

CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

PS 2301732 0018
Report Symbol U 447

1. PROJECT TITLE Blue Nile Integrated Agricultural Development Project	2. PROJECT NUMBER 650-0018	3. MISSION/AID/W OFFICE USAID/Sudan
4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. Beginning with No. 1 each FY) 650-82-02		
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

5. KEY PROJECT IMPLEMENTATION DATES A. First PRO-AG or Equivalent FY <u>79</u> B. Final Obligation Expected FY <u>82</u> C. Final Input Delivery FY <u>85</u>	6. ESTIMATED PROJECT FUNDING A. Total \$ <u>15,724</u> B. U.S. \$ <u>12,032</u>	7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>11/79</u> To (month/yr.) <u>2/82</u> Date of Evaluation Review <u>17 July 1982</u>
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B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Establish Project activities within Ministry of Agriculture organizational structure	Ivers/Siddiq	31 Oct. 1982
2. Define and institutionalize interdisciplinary approach to planning and implementation	Ivers/Siddiq	31 Oct. 1982
3. Determine priorities for implementing technical activities		Completed
4. Conclude agreement with ESRC on its role in Project studies	Ivers/Siddiq	30 Nov. 1982
5. Selection and appointment of new GOS Project Director	Minister of Ag.	Completed
6. Selection and appointment of new U.S. contract team Chief of Party	K. Byergo EI/W	Completed
7. Program PL 480 local currency for portion of GOS contribution	Ivers/Siddiq	31 Oct. 1982
8. Revise implementation plan to include evaluation report recommendations	Ivers	31 Dec. 1982
9. Determine whether or not extension of PACD needed	Ivers	31 Mar. 1983

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan (e.g., CPI Network)	<input checked="" type="checkbox"/> Other (Specify) Work Plan
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	
<input checked="" type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input checked="" type="checkbox"/> Other (Specify) Implementation Plan
<input checked="" type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

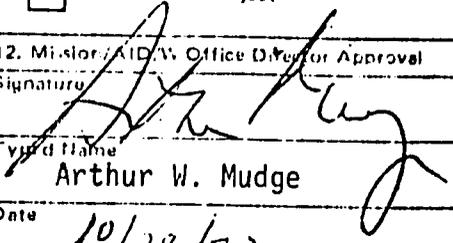
A. Continue Project Without Change

B. Change Project Design and/or Change Implementation Plan

C. Discontinue Project

- 11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)**
- Dr. Hassan Sid Ahmed Abu Zeid, Director General, Planning and Economic Administration, MinAg.
 - Dr. Hassan Mohammedi Beteik, Director, SCLU&WP, MinAg.
 - Dr. Thomas C. Ivers, Project Manager, USAID
 - Mr. Siddiq Abdallah, Project Director, MinAg.

12. Mission/AID/W Office Director Approval

Signature: 

Typed Name: Arthur W. Mudge

Date: 10/29/82

Project Evaluation Summary (PES) - Part II

Blue Nile Integrated Agricultural Development Project (650-0018)

13. Summary

An unrealistic Project Implementation Plan (PIP) was established for the Project. Several assumptions in the PP regarding the existence of GOS infrastructure or administrative capability were not realistic. Further, the PP did not adequately consider logistical difficulties, especially as the movement of personnel and materials to Damazin and to the Project sites is restricted essentially to the dry season (November - May). Moreover, due to the protracted negotiations, the contractor, Experience Inc. (EI) was not selected until November 1979, eight months after the PP start-up date. Delay in naming a GOS Project Director precluded the early initiation of technical activities.

Many important preliminary actions which should have been carried out prior to the arrival of the EI team were not undertaken until long after its arrival. Construction activities, long and short term training, the assignment of key Government of Sudan personnel and the initiation of the cooperatives/credit element have lagged from the beginning. ^{1/} Other than the agronomy activity, most of the field activities are approximately one year behind schedule. An integrated framework for technical activities does not yet exist.

Inadequate leadership on the part of the Project Director has been responsible for much of the delay in implementation since November 1979. The Project Director did not take actions necessary to initiate key activities and secure an adequate number of competent GOS personnel to work with U.S. counterpart technicians.

Turnover of EI staff during the first year (there were three chiefs of party during the period November 1979 - September 1980) also precluded a sustained working relationship with Project Director from the outset. The current EI Chief of Party also has not provided the necessary leadership for the Project.

