

AGENCY FOR INTERNATIONAL DEVELOPMENT
 WASHINGTON, D C 20523
BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY

Batch 81

1. SUBJECT CLASSIFICATION	A. PRIMARY Science and technology	TC00-0000-0000
	B. SECONDARY Applications	

2. TITLE AND SUBTITLE
 Rural water supply and sanitation in developing countries; report on donor agency activities

3. AUTHOR(S)
 Rosenfield, P.L.

4. DOCUMENT DATE 1975	5. NUMBER OF PAGES <i>105p. 220p.</i>	6. ARC NUMBER ARC
--------------------------	--	----------------------

7. REFERENCE ORGANIZATION NAME AND ADDRESS
 AID/TA/H

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)

9. ABSTRACT

10. CONTROL NUMBER <i>PN-AAF-448</i>	11. PRICE OF DOCUMENT
12. DESCRIPTORS AID Organizations Projects Rural areas Sanitation Surveys Technical assistance Water supply	13. PROJECT NUMBER
	14. CONTRACT NUMBER AID/TA/H
	15. TYPE OF DOCUMENT

AID/CM/ta 147-494
Resens. ed.

AID/TA/H
PN-AAF-448
Corrected

RURAL WATER SUPPLY AND SANITATION
IN
DEVELOPING COUNTRIES:
REPORT ON
DONOR AGENCY ACTIVITIES

Patricia L. Rosenfield, Ph.D.
Johns Hopkins University

AID Contract No. AID/CM/ta-147-494

November 1975

ABSTRACT

Recognition of deficient rural water supply and sanitary conditions in developing countries led to formation of an Ad Hoc Working Group by seven international agencies. The group is concerned with solving institutional and technical problems which constrain future progress. The Agency for International Development has a long history of continued water project funding which peaked during the 1960's. Current and proposed AID water projects are largely in agricultural irrigation but also include numerous potable water system construction projects and technology assessment research. An AID Workshop in Washington, D.C., during October 1975 considered the relative strengths of the agencies concerned with rural water problems. Workshop participants advocated continuing cooperation by AID with the Ad Hoc Working Group. Priority was given by Workshop attendees to: (1) strengthening information and technology exchange by (a) an international clearinghouse, (b) regional centers with additional capacity for managing training programs, and (c) national agencies which total program responsibilities as proposed by the Ad Hoc Working Group; (2) creation of effective local institutions specifically responsible for construction and post-construction aspects of rural water supply and sanitation; (3) training sanitary engineers and also mid-level sanitarians having less training than a sanitary engineer; and (4) improving the effectiveness of post-construction water system maintenance, and more stable financial arrangements.

TABLE OF CONTENTS

Abstract

Table of Contents

Preface

	1
1. INTRODUCTION	1
1.1 The Problem	2
1.2 Ad Hoc Working Group in Rural Potable Water Supply and Sanitation	2
1.3 Key Issues in RWSS	4
2. RURAL WATER SUPPLY AND SANITATION ACTIVITIES OF THE AGENCY FOR INTERNATIONAL DEVELOPMENT	6
2.1 Past Activities	6
2.2 Present and Proposed AID RWSS Activities	7
2.3 AID Project Submission Procedure	9
3. COMPARISON OF AID ACTIVITIES WITH OTHER DONORS	25
3.1 International Bank for Reconstruction and Development	25
3.2 Inter-American Development Bank	29
3.3 UNICEF	29
3.4 World Health Organization	31
3.5 Pan American Health Organization	33
3.6 Comparison of Agency Activities	35
4. DEVELOPING COUNTRY PRIORITIES	37
5. WORKSHOP REPORT	42
5.1 Summary of Discussion of AID Activities	42

5.2	International Activities	43
5.3	Specific Project Needs	44
6.	SUMMARY OF SUGGESTIONS FOR FUTURE RWSS ACTIVITIES	45
	REFERENCES	49
ANNEX 1.	PROJECT INVENTORY	A-1
ANNEX 2.	Individuals Contacted for RWSS Report	B-1
ANNEX 3.	Participants in AID Workshop or RWSS Activities	C-1

LIST OF TABLES

TABLE		PAGE
1	RWSS Projects of The Agency for International Development	12
2	Comparison of AID RWSS Projects by Grant and Loan	13
3A-3F	RWSS Activities in Africa, Asia, Latin America, Near East and Project Identification Documents	15-20
4	Technical Assistance Bureau Water-Related Projects	24
5	Multilateral Support of Rural Water Supply and Sanitation Activities, 1972 to 1975	26
6	World Bank Loans to Current Borrowers	28
7	UNICEF Water Supply Activities, 1960 to 1975	30
8	Comparison by Tables and Graphs of RWSS Financing in Latin America	32
9	Comparison of Donor Strengths in Supporting RWSS Activities	36
10	Water Supply and Sanitation Institutions in Latin America, 1974	38

PREFACE

Rural water supply and sanitation (RWSS) activities in developing countries are summarized here from reviews of internal documents at the Agency for International Development and other international agencies as well as from personal interviews with over fifty professionals both in and outside of AID. The material was prepared for the Office of Health, Technical Assistance Bureau, Agency for International Development by Patricia L. Rosenfield, Department of International Health, Johns Hopkins University, with the assistance of Robert C. Emrey, Office of International Health, U.S. Department of Health, Education, and Welfare; and, Martha L. Anderson, Office of International Health, U.S. Department of Health, Education, and Welfare.

The report appears at a time of renewed international concern for rural water supply and sanitation (RWSS). A global conference called by a consortium of multilateral donor agencies, the Ad Hoc Working Group of Rural Potable Water Supply and Sanitation, will be held in Geneva during November 1975. At the Conference representatives from multilateral and bilateral donor agencies and from developing countries will discuss issues involved in developing rural water supply and sanitation programs on global, regional, and national levels. The Conference is expected to produce expressions of commitment for support of RWSS activities by donor agencies. A second conference is scheduled for early 1976 to discuss program details and funding.

Drafts of the data collected in this report were presented to a group of water supply and sanitary engineers and AID staff at a Workshop held in Washington, D.C., October 15 through 16, 1975. At the Workshop, issues in RWSS activities involved in developing an AID program and for discussion at the November Conference were identified. Issues raised at the Workshop related to gaps in RWSS programs sponsored by AID and other donor agencies. AID's strong and weak points in supporting RWSS activities were discussed, along with possible strategies for expanding AID capabilities. RWSS programs of other donor agencies were compared to those of AID, with suggested potential for collaboration. Reasons for failures of past projects provided the focus for suggestions of program priorities made by the participants at the conclusion of the Workshop.

Many persons spent considerable time and effort in assisting with the preparation of this report. Generous cooperation was given by each person contacted at the Agency for International Development, Office of International Health at HEW, U.S. Department of State, International Bank for Reconstruction and Development, Pan American Health Organization, Inter-American Development Bank, United Nations International Children's Emergency Fund, United Nations Development Programme, United Nations Environmental Programme, International Development and Research Centre, University of North Carolina, and Johns Hopkins University.

In addition, we would like to thank for their special guidance and patience, Ms. Marjorie Belcher, AID, Dr. Lee Howard, AID, and A. Dale Swisher, P.E., AID. Ms. Julie Weissman, Ms. Robin Menes, and Mr. Scott Loomis of the U.S. Department of Health, Education, and Welfare generously and skillfully assisted us with time-consuming data collection. Mr. David Donaldson, PAHO, shared with us on repeated visits his valuable ideas, observation, and data. Mr. Jeremy Warford and Mr. Robert Saunders of IBRD, also subjected to repeated visits and phone calls, kindly offered suggestions and loaned their unpublished manuscripts. Dr. Daniel Okun, University of North Carolina, bolstered our background knowledge, and with his staff commented on early drafts.

The thoughtful and provocative participation of the Workshop Conferees was of invaluable assistance in the preparation of this document. We are grateful that Mr. Charles Pineo, Dr. John Logan, Mr. Donaldson, Mr. John Foster, and Dr. Jay Lehr could attend. We also appreciate those AID Bureau representatives concerned with health matters who attended.

Dr. Abel Wolman with his sensitive and thoughtful comments on needs and approaches to water problems provided encouragement and hope as well as much useful advice towards the completion of this document.

Mrs. Jean Allen, AID, masterfully typed the final manuscripts and drafts. Ms. Laurie Solow, Ms. Vickie Ugas, and Ms. Jessica Auerback, U.S. Department of Health, Education, and Welfare, did yeomen service in typing from illegible copy and re-typing many times the Project Inventory. We are also grateful to Ms. Catherine Bowman and Ms. Velma Van Duren, AID, for their assistance at all times.

1. INTRODUCTION

Provision of adequate and safe water supplies accompanied by excreta disposal facilities are essential to improving the quality of life in rural areas.^{/1} With waste-free water, domestic consumption is no longer a disease causing activity; a worker is not impeded by waste-associated diseases. With conveniently located water facilities, women and children have fewer burdens to carry; part of the drudgery is removed from their lives. As Robert McNamara, President of the International Bank for Reconstruction and Development has stated, "The single most important factor in improving the health environment of the poor is to provide clean water and adequate sewage" (1975, p.30).

Increased awareness of effects of the lack of potable water and sanitation facilities in rural areas has led the United Nations to incorporate the following goal into those of the Second United Nations Development Decade: 25% of the rural population of the developing world should have reasonable access to safe water by 1980 (Pineo, 1975, p. 29).

Since its beginning the Agency for International Development, has been involved in water supply and sanitation activities. There has been increasing emphasis on "prevention of major rural environmental hazards" (AID, 1975, p. 16).

/1. Rural areas are defined here to include dispersed populations, villages up to about 5000 inhabitants, and fringe areas of large cities. Water supply refers to water for domestic uses of drinking, bathing, and washing; excreta disposal, also referred to in the report as sewage disposal or sanitation, refers to removal of human and animal wastes.

1.1 The Problem

In 1970, 1.2 billion people lived in rural areas and the World Health Organization (1973) predicted an increase of 24% by 1980 to 1.5 billion persons. According to the same survey (the most complete to date), 28% of the developing world's population had reasonable access to water and 25% were served by sewage disposal facilities.¹² Differences exist between rural and urban services for the poor because greater numbers of loans have been made to urban areas. These totaled more than \$1.5 billion in the 1950's and 1960's (McJunkin, 1969).

The impact of past urban emphasis is that in 1970, 69% of the urban population had water supplies and 80% had some connection to sewage disposal facilities; whereas, in sad contrast, 12% of the rural population had reasonable access to water and 5% adequate sewage disposal (World Health Organization, 1973 p. 727-738).

1.2 Ad Hoc Working Group on Rural Potable Water Supply and Sanitation

Increased recognition of the need for RWSS activities in developing countries led the staffs of United Nations Development Program and International Development Research Centre in 1974 to organize a meeting of multilateral donor agencies. As a first step toward

¹² Access has been defined as follows: "Reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs. (World Health Organization, 1973, p. 721).

* Compared with total population estimate for the world of 3.6 billion.

more coordinated donor agency efforts, representatives of seven agencies met to discuss an international program for rural water supply and sanitation:

International Bank for Reconstruction
and Development,

International Development Research Centre,

Organization for Economic Cooperation and
Development,

United Nations Development Program,

United Nations Environmental Program,

UNICEF,

World Health Organization.

The representatives formed an Ad Hoc Working Group on Rural Potable Water Supply and Sanitation to plan future activities.

Two panels were organized, one to review technical needs and the other to study institutional arrangements. The Technical Panel (1974) reported that existing technology more than sufficed to meet needs in rural areas. Difficulties were found in adapting technologies for rural situations and in adequate maintenance and supervision of RWSS systems. The crux of the problem was the lack of appropriate institutional mechanisms locally, nationally, and internationally to support RWSS. Institutions were needed to disseminate information, to train managers and technicians, to encourage community participation and understanding, to establish criteria and standards, and, most importantly, to organize, operate, and maintain the systems.

The Institutional Panel (1974) recommended:

1. An International Centre, based upon the International Reference Centre for Water Supply in The Hague, promote RWSS activities by serving as a central clearinghouse for RWSS technical and project information. Information would be disseminated to regional and national centers.

2. Existing centers would be funded and assigned responsibility for setting priorities, running training programs, and, perhaps, administering demonstration projects for the region. Three prospective regional centers were identified: Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS) in Peru; Pan African Institute for Development (PAID) in the Cameroons; and, Comite inter-africain d'Etudes hydrauliques (CIEH) in Upper Volta. Choices in East Africa and Asia were postponed for future discussions.

1.3 Key Issues in RWSS

As discussed by the Ad Hoc Working Group and people interviewed for this report, key issues affecting progress in RWSS may be summarized as follows:

Technical

a. How to adapt existing technology so that the installed system meets user needs? The system also needs to be designed so that it may expand as needs expand.

b. How to measure certain costs and benefits of traditionally accepted RWSS technology requirements? These include: the possibilities and effects of training local people to construct, operate, and maintain

rural water systems; the feasibility of local production of water and waste system parts; the relationship of expected useful life of current technologies to their original cost; flexibility of low-cost systems to meet changing needs (i.e., expanding capacity).

Institutional

a. How may international and regional centers successfully promote interest in RWSS at the national and local levels? As a corollary, how best may national and local institutions administer RWSS programs?

b. What activities may be best handled at international, regional, and local levels?

c. What sources of funding are needed to support such activities?

d. How best may donor agencies and developing countries coordinate their priorities and programs in RWSS activities?

e. How may AID best participate in global, regional, and national RWSS activities?

The remainder of the report is organized as follows: First, information is presented concerning AID's past, present, and proposed activities in RWSS; second, the activities of other donor agencies including multilateral and bilateral ones are reviewed; third, developing country priorities in RWSS are discussed; fourth, the AID Workshop discussion and suggestions are summarized; and fifth, recommendations of future RWSS activities are presented. Annexes include the AID Project Inventory, the list of persons contacted in the writing of this report, and list of Workshop participants.

2. RURAL WATER SUPPLY AND SANITATION ACTIVITIES OF THE AGENCY FOR INTERNATIONAL DEVELOPMENT

2.1 Part Activities

The foreign aid programs of the United States under various names supported community water supply programs as part of health-related technical assistance.^{/3} In the 1960's, a separate office and staff with four regional water supply advisors, all under the Community Water Supply Program, provided technical consultation, developed manuals, ran training programs, supported technology development, and worked closely with other donor agencies. AID employed 39 sanitary engineers and 16 sanitarians. Short-term consultants were used to enlarge the staff.

