

AREA DEVELOPMENT PROJECTS
- EVALUATIVE CRITERIA -
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Annex 1 - Scope of Work

FOREWORD

This work order has been performed under a Design and Analysis Evaluation IQC (Louis Berger International, Inc. and Checchi, Inc.) with the Bureau for Program and Policy Coordination, Agency for International Development (U.S.A.)

It was commissioned by Mr. David Steinberg, of the Studies Division, Office of Evaluation, PPC as a part of preparations for a worldwide impact evaluation of past AID-assisted area development projects.

The Scope of Work is attached, Annex A. The work was done in the April 9, 1981 - April 17, 1981 interval.

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The views presented in the following pages are the sole responsibility of the author.

I. Introduction

1. This paper deals with three projects:

- The Helmand/Arghandab Valley in Afghanistan,
- Central Tunisia Rural Development in Tunisia,
- Lam Nam Oon Integrated Rural Development in Thailand.

2. These projects are each viewed from a perspective experienced by the author. They all concern activities supported by the United States Agency for International Development. Two involve irrigation as a focus and one rain-fed agriculture.

3. The author worked with each of the projects in a different role. Evaluation and policy review comprised the assignment for the Helmand/Arghandab Valley project. Design featured the assignment for Central Tunisia Rural Development. Implementation is the current assignment of the author in Lam Nam Oon.

4. All three of these projects meet a broad definition of area development. There are specific geographic areas stretching across several administrative boundaries and ecological zones. There are multiple inputs coming from various agencies and disciplines. Special forms of organization and management feature each case.

5. The paper does not draw any inferences about commonalities as between the countries and projects. Diversity best characterizes the three. They have taken place in two independent nations and one former colony. One of the independent countries, Afghanistan, is among those in the world with the lowest Gross National Product. The ex-colony, Tunisia, boasts one of the better income situations for its populace. The other independent country, Thailand, has experienced a steady economic growth until recent years.

6. A differing international political relationship as between the country and the United States of America also characterizes these projects. Afghanistan can be viewed as the most distant in terms of relationship to American power and interests. Tunisia is much closer as an ally with important port facilities in the Mediterranean and a moderate role in the Islamic world. Thailand, is the closest because of its strategic location in Southeast Asia and a strong mutual identification of interests developed during the Vietnam war.

7. This paper does not present an in-depth, fully documented, and judgemental treatment of all three projects. Instead, a critical set of policy issues as seen by the author are presented. The point of reference in each case concerns purposes and organization/coordination. Certain inferences are then drawn which may be useful in formulating evaluative criteria to judge other area development projects.

II. The Helmand-Arghandab Valley - Afghanistan

A. Background

1. The watershed served by the Helmand and Arghandab rivers is the largest in Afghanistan. It comprises 361,305 square miles and represents about 40% of all water run-off capacity in the country. It contains a series of geological formations including flat, riverine, flood plains, gently sloped and elevated terraces, and desert. The soils are deeply alluvial in some places and thin as well as alkaline in many others. Problems of drainage and salinization have always accompanied irrigation efforts in the region.

2. Run-of-the-river irrigation has flourished in some small portions of these two river valleys for at least 2,000 years. The valleys, located about 250 miles south and west of Kabul stretch more than 300 miles to the border with Iran.

3. There are ten potentially irrigable areas within the valley. Starting closest to the headwaters of the Helmand and Arghandab and running south they include: the North Arghandab, 40,235 acres; the Central Arghandab, 80,475 acres; the Seraj area, 63,000 acres; Kajakai-Shamlan, 45,500 acres; the Nadi-i-Ali area, 18,500 acres; the Marja area 27,190 acres; the Shamlan, 42,325 acres; Darweshan, 50,733 acres; the Garmsel area, 43,475 acres; and Chakhansur, 65,000 acres.

4. The Helmand-Arghandab region has been one of great developmental interest to successive governments in Afghanistan. Sometimes it has absorbed as much as 55% of total annual developmental budgets. Altogether, through the years of development, about \$150,000,000 in Afghan foreign exchange as well as borrowed resources have been expended.

5. Developmental work on some portions of the region began as early as 1930 when the Germans helped to design and install the Seraj canal. This was followed by the Japanese in 1936 who began work on the Deh Adam Khan canal, which preceded the Bogra canal. After World War II and starting in 1946, the Royal Government of Afghanistan financed further development from its own wartime savings. It employed the American engineering firm of Morrison-Knudson; Afghanistan (MFK) during the 1946-49 period. That firm designed and constructed a number of diversion dams and enlarged several canals such as the Seraj and Bogra.

6. Beginning in 1949-50, a new phase of development began when the Afghanistan government started borrowing funds abroad for further development effort in the Helmand-Arghandab. This initially involved the Ex-Im Bank; but, ultimately, sources such as the United States of America, the Asian Development Bank, and the World Bank were tapped.

The largest volume of external inputs as measured by value of technical assistance came consistently from the United States until 1973. Following a lapse of about eighteen months at that time, a more modest program of U.S. assistance to the Helmand-Arghandab continued until the invasion of the country by the Soviet Union in December 1979.

B. Review and Evaluation

7. The twenty-year period of large-scale American involvement (1952-72) was accompanied by a number of reviews and evaluations. These culminated, in 1973, in a review by the author of this paper. That review, written for the Near East and South Asia Bureau of the Agency for International Development, contributed to a AID/Washington decision to phase out and suspend further assistance to the Helmand-Arghandab pending adoption of certain policy changes and clarifications by the Government of Afghanistan. Those are outlined elsewhere below. *Evaluation was not reason for phase-out*

8. This decision was later modified in 1975 in such a way that a modest program of assistance was continued in the Helmand-Arghandab until the Soviet invasion. *political*

C. Policy Issues

9. At the time of the 1973 review there were several basic policy issues which had evolved over the years. These deeply divided the Afghan government, the donor organization - AID, and the two governments. Since this paper is not a history, there is no point in tracing the evolution and effects of these varying differences; but it is essential to know their general dimensions when considering the implications for area development.

