project the farmers' needs to the JVFA, and maybe also be the most able to objectively define the power structure and power play within the institution.

IV. CONCLUSION: THE BENEFICIARIES

Rare are the projects which have both a concentrated localized impact as well as a spread effect on an entire nation. Such will be the Maqarin Dam project, as was, on a much lower scale, the construction of the East Ghor Canal. The farmers are all well aware of the uniqueness of the Ghors, for they have heard it said frequently and their recent new double-crop cultivation at off-seasons has proven it to them. They want to take advantage of the situation but, as they themselves admit, they need help, advice, guidance and, above all, more water. It is too dangerous for their economic and agricultural stability to continue relying on increasingly irregular rains.

The various motivations and incentives, as a result of the Maqarin, can be foreseen on the basis of what has happened after the EGC. The effect of the impact on the Valley will be seen on three levels: 1) the most immediate: physical changes (structures and population density); 2) the most long term: evolution of the agricultural development process; 3) the most constant, cutting across both the previous impacts: the social and economic changes already taking shape, i.e. the beneficiaries.

Physical changes in the Valley have already been the most tangible expressions of the development plans of the JVA and JVFA. The schools, houses, health clinics and one hospital, the roads, government buildings, credits,

sprinklers, drop irrigation, greenhouses, marketing centers being constructed, availability of electricity, potable water and sewerage systems, increased traffic of trucks up and down the Valley loaded with agricultural produce -- all these have affected people on all levels, have made them aware of the very meaning of development in the region but also of the changes expected from them.

Some farmers have taken advantage of these changes and grabbed the opportunities offered them through the agricultural development projects by heavily investing in new technology.

The share-cropping system has increased the agricultural productivity of the area. Indeed, this success has enabled the share-cropper himself to have a greater voice in the protection of his own benefits and a greater say in the decision-making process relative to land use and to the introduction of this new technology. But such technology, requiring heavy investment, is available only to the well-to-do. As a result, water, which is at the source of the development process in this case, could lead to despotism, dependency, and social and economic distinctions new to the region. Attempts have been made to reduce the possible social ill effects of agricultural development by the various amendments of the land reform law. Yet the effect of these on the farm management systems (share-cropping, absentee landlords, cash tenants, increased agricultural

laborers) has not always been positive. An increase in small ownership has been seen but a decrease in effective power of large owners will be a much slower process.

Agricultural development, however, has created a greater interest among farmers of all levels by projecting into the future, by trying new methods, new crops, new habits. Request for change in marketing, in grading and for small industries linked to agriculture are being made. The long-term goals in the thoughts of many is to export. The needs of the neighboring countries are known.

The very complexity of this development requires organization (in the process of being put into effect by the JVFA), training, stability, mobility and efficiency of public services. By increasing social and economic benefits, the people will be encouraged to participate in the development and thus out-migration would diminish. Already people are known to want to return to the Valley if only facilities were available, thus the desired immigration of the JVA plans may happen, provided these social benefits are felt by all: laws that are meaningfully applied, credit that is within reach of all, an educational system to fit the employment opportunities of the future, community centers to create identification through participation, etc.....

The beneficiaries of the various projects in the East Jordan Valley have been many for they have touched all levels of the society. They are:

- a) the women who have acquired a greater self-sufficiency not only because of the intense participation in the labor force but through real interest in adult education;
- b) the young girls whose number in schools has increased because of the availability of new schools;
- c) the small farmer, especially in the North, who is now able to own his farm;
- d) the large owner, most effective participant in the development process, through the possibility of investment in new agricultural technology;
- e) the numerous merchants, small and big, who have profited from the new trading activities in the area;
- f) the teachers, employees and laborers planning to return to the Valley, as a result of the physical structures and social benefits they are told will be made available to them and which they already see.

In spite of the obvious benefits, problems have become apparent or risk to result from the intense agricultural and social development taking place in the Valley. In view of the potentially greater social and economic impact that will result with the completion of the Maqarin Dam, it is

recommended ^{85/} that for a more equitable social situation to be created, to take roots along with a more meaningful sense of stability, that these problems be dealt with as soon as possible:

- 1) The situation of the share-croppers should be carefully studied and improved upon by first enacting laws regulating their status and rights in view of changing their growing state of economic dependency, of increasing their possibilities of land-ownership by implementing the regulations limiting absentee land-ownership; by facilitating the acquisition of credit, etc.
- 2) The situation of the farm laborer (foreign and Jordanian) must be improved especially regarding the living conditions of the foreign laborer and the hidden unemployment of the Jordanian unskilled laborer because of higher rates than foreign laborers. Agricultural labor laws are essential in this case as well.