One especially imaginative training program that may be useful to consider in future programs involved bringing engineers from developing countries to the University of North Carolina for academic review, then placing the engineers in consulting firms planning activities in their own countries, and finally, sending the engineers back to their own countries to work on the projects they had helped develop in the home offices of the consulting firms. The project ran from 1962 to 1971 and trained 135 engineers from 42 countries.

/3 For detailed discussion of past U.S. programs
see McJunkin (1969) and Okun (1965)

From the beginning of the United States foreign aid program in 1950 until 1968, "direct grants and loans totaling some \$330 million for water supply projects and programs were made. An additional \$200 million has been indirectly provided through local currency and commodity assistance loans and grants." (McJunkin, 1969, p. 30).

AID concentrated most of its activity on urban areas because of the existence of administrative institutions, realization of economies of scale, and greater likelihood of establishing self-supporting systems. The hope was that the development of urban systems would spread interest and competence in these activities to rural areas. Several urban systems and institutions were developed but the hoped for multiplier effect seldom occurred. With the trend in the late 1960's for supporting capital projects rather than technical assistance ones, AID country programs included progressively fewer water supply and sanitation projects until the termination of the Community Water Supply Program in 1968.

2.2 Present and Proposed AID RWSS Activities

In the middle 1970's, with increased interest in RWSS from developing countries and other donor agencies, RWSS in AID activities were revitalized. In addition, the Congressional mandate for 1975 included strong support for Environmental Health which encompasses RWSS programs. In FY 1976 \$ 0.4 billion were allocated for ongoing projects which included RWSS components. New projects in this sector have been proposed for FY 1976 and FY 1977.

For the purposes of this report, the ongoing and proposed RWSS activities of AID were divided as follows: agriculture, domestic water supply, and sanitation. Agriculture includes irrigation and drainage projects, and water for livestock. Irrigation was included as a water supply activity because canals and drains in rural areas frequently serve as the major source of water when villages have no alternative systems. Livestock projects which support well-digging are included as agriculture-water supply projects since sinking of wells for livestock use also provides water for people. Domestic water supply projects provide water for drinking, bathing, and washing. Sanitation projects include the construction of excreta disposal facilities such as latrines and septic tanks as well as health education. The Project Inventory with detailed project descriptions, listed by AID Bureaus, are in Annex One.

Project data presented in the Inventory were obtained from the Congressional Presentation for May 1975, Project Identification Documents for Fiscal Years 1976 and 1977, and conversations with appropriate AID staff (for those contacted see Annex Two). For clarification to the reader of the route a project takes to inclusion in the Congressional Presentation and of the difficulties involved in sorting out rural water supply and sanitation activities, a brief summary of the AID project submission procedure is given below. The data in the Inventory are only as thorough as the information requirements of the project review procedure. It may be seen from the following description that the field mission emphasis, which is of necessity based on local host country and field staff interests and

also on Washington funding realities, limit the detail in the project activity presentations. For these reasons, it is impossible to separate in the Inventory the water elements unless a project is specifically aimed at providing the water activity.

2.3 AID Project Submission Procedure

Three steps are required before a project is presented to Congress (AID, 1975). The first step is determination by the field mission and the country planners of long range needs in the country. This results in a Development Assistance Plan (DAP). The field mission staff then draft a Project Identification Document (PID) for review in the appropriate office in Washington. The PID is intended to inform Washington as early as possible of the kinds of projects considered in the field. The PID includes financial requirements, and any policy issues involved. More PIDs are submitted than other documents because of the great possibility of rejection on programming grounds or infeasibility of the plan.

The next step requires a Project Review Paper (RRP) to determine the feasibility of further effort for a particular project and to decide if the project merits inclusion in the Congressional Presentation. The RRP must discuss in sufficient detail the relevance of the project, project description, the beneficiaries, AID relevant experience, other donor coordination, feasibility plans for financing, implementation, and scheduling. This step is comparable to pre-project feasibility planning and is supposed to be done in close cooperation with the host country.

The last stage is the submission of the Project Paper (PP) for final consideration of the project for the Congressional Presentation. The PP must include a detailed description of the project, analyses of technical, financial, social, and economic considerations, and implementation planning. Ten annexes containing administrative details are also required. The Mission and host country are expected to collaborate fully in the preparation of this document. The time involved from submission of PID through PP may be as long as two years.

The AID project submission procedure requires active collaboration between the field missions and host countries. The field mission staff thus plays a major role in stimulating country interest in particular activities. The impact of AID's closing field missions will, of course, be noticed in decreased project submissions. In RWSS, specifically, without interested field staff, projects in this sector will rarely be submitted for consideration. Where the AID representative is interested and informed about RWSS, there is an increase of water supply and sanitation activity. An additional impediment in project submission is the time involved.

Despite difficulties identifying in detail the disparate rural water supply and sanitation components of AID's ongoing and proposed activities, more project descriptions contained mention of water-related activities than were initially anticipated. The amount of information varied from project to project but enough was available to summarize types of RWSS projects and activities supported under those projects.

The distribution of types and costs of projects by region is shown in Table 1. The table contains information on ongoing projects, shelf items for FY 1976, and proposed activities for FY 1977. Shelf items are those projects which are listed in the Congressional Presentation but receive funding only when an ongoing project is expanded or discontinued. The proposed activities are taken from descriptions in the Project Identification Documents, and are still under consideration for funding. In Table 2, the projects are separated by grants and loans to show the means of support for the different projects.

Summation of the expenditures in RWSS activities may be somewhat misleading since it was difficult in many projects to break down total costs into the separate water components. The amounts listed tend to overestimate investment in RWSS activities. Nonetheless, if one considers the number and cost of projects, the majority of AID RWSS funding in all regions is for irrigation projects. It may also be observed from Table 1 that the bulk of ongoing and proposed project funding is in Latin America, again with most of the support for irrigation projects. The most widespread type of AID funding activity is through loans, although in Africa more than twice as much support is in the form of grants.

One of the difficulties in considering irrigation projects as sources of village water supplies is that the AID agricultural staff does not take into account this aspect of irrigation water use in their project planning. With no provision of alternative sources villagers often

TABLE I
RURAL WATER SUPPLY AND SANITATION PROJECTS

	PROJECT TYPE															
	Total		Water Supply		Sanitation		Irrigation		Water Supply/ Sanitation		Water Supply/ Irrigation		Irrigation/ Sanitation			
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$		
<u>On-going Projects</u>																
Africa	26	109.3	4	10.0	3	7.3	4	35.2	(10)	35.2	3	9.9	2	11.7	-	-
Asia	9	129.1	1	10.0	-	-	8	119.1	-	-	-	-	-	-	-	-
Latin America	27	162.5	6	25.7	4	9.6	9	74.7	6	48.0	2	4.5	-	-	-	-
Near East	14	49.7	3	7.8	-	-	7	33.8	1	0.1	3	8.0	-	-	-	-
Total	76	450.6	14	53.5	7	16.9	38	298.0	10	58.0	7	24.2	-	-	-	-
<u>Shelf Items</u>																
Africa	3	9.0	-	-	-	-	1	5.0	(1)	2.0	1	2.0	-	-	-	-
Asia	4	18.3	1	10.0	1	3.3	2	5.0	-	-	-	-	-	-	-	-
Latin America	1	2.0	-	-	-	-	1	2.0	-	-	-	-	-	-	-	-
Near East	1	0.5	-	-	-	-	1	0.5	-	-	-	-	-	-	-	-
Total	9	29.8	1	10.0	1	3.3	6	14.5	1	2.0	-	-	-	-	-	-
<u>PID's</u>																
Africa	13	40.3	-	-	-	-	8	30.0	(1)	6.0	1	1.5	3	2.8	-	-
Asia	10	117.8	2	35.6	-	-	7	72.2	-	-	1	10.0	-	-	-	-
Latin America	11	21.2	1	3.0	2	0.4	2	12.2	4	5.3	1	0.1	1	0.2	-	-
Near East	3	55.4	-	-	1	1.4	2	54.0	-	-	-	-	-	-	-	-
Total	37	234.7	3	38.6	3	1.8	20	174.4	5	6.8	5	12.9	1	0.2	-	-
TOTAL	122	715.1	18	102.1	11	22.0	64	486.9	16	66.8	12	37.1	1	0.2	-	-

Number of Projects
\$ Value (\$ Millions)

* Water for livestock projects including one water supply/livestock project.
** Includes one irrigation/water supply/sanitation project
*** Water for livestock projects

TABLE II
COMPARISON OF PROJECTS BY FUNDING TYPE - LOAN (L) OR GRANT (G) - \$ MILLIONS

	Total		Water Supply		Sanitation		Irrigation		Water Supply/ Sanitation		Water Supply/ Irrigation		Irrigation/ Sanitation	
	G	L	G	L	G	L	G	L	G	L	G	L	G	L
<u>On-going Projects</u>														
Africa	67.8	41.5	10.0	-	7.3	-	9.2 [*] (29.2 ^{**})	26.0 ^x 6.0 ^x	7.9 ^{**}	2.0	4.2	7.5	-	-
Asia	2.6	79.3	-	10.0	-	-	2.6	69.3	-	-	-	-	-	-
Latin America	15.0	147.5	5.3	20.4	2.1	7.5	1.7	73.0	1.4	46.6	4.5	-	-	-
Near East	21.7	28.0	7.8	-	-	-	10.8	23.0	0.1	-	3.0	5.0	-	-
Total	107.1	296.3	23.1	30.4	9.4	7.5	53.5	197.3	9.4	48.6	11.7	12.5	-	-
<u>Shelf Items</u>														
Africa	2.0	7.0	-	-	-	-	-	5.0 ^x (2.0) ^x	2.0	-	-	-	-	-
Asia	-	18.3	-	10.0	-	3.3	-	5.0	-	-	-	-	-	-
Latin America	-	2.0	-	-	-	-	-	2.0 ^x	-	-	-	-	-	-
Near East	0.5	-	-	-	-	-	0.5	-	-	-	-	-	-	-
Total	2.5	27.3	-	10.0	-	3.3	0.5	14.0	2.0	-	-	-	-	-
<u>PID's</u>														
Africa	40.3	-	-	-	-	-	30.0 ^x (6.0) ^x	-	1.5	-	2.8	-	-	-
Asia	1.7	116.1	0.6	35.0	-	-	1.1	71.1	-	-	-	10.0	-	-
Latin America	4.3	16.9	-	3.0	0.4	-	3.0	9.2	0.6	4.7	0.1	-	0.2	-
Near East	1.0	53.0	-	-	-	-	1.0	53.0	-	-	-	-	-	-
Total	47.3	186.0	0.6	38.0	0.4	-	41.1	133.3	2.1	4.7	2.9	10.0	0.2	-
TOTAL	156.9	509.6	23.7	78.4	9.8	10.8	95.1	344.6	13.5	53.3	14.6	22.5	0.2	-

* Water for livestock projects including one water/supply/livestock project

** Includes one irrigation/water supply/sanitation project

NOTE: \$47.2 million for Indus River Basin (on-going) and \$1.4 million for Egypt (PID) not included because funding type not determined.

turn to convenient but unsafe water supplies. Animal and human wastes, along with fertilizer run-off contaminate water in canals and drains. As a result, canals and drains serve as habitats for intermediate hosts of parasitic diseases.

Each project may encompass a variety of activities. To evaluate more thoroughly the RWSS projects, activities were characterized as follows:

- | | |
|---------------------------|--|
| Institution-building (I): | all levels of institutions from local to national, financing mechanisms, and self-help project development. |
| Surveys (S): | exploration for ground and surface water resources (large-scale). |
| Research (R): | new technology development, studies of procedures, techniques, water quality, water consumption, sanitary habits. |
| Training (T): | training of professional and sub-professional personnel in RWSS engineering and/or management. |
| Education (E): | health and sanitary education for villagers or farmers. |
| Construction (C): | planning, designing, and building of facilities, provision of equipment, material, or advice at any of those stages. |
| Maintenance (M): | operating, monitoring, or improving an existing system, pilot project operation. |
| Evaluation (A): | evaluation of existing systems. |

Activities as identified by project type and region are shown in Table 3A through 3F.

Project Type	Project Activity (#)								TOTAL #*
	Instruction- building	Survey	Research	Training	Health Education	Design & Construction	Evaluation	Operation & Maintenance	
Water Supp'y	3	3 (1)	3	3	-	-	-	-	12
Sanita- tion	2	-	-	2	1	-	-	-	5
Irriga- tion	-	-	-	1	-	3 (1)	-	-	4
Livestock	4	-	1	-	-	10** (1)	-	-	15
Water Supply/ Sanita- tion	1	-	-	-	2	3***	-	-	6
Water Supply/ Irriga- tion	-	-	1	-	-	1	-	-	2
Irriga- tion/ Sanita- tion	-	-	-	-	-	-	-	-	-
TOTAL* (#)	10	3	5	6	3	17	-	-	44

Table JA. Characterization of RWSS Projects by Activities for AFRICA.

(numbers in parentheses indicate shelf item activities and are not included in totals)

* Totals indicate number of activities and equal more than total number of projects since many projects comprise more than one activity.

** includes one water for livestock project

*** includes one irrigation/sanitation/water supply project

Project Type	Project Activity (#)								TOTAL #*
	Institution- building	Survey	Research	Training	Health Education	Design & Construction	Evaluation	Operation & Maintenance	
Water Supply	1 (1)	-	1 (1)	-	-	1 (1)	-	1 (1)	4
Sanitation	-	-	-	- (1)	-	-	-	-	-
Irrigation	3 (1)	1	1	4 (2)	-	7 (1)	-	3	19
Livestock	-	-	-	-	-	-	-	-	-
Water Supply/ Sanitation	-	-	-	-	-	-	-	-	-
Water Supply/ Irrigation	-	-	-	-	-	-	-	-	-
Irrigation/ Sanitation	-	-	-	-	-	-	-	-	-
TOTAL* (#)	4	1	2	4	-	8	-	4	23

Table 3B. Characterization of RWSS Projects by Activities for ASIA.

(numbers in parentheses indicate shelf item activities and are not included in totals)

* Totals indicate number of activities and equal more than total number of projects since many projects comprise more than one activity.

Project Type	Project Activity (#)								TOTAL # *
	Institution- building	Survey	Research	Training	Health Education	Design & Construction	Evaluation	Operation & Maintenance	
Water Supply	3	-	1	-	-	4	1	2	11
Sanitation	1	-	1	-	3	2	-	-	77
Irrigation	6	-	1	-	-	7	-	3	7
Livestock	-	-	-	-	-	(1)	-	-	-
Water Supply/ Sanitation	2	-	1	2	3	5	2	-	15
Water Supply/ Irrigation	1	-	-	-	-	2	-	-	3
Irrigation/ Sanitation	-	-	-	-	-	-	-	-	-
TOTAL* (#)	13	-	4	2	6	20	3	5	53

Table 3C. Characterization of RWSS Projects by Activities for LATIN AMERICA.
(Numbers in parentheses indicate shelf item activities and are not included in totals)

* Totals indicate number of activities and equal more than total number of projects since many projects comprise more than one activity.

