PROJECT AUTHORIZATION AND REQUEST
FOR ALLOTMENT OF FUNDS PART I 1339

1. COUNTRY/ENTITY DS/AGR/RNR PD-AAH-872/119
2. ACTION: A = ADD; C = CHANGE; D = DELETE — A
3. DOCUMENT CODE: 5
4. DOCUMENT REVISION NUMBER: — Original
5. PROJECT NUMBER (7 digits): 936-4021
6. BUREAU/OFFICE: A. SYMBOL: DSB; B. CODE: 10
7. PROJECT TITLE (Maximum 40 characters): Dryland and Irrigation Support

DE E. Program Development & Support

PROJECT APPROVAL DECISION — ACTION TAKEN: A = APPROVED; D = DISAPPROVED; DE = DEAUTHORIZED — A

8. EST. PERIOD OF IMPLEMENTATION: YRS. 1 2; QTRS 2

10. APPROVED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		C. 1ST FY 81		K. 2ND FY 82		K. 3RD FY 83	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
1) ARDN	121I	090	---	500	---	0	---	0	---
2)									
3)									
4)									
TOTALS				500	---	0	---	0	---

A. APPROPRIATION	N. 4TH FY 84		O. 5TH FY 85		LIFE OF PROJECT	
	C. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN
1) ARDN	0	---	0	---	500	---
2)						
3)						
4)						
TOTALS	0	---	0	---	500	---

11. PROJECT FUNDING AUTHORIZED (ENTER APPROPRIATE CODE(S)): 1 = LIFE OF PROJECT; 2 = INCREMENTAL, LIFE OF PROJECT

A. GRANT	B. LOAN

C. PROJECT FUNDING AUTHORIZED THRU: FY 8 1

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED ($000)

B. ALLOTMENT REQUEST NO. ____

A. APPROPRIATION	C. GRANT	D. LOAN
NA		
1)		
2)		
3)		
4)		
TOTALS		

13. FUNDS RESERVED FOR ALLOTMENT: NA

TYPED NAME (Chief, SER/FM/FSD)

SIGNATURE

DATE

14. SOURCE/ORIGIN OF GOODS AND SERVICES: ☐ 000 ☐ 941 ☐ LOCAL ☐ OTHER ____

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

DS/PO OFFICIAL FILE

FOR AID/W USE ONLY

16. AUTHORIZING OFFICE SYMBOL

17. ACTION DATE: MM DD YY

18. ACTION REFERENCE (Optional)

ACTION REFERENCE DATE: MM DD YY

AID 1330-5 (7-78)

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART II

ENTITY: Bureau for Development Support

PROJECT: Dryland and Irrigation Support

PROJECT NUMBER: 936-4021

I hereby authorize grant funds not to exceed $500,000 for a 18 month agreement with the United States Department of Agriculture (USDA) starting March 15, 1981 and ending September 15, 1982.

This agreement will provide professionally qualified personnel to advise and assist the LDCs through projects of the DS/AGR Renewable Natural Resources Division, the Regional Bureaus, and the Missions. Assistance will be given on matters relating to project development and evaluation as defined in the scope of work attached to the Action Memorandum.

Tony Babb
Deputy Assistant Administrator
for Food and Nutrition
Bureau for Development Support
Date 3.16.81

Clearances:

DS/AGR/RNR, C. Simkins Charles A. Simkins date March 18, 1981
DS/AGR, D. Fiester (Draft) date
DS/AGR, J.K.McDermott (Draft) date
DS/PO, A.Silver (Draft) acm date 3/19/81
DS/PO, B.Chapnick BC date 3/19/81
DS/MGMT, M.Thome date
DS/AGR, Mary Mozynski (Draft) date

DS/PO OFFICIAL FILE

Recd 3/19/81

ACTION MEMORANDUM FOR THE DEPUTY ASSISTANT ADMINISTRATOR FOR FOOD AND NUTRITION
BUREAU FOR DEVELOPMENT SUPPORT

FROM: DS/AGR, Donald Fiester Richard L Hughes for

SUBJECT: Dryland and Irrigation Support.

Background

Your approval is required for a RSSA with the USDA to obtain services of soil and water management experts and scientists to assist LDC Governments through activities of the Regional Bureaus (RB), Missions, and the Renewable Natural Resources Division, DS/AGR, for a period of 18 months at a cost not to exceed $500,000.

Discussion

The Renewable Natural Resources Division DS/AGR has a continuous need for staff support to provide specialized technical and professional services to LDC programs through the RBs, Missions and in areas related to dryland agricultural production and soil and water management. DS/AGR has had only limited staff to respond to requests on a timely and effective basis. In the Renewable Natural Resources Division there has been no available specialist during the past year to provide service in the soil and water management of dryland production.

There is a need to establish within the Division of Renewable Natural Resources a capability to provide assistance as required by the LDC projects developed by the Missions, RBs and DS/AGR in the areas of research and technical assistance project design implementation and evaluation of proposed projects. Subject matter specialists are needed to assist in the preparation of documents and project papers on regionally and centrally funded research and technical assistance projects, as well as to provide short-term assistance to assist in problem identification and diagnosis at the field level.

The United States Department of Agriculture (USDA) possesses a comprehensive research and extension program which is staffed by competent scientists and specialists in many areas of dryland agricultural production, including soil and water management, crop production and farming systems.

Many of these specialists are available on a rather short-time notice and can provide short-term assistance to the LDC projects with RBs, Missions, LDCs and DS/AGR. One scientist, a dryland soil and water management specialist, is available now for assignment to the Renewable Natural Resources Division for a period of 18 months. The USDA is willing to make his services available to the Division since they are aware that the involvement of their specialists in AID programs is beneficial to the individual in gaining experience which will ultimately benefit the domestic program of the USDA.

The procedure for approving a RSSA agreement requires an annual plan of work and a budget. A scope of work and a budget for an 18 month period is attached to this memorandum (Attachment A.) The scope of work and budget covers a

period from March 15, 1981 to September 15, 1982. The budget will fund a dryland agricultural specialist for the 18 month period, a water management specialist for 18 months, and allow for 18 months of various short-term support.

Recommendation

I recommend that you indicate your approval for an 18 month RSSA agreement with the USDA from March 15, 1981 to September 15, 1982 in the amount of $500,000 by signing the attached PAF.

