

P, SAA-52.1

INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER

EGYPT

IRRIGATION PUMPING

PROJECT NO. 263-0040

*Amend. #1*

April, 1980

UNCLASSIFIED

1

PROJECT DATA SHEET

1. TRANSACTION CODE

C  
A = Add  
C = Change  
D = Delete

Amendment Number

1

DOCUMENT CODE

3

2. COUNTRY/ENTITY

Arab Republic of Egypt

3. PROJECT NUMBER

263-0040

LOAN NUMBER

263-K-039

4. BUREAU/OFFICE

Near East

03

5. PROJECT TITLE (maximum 40 characters)

Irrigation Pumping

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
08 31 84

7. ESTIMATED DATE OF OBLIGATION

(Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 77

B. Quarter 2

C. Final FY 80

8. COSTS (\$000 OR EQUIVALENT \$1 = )

| A. FUNDING SOURCE      | FIRST FY      |        |               | LIFE OF PROJECT |               |               |
|------------------------|---------------|--------|---------------|-----------------|---------------|---------------|
|                        | B. FX         | C. L/C | D. Total      | E. FX           | F. L/C        | G. Total      |
| AID Appropriated Total | 19,000        |        | 19,000        | 19,000          |               | 19,000        |
| (Grant)                | ( 8,000 )     | ( )    | ( 8,000 )     | ( 8,000 )       | ( )           | ( 8,000 )     |
| (Loan)                 | ( 11,000 )    | ( )    | ( 11,000 )    | ( 11,000 )      | ( )           | ( 11,000 )    |
| Other U.S. 1.          |               |        |               |                 |               |               |
| Other U.S. 2.          |               |        |               |                 |               |               |
| Host Country           |               | 3,500  | 3,500         |                 | 22,165        | 22,165        |
| Other Donor(s)         |               |        |               |                 |               |               |
| <b>TOTALS</b>          | <b>19,000</b> |        | <b>22,500</b> | <b>19,000</b>   | <b>22,165</b> | <b>41,165</b> |

9. SCHEDULE OF AID FUNDING (\$000)

| A. APPROPRIATION | B. PRIMARY PURPOSE CODE | C. PRIMARY TECH. CODE |         | D. OBLIGATIONS TO DATE |               | E. AMOUNT APPROVED THIS ACTION |         | F. LIFE OF PROJECT |               |
|------------------|-------------------------|-----------------------|---------|------------------------|---------------|--------------------------------|---------|--------------------|---------------|
|                  |                         | 1. Grant              | 2. Loan | 1. Grant               | 2. Loan       | 1. Grant                       | 2. Loan | 1. Grant           | 2. Loan       |
| (1) SA           | 120                     | 064                   | 064     |                        | 11,000        | 8,000                          |         | 8,000              | 11,000        |
| (2)              |                         |                       |         |                        |               |                                |         |                    |               |
| (3)              |                         |                       |         |                        |               |                                |         |                    |               |
| (4)              |                         |                       |         |                        |               |                                |         |                    |               |
| <b>TOTALS</b>    |                         |                       |         |                        | <b>11,000</b> | <b>8,000</b>                   |         | <b>8,000</b>       | <b>11,000</b> |

10. SECONDARY TECHNICAL CODES (maximum 5 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

Increase irrigated agricultural productivity in the Project area.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY  
06 80 06 82 08 85

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 13 page PP Amendment.)

Provision of a grant of an additional \$8.0 million for the Project

17. APPROVED BY

Signature

Donald S. Brown

Title

Director, USAID/Egypt

Date Signed

MM DD YY  
12 21 80

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

2X

## INSTRUCTIONS

The approved Project Data Sheet summarizes basic data on the project and must provide reliable data for entry into the Country Program Data Bank (CPDB). As a general rule blocks 1 thru 16 are to be completed by the originating office or bureau. It is the responsibility of the reviewing bureau to assume that whenever the original Project Data Sheet is revised, the Project Data Sheet conforms to the revision.

Block 1 - Enter the appropriate letter code in the box, if a change, indicate the Amendment Number.

Block 2 - Enter the name of the Country, Regional or other Entity.

Block 3 - Enter the Project Number assigned by the field mission or an AID/W bureau.

Block 4 - Enter the sponsoring Bureau/Office Symbol and Code. *(See Handbook 3, Appendix 5A, Table 1, Page 1 for guidance.)*

Block 5 - Enter the Project Title *(stay within brackets; limit to 40 characters).*

Block 6 - Enter the Estimated Project Assistance Completion Date. *(See AIDTO Circular A-24 dated 1/26/78, paragraph C, Page 2.)*

Block 7A. - Enter the FY for the first obligation of AID funds for the project.

Block 7B. - Enter the quarter of FY for the first AID funds obligation.

Block 7C. - Enter the FY for the last AID funds obligations.

Block 8 - Enter the amounts from the 'Summary Cost Estimates' and 'Financial Table' of the Project Data Sheet.

**NOTE: The L/C column must show the estimated U.S. dollars to be used for the financing of local costs by AID on the lines corresponding to AID.**

Block 9 - Enter the amounts and details from the Project Data Sheet section reflecting the estimated rate of use of AID funds.

Block 9A. - Use the Alpha Code. *(See Handbook 3, Appendix 5A, Table 2, Page 2 for guidance.)*

Blocks 9B., C1. & C2. - See Handbook 3, Appendix 5B for guidance. The total of columns 1 and 2 of F must equal the AID appropriated funds total of 8G.

Blocks 10 and 11 - See Handbook 3, Appendix 5B for guidance.

Block 12 - Enter the codes and amounts attributable to each concern for Life of Project. *(See Handbook 3, Appendix 5B, Attachment C for coding.)*

Block 13 - Enter the Project Purpose as it appears in the approved PID Facesheet, or as modified during the project development and reflected in the Project Data Sheet.

Block 14 - Enter the evaluation(s) scheduled in this section.

Block 15 - Enter the information related to the procurement taken from the appropriate section of the Project Data Sheet.

Block 16 - This block is to be used with requests for the amendment of a project.

Block 17 - This block is to be signed and dated by the Authorizing Official of the originating office. The Project Data Sheet will not be reviewed if this Data Sheet is not signed and dated. **Do not initial.**

Block 18 - This date is to be provided by the office or bureau responsible for the processing of the document covered by this Data Sheet.

EGYPT: IRRIGATION PUMPING (AMENDMENT)

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EGYPT: IRRIGATION PUMPING

SUMMARY AND RECOMMENDATION

1. Grantee: The Government of the Arab Republic of Egypt (GOE)
2. Implementing Agency: The Egyptian Ministry of Irrigation (MOI)
3. Grant Amount: U.S. \$8.0 million, supplementing an \$11 million loan.
4. Project Purpose: The Project is designed to increase irrigated agricultural productivity in the project area.
5. Project Description: Installation of irrigation water pumping facilities at 37 sites in Middle and Upper Egypt. This A.I.D. Grant will provide the additional funding needed to procure equipment and supplies for new or replacement pumps, shop and service equipment, and for additional engineering services (by the consultant who was retained for the initial consultant services).
6. Total Project Cost: Total Project cost in both foreign exchange and local currency is estimated at \$41.2 million. The foreign exchange component estimated at \$19.0 million will be provided under the previous loan and this grant. The GOE will provide the balance of \$22.2 million equivalent in local currency, representing an increase of \$15.2 equivalent in local currency from its original contribution.
7. Environmental Considerations: Environmental analysis is contained in pages 20-23 of the original Project PP.
8. Grant Application: The Government of Egypt has requested AID to provide an \$8.0 million grant for this project. The application is attached as Annex A.
9. Mission Views: USAID/Egypt has recommended authorization of the proposed Grant. The principal officer's certification of the Project pursuant to Section 611 (e) of the Foreign Assistance Act of 1961, as amended, is contained in Annex C of the original Project Paper.

10. Source of U.S. Funds: Fiscal Year 1980 Economic Support Fund.
11. Statutory Requirements: All statutory criteria have been met. See Annex B.
12. Recommendation: That a grant in the amount of \$8.0 million be authorized on terms and conditions as set forth in the draft grant authorization which is Annex R of this paper.

USAID Project Committee

Theodore T. Foley, Loan Officer (drafting Officer)  
James L. Sloan, Engineer  
Neil Dimick, Agricultural Officer  
Raymond Debruce, Controller  
George Flores, Program Officer  
James Norris, Economist  
L. Michael Hager, Legal Officer

## Introduction

### Problem Defined

USAID and the GOE were overly optimistic in project scheduling and in estimating the funds needed to implement the project. The project's approved budget does not provide for the additional U.S. consultant services which are now considered essential to meet original targets. Equipment procurement and civil works construction have suffered considerable delays resulting in substantial cost overruns. The GOE does not have the required foreign exchange resources to fund the added U.S. dollar costs.