Project Type	Project Activity (#)								TOTAL # *
	Institution- building	Survey	Research	Training	Health Education	Design & Construction	Evaluation	Operation & Maintenance	
Water Supply	2	1	-	3	-	-	-	1	7
Sanitation	-	-	-	-	-	-	-	-	-
Irrigation	6 (1)	1	3	2	-	7 (1)	-	3 (1)	22
Livestock	-	-	-	-	-	-	-	-	-
Water Supply/ Sanitation	1	-	-	-	1	1	1	-	4
Water Supply/ Irrigation	1	-	-	1	-	1	-	1	4
Irrigation/ Sanitation	-	-	-	-	-	-	-	-	-
TOTAL* (#)	10	2	3	6	1	9	1	5	37

Table 3D. Characterization of RWSS Projects by Activities for NEAR EAST.
(numbers in parentheses indicate shelf items; activities and are not included in totals)

* Totals indicate number of project activities and equal more than total number of projects since many projects comprise more than one activity.

Region	Project Activity (#)								TOTAL # *
	I	S	R	T	E	C	A	M	
Africa	4	-	1	3	-	7	-	2	17
Asia	6	-	-	4	-	5	1	1	17
Latin America	3	3	2	8	3	6	-	2	27
Near East	-	-	1	1	-	3	1	-	6
TOTAL # *	13	3	4	16	3	21	2	5	67

Table 3E. Summation of RWSS Project Activities as described in Project Identification Documents (PID's).

* Totals indicate number of activities and equal more than total number of projects since many projects comprise more than one activity.

Project Activity (#)

Region	Institution- building	Survey	Research	Training	Health Education	Design & Construction	Evaluation	Operation & Maintenance	TOTAL #*
Africa	10	3	5	6	3	17	-	-	44
Asia	4	1	2	4	-	8	-	4	23
Latin America	13	-	4	2	6	20	3	5	53
Near East	10	2	3	6	1	9	1	5	37
TOTAL #*	37	6	14	18	10	44	4	14	157

Table 3F . Summation of RWSS Project Activities by Region.

* Totals indicate number of project activities and equal more than total number of projects since many projects comprise more than one activity.

It may be seen in Table 3A that the majority of AID RWSS projects in Africa are for support of water supplies for people and animals. Irrigation and sanitation projects are significantly fewer. In the water for livestock projects, the major support is for construction activities, whereas in water supplies for people, efforts are more evenly distributed among institution-building, surveys, research, and training. The emphasis on water supply projects in Africa stems in part from the drought concerns. Africa has the greatest number of water supply projects among the different bureaus and is second only to Latin America in sanitation projects.

In Asia, as reported in Table 3B, 84% of the projects are for irrigation. The activities supported for the most part are construction, training, and institution-building. Irrigation project emphasis may be related to attempts to use most efficiently the abundant water in this region. The relative paucity of AID water supply and sanitation projects in this region might merit re-examination in terms of World Health Organization concerns here (see p. 33).

As mentioned above and as seen in Table 3C, the emphasis in Latin America is also on irrigation projects with major project activities concentrating on institution-building and construction. In addition, Latin America has a large number of AID water supply and sanitation projects. As discussed under PAHO (see p. 34) the fact that Latin America is relatively well-served with water supplies implies that a shift in emphasis from construction to maintenance and evaluation activities may merit consideration for future projects.

Irrigation is the major type of project in the Near East (Table 3D) with a wide range of activities supported. These include institution-building, surveys, research, training, construction, and maintenance. Water supply projects are of considerable importance here, too, again related to water shortages.

Almost the same distribution of project types and activities is found in the projects proposed for FY 1976 and FY 1977 as described by the Project Identification Documents (see Table 3E). Africa, however, is proposing a large number of irrigation projects. The other regions continue to emphasize irrigation. Again, as with the ongoing programs, construction and training are the major activities.

In summary, as seen in Table 3F, AID project activities emphasize construction and institution building in almost every region and project. Training of all kinds, including technical, research, and health education is supported to some extent. Maintenance, which includes operating projects, is supported to a small extent, and evaluation is insignificantly supported.

Examples of projects supported by AID show the different approaches to providing RWSS services. In the Yemen Arab Republic, the AID representative's interest, training, and experience in sanitary engineering have led to the development of a Yemen National Water and Sewerage Agency that is now capable of operating and maintaining both the continually expanding Taiz water system, and new small city and rural area systems. A different approach has been taken in Guatemala where AID has supported the provision of latrines and potable water at

village levels not under the auspices of a National Water Board. A third example is the Senegal River Basin Project.

The Senegal Project is an experiment in donor agency cooperation on a large scale in West Africa. A unique feature about this project is the assessment of environmental impacts from the initial planning stages. One of the significant impacts is in public health and health professionals are members of the environmental team. Environmental health impacts of each step in the project development will be evaluated.

A research project that at its conclusion will provide planners in developing countries with the means to choose rationally among alternative systems is being conducted at the University of Oklahoma. Researchers there have been determining the most appropriate treatment technologies for given sets of considerations such as: the availability of technical personnel, internal and external financing; education level of the community; road conditions; and, sand availability. The matrix now being developed shows sites of differing capabilities and their different costs. The end result will be a user's manual to assist planners in evaluating systems and calculating the resource costs involved. Table 4 shows AID RWSS research support.

Potentially significant AID activities in RWSS are the self-help and non-formal education projects. Many of the Congressional Presentation descriptions did not specify if these projects had water supply and sanitation components; as a result, they were not included in the Project

Table 4

Technical Assistance Bureau
Water-Related Projects

<u>Project</u>	<u>Type</u>	<u>Activity</u>	<u>Amount (US \$, Millions)</u>
Water and tropical soils management (Grant)	Irrigation	Research	23.8
Environmental Health Projects (Grant)	Water Supply/ Sanitation	Research	6.9
Total			30.7

Inventory. These projects, however, do provide a vehicle for RWSS educational activities and will probably be used for this purpose in the future.

3. COMPARISON OF AID ACTIVITIES WITH OTHER DONORS

Multilateral and bilateral donor efforts and capabilities in RWSS were reviewed to consider possibilities of future collaborative arrangements.

The most active lending agencies on RWSS are the International Bank for Reconstruction and Development (World Bank) and Inter-American Development Bank. A few loans in this sector have been made by the Asian Development Bank and African Development Bank. Among the United Nations agencies, UNICEF provides equipment and technical assistance, World Health Organization and Pan American Health Organization provide technical assistance, and United Nations Development Programme provides financing. The International Development Research Centre supports basic and practical research in RWSS. Bilateral agencies provide a range of technical and capital assistance. The volume of multilateral and bilateral agency loans in RWSS is given in Table 5. Discussed below are RWSS activities of the multilateral agencies for which information was available followed by a comparison of donor agency capabilities in this sector.

3.1 International Bank for Reconstruction and Development

Until 1974 World Bank loans to the rural sector were essentially for agricultural projects with major emphasis on irrigation and drainage systems. In a few projects hand pumps eased human access to

TABLE 5

MULTILATERAL SUPPORT OF RURAL WATER SUPPLY
AND SANITATION ACTIVITIES, 1972 TO 1975
(US\$ MILLIONS)

	1972		1973		1974		1975	
	Agrcltr ¹	W S S ²	Agrcltr	W S S	Agrcltr	W S S	Agrcltr	W S S
IBRD ³			937.7 ^{10/}	278.8	955.9	173.7	1,857.5 ^{11/}	145.1
IDB ⁴					228.0	110.0		
AsiaDB ⁵			43.7	43.7		68.8		222.7
UNICEF ⁶		7.4		9.7		11.0		
UNDP ⁷			74.7	14.5				
WHO & PAHO ⁸								
DAC ⁹			27.1	346.0				
AID (Ongo. & Prop)							553.0*	180.9*

¹ Agriculture includes irrigation and drainage plus other activity such as improved seeds.

² Water supply and sanitation figures include urban as well as rural areas.

³ International Bank for Reconstruction and Development (1972, 73, 74, & 75)

⁴ Inter-American Development Bank (1974)

⁵ Asian Development Bank (1974)

⁶ UNICEF (1975)

⁷ United Nations Development Programme files.

⁸ WHO and PAHO RWSS expenditures not available

⁹ Development Assistance Committee (1974)

¹⁰ Includes Bank loans and IDA credits

¹¹ Includes some multi-purpose projects for irrigation with some water supply activity.

* On-going projects are for FY1976, proposed projects are for FY 1976, FY 1977, and occasionally FY 1978 (see Project Inventory for more details).

canal water (Warford, personal communication, 1975). Loans designated for water supply and sanitation were only made to the urban sector. In 1974, World Bank emphasis began to shift to rural areas with new programs in integrated rural development, in establishing or supporting national water agencies, and in local water supply and sanitation projects. (World Bank, 1975, 1974). Table 6 shows the extent of lending activities of the World Bank in urban and rural water supply and sanitation over time. Major recent effort has been in supporting integrated rural development projects and developing national institutional capacity. Loans have not yet been made for specific village water supplies and sanitation facilities (Shipman, personal communication, 1975).

Integrated rural development projects include water supply and sanitation activities as part of the development effort. Frequently, one department of a foreign government is responsible for a variety of infrastructure efforts. As a result, operation and maintenance of the water supply and sanitation system are not given as high a priority as they would if a separate agency were responsible.

An alternative (or preliminary step) to integrated rural development loans has been the effort of the World Bank to establish or strengthen national water agencies in India, Turkey, and Mexico. The major advantages of national water agencies are the development of managerial capabilities, stronger incentive for follow-through on operation and maintenance, increased possibilities for obtaining some financial return from the system, and equitable development of facilities throughout a country.

TABLE 6

WORLD BANK LOANS TO CURRENT BORROWERS
(US\$ MILLIONS)

	Region						Total
	Eastern Africa	Western Africa	East Asia and Pacific	South Asia	Europe, Near East N. Africa	Latin America	
<u>Agriculture</u>							
Annual Average 1964-68	5.3	3.6	28.8	25.2	14.7	46.6	124.2
Annual Average 1969-73	54.5	30.6	88.2	108.1	111.2	109.2	501.8
1973	145.6	39.7	113.5	93.1	209.4	256.4	857.7
1974	120.9	81.0	189.5	150.0	184.0	223.5	948.9
1975	124.2	323.0	193.0	400.0	395.3	422.0	1,857.5
<u>Water Supply & Sewerage</u>							
Annual Average 1964-63	0.2	-0-	5.4	10.4	0.7	7.1	23.8
Annual Average 1969-73	4.4	3.6	4.6	11.0	42.9	51.3	117.8
1973	-0-	9.5	13.5	55.0	101.7	99.1	278.8
1974	-0-	10.4	67.0	7.8	29.2	59.2	173.6
1975	3.5	9.0	39.5	-0-	51.1	42.0	145.1

Source: International Bank for Reconstruction and Development.
Annual Report, 1975. Washington: IBRD, 1975.

A recent Bank Project in Uttar Pradesh is an example of the type of support involved in this kind of program. The World Bank is assisting the State of Uttar Pradesh to develop its institutional infrastructure as well as to construct over 1000 water systems, at a total project cost of \$30 million. The water systems will provide service to rural and urban areas. Local boards responsible to the state agency will manage the systems.

3.2 Inter-American Development Bank

From 1961 to January 1975, the Inter-American Development Bank has loaned a total of U.S. \$76 million for design and construction of rural water supply and sanitation facilities in Latin America. The loans are made to communities rather than to dispersed populations. The Bank attempts to encourage community participation in the development of the system. Recent practice has been for a country to prepare loan requests with assistance from Pan American Health Organization for submission to the Inter-American Development Bank.

3.3 UNICEF

Over the past 15 years UNICEF has become increasingly involved in RWSS activities. Safe drinking water is considered essential to improving the health of young children by the UNICEF staff (UNICEF, 1975). Table 7 shows UNICEF expenditures in RWSS over since 1960. The money is usually spent for vehicles, handpumps, drilling rigs, well construction, training, and health education.

Table 7

UNICEF Water Supply Activities 1960-1974 (US\$, millions)						
1960-64	1965-69	1970	1971	1972	1973	1974
(% Total UNICEF Budget)						
2050 (8%)	2230 (7%)	2457 (6%)	3290 (7%)	7419 (14%)	9712 (18%)	10971 (14%)

Source: UNICEF General Progress Report of the Executive Director,
1975

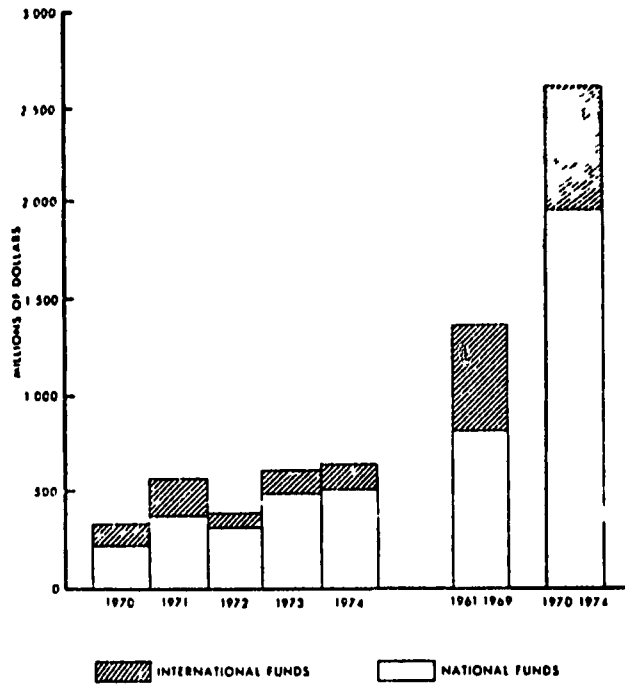
3.4 World Health Organization

World Health Organization provides technical assistance in RWSS. The World Health program in community water supplies and excreta disposal began in 1949. In 1974, World Health provided advice on basic community sanitation and water supply projects. These included soil disposal in Kenya, national capability development in Turkey, hand pump purchases by Comite inter-african d'Etude hydraulique, and writing new manuals in conjunction with the International Reference Centre for Community Water Supplies (World Health Organization, 1975).

In the African region, 20 health services projects included water supply and sanitation. For example, 32 water systems were installed in Kenya making a total of 297 installed by combined efforts of World Health Organization and UNICEF. These systems included 161 latrines, 22 wells, 7 tanks, and 2 dams.