Attachments: Scope of Work
Budget
PAF Part I and II

CLEARANCES:
DS/AGR/RNR, C. Simkins Charles Simkins date March 18, 1981
DS/AGR, J.McDermott (Draft) date
DS/AGR, M.Mozynski (Draft) date
DS/PO, B.Chapnick BC date 3/19/81

ATTACHMENT A

STATEMENT OF WORK

PROJECT TITLE: Dryland and Irrigation Support
PROJECT NUMBER: 936-4021
USDA/RSSA: To be determined

A. Objectives of Agreement

This RSSA will enable A.I.D. to draw upon the resources of the USDA for assistance in Dryland Agriculture and Soil and Water Management Areas where little direct hire capability exists. The USDA has broad and comprehensive dryland agriculture and soil and water management research and extension activities and on a continuing basis maintains an extensive staff of professionals who are experts in many aspects of dryland agriculture and irrigation. Through this RSSA, AID will be able to utilize USDA experts within the man power available on an as-needed basis.

B. Description

The services of the USDA soil and water management agriculture specialists and scientists will strengthen technical skills of the Renewal Natural Resources Division, Office of Agriculture, Bureau for Development Support, AID. These services are needed to develop a capability to support dryland agriculture programs as well as irrigation programs planned and implemented in the LDCs by Missions, Regional Bureaus and DS/AGR/RNR Division.

C. Scope of Work

Tasks to be undertaken by personnel provided under this agreement include the following:

1. Provide professional scientists in the formulation of policies and programs relating to problems of dryland agriculture and irrigation.

2. Identify and design projects for implementation by DS/AGR/RNR, arrange for project development, review, contracting and monitoring.

3. Identify and develop a center of expertise for the transfer of professional and technical advice and assistance to other Bureaus and offices within AID, Missions, and host countries on dryland agriculture.

4. Participate in reviews and evaluations of proposed and ongoing projects in and give advice on technical sufficiency and appropriateness of project design.

5. Assist in the development of training materials and training programs in LDCs and the U.S. to meet needs in host countries.

6. Provide the services of intramural and extramural experts on a short-term basis.

7. Assist in the management and monitoring of AID projects concerning soil and water management and in dryland agricultural management.

8. Provide for the preparation of publications on selected aspects of dryland agriculture management.

D. Expertise required.

The USDA will provide the following specialists, experts and scientists:

1. A dryland agriculture soil and water management specialist (GS-14) from within the USDA to serve as a staff member of the Renewable Natural Resources Division, Office of Agriculture, Bureau for Development Support, AID. The specialist will direct the design, planning and implementation of worldwide projects to strengthen the progress of soil and water management for agricultural production in semi-arid regions.

The agriculturist will review and evaluate proposals for dryland agriculture management to determine their benefits to rural farmers. The specialist will be responsible for providing counsel and guidance to the LDCs, to AID, to Regional Bureaus and to Missions on research, field studies and technical assistance needs for development of specific technology for effective utilization of land and water in agricultural production in dryland regions of the world.

2. A water management specialist from within the USDA to serve as a staff member of the Renewable Natural Resources Division, Office of Agriculture, Bureau for Development Support, AID. The specialist will provide counsel and guidance to AID, to Regional Bureaus and to Missions on design, planning, implementation and evaluation of projects in irrigation and water management.

3. Short-term experts will be provided to meet specialized requests from the LDCs, AID/Regional Bureaus, overseas missions, and the RNR Division. The Division Chief of RNR Division will notify USDA of the requirements for TDY assignments. Short-term experts may include the following:

(a) Soil Physics - This area deals with expertise in an understanding of the physical properties of soils as they relate to management of soils so that they provide the best moisture and environment for crop production. It also is concerned with the quantitative characteristics of water retention and flow in the soil profile as it relates to root development and plant growth.

(b) Agro-climatology - This area includes a quantitative understanding of the agricultural climate as a prerequisite for developing a sound farming system as well as a crop improvement program; the use of probability techniques to construct models for analyzing long-term rainfall data in relation to evapotranspiration and soils of various moistsure holding capacity. This information can then be used to suggest potentially optimum cropping patterns to fit various environments

(c) Agronomist (dryland) - This area includes intercropping systems, weed control methods, genetic evaluation and sequential crop systems for dryland areas.

(d) Irrigation Engineer - This area includes experience with pumps, pumping, energy costs, water distribution system design and construction, control and measurement devices, and water demand and use.

(e) Agronomist (Irrigation) - This area includes cropping sequences, crop water requirements, production functions, water-use curves, weed control methods, and genetic evaluations for irrigated crop production.

(f) Land and Water Management - Ths area includes the identification of criteria for new crop varieties, cropping systems and crop management technologies which can increase long-term rainfall use efficiency. It also includes the technology involved in effectively conserving and utilizing rainfall to support crop production systems which maintain productivity and assure dependable harvests.

(g) Soil Conservation - This specialty expertise is in the area of control of soil erosion by wind and water.

(h) Soil, Fertility and Chemistry - This area includes use of fertilizers, the efficient utilization, recyling and conservation of the natural soil-nutrient resources. It is also concerned with the nutrient cycling in alternative cropping systems under different management practices and varying soil-climatic environments.

(i) Farm Equipment and Tillage (LDCs) - This area includes the art of development of systems for the use of draft animals and the development of improved animal-drawn implements for tillage and cultivation in dryland areas. It also includes the integration of mechanical power into dryland systems of farming.

(j) Dryland agriculture project and program support, project and program identification, design management and evaluation of research and technology transfer programs and systems - includes data collection, census and statistics.

(k) Hydrology - This area deals with the effects of various management treatment in water sheds upon surface and ground water hydrology. Expertise in quantifying the run-off probabilities and erosion prevailing in a given agro-climatic zone.

(l) Pest control - This area includes entomology, pathology and other pests of crops in dryland areas.

E. Supervision and Guidance

The agricultural specialists will receive guidance from and consultation with the Renewable Natural Resources and other professional staff with respect to broad AID policy directives in the area of development goals. Their work will

be reviewed in terms of fulfillment of the broad program objectives and national foreign assistance goals and in terms of the achievement of high-quality research/assistance programs as well as the contributions to the science in meeting new goals and finding solutions to new problems.