^{85/} It should be noted that the following suggestions do not only apply to the East Ghor Canal Project area but to the entire East Jordan Valley.

- 3) A serious re-evaluation of agricultural education should be made to benefit local and national development needs: An Agricultural Vocational School should be set-up in the East Jordan Valley with high entrance marks to encourage high quality teaching and learning, thus greater incentives for the profession. Economic incentives are already beginning, as has been seen in the report, and could become better channelled through better training.
- 4) A rethinking of the role and function of extension work with the goal of readapting it to the capabilities available and to the needs of the area.
- 5) An objective study of the benefits of drip versus sprinkler irrigation.
- 6) An immediate activation, on a popular basis, of the Development Area Councils.
- 7) The consideration of establishing the consulting position of anthropologist/social researcher in the JVFA or the JVA should be seriously taken. See below recommendation 14.
- 8) In support of Ennis and Hazleton's recommendation: the importance for the JVFA to do analysis, from time to time, of characteristics of borrowers, so as to evaluate the extent to which small farmers are being reached ^{85/}.

86/ Ennis and Hazleton, p.II-10

9) Urgency of initiating serious agricultural research to be practically applied in the region in view of its immediate needs.

10) A serious reappraisal of the distribution of houses in the Valley and a rethinking of future construction plans. The preference is herewith made for a sites and services plan whereby mortgage and physical facilities are made available to potential owners responsible to build their own house on a prescribed plot of land.

11) A practical exercise to be undertaken for deeper understanding of housing needs of farmer: measurement of present living space versus room space of new houses.

12) Encouragement and initiative of new activities: small industries linked to agriculture and fish cultivation with increase of water pools from the potential waters of the Maqarin Dam.

13) Community-cultural centers should be more seriously considered and their organization studied on a grass-roots level.

14) Surveys bypass feelings and attitudes yet attitudes express the real needs and expectations of people and are the clue to the process of change. It is, therefore, essential to undertake more in-depth and long-term socio-anthropological research in the Ghors to better reach the people and better define the expected impact of the

development projects. Development projects throughout the world have frequently proven to be socially and economically grossly unproductive precisely because they have missed having a positive impact on the targetted groups due to a misunderstanding of how that impact was to be absorbed.

BIBLIOGRAPHY

- American Society of International Law, Legal Questions arising out of the Construction of a Dam at Magarin on the Yarmuk River, ASIL, Working Group, AID, Washington, D.C. July, 1977.
- Awwad, A.W.J. Agricultural Production and Income in the East Ghor Irrigation Project, USAID - Amman, August, 1967.
- Barhoum, M.I. East Jordan Valley Villages versus Social Institutions, Ford Foundation, 1976. (MS)
- Dar el-Handassah - Nedeco, Jordan Valley Project, Agro and Socio-Economic Study, Final Report, Vols. I, III, Beirut, The Hague, April, 1969.
- Ennis, J. and Hazelton, J.E., An Information System for the Jordan Valley Authority, USAID, Washington, D.C. January, 1978.
- Fernea, R. Social Soundness Analysis: the Jordan Valley Farmers' Associations, USAID, Amman, 1977.
- Haddad, M.K. The Agricultural Sector of Jordan, Economic Department, Royal Scientific Society, Amman, 1976.
- Hammam, S. and Christian J.W., Report on the Housing Component of the Jordan Valley Village Development Program: Summary and Conclusion, National Savings and Loan League, USAID, 1978.
- Harman, G.W., Protter, F.J. and Eavis, B.W., Report of the Jordan Valley Marketing Mission, October 1 - November 1977, Tropical Products Institute, Ministry of Overseas Development, London, 1977.

Harris, G.L. Jordan - Its People, Its Society, Its Culture, HRAF Press, New Haven, 1958.

HARZA - Dar el-Handassah, Jordan Valley Irrigation Project, Stage II - Feasibility Study, Vols, I-IV, Chicago, 1978.