### The Project:

The Project remains as described in the FY 1977 approved project proposal which aims at installation of water pumping equipment for agricultural purposes at 37 sites. The Project is part of a phased program which will upgrade critical pumping facilities in Middle and Upper Egypt.

### Background:

1. On September 27, 1977, AID signed a Loan Agreement in the amount of \$11 million with the Government of Egypt and its Ministry of Irrigation for financing the foreign exchange costs of the Irrigation Pumping Project 263-0040.
  2. The purpose of the Irrigation Pumping Project is to assist the GOE to replace or install irrigation water supply pumping stations at 34 irrigated agricultural sites in Middle and Upper Egypt (later increased to 37 sites). Of these sites, 20 have existing pumping equipment which will be replaced and 17 (without such equipment) will have power-driven equipment installed. The Project is expected to increase agricultural production substantially in these areas. The 37 modernized pumping facilities represent some 3% of the number of such facilities in Egypt.
  3. The Ministry of Irrigation (MOI) selected the sites, which represent about three percent of the pumping stations in Egypt, on the basis of condition of equipment, their importance to production of key export crops and the desires of farmers for publicly operated water delivery systems.
  4. A feasibility study of this project was completed in mid-1977 by the firm of Louis Berger International under Contract AID/afr-c-1132. The study, reviewed by USAID and MOI, served as the basis for the Project Paper presented on September 12, 1977.
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5. Funds provided under the FY 1977 \$11.0 million loan provide for procurement of pumps, motors and spare parts for the pumping stations. In addition, comprehensive packages of repair shop and maintenance equipment are being provided to upgrade the capabilities of the three main workshops and floating workshops. To improve the capability to install and service the new pumping stations, transportation equipment will be provided to the three main workshops.
6. Local currency costs of the FY 1977 Project estimated at LE 5.0 million (equivalent to US \$7,150,000), were to be provided by the GOE to finance the pump station civil works construction and installation.
7. The Project Implementation Schedule of the 1977 PP estimated that equipment contract awards and civil construction awards would be made in August 1978, Group I civil works installations would be complete in September 1979, Group II in June 1980, and Group III in January 1981. Terminal date for requesting the opening of letters of commitment was initially established as January 31, 1980 and terminal date for disbursements as July 31, 1981.
8. Delays incurred in obtaining a consultant engineering contract, in fulfilling CP's, in approval of IFB's, and in evaluating the complex technical proposals, have caused an approximate nineteen month delay in award of equipment and civil works construction contract (now estimated to be March 1980) and a consequent prolongation of the time estimated for completion of the civil works construction. As a result, there has been considerable escalation of costs for equipment and of civil works construction.
9. The cited delays in accomplishing consultant contracting, resulted from the need to resolve procedural and policy differences between AID and the MOI, on such issues as the provision of consulting services and establishment of a two-step procurement procedure for bidding the pumping equipment. These differences reflected an incompatibility of traditional Egyptian legal and procurement practices with current U.S. legal and procurement requirements.
10. Consultant contract negotiations were initiated in September 1977. Due to delays in reaching an agreement with the MOI on the scope of services and form of contract, the contract was not signed until April 12, 1978, three months later than planned.
11. The amount finally reserved for consultant services funded by AID Loan 263-K-039 has been fully expended. The 1977 Project Paper estimated \$350,000 for consultant services, however, the MOI insisted upon reducing consultant services to an absolute minimum and made a lump-sum contract amounting to \$188,960 for a limited number of person-months of specialist services. The difference was then reallocated to the contingency line item. Under the contract there was no

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provision for an electrical engineer specialist, and the time allotted for person-months to provide contract specialists expired in July 1979. Consequently, the consultant will not be participating in bid analyses, awards, inspections, and monitoring civil works and installations as planned under the original contract. The Project Committee perceives a need for consultant services to complete the scope of work of the project as originally conceived and to provide additional expanded services of monitoring receipt and installation of the equipment and construction of civil works facilities (although the latter are funded by the GOE, they are critical to the successful installation of the U.S. equipment procured for the project). We estimate that these services could cost up to \$610,000. No funding is available for these services under the loan.

12. Working under an AID IQC (requirements) contract, Berger prepared the feasibility study of the subject project. Based on AID Handbook 11, Section 1B2K(1) - (Section 2.4.2(e) "Waiver-Negotiation with a Single Source" of new HB 11), which permits the B/G to select a contractor without following normal selection procedures, when the B/G wishes to select a contractor to perform services and the firm has performed prior services, with respect to the same project and clearly has special capability by virtue of previous experience in the work, a direct selection of Berger by the Ministry of Irrigation was recommended by USAID and approved by AA/NE.
13. Berger has an established relationship with the MOI and has a special capability by virtue of its long previous experience with the project during which it completed project design, work plans, specification, developed an equipment management plan, and other advisory work which makes it a uniquely qualified selection for the additional consulting services required by the Grant. The alternative of discarding a proven, experienced firm in the project and undertaking selection of an entirely new firm would be a costly waste of accumulated experience, and would cause still more delay in the implementation of this important project. The MOI wishes to engage Berger's services to complete the original scope and carry on additional services needed during the implementation period. Consequently, it is appropriate and recommended that, in approval of this PP, the MOI be approved to continue with its proven consultant's services by negotiation of an appropriate add-on contract.
14. Draft IFB's were prepared by the consultant by June 1978, but did not receive host country approval until issues concerning the IFB's were resolved in November 1978. Technical specifications of the IFB's were prepared by the consultant with the exception of the electrical equipment specifications which were prepared by the Mechanical and Electrical Division of the MOI. Specifications for the civil works element of the project, funded by the GOE, were made by the GOE.

15. Pumping and electrical equipment of IFB 78/01 is being procured, in parallel bidding with the Egyptian financed civil works, under a two-step tendering procedure. Among the complicating factors in the procurement of pumping and electrical equipment under IFB 78/01 was that the award for this imported equipment will be made on the basis of the lowest responsive combined bid of a U.S. equipment supplier bidding in parallel with an Egyptian civil contractor. The U.S. supplier is not in joint venture with the parallel bidding Egyptian civil contractor and hence exercises no control over it. The U.S. supplier could have a performance bond of 10% and a 10% procurement retention outstanding, and even though it has delivered CIF Alexandria on time, be unable to retrieve its performance bond or collect its 10% retention for a considerable time in the event of slow or non-performance by the Egyptian civil contractor. The increased scope of consulting engineering services will help both MOI and USAID to implement the project and maintain the monitoring needed for Project completion.
16. This IFB 78/01, advertised in December 1978, originally called for submission of technical tenders on March 1, 1979, later extended to April 30, 1979. Two pre-bid conferences were held at MOI in January 1979 resulting in Addenda Nos. 1 and 2 which clarified points raised by prospective suppliers and corrected errata. IFB tender 78/02 for procurement of shop and service equipment was advertised in December 1978 and opened March 1, 1979.
17. MOI's recommendations for determination of responsive technical tenders of IFB 78/01 was submitted for USAID approval on July 9, 1979. Representatives of technical tenderers had been called in by MOI on June 12 and given an addendum No. 3 requiring them to submit repairs within two weeks. Addendum No. 3 was issued by MOI without prior consultation or approval of USAID, and its conditions of such a short time for tender repairs were not in accordance with Loan documentation. In addition, the initial evaluation documents submitted by MOI were not explicit or complete enough for USAID to make an evaluation.
18. From late June through August 1979, a series of meetings were held between representative of MOI and USAID to arrive at procedures which would remedy defects incurred by MOI, through its misunderstandings and unwillingness to observe all USG requirements on the procurement process, and to seek ways of moving the project forward in an orderly manner in accordance with the Loan Agreement and AID procurement regulations.
19. An understanding was reached with MOI and USAID approved Addendum No. 4 was then issued by MOI which gave additional time of repairs of the technical tenders and called for a resubmission of technical tender repairs in a public opening at MOI on September 21, 1979. On that same date MOI received sealed commercial bids which were then enclosed in a sealed overwrap and safeguarded in a USAID safe to be opened only on a date to be determined after a list of responsive technical tenderers had been approved.