Specialists from several disciplines will apply their technical expertise to the solutions of AID-identified LDC development problems. USDA will provide authoritative expertise from within USDA or outside USDA and other specialized assistance as recognized by AID and required for particular design and study efforts. These experts and scientists should possess a composite of the following attributes, qualifications and/or experience:

1. Professional and scientific stature to command respect and to work at peer levels with scientists in all areas of responsibility.

2. Professional experience as a professional soil, water, or agronomic management specialist including organizational reponsibility for planning and managing programs and projects.

3. Demonstrated ability to assess the soundness and economic feasibility of proposals for economic advancement in relation to conditions existing in specific countries.

4. Ability to deal successfully with senior government officials or scientists in recipient countries, as well as with representatives of other sponsoring agencies on policy issues of major importance to the development of programs.

F. Evaluation

The AID requirement of annual evaluation will be implemented during January '82. Two aspects of project review will be involved in the evaluation process. The first aspect applies to the specialist working in the DS/AGR/RNR Office. In this case, the frequent face to face contact provides evaluation periodically and for rapid adjustment in the scope of work to meet the needs of office operations.

The second aspect applies to limited work projects and TDY services provided by USDA as requested by LDCs through DS/AGR. These various activities will be evaluated in terms of the results produced as compared to the implementing instructions provided.

G. Reports

The RSSA experts will prepare memoranda from time to time as required on issues arising in the course of their duties. They will also prepare documents relating to research and technical assistance projects in which they participate, and they are to report on the results of such projects.

Trip reports (3 copies) are to be submitted to the AID Project Manager, DS/AGR/RNR.

H. Background Information

Background information is available from DS/AGR/RNR.

I. Travel

The travel of RSSA employees stationed in DS/AGR will be included in the annual/quarterly travel plans of DS/AGR. All requests for international travel of RSSA employees stationed in DS/AGR will be initiated by a memorandum signed by the Deputy Director, DS/AGR or his designee and cleared by the Division Chief of DS/AGR/RNR. Prior approval will also be obtained from OM/SOD/IIA. All other travel under the RSSA will be initiated by a written request signed by the Division Chief, DS/AGR/RNR and cleared by the Project Manager.

J. Special Provisions

Any residual funds remaining on September 30, 1981 are to be carried forward into FY 1982 in support of this project.

K. Logistic Support

Use of AID facilities is authorized as it is essential for the performances of the RSSA personnel.

ATTACHMENT B

PROPOSED BUDGET

PROJECT TITLE: Dryland and Irrigation Support
PROJECT NUMBER: 936-4021
USDA/RSSA: To be determined

TECHNICIANS	GRADE	NO. MONTHS
1 Dryland Soil and Water Specialist	GS-14	18
1 Water Management Specialist	GS-14	18
Various TDY Support	Various	18
1 Secretarial/Clerical	GS-6	18

BUDGET

Personnel cost	$250,000
Personnel benefits	20,000
Travel	98,000
Training materials, seminar, workshop, in-service training	30,000
Printing and related costs	10,000
Miscellaneous equipment	8,000
Overhead 20%	80,000
Negotiating contingencies	4,000
TOTAL	$500,000

UNITED STATES GOVERNMENT

memorandum

DATE: March 18, 1981

REPLY TO ATTN OF: DS/AGR/RNR, Charles A. Simkins

SUBJECT: RSSA - Dryland and Irrigation Support

TO: DS/PO, Arthur Silver

The proposed RSSA for Dryland and Irrigation Support is designed to give additional support to the areas of the existing project "Synthesis of Water Management" and the proposed project of "Dryland Agriculture Support Service." The expression of need in these two projects is overwhelming. In the recent review by Missions of DSB/AGR projects both of these projects received highly favorable response by the Missions responding On the question of the importance of the project focus to RD in their country the projects ranked 4th and 20th out of 63 projects or within the upper 1/3 most favorably considered. On the question of importance to present AID activities, within their country, ranking was 4th and 14th or both within the upper 1/4 considered most important. On the question of importance to projected USAID projects Water Management and Dryland Support ranked 4th and 11th or both within the upper 1/5 of those considered. On the question of extent of use of the project's outputs by the LDCs' rural institutions which is certainly central to AID's mission of helping the LDC farmer, response was 5th and 12th indicating a very real future contribution. On the question of Missions' use of the projects for help in the design and evaluations of other Mission projects these 2 projects ranked 5th and 10th indicating a need for these projects in helping improve overall performance within LDCs of AID efforts.

In addition to the countries responding to the above survey several other countries have indicated a deep interest in these projects and asked that the dryland support not "move slowly." There is no question of additional support needed for the water synthesis project as Dr. Corey is spending a high percentage of his time outside of the country in support of the project and cannot respond to all the requests that are presently being received.

In summary, the RSSA is needed to assist the LDCs and the Missions in areas where there has been an indication of high priority.

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-112

936-4021 nf 4/1/80

MAR 27 1980

ACTION MEMORANDUM FOR THE DEPUTY ASSISTANT ADMINISTRATOR, BUREAU FOR DEVELOPMENT SUPPORT

FROM: DS/AGR, Ra[illegible] Solem

936-4021

The PID for the Water Management Support Service project 931.4021 was approved on July 6, 1979 (see your approval memo attached). The Environmental Threshold Determination was not made at that time even though the PID recommended negative action. I am sure this resulted from the fact that we inadvertently omitted the approval page from the PID.

We, now, request that you approve the attached Environmental Threshold Determination so that it can be included with the Project Paper which is nearing completion.

Clearance:
DS/AGR:GCorey [illegible] Date 25 March 80
DS/AGR:MMozynski [illegible] Date 3/25/80
DS/PO:ASilver [illegible] Date 3/27/80
DS/PO BChapnick [illegible] Date 3/31/80

DS/PO OFFICIAL FILE

MAR 27 1980

ASSISTANT

ACTION MEMORANDUM FOR THE DEPUTY ADMINISTRATOR, BUREAU FOR DEVELOPMENT SUPPORT

FROM: DS/AGR, Ralph Solem

The PID for the Water Management Support Service project 936-4021 was approved on July 6, 1979 (see your approval memo attached). The Environmental Threshold Determination was not made at that time even though the PID recommended negative action. I am sure this resulted from the fact that we inadvertently omitted the approval page from the PID.

We, now, request that you approve the attached Environmental Threshold Determination so that it can be included with the Project Paper which is nearing completion.

Clearance:

DS/AGR:GCorey [illegible] Date 25 March 80
DS/AGR:MMozynski [illegible] Date 3/25/80
DS/PO:ASilver [illegible] Date 3/27/80
DS/PO. BChapnick [illegible] Date 3/31/80

OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : DS/AGR, Gil Corey

DATE: July 6, 1979

FROM : DAA/DS/FN, Tony Babb /s/ TONY

SUBJECT: Water Management Support ~~Service~~

Following my review of the project implementation document and the minutes of the PID review meeting, and my meeting with you and Dean Peterson, I have made the following decisions.

1. The PID is approved for the Water Management Support Service.

2. You should move as rapidly as feasible to prepare a project paper.

3. The Water Management Support Service project should not be combined with the Water Management Synthesis project.

4. The project should be developed as a cooperative agreement.

I have decided against combining the two projects because I feel that the subject matter of dry land and rain fed agriculture management is sufficiently different from management of irrigation systems that the project ought to have a separate team of specialists and separate management system. It would appear that a combination of these two rather major projects would create unnecessary confusion.

CC: DS/AGR, Dean Peterson
PPC/PDPR, Douglas Caton
AFR/DR/ARD, William Johnson
LA/DR, John Balis
ASIA/TR, Calvin Martin
NE/TECH, Russell Olson

7/9/79

MISSING PAGE NO. 2-7

9. Budget

The estimated year by year budget is as follows: (in thousands)

FY 79	FY 80	FY 81	FY 82	FY 83	Length of Project
650		1300	1750	2500	6200

10. Staff Implication and Relation to Other Program

DS/AGR will provide Agency technical liaison, technical expertise, and assistance with documentational arrangements; Regional Bureau technical committees will provide advice and counsel on methodology, technical support needs, selection of topics for training and implementation manuals, and review of publication. DS/AGR will attempt to locate an experienced person to serve as as IPA assistant to the AID project manager during the first two years of the project.

Cooperating Missions will be selected through negotiation and expressions of interest by the Missions and host country agencies.

If approved, this support service program would be the principl activity in DS/AGR's water management cluster during the next 5 years. Ongoing projects will terminate on schedule and a CRSP is not anticipated, in this area until 1985.

11. Initial Environmental Examination

The activities of this project fall into the area described in environmental procedure regulations, paragraph 216.2(c), "Analysis, studies, academic or investigative research, workshops and meetings". These classes of activities will not normally require the filing of an Environmental Impact Statement or the preparation of an Environmental Assessment. It is possible that an output of the project will be a set of proposals, procedures, and guidelines which when used would require such an assessment. However, the project itself only proposes development programs and activities. Under these guidelines, th activity clearly qualifies for a negative determination at the time when a threshold decision is determined.

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT IDENTIFICATION DOCUMENT FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE: [A] (A = Add, C = Change, D = Delete) — PID — 2. DOCUMENT CODE: 1

3. COUNTRY/ENTITY: DS/AGR/TSWM RDA-4 Type C. Field Service

4. DOCUMENT REVISION NUMBER: [ ] Original

5. PROJECT NUMBER (7 DIGITS): 936-4021.11

6. BUREAU/OFFICE: A. SYMBOL: DSB; B. CODE: 10

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS): Water Management Support Service

8. PROPOSED NEXT DOCUMENT: A. 3 (2 = PRP, 3 = PP) B. DATE: MM 06 YY 79

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION: a. INITIAL FY 79 b. FINAL FY 83

10. ESTIMATED COSTS ($000 OR EQUIVALENT, $1 =)

FUNDING SOURCE	$000
A. AID APPROPRIATED	6200
B. OTHER U.S. 1.	
B. OTHER U.S. 2.	
C. HOST COUNTRY	
D. OTHER DONOR(S)	
TOTAL	6200

11. PROPOSED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. FIRST FY ____ F. GRANT	E. FIRST FY ____ G. LOAN	LIFE OF PROJECT H. GRANT	LIFE OF PROJECT I. LOAN
(1) FN	120 I	022	-	650	-	6200	-
(2)							
(3)							
(4)							
			TOTAL	650	-	6200	-

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

091	095	064	066	032	-

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

BS	XII	INTR	TECH	-	-

14. SECONDARY PURPOSE CODE: 140

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

Increased agricultural production and productivity.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)

To improve the effectiveness and efficiency of water use in agriculture by providing support and service assistance to LDC water management projects.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

3 person months DS/AGR

18. ORIGINATING OFFICE CLEARANCE

Signature: Dean F. Peterson

Title: Director, Office of Agriculture

Date Signed: MM 04 DD 27 YY 79

19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS DATE OF DISTRIBUTION: MM DD YY

WATER MANAGEMENT SUPPORT SERVICES

1. Project Description

This PID describes a program to integrate DS/AGR funded activities with Mission funded activities in a fashion supportive of Mission projects in agricultural water management and should lead to better overall projects.

The program represents more than a project in the usual AID sense because of the complicated nature and totality of water management in agriculture. Water should not be considered an agricultural input in the manner of fertilizer, seed, pest control, credit, etc. Its management is far more complicated. Water is a basic natural resource. It exists everywhere on the earth; either above, below or on the surface. It is not ordered and delivered in neat packages. One works closely with nature to achieve effective and efficient water management.

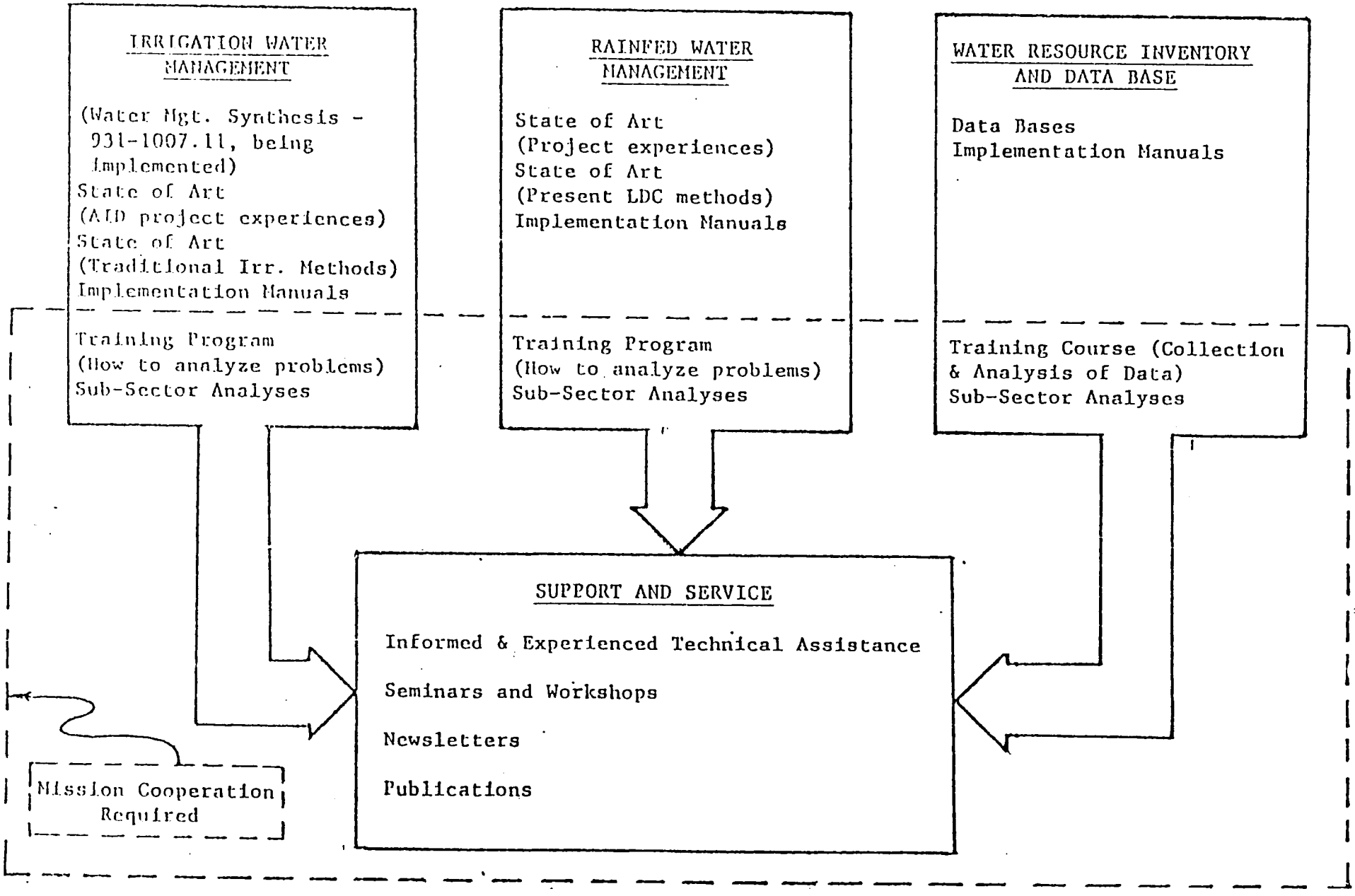
Good agricultural water management involves, first, a knowledge of the availability of the resource in a given location and time, and, then, the development and use of many technologies to conserve, collect, distribute, use and dispose of the water while maintaining its quality without wasteful use. Water is essential in all agricultural production including irrigation, rainfed and non-cultivated watersheds, and grazing lands. These types of agriculture require very different approaches to water management. Therefore, the totality of water management in agriculture is extensive and complicated.

The program described here includes all the elements believed necessary to improve country strategies, planning, and improvement projects in all aspects of agricultural water management. The diagram on the following page indicates the various project components.

These components include water management in irrigated agriculture, rainfed agriculture and watersheds, resource inventory and data base, and a service component to organize and systematize the service outputs from the other components. The physical, economic, social and institutional aspects of each element will be addressed. Basically the program will involve a bank of professional talent working on specific outputs when not working directly with Missions. These outputs are needed in order to improve mission programs, but also the experience in providing these outputs will build an institutional capability and experience which does not now esist anywhere.

Most of the irrigated agriculture component is already in progress through the "Synthesis of Irrigation Water Management" project. This project was initiated in October 1978 and will provide the outputs indicated.

DS/AGR CENTRALLY FUNDED WATER MANAGEMENT SUPPORT AND SERVICES PROGRAM



* Does not include research projects.

Therefore, the rainfed water management, water resource inventory and data base, and the support and service components are needed to complete the total service program. These components are the subject of this PID, but it must be remembered that the irrigated agriculture component is just as important and will be an essential part of the total program.

Products expected from the program will be:

a) Analytic studies which focus on constraining issues in water management; eg. institutional/farmer relationships; the value of water in specific settings; relationship between water allocations and water logging; vegetation management for erosion control; participation distribution/summer fallow relationships, etc.

b) State of the art analyses of the present situation within each particular component. In other words, what is the present state of knowledge and experience within the AID and other donor project experience? A thorough study of existing and past project experience will be done.

c) Analyses of methods (technologies) in use today in LDC's. These are considered necessary in order to understand the present state of the knowledge. It seems only logical that in order to improve something one must first know how it operates.

d) A training course and the necessary training aids to conduct the course under each component. The course will be directed to teaching technicians how to do a sub-sector analysis within that component.

e) Sub-sector analyses or problem identification documents. These will be accomplished after the training course is taught and, therefore, will be done essentially by the trained LDC technicians. The analyses will be useful in program strategies, planning and future project development.

f) Technical Assistance. The service portion of the program will provide TDY technical assistance from within any of the components. This assistance will be in project planning, design, implementation, or evaluation. It will be Mission requested and, if more than 30 days, at least partially Mission funded.

g) Working implementation handbooks and manuals. These informative how-to-do materials will be useful to project implementors. They will be written specifically for LDC situations, and background material to prepare them will come from the study of worldwide experience within each component, b and c above. As an example, the manuals presently planned under the irrigation portion include land leveling, pump types and selection, and watercourse improvement and maintenance.

n) Seminars, newsletters, and workshops to create awareness and disseminate information.

2. Project Purpose

To improve the effectiveness and efficiency of water use in agriculture by providing support and service assistance to LDC/USAID water management projects. The project will be accomplished by using U.S. institutional capabilities in a systematic, comprehensive, organized program of problem analysis, technology development, training, and technical assistance which Missions can use in project development and implementation.

To accomplish this purpose will require a long-term focused effort which:

a) develops methodologies and training to do sub-sector analyses and problem identification;

b) provides a review and analysis of existing worldwide knowledge and experiences and keeps it current;

c) helps design project and programs;

d) creates an awareness of problems and solutions through newsletters, seminars and workshops;

e) provides simple implementation handbooks and manuals to develop and transfer suitable technologies.

3. Problem to be Solved

Water is a scarce agricultural resource in most countries. Its management in agriculture traditionally has been poor. A great amount of technology for improvement is generally known. However, there are many choices of methods, organizational and institutional arrangements, and degrees of sophistication. Since good management of the resource requires a combined cooperative effort among farmers, organized groups of farmers, and government and private institutions, implementation of new and improved technologies is a highly complicated, time consuming, and difficult process. In the exhuberance to achieve results, a coordinated total effort and commitment is usually not achieved and partial solutions are attempted usually with disappointing results.

The problem is significant because water is one of the basic resources necessary for agriculture. Good management of soil and water resources is a necessary precondition to optimization of input projects (fertilizer, seeds, mechanization, pest control, etc.). It is fundamental to all agricultural improvement projects AID initiates.

LDC's will invest several billion dollars, by 1985, in water management related activities including irrigation system construction; improvement of water management within irrigation systems; remedial actions in drainage, waterlogging and salinity; increased production in rainfed agriculture; and increased attention to environmental issues including watershed management, soil erosion, and hydrologic data bases and analyses. The human, technical, training and methodological resources needed to effectively carry out these programs is awesome.

Most of these activities relate directly to AID's program objectives of improving the plight of the rural poor through increased productivity, employment, and income. As evidenced in the 1979 CDSS's AID will invest several hundred million dollars between now and 1985 in these areas through bilateral assistance projects. According to the CDSS's, AID's investment in water management projects will increase from $225 million in 1981 to over $450 million by 1985.

Past history indicates that such projects often suffer from poor design and implementation because of insufficient and untrained personnel, institutional constraints, and inadequate and unclear technical objectives resulting in poor integration of project outputs into the indigenous systems; even though the U.S. has significant expertise and experience in personnel, methodologies, techniques, and training faculities in these areas.

The water management cluster in DS/AGR logically should take the lead in addressing this issue by organizing U.S. technical resources, creating awareness of key constraints, providing base data on existing conditions, and adapting technologies to local conditions so that technical support in development and implementation of mission projects and programs is timely, appropriate, and achievable.

4. Beneficiaries

The key beneficiaries are the farmers who manage the water resources. Perhaps as important is the governmental system and institutions which plan and are engaged in the process of addressing problems important to the economy and welfare of the agricultural sector. Finally, the service, if successful, will be appropriate for all countries.

5. Project Implementation

There are two basic implementation approaches the program could take. The irrigation water management component is already under contract to the Consortium for International Development (CID). The remaining 3 components could be initiated under one additional contract or grant, or each component could be dealt with separately and would not necessarily need to be initiated at the same time.

The first approach is preferred because there is a definite synergetic advantage in producing like outputs within each component concurrently. In fact, the implementation experience of the ongoing "Synthesis" project will be a valuable aid to implementation of the other components. Also, it is logical that the Service component be developed along with the other components in order to take immediate advantage of the technical components. In the final analysis, the Support and Service component provides the output AID is most interested in and needful of. The other components are only required to provide quality input to the Service component.

The Support and Service component will be accomplished through a contract whose scope-of-work describes the specific outputs where possible, and, in the case of the technical assistance, will describe typical example cases—many of which are already known to be needed and wanted.

The other technical components (rainfed agriculture and watersheds, and water resource inventory) would be accomplished through grants. As indicated before, the irrigation component is already under contract.

The grantees will be selected from Title XII Institutions which will have expressed interest in the specific components of the program. Final selection will be made from Expressions of Interest defining the costs, key personnel, past experiences, and institutional commitment to the particular component. DS/AGR will work closely with the BIFAD office in making these selections.

The program will require close cooperation and monitoring from DS/AGR since the technical experts there must provide information, methodological assistance, and technical review to insure quality, high priority, and timely outputs. Only AID knows specifically what outputs are needed and past experience indicates that many of the types needed here are not easily described in a scope-of-work. Polished results more reasonably can be expected through a close-working relationship between the contractor and AID. DS/AGR must also take steps to insure that the ongoing Synthesis (irrigated agriculture component) project does become a working part of the total Service program. This may require a contract amendment.

The Project Paper will be prepared by DS/AGR staff according to the recommendations of the PID review. The following issues need to be addressed at that review:

a) Should the project/program be developed? (A pre-PID document briefly describing the program was circulated in November 1978. A summary of these comments is attached to this PID. Several changes have been made in response to these comments.)

b) Should the total program be developed as a package? Or should we proceed with one component at a time?

c) Is the grant/contract approach described above a workable possibility?

d) Is the Title XII mechanism suitable for selection of contractor/grantees?

6. End of Project

The program is programmed for long-term, at least 5 years. It will be reviewed comprehensively after 3 years to determine progress, usefulness, and recommend changes.

The program consists of four key broad output categories which will promote and provide better water management in agriculture. These are:

a) Information: workshops, seminars, newsletters resource data bases, and analyses.

b) Training: Training materials and courses to provide methodologies of data collection in problem identification and sub-sector analyses.

c) Implementation tools: working manuals to provide methods and techniques to implement selected technologies.

d) Technical Support: Mission requested professional technical assistance in project development, design, implementation and evaluation.

7. Probability of Success

Presently most countries are addressing the problem of excessive waste and inefficient use of water in agriculture. Most often, however, not enough time and resources are devoted to thoroughly understanding the farming system before improvements are attempted. Water management is not a technology, it is instead the process under which water is used. It includes structures, facilities, organizations, laws, regulations, procedures and people. Improvement in one of these does not necessarily result in improved management. The interactions must be understood to properly implement improvement.

The probability of success through an integrated studied approach, as called for in this project, is great because the economics are favorable especially where water is scarce and food supply deficient.

8. Critical Assumptions

The important critical assumption is that all parties, host country, AID, and contractor, will cooperate in the development and operation of the program such that it will be effective in addressing important issues which are not being adequately take care of now. Of course, it is assumed that water manageme will continue to be an important element in Mission strategies. Since the prog is especially comprehensive it is also assumed that AID will provide sufficient time and talent to manage it properly.

COMMENTS ON WATER MANAGEMENT SUPPORT SERVICES PRE-PID

Summary of comments received. The distribution was:

DS/AGR, D. Peterson, K. McDermitt, F. Williams, J. Day
DAA/DS/FN, T. Babb
CM/COD/AN, M. Darvin
PPC/PD/PR, D. Caton
All Office Chiefs - RB/AG offices
Agr. officers - All missions

AFRICA BUREAU

Ndjamena (cable) - Chad mission interested in both rainfed and irrigated water management. Major physical constraints to increased agriculture in Chad appears to be related to water management.

USAID feels the proposed project may be worthwhile and appropriate for Chad. Mission has reservations on project particularly on 30-day TDY limitation and fact that services may not be available when needed. Mission also wonders if it is economical to the Agency as a whole having available specialized teams on a full-time basis compared to the cost of simply requesting services as the need arises. However, would be justified if Mission demand is great enough.

ASIA BUREAU

ASIA/TR/ARD Newberg (memo) - Asia Bureau currently working on the same input, more broadly focused from Title XII. Sees no need for proposed services.

India, Chief Office Agr. & RD, F. Riggs (letter) - Overall looks like a good idea. A variation might be for Missions to fund their specific requirements with the Project being a ready source of the technical expertise. The nature of the grant has the flavor of an IQC and that experience may be helpful.

LATIN AMERICA CARRIBEAN BUREAU

LAPAZ (cable) - Bolivia Mission believes proposed project would efficiently meet needs in this field. Mission anticipates need for services.

USAID/Guatemala, C. D. Koone (letter) - Irrigation is high priority for Guatemalan agriculture. A great potential prevails to increase and diversify agricultural production through the proper use of irrigation on both small and large farms. USAID/Guatemala will probably make additional financing and technical assistance available for design and construction of small irrigation systems during the FY 78-85 period. Irrigation will likely be corbined with other natural resource efforts

consisting of soil conservation, forest management, and improved land use in highland regions. In this event, Mission would be in a position to make effective use of the services in all four program elements.

With emphasis on Title XII, Mission wonders why these institutions are not being considered for providing technical support for project.

USAID/Colombia, D. H. Schaer, Chief ARDO (letter) - although USAID/Col. is in phase out made, the Agri. & Rural Development Division enthusiastically endorses the development of the project. We firmly believe that rural development through improved water and land management leads to the ability by small farmers to use much of the improved crop technology successfully and leads to increased incomes (2-5 times) which then leads the way for farmers to adopt many of the other development options.

Any effort by AID/W to go forward with this project should be supported and we recommend a strong element of central funded backstopping for timely assistance to missions and host countries.

NEAR EAST BUREAU
No comments received.

AID/WASHINGTON
PPC/PDPR/RD Caton (memo) - This type of service arrangement can lead to problems for the AID manager because of the difficulty in making teams available at right time, getting the right mix on the team, and teams not doing the right thing.

There is no reason why the service couldn't be provided through expansion of the synthesis project.

DS/AGR Peterson (note) - Looks good. Procurement mechanism might be a cooperative agreement such as used by DS/ESP and DS/RAD.

McDermott (note) - A good idea. Closely related to Synthesis project. Proceed, but why not anticipate adding the services to Synthesis project.

Williams (note) - How does project differ from Synthesis project? Is it best to combine rainfed and irrigated components? Contract arrangements proposed will be difficult at best. The whole thing is like an IADs or ISNAR for water management.

Day (memo) - Supportive. Project is in right direction. We need to define a logical place in the chain of technical into AID projects and program development where DS/AGR funding an initiative. Project identification, project feasibility analysis, and project evaluation are very much an integral part of mission country programming activities. These activities should be left to the inititative and funding of the missions.

SUMMARY AND COMMENTS BY G. L. COREY

Obviously there is some difference of opinion regarding the merits of the project. There is obvious agreement that water management is important in AID Mission development strategies.

If the service grant were organized through the Title XII mechanism with the Synthesis project folded into it, many objections would be met. The problem of having contracted personnel doing worthwhile things when not doing service for Missions is real. Sub-sector analysis and problem identification were chosen as activities because of my belief that once LDCs know the facts regarding the problem they can plan a strategy to solve it without much help. And I disagree with Day that DS/AGR has no business in this area. Certainly missions do not devote much time to it and if DS doesn't projects will continue to be developed based on inaccurate information.

The point at which Mission funding takes over from central funding is a serious question. Certainly from this rather limited response it would appear that DS/AGR should back off some and let missions fund most of the activities other than pure technical TDY assistance. But if we do that we arrive back at the point of needing something for the personnel to do while awaiting TDYs.

GLCorey:kb 2/22/9

0926-4021

UNITED STATES GOVERNMENT

memorandum

DATE: April 2, 1981

REPLY TO ATTN OF: DS/AGR/RNR, Charles A. Simkins

SUBJECT: Mechanisms for Linkage of Dryland Support Project with Various U. S. and International Research Centers.

TO: DS/AGR, Donald Fiester

I appreciate very much your note and concern on the need for linkage with institutions and research centers in regard to much work and good information on dryland agriculture production. While I doubt whether or not there is a great quantity of information which can be directly adapted in LDCs, we do need to put together what there is. Furthermore, this is what the project is all about, i.e., the development of the best type of mechanism to be used to obtain technology and transfer it to the LDCs and Missions.

We must obtain or appoint a DS/AGR project manager, initiate the first phase of the Dryland Agriculture Support project with a longer term arrangement to supplement in-house capacities and help carry out programs so that Missions do not have to mobilize outside resources strictly on an ad hoc, case by case basis.

cc: DS/AGR/RNR, R. Meyer
DS/DAA/FN, Tony Babb

MECHANISMS FOR LINKAGE OF DRYLAND SUPPORT PROJECT
WITH VARIOUS U. S. AND INTERNATIONAL RESEARCH CENTERS

Considerable technology and expertise in the field of dryland agriculture production has been developed by international research centers, U. S. institutions and other international institutions and organizations. The success of the Dryland Agriculture Support Project of DS/AGR will depend greatly on the linkage with these institutions and research centers. Following are some of the mechanisms which will be used to insure this linkage.