It was estimated in the Americas that, up to the end of 1974, \$4 billion had been invested for construction and expansion of water systems (Table 8), one-third by credit from multi- and bilateral agencies, two-thirds by the countries themselves. Only 12% of total investment, however, had been for rural systems. PAHO projects at the moment include joint work with United Nations Development Program in Guyana, Surinam, Belize, and Grenada; with Canadian International Development Agency in Belize and Jamaica; and with World Bank in Barbados, Guyana, and Mexico.

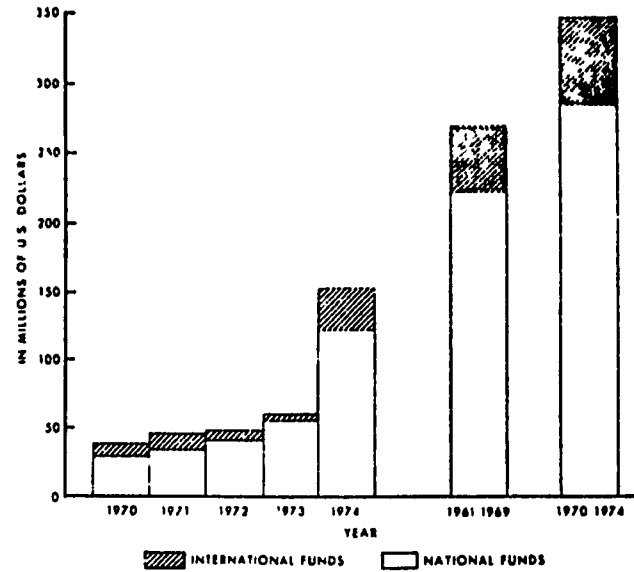
FIG 14 Funds allocated for the construction of urban water supply and sewerage systems 1961-1974



Source	1961 through 1970	1971	1972	1973	1974	1970 through 1974
International loans	665.03	123.30	86.2	84.18	147.70	123.88
IDB	424.88	44.40	52.28	59.45	44.80	78.30
AID	127.86	40.40	6.51		3.60	30.51
IBRD	81.80	18.50	127.00	16.00	92.50	285.20
EXIMBANK	30.51					
CIDA				8.73*	6.38	15.11
National funds	1,078.03	27.84	386.82	311.51	478.63	525.93
Total	1,743.06	332.94	533.62	395.69	626.33	649.81

*Includes 1966 thru 1972

FIG 15 Funds allocated for the construction of rural water supply and sewerage systems 1961-1970 and 1970-1974



Source	1961 through 1970	1971	1972	1973	1974	1970 through 1974
International loans	53.0	8.14	12.00	7.85	27.3	21.00
IDB	50.71	8.80	12.00	7.85		40.41
AID	2.99	1.34				4.07
IBRD					27.3	18.00
EXIMBANK						18.00
CIDA						
National Funds	252.3	28.95	33.00	40.18	57.08	123.60
Total	306.0	36.99	45.00	48.03	59.5	243.21

TABLE 29 SUMMARY DATA ON THE FINANCING OF WATER SUPPLY AND SEWERAGE PROGRAMS IN THE AMERICAS, 1961-1974

International loans	
Inter-American Development Bank (IDB)	\$ 752,852,000
U.S. Agency for International Development (AID)	153,688,000
International Bank for Reconstruction and Development (IBRD)	356,500,000
Export-Import Bank (EXIMBANK)	30,508,000
Canadian International Development Agency (CIDA)	15,116,000
Total	1,308,664,000
National funds, including counterpart funds, to support international loans and grants	
	3,248,150,000
Grand total	\$4,556,814,000^{a,b}

Approximate population benefited (urban and rural) 125,813,368

^a Approximately 12% of total funds were for rural areas
^b Total figure includes approximately 35% for sewerage works.

Table 8. Comparison by tables and graphs of RISS financing in Latin America. (from Pan American Health Organization 1975.)

In the Southeast Asia region, World Health Organization found that RWSS does not receive due priority in development plans (1975, p. 126). The United Nations Development Decade goal of 25% of rural populations having reasonable access to water is not attainable here with existing financing, manpower, and materials. Disposal of wastes is also a serious problem though some success has been achieved with water-seal latrines.

In the Eastern Mediterranean region, World Health with United Nations Development program is assisting to strengthen the Yemen National Water and Sewerage Authority World Health Organization also is advising on the development of: semi urban water supply and sanitation systems in Afghanistan, Yemen, and Ethiopia; RWSS systems in Southern Sudan; waste-water treatment and disposal facilities in Saudi Arabia; and pollution free tourist zones in Tunisia.

World Health Organization and Pan American Health Organization are assisting countries in drawing up sector studies that will lead to specific allocations. In addition, preinvestment studies are done in conjunction with United Nations Development Program, World Bank, regional development banks, and bilateral agencies.

The investment resulting from World Health Organization advisory activities amounted to a total of \$105.5 million, with \$32.3 million funded by external sources and with \$73.2 funded by internal resources (World Health Organization, 1975, p. 128) .

3.5 Pan American Health Organization

The Pan American Health Organization has played a major role in improving living conditions in Latin America. The United States provides

62% of PAHO funding. Technical assistance practices in Latin America provide an example for AID to follow other parts of the world where no agency similar to Pan American Health Organization exists. The Organization is a somewhat special entity since it is an outgrowth of the Pan American Sanitary Bureau, an Agency found in 1972 with continuing support from Western Hemisphere governments. The Organization inherited well-established institutional structure and also today receives funding from two separate sources, direct allocations from Western Hemisphere governments and indirect transfers from World Health Organization as Regional Office for the Americas. Because of the long history of agency activity and the additional financial support, the Pan American Health Organization has certain advantages not duplicated elsewhere in the developing world.

Water supply and sanitation activities have been major areas of assistance as described in the Annual Report of the Organization (1975, p. 47). An example of Pan American Health Organization assistance activities is its work in Guatemala. At the request of the Government of Guatemala, staff members evaluated the majority of agencies involved in RWSS activities, met with staff members of those agencies, and together drew up a proposal for future programs in that sector. The final planning document provided the Government of Guatemala with enough information to submit a proposal for assistance in RWSS to the Canadian International Development Agency. This kind of technical advice is provided frequently to countries so that the countries are prepared to request appropriate assistance from donor agencies.

Although in the past, the Pan American Health Organization concentrated on the urban sector, by December 1974, PAHO was able to conclude for rural areas that "most country programs had passed the stage of water system construction" (1975, p. 48). Concern now is for building socio-economically feasible systems and strengthening operational and maintenance capabilities. The Organization has been trying to increase investment in rural sanitation programs where levels were still low in 1974 because its experience has shown that only when water systems are coordinated with sanitation programs can "the greatest possible environmental health benefits" (1975, p. 48) be obtained.

3.6 Comparison of Agency Activities

Support of RWSS programs by multilateral agencies was found to be widespread. It was difficult to determine the specific activities of the bilateral donors, although many of them participate in multi-donor activities (as may be seen from review of AID project descriptions in Annex One). Although attempts to characterize a donor agency RWSS effort in a few words are fraught with danger, a rough comparison is provided as background for when AID considers the next steps to be taken toward improvement in this area. Discussion during one of the AID Workshop sessions provided valuable insights to the formation of these data. Table 9 reports where the agencies are strong today but is no way intended to prescribe an optional mix of skills and tasks among the various participants in RWSS work.

TABLE 9

Comparisons of Donor Strengths
in supporting
RWSS Activities

- Agency for International Development: training, institution-building,
and technical assistance
- International Bank for Reconstruction and Development: funding
institution-building, evaluation
- Inter-American Development Bank: funding
- United Nations Development Programme: funding
- United Nations Environmental Programme: technical assistance (?)
- United Nations International Children's Emergency Fund: equipment and
technical assistance
- International Development Research Centre: research
- Canadian International Development Agency: funding and technical
assistance
- Swedish International Development Agency: funding and technical
assistance
- World Health Organization and Pan American Health Organization:
technical assistance and training
- Overseas Development Ministry: training, community development
(United Kingdom)
- The Netherlands: training and management
- Kreditanstalt fur Weideraubau: funding and technical assistance
(West Germany)
- Switzerland: training and funding
- France: technical assistance

Strong points of the different agencies need to be more finely characterized so that decisions about appropriate means of collaboration may be made. A useful contribution of the Ad Hoc Committee meetings would be rigorous comparative analyses of donor agency strengths.

4. DEVELOPING COUNTRY PRIORITIES

The priority of RWSS in developing country plans and programs must be considered in evaluating prospects for future donor agency activity. Indicators of priority include both written pronouncements and budgets and also actual expenditures and institutional capacity in RWSS. Although a complete review of such information is not reported here, the following sources are available for future analyses:

1. Country development plans and national budget documents contain statements of intent (see: International Bank for Reconstruction and Development 1973, 1975). A perusal of a selection of the plans indicated a wide range of support for RWSS activities.

2. Extent of country commitments and capabilities in RWSS are included in surveys of the World Health Organization and Pan American Health Organization. The World Health Statistics Report (1973) contains a special section in which community water supply and sanitation responsibilities are listed (summarized in Table 10).

The WHO report was based on questionnaires sent to appropriate agencies and, when necessary, followed up with visits by the researchers. Many topics were covered by the questionnaire including populations with access to water (urban and rural), projection of water supply and sanitation needs in 1980, annual incomes, staff needs, external assistance received, constraints on developing water supply and sanitation programs, and research priorities. The developing

Table 10 . Water Supply and Sanitation Institutions in Latin America, 1974. (compiled from Pan American Health Organization, 1975,p.52)

Country	Agency
Argentina	National Sanitation Works (OSN)
Barbados	Waterworks Department (WWD)
Belize	National Water and Sewerage Authority (NWSASA)
Bolivia	National Water and Sewerage Corporation (CORPAGUAS)
Brazil	National Housing Bank(BN ^h)
Colombia	National Municipal Development Institute (INSFOPAL)
Costa Rica	National Water Supply and Sewerage Service (SNAA)
Dominican Republic	National Water Supply and Sewerage Institute (INAPA)
Ecuador	Ecuadorean Sanitary Works Institute(IEOS)
El Salvador	National Water and Sewerage Administration (ANDA)
Guatemala	Department of Sanitary Engineering (DIS), Ministry of Health
Guyana	Guyana Water Authority (GUYWA)
Haiti	Autonomous Metropolitan Potable Water Authority (CAMEP)
Honduras	National Autonomous Water and Sewerage Department (SANAA)
Jamaica	National Water Authority (NWA)
Mexico	Water Resources Ministry (SRH)
Nicaragua	National Water Supply and Sewerage Department (DENACAL)
Panama	National Water Supply and Sewerage Institute (IDAAN)
Peru	National Sanitation Works Department (DGOS)
Trinidad and Tobago	Water and Sewerage Authority(WASA)
Uruguay	State Sanitation Works (OSE)
Venezuela	National Sanitation Works Institute(INOS)

countries reported the following constraints on development of facilities (in order of importance): insufficiency of internal finance; lack of trained personnel; insufficiency of external assistance; inappropriate administrative framework; insufficient local production of material; inappropriate financial framework; and inadequate legal framework. These constraints are institutional in nature, indeed, they indicate an awareness of the need for national institutions concerned with water supply and sanitation. (Pineo, 1975). The research needs cover a wider variety of topics ranging from new technologies in pollution control to studies of water consumption patterns to basic surveys of water resources to better financing mechanisms. The different responses and priorities indicate that developing country planners are aware of their needs. This awareness in combination with greater coordination of donor agency assistance will help to ensure a higher probability of building rural water supply and sanitation systems that will endure and be used.

5. WORKSHOP REPORT

At an AID sponsored Rural Water Supply and Sanitation Workshop held in Washington, D.C., during October 1975, the gaps in the program activities were discussed along with suggestions for meeting RWSS needs in developing countries. Discussion of the first day concentrated on current AID and other donor RWSS programs. The second day was devoted to developing suitable alternative courses of action for donors and developing countries at the global, regional and national levels.

5.1 Summary of Discussion of AID Activities

Considering the results of AID projects, workshop participants noted the overwhelming need for adequate administration and supervision of projects. It was suggested that perhaps a disproportionate amount of effort and money was spent on design and construction to the exclusion of appropriate supervision and maintenance assistance. Without appropriate concern and understanding at the local and national levels, merely constructing water supply and sanitation projects has not succeeded in improving living standards - the usual project objective - in the project area.

The support by AID of training programs was thought to represent a strong point of AID's potential development assistance. It was suggested that programs for training more mid-level RWSS managers and technicians, and local laborers should be supported. AID has

sponsored many surveys. It was mentioned that in order for these to be worthwhile, they need to be followed up with projects which use the survey information. Institution-building, including local self-help programs, was noted as another positive strong point of AID. Workshop participants emphasized the need for operation, maintenance, and evaluation support if AID hopes to support enduring activities.

Specific contributions of AID discussed at the Workshop that were considered to be worth mentioning at the Geneva RWSS conference were: AID's ongoing support for the proposed regional centers (CEPIS, PAID, CIEH); the University of Oklahoma low-cost technology assessment program; and the fact that a possible site for part of the information and referral activities for either central or regional clearinghouse exists within AID.

Gaps in programming indicated to the Workshop participants that an ordering of priorities would assist AID in planning the RWSS activities. That is, the emphasis and role of AID in supporting RWSS activities need to be clarified. It was strongly urged that AID prepare a rural water supply and sanitation strategy paper. The strategy paper could contain: issues in RWSS from the AID perspective, identification of country needs, and identification of offices responsible for RWSS within the Agency.

Various steps could follow the preparation of the strategy paper. Manpower in Washington and the field could be expanded by training or

direct hiring of sanitary engineers for assignments in Washington and in the field. If it is not practical to hire adequate numbers of field sanitary engineers, the role of Regional Water Supply Advisor could be revived so that someone in the field would be able to assist in writing water supply and sanitation proposals and to stimulate country interest. Without more staff concerned about the problems and programs in this sector, increased effort probably is not feasible.

The recent Congressional Mandate to AID contains encouragement to plan more environmental health programs. The Mandate may be met by developing a strategy that builds on AID's strengths and provides for collaboration with other donors in areas where AID can not easily develop capabilities. AID's strong points include the success of AID in running training programs in a variety of problem areas, the ability of AID to utilize short-term consultants and personal service contracts to bolster in-house staff with expert assistance, and the past experience of AID in institution building in the 1960's Community Water Supply program. The new areas for competent staff involvement include increased operation and maintenance assistance, and evaluations of the impacts of AID-supported projects. The development of a strategy based on AID strength will permit a program to be designed that both improves RWSS facilities and results in greater well-being for rural populations in developing countries.