20. By letter dated October 15, 1979, MOI transmitted to USAID its final evaluation and recommendations of responsive technical tenderers. On November 15, 1979 USAID concurred with the MOI's recommendations determining that the technical tenders submitted by Patterson Pumps, Ingersoll Rand, and Peerless Pumps were to be fully responsive to the technical and legal conditions of the IFB. Tenderers representatives were then notified in writing by MOI that the sealed commercial tenders would be publicly opened at MOI on November 26, and that the sealed bids of the unresponsive tenderers would be returned to them unopened.
21. Regarding tender IFB 78/02 for shop and service equipment, opened March 1, 1979, MOI submitted its evaluation and award recommendation to USAID on June 20, 1979, but did not submit all necessary backup documentation until July. On July 25, USAID notified MOI that only three bids were apparently responsive but that they still required clarification. On August 5, 1979 MOI informed USAID that after seeking clarifications from the apparently eligible bidder, it had been determined that these bids were also unresponsive and the IFB would have to be rebid.
22. The apparent low bids received for IFB 78/02 showed that costs had escalated dramatically above the 1977 Feasibility Study estimates. MOI and USAID shared a concern that if shop and service equipment had escalated considerably, the essential pumping and electrical equipment under IFB 78/01 part of the project might similarly escalate and there would be a serious cost overrun above the funds available from the Loan. At that point in time there was no accurate way to ascertain what the actual bids for the pumping and electrical equipment of IFB 78/01 would be until the bids were opened, since these items are not shelf items that can be easily checked, but are mainly special design items which will have to be manufactured to order. This led MOI to defer action on the solicitation of a rebid for the less essential procurement of IFB 78/02 until the costs of IFB 78/01 were known.
23. Discussion with various suppliers' representatives led USAID to anticipate that the sealed commercial tenders received on September 21, and held in safekeeping would result in a total project cost overrun of \$5.0 to \$9.0 million. By CAIRO 22941 USAID alerted AID/W that, if such an overrun did occur, we were prepared, in principle, to provide additional foreign exchange financing to complete the project. After the IFB 78/01 bid opening, CAIRO 24277 reported to AID/W that apparent costs revealed in the public opening indicated substantial additional U.S. dollar funding requirements needed for the U.S. procurement element, and on the Egyptian side, additional LE pounds for the civil works element depending upon the combinations with Egyptian contractors.

24. As indicated above, the foreign exchange procurement planned for the Project cannot be accomplished with the U.S. dollar funds now available. Project costs have escalated substantially in the three years since the original cost estimate were prepared, making the shortfall even more striking. The problems with MOI which caused critical delays in the past are essentially resolved and procurement is on track. We have a good handle on project cost needs and have revised three estimates with the collaboration of MOI (see following Financial Plan and Annex C 611 (e) certification). The GOE will be bearing its fair share of added project costs. The Project will suffer irreparable harm if the add-on grant is not approved, as these project foreign exchange costs cannot be scaled down.

Financial Plan

25. The financing plan for the Project was based upon feasibility study cost estimates calculated in early 1977, based on 1976 data, by Louis Berger International, Inc. (Contract No. AID/afr-c-1132). The Project Paper dated September 12, 1977 used these data to estimate the foreign exchange requirements of the Project at \$11.0 million.
26. To meet the present needs of the Project, a review of the Project cost estimate levels was undertaken based upon the IFB 78/01 commercial bid award recommendations received from MOI in late December 1979, the anticipated rebid costs of IFB 78/02, and an increased and extended scope of consultant engineering services. (See Annex Q, Attached)
27. The revised 1980 estimates have been reviewed with representatives to the Ministry of Irrigation and the Ministry of Economy and Economic Cooperation of the GOE. Table I below compares estimated U.S. dollar and Egyptian LE Pound requirements with the original estimates.
28. The substantial capital cost escalations of the Project reflected in Table I are a collective product of an accumulation of events not foreseen in the original PP. The four principal influencing factors have been (a) a present presumption that the original Project cost estimates of the Feasibility Study, against which increases are measured, were faulty and understated, and furthermore, could not have anticipated accurately domestic freight cost increases or the current rapid escalation in bunker and congestion surcharges which have caused problems for all AID suppliers in the period, and continue to be a potentially increasing suppliers' risk; (b) Fundamental design changes made by MOI in civil works and equipment increased the number of pumping units and added superstructure to the pumping station platforms with resultant increases in costs; and (c) a significant cost escalation over the past three years since the original cost estimates were made

(estimated to be in the area of 35-45%), and the concurrent striking cumulative increases in Egyptian civil works construction costs (estimated to have been, and to continue through the life of the Project, at a rate of 30% per annum cumulative); and (d) the contingencies of major risks perceived by suppliers which suppliers cannot unilaterally change and which are a valid component of price, such as (1) contingencies inherent in the IFB including the parallel bidding procedures where the U.S. supplier has no legal or effective control over the performance bond and a 10% retention of payment until the Egyptian civil contractor has satisfactorily completed the facilities and testing can be completed; and (2) perceived risks of doing business in the Middle-East.

TABLE I

Revised Capital Cost Estimate

|   | Foreign Exchange<br>US\$ |                      | Local Currency<br>LE Pounds |                      |
|---|--------------------------|----------------------|-----------------------------|----------------------|
|   | '77 Est.                 | '80 Est.             | '77 Est.                    | '80 Est.             |
| <b>A. PUMPING STATIONS</b>                |                          |                      |                             |                      |
| Pumps & Motors                            | 5,662                    | 8,088                | 665                         | } 1,849              |
| Pump/Motor Spare Parts                    | 674                      | 2,221                | 64                          |                      |
| Transformers & Switches                   |                          | 3,696                | 341                         |                      |
| Transformer Mounting                      |                          |                      | 24                          |                      |
| Submarine Cable                           | 694                      | 522                  | 65                          |                      |
| Trng. & Supervision of Erection           |                          | 490                  |                             |                      |
| Egyptian Agent's Commission               |                          |                      |                             | 49                   |
| Discharge Pipe                            |                          |                      | 487                         | 1,350                |
| Pump/Platform/Structures                  |                          |                      | 281                         | 7,337                |
| Measuring Weirs                           |                          |                      | 85                          |                      |
| Sub-Total IFB Base Bid Costs              | <u>7,030</u>             | <u>15,017</u>        | <u>2,012</u>                | <u>10,585</u>        |
| Transmission Line                         |                          |                      | 1,482                       | 1,500                |
| Access Roads                              |                          |                      | 51                          | 69                   |
| Sub-Total Pumping Station                 | <u>7,030</u>             | <u>15,017</u>        | <u>3,545</u>                | <u>12,150</u>        |
| <b>B. SUPPORT EQUIPMENT</b>               |                          |                      |                             |                      |
| Transport Equipment                       | 867                      | } 1,600              | 313                         | } 300                |
| Spare Parts                               | 130                      |                      |                             |                      |
| Shop Equipment                            | 307                      | 600                  | 12                          |                      |
| Elect. Testing Equipment                  | 75                       | 200                  | 29                          |                      |
| Sub-Total Support Equipment               | <u>1,374</u>             | <u>2,400</u>         | <u>7</u>                    | <u>33</u>            |
|   |                          |                      | 361                         | 333                  |
| <b>C. CONSULTANT SERVICES</b>             | <u>350</u>               | <u>800</u>           | <u>117</u>                  | <u>384</u>           |
| <b>D. EQUIPMENT AND SERVICES SUBTOTAL</b> | <u>8,759</u>             | <u>18,217</u>        | <u>4,023</u>                | <u>12,867</u>        |
| <b>E. CONTINGENCIES</b>                   | 2,241                    | 783                  | 1,005                       | 113                  |
| <b>F. CUSTOMS DUTY TRANSFERS</b>          |                          |                      |                             | 2,500                |
| <b>G. TOTAL PROJECT COST</b>              | <u><u>11,000</u></u>     | <u><u>19,000</u></u> | <u><u>5,028</u></u>         | <u><u>15,500</u></u> |

29. Comments on Revised Capital Cost Estimate:

a) Transformers and Switches: The Feasibility Study made the assumption that transformers and switch gear costs of the Project would be locally procured by GOE. Table A-15 of the Feasibility Study estimated these costs to be LE 341,470 (equivalent to US\$ 488,302) based upon 1977 Egyptian-manufactured prices. This LE cost was included in the original PP's cost estimate as a local currency procurement.

In the interests of obtaining more reliable imported US manufactured transformers to ensure the quality of performance of the Project and to reduce the substantial down-time and replacement costs that would have resulted if locally produced elements were utilized, the MOI and the Consultants recommended issuing the IFB that the procurements of this equipment be made from the Loan, and AID approved their inclusion in IFB 78/01. At that time it was assumed that the cost of the imported transformers and switch gear would approximate the estimated cost of local procurement and that the amount of the original budget designated for foreign exchange contingencies would amply accommodate the procurement.

Escalation over the three years on these items was substantial, and over the same time CIF costs went up considerably, with the result that the apparent low bid received for these items constitutes almost half of the increased need for Project foreign exchange financing.

b) Spare Parts (Pumps and Motors): At the time the Feasibility Study was made it was assumed that the spare parts and the pumps and motors would be standard stock items of regular manufacture, and that the spare parts would be an absolute minimum quantity amounting to only about 11.9% of the original cost for the motors and pumps themselves. Later, when special design pump and motor technical tenders were requested in IFB 78/01, the MOI and consultants, with AID approval, increased the amount of spare parts to be procured to about 25% of the value of the pumps and motors. The cost effect of these specifications could not be accurately estimated until the technical tenders and commercial tenders had been received. The increase in quantity of spare parts and the specifications requirements, however, together with the escalation over the three years from project design estimates, combined to result in an apparent low bid substantially higher than the original estimates for these parts.

c) Discharge Pipe: MOI has informed USAID that its recent check of the local market for this pipe reveals they have escalated to about three times their local costs in 1976/77.

d) Pump Platform/Structures: As has been previously mentioned, the MOI designed final specifications for its local currency IFB document which were based on the traditional Egyptian practice of blockhouses with

strong, heavy structures, instead of the less expensive suggestion made in the Feasibility Study, which called for only cement platforms with dust/sand shield light structures. The MOI Informed USAID that it does not recommend the use of light coverings for its pumping stations, partly because of the depredations of casual Bedouin nomads who have a tendency to strip such installations of all removable parts which are unprotected. In addition to this fundamental design decision, the Egyptian construction industry cost escalation for this type of structure has increased by approximately 30% per annum cumulatively over the past three years.

e) Support Equipment: As previously reported in this PP, the bids for IFB 78/02 were opened on March 31, 1979 but found to be unresponsive. A rebid of these items is intended to be made during CY 1980 and the resultant costs are expected to approximate the total of the 03/01/79 bids, after substantial reductions in crew boat specifications have been taken into account in the new IFB.

f) Customs Duty Transfers: Customs duties payable by MOI were not taken into consideration in the Feasibility Study and not included in the original cost estimates. These cost transfer payments within the GOE do not affect the economic rate of return evaluation, although they are costs for which the MOI must provide LE resources.

### 30. Economics

The economic assessment of the project has been redone to reflect new data available at present. The changes made are as follows:

- The total dollar and Egyptian pound project costs were revised upward to LE26.3 million to reflect actual bids received. Annual replacement costs were analogously increased. The annual schedule of disbursement is shown in Table II.

- Electricity costs were increased to LE.06/kwh to reflect full economic costing of fuel and capital costs for electricity production.

- A 1979 GOE Ministry of Economy study was used to update the consultant's estimates of output prices and net revenues for the major crops. This data is shown in Annex D, Tables 1 and 2.

Project benefits are divided into two broad categories. For those areas where additional water will not permit expanded acreage but will result in higher yields, the international output prices in Annex D, Table 1 were used to value the greater production. The Ministry of Economy study provided data for the major crops of wheat, clover, corn, sugar cane, and cotton only. Therefore, the consultant's original domestic price figures were used for the minor crops of barley, beans, sorghum, and sesame. The revised benefits are as follows (LE thousands):

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| <u>Commodity</u> | <u>Original Benefits</u> | <u>Revised Benefits</u> |
|------------------|--------------------------|-------------------------|
| Wheat            | LE 741                   | LE 1,905                |
| Clover           | 252                      | 605                     |
| Corn             | 477                      | 835                     |
| Sugar Cane       | 2,348                    | 5,964                   |
| Cotton           | 516                      | 516                     |
| Barley )         |                          |                         |
| Beans )          |                          |                         |
| Sorghum)         | 573                      | 570                     |
| Sesame )         |                          |                         |
|                  | <hr/>                    | <hr/>                   |
| TOTAL            | 4,907                    | 10,395                  |

For these areas where greater water will permit expanded acreage, the net revenues at international prices from Annex D, Table 2 were used to value the benefits. The consultant's data for barley, beans sorghum and sesame were used except for fertilizer costs. The revised benefits are as follows (LE thousands):

| <u>Commodity</u> | <u>Original Benefits</u> | <u>Revised Benefits</u> |
|------------------|--------------------------|-------------------------|
| Wheat            | LE 14                    | LE 162                  |
| Clover           | 112                      | 240                     |
| Corn             | 93                       | 204                     |
| Sugar Cane       | 199                      | 544                     |
| Cotton )         |                          |                         |
| Barley )         |                          |                         |
| Beans )          | 1,117                    | 1,054                   |
| Sorghum)         |                          |                         |
| Sesame )         |                          |                         |
|                  | <hr/>                    | <hr/>                   |
| TOTAL            | 1,535                    | 2,204                   |

The cost/benefit streams that result from the above are shown in Table II. The economic internal rate of return is 21%. It should be noted that this calculation represents a slight modification of that contained in the initial project paper amendment. The

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differences are: 1) a 1979 estimate of LE.06 is used for the economic cost of electricity rather than the 1978 cost factor of LE.045 and, 2) rather than using just the output price estimate from the Ministry of Economy study, the overall net revenue estimates are used.

Table II

Economic Costs and Benefits  
(LE Millions)

| <u>Year</u> | <u>Capital Cost</u> | <u>O+M Costs</u> | <u>Replacement Costs</u> | <u>Benefits</u> | <u>Net Benefits</u> |
|-------------|---------------------|------------------|--------------------------|-----------------|---------------------|
| 1           | 19.6                | -                | -                        | -               | (19.6)              |
| 2           | 6.7                 | 0.8              | -                        | -               | (7.5)               |
| 3           | -                   | 3.6              | .4                       | 9.0             | 5.0                 |
| 4           | -                   | 3.8              | 1.0                      | 12.0            | 7.2                 |
| 5-33        | -                   | 4.1              | 1.1                      | 12.6            | 7.4                 |

The present discounted value is +1.5 at a discount rate of 21%.

Grantee's Request

31. The Arab Republic of Egypt, acting through its duly authorized representatives, has requested authorization of an increase in the amount of the Project to provide AID assistance in financing all of the foreign exchange costs of the Project. (See Annex A).

Terms

32. The Grant assistance to the GOE will be made available to the Ministry of Irrigation for both equipment procurement and consultant services. The Ministry of Irrigation is a government agency, not a profit making enterprise. There will be no direct cost recovery which can be directly attributed to the Project because farmers in Egypt do not pay a user charge for water. The Ministry of Irrigation has no present plan to institute such a charge, claiming that such a procedure violates traditional practice. There has been some recent discussion regarding subsidies, including user charges; however, there is little or no chance they will be instituted with the foreseeable future. For these reasons, as in the original PP, we recommend against requiring the Ministry of Irrigation to impose any user charges as a condition of financing this Project. This issue will have to be dealt with as a longer term and more broadly based matter, possibly as a part of a proposed Irrigation Sectoral Water Management project to be developed.

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Covenants and Conditions Precedent

- 33. The Grant Agreement will contain the same covenants as were included in 1977 Loan Agreement except for (1) necessary changes in the "borrower" terminology, (2) a revision of the Section 3.2 (b) language to provide the GOE contribution of not less than 15.5 million LE pounds for construction and other LE pound costs of the revised project.
- 34. This Grant Agreement will include a covenant 3.2 (b) Grantee Resources for the Project, to read: "Section 3.2 (b) The resources provided by Grantee for the Project will be not less than Fifteen Million Five Hundred Thousand Egyptian Pounds (L.E. 15,500,000) including cost borne on an "in-kind" basis," and a new covenant to read: "The Grantee agrees to execute a contract approved by A.I.D. with a U.S. consulting engineering firm acceptable to A.I.D. for project-related services. Unless otherwise agreed in writing by A.I.D., such services shall be contracted within ninety (90) days of the date of execution of this Grant Agreement."
- 35. No condition precedent to disbursement other than (1) those relating to the designation of representatives by the Grantee and (2) a condition precedent requiring evidence that the Grant Proceeds will be made available to the Ministry of Irrigation on terms acceptable to AID.

Conclusion

In view of the above, the Capital Assistance Committee concludes that, to ensure successful completion of the Project, it is in the U.S. interests to provide an additional \$8.0 million of financing for the Project.

Clearances

Controller : W.A. Rice *W.A. Rice*

Legal Officer : L. Michael Hager *L. Michael Hager*

Deputy Assistant Director for IIDPS : Philip S. Lewis *Philip S. Lewis*

Chairman, USAID/Egypt Executive Committee: Owen P. Cylke, Deputy Director *Owen P. Cylke*

Mission Approval Officer

Director..... Donald S. Brown

Approved: *[Signature]*

Date: 2/4/70

100108



MINISTRY OF STATE  
FOR ECONOMIC COOPERATION

Mr. Donald S. Brown  
A.I.D. Director  
United States Embassy  
Cairo.

ANNEX A

*Action: HAPS*

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|                  |              |             |           |
|------------------|--------------|-------------|-----------|
| <i>cc: Legat</i> | ACTION TO    | <i>UDPS</i> | <i>DD</i> |
| <i>com</i>       | ACTION TAKEN | <i>2/10</i> | <i>LE</i> |
| <i>Cyber</i>     | NAME         |             |           |
| <i>Prayer</i>    | INITIALS     |             |           |

Cairo 22 Jan. 1980

Dear Mr. Brown,

One of the major problems Egypt is facing is the need to supply irrigation water to the agricultural sector which is critical to the life and economy of the country.

Our government has, therefore, considered its infrastructure of irrigation pumping stations as one of its highest priorities and is rehabilitating irrigation pumping stations, as well as extending the system to areas not previously served.

This requires substantial foreign exchange expenditures. In 1977 the foreign exchange costs of the projects were estimated at \$ 11.0 million. In response to our government's request, A.I.D. provided a loan of \$ 11.0 million to assist in funding the foreign exchange costs of the Irrigation Pumping Project. At that time the local currency costs of the project to be provided by our government were estimated to be LE 5.028.900. Costs have escalated since early 1977 and we now estimate that it will require \$ 19.0 million to finance the foreign exchange costs of the project. and LE 15.5 million to provide the local currency costs.

In order to implement this Irrigation Pumping Project, we request a grant of \$ 8.0 million from the Agency for International Development to finance the foreign exchange cost of the project which cannot be funded from the loan.

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MINISTRY OF STATE  
FOR ECONOMIC COOPERATION

ANNEX A  
Page 2 of 2

= 2 =

Your efforts in this respect will be highly appreciated.

I remain,

Sincerely yours,

GAMAL EL NAZER  
Minister of State for Economic  
Cooperation and External Finance

## 5C (2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable generally to projects with FAA funds and project criteria applicable to individual funding sources: Development Assistance (with a subcategory for criteria applicable only to loans); and Economic Support Fund.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE?  
HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 79 App. Act Unnumbered; FY 80 App. Act Unnumbered; FAA Sec. 634A; Sec. 653(b);

(a) Describe how authorizing and appropriations Committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure)?

(a) A congressional Notification on this Grant was sent to the congress on 3/4/80 obligations may be incurred on 3/19/80

(b) Yes  
Yes

2. FAA Sec. 611(a) (1). Prior to obligation in excess of \$100,000 will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

3. FAA Sec. 611(a) (2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

No further legislative action is required

4. FAA Sec. 611(b); FY 79 App. Act Sec. 10; FY 80 App. Act Sec. (501.) Is for water or water-related land resource construction has project met the standards and criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973?

N/A

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5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

Yes

6. FAA Sec. 209. Is project susceptible of execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

No. But future A.I.D. assistance in this area may be so susceptible

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions

This Project will improve the efficiency of agriculture and commerce by assisting the GOE to provide irrigation water supply in Middle and Upper Egypt which is critical to maintaining required levels of agricultural productivity throughout the country.

8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

All commodities and services financed under the grant will be procured from U.S. suppliers.

9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

The grant agreement will so provide. All local currency required will be provided by the GOE.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

Yes. Release by the GOE is not a problem at present

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

12. FY 79 App. Act, Sec. 608; FY 80 App. Act Sec. (521.) If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

N.A.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b); 111; 113; 281a.  
Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts

N.A.

of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106, 107.

N.A.

Is assistance being made available: (include only applicable paragraph which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

N.A.

(1) [103] for agriculture, rural development or nutrition; if so (a) extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, full account shall be taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made; (b) extent to which assistance is used in coordination with programs carried out under Sec. 104 to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value, improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people; and (c) extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food

N.A.

N.A.

reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

(2) [104] for population planning under sec. 104(b) or health under sec. 104(c); if so, (a.) extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems and other modes of community research.

N.A.

(3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development; and (b.) extent to which assistance provides advanced education and training of people in developing countries in such disciplines as are required for planning and implementation of public and private development activities.

N.A.

N.A.

(4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is: (1) (a) concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and (b) facilitative of geological and geophysical survey work to locate potential oil, natural gas, and coal reserves and to encourage exploration for potential oil, natural gas, and coal reserves.

N.A.

- (ii) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations; N.A.
  - (iii) research into, and evaluation of, economic development processes and techniques; N.A.
  - (iv) reconstruction after natural or manmade disaster; N.A.
  - (v) for special development problems, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance; N.A.
  - (vi) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development. N.A.
- c. [107] is appropriate effort placed on use of appropriate technology? (relatively smaller, cost-saving, labor using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor.) N.A.
- d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least developed" country)? Yes.
- e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? N.A.
- f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's N.A.

Intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

g. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth? N.A.

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest. N.A.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan? N.A.

3. Project Criteria Solely for Economic Support Fund

a. FAA Sec. 531(a). Will this assistance promote economic or political stability? Yes  
To the extent possible, does it reflect the policy directions of section 102?

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? No.

5C(3) - STANDARD ITEM CHECKLIST

Listed below are statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? Yes.
3. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will commodities be insured in the United States against marine risk with a company or companies authorized to do marine insurance business in the U.S. Yes.
4. FAA Sec. 604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? N.A.
5. FAA Sec. 603 Compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates. Yes
6. FAA Sec. 608(a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items? N.A.
7. FAA Sec. 621. If technical assistance is financed, to the fullest extent practicable will such assistance, goods and professional and other services from private enterprise, be furnished on a Yes. It is anticipated that only the U.S. private sector will provide services under this grant.

contract basis? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974.  
If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available?

Yes

9. FY 79 App. Act, Sec. 105; FY 80 App. Act Sec. [505.] Does the contract for procurement contain a provision authorizing the termination of such contract for the convenience of the United States?

N.A.

B. Construction

1. FAA Sec. 501(d). If a capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interest?

Yes.

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

Yes

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million?

Yes

C. Other Restriction

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

N.A.

36X

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N.A.
3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes.
4. FAA Sec. 636(1). Is financing not permitted to be used, without waiver, for purchase, sale, longterm lease, exchange or guaranty of motor vehicles manufactured outside the U.S.? Yes.
5. Will arrangements preclude use of financing: Yes,
- a. FAA Sec. 104(f). To pay for performance of abortions as a method of family planning or to, motivate or coerce persons to practice abortions; to pay for performance of involuntary sterilization as a method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization? Yes.
- b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes.
- c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- d. FAA Sec. 662. For CIA activities? Yes.
- e. FY 79 App. Act, Sec. 104; FY 80 App. Act Sec. [504.] To pay pensions, etc., for military personnel? Yes.
- f. FY 79 App. Act, Sec. 106; FY 80 App. Act. Sec. [506.] To pay U.N. assessments? Yes

- g. FY 79 App. Act, Sec. 107; FY 80 App. Act. Sec. [507.] To carry out provisions of FAA section 209(d)? (Transfer of FAA funds to multilateral organizations for lending.) Yes.
- h. FY 79 App. Act, Sec. 112; FY 80 App. Act Sec. [511.] To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? Yes.
- i. FY 79 App. Act, Sec. 601; FY 80 App. Act Sec. [515.] To be used for publicity or propaganda purposes within U.S. not authorized by Congress? Yes.

EGYPT - IRRIGATION PUMPS PROJECT - AMENDMENT 1  
CERTIFICATION PURSUANT TO SECTION 611 (e) OF THE  
FOREIGN ASSISTANCE ACT OF 1961 AS AMENDED

I, Donald S. Brown, the Principal Officer of the Agency for International Development, Egypt, having taken into account, among other things, the maintenance and utilization of projects in Egypt previously financed by the United States, do hereby certify that in my judgement Egypt has both the financial capability and human resources capability to effectively maintain and utilize the capital assistance to be provided for irrigation pumping facilities at thirty-seven sites.