A. DS/AGR will have an AID based project manager who will be in close contact with the international research centers, U. S. research institutes and other international research programs. This contact will be established by travel and personal contact with staff involved in dryland agricultural production.

B. A broad-based international advisory committee would tend to insure that information from all sources is available and considered. It would also insure cooperation with existing institutions already involved in dryland agriculture.

The committee could include representatives from:

1. USDA - both Washington and dryland field stations
2. Universities - both 2lld dryland universities and universities located in the Great Plains.
3. Institutes - OALS (Arizona), ICASALS (Texas), Desert Research (Nevada)
4. AAAS Committee on arid lands
5. Great Plains Council
6. Australian dryland groups
7. FAO
8. Israeli desert agencies
9. French - SAHEL group
10. IARCs - ICRISAT, ICARDA, ISNAR

C. The development of a "Center of Expertise" as the principal output of the "Project" would achieve the project purpose of "providing improved, effective, efficient and rapid field support to AID/W, AID Missions, and Host Country Institutions." The actual mechanisms involved in structuring of the "Center" and linkages would be worked out in consultation with USDA field experts, institutes working in arid and semi-arid studies, 2lld universities in dryland agriculture, other universities, and special groups such as the broad-based Great Plains Research Council Committees in dryland management. Input should also be obtained from other international agencies such as World Bank, Israeli groups, French and Australian groups working in the SAHEL and Missions located in prime target areas. A workshop or seminar could synthesize the final structuring.

The expertise could be from:

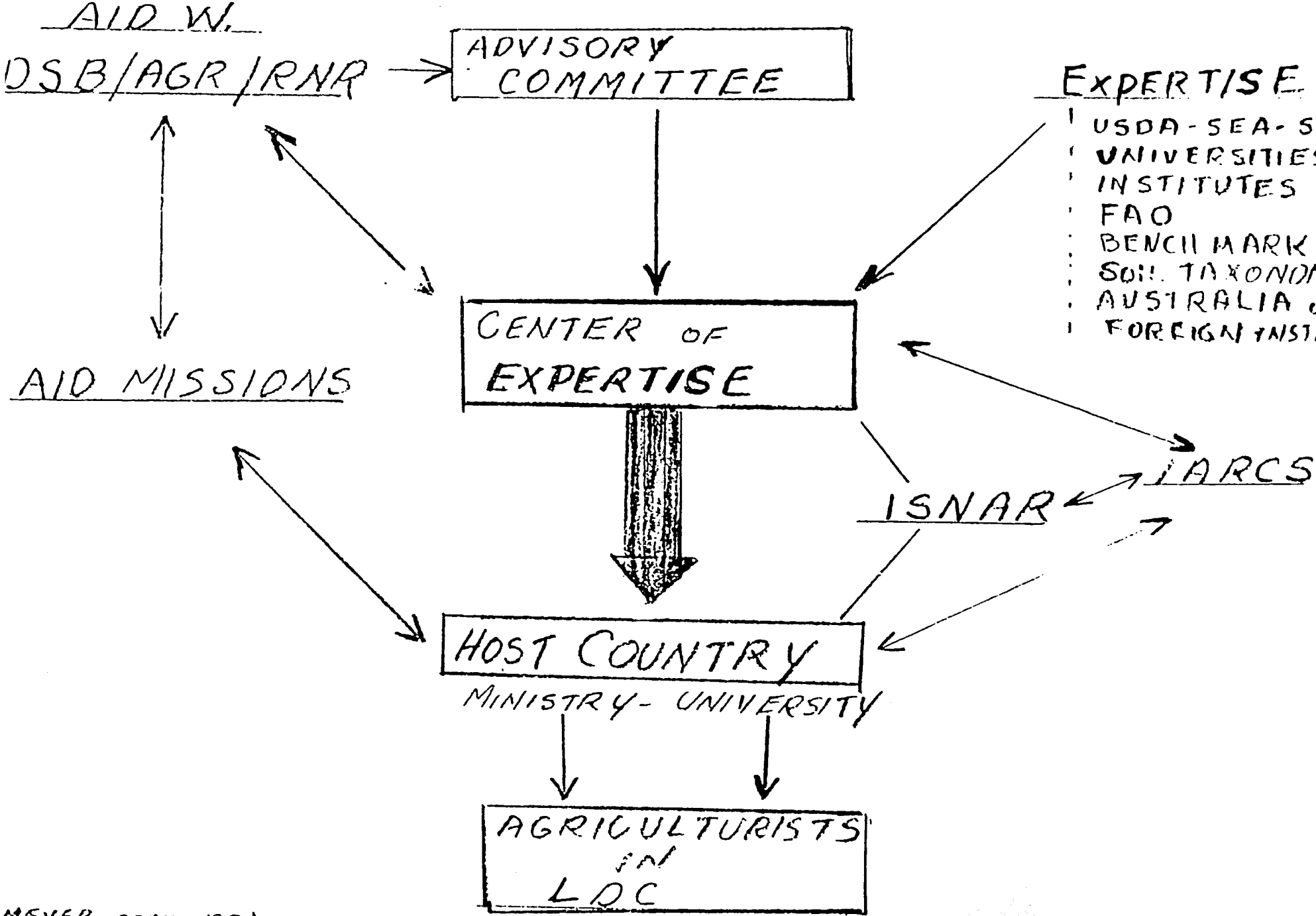
1. USDA - SEA, SCS
2. U. S. universities
3. Foreign universities
4. FAO
5. Foreign research agencies
6. Other projects - Benchmark, Soil Taxonomy

An example of how the connection with IARCs might work is:

> Turkey has a dryland area where potatoes are grown with little or no rainfall after planting. The Ministry asks CIP for help in designing research projects for the area. CIP does not have any expertise in dryland soil management and asks for help from the "Center" (possibly through ISNAR). The type of team or individual sent would depend on the request, i.e., specific research projects in potatoes or a dryland program with potatoes as one commodity. Expenses might be paid as part of CIPs regional program.

A possible flow and interaction of the various components is shown in the attached diagram.

DRYLAND AGRICULTURE SUPPORT



CR MEYER - APRIL - 1981

PROJECT NUMBER:

PROCESS:	ACTION:	DATES:	INITIALS:
CATALOGUE	✓	8/31/82	DJB
ABSTRACT		~~8/11/82~~	
FICHE	filmed		

COMMENTS:

DS/DIU