5.2 International Activities

On the international level, the clearinghouse mechanism proposed by the Ad Hoc Working Group was supported by the Workshop participants. It was emphasized that the clearinghouse serve as more than an information exchange and referral unit. Materials need to be analyzed and presented in a readable manner for specific audiences. Promotional activities could also be undertaken by the clearinghouse to better utilize mass media such as transistor radios and communication satellites to educate rural populations and to stimulate interest in use of water supply and sewage facilities. Workshop participants supported the concept of an international center that handled information but not funds. In addition, guidelines for RWSS activities could be written at the clearinghouse as well as development of manuals that explained how to implement the guidelines.

At the regional level, it was suggested that an agency be designated as a clearinghouse, with training programs for teachers who could then run training programs in their own countries, and capability for identification of regional priorities and assistance in developing national institutions in water supply and sanitation. The regional center it was thought should have a pre-existing clientele of governments in the region, such as the WHO regional centers and should be staffed with people trained in water supply and sanitation.

At the national level, the mechanism suggested was a National Water and Sewerage Agency responsible for implementing projects to all

regions of the country. Strong emphasis was given to developing trained personnel (technicians and managers) from sanitary engineers to sanitarians to local individuals with specific operational responsibilities. The national agency with the advantages mentioned under Part 3 could provide a focus for donor activity and for responsibility of managing rural projects. Whether it would be most effectively located under Ministry of Health or Public Works, or separately was not resolved. As long as someone at the national level is working with local boards to supervise ongoing projects and to stimulate community interest, the chances for project survival and usefulness are greatly increased.

5.3 Specific Project Needs

Specific needs for successful programs include the presence of interested and trained persons in the community who operate and maintain the facilities on a continuing basis. Constant monitoring of the systems suggests the need for a local board with managerial and technical capabilities. Education is needed 1) to instill community understanding, 2) to encourage community participation, and 3) to train managers, technicians, and unskilled laborers to run the systems. The facilities that are installed should be geared to the needs of the community, keeping in mind the dynamic nature of water needs. As users discover the benefits of clean, convenient water and efficient sewage removal, demand will probably increase. The system and those trained to run it need to be able to meet changing needs.

Water supplies are tangible, positive actions that can be taken to improve rural communities. With supervision by local boards and local manpower, with support and promotional activities by the national government, and with technical and capital assistance by donor agencies, rural communities will be provided with basic improvements in living conditions that lead to a better quality of life.

6. SUMMARY OF SUGGESTIONS FOR FUTURE RWSS ACTIVITIES

Expanding RWSS activities in developing countries requires stronger commitments from donor agencies and from recipient national and local governments. Successful RWSS programs have received large measures of support from national government and local communities. When programs fail, lack of sustained interest from these entities appears to be the reason.

As discussed at the Workshop, a workable local solution, based on many Latin American experiences, could be the installation of self-supporting systems with technically competent people to manage them. Self-supporting in this context implies that the users are able to pay for operating and maintaining the system, the total costs of the system (which includes construction). Local individuals trained to provide differing levels of services would be responsible to a local water supply and sanitation board. The local board's tasks would involve not only supervising the specific system but also analysing future needs. Over the board would be a state or national agency (depending on the size of the country) whose responsibilities would include providing equitable service throughout the country.

Equitable service would imply the same system of assessing user fees and of setting standards of design and quality. A National Water Supply and Sewage Agency could benefit from economies of scale by centrally purchasing material and equipment, and distributing supplies throughout the country to the local boards. The National Agency could run training programs for skilled and unskilled labor, and provide manuals for the local use. On-site training programs for managers however might be more effective than central schooling. Most importantly, at the national level, persons will be responsible for maintaining adequate supervision and monitoring to insure continuation of service. The location of the water agency in the national government can only be decided by the particular country. The experience in Latin America where water agencies may be found in either national authorities, ministries of health, or ministries of public works has shown that if the commitment to provide RWSS programs is there, the Agency will be effective.

Internationally an institution linked to regions and countries may provide the most effective means for exchanging information and for sharing project experiences. An international institution may also assist in coordinating donor agency efforts by identifying priorities in different areas of the world.

Regional centers could assist in identifying needs and transmitting that information to the international center. It was also suggested that regional centers could train teachers for technical programs in countries.

The question of whether to concentrate resources on integrated rural development activities or on constructing and operating RWSS systems was raised at the Workshop. As discussed under the World Bank section in this report, both alternatives present reasonable options. The decision is not categorical; rather, it depends on the situation in the particular country. In the majority of cases in Latin America, for instance, the creation of responsible National Agencies has ensured the longevity and success of water and sanitation activities. In Mexico today, the water and sewerage authority is part of the rural development plan and will be responsible for developing RWSS activities. In the Near East in Yemen, the municipal systems were installed at the same time the National Water and Sewerage Agency was developed. With success in the urban areas, the program is now being expanded to rural areas

The Taiwan experience presents a major argument for integrated rural activities where the first steps were land reform and rural extension training of farmers, later followed by the provision of water and sewerage facilities. The provincial and national governments are responsible through country agents in maintaining service.

The significant conclusion about the appropriate emphasis is that existing institutions in the country need to be capable of handling the logistics of RWSS activities for maintaining successful programs, for establishing new priorities in programs, and for encouraging community participation. Water supplies

and sewage disposal facilities are part of the infrastructure of development. The implementation of such programs requires commitment from the national government and acceptance of operational responsibility by local areas. Flexibility in donor agency program funding combined with national government commitments and local operational responsibility are fundamental steps in improving existing conditions.

REFERENCES

- Agency for International Development. 1975. A.I.D. Project System and revisions. Washington, D.C.
- _____. 1975. Population and Health. Office of Public Affairs, Washington, D.C.
- Asian Development Bank. 1974. Annual Report. Manila.
- Inter American Development Bank. 1974. Annual Report. Washington, D.C.
- International Bank for Reconstruction and Development (World Bank). 1975, 1974, 1973, 1972. Annual Report. Washington, D.C.
- _____. 1973. List of National Development Plans with 1975 addendum to the Fourth Edition. Planning Advisory Division, International Relations Department, Washington, D.C.
- Institutional Panel of Ad Hoc Working Group on Rural Potable Water Supply and Sanitation. 1974. Report of the meeting of the Institutional Panel, (unpubl. doc.), Ottawa.
- McJunkin, F.E. 1969. Community Water Supply in Developing Countries: A Quarter-Century of United States Assistance, Department of State, Agency for International Development, Washington, D.C.
- McNamara, R.S. 1975. Address to the Board of Governors, World Bank, Washington, D.C.
- Okun, D.A. 1965. The Community Water Supply Program of the Agency for International Development. Department of State, Washington, D.C.
- Pan American Health Organization. 1975. Annual Report of the Director-General, 1974. Official Document No. 16, Washington, D.C.
- Pineo, C.S. and D.V. Subrahmanyam. 1975. Community Water Supply and Excreta Disposal Situation in the Developing Countries: A Commentary, World Health Organization, Offset Publ. 15, Geneva.
- Technical Panel of Ad Hoc Working Group on Rural Potable Water Supply and Sanitation. 1974. Report of the meeting of the Technical Panel, CWS/RD/74.14, (unpub. doc.), Geneva.

REFERENCES, con't.

- UNICEF. 1975. General Progress Report of the Executive Director,
E/ICEF/637 (Part 1 and 2), United Nations, New York.
- World Health Organization. 1975. The Work of WHO 1974, Official
Records No. 221, Geneva.
- World Health Statistics Report. 1973. "Community water supply and
sewage disposal in developing countries." 26(11):720-783.

ANNEXES

ANNEX ONE

INVENTORY OF CURRENT AND PROPOSED A.I.D. WATER SUPPLY, SANITATION
AND AGRICULTURAL WATER ACTIVITIES FOR RURAL AREAS

The tables which follow summarize activities of the Agency for International Development in rural areas related to water supply, sanitation, and agricultural water. The data were collected from published sources, internal AID documents, and interviews with Agency staff members during September and October 1975.

Our major concern here is with including all rural and rural-related potable water and sanitation activities as they are defined in each country. The urban fringe-area water supply and sanitation projects are included wherever they could be identified. Agricultural water resources projects, including irrigation and livestock water activities, are included as separate items for comparison with the potable water and sanitation in each country.

The following is a brief explanation of how we have characterized and summarized each project for inclusion in this listing;

- (1) The tables contain data grouped according to the bureau structure of the Agency. The regional bureaus carry their new names which became effective as of 12 October 1975 -- Near East and South Asia Bureau is now Bureau for Near East; East Asia Bureau is now Bureau for Asia including five countries which formerly came under the NESAs Bureau. The order of presentation is:

Bureau for Africa
Bureau for Asia
Bureau for Latin America
Bureau for Near East
Bureau for Technical Assistance

- (2) The columns for identification of each project include where available title, loan or project number, AID category, population covered, and dates. AID categories are:

Food and Nutrition- F & N
Population Planning and Health- PP & H
Education and Human Resources- E & HR
Special Development Projects- SDP

ANNEX ONE, con't.

- (3) The columns contain estimates of total project costs and codings of water-related activities within three broad categories: water supply, sanitation, and agricultural water (distinguished between: irrigation and livestock water). The activity codes are:

C	Construction and Design
M	Maintenance and Operation
I	Institution Building
T	Training
E	Sanitary Education
S	Surveys
R	Research
A	Evaluation

The tables for each region are listed in the following order: current projects, shelf items (that is, project proposals which are available but not approved to be implemented), and proposed projects (those which are identified as being in initial stages of formulation). Following the summary table for each region is a description of each project.

ANNEX TWO

Individuals Contacted for RWSS Report

We would like to acknowledge the following persons who kindly gave us much time and effort:

Alden, John. Agency for International Development, Bureau for Near East

Belcher, Marjorie. Agency for International Development, Technical Assistance Bureau, Office of the Assistant Administrator

Brackett, Maura. Agency for International Development, Bureau for Latin America

Chandler, James. Agency for International Development, Technical Assistance Bureau, Office of Education and Human Resources

Cohen, Myer. International Development Research Centre

Coleman, George. Agency for International Development, Bureau for Near East

Corey, Gilbert. Agency for International Development, Technical Assistance Bureau, Office of Agriculture

Cross, Edward. Agency for International Development, Bureau for Africa

Davies, Dale. Agency for International Development, Bureau for Program and Management Services, Office of Engineering

Donaldson, David. Pan American Health Organization, Department of Engineering and Environmental Science

Dove, Charles. Agency for International Development, Technical Assistance Bureau, Office of Program and Policy Utilization

Drobny, Abraham. Inter-American Development Bank, Public Health Advisor.

Eaton, David. Johns Hopkins University, Department of Geography and Environmental Engineering

Evans, Gordon. Agency for International Development, Bureau for Program and Policy Coordination, Office of International Assistance Coordination

Falbo, Edna. Agency for International Development, Bureau for Program and Policy Coordination, Document Reference Center

Gardner, Sandra. Agency for International Development, Bureau for Program and Management Services, Office of International Training

Green, James. Agency for International Development, Technical Assistance Bureau, Office of Nutrition

Howard, Lee. Agency for International Development, Technical Assistance Bureau, Office of Health

*Jackson, Isaiah. Agency for International Development, Bureau for Asia

Kawata, Kas. Johns Hopkins University, Department of Environmental Health

Kruse, Cornelius. Johns Hopkins University, Department of Environmental Health

Ladenheim, H.C. Agency for International Development, Technical Assistance Bureau, Office of Program and Policy Utilization

Lauria, Donald. University of North Carolina, Department of Environmental Sciences and Engineering

*Hutchings, John. United States Department of Health, Education, and Welfare, UNICEF-USA Liason Office.

ANNEX TWO, con't.

- Littlewood, William. Agency for International Development, Technical Assistance Bureau, Office of Science and Technology
- Long, Bill. United States Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, Office of Environmental Affairs
- Lustig, Theodore. Agency for International Development, Bureau for Near East
- Marshall, Herman. Agency for International Development, Bureau for Africa
- Mastrofini, Leopold. Agency for International Development, Bureau for Program and Management Services, Office of Engineering
- McDermott, James. Agency for International Development, Technical Assistance Bureau, Office of Agriculture
- McJunkin, Frederick. University of North Carolina, Department of Environmental Sciences and Engineering
- Miner, William. Agency for International Development, Technical Assistance Bureau, Office of Urban Development
- Mosher, Norman. Agency for International Development, Bureau for Program and Policy Coordination, Office of International Assistance Coordination
- Neave, John. Agency for International Development, Bureau for Program and Management Services, Office of Engineering
- Okun, Daniel. University of North Carolina, Department of Environmental Sciences and Engineering
- Olivaro, Umberto. Inter-American Development Bank, Environmental Engineering Branch
- Parker, Norma. Agency for International Development, Bureau for Latin America
- Pease, Jean. United States Department of Health, Education and Welfare, Office of International Health and Agency for International Development, Technical Assistance Bureau, Office of Health
- Pope, Margaret. Agency for International Development, Technical Assistance Bureau, Office of Health
- Rechcigl, Miloslav. Agency for International Development, Technical Assistance Bureau, Office of Research and Institutional Grants
- Reid, George. University of Oklahoma, Bureau of Water and Environmental Resources
- Saunders, Robert. International Bank for Reconstruction and Development, Public Utilities Department
- Sherry, Jerome. Agency for International Development, Bureau for Program and Policy Coordination, Office of International Assistance Coordination
- Shiffman, Morris. University of North Carolina, Department of Environmental Sciences and Engineering
- Shipman, Harold. International Bank for Reconstruction and Development, Public Utilities Department

ANNEX TWO, con't.