Hashemite Kingdom of Jordan, The East Jordan Valley, A Social and Economic Survey, Department of Statistics, Amman, 1961.

, Expected Number of Beneficiary Families from Stage II: Jordan Valley Development Plan 1976 - 1982, JVA-JVFA, Amman, 1978.

, General Results of the Agricultural Census, Department of Statistics, 1975.

, Jordan Valley Authority: Donors Meeting, April, 4-10, Amman, 1978.

, Jordan Valley Development Plan, 1975 - 1982, Jordan Valley Commission, Amman, 1975.

, The Jordan Valley Social Development Plan, Jordan Valley Commission, Amman, June, 1974.

, Law No. 19 of 1974: Law of Farmers' Association in the Jordan Valley, Amman, March, 1974.

, Plan for Rehabilitation and Development of the Jordan Valley, National Planning Council, Amman, June, 1973.

, Progress Report of the Jordan Valley Development, Stage I, Amman, 1978.

, Results of the Agricultural Census in the Ghor, Department of Statistics, 1975.

, Social and Economic Survey of the East Jordan Valley, Department of Statistics, Amman, June, 1973.

, The Temporary Law No. 18 for the Year 1977: The Jordan Valley Development Law, May 16, 1977 (official gazette No. 2700).

Hazelton, J.E. The Impact of the East Ghor Canal Project on Land Consolidation, Distribution and Tenure, Royal Scientific Society, Research Department, Amman, 1974.

, Social Soundness Analysis of the Jordan Valley Farmers' Association Credit Program, USAID/NE Bureau, 1978.

Howard Humphreys and Sons, Water Use Strategy - North Jordan, 4 Vols., London, 1978.

IBRD, Northeast Ghor Irrigation and Rural Development Project - Jordan, EMENA Projects Department Doc. of I.D.A., Washington, D.C. May, 1974.

Ionides, M.G. and Blake, G.S., Report on the Water Resources of Transjordan and their Development, Government of Transjordan, 1939.

Issi, M. B. Socio-Economic Aspects of the Wadi Dhuleil Area of Jordan, Royal Scientific Society, Amman, 1975.

Jensen, J.H. et al, Agricultural Planning and Technical Services for the Jordan Valley, A.I.D., Jordan, 1978.

Keller, J., Water Management Technology: Sprinkler Irrigation (Jordan) Training Program, Utah State University - USAID, February, 1977 (Contact AID/afr-C-1140 V.O.15).

Olson, R.O., Integration of Agricultural Planning and Services in the Jordan Valley, AID/NE/TECH/AD, December, 1977.

PADCO, Development Report for Town Planning in the Jordan Valley - Compilation of 32 Villages Settlement Plans, Washington, D.C. April, 1976.

, Settlement Planning and Housing Recommendations for the East Ghor Valley, Main Report, Appendices I-VII, Washington, D.C. November 1973.

Project Committee Submission: Jordan Cooperative Organization, Middle East Development Division, British Embassy, Amman, October, 1977.

Romig, Wm. D. Yarmouk River Water Situation, AID - Amman, May 22, 1976.

Salt, A. & Kelley, Wm., Manpower Development in the Hashemite Kingdom of Jordan, with Special Reference to the East Jordan Valley, Bureau of Labor Affairs, U.S. Department of Labor, for USAID - Amman and JVC, May 24, 1976.

Savage, J.K., A Report on the Functions and Organizational Aspects of the Jordan Valley Farmers Association, Agricultural Cooperative Development Institute - JVC, Amman, December, 1976.

Sha'rab, H., Agro-Economic Aspects of Tenancy in East Jordan Valley, Royal Scientific Society, Amman, 1975.

Steele, C., Evaluation: Village Development I, USAID, Amman, June, 1978.

Stetieh, A. et al, Population, Employment and Economic Development of Jordan, Jordan/FAO/UNFPA P02 project, University of Jordan, Amman, 1978.

Sutcliffe Claud R., "The East Ghor Canal Project: A Case Study of Refugee Resettlement, 1961 - 1966", in The Middle East Journal, Vol. 27, 4, 1973, pp. 471 - 483.

USAID, Jordan Valley Village Development I: Project Paper, Washington, D.C. March, 1977.