

UNITED STATES GOVERNMENT

Memorandum

TO : Dr. Raymond W. Hooker, DP

DATE: November 15, 1975

FROM : Richard B. Scott, DP

SUBJECT: Amounts of Project Land to have on-farm Drains, and Planning:
The Shamalan

Long range planning demands estimates of land to be developed eventually with on-farm drains. But these estimates must be realistic or planning cannot be realistic. All land in all project areas is not likely to have on-farm drains installed. By using total or near total figures, the job of on-farm drains is monumental. Even with realistic estimates, the numbers of kilometers of needed drains is likely to be well beyond the abilities of USAID to provide and beyond the real desires of HAVA to construct. Further, inflated drain figures relate to methods to be used in construction, given the constraints of time and labor force. Grossly inflated figures for the purpose of planning, discussion and argument is a method of "stacking the deck", as it were.

In this memo, I will consider only one figure presented in the recent November 10, 1975 meeting about farm drains. I suspect that many of the other figures can be similarly analyzed. It was stated that 23,000 hectares in the Shamalan area is for development. Using the most generous or optimistic source I could find, A. R. Baron's, "Helmand Arghandab Valley Project Area Analysis", June 1972, the gross Shamalan area is stated at 259 Km. or 25,875 hectares. Potential irrigable land in the area is totaled at 12,707 hectares with another 4,500 hectares classed as marginal with water rights and farmed. I have difficulty with the classification of "potential" which means, to me, to include not yet developed but developable, and then adding "marginal but farmed" to it. In any case, there was an estimated 17,200 hectares that may be expected to be maintained in irrigation "over the long run".

A more technical presentation is made by the Bureau of Reclamation in Volume 3 of the Shamalan Project Feasibility Study pp. 39-43. The gross Shamalan area was 25,874.5 hectares. There were 529.6 hectares in drain and canal right-of-ways, 4497.2 hectares of Class 5 land presently being irrigated, and 8140.7 of class 6 land not being irrigated, this includes some areas of hills, sand dunes, sand and gravel flats, and land under water. The Bureau of Reclamation defines class 6 land as generally nonarable lands which do not meet the minimum arable class requirements. The specifications for this land classification, "are based on a correlation of the physical factors of soil topography and drainage with land development costs, production costs and anticipated crop production under irrigation farming, assuming that a full water supply is available and there are improved agricultural practices." They



finally total Shamalan arable land at 13,236.4 hectares or 12,706.9 hectares of irrigable land. In either case it approaches half the figure presented as the area, for planning purposes, to be developed with on-farm drains.

There are several factors that may be considered in the real world of Shamalan that will reduce the size of area of potential development with on-farm drains even further.

Most of the Shamalan is settled by indigenous Pashtun tribal groups that have farmed this flood plain valley longer than Helmand had been identified as a development area. The land tenure system is traditional, highly fragmented and an examination of cadastral maps will show the jig-saw puzzle arrangement of the multitude of small plots. In many areas the borders of the fields are lined with trees, and land use also includes a mixture of vine yards and orchards. Past experience indicates an inability of HAVA to generate enough interest among these long-term settled farmers to support a land development scheme. The Shamalan Project folded in part because of this lack of interest. In some cases there was active dis-interest expressed by the farmers. The sociopolitical organization in the area was effective enough to resist government pressures. Economically the Shamalan is one of the most productive areas of the Helmand valley.

This is not to suggest that there are not areas in the Shamalan that would be amenable to the development of on-farm drains but this would not be the total 23,000 hectares nor the 13,236.4 hectares of arable land. The amount will not likely equal half the arable land. Some areas in South, Central and Western Shamalan are badly drained and have salt problems. Some of the settlers within the past two years have been settled on land the BuRec classed as class 6. Large tracts of land in the Zarist area, and just north, are in the process of receiving irrigation water, of being settled or planned for settlement. Some of this land is presently poorly drained and/or in the past classed as Class 6 land. The social, political and economic barriers noted above do not apply. In some cases, on-farm drains should probably be considered a prerequisite to settlement.

In summary, at the pre-planning stages careful consideration must go into the estimates of the amounts of land to be developed with on-farm drains. To work with gross figures is meaningless and misleading. It could result in tentative policy decisions which, through the bureaucratic process, result in an attempt to implement them at some later date. In particular I refer to the methods to be used in digging the on-farm drains, man vs. machine.

cc: Mr. Johnson, DP
Mr. Barbour, PARD

Mr. Stanley, CDE