Steinberger, Howard. Agency for International Development, Bureau
for Program and Policy Coordination, Office of International
Assistance Coordination

Stockard, Joe L. Agency for International Development, Technical
Assistance Bureau, Office of Health

Swisher, A. Dale. Agency for International Development; Bureau for
Program and Management Services, Office of Engineering and
Technical Assistance Bureau, Office of Health

Torelle, Ethel. Agency for International Development, Bureau
for Program and Policy Coordination, Office of International
Assistance Coordination

Van Buren, Lester. United States Department of State,--Bureau
of International Organization Affairs

Walsh, Bill. United States Department of State, Bureau of
International Organization Affairs

Warford, Jeremy. International Bank for Reconstruction and
Development, Public Utilities Department

Wilder, Bernard. Agency for International Development, Technical
Assistance Bureau, Office of Education and Human Resources

Wolmar, Abel. Johns Hopkins University, Department of Geography
and Environmental Engineering

Yoder, Von. Agency for International Development, Bureau for Asia

C-1

ANNEX THREE

Participants in AID Workshop on

RWSS Activities

October 15 - 16, 1975

- Anderson, Martha. United States Department of Health, Education, and Welfare, Office of International Health
- Belcher, Marjorie. Agency for International Development, Technical Assistance Bureau, Office of the Assistant Administrator
- Botts, Byron. Agency for International Development, Technical Assistance Bureau, Office of Rural Development
- Cross, Edward. Agency for International Development, Bureau for Africa
- Davies, Dale. Agency for International Development, Bureau for Program and Management Services, Office of Engineering
- Donaldson, David. Pan American Health Organization, Department of Engineering and Environmental Science
- Emrey, Robert. United States Department of Health, Education, and Welfare, Office of International Health
- Foster, John. National Water Demonstration Project.
- Howard, Lee. Agency for International Development, Technical Assistance Bureau, Office of Health
- Jackson, Isaiah. Agency for International Development, Bureau for Asia
- Lehr, Jay. National Water Well Association
- Logan, John. Rose Hulman Institute of Technology
- Marshall, Herman. Agency for International Development, Bureau for Africa
- Neave, John. Agency for International Development, Bureau for Program and Management Services, Office of Engineering
- Pineo, Charles. Consulting engineer
- Rosenfield, Patricia. Johns Hopkins University, Department of International Health
- Swisher, A. Dale. Agency for International Development, Bureau for Program and Management Services, Office of Engineering and Technical Assistance Bureau, Office of Health
- Vanderhoof, Edwards. Agency for International Development, Bureau for Asia
- Welty, John. Agency for International Development, Bureau for Program and Policy Coordination, Office of Development Program Review and Evaluation

AFRICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	PERCENTAGE COVERED	FY OBLIGATION OF LOAN (MILLION DOLLARS)	ESTIMATED TOTAL PROJECT COSTS (\$000)		LATER PHASED ACTIVITIES		
					AID	OHLR	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>ETHIOPIA</u>									
Ada District Development	663-55-130-162	F + N		FY71-78	2,811				LS-C
Rural Agricultural Development	663-55-130-167	F + N		FY72-78	2,361			E	
Southwest Development	663-55-XXX-XXX	F + N		FY76-80	4,210		S		IR-R
Drought Recovery and Rehabilitation Program	633-F-601 Grant	F + N		FY76	5,000				LS-C
Livestock Development	Project Loan	F + N		FY76	6,000	40,000			LS-C
Southwest Development	Project Loan	F + N		1Q	7,500		C		IR-C
<u>GHANA</u>									
Rural Health Service	Sector Loan	PP + H		1Q	2,000		C	C	
<u>KENYA</u>									
National Range and Ranch Development	615-11-190-157	F + N		FY73-79	5,250	46,750			LS-C
<u>TANZANIA</u>									
Masai Livestock Development	621-11-130-093	F + N		FY70-79	3,612				LS-C

AFRICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	COMMITMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		AGRICULTURE
					AID	OTHER	WATER SUPPLY	SANITATION	
CURRENT PROJECTS									
<u>TANZANIA</u>									
Livestock Marketing and Development	621-11-130-122	F + N		FY74-79	4,400	18,500			LS-C,I
<u>SAHEL AND CENTRAL AND WEST AFRICAN PROGRAMS (SCWAP) - MALI</u>									
Mali Crop Production	688-11-130-202	F + N		FY76-80	7,182				IR-C,T
Mali Food for Work	688-11-995-XXX	F + N		FY76-80	6,360		C	C	IR-C
Mali Land Use in Capability Inventory	688-11-120-XXX	F + N		1Q-FY77	1,300		S,T		
Mali Rural Health Services Development	688-11-590-XXX	PP + H		1Q-FY80	2,500			T,I	
<u>SCWAP - MAURITANIA</u>									
Mauritania Ragne and Livestock Development	682-11-120-201	F + N	20,000	FY76-81	2,800				LS-C
<u>SCWAP - SENEGAL</u>									
Senegal Rural Health Services Development	685-11-590-XXX	PP + H		1Q-FY80	1,525		C,I	C,I,E	
<u>SCWAP - UPPER VOLTA</u>									
Upper Volta Livestock Development	686-11-130-XXX	F + N	50 villages	FY76-78	2,000				LS-C,I

AFRICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN ARRIVALMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		DATEP RFLATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>SCWAP - REGIONAL</u>									
Sahel Water Data Network and Management	625-11-120-XXX	F + N		FY76-82	4,260		S,T,I		
Central Africa Live-stock and Meat Marketing	625-11-130-803	F + N		FY71-77	1,400				LS-C,I
Water Resources	625-11-120-712	F + N		FY73-78	1,735		R,I		
Regional Public Health Training	625-11-540-510	PP + H		FY69-76	2,486			E,I	
OMVS Management and Staff Support	625-11-755-XXX	E + HR		FY76-78	1,980				IR-R,T,I
Development Studies of the Sahel-Sudano Zone	625-11-995-907	SDP		FY76-80	2,700		R		
Senegal River Basin Development (OMVS)	Project Loan	F + N		FY76	15,000				IR-C
<u>SOUTHERN AFRICAN PROGRAMS - BOTSWANA</u>									
Botswana Range Management and Livestock Development	690-11-130-015	F + N		FY73-78	1,950				LS-C,R,I

AFRICA									
TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OF LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>AFRICA REGIONAL PROGRAMS - SUDAN</u>									
Rahad Irrigation	690-II-017 Loan	F + N		2/26/73	11,000				IR-C
<u>SHELF ITEMS</u>									
<u>SCWAP - NIGER</u>									
Niger Range and Live-stock Development	683-11-120-XXX	F + N			2,000				LS-T,C
<u>SCWAP - REGIONAL</u>									
Senegal River Basin Development (OMVS)	Project Loan	F + N		FY76	3,000				IR-C
PROPOSED PROJECTS									
<u>MALI</u>									
Operation Haute Vallee	Grant	F + N	156,000	FY77-79	8,700	2,600			IR-C
Pilot Rural MCH CLINIC/TRAINING CENTERS	Grant	PP + H		FY77-79	1,520	120	I,T	I,T	
Wheat Production - Northern Niger Valley	Grant	F + N		FY77-79	3,070	150			IR-C
Rural Engineering	Grant	F + N		FY76-79	5,372				IR-M

AFRICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN COMMITMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
PROPOSED PROJECTS									
<u>MAURITANIA</u>									
Agriculture Perimeter Development	Grant	F + N		FY77-79	2,000				IR-C
Mauritania Manpower Training	Grant	L + HR		FY77-80	450		T		IR-T
<u>SENEGAL</u>									
Gambia River Valley Development Studies	Grant	F + N		FY76-79	1,750	3,250			IR R, I
Eastern Senegal Range and Livestock Development	Grant	F + N		FY77-79	6,000	10,000			LS-C
Casamance Agricultural Development	Grant	F + N		FY77-79	3,000				IR-I
Small Irrigated Perimeters	Grant	F + N		FY76-78	3,100				IR-C
Senegal Manpower Training Project	Grant	E + HR		FY76-79	600	100	T		IR-T
<u>UPPER VOLTA</u>									
Irrigated Rice Development	Grant	F + N		FY77-79	3,000				IR-C, M

AFRICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY ORIGINATOR OR LOAN NUMBER DATE	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
PROPOSED PROJECTS <u>AFRICA REGIONAL</u> Study of the Black Volta Basin	Grant	F + N		FY76-79	1,800	7,554	C		IR-C

COUNTRY: Ethiopia

2. PROJECT TITLE: Ada District Development

3. NUMBER: 663-55-130-162 Grant

CATEGORY: Food and Nutrition

ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To increase the agricultural production of 12,800 small farmers in the Ada district, develop institutions to encourage a more productive, market-oriented economy, improve the local road system, promote cooperatives, and develop sanitary water supplies

4.2 Number of People to be Covered:

4.3 Intended Impact: To demonstrate manageable and replicable agricultural techniques and approaches for increasing the income and living conditions of large numbers of Ethiopia's small farmers

5. RWSS ACTIVITIES: Water for livestock - construction

o. IMPLEMENTATION: U.S. technical assistance contract team is assisting in the introduction of a package of inputs tailored to the needs of the farmers in the area; by the end of 1975 60 model farms were expected to have been established to be demonstrating improved farm practices; other AID inputs include participant training and commodity costs

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1971 - FY1978

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	2,811							
FY1975	357	400						
FY1976		440						
Fifth Quarter FY1977		80						

1. COUNTRY: Ethiopia
2. PROJECT TITLE: Rural Agricultural Development
3. NUMBER: 663-55-130-167 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To aid rural development in Ethiopia through three interrelated areas: a) the Minimum Package Program (MPP), b) non-formal education, and c) "Auraja" or local government improvement (at least temporarily suspended due to unsettled political situation); the MPP is helping to increase the net income of approximately 500,000 small holder farmers in 43 selected sites who cultivate an average of five acres and whose yearly net income is about \$58.

4.2 Number of People to be Covered:

4.3 Intended Impact: To provide assistance to Ethiopian development plans and to support AID country strategy which is focused on rural development

5. RWSS ACTIVITIES: Sanitation - sanitary education

6. IMPLEMENTATION: AID is providing technical assistance, participant training funds, project materials plus workshop and conferences for the development of project activities; in the MPP areas 347 extension centers have been established, home economics training has been introduced and fundamental instruction is being offered to women in child care, health education and sanitation; in non-formal education six pilot sites have been selected for experimental community education centers which are designed to offer relevant education including sanitation rural inhabitants.

7. RELATED ONGOING ACTIVITIES:

8 FUNDING

8.1 Duration or Loan Agreement Dates: FY 1972 - FY 1978

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	2,361							
FY1975	104	218						
FY1976	680							
Fifth Quarter FY1977	100							

1. COUNTRY: Ethiopia
2. PROJECT TITLE: Livestock Development
3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To join with IBRD in financing a third livestock project intended to increase the production and the value of livestock marketed from the project areas: the Southern Rangelands, the Northeast Rangeland and Jijigga; the project will benefit and earn substantial net gains in foreign exchange.

4.2 Number of People to be Covered:

4.3 Intended Impact: To help meet immediate nutritional needs of rural poor through increased food supply and income and to increase availability of food for urban areas, demonstrate methods of rangeland development and build the livestock

5. RWSS ACTIVITIES: Water for livestock - construction industry.

6. IMPLEMENTATION: Project components will include range management, irrigation, training and information programs, project management, common services and others; an IBRD appraisal mission which visited Ethiopia in January and February of 1975 was to further delineate project design.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 - initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project		40,000*						
FY1975								
FY1976	6,000							
Fifth Quarter								
FY1977								

* Total estimated project cost of which Ethiopia expected to provide 10 million; the rest, including AID funds will come from external sources.

1. COUNTRY: Kenya
2. PROJECT TITLE: National Range and Ranch Development
3. NUMBER: 615-11-190-157 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To assist programs involving the 1) development of ground and surface water sources, 2) design and institutionalization of national range management practices, and 3) training and placement of professional range management personnel; additionally, this project addresses the problems of the nomadic and semi-nomadic pastoralists and, to a lesser extent, the subsistence farmer, who together comprise the lowest income group in Kenya; to this group the project is designed to supply water, roads and supporting services to encourage the production of more and better livestock.

4.2 Number of People to be Covered:

4.3 Intended Impact: To reduce or eliminate the environmental, organizational and managerial constraints which inhibit increased livestock production.

5. RWSS ACTIVITIES: Water for livestock - construction

6. IMPLEMENTATION: AID has assisted in efforts to improve range management and wa development in northeast Kenya; this resulted in the implementation of range management schemes for an additional 7.6 million acres of arid lands; AID's efforts are closely linked to the activities of the IBRD, UNDP, FAO, Swedish, British and Canadian Development Agencies which are jointly implementing a multi-donor live-stock development project; the Deputy Coordinator of the program is a USDA specialist.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1973-1979

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	5,250	46,750*						
FY1975	880	822						
FY1976	750							
Fifth Quarter	50							
FY1977								

*Other Multilateral Funding

1. COUNTRY: Tanzania
2. PROJECT TITLE: Masai Livestock Development
3. NUMBER: 621-11-130-093 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To assist Tanzania achieve and sustain a high level of livestock production and marketing in the two Districts of Masailand in north central Tanzania by improving herds and institutionalizing regular marketing as a means of bringing the nomadic Masai into the country's monetary economy.

4.2 Number of People to be Covered:

4.3 Intended Impact:

5. RWSS ACTIVITIES: Water for livestock - construction

6. IMPLEMENTATION: AID provides multidisciplinary team to work with government officials and the Masai to develop ranching associations; through these associations the Near East Foundation team is introducing improved rotational grazing and animal husbandry practices, developing water and disease control facilities and establishing organized livestock markets; AID also financed a land-use survey including the services of the Earth Satellite Corporation to aid in identifying grazing lands

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1970-FY1979

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	3,612							
FY1975	673	923						
FY1976	625							
Fifth Quarter FY1977	158							

1. COUNTRY: Tanzania
2. PROJECT TITLE: Livestock Marketing and Development
3. NUMBER: 621-11-130-122 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To assist Tanzania establish an effective and efficient livestock market system and achieve self-sufficiency in livestock production for domestic consumption and an exportable surplus, thus providing improved earnings for traditional and small producer families and improved nutrition for urban consumers.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. RWSS ACTIVITIES: Water for livestock - construction, institution-building
6. IMPLEMENTATION: AID is providing technical assistance to the Project Management Unit of the Tanzania Livestock Development Authority to help implement an \$18.5 million IDA credit for livestock development; included in the assistance is a water development specialist to aid in the construction of new and improving marketing infrastructure and the development of government ranches and small holder associations.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1974 - 1979

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	4,400	18,500*						
FY1975	311							
FY1976	155							
Fifth Quarter FY1977	330							

*IDA credit

1. COUNTRY: Sahel and Central and West Africa Programs - Upper Volta
2. PROJECT TITLE: Upper Volta Livestock Development
3. NUMBER: 686-11-130-XXX Grant
 CATEGORY: Food and Nutrition
 ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To develop village livestock management systems and mixed food and livestock farming in sedentary villages of the northern belt of the Sahilian zone of Upper Volta
 - 4.2 Number of People to be Covered: 50 sedentary villages
 - 4.3 Intended Impact: To improve management of range resources and other food supplies and reduce the risk of ecological damage; to increase livestock productivity and income of livestock producers and, in the process, to increase government revenues and foreign exchange earnings
5. RWSS ACTIVITIES: Water for livestock - construction, institution building
6. IMPLEMENTATION: The project after an initial survey of the area will organize village livestock grazing associations to be responsible for allocating and controlling grazing zones; AID through the GOUV will provide assistance including seasonal stock watering facilities to the associations; the project will be jointly undertaken by the French aid agency and AID based on a study sponsored by the French agency
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration of Loan Agreement Dates: FY1976-1978
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	2,000							
FY1975								
FY1976	850							
Fifth Quarter								
FY1977								

1. COUNTRY: Southern Africa Programs - Botswana
2. PROJECT TITLE: Botswana Range Management and Livestock Development
3. NUMBER: 690-11-130-015 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To assist the GOB rural development efforts by developing prototypes of small stockholder range and livestock community management units.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. WATER RELATED ACTIVITIES: Water for livestock - construction research, institution building
6. IMPLEMENTATION: AID is providing six technical experts in range of the project from selection of site through formulation and demonstration of ranching schemes; successful prototypes will then be replicated into a number of operating units before completion of the project; strategies developed in this project could then be carried out in other small holder areas of the country by the government.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1973-FY1978

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1,950							
FY1975	159/352							
FY1976	575							
11th Quarter								
FY1977								

1. COUNTRY: Sahel and Central and West Africa Programs - Niger
2. PROJECT TITLE: Niger Range and Livestock Development
3. NUMBER: 683-11-120-xxx Grant (Shelf Item)
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES: To develop capability of GON to plan and implement long-term livestock development program
 - 4.1 Nature of Project:

4.2 Number of People to be Covered:

4.3 Intended Impact: Progress against desertification and improvement of herder's production and income as well as maintaining the viability of the livestock sector in Niger.

