3060146 (4)

AID 1050-1 (7-71)

PIO/T

FY-1975

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

1. Cooperating Country: AFGHANISTAN

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2. PIO/T No.: 306-146-3-50121

3. [X] Original or Amendment No.

4. Project/Activity No. and Title: PD-AAD-015

306-11-120-146

Central Helmand Drainage

DISTRIBUTION

5. Appropriation Symbol: 72 - 11 - 1028

6.A. Allotment Symbol and Charge: 402-50-306-00-69-63

6.B. Funds Allotted to: [ ] A.I.D./W [X] Mission

7. Obligation Status: Funds obligated thru ProAg

[ ] Administrative Reservation [X] Implementing Document

8. Funding Period (Mo., Day, Yr.): 2-3 MM. To

9.A. Services to Begin (Mo., Day, Yr.): Between 12/8/75 and 12/31/75

9.B. Completion date of Services (Mo., Day, Yr.): 3-31-1978

10.A. Type of Action: [X] A.I.D. Contract [ ] Cooperating Country Contract [ ] Participating Agency Service Agreement [ ] Other

10.B. Authorized Agent: AID/W

Estimated Financing $1,000s		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
11. Maximum A.I.D. Financing	A. Dollars		56,000		56,000
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contribution	A. Government				
	B. Other				

13. Mission Reference: Kabul - 6436, Kabul - 6090, Kabul -

14. Instructions to Authorized Agent:

Request AID/W to arrange for expeditious selection of IQ firm in order for scope of work to be completed by end March.

15. Clearances – Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
DP:FWHooker 10-21-75

B. Funds for the services are available
CO:TJMcMahon 11/1/75

C. The scope of work lies within the policy of the initiating and approved Agency Programs
PAFD:WJBarbour 10/22/75

D.
MGT:FMiller 11/3/75

E.
DP:CWJohnson 10-21-75

F.
DD 12/2/75

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

Title:

17. For the Agency for International Development

Signature: Vincent W. Brown

Title: Director, USAID/A, Kabul

18. Date of Signature: 12/2/1975

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19 a. Scope of Technical Services

A. Objective for which the Technical Services are to be Used

to construct [illegible] main drains in the Central Helmand Drainage Project area; and (2) the most feasible type of farm drain to construct. With respect to type, open ditch drains, buried tile and buried perforated plastic pipe have been suggested as alternatives to be considered. Construction could be by machine-intensive or labor-intensive (including use of locally available draft animals) methods or by a method involving an intermediate machine-labor combination. Particular attention will have to be given to alternative methods for using machine or labor inputs as opposed to the typical developed world approach of minimizing labor inputs. (Use of contract pipe for buried drains should also be explored.)

19 b. B. Description

no local experience. The Mission may request that an operational plan be developed. Such a plan would have to be developed anyway, at least implicitly, in assessing the feasibilities of the alternative approaches. It is assumed main drains will be open ditches.

Once the technical, administrative and political feasibility of each of the alternatives has been assessed, analyses will be performed regarding: (1) the economic and financial feasibility; and (2) the socio-economic impact for those approaches deemed to be technically, administratively and politically feasible. Options are provided for the economic and financial feasibility analyses.

Economic Feasibility. If time should become a limiting factor in completing the scope of work, it will not be necessary to compute internal rates of return (or benefit-cost ratios) although it is desirable that this be done. The option is to compute and compare the economic costs of the alternative approaches. The critical cost elements would seem to be:

- the economic value of the output lost (because of loss of land) when using ditch as opposed to covered drains;
- the economic cost of using labor. Labor will be shadow priced and if labor should have to be imported from out-of-area, account will be taken of associated economic costs; and

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SCOPE OF WORK

19. Scope of Technical Services

A. Objectives [illegible]

B. Description

To assist Mission in selecting: (1) [illegible] optimal socio-economic method (cont'd page 2a)

The scope of work should produce a study which will give the Mission and the GOA extensive parametric data to use in selecting: (1) the kind of farm drain to construct (e.g., open ditch, buried plastic perforated pipe) in the Central Helmand Drainage Project area; and (2) the method of construction of both farm and main drains. The method could be labor-intensive, machine-intensive, or some-intermediate combination. Such a study will require an assessment of the technical, administrative and political feasibility of the alternative kinds of drain construction each under: (1) labor-intensive methods of construction; (2) labor-machine combinations; and (3) machine-intensive. The kinds of farm drain construction are probably limited to three alternatives -- open ditch, buried plastic perforated pipe and perhaps buried tile. A real effort will need be made to determine the true problems of buried drains, since the use of such drains would introduce a technology into the country with which most of the population is not acquainted and for which there is little or (cont'd page 2a)

C. Technical

(1) No. Needed	(2) Skills Needed	(3) Indoor/Outdoor	(4) Duration of Assignment (Man-Months)
1	AG Engineer familiar with drainage Practices and technology		2-3 MM
2	Generalist Economist - Experienced in conducting feasibility & socio-economic impact studies		2-3 MM

(2) Duty Post and Elevation of Technical Services

Lashkar Gah, Afghanistan

(3) Language requirements None

(4) Access to Classified Information Not required

Cost Estimates

66 days @ $366	--	$ 24,156
66 days @ $353	--	23,298
Int'l Travel	--	4,000
Local per Diem (111 days x $18. x2)	--	3,996
Int'l per Diem	--	200
Miscellaneous		350
		$ 56,000

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(5) Dependents ☐ Will ☒ Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - $56,000 (2) By Cooperating Country -- - 0 -

- loss of income if labor takes significantly to complete work.

- the economic cost of using machines. A realistic opportunity cost will be utilized for capital and foreign exchange will be shadow priced. The machine down time will need be estimated and this done on the basis of the existing logistics system and taking into account the project's remoteness from supply sources.

Financial Feasibility. While we are interested in the financial feasibility of the alternatives, these computions have a low priority. We do want, however, the financial costs to the GOA of each alternative.

Social and Economic Impact. The implications that each approach holds for social equity is a very important part of the study. For each of the alternatives, we want to know what the benefits will be, who will be the recipients and the distribution of the benefits among the recipients. We want to know the (social) equity cost of machine vs labor intensive approaches in the HAV and for the country as a whole. The latter will require an assessment of the multiplier effects under labor and machine-intensive approaches. For the nation as a whole, we want to know whether the secondary impact (through the multiplier effect) will be different for a labor-intensive approach than for a machine-intensive from both an economic and an equity point of view. This aspect will have to be discussed and assessed.

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20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity (2) Description (3) Estimated Cost (4) Special Instructions

B. Financing of Equipment and Supplies
(1) By AID - $ - 0 - (2) By Cooperating Country - - 0 -

21. Special Provisions

☒ A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.

☒ B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.

☐ C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.

☐ D. Other (specify)

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22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

1. Ten each short, typed (English) summary reports will be submitted to DP, USAID/A as each of the major topics of the study are completed. The reports will contain (perhaps tentative) conclusions and rationale supporting conclusions. The major topics are:

- Feasibilities
  - technical, administrative, political
  - economic (or the cost option)
- Financial costs to GOA
- Impacts
  - social equity
  - economic

2. One copy of a final report containing results of studies performed under this scope of work will also be submitted to DP. The report will be in English, typed and capable of being clearly reproduced with Mission's reproduction facilities. Report will contain sufficient methodology and data so reader can make own judgment as to reasonableness of conclusions. Raw data not included in report will be made available to Mission for reproduction at Mission's option

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractor or Participating Agency; if no answer, cross reference Block 19.C(6) above.)

The USAID is assisting the GOA in a drainage construction/rehabilitation project in the Central Helmand Valley. Since the project's inception, there has been substantial pressure from some quarters pushing for the construction of both main and farm drains by machine-intensive methods. While it is possible that such an approach may be the socially and economically rational one, we suspect, at least for farm drains, that it may not be.

The Mission needs a careful study of the merits of alternative approaches as a base for decisions -- on the type of drains to construct and on the method of construction -- before negotiations begin on the anticipated second phase of the project.

Many GOA officials continue to stress that there is substantial unemployment and underemployment in Afghanistan. It does seem that large quantities of labor are at make-work jobs in Kabul. And it is true that in much of the country, but not in the project area, winters are severe (cont'd page4a)

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

The consultants will report to the USAID/A Program Economist.

B. Cooperating Country Liaison Official

HAVA Project Manager

C. AID Liaison Officials

Raymond Hooker, USAID/A Program Economist
Central Helmand Drainage Project Manager

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enough to virtually prohibit productive outdoor activity. The desirability of investment to create additional productive employment is a constant GOA theme. At the same time, however, it is frequently reported that there is no surplus labor in HAVF; it is contended that a rather acute labor shortage exists, at least seasonally.

If the former condition obtains, then the social cost of using labor to construct drains in the Central Helmand might well be negligible. The direct opportunity cost would be close to zero and such an approach, if technically, administratively and politically feasible, would contribute to the attainment of the country's socio-economic goals, including the priority one of equity.

If, on the other hand, there is a de facto labor shortage and constructing drains by labor-intensive methods would result in a reduction in output in other segments of the economy, then the construction by machines or capital intensive methods might be the socially optimal approach.

There are also technical and administrative considerations which may influence the approach to drain construction. For example, the vertical profile of the land in some parts of the project area exhibits a layer or layers of underlying of conglomerate of varying thickness and depth. Some of the conglomerate is highly cemented, hard and impermeable to water; other conglomerate is water permeable and relatively loose. In some areas, the conglomerate is close enough to the surface that main drains anyway may have to be dug through, or into, the layers. Also, in most parts of the project area the water table is quite high and drains will begin filling with water well before the designated depth is reached. Most of the population is not familiar with buried drains. There may be problems associated with the importation of out-of-area labor. We note also that our experience in the Valley has been that the down-time on construction machinery has been distressingly high. Much of the machinery was old, however, and this status undoubtedly contributed to the poor performance. Still, Afghan maintenance and operations procedures are far less efficient and flexible than is the case for the normal environment in which modern machines are used.

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The study will require substantial association/communication with Afghans and study team can expect to do a good deal of traveling within country as it collects information. The team may also spend substantial time in Kabul gathering information from GOA officials and foreigners. The Mission will provide an Afghan translator and, if needed, the Mission's sociologist can be made available for about two weeks.

AID 1330-1 (1-70)

PIO/T

Cooperating Country: AFGHANISTAN

PIO/T No.: 306-146-3-50121

Project/Activity No. and Title: 306-11-120-146 Central Helmand Drainage

7B. Provisions for Logistic Support

A. Specific Items (Insert "YES" in applicable columns or date. If entry needs qualification, insert an asterisk and explain below in C. "Comments")	In Kind Supplied By: AID	In Kind Supplied By: Cooperating Country	From Local Currency Supplied By: AID	From Local Currency Supplied By: Cooperating Country (Trust Funds)
(1) Office Space	X			
(2) Office Equipment	X			
(3) Furniture and Utilities	*			
(4) Furniture	*	*		
(5) Travel [illegible]	*			
(6) Transportation in Cooperating Country	X			
(7) Interpreter Services				X
Other (Specify) (8) Secretarial Services	X			
(9)				
(10)				
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities available from Other Sources

All facilities that are available to other USAID Contract groups in Afghanistan.

* Temporary Govt. Quarters will be provided (Basis for Per Diem) in Lashkar Gah. Standard per diem in Kabul.

C. Comments

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