10. Probably the greatest single and enduring issue thought-out the whole period concerns the unrealistic policy-planning of the Government of Afghanistan for the Helmand-Arghandab valleys. Concisely stated, this was manifest in very broad developmental goals accompanied by an emphasis upon insufficiently researched capital-intensive investments and an undefined resource allocation schedule over a time span sufficient to insure that sequenced development took place.

11. The same observation, in general, applies to the donor agencies, contractors, and expatriate technical advisory staff involved in the Helmand-Arghandab. This is first notable in 1949 when, after several years of experience, MKA favored an integrated valley development based upon comprehensive planning for infrastructure, land development, and institutional growth. The Government of Afghanistan over-ruled this approach and found foreign assistance support through the Ex-Im Bank for individual infrastructure development unaccompanied by the critically needed soil and groundwater surveys for the valleys in their entirety.

problems of
funding
non-productive
studies.

12. The foregoing pattern was repeated over the years and an important factor influencing this appears to have been inadequate technical advice both within the Afghan government and among the donor agencies. This inadequacy took many forms; but its effect was to complicate and confuse the fixing of priorities concerning what should be developed, how, and in sequence. There were, for example, those who favored continued expanded infrastructural growth through emphasis upon developing additional areas, installing on-farm water delivery systems, and solving drainage problems. There were others looking for attention to social, institutional, and management problems with emphasis upon smaller or area-intensive directly productive expenditures. In the event, both were tried in an unsatisfactory and limited manner with the issue, ultimately, strongly affecting the 1973 review and subsequent AID/Washington phase-out decision.

politics

13. A second issue which grew in importance during the passage of years concerned the extent to which the 2,000,000-plus population of the Helmand-Arghandab areas should be subsidized through central government investments. At the outset, and until about 1965, this was not a major problem within the Government of Afghanistan. However, at about that time the Jirga (Parliament) began to represent other regional views and interests. This development coupled to a difficult balance of payments problem and inadequate domestic revenues resulted in a 'capping' of annual budgets for the different regional programs of Afghanistan. At the same time, little was done to raise taxes in the benefitted regions and virtually nothing was done to establish realistic systems of charges for water delivery and operations and Maintenance services in irrigated areas. This latter situation also affected the 1973 review and the subsequent AID/Washington phase-out decision.

politics

14. A third issue concerned data-gathering, analysis, and a resultant correction of perspectives on potentials and problems. All studies commissioned during the years tended to serve specific interests and/or were directed at judgemental questions concerning whether or how to continue further development. Technical, social, economic base lines of sound validity were never established nor

problem of
personnel
mix.

Purpose of Shamslan Project.
Bw. Rec. vs. HAVA

was Afghan capability to consistently pursue such work ever developed. Probably no other issue was so divisive as between the Afghan and American governments concerning the Helmand-Arghandab. The former did not perceive the need for such work and the latter dissipated its energies in achieving short-term or one-shot studies of one kind or another. This resulted, as late as 1972, in Internal Rate of Return Studies (Lloyd Baron) which demonstrated a zero rate for the next ten years on proposed new investments or sociological studies in that same year (Richard Scott) demonstrating a need for completely re-adapting the on-farm water development plans for areas like the Shamlan. Neither these or other studies adequately conveyed the actual progress that had taken place. This included reliable water supplies for three-fifths or about 360,000 acres of area, high-yielding wheat varieties production on 60,000 acres, double cropping on about 40,000 acres, and a slow institutional growth. By that year, also, approximately 34% of the operational budget for area was coming from regional taxes; and through this could not be regarded as adequate, it did reflect the going productivity and economic well-being of the Helmand-Arghandab.

Dwors
F of Survey

15. Institutional authority and efficiency comprise the fourth major issue. The entities involved were the Helman-Arghandab Valley Authority (HAVA) first organized in 1952, the Helmand Construction Unit (HACU) first established in 1959, and a number of Divisions operated by HAVA. Set up as an autonomous agency somewhat on the model of the Tennessee Valley Authority, HAVA covered the four provinces of Kandehar, Girishk, Farah, and Herat but it was never adequately linked in to the provincial governorates including authorities, tax-raising powers, enforcement of regulations, etc. Similarly, at the Kabul level, though reporting to the Prime Minister the HAVA often ran afoul of Ministries like Finance, Planning, Agriculture, etc. Various reorganizations and redefinitions of authority over time never solved these inadequacies. HACU was developed as a construction unit to replace MKA in the Helmand-Arghandab and carry out all necessary heavy-duty construction and repair work. It experienced a number of equipment shortages and management problems; but, gradually, through the years HACU became a useful organization. However, like all state-run enterprises it was never highly effective and in the absence of a flourishing private Afghan construction industry HACU monopolized all such activities in the Helmand-Arghandab. Finally, some of the Divisions created and operated by HAVA became effective in some degree. Most notable was the Agriculture Division with more than 75 trained extension agents in place and the Animal Husbandry Division which operated the only large Brown Swiss herd of dairy cattle in the area. Yet, these very successes tended to be controversial since the Divisions operated their own money-earning enterprises and their personnel obtained a portion of the income. As a result, less attention was devoted to working with farmers in the area than the size of the staff might suggest. Though the overall

No

because it was separate

No

Central Gov.

management training provided to HAVA, HACU and the Divisions was high by Afghan standards it did not result in a commensurate increase in efficiency. Again, this institutional set-up and its varied weaknesses were the objects of adverse review in 1973 and contributed to the AID/Washington phase-out decision.

D. Evaluation of Purposes and Co-ordination/Cooperation

17. The foregoing sketches the principal issues. Two matters that were critical to the development difficulties experience concerned imprecise and undoable purposes as well as inadequate instructions and processes for coordination/cooperation. Mention has already been made of the broad developmental goals favored by the Royal Afghan Government as well as the more narrow and sometimes conflicting purpose intentions of donors. Similarly, the Helmand-Arghandab Valley Authority has been described as the principal implementing body. Yet a careful appraisal of these matters indicates that both might have been addressed in ways that would have resulted in more productive area development gains in a shorter time and at probably less cost. *examples* ?

18. In the first place, it may be asserted as a cardinal rule in area development activities that the economic and technical criteria for a doable set of purposes must be thoroughly researched and clearly stated at the outset. This was never done by anybody in the Helmand-Arghandab case; and it is probable that the Afghan and U.S. modes of negotiating, designing, organizing, and funding project interventions contributed strongly to this situation.

19. Secondly, phased or segmented sets of purposes can comprise a useful interim condition in area development. This is particularly true in cases like the Helmand-Arghandab where the basic data did not exist and the appropriate technological/management interventions were not known to the expatriate advisory staff. Such an approach was never adopted in the Helmand-Arghandab for a number of reasons that were largely technical in nature. That is, at least during the first twenty years from 1946 it was assumed by the technical design and implementation advisory staffs that methods of irrigation, organization, and operation successfully applied in western conditions were equally applicable in Afghanistan. Since those were not applied on a phased or test basis in the west it was assumed that the same could be done in the Helmand-Arghandab. *Not exactly*

20. A third point concerns the measureability of purposes. There is a need to so define each purpose so that performance towards attaining that purpose can be measured with ease. Area development projects are often located in complex situations. A number of factors can constrain or contribute to attainment of purposes; but it is vital to know at all times what these may be and what influence they are exercising. Simplicity and directness of purpose simplifies measurement; but in the Helmand-Arghandab this dictum was never followed. *Drainage Project*

21. Fourthly, although HAVA and its related organizations had certain difficulties in management and authority over time a more critical situation arose as a result of insufficient coordination and cooperation within the central government and with the principal donor. No autonomous developmental organization can exist in any country and perform effectively without the effective support of various coordinating and cooperation mechanisms among Ministries and at various levels of government. The nature of these mechanisms will differ from one bureaucracy and one culture to another. They may even alter, in some countries, from one political administration to another. In some instances, it may be necessary for donors to insist that such mechanisms be developed and constantly reviewed from the standpoint of effectiveness. This kind of politico-administrative analysis was never done with reference to the Helmand-Arghandab and, as a consequence, a disproportionate share of attention was lavished upon the organization, management, and training of the HAVA establishment.

But may not change anything.

III. Central Tunisia Rural Development - Tunisia

A. Background

1. The Government of Tunisia started developmental work in the Central Tunisia region as a follow-on to efforts first initiated by French in the 1930's. These largely comprised attention to infrastructure such as roads, the development of a network of schools, and health clinics, and the creation and improvement of several small irrigated perimeters.

2. The dimensions of the region has been defined politically in terms of three governorates or provinces and fourteen delegations or districts. However, ecological and rainfall definitions (530mm to 200 mm.) expand the area into portions of five governorates and twenty delegations or districts.

3. The entire area is a generally hilly terrain with plateaus cut by broad valleys with a few rivers. Soil resources are maldistributed. Some valleys have high quality, well drained, loam-silt soils while others range from poor sandy to clay types. Similar differences exist in the plateau areas. Most of the sloping areas are characterized best as rocky and depleted. Salinity is a major problem in some of the plains areas. The prevalence of exposed bedrock, plus large areas of heavy clay, make absorption of rainfall poor and consequently high runoff occurs after rainstorms.

4. Cropping patterns in the region are largely dryland farming in character; but along the banks of the rivers where shallow well irrigation is possible and in a few small irrigated perimeters there are crops suited to a year-round production cycle. Dryland farmers follow a traditional pattern: grain (wheat/barley) fallow rotation, and grazing sheep or goats on the fallow.

5. The Government of Tunisia has never attached a high developmental priority to the region. This is due to a realistic assessment of production potentials vis-a-vis other agricultural areas such as Northern Tunisia where investments can have a much higher payoff. Similarly, the government has sought to build up services and facilities along the coasts where various foreign exchange earning operations such as tourism, high-yielding fruit and vegetable production, etc. have been established.

6. Starting in 1965, the government began to take a more serious interest in Central Tunisia largely in terms of developing means to 'hold' the people in the area rather than encouraging them to move to the larger coastal cities. This interest took the form of stepped up 'line' ministry attention to the area as well as focusing the government's 'Rural Development Program' through the governorates on special needs. It also included efforts to extend operations of special authorities such as the Medjerda Valley Development Authority into public irrigated perimeters within the region. Encouragement of donor assistance to the area through IBRD, AID, the United Nations World Food Program (PAM), etc. was particularly fostered by the Ministry of Plan.

B. Design

7. Starting in 1977, the Agency for International Development/Tunis began to emphasize to the Government of Tunisia that it wished to focus future U.S. assistance on meeting the needs of the rural poor. The two governments reached tentative agreement on an integrated rural development program in Central Tunisia as the best way to focus U.S. assistance to Tunisia on meeting the basic needs of the rural poor.

8. There followed a period of study and strategy development in which the agricultural problems and opportunities of the area were examined, small industry development opportunities assessed, and potable water, as well as health/nutrition needs of the area investigated. These efforts were accompanied by a decision to concentrate only on eight delegations in Central Tunisia. This area covered portions of three governorates and contained a population of approximately 200,000. Much of the assessment and study work was simplified, in some degree, by the fact that the Government of Tunisia in collaboration with other agencies such as the United Nations Development Program, FAO, the International Labor Organization, etc. had already assembled much basic data about conditions in some or all portions of the selected area. Nonetheless, certain policy issues related to insufficiently assessed or non-existent datasets project design. These are described elsewhere below.

9. A basic strategy for development of the area was formulated. It placed emphasis upon: maintaining a careful balance between investments in employment generating/income producing activities and investment in social infrastructure; according the highest priority to the agricultural sector, but also paying attention to means of increasing non-agricultural income and employment; placing emphasis upon the use of water for irrigation and improving the efficiency of water use; according an equally high priority to initiating pilot interventions aimed at improving the productivity of dryland farming and livestock production; and, within the general area of public goods and services, assigning a high priority to potable water inputs.

10. Three major projects were then designed in order to assist in implementing this strategy. These comprised: Central Tunisia Area Development; Small-holder Irrigation; and Dryland Farming Systems Research. The author of this paper assisted in the formulation of the strategy as well as the design of the projects.

C. Policy Issues

11. During the strategy formulation period and as projects were designed it early became evident that the Government of Tunisia favored large-scale infrastructure development in the area including irrigation, roads, and other capital-intensive investments as the appropriate interventions. Though personnel within the Ministry of Planning and other Ministries participated in the formulation of the strategy mentioned above and it was formally accepted by the Government of Tunisia the specific size and organizational characteristics of each project had different meanings entirely from those held by UAID policy-makers and designers.

12. The foregoing attitude, among Tunisian officials, originated from their view that they had initiated the development of Central Tunisia long before the Americans became involved and they would be still carrying forward with development in that region long after the Americans had left. In this particular case, there was much justification for such an attitude since the Americans were considering ending all economic and technical assistance to Tunisia by 1983 or 1984. This was either known or widely suspected among senior Tunisian officials; and it did not predispose them to lightly accept the gradualist and prioritized strategy suggested by the Americans.

13. Understanding and acceptance of the strategy was equally diffuse and contradictory within USAID/Tunis and USAID/Washington policy-making and technical ranks. Here, considerations of turf protection and aggrandizement, lack of policy emphasis upon the processes of rural development and inadequate staff training in the inter-sectoral relationships and communication need of rural development were largely at fault. In other words, neither USAID/Tunis nor USAID/Washington - even with the best will in the world is equipped with the trained personnel and the disciplinary systems adequate to develop and sustain the design of an area development strategy and the accompanying projects. The result was the issuance of a concisely stated strategy; but one that was ill-understood in many circles and not even familiar to some.

14. Given the foregoing situation, the internal U.S. assistance strategy for Central Tunisia was probably much too complex and ambitious in content. That strategy was to: stimulate the Government of Tunisia into undertaking a "minimum critical effort"; design and test cost-effective delivery systems for public goods and services which could be replicated elsewhere in Central Tunisia, address the problems of small dryland farmers; encourage local participation in decision-making; encourage the participation of other donors; and assist in achieving better integration of rural development interventions.

15. The organizational system for development of Central Tunisia had preoccupied USAID/Tunis even prior to the decision of 1977 to foster an integrated rural development program for this area. Experience had been earned earlier about some dimensions of the problem through designing and implementing the Siliana project for a portion of the area. This was operated through the Tunisian Rural Development Program in which the governorate acted as the major implementer. It was found that this approach did not allow adequate prioritization of emphasis on particular developmental problems nor did it facilitate adequate planning, innovation, and coordination of inputs. This posed a serious policy problem both for the Government of Tunisia and AID since it appeared that a meaningful integrated area development program required some special policy-making and coordination mechanism.

16. At that juncture, rather than conducting a careful study of the bureaucratic intricacies of a new mechanism carefully tailored to such a highly centralized government and the demands of integrated area development the Government of Tunisia revived and adopted a previous proposal to create a Central Tunisia Development Authority (CTDA). This suggestion had first been developed under a Tunisian/FAO study in 1974. That study had been the prelude to seeking a major IBRD loan for extensive infrastructure development in Central Tunisia. The suggested Authority was aimed at being an implementer of various projects connected with the loan. The loan was never consummated as originally envisaged. Nonetheless, the Government of Tunisia decided in 1978 that both its own developmental efforts in Central Tunisia and those supported by foreign donors required an Authority of the kind proposed in the study. Accordingly, the National Assembly approved the creation of the Authority. At that juncture, AID faced the issue of whether to accept the new Authority as the policy-making and management instrument for integrated area development in Central Tunisia. After a short study it decided in the affirmative, even though the Authority was only responsible for agriculture and irrigation development in the area. Subsequently, one of the first AID-supported projects was designed to strengthen the regional planning, design, implementation, and evaluation capabilities of the Authority.

17. The decision to go with the CTDA and both strengthen it as well as channel other interventions through that Authority presented many risks. On the one hand, it was argued that it would be best for AID to assist the Authority to build up and staff its operations before also engaging in major projects operated under the auspices of that Authority. On the other hand, it was argued with equal validity that AID's influence on the process of area development planning and Central Tunisia Rural Development resource allocation could only be exercised as a function of its willingness to support major interventions. Probably the key consideration tipping AID towards the policy adopted was twofold in nature. One concerned an alteration in the scope of the Authority so that it was not only to handle the regular investment budgets for agriculture and irrigation in the area but also projects funded under the Government's Rural Development Program (PDR). The other concerned agreement by the Government of Tunisia to create an Area Development Experimental Fund, with the money provided largely by AID. This Fund, it was hoped, would permit the Authority to play a truly innovative role by helping design, fund and implement (in cooperation with other agencies and possibly the private sector) experimental innovations which would test new modes of interagency cooperation in the delivery of public services. An AID decision to also fund all Central Tunisia Rural Development interventions (for example, in the field of health and nutrition) through the Authority was directed at trying to strengthen the position of the Authority in developing working relationships with non-agricultural agencies operating in Central Tunisia.

manipulation or
empire building!

18. Another important policy issue affecting project design was a decision to keep long-term technical assistance staff to an absolute minimum and rely heavily upon short-term advisory help. This was accompanied by a policy in which emphasis was placed upon not building new institutional capabilities within the area when such capabilities already existed elsewhere and merely needed extending into Central Tunisia. The case in point was the Le Kef Cereals Institute in Northern Tunisia, where emphasis upon applied research in dryland cereals grains was sought for Central Tunisia. Similarly, other AID-assisted projects were to be tied in to Central Tunisia in supporting roles. These included: Livestock Feed Production, long-term academic training provided under a Agricultural Technology Transfer Project, and a Rural Health project. Finally, it was decided that use would be made of existing U.S. resources to provide technical assistance to Central Tunisia. One such was the Land Grant University system in the United States. The other concerned a centrally funded (AID/Washington) contract for regional development planning with the University of Wisconsin.

mistake

19. Mention has already been made of the considerable amount of data available on Central Tunisia during the exploratory, strategy development, and design stages. Yet much of this data had large gaps concerning such matters as; farm budgets, year-round patterns of family income in various ecological sub-zones, family sizes, seasonal migration and earnings flows by families, etc. Many of these gaps forced the adoption of very broad generalizations when designing projects and computing estimated Internal Rates of Return. Because of this, much emphasis was placed upon building up the capacity of the new Central Tunisia Development Authority to identify data needs and contract out to Tunisian academic and private resources for on-going research and evaluative activities. This raised a policy issue concerning whether it might be premature to expect rapid development of such a capability within the CTDA and, therefore, other capabilities should also be developed simultaneously with universities, government research organizations, etc. The decision was to go with CTDA.

D. Evaluation of Purposes and Co-ordination/Cooperation

20. The issues sketched above were complex and they affected the content of strategy and project design. What has happened since activation of the various projects in 1979 is not within the purview of this paper. Again, though, just as in the case of the Helmand-Arghandab Valley described earlier two matters constantly beset the designers of the Central Tunisia Rural Development projects. These concerned purposes and mechanisms for co-ordination/cooperation.

21. As has been indicated, a strategy paper was developed for Central Tunisia. That part of it concerning developments desired within the area evolved out of exchanges of ideas, draft papers, and joint reviews as between the USAID Mission at Tunis and personnel within the Government of Tunisia. This process required several months and it was accomplished through the work of a Government of Tunisia and United States Joint Committee for Central Tunisia Rural Development. At various intervals, very senior Tunisian and American officials were involved in the process. Special study teams and rural development specialists were assigned from AID/Washington (of which this author was one) and the Government of Tunisia. It can, therefore, be noted that there was no lack of effort to evolve a joint strategy. In fact, in some quarters of AID the heavy investment of staff time represented by this effort was seriously questioned. Nevertheless, the investment was made.

22. Yet, as the work of developing a strategy went forward, it became evident that at least five different factors were interfering with the process among the Tunisians. One has already been mentioned and that was the widespread belief among Tunisian policy-makers and technocrats that major infrastructure development was the prime need in Central Tunisia. Another concerned a lack of focus within the top levels of the Tunisian government about who was responsible for inter-disciplinary and inter-functional rural or area development activities in the country. Essentially, this meant that coordination/cooperation on this whole subject was very weak within Tunisian government circles. A third factor, related to this, was a highly centralized Ministry of Agriculture which placed much emphasis upon irrigation as a prime means of development. Fourth, the Ministry of Interior was responsible for Rural Development program operated through the Governorates. Finally, the Ministry of Planning appeared not well staffed or adequately organized and empowered to develop and guide rural development policies. It may be noted, here, that there was nothing unusual about this situation. All governments are comprised of contending centers of power and competence. It may be expected, therefore, that purposes are always understood in different ways. What is important has to do with constant reiteration of a single theme or definition for each purpose as well as the design of easily measured indicators of progress towards achievement of purpose. This was not done by the Joint Committee during the strategy development and project design stages.

23. A powerfully contributory factor affecting the foregoing comprised shifting opinions concerning defined purposes and misunderstandings about their meanings among AID/Tunis and AID/Washington personnel. The details of this are not pertinent here; but the lesson during strategy development and design stages was quite clear. That is, area development programs demand an enormous and steady series of efforts directed at fostering communication and understanding among policy-makers, technocrats, and technicians. It appeared to the author, in this case, that normal systems for dealing with this matter among governments are not adequate and the damaging consequences flowing from this situation are not recognized as a critical issue. Yet, the matter appears to be so crucial that if not addressed adequately then avoidance of all but the most carefully phased and incremental area development programming is strongly indicated.

24. Project design work did not encompass attention to the coordination/cooperation issue except through strengthening the Authority. It is probable that given the limited resources that AID wished to bring to bear on Central Tunisia it was correct to concentrate attention on the Central Tunisia Development Authority. However, a more thorough study of the Tunisian bureaucracy and the

position of an Authority within it might have resulted in efforts to design rewarding linkages for several Ministries so as to insure an improved degree of receptivity to coordination/cooperation. This was not done at the time of strategy development or during the formulation of the first three projects; and it was evident, at the time, that deferral of attention to this matter would cause problems for the Authority as well as the project.

25. Matters concerning the definition of purposes and their constant monitoring as well as communication about them require extensive advance and continuing study. Precise blueprints, as it were can never be fully explicated at the outset of an area development project; but they should be drawn as sharply as possible following extensive investigation. They should be cast in a flexible frame; but if precision is not attempted at the outset it becomes impossible to mount and sustain the necessary communication efforts within and among bureaucracies and Technicians communities. As noted earlier, strategy and project design for Central Tunisia benefitted from earlier studies as well as special efforts exerted at the time. These helped to chart some of the physical dimensions of problems addressed; but much of the economic, social, technological, and management aspects remained unknown at the time of final formulation of a strategy and project designs. The same observation applies to matters concerning coordination/cooperation.

26. Finally, the state of technical knowledge as it pertains to the principle problems of an area exercises a very great effect upon both defining purposes and providing for appropriate coordination/cooperation mechanisms. Central Tunisia is, essentially, an area where rainfed agriculture at about the 300 mm. annual rainfall level is the norm. Technical knowledge about appropriate crops, cropping practices, soils treatment, etc. for such conditions is at a comparatively low level among expatriate and Tunisian specialists. Therefore, the purposes had to be shaped in such a way that they treated the area development as an immense applied research laboratory. The resulting inadequacies in project design suggest that perhaps area development should not be undertaken where technical knowledge is so deficient.

IV. Lam Nam Oon Integrated Rural Development - Thailand

A. Background

1. The Government of Thailand, assisted by a loan from AID, began development of an irrigation project in this 30,000 hectare area prior to 1970. The site is located in the Northeastern region of the country where, from a climatological point of view, rainfall is less heavy and far more erratic than in Central and Northern Thailand.

Virtually all agriculture in this region is rainfed; but there are some river sites where given adequate infrastructure development irrigated agriculture is feasible. Lam Nam Oon is one such site located in the province of Sakorn Nakon.

2. Economic development of the Northeast has never been a high priority matter in the planning of the Thai government. Other regions have much greater promise for return on investments. Nevertheless, largely for political reasons increasing attention has been paid to the Northeast since about 1960 and the development at Lam Nam Oon is one example of that increased interest.

3. A very large percentage of the costs for development of Lam Nam Oon has been assumed by the Thai Government from the outset. An initial American loan covered the costs of heavy-duty earth-moving machinery and technical advice by Engineering Consultants, Inc.. This period, involving design and construction catchments, a dam, and major main and secondary canals stretched from about 1966 to 1975. During that time, all major systems were installed with the exception of some portions of the cement-lined secondary canals and four electric pumping stations. Virtually all of this latter unfinished work was completed by the autumn of 1980.

4. Like other irrigation projects in the Northeast, Lam Nam Oon is a system located among subsistence farmers who have been cultivating their one-season (wet) crops for thirty or more years. Ethnically, the farmers are Lao-Thai and they are not accustomed to irrigated agriculture. Their holdings are relatively small (2 to 3 hectare each) and they do not have full legal title to the land, although under the Thai system their existing kinds of title can be inherited and transferred. These farmers derive annual incomes which are below the national poverty line. Somewhere between one-fourth and one-half of such incomes are earned by other means than crop production. Basically, the families have few resources, there are limited credit facilities, and the marketing as well as storage systems are adjusted to a subsistence style of agriculture.

5. A second phase in the development of Lam Nam Oon began in 1976 when project design work was initiated for a second U.S. loan. This, again, was modest in size. It was aimed at providing some equipment essential to Operations and Maintenance work on the installed system and technical assistance to design and test on-farm water delivery systems as well as establish an integrated mode for planning and delivering inputs to the Lam Nam Oon area by seven different Departments of government.

6. Preparations for this loan, as well as organization of the Thai participants and selection of a expatriate technical advisory group (Louis Berger International, Inc.) was completed in early 1979.

B. Implementation

7. Even as the details of the loan were nearing finalization in the latter part of 1978, the Thai Government began to organize arrangements for implementation. The project falls under the Ministry of Agriculture and Cooperatives. Since it is, essentially, an irrigation project the directly responsible agency was the Royal Irrigation Department. This Department, as part of the Ministry of Agriculture and Cooperatives, undertook to handle all the management aspects of an integrated project within the context of unaltered Bureau of the Budget, Ministry of Finance, Civil Service Commission, and participating Departmental procedures. The other Departments included: Agriculture, Agricultural Extension, Fisheries, Agricultural Economics within the Ministry of Agriculture and Cooperatives. Two other Departments were in separate Ministries: Non-Formal Education, Ministry of Education; and Community Development, Ministry of Interior.

8. A national committee was established and a Lam Nam Oon Committee comprised of team leaders for each Department began operations at the site early in 1979. The latter were to be planned in consultation with the expatriate technical advisory assistance group and a matching fund system was to be used so that portions of the loan (in Baht) would be released by AID against agreed plans for each Department. Unfortunately, for reasons not all relevant to the project, the technical advisory group did not arrive on site in strength until the beginning of 1980. Meanwhile, plans and operations went forward in any case.

9. The author of this paper is the Team Leader of the expatriate technical assistance contractor (Louis Berger International, Inc.) at Lam Nam Oon. What has transpired at the project is reported in his perspective only, under Policy Issues related to area development below.

C. Policy Issues

10. While it has been argued in some quarters that this is an irrigation project with some integrated inputs and therefore not an area development project, it has become increasingly evident that the physical water space served by the irrigation system deals with a number of differing ecological zones and several politico/administrative sub-divisions. The total area served by water,

potentially, is about 15 miles long by five miles wide. It contains over 10,000 families and sixty villages. The one unifying characteristic of the entire area is the installed system of main and secondary irrigation canals. Another characteristics, comprising organization and management, is that the Thai government is trying to deal with Lam Nam Oon as an area through emphasizing the rhetoric if not the practice of integrating planned inputs related both to stimulating increased agricultural productivity and improving services to the populace.

11. The project is not planned as an area development activity. Instead, it contains a mixture of physical infrastructure development targets, complex tests of on-farm water systems and accompanying management methodologies, increases in family income, and various services expansion. This creates a difficult situation for participating agencies because although they may reach some discernable targets during operations, they cannot mount the necessary long-term staffing and special budgetary funding essential to any successful area development emphasis. The probability is, therefore, that when current loan funding ends the various Departments will treat Lam Nam Oon as just one more area in their province-wide functional operations, i.e. Agricultural Extension, Non-Formal Education, etc.

12. Related to the foregoing is the point that there is no program budgeting for this project. Some Departments encourage the initial annual budget planning to be done by the responsible Team Leader at the site. Others either try to do the planning at Bangkok or limit the Team Leaders to functional targets common to national programs. Once they have received the annual budgets, however developed, Departments then follow varying ways of obtaining the funds. Some shift monies around in their central budgets in order to cover the costs others develop specific line items and seek approval by the Bureau of the Budget. Over time none of these methods can be satisfactory in establishing the foundations for area development activities. What is required in such circumstances is program budgeting or a system of unified planning against area-specific targets fixed by Team Leaders.

13. Similarly, while originally the Thai government planned to staff this project with specially assigned and appropriately qualified management and technical personnel it has not been able to do this- with a few exceptions. The initial intent was to assign people on a full-time basis and locate them at the site as a joint planning and operations team. This has never been accomplished and it appears that, given the general staffing constraints on the Thai government, the initial policy decision on this subject was incorrect.

14. While, as mentioned earlier, much data has been developed about Lam Nam Oon the same kinds of gaps in that data exist as in the case of Central Tunisia Integrated Rural Development. The most crucial of these gaps, in both cases, concern economic and social facts of family life, attitudes, employment, etc. They are not the kinds of gaps which can be filled - (as has been tried in both Central Tunisia and Lam Nam Oon) - by the application of survey techniques. Instead, policies are required that would support intensive observation of a few families over a period of some time. Only through such means can a reliable basis for area development be established.

15. Unlike the situation in Central Tunisia concerning lack of specialist knowledge on the appropriate content of dryland farming, much is known in Thailand about some crops that will prosper under irrigation. However, the soils of this area as well as limitations on the amount of annual irrigated water supply dictate that only certain crops are best suited to the conditions. Knowledge about the identity of these particular crops as well as their relevant cultivation practices is not readily available at Lam Nam Oon. Current policies of the Department of Agriculture have to be altered in order to speed the rapid development of this knowledge for Lam Nam Oon.

16. Contrary to the foregoing, not much is known in Thailand about the kinds of on-farm water delivery systems that are best suited to the topography, soils, and cultivator conditions in Northeast Thailand. Policy, to date, has been to emphasize the installation of systems suitable to the deep, alluvial, and flat soils of Central Thailand. The Royal Irrigation Department is responsible at Lam Nam Oon for advancing these policies and it is doing so. However, the project does contain provisions for certain test areas where new systems can be designed to conform to local conditions. Policy support for these tests appears to be erratic; but, nevertheless, they are slowly going forward and assuming a favorable outcome the physical basis for substantive area development may come into existence.

17. A similar situation exists in agricultural extension. The responsible Department has a very good expanding program that will better serve one-season farmers during the next few years. As yet, however, it has not begun to staff and organize so that it can work effectively among farmers who are new to irrigated farming as in Lam Nam Oon case. New policies on staffing, targets, and training are needed so that a site such as Lam Nam Oon can be used in a design and test mode for irrigation-related agricultural extension tailored to area development perspectives.

18. The original design of this project did not include several Departments and Ministries crucial to balanced area development programming. These include: the Department of Livestock and Department of Cooperatives in the Ministry of Agriculture and Cooperatives, the Department of Local Administration in the Ministry of Interior, Public Health in the Ministry of Health, and the Bureau of the Budget. As a result, current implementation efforts are hampered in some cases and integrated inputs to a dynamic area development process does not occur.

19. The expatriate technical advisory team was brought into the action several months after project implementation had already started; and, at the same time, the technical content as well as timing of assignments for the team was reduced. Both of these circumstances were due to policy decisions forced by entities other than those responsible for Lam Nam Oon programming. This situation has, however, affected the implementation of the project and raises serious issues concerning the kinds and timing of technical advisory services required to deal with projects of an area development character.

D. Evaluation of Purposes and Coordination/Cooperation

20. At the time that Lam Nam Oon and other irrigation projects in the Northeast were first planned they were not defined as area development activities. They were and are regarded by the Thai Government as opportunities to develop better endowed 'pockets' of resources in the Northeast and thereby benefit some portions of the population as well as regional and national production accounts. This latter, however, was not done under a strategy covering all of them or with any degree of integrated planning. Thus, the purposes for each one of the irrigation projects are specific to their locations with certain similarities of emphasis upon raising incomes, introducing year-round irrigation, on-farm water delivery systems, etc. In other words, unlike the Central Tunisia Rural Development program and very much like the Helmand-Aghandab Valley operations, there is no strategy for what has to be done at Lam Nam Oon and this is a shared condition with the other irrigation projects in the region. The absence of such a strategy makes it that much more difficult for the government of Thailand to assemble the necessary resources over time and focus those resources on meeting needs common to all of the Northeastern irrigation projects.

21. What transpired at the time of project design when formulating purposes for Lam Nam Oon is unknown to this author. What is evident, though, during implementation is a very steady effort by the participating Departments to progress towards achieving some defined purposes. A number of them do work together

which besets all projects but becomes particularly important in complex area development activities operated under uncertain technical conditions.

25. Mention has already been made of data gaps in this project. These have affected the definition of purposes; but they also affect coordination/cooperation. In the latter case, there are some participating Department notably Agricultural Economics and Agriculture which can structure some of their work in order to fill portions of the gaps. However, because those and other Departments have to operate under more nationally-oriented objectives as well as standardized systems of research they experience difficulty in cooperating at Lam Nam Oon in organizing and operating the kinds of 'customized' applied research essential to filling the gaps. This appears to be a common problem affecting many Departments in various ways, and it is one that can seriously impede the orderly design and operation of area development projects in Thailand.

26. The established coordination/cooperation mechanisms for Lam Nam Oon are in place, but they rarely function in a formal sense. Real coordination/cooperation is at the Team Leader level at the site and that is both formal and informal. The reasons for the latter have to do with a number of factors including friendships among the Team Leaders, a sense of mutual career identification in making something different (integrated rural development) function, and stimulation by a clearly asserted and constantly reiterated interest in the project coming from Thai government and AID sources in Bangkok. All of this produces very positive and engaged efforts at coordination/cooperation at the project site among Team Leaders; but once an issue gets beyond the level of immediate resources that can be committed by those Leaders then the existing provincial and national formal coordination/cooperation structure for the Lam Nam Oon project does not help very much. Instead, another pattern of informal coordination/cooperation can be activated at the Bangkok level and this sometimes produces results helpful to the Team Leaders. In Thailand, then, it does seem apparent that the formal structures for coordination/cooperation should be created when designing area development or other forms of multiple-intervention projects. These should be developed in order to give a greater sense of career identification and professional engagement to participants. However, the greatest importance has to be attached to the informal systems for coordination/cooperation and means must be found, constantly, to enhance their growth and operation.

27. The timing or synchronization of planning, technical, and physical inputs to a project like Lam Nam Oon is vital. As remarked above, this project rests essentially upon irrigation and this fact alone imposes a certain periodicity upon events. It is the Dry Seasons which are the periods of test, construction, and operations.

It is the Wet Seasons which are periods of review, planning, design, and organization. All technical advisory assistance, budgetary planning, input scheduling, etc has to be synchronized to the above otherwise movement towards achievement of purposes, redefinition of purposes, and the dynamic growth of cooperation/coordination will be impeded. There are a number of instances at Lam Nam Oon where these matters have gotten out of phase. One of the more obvious at Lam Nam Oon is the late engagement of the technical advisory consultant firm as well as the limitation of advice to only two full Dry Seasons. Area development projects, anywhere do confront this timing and synchronization problem as a constant because of the many complex factors as well as multiple participants involved. However, it is one that should be the focus of constant attention during design and implementation stages or otherwise initially inadequate purposes will never be altered and appropriate coordination/cooperation mechanisms cannot be evolved.

V. Suggested Evaluative Criteria

The following are derived from the experiences cited in the preceding sections. They are not prescriptive but only indicative.

Impact evaluations of past activities (as performed by the Agency for International Development) have special agendas and procedures. These are not known to the author and so the suggestions made here may be only partially applicable. Nevertheless, they may be helpful when developing perspectives about why impact was either not achieved or achieved in unanticipated ways.

The suggestions presented here are in order of priority as derived from the author's experience. Naturally, during impact evaluations of particular projects specific situations about the purposes of projects and the mechanisms of coordination/cooperation will differ a great deal. Hence, the importance to be attached to the various suggestions offered here will vary.

These suggestions refer, in particular, to area development activities, however, those may be defined. They focus on what to look for in matters concerning the formulation and attainment of purposes and the development of mechanisms of cooperation/coordination.

1. A central, clearly visible, physical theme concerning area development must be present and expressed as a carefully stated purpose. There may also be a number of physical sub-themes as well as technological, institutional, economic, and social changes which are less visible.

The kinds of physical themes there might be will vary with area needs and the priorities attached by host government policy makers, donors, and designers. Usually, they will be represented by capital-intensive investments including: irrigation, roads, drainage and flood control, electrification, and the development of market, health, educational or other facilities.

If there are multiple themes and they are not consistently prioritized and time-phased it will be difficult if not impossible to evaluate what has happened to whom and why.

2. A thorough analysis of the politico/administrative structure and the behavior of management, technical personnel within which the area development operation is situated must exist at the time of an evaluation. Additionally, the interrelationships and influences as between that structure including the behavior of personnel and others in government and the private sector must also be well delineated.

If these conditions are not met it may still be possible to evaluate some aspects of an area development project; but there will be much uncertainty about the long-term institutional prospects for cooperation/coordination in continued area development effort.

3. Similarly, it should be clearly evident by the time that an evaluation takes place how efficiencies in technical knowledge and data gaps on economic social, and other conditions warped the original purposes away from what could have been done.

If this condition is not met it will be impossible to evaluate an area development project using stated purposes as one means of judging what has happened to whom and why.

4. Evaluation must certainly look at the checkpoints or indicators designed to assist in determining progress towards stated purposes in an area development project. These usually take the form of defined Outputs and in most cases there are only very tenuous causal connections between a stated Purpose and the content of Output indicators.

However, the strengths or weaknesses of these measuring devices are in themselves an indicator of whether the area development logic for a given project is soundly based. Furthermore, measurement of performance towards achieving stated purposes is so important in area development programming that evaluation efforts must seek as many perspectives as possible about achieved performance.