5. WATER RELATED ACTIVITIES: Water for livestock - training, construction

6. IMPLEMENTATION: The project will be implemented in three phases which will include 1) training of livestock personnel in range management, animal husbandry, surface water development and range fire fighting; 2) initiation of pilot project in western Niger to include provision of stockwater; and 3) replication of pilot project; AID will be coordinating project with the French development agency.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	7,000*							
FY1975								
FY1976								
Fifth Quarter								
FY1977								

*\$2 million in 1st FY of implementation

1. COUNTRY: Mali
2. PROJECT TITLE: Operation Haute Vallee
3. NUMBER: None PID Grant
 CATEGORY: Food and Nutrition
 ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To increase food production and the quality of Rural life by financing the operation of a GOM program of integrated agricultural development in the Haute Vallee Region
 - 4.2 Number of People to be Covered: 156,000 rural inhabitants
 - 4.3 Intended Impact: To reduce the Malian national food defect by increasing production of cereals, vegetables, and animal products. Haute Vallee area of Mali (2nd Region)
5. WATER RELATED ACTIVITIES: Irrigation - construction
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES: IBRD financing of Selingue Dam scheduled to begin in 1975.

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1977 - FY79

8.2 Estimated Total Costs (in \$000): 11,300

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	8700	2,600						
FY1975								
FY1976								
Fifth Quarter								
FY1977	3,000							

1. COUNTRY: Mali

2. PROJECT TITLE: Pilot Rural MCH CLINIC/TRAINING CENTERS

3. NUMBER: PID Grant
CATEGORY:
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To develop 3 pilot MCH Clinic/Training Centers which through use of polyvalent teams will deliver adequate modern rural health services including nutrition, farm planning, environmental health and health education

4.2 Number of People to be Covered

4.3 Intended Impact: To provide health services to the rural population of Mali

5. PROJECT ACTIVITIES: Water supply and Sanitation - Institution building, training

6. ADMINISTRATION:

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates FY1977 - FY1979

8.2 Estimated Total Costs (in \$000) 1640

Period	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>	
	<u>AID</u>	<u>Other</u>	<u>AID</u>	<u>Other</u>	<u>AID</u>	<u>Other</u>
Complete Project	1520	120				
FY1975						
FY1976						
Fifth Quarter						
FY1977	800					

1. COUNTRY: Mali
2. PROJECT TITLE: Wheat Production - Northern Niger Valley
3. NUMBER: None PID Grant
 CATEGORY:
 ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To finance the GOM effort to produce wheat by the irrigation of and lands in the Northern Niger Valley.
 - 4.2 Number of People to be Covered Poor farmers of northern reaches of Fifth Region 11,000 hectares
 - 4.3 Intended Impact To assist the GOM to achieve its goal of self-sufficiency in cereals production by 1980
5. PROJECT ACTIVITIES: Irrigation - construction
6. ADMINISTRATION:
7. RELATED ONGOING ACTIVITIES: FAO is considering a project which will utilize approximately 5,000 ha of irrigated land for wheat production. FAO project will use land where infrastructure improvements made long ago.

8. FUNDING

8.1 Duration or Loan Agreement Dates Initial FY1977 Final FY1979

8.2 Estimated Total Costs (in \$000) 3220

Period	PROJECT		WATER		SANITATION	
	AID	Other	AID	Other	AID	Other
Complete Project	3070	150				
FY1975						
FY1976						
Fifth Quarter						
FY1977	1500					

1. COUNTRY: **Mauritania**
2. PROJECT TITLE: **Agriculture Perimeter Development**
3. NUMBER: **682- PID grant**
 CATEGORY: **Food and Nutrition**
 ORIGINATING OFFICE: **Mission**
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: **To develop small irrigated perimeters along the Senegal River that will have immediate returns and contribute to an ultimate solution of the overall problem.**
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: **Substantially increase cereal production to alleviate chronic shortages**
5. WATER RELATED ACTIVITIES: **Irrigation - construction**
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES: **Seed Multiplication Project, Manpower Training Project capital intensive large public works construction**
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: **FY1977-79**
 - 8.2 Estimated Total Costs (in \$000): **2,000**

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	2,000							
FY1975								
FY1976								
Fifth Quarter								
FY1977	60							

1. COUNTRY: Mauritania

2. PROJECT TITLE: Mauritania Manpower Training

3. NUMBER: 682 PID Grant

CATEGORY:

ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To provide in and out-of-country training both long degree and short-term programs in rural planning and development.

4.2 Number of People to be Covered:

4.3 Intended Impact: To increase the number and quality of trained manpower in the critical sectors of development.

5. WATER RELATED ACTIVITIES: Water supply and Irrigation - training

6. IMPLEMENTATION:

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1977 - FY80

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	450							
FY1975								
FY1976								
Fifth Quarter								
FY1977		25						

1. COUNTRY: **Senegal**
2. PROJECT TITLE: **Eastern Senegal Range and Livestock Development**
3. NUMBER: **685-0204 PID Grant**
 CATEGORY: **Food and Nutrition**
 ORIGINATING OFFICE: **Mission**
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: **To establish a managed grazing reserve of 1 million hectares in Eastern Senegal through the development of water resources, health control program**
 - 4.2 Number of People to be Covered: **Herdsman, farmers, villagers in Project area.**
 - 4.3 Intended Impact: **Increase availability of meat and dairy products for domestic consumption and conserve natural resources.**
5. WATER RELATED ACTIVITIES: **Water for livestock (animals), construction**
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES: **IBRD primary manpower-need studies**

8. FUNDING

8.1 Duration or Loan Agreement Dates: **FY77-79**

8.2 Estimated Total Costs (in \$000): **16,000**

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	6,000	10,000						
FY1975								
FY1976								
Fifth Quarter								
FY1977	1,000							

ASIA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
PROPOSED PROJECTS									
<u>INDONESIA</u>									
Irrigation Training and Management	Grant				1,100	325			IR-T,I
Integrated Area Development	Loan				10,000	10,000	C,I		IR-C,I
Kanjiro Irrigation System	Loan				3,100	7,200			IR-C,M,T
Sederhana Irrigation -II	Loan				20,000	26,250			IR-C
Sedang/Kecil Irrigation	Loan				20,000				IR-C,T,I
<u>PAKISTAN</u>									
Rural Potable Water Supply	Loan				15,000	44,6000	C		
<u>PHILIPPINES</u>									
Local Water Development III	Loan/Grant	PP + H			20,600	20,000	A,I		
Small Scale Irrigation II	Loan	F + N			10,000	15,000			IR-T,I
Bicol Integrated Area Development	Loan	F + N			3,000	2,000			IR-C,T

1. COUNTRY: Bangladesh
2. PROJECT TITLE: Rural Works
3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Expansion of rural infrastructure - irrigation for rice cropping mechanism, better roads, improved flood control, and provision of jobs during dry season.
 - 4.2 Number of People to be Covered: 90% of population is rural about 70 million
 - 4.3 Intended Impact: To make Bangladesh self-sufficient in food production
5. WATER RELATED ACTIVITIES: Irrigation - construction and maintenance
6. IMPLEMENTATION: AID and GOB share concern for Bangladesh's self-sufficiency in food production. AID's initial loan would support expansion of GOB's Rural Works Program complementary to AID grant assistance in FY76. Loan would finance local wages and materials. Pilot experience will determine future loan funds.
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1976 initial obligation
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	25,000*							
FY1975								
FY1976	6,000							
Fifth Quarter								
FY1977								

* dependent on pilot experience

1. COUNTRY: Korea
2. PROJECT TITLE: Irrigation Construction
3. NUMBER: 489-T-090 and 489-T-090a Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project:
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. WATER RELATED ACTIVITIES: Irrigation - construction
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY 1975 initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project								
FY1975	17,200*							
FY1976	6,500**							
Fifth Quarter								
FY1977								

* - 489-T-090

** - 489-T-090A

1. COUNTRY: Philippines
2. PROJECT TITLE: Provincial Water Supply
3. NUMBER: Project loan
CATEGORY: Population Planning and Health
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Consult 5 water systems owned and operated by autonomous water user districts which are designed to provide reliable and sanitary water to low income families at affordable prices.
 - 4.2 Number of People to be Covered: 250,000 people with expanded service
 - 4.3 Intended Impact: To reduce the incidence of water-borne disease
5. WATER RELATED ACTIVITIES: Water supply - construction, research, maintenance, institution-building
6. IMPLEMENTATION: This project builds on a previous \$20.0 million Water Supply Loan and existing technical assistance grant where AID is assisting with building 5 water supply systems and developing local and material institutional capabilities. This loan will fund an additional 5 systems plus improve existing systems.
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1976
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	20,000*							
FY1975								
FY1976	10,000							
Fifth Quarter								
FY1977								

* Second \$10 million presented as shelf item

1. COUNTRY: Indus Basin - Regional
2. PROJECT TITLE: Indus Basin Development Fund
3. NUMBER: Loans and Grants
CATEGORY: Other Programs
ORIGINATING OFFICE: Region
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To finance construction program to divide equitably water of Indus Basin and to provide increased water for irrigated agriculture and electricity.
 - 4.2 Number of People to be Covered: Population in Indus Valley
 - 4.3 Intended Impact: To improve the use of water in the Indus Basin by India and Pakistan
5. WATER RELATED ACTIVITIES: Irrigation - construction and maintenance
6. IMPLEMENTATION: Specific activities have been completion of Mangla Dam, 300 miles of link canals, and seven low dams. The rest of the monies available will go to completion of Tarbela Dam, begun in 1968. AID and 8 other donors have made payments of the fund upon semi-annual call from the World Bank (made on the basis of expected rate of construction and expenditure) India and Pakistan are also contributing in foreign exchange and rupees. The U.S. is helping to contribute to repair costs due to structural failure of gate/tunnel complex of Tarbela Dam.
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1974 - 5Q (initial agreements in 1960-64)
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	47,200	926,800*						
FY1975	9,200							
FY1976	22,500							
Fifth Quarter FY1977	4,500							

* India - \$168.8 million in foreign currency; Pakistan - \$1.2 million in foreign exchange and \$403.5 million equivalent in rupees; other donors \$353.3 million

1. COUNTRY: Bangladesh
2. PROJECT TITLE: Kurigram Flood Control and Irrigation (North Unit)
3. NUMBER: Loan PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Establishment of flood control/irrigation/drainage infrastructure which allows year round cropping in the Kurigram area
 - 4.2 Number of People to be Covered: Kurigram sub-Division
 - 4.3 Intended Impact: Food grain self-sufficiency in the Kurigram area by 1981.
5. WATER RELATED ACTIVITIES: Irrigation: construction
6. IMPLEMENTATION: The Bangladesh Water Development Board would be responsible for implementing the project. It is assumed that the Bangladesh Power Development Board, the Ministry of Agriculture, the Bangladesh Agriculture Development Corporation and the Ministry of Local Government, Rural Development and Cooperatives will be extensively involved. The Asian Development Bank has also indicated interest in providing financial support for the project.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	15,000	26,200	15,000	26,200				
FY1975								
FY1976								
Fifth Quarter								
FY1977	15,000	26,200	15,000	26,200				

1. COUNTRY: Indonesia
2. PROJECT TITLE: Irrigation Training and Management
3. NUMBER: 497-15-110-250 Grant PID
CATEGORY:
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To improve the GOI's capability for managing and implementing planned irrigation construction programs.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Increased food production.
5. WATER RELATED ACTIVITIES: Irrigation: training, institution-building
6. IMPLEMENTATION: The project will be developed with the Directorate General of Water Resources Development. AID will provide monies for the expenses of five irrigation and management experts.
7. RELATED ONGOING ACTIVITIES: AID has authorized \$20 million for the Sederhana Irrigation Program and another part of \$15 million for irrigation projects in Kecil. IDA/IBRD has provided 160 million for rehabilitation of older irrigation systems.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1100	325						
FY1975								
FY1976								
Fifth Quarter								
FY1977	350							

1. COUNTRY: Indonesia
2. PROJECT TITLE: Integrated Area Development
3. NUMBER: 497-22-121-257 Loan PID
CATEGORY:
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: In a sub-district sized geographical area 1) increase the participation of the rural populace in their own development and 2) develop a network of rural infrastructure which emphasizes accelerated agricultural development.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Increased agricultural productivity and improved standard of living for the rural poor.
5. WATER RELATED ACTIVITIES: Water supply and irrigation: construction, institution-building
6. IMPLEMENTATION: AID will provide funding. Technical support will be provided by expatriates, Indonesian non-GOI and GOI for community development, education and motivation for credit unions and health insurance program, extension activities at lower levels, and administration of taxes and other local government revenues and of provision of local government services. Physical resource inputs may be required for irrigation and feeder roads and for village water supply systems.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	10,000	10,000	10,000	10,000				
FY1975								
FY1976								
Fifth Quarter								
FY1977	10,000		10,000					

1. COUNTRY: **Indonesia**
2. PROJECT TITLE: **Kanjiro Irrigation System**
3. NUMBER: **497-22-120-255 Loan PID**
 CATEGORY:
 ORIGINATING OFFICE: **Mission**
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: **To assist in the rehabilitation and betterment of approximately 8,800 hectares of irrigable land in the Kanjiro irrigation system within the sub-district of South Sulawesi**
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: **Increased food production**
5. WATER RELATED ACTIVITIES: **Irrigation: construction, maintenance training.**
6. IMPLEMENTATION: **AID will provide monies (loan) for technical assistance, (construction materials, and training of manpower for the improvement and rehabilitation of primary and secondary canals, for design and to partially construct tertiary canals for additional areas, and for operation and maintenance of the system. GOI personnel for the project will be made available on a timely basis and in numbers sufficient for training and project work.**
7. RELATED ONGOING ACTIVITIES: **The Netherlands Government is providing a team of technical people to work on all the irrigation projects of LUWU.**

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	3,100	7,200	3,100	7,200				
FY1975								
FY1976								
Fifth Quarter								
FY1977	3,100		3,100					

1. COUNTRY: Indonesia
2. PROJECT TITLE: Sederhana Irrigation - II
3. NUMBER: 497-22-120-252 Loan PID
CATEGORY:
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To improve and develop approximately 100,000 hectares of irrigable land.