Donald S. Brown  
Director, USAID/Egypt

February 11, 1982  
D S

TABLE 1

CONVERSION OF INTERNATIONAL PRICES AT THE BORDER INTO EQUIVALENT INTERNATIONAL PRICES AT THE FARM FOR THE MAIN COMMODITIES (L.E. PER TON).

| Items   | Cotton at 1979 price | Rice    | Wheat   | Maize   | Berseem | Beans   | Soya Beans | Onions       | Sugar cane | Nitrogen Fertilizer (15.5%) | Pesticides |
|---|----------------------|---------|---------|---------|---------|---------|------------|--------------|------------|-----------------------------|------------|
| 1. Export or import price per ton of the commodity in its traded form at parallel exchange rate.    | 1909                 | 224.2   | 94.1    | 64.6    | -       | 108.88  | 529.01     | 156.09       | 176.41     | 66.14                       | 3089.60    |
| 2. International price per ton of the commodity in its raw form.                                    | 679                  | 152.5   | 94.1    | 84.6    | -       | 108.88  | 79.35      | 156.09       | 19.41      | 66.14                       | 3089.60    |
| 3. International or domestic value of joint products.   | 94.451               | 5.156   | 39.101  | 12.920  | -       | 12.795  | 128.0      | -            | 3.250      | -                           | -          |
| 4. Combined international value of farm products (2 + 3).   | 773.451              | 157.66  | 133.201 | 97.52   | -       | 121.675 | 207.35     | 156.09       | 22.66      | 66.14                       | 3089.60    |
| 5. Transport, handling, processing costs (minus if export commodities, plus if import commodities). | -54.44               | -14.270 | +3.568  | +6.007  | -       | +6.422  | -19.62     | -15.54       | +0.70      | +1.150                      | +7.500     |
| 6. Equivalent international price per ton at the farm (4 + 5).                                      | 719.001              | 143.39  | 136.761 | 100.847 | 12.21   | 128.097 | 187.73     | 140.55<br>60 | 23.36      | 66.79                       | 3097.10    |
| 7. Value at 1979 farm price per ton including joint products.                                       | 289.20               | 68.041  | 90.367  | 82.722  | 12.21   | 120.219 | 210        | 33.00        | 9.41       | 25.00                       | 792.094    |
| 8. Ratio of equivalent international price to farm price (6/7).                                     | 2.486                | 2.107   | 1.513   | 1.219   | 1.00*   | 1.066   | .89        | 4.260        | 2.48       | 2.65                        | 3.917*     |

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Cont. ... - 2 - Notes on Table 1.

Line 7. Value at the 1979 farm price is per ton of the main farm product. It is calculated from the farm price of the main product in Table 1, lines 1 and 7, after conversion of domestic units of measurement into metric tons; plus the farm value of farm joint products, by translating the revenue per feddan in Table 1, lines 4 and 10, into values per metric ton of the main farm products.

Line 8. Ratio for berseem is assumed to be one, since berseem is not traded; the equivalent international price is calculated from the farm price, assuming 6 tons per cut. The ratio for pesticides is calculated from an analysis of pesticide use in cotton in 1976; cotton uses about 85% of all imported pesticides. Import value, converted at the parallel rate, would have been L.E. 29.1 million, plus transport and handling of L.E. 6.6 million (40% of the actual import value at the official rate), equals L.E. 35.2 million. Pesticide cost per feddan, allowing for the area under cotton of 1.25 million feddans, was therefore L.E. 28.56. Costs actually paid by farmers were L.E. 7.31. The ratio of 3.917 in line 8 is used to derive the value at farm price in line 7 from the equivalent international price per ton at the farm.

TABLE 2

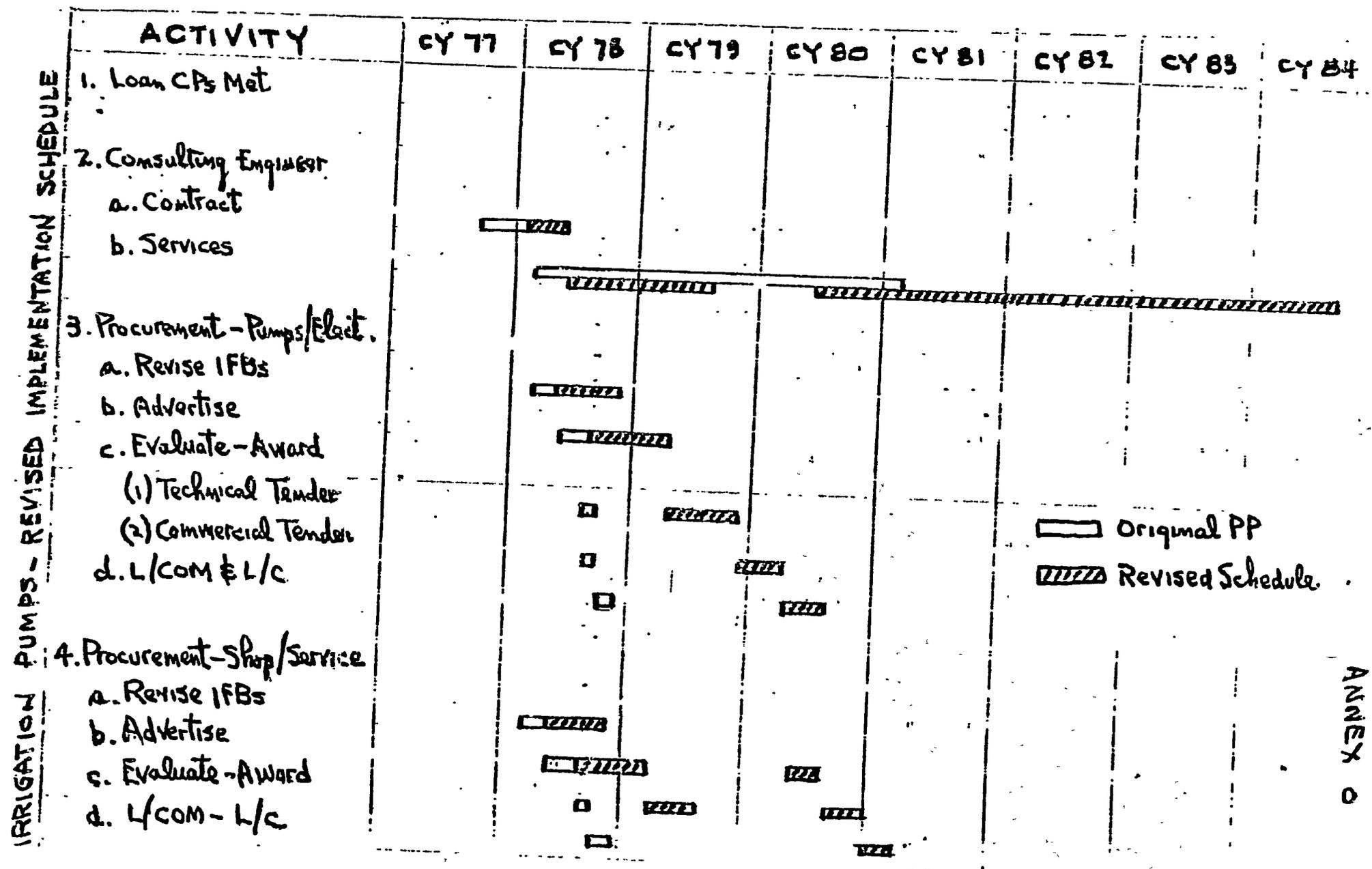
| NET REVENUES TO THE ECONOMY OF ALTERNATIVE CROP ROTATIONS AT EQUIVALENT INTERNATIONAL PRICES COMPARED TO NET RETURNS |  |  |  |                  |                   |                |                 |                 |                 |                         |               |
|--|--|--|--|------------------|-------------------|----------------|-----------------|-----------------|-----------------|-------------------------|---------------|
| AT FARM PRICES (L.E. PER FEDDAN)   |  |  |  |                  |                   |                |                 |                 |                 |                         |               |
|  |  | Berseem/<br>Cotton<br>at 1978<br>price | Berseem/<br>Cotton<br>at 1979<br>price | Berseem/<br>Rice | Berseem/<br>Maize | Wheat/<br>Rice | Wheat/<br>Maize | Onion/<br>Maize | Beans/<br>Maize | Soya<br>Beans/<br>Maize | Sugar<br>cane |
| Winter<br>Crop   | Equivalent international price<br>per ton at the farm (Table 2 line 6).    | 12.21                                  | 12.21                                  | 12.21            | 12.21             | 136.761        | 136.761         | 140.55          | 128.097         | 187.73                  | 200.00        |
|  | Revenue per feddan at inter-<br>national prices                            | 146.52                                 | 146.52                                 | 293.04           | 293.04            | 191.869        | 191.869         | 1058.482        | 122.565         | 152.436                 | 799.356       |
|  | Average cost of production<br>at international prices of<br>traded inputs. | 83.87                                  | 83.87                                  | 83.87            | 83.87             | 104.62         | 104.62          | 283.506         | 77.427          | 90.00                   | 266.169       |
|  | Net Revenue at international price   | 62.65                                  | 62.65                                  | 209.17           | 209.17            | 87.249         | 87.249          | 774.976         | 45.138          | 62.436                  | 533.187       |
| Summer<br>Crop   | Equivalent international price<br>per ton at the farm (Table 2 line 6)     | 719.001                                | 719.001                                | 143.39           | 100.847           | 143.39         | 100.847         | 100.847         | 100.847         | 100.847                 | -             |
|  | Revenue per feddan at inter-<br>national prices                            | 617.965                                | 617.965                                | 319.186          | 169.180           | 319.186        | 169.186         | 169.186         | 169.186         | 169.186                 | -             |
|  | Average cost of production at<br>international prices of traded<br>inputs. | 209.715                                | 209.715                                | 112.864          | 122.159           | 112.864        | 122.159         | 122.159         | 122.159         | 122.159                 | -             |
|  | Net Revenue at international price   | 408.25                                 | 408.25                                 | 206.322          | 47.027            | 206.322        | 47.027          | 47.027          | 47.027          | 47.027                  | 47.027        |
| Winter +<br>Summer<br>Crop   | Net Revenue of the rotation at<br>international prices                     | 470.90                                 | 470.90                                 | 415.492          | 256.197           | 293.571        | 134.276         | 882.003         | 92.165          | 109.46                  | 533.187       |
|  | Net revenue of the rotation at<br>farm prices (Table 1 line 13)            | 112.101                                | 166.671                                | 260.553          | 255.363           | 88.320         | 83.130          | 97.266          | 118.570         | 126.715                 | 129.433       |
|  | Ratio of net revenue at inter-<br>national and at farm price(9/10)         | 4.201                                  | 2.825                                  | 1.595            | 1.003             | 3.32           | 1.62            | 8.451           | 0.78            | 0.864                   | 4.11          |
|  | Economic Surplus to the Economy<br>outside Agriculture<br>(9.76)           | 358.80                                 | 404.229                                | 154.939          | 0.834             | 205.251        | 51.141          | 784.737         | -26.404         | -17.15                  | 404.765       |

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Notes on Table 2

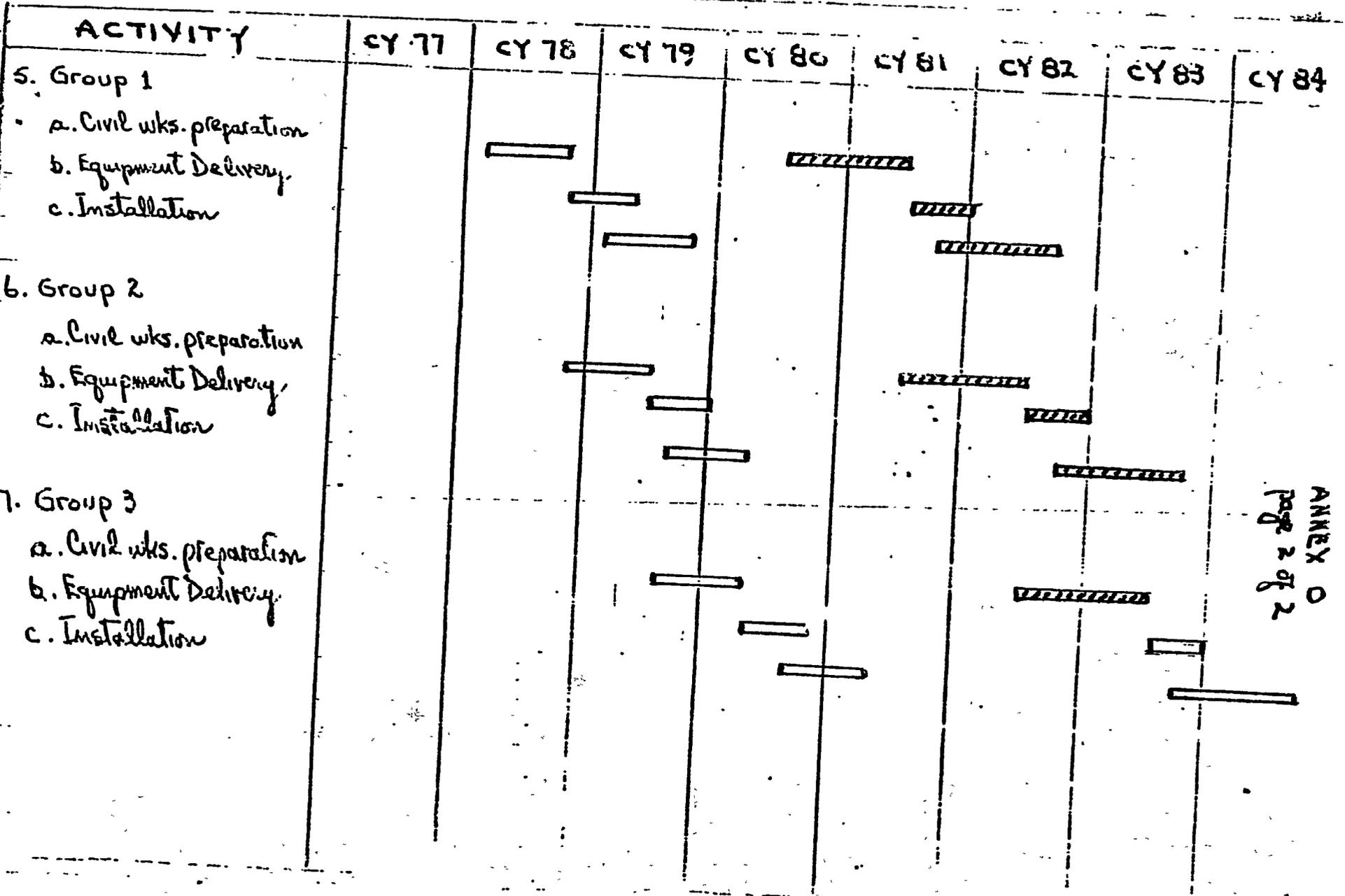
- \* Revenue per feddan at international prices is calculated using the equivalent international price per ton for the raw commodity at the farm, and the average yield (converted to metric tons) from Table 1 lines 2 and 8. Average cost of production per feddan at international prices is adjusted from Table 1 A by adjusting costs for fertilizer, pesticides, and machinery. For fertilizer, costs are multiplied by the ratio of the equivalent international price to the farm price for fertilizer (3.6) from Table 2 line 8. For pesticide materials, costs of pesticides are multiplied by the similar ratio for pesticides (3.9). Cost of machinery is increased by 25% in order to reflect approximately the indirect subsidy to machinery services provided through the Ministry of Agriculture and the cooperatives. For cotton, average cost of production is also adjusted by adding 25 per cent to the labor cost, in order to reflect approximately the part of the direct subsidy to pest control operations in 1978 which was due to subsidizing costs of labor rather than cost of pesticide materials.

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ANNEX 0

IRRIGATION PUMPS - REVISED IMPLEMENTATION SCHEDULE



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PRELIMINARY

PROPOSED SCOPE OF CONSULTANT'S SERVICES

(Suggested Draft)

(To be negotiated between consultant and Ministry of Irrigation. When AID-Grant funding is available and consultant/MOI have agreed upon scope of services and costs, contract will be subject to AID prior approval before execution.)

I. Introduction:

A. Objective of Services:

The objective of the professional services herein described is to assist the Ministry implement the project in accordance with the proposed schedule and within the estimated budgets. Assistance to the Ministry shall be provided to specify and procure the required equipment, contract for and supervise the construction of the necessary civil works and installation of equipment, and improve the maintenance capability of supporting shops and parts warehousing facilities.

B. Engineer's Performance:

The Ministry of Irrigation is responsible for all matters relating to Egypt's irrigation systems, including implementation of the project above described. In the field, the Ministry's Mechanical and Electrical Department is responsible for the installation, operation and maintenance of irrigation pumping stations. The Engineer shall work under the general direction of the Ministry and in close consultation with the Department. He shall provide the Ministry with advice and assistance as may be required for the successful implementation of the project.

II. Scope of Services:

A. Implementation Plan:

The Engineer shall prepare, in concert with the Ministry, within six weeks after the effective date of his contract, a project implementation plan including a work plan and schedule for project completion. The purpose of the implementation plan will be to permit early agreement among the financing parties on details of project implementation completion and to allow balance of procurement, contracting and construction/installation

to proceed in a timely and orderly manner.

1. Work Plan/Schedule:

A work plan and schedule shall be presented covering full project completion, implementation. It shall be based on a critical Path Method (CPM) analysis of all activities - procurement, contracting, construction installation, etc. - required to place all 37 pump stations into operation. The plan shall clearly identify the agency or entity responsible for specific, individual actions, giving special note to actions encumbent on other parties beyond direct control of the Ministry.

2. Cost Estimate:

A detailed cost estimate (both U.S. dollars and Egyptian pounds) shall be presented; this estimate should constitute a refinement of previously prepared estimates. A schedule of expenditures by quarters shall be presented based on the work plan and schedule.

B. Equipment Procurement

Upon approval of the project completion implementation plan, the Engineer shall assist the Ministry prepare final specifications and bidding documents for all remaining equipment to be procured, and assist evaluate bids, execute contracts and administer such procurement, as follows:

1. Specifications:

The Engineer shall prepare detailed specifications for all equipment and commodities to be procured from U.S. sources, utilizing, to the maximum extent possible, the specifications previously prepared. Specifications shall be prepared for incorporation into invitations for bid (IFB) and shall be adequate to provide a sound basis for competitive bidding by qualified US manufacturers and suppliers. In general, procurement specifications will include applicable requirements for performance, reliability, warranties and spare parts provisions.

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2. IFB Preparation:

The Engineer shall revise or prepare complete IFB documents for all equipment and commodities required. Procurement shall be in accordance with appropriate section of AID Handbook 11, Country Contracting, when AID funds will be used to finance the procurement. Each proposed procurement IFB, to the extent applicable, shall include but not be limited to the following:

- a. Complete specifications
- b. Provision for concurrent spare parts, special tools, operating and repair manuals.
- c. Instructions for bid tendering, including applicable bid evaluation criteria in accordance with appropriate Sections of AID Handbook 11.
- d. Commercial contract terms and conditions, including, when appropriate, requirements for guaranties, warranties, performance bonds and default procedures, and special AID provisions.
- e. Provisions for shop drawings and supervision of installation as appropriate.

Each IFB shall be accompanied by a synopsis of same for advertising purposes and a cost estimate for the equipment and materials included in the IFB.

Upon receipt of Ministry and AID approvals of the IFBs, and in conjunction with IFB advertising by AID, the Engineer shall issue the invitations to prospective suppliers and shall issue such IFB emendments and clarifications to bidders as may be necessary after appropriate consultation with the Ministry and AID. If prequalification of prospective suppliers is deemed necessary, the Consultant shall assist the Ministry in accomplishing such prequalification in accordance with procedures acceptable to AID.

3. Bid Evaluation/Contract Administration

The Engineer shall assist the Ministry in all matters pertaining to procurement contract preparation, negotiation, execution and administration, including the following:

- a. Upon receipt of bids, make technical and commercial analysis and evaluations of all bids to assure their responsiveness, compliance with all terms and specifications, and reasonableness of price.

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- b. Submit bid tabulations, analyses and evaluations based on previously established criteria, together with recommendations for award of contracts to the Ministry (5 copies) with concurrent copies to USAID (3 copies).
- c. Upon receipt of written notice from the Ministry of award approval, prepare appropriate Notice of Award.
- d. Assist and advise the Ministry in making shipping arrangements, securing proper insurance coverage, export, and import documentation. Certify invoices for progress payments, as necessary and perform all other administrative work necessary to effect the timely supply of equipment and materials in accordance with project completion requirements.
- e. Review and approve any detailed shop or layout drawings submitted by the suppliers for conformance to design concepts and specifications.
- f. Supervise and/or review necessary factory inspections and tests and witness factory performance tests as required to assure compliance with the applicable specifications.
- g. Advise and assist the Ministry in securing all contractual guarantees and warranties and monitor vendors performance under the contracts. Recommend necessary actions to ensure compliance by all vendors with all contract provisions.
- h. Advise and assist the Ministry to establish and implement proper procedures for documenting and controlling the receipt, storage and issuance of all equipment and materials procured.
- i. Assist the Ministry in processing any claims against suppliers which may arise. Any costs in connection with the processing of such claims will be for the account of the Ministry.

C. Pump Station Construction:

The Engineer shall provide assistance to the Ministry, as required in supervising construction, as follows

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3.  
1. Supervision of Construction/Installation:

The Engineer shall provide a resident construction engineer to assist the Ministry supervise all civil construction work and mechanical/electrical installation work relative to the project. The Engineer shall:

- a. Act as the Ministry's representative to provide engineering supervision and detailed inspection of the performance of all construction/installation work to ensure quality control in conformance with the specifications.
- b. Maintain current all work plans, OPM schedules and financial schedules. Prepare progress reports and special reports as required by the Ministry and AID.
- c. Monitor and determine construction progress and receipt/installation/testing of equipment, and certify the validity of progress payment invoices submitted to the Ministry by contractors and suppliers.
- d. Interpret contracts, drawings and specifications to ensure compliance with said documents and timely provision of services, equipment and materials.
- e. Prepare or review and approve field design changes and revisions and issue work change or extra work orders as may be required.
- f. Assist the Ministry in obtaining appropriate agreements with others relative to the provision of utilities and infrastructures. Monitor and advise the Ministry on the progress of such onsite or offsite work by others.
- g. Inspect and test all mechanical and electrical equipment, together with related controls and instrumentation, for proper installation and operation. Perform or witness performance testing of such equipment and prepare recommendations/certificates of acceptance.
- h. Advise and assist the Ministry establish and implement proper procedures for documenting and controlling receipt, storage and issuance of all equipment and materials to be furnished by the Ministry to contractors.

D. Maintenance Support:

The Engineer shall assist the Ministry in implementing the previously recommended improved equipment maintenance system which will help ensure the proper use and maintenance of newly procured as well as existing equipment.

I. Equipment Maintenance:

The Engineer shall review and analyze existing procedures and methods concerning pumping station and transport equipment maintenance and shall assist the Ministry in implementing an improved system for preventive maintenance including daily operator maintenance, scheduled (standard interval) maintenance and unscheduled maintenance emanating from operators' trouble reports.

E. Project Reporting:

The Engineer shall be responsible for project reporting. Reports shall be prepared and submitted as described below.

1. Monthly Reports:

The Engineer's monthly report shall include but not be limited to the following:

- Major activities and events, including conferences, submittals, approvals received and decisions reached relative to project matters.
- Major problems and constraints, current or foreseen, together with recommended solutions.
- Progress report on preparation of tendering documents, contracting for procurements, indicating actual and scheduled progress.
- Status of equipment arrivals at port, receipt, and installation.
- Staffing, including beginning-of-period staff, additions, departures and end-of-period levels.
- Expenditures, both from loan proceeds and other funding sources, during report period and accumulative.

2. Quarterly Reports:

Engineer's quarterly report shall include but not be limited to the following:

- A narrative summary of the project history to date, including a list of significant events and related dates.
- Statistical data presented in tables and graphs of:

Actual and scheduled work progress

Status or procurement

Accrued charges and payments made to the Engineer, suppliers, and contractors. Quarterly reports shall be due within 30 days after the end of the quarter reported and will be submitted to the Ministry and AID in ten copies each.

3. Quarterly Shipping Reports:

The Engineer shall assist the Ministry to fulfill its reporting obligations relative to the status of meeting AID 50/50 shipping requirements by preparing a quarterly shipping report (i.e., Borrower's Shipping Statement) in the format required by AID. The first report, covering shipments from inception of the Loan through the three-month period following the first disbursement, should be forwarded to AID through the Ministry within ninety (90) days from the end of said three-month period. Subsequent reports, covering calendar quarters thereafter, should be forwarded within ninety (90) days of the end of the period reported on.

4. Project Completion Report:

The Engineer shall prepare a project completion report, presenting a statistical, historical, financial and technical summary of the project. This final report shall be due within thirty days after completion of all work; ten copies each shall be submitted to the Ministry and AID.

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WAIVER CONTROL NO: NE-80-013

FIRST AMENDMENT  
TO  
PROJECT AUTHORIZATION

Name of Country: Arab Republic of Egypt      Name of Project: Irrigation Pumps  
Number of Project: 263-0040  
Number of Loan: Loan 263-K-0039

1. Pursuant to Part II, Chapter 4, Section 532 of the Foreign Assistance Act of 1961, as amended, the Irrigation Pumps Project of the Arab Republic of Egypt was authorized on September 26, 1977. That authorization is hereby amended as follows:

a. The first two paragraphs are deleted and the following substituted therefor :

"Pursuant to Part II, Chapter 4, Section 532 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a loan to the Arab Republic of Egypt (the "cooperating country") of not to exceed Eleven Million United States Dollars (\$11,000,000), and a grant of not to exceed Eight Million United States Dollars (\$8,000,000), such funds to be made available to the Ministry of Irrigation (the "Ministry") to assist in financing the foreign exchange costs of the project as described below.

The Project shall consist of installation of irrigation water pumping facilities at 37 sites in middle and upper Egypt. The loan and grant will finance necessary materials, equipment and services for the installation of new or replacement pumps."

b. New paragraphs shall be added as follows:

1. Paragraph c(3):

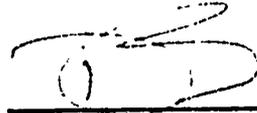
"(3) The names of the persons who will act as the representatives of Grantee and the Ministry for the Project together with evidence of their authority and specimen signatures of each."

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2. Paragraph c (4):

"(4) Evidence that the grant proceeds will be made available to the Ministry of Irrigation on a timely basis."

2. The authorization cited above remains in full force and effect except as hereby amended.

  
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Douglas J. Bennet, Jr.

May 27, 80  
Date

f Clearances:  
GC/NE: John E. Muller <sup>GB</sup> Date 11/12/12, 1950  
NE/PD: Don Reese <sup>DR</sup> Date 3/12/80

Info:  
NE/EI: Jonathan Sperling  
cjl  
Drafter: GBisson:paj:GC/NE:3/12/80

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