Another major impediment to project progress has been the lack of integration of the Project into the GOS administrative framework. Clear lines of authority have not been developed, and the project has remained an almost autonomous unit, having minimal contact with its national level coordinating body, the Soil Conservation, Land Use and Water Programming Administration of the national Ministry of Agriculture and Irrigation. A closer, but informal, working relationship exists with the Blue Nile

^{1/} Imported prefabricated buildings were originally to have been used but a subsequent decision was made in favor of on-site construction. This resulted in a more cost-effective product but delayed implementation.

Provincial Government.

It is the opinion of the evaluation team that, in spite of the numerous difficulties encountered to date, the Project merits continuation and has a reasonable chance of success if attention is given to correcting the problems of leadership and institutional relationships. While the evaluation team concluded that none of the principal components of the Project could be deleted without adverse consequences, it has recommended that emphasis be placed initially on the two Project sites near the Blue Nile River, i.e. Abu Gamai and Abu Sheneina. These sites are accessible by boat in the rainy season, thus precluding an interruption of activities. The third site, Kharen-Kharen, should be developed on a lower priority basis, given the remaining timeframe and resources.

Several important changes have occurred since the evaluation. A new GOS Project Director was named in May and has taken the initiative to ensure that the Project becomes fully integrated into the GOS agricultural system. The current EI Chief of Party will leave in September, and a nomination for his replacement has been received. Several key professional GOS staff have joined the Project, and it is expected that the remaining vacancies will be filled in the near future. Similarly, the two remaining participants for long-term training have been selected and should begin training in the next few months. A revised Amplified Project Description (Annex 1) of the Project Agreement has been negotiated and features a farming systems approach to more fully integrate the various components of the Project. The administrative complexity of the Project also has been reduced by substituting alternative arrangements for weak or non-existent institutions envisaged in the Project Paper. For example, the Cooperative Development Bank, still not viable as of 1982, has been replaced by the Agricultural Development Bank as the disbursement agent for the cooperatives/ credit component. Technical activities are now well underway at field sites, and in the past few months over 1500 acres have been prepared and planted by recipient farmers under the supervision of Project personnel and recipient farmers.

Within the next year it is expected that with new leadership, the Project should be well integrated into the GOS' administrative structure and that the full complement of staff will be on board. All physical infrastructure should be completed by the end of the first quarter of FY 83. The agronomic systems developed at the Demonstration/Verification Farm in Damazin will have been tested for one growing season and will be further refined for the second season's application. The cooperatives system, which is now organized, will have been initially tested. In sum, it is expected that the Project will be proceeding at a normal rate of progress.

Chances of replicating the Project are dependent, of course, upon technical findings and the acceptance by the Project recipients of the systems developed under the Project. This will not be apparent until at least the end of the current crop season, at which time the results should be evaluated to determine whether or not an extension of the PACD is merited. The current standard of physical infrastructure, while impressive, is too expensive to be replicated, and a more modest standard is suggested for any future project of this type.

14. Evaluation Methodology

A nine person team conducted the evaluation in Damazin during the period February 4 - 11, 1982. The team was composed of five Sudanese (four GOS officials and one consultant), and four Americans (three USAID officers and one consultant on loan from another USAID project). The composition of the team included expertise in administration, agricultural economics, soil, water and land use, veterinary medicine, forestry and agronomy. The size of the evaluation team was influenced by the complexity of the Project and the need to include a significant host country perspective and input. The team was divided into several technical sub-groups which evaluated each component of the Project.

Prior to the team's leaving for Damazin, an initial organization meeting was held at USAID Khartoum. The scope of work for the evaluation was explained and discussed, subgroup assignments were made, and a time-phased schedule was reviewed. Subsequently, background materials including the Project Paper, Project Agreement, monthly, quarterly and annual reports, technical reports, EI contract and amendments, and other materials were distributed to the evaluation team members. An AID audit had recently been completed, and the draft findings were prepared for each sub-group, stating the major issues and technical considerations to be addressed under each activity.

Semi-structured group discussion was the principal technique used in the evaluation. Interviews were conducted with the GOS Project Director and selected staff members, as well as with the EI Chief of Party, and all EI staff members. Separate interviews were held with provincial assistant commissioners for technical areas, the local representative of the Agricultural Development Bank, officials of the Central Power and Water Corporation (CEWAC), and representatives of the construction sub-contractor.

The Demonstration/Verification Farm, staff housing, warehouse/workshop and office buildings in Damazin were also visited by the evaluation team. Some team members visited the Project sites. An arrival conference was held with the Provincial Commissioner, and discussions were held with him prior to departure.

15 External Factors

Since the Project was designed in 1978, two significant changes have affected the project. One is the continuing deterioration of the economy. This situation has not yet affected the Project to a great extent, except for the inability of the Provincial Government to carry out its obligations with respect to road maintenance and water source development. However, as the project initiates an increasing number of field activities, the ability of the GOS to provide its agreed-upon

contribution may be diminished, given the current economic situation in the Sudan. This situation could be minimized in the near term by utilizing GOS-owned local currency provided under the PL 480 Title III Program.

The second key external factor is the GOS decision to decentralize government by transferring power, including funding, from the national to regional governments and from provincial to district levels. This process has a significant bearing on the relationship of the Project to GOS counterpart administrative organizations and must be taken into account when implementing the evaluation team's recommendations. In particular, the purpose assumption relating to institution building at the province level will be re-examined in light of this situation.

While not included as a stated assumption, the implicit assumption that the GOS would provide adequate institutional support in several key areas was optimistic. The failure to create the Central Cooperative Bank (still not operational in 1982) and the Extension Training Center in Damazin are examples. Also it was impractical to rely upon the Economic and Social Research Council (ESRC) to carry out socio-economic studies when it has little internal capability or financial resources of its own to carry out such activities.

However, Project personnel are establishing alternative relationships to substitute for the lack of institutional support since the institutions were not created. The Agricultural Development Bank has agreed to provide credit services in the Project area. Project and short-term personnel are able to assist with necessary studies. There are other extension training facilities in the Sudan which can be utilized for short-term training functions.

Other than the above mentioned assumptions relating to institution building at the provincial level, it is premature to judge the validity of both goal and purpose assumptions, as field activities were only just beginning when the evaluation was held. Subsequent evaluations will have to make this judgement.

16 & 17. Inputs and Outputs

With respect to each of the eight major activities of the Project, the following overview is provided:

A. Project Management and Support

1. Objective : to provide the basic management and support functions for Project operations, including transportation, vehicle maintenance, housing, supply procurement and miscellaneous service activities associated with headquarters operations. The administrative unit to be established is the Blue Nile Agricultural Services Center (BASC).

2. Progress to Date:

The BASC has been established, and most physical infrastructure, including offices, housing, warehouses and workshops, is completed or is nearing completion. A full complement of EI staff is now on board, but some key GOS positions remained unfilled. Two separate, (GOS and EI) administrative systems exist, and separate recruitment processes are used for GOS and EI personnel. At this point in time the BASC does not yet have the capability to sustain Project administration beyond the PACD.

3. Expected Progress Over the Remaining Project Lifetime:

With adequate leadership the BASC should be able to provide the necessary administrative support for Project activities by the PACD. The timely appointment of key GOS staff is of the utmost importance however. The evaluation team has recommended changing both the GOS Project Director and the EI Chief of Party. 2/ Numerous other recommendations regarding Project management were made by the evaluation team. These recommendations are consistent with those issued in an AID audit report on the Project. 3/

B. Data Management, Studies, Planning and Evaluation:

1. Objectives: To create within the BASC a separate office having responsibility for Project planning. The office has four main functions, including: a) supervision and coordination of all studies; b) development of an information system to provide feedback for planning and programming purposes; c) development of work plans and reports for the Project and provision of analytical backstopping for all major activities; and d) preparation of data and analytical material for two major evaluations on project impact in the field.

2. Progress to Date:

The Data Management Office (DMO) has been established and is undertaking some planning and reporting functions. However, several of the studies to be performed under the Project have not yet been carried out, in part because the duties of the Data Management Specialist (DMS) and other Project personnel have not been delegated or clarified. Further, the GOS has not yet assigned a rural planner to work with the DMS, and the DMO is not effectively integrated into a GOS administrative unit. The evaluation team noted that the roles of the DMS and the Agricultural Economist are not well defined, and the need for formal Project planning on an integrated basis is not adequately accepted by Project staff or management. The evaluation team also noted that the role of the Agricultural Economist should be restructured to involve him in the

2/The GOS Project Director was replaced on May 15, 1982. The EI Chief of Party will depart prior to the end of September.

3/ Report No. 3-650-82-11, dated March 31, 1982.

interdisciplinary design and evaluation of improved agronomic and extension practices.

3. Expected Progress Over the Remaining Project Lifetime:

In order for this activity to play a key role in the project, it is imperative that the DMO be integrated at the local, i.e. provincial or district level. It will also be necessary to coordinate planning with the Central Region Ministry of Agriculture. Since the evaluation the DMS has met with GOS officials regarding the integration of this office into the GOS organizational framework. It is expected that this activity will result in an effective unit to support planning functions beyond the PACD.

C. Agronomy and Extension:

1. Objectives: a) Develop and extend to the farmer ways and means of overcoming some of the basic constraints to improved productivity, e.g. lack of labor at weeding time; b) test a non-mechanized but improved package of credit and services; c) test various cropping approaches on a small scale, in conjunction with livestock and range management personnel; and d) test various extension techniques and attempt to discover the most effective approach and preferred set of methods.

2. Progress to Date:

The Agronomist and Extensionist positions for both EI and senior GOS personnel are filled, and activities are proceeding normally. However, the absence of the planned Provincial Extension Training Center in Damazin has hindered staff recruitment. The Demonstration/Verification Farm began trials in 1981 and a number of trials were conducted and evaluated, among them different cropping techniques, weed control methods and the adaptability of several varieties of sesame, millet, peanuts, beans and vegetables. Horticultural cultivars also were evaluated for potential introduction on riverbank lands.

The extensionists and agronomists have cooperated closely regarding activities initiated during the last growing season. The 1982-1983 season will provide the first extended period in which the Project will be operating in the field. This will allow for initial evaluation of new agronomic practices and extension methods. The evaluation team recommends that the extensionist, agricultural economist, agronomist, agricultural engineering and cooperatives personnel function in an interdisciplinary manner to design, extend and elevate new packages of inputs and practices. In this regard, a farming systems approach was recommended by the evaluation team for immediate adoption. The Project should give primary emphasis to sorghum and sesame.

3. Expected Progress Over the Remaining Project Lifetime:

While the agronomic trials have proceeded normally at the Demonstration/Verification Farm in Damazin, it is too early to determine to what

extent practices and inputs will be adopted by the target farmers. The three cropping seasons remaining in the project lifetime may not be sufficient to evaluate farmers' responses to the new practices. This makes it imperative that a farming systems approach be implemented immediately. Also, provision must be made for the long term monitoring of newly introduced factors. Moreover, the evaluation team recommended that the EI agronomist position be extended from August 1982 until September 30, 1984, the present termination date of the EI contract. 4/

D. Mechanization:

1. Objective: Test the feasibility and desirability of limited application of farm machinery to the case of the small farmer, with special reference to financial return to the farmers.

2. Progress to Date:

Tractors and some equipment have arrived in Damazin, and some field testing has taken place in the Project area. However, a tractor driver training program had not been developed as of February 1982, and a maintenance program had not been instituted. The EI Agricultural Engineer did not have adequate counterpart participation to manage the program. Further, the advisor had spent relatively little time in his technical area due to administrative duties and construction oversight responsibilities. The evaluation team recognized that these assignments were made for pragmatic reasons, but recommended that the situation be corrected immediately.

3. Expected Progress Over the Remaining Project Lifetime:

As this activity is presently far behind schedule, it is imperative that the Agricultural Engineer devote full attention to his technical assignment. The planned number of GOS personnel must also be assigned to the Project and trained soon in order to develop and sustain this activity beyond the life of the Project. It is recommended that the Agricultural Engineer's position be extended until the end of the EI contract.

F. Livestock and Range Management:

1. Objectives: a) increase nomad income; b) improve animal health and productivity; c) optimize natural resource utilization in the Project area through organizing and modernizing pastoral activity; d) assist with the establishment of a mutually beneficial pattern of co-existence and cooperation between nomads and settled farmers; e) assist sedentary farmers with the improvement of village livestock production conditions and practices, and f) determine a practical and effective approach for the development of mixed cropping systems, i.e. livestock and crop production, for farmers and nomads.

4/ The agronomist and agricultural engineer positions were recently extended to the above date.

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2. Progress to Date:

While relatively little activity had occurred as of February 1982 under this activity, a promising program of close cooperation had been initiated with the Provincial Range Management Administration in Damazin. Under this program range enclosures have been established in the Project area to monitor the response of range plants to a cessation of grazing and thereby determine the effect animals have had on the production and growth of range plants.

A GOS livestock specialist needs to be identified and join the Project. This is an important appointment, as there is no resident EI expertise, the Project Paper having envisaged only short term assistance in this field. Additional GOS staff will need to be recruited and an action plan developed as soon as possible.

3. Expected Progress Over the Remaining Project Lifetime:

While this activity has just been initiated, there are indications that the objectives can be achieved. For instance, initial meetings with nomads have indicated that nomads wish to avoid conflicts with settlers and are willing to establish grazing boundaries. Another indication is that nomads have offered to contribute a portion of the costs for animal health activities. The nomads seem to be better off in terms of income (although their wealth resides in their animals rather than in material goods) than sedentary farmers. However, their lifestyle is continually threatened by conflicts with mechanized schemes and sedentary farmers over available land. These conflicts can be reduced significantly only by reducing the size of their herds, which, in turn, will depend on their recognition of the value of fewer head or more productive livestock. As soon as an action program can be developed for this activity, which will include animal traction, there appear to be no major impediments to reaching project objectives.

F. Cooperatives and Credit:

1. Objective: To create and test a regional member-owned delivery system for continuing provision of the necessary package of credit, services and goods required by farmers for increased production and income.

2. Progress to Date:

This activity is approximately a year and a half behind schedule. According to the PIP, the cooperative process was to have been fully completed by the planned arrival of the EI Cooperatives/Credit Advisor in October 1980. The advisor arrived in February 1981, and due to his being assigned administrative and logistical responsibilities, cooperative organizational efforts did not begin until November 1981. As of February 1982, initial meetings had been held with farmer leaders in 7 Project villages, as well as with nomadic leaders. Initial reaction has been favorable. A senior level GOS counterpart and several junior

field personnel have worked closely with the EI advisor in the organizational process. While Project staff have worked closely with the District Cooperatives Office in Damazin, the cooperatives/credit activity needs to be further incorporated into the local GOS administrative structure.

3. Expected Progress Over the Remaining Project Lifetime:

The evaluation team recommended that this activity be more clearly focused and that time-phased work plan be developed, based on a priority approach. It was also recommended that the EI Cooperatives/Credit position should be extended until September 30, 1985 and the activity until September 30, 1986, in order to fully accomplish stated objectives. Further, the evaluation team recommended that the Agricultural Development Bank be approached as soon as possible to expedite the delivery of credit prior to the onset of the rainy season in June.^{5/} Provided that this activity is integrated into the local, i.e. provincial or district level, GOS administrative structure, and provided reasonable outputs are established, Project objectives should be attained.

G. Construction and Site Selection:

1. Objectives: a) to provide physical infrastructure for the administration of the Project and for operational activities; and b) to provide housing for Project personnel.

2. Progress to Date:

Due to the numerous delays, as of February 1982 construction was just over 50 percent complete.^{6/} The total cost had increased from the original estimate of \$3,466,500 to \$3,855,000, approximately 11 percent. It appeared at the time of the evaluation that construction in Damazin would be complete by the onset of the rainy season in June, but field facilities would not. As the field facilities were considered more important to the attainment of Project objectives, the evaluation team recommended that the order of priorities be reversed, i.e. that full attention be given to the completion of field activities.

The construction of Project buildings is of a relatively high standard for the areas. However, the cost of the construction element is too high to be affordable, should the Project be replicated in other areas. A lower design standard would be appropriate in this instance.

3. Expected Progress Over the Remaining Project Lifetime:

It is now expected that all facilities will be completed by early 1983, although most will be operational during 1982. A number of cost reducing measures, already recommended, may enable this activity to stay within its original budget or exceed it only by a relatively small amount.

^{5/} Contacts with the Agricultural Development Bank were initiated in March, and prospects for cooperation appear favorable.

^{6/} The PIP envisaged that construction would be complete by October, 1980. Under the current construction contract, all activities were to be complete by end of 1981.

H. Other Infrastructure: Road Maintenance and Water Resources Development:

1. Objectives: a) maintain dry-weather roads within the Project areas; and b) develop new sources of water for farming, livestock and human consumption.

2. Progress to Date:

These two activities, entirely a GOS responsibility, serve as support elements for the Project. As of February 1982 the Provincial Department of Public Works had graded the road to the Project area once, in 1981. It appears that the Department does not have sufficient funds or equipment to maintain the road at this time. Regarding water development, the Rural Water Corporation is to construct wells and ponds in support of the Livestock/Range Management activity. To date the survey has not been carried out. As in the above case, funds and equipment appear lacking. The assumption that these two activities could be implemented, consistent with Project requirements, was unrealistic.

3. Expected Progress Over the Remaining Project Lifetime:

At this point little progress can be expected unless PL 480 funds can be obtained. The GOS Project Director should ascertain to what extent the road maintenance and water resource activities can and will be carried out. If the local government bodies are unable to fulfill their responsibilities, this situation by itself is not expected to adversely affect the Project area. In the future, however, marketing activities may be impaired by the lack of adequate dry-weather road. Similarly, the lack of an expansion of water resources could restrict agricultural and livestock activities.

18. Purpose

The purpose of the Project is to develop and verify an effective and viable system approach to small farms and livestock development suitable for replication over larger areas of the traditional rainfed production sub-sector. The purpose of the Project remains valid, although it cannot yet be determined whether or not replication will result, as field activities have been initiated only recently.

With respect to the first sub-purpose, i.e. improvements of the economic condition of approximately 2,500 farm and 3,500 nomad families, it appears valid at this time. The validity of the second sub-purpose, i.e. the development of the institutional capability of the Blue Nile Provincial Government to effectively plan and implement traditional sector development programs throughout the province, will depend on a re-examination of the Project relative to the institutional setting created by decentralization.

19. Goal/Sub-goal

The goal of the Blue Nile Integrated Agricultural Development Project is to increase production and income of the traditional farmer and herder families in the rainfed areas of the Sudan.

The Project goal remains valid. However, in order to be feasible, both operationally and economically, Project activities must be incorporated into the organizational structure of the Ministry of Agriculture and Irrigation.

20. Beneficiaries:

The planned direct beneficiaries are approximately 2,500 farm families and 3,500 nomad families in the Project area. As of February 1982, the Project's only direct impact upon the beneficiary group had been with the farmers in Abu Gamai area who have participated in agricultural trials.^{7/} Also directly benefiting were the three long-term participants in training under the project. Indirect beneficiaries under the program have been construction workers, GOS Project personnel who are receiving improved housing and sanitary conditions, and merchants in the Damazin area who are already benefitting from purchases of consumables and construction materials.

21. Unplanned Effects

The principal unplanned effect impacting on the Project is the isolation of the Project from GOS administrative units. While it normally receives guidance from the Soil Conservation, Land Use and Water Programming Administration at the national level and oversight from the Blue Nile Agricultural Development Committee, in fact the Project functions as an isolated unit. The Project Paper envisaged a close working relationship with the Blue Nile Provincial Government, as well as the existence of a national level inter-agency coordinating committee. This question needs to be addressed immediately by both the GOS and USAID.

Within the Project itself, separate administrative units were created by the Project Director and by the EI staff. Coordination of plans and activities has been lacking, although it appears that the EI staff has made numerous attempts to which the Project Director did not respond.

Another unplanned effect of the Project was the initial perception by some beneficiaries that the Project was "another mechanized scheme" which would displace them from their land. This perception has now been overcome by consultation and by demonstration of intent through initial Project activities.

22. Lessons Learned

Several lessons relative to the design of the Project may be useful for future projects. They are: a) The difficulty of coordinating a project with numerous administrative bodies. The Project was designed to have administrative components on a national and provincial level, with several activities dependent on yet other GOS organizations, e.g. Central Cooperative Bank, Damazin Extension Training Center, Economic and Social Research Council, outside the control of the Project. Not only was this type of arrangement administratively awkward, but the weak assumption of the ability of the various institutions to carry out their

^{7/}As of August 1982 substantial progress had been attained at field sites, with over 1,500 feddans being prepared and planted by farmers under the supervision of Project personnel.

responsibilities has adversely affected the progress of the project. b) While the team responsible for the design of the project could not necessarily foresee a deterioration in the economy of the Sudan, close attention should have been given to both capital and recurrent expenditures. The high standard of construction at Project sites is unlikely to be replicated elsewhere due to its cost. More modest structures would have been more appropriate. With regard to recurrent expenditures, closer coordination with the Blue Nile Provincial Government might have precluded the need for the number of additional GOS personnel hired under the Project. It also would have put less of a strain on the GOS ability to provide high-level counterparts at a time when the Sudan is losing great numbers of trained personnel to other countries. c) A Project Implementation Plan (PIP) is important to the effective initiation of activities and the monitoring of project outputs. While the PIP outlined in the Project Paper could not be expected to anticipate all possible delays, the failure to recognize the normal delays in contracting and mobilizing a technical assistance team meant that, at least on paper, the project was always considered to be behind schedule. Further, the expectation that key implementation activities would take place prior to the arrival of the contractor's Chief of Party and GOS Project Director was unrealistic.

A conceptual framework which fully illustrates the functional relationships of the technical staff in the planning, design, evaluation and extension of farm technology is clearly required by an integrated agricultural development project.