4.2 Number of People to be Covered:

4.3 Intended Impact: Increased food production

5. WATER RELATED ACTIVITIES: Irrigation: construction

6. IMPLEMENTATION:

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	20,000	26,250	20,000	26,250				
FY1975								
FY1976								
Fifth Quarter								
FY1977	20,000	26,250	20,000					

1. COUNTRY: **Indonesia**
2. PROJECT TITLE: **Sedang/Kecil Irrigation**
3. NUMBER: **497-22-120-251 Loan PID**
 CATEGORY:
 ORIGINATING OFFICE: **Mission**
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: **To assist the on-going GOI Sedang/Kecil Irrigation project to improve and develop approximately 100,000 hectares of off-Java irrigable land.**
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: **Increased food production.**
5. WATER RELATED ACTIVITIES: **Irrigation: training, institution-building, construction.**
6. IMPLEMENTATION: **AID will provide through its loan to the GOI Directorate Gen^l of Water Resources (DGWRD), two U.S. advisors to assist in on-the-job training, hydrologic and construction equipment and monies for design and construction services provided by Indonesian firms. DGWRD will provide personnel and staff support for the project implementation.**
7. RELATED ONGOING ACTIVITIES: **The U.S. is participating in numerous irrigation programs throughout Indonesia. The U.K. has conducted a training program in technical aspects of maintenance.**

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	20,000		20,000					
FY1975								
FY1976								
Fifth Quarter								
FY1977	20,000		20,000					

1. COUNTRY: Republic of the Philippines
2. PROJECT TITLE: Local Water Development III
3. NUMBER: 492-0263 Loan PID Grant
CATEGORY: Population Planning and Health
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: 1)Continue in the institutional development of LWUA and local water districts, 2) Assist construction/improvements of selected small waterworks system under a high impact program.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: To improve the health and welfare of the people in the targeted areas and contribute to their economic development with particular reference to the lower 40% income group
5. WATER RELATED ACTIVITIES: Water supply: evaluation, institution-building
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project FY1975	20,600*	20,000	20,600*	20,000				
FY1976 Fifth Quarter FY1977								
	20,300**		20,600*					

* Grant - 600
Loan - 20,000

** Grant - 300
Loan - 20,000

1. COUNTRY: Republic of the Philippines
2. PROJECT TITLE: Small Scale Irrigation II
3. NUMBER: 492-0274 Loan PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: 1) Increase small farmer income 2) Improve employment opportunities 3) Develop and train small farmer organizations capable of operating and maintaining self-owned irrigation systems.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Increase rice and corn production to reach and maintain self-sufficiency in food grains.
5. WATER RELATED ACTIVITIES: Irrigation: training, institution building
6. IMPLEMENTATION:
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	10,000	15,000	10,000	15,000				
FY1975								
FY1976								
Fifth Quarter								
FY1977	10,000	15,000	10,000	15,000				

1. COUNTRY: Republic of the Philippines
2. PROJECT TITLE: Bicol Integrated Area Development
3. NUMBER: 492-0275 Loan PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Establish a viable Integrated Area Development organization structure with the management capability to plan and implement Integrated Area Development projects in the Bicol River Basin to include applicable flood control, land reform, land consolidation, irrigation and drainage, intensified agricultural production and farm level organization components.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Increased income, equitably distributed; increased employment opportunities; and improved perceived quality of life by the general population of the Bicol River Basin and, specifically the population within selected projects.
5. WATER RELATED ACTIVITIES: Irrigation, construction, institution-building
6. IMPLEMENTATION: Based upon recommendations of on-going surveys and studies AID loan will be used to be used to develop water resources infrastructure and organizational components.
7. RELATED ONGOING ACTIVITIES: USAID is supporting study examining comprehensive Water Resource Development in the Bicol River Basin.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	3000	2000	3000	2000				
FY1975								
FY1976								
Fifth Quarter								
FY1977	3000	2000	3000	2000				

LATIN AMERICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATE	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>BOLIVIA</u>									
Development and Improvement of Small Farmer Organizations	Project Loan	F + N	(50,000 fam.)	FY76	7,500	7,500			IR - C,I
Rural Sanitation	Project Loan	PP + H	360,000	FY76	9,000	4,000	C,T,A	C,E,T,A	
<u>BRAZIL</u>									
Integrated Health Delivery Systems	512-L-089 Loan	PP + H		1/30/74	7,600		C	C,E	
<u>CHILE</u>									
Rural Environmental Sanitation	513-11-520-278 .	F + N	(4,500 fam.)	FY76-77	407			C,E,R,I	
On-Farm Irrigation	Project Loan	F + N	35,000	FY76-78	7,000	13,000.			IR - C,M,I
<u>COLOMBIA</u>									
Rural Integrated Development (PVO)	514-13-190-202	F + N	(30 com.)	FY75-76	165	842	C,I		
Small City Environmental Sanitation	514-U-096 Loan	PP + H		12/17/74	7,500			C	
<u>DOMINICAN REPUBLIC</u>									
Agriculture Sector	Sector Loan	F + N		FY76	12,000	29,000			IR - C,I

LATIN AMERICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN ACCELEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>EL SALVADOR</u>									
Small Farmer Production	Project Loan	F + N	(11,000 fam.)	FY76	11,000	11,000			IR - C, I
<u>GUATEMALA</u>									
Village Water Systems and Latrines	520-15-520-231	PP + H		FY75-77	300	50	C, R	C, R, E	
Public Administration - Municipal	520-11-790-176	E + HR		FY70-77	708		I	I	
Small Farmer Development	Project Loan	F + N		FY76	13,000	13,000			IR - C, I
<u>GUYANA</u>									
Food Crop Production	Project Loan	F + N	(8,000 farmers)	FY76	3,500	6,100			IR - C, M, I
Water Supply Improvement	504-L-007A Loan			9/01/68	2,400		C		
<u>HAITI</u>									
Rural Community Development	521-15-810-061	F + M		FY66-78	4,276		C, I		IR - C, I
Agricultural Development Support	521-15-190-069	F + N		FY73-74	1,742				IR - M, R
Potable Water (PVO)	New Grant	SDP		FY75-76	121		C, M		
Integrated Agricultural Development	Project Loan	F + N	60,000	IQ	8,000	4,600			IR - C, M, I

LATIN AMERICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OF LOAN AMOUNT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>HONDURAS</u>									
Hurricane Disaster Relief and Rehabilitation	522-16-823-114		550,000	FY75	5,000		M,R		
Non-Formal Rural Education	522-15-690-108	I + HR		FY76-78	665	285		E,I	
Rural Recovery	Project Loan	Various		FY76	12,000		C,I		
<u>NICARAGUA</u>									
CARE Irrigation Project	524-15-120-112	F + N	715	FY75-76	200	112	C		IR -C
Rural Community Health Services	524-15-530-110	PP + H		FY76-77	385		C,T,I,A	C,T,I,A	
Reconstruction and Deconcentration	Project Loan	Various		FY74-76	30,000	70,000	C	C	
<u>PANAMA</u>									
Non-Formal Rural Education	525-11-690-174	E + HR		FY76-78	1,000			E	
Rural Health	Sector Loan	PP + H		FY76	6,000	3,000	C,I		
<u>PERU</u>									
Improved Water and Land Use	Project Loan	F + N	(10,000 fam)	FY76	11,000	10,000			IR - C

LATIN AMERICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
SHELF ITEMS									
<u>CHILE</u>									
Arid Zone Land and Livestock Management	Project Loan	F + N	27,000	FY76	2,000	2,000			LS -C,I
PROPOSED PROJECTS									
<u>CHILE</u>									
Water Supply and Disposal System	Loan	F + N	650,000		4,700	5,200	C,M,T,R	C,M,T,R	
Improved Rural Educational Facilities	Grant	F + N	(20,000 child)		400	360	C,T	C,T	
<u>GUATEMALA</u>									
Potable Water Systems for Small Villages	Grant	PP + H	20,000		230	230	C,T	C,T	
<u>HAITI</u>									
Soil/Water Resource Development	Grant	F + N	60,000		123	17	C,I,T,S	E	IR - C,I,T
Integrated Agricultural Development	Loan/Grant	F + N			11,000	4,000			IR - C,M,I,T

LATIN AMERICA

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATE	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
PROPOSED PROJECTS									
<u>HONDURAS</u>									
Nutrition/Health Promotion	Grant		35,000		385			T,E	
<u>PARAGUAY</u>									
Health Education (PVO)	Grant				50			E	
Potable Water Systems for Rural Communities	Loan		130,000		3,000	1,000	C,S,T		
<u>PERU</u>									
Water Resources Planning	Loan	F + N			1,207	590			IR - R,T,I
Use of Treated Sewage for Irrigation	Grant	F + N	80,000		200	70		C	IR - C

COUNTRY: Bolivia

PROJECT TITLE: Rural Sanitation

NUMBER: Project Loan

CATEGORY: Population Planning and Health

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

- 4.1 Nature of Project: To develop potable water supply and waste disposal systems for 860 communities of 100-2,000 inhabitants in rural areas of Cochabamba, Santa Cruz and northern Chiquisaca Departments
- 4.2 Number of People to be Covered Approximately 360,000
- 4.3 Intended Impact To improve level of health of the recipients by reducing incidence of endemic and parasitic diseases

PROJECT ACTIVITIES: Water Supplies and Sanitation; Construction, training and evaluation; sanitary education

ADMINISTRATION: AID loan to be borrowed by GOB through the Ministry of Social Welfare and Public Health; Minister's Department of Environmental Sanitation will be executing agent responsible for providing health instruction and operational guidance to insure proper utilization and maintenance of project waste and water facilities; Ministry of Agriculture's National Community Development Service to assist in organization of rural communities to carry out construction and institute garbage collection and disposal systems; loan to finance commodities, technical assistance, training and evaluation.

RELATED ONGOING ACTIVITIES: U.N. is supporting similar activities in areas other than those covered in project.

FUNDING

8.1 Duration or Loan Agreement Dates Initial obligation - FY 1976

8.2 Estimated Total Costs (in \$000)

Period	PROJECT		WATER		SANITATION	
	AID	Other	AID	Other	AID	Other
Complete Project	9,000	4,600				
FY1975						
FY1976	9,000					
Fifth Quarter						
FY1977						

AID loan will finance 66%, GOB 12% and recipient communities will contribute 22% in land, self-help labor construction materials; water use charge will be applied acc. to community's water resources and financial and self-help capability

1. COUNTRY: Bolivia
2. PROJECT TITLE: Development and Improvement of Small Farmer Organizations
3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To develop and improve small farmer organizations as a means of improving the economic and social conditions of the small farmers participating in these organizations
 - 4.2 Number of People to be Covered: 50,000 low-income rural families
 - 4.3 Intended Impact: To increase the per capita income and improve the standard of living of rural people
5. RWSS ACTIVITIES: Irrigation - construction, institution -building
6. IMPLEMENTATION: AID will provide a loan to the Government of Bolivia through the Ministry's decentralized National Community Development Service which will be strengthened to provide instruction and assistance to leaders of small farmer organizations; additionally \$6.7 million of the loan will be used to establish a revolving fund for income producing economic infrastructure projects including irrigation
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1976 initial obligation
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	7,500	7,500*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

*The Bolivian Government

COUNTRY: Chile

PROJECT TITLE: Rural Environmental Sanitation

NUMBER: 513-11-520-278 Grant

CATEGORY: Food and Nutrition

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

- 4.1 Nature of Project: To provide basic minimal sanitary facilities to 4,500 low income families and subsequently, to measure results to demonstrate effectiveness and efficiency of such food and health investment.
- 4.2 Number of People to be Covered 4,500 X size of family
- 4.3 Intended Impact To reduce malnutrition caused by caloric loss from gastroenteric diseases as well as lowering high incidence of morbidity and mortality of these diseases.

5. PROJECT ACTIVITIES:

- Sanitation - construction, sanitary education, research , institution-building
6. ADMINISTRATION: AID funding and administration utilizing Chilean personnel already in rural areas to aid recipients in installing facilities, conduct education programs and keep records; national coordinating office will contribute labor and perhaps some materials.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates FY1976 - 1977

8.2 Estimated Total Costs (in \$000)

Period	PROJECT		WATER		SANITATION	
	AID	Other	AID	Other	AID	Other
Complete Project	407				407	
FY1975						
FY1976	295				295	
Fifth Quarter	25				25	
FY1977	87				87	

1) COUNTRY: Chile

2. PROJECT TITLE: On-farm Irrigation

3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To bring about improved water resources, soils utilization and farm management practices by some 6,200 small-scale farmers in the interior of Coquimbo Province, one of Chile's poorest rural areas; an institutional capacity will be developed that will enable the application of the experience and know-how gained in this project to be applied to other areas of Chile.

4.2 Number of People to be Covered: 35,000 people

4.3 Intended Impact: To support Chile's agricultural recovery program which is directed at increasing and improving the distribution of food production, farmer income and rural employment

5. RWSS ACTIVITIES: Irrigation-construction; maintenance and institution building.

IMPLEMENTATION: The borrower will be the GOC through either a national water commission expected to be created in 1975 or through an existing Chilean governmental agency; farm families will be provided credit and technical assistance to install and improve on-farm irrigation facilities and to adopt more labor-intensive agriculture techniques; investing in irrigation together with the adoption of sound water and farm management practices may increase agricultural production up to 200% and generate employment for some 5,800 rural residents.

7. RELATED ONGOING ACTIVITIES: Project development is being coordinated with the Inter-American Development Bank which is considering financing two larger scale irrigation projects in Chile.

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 initial obligation-AID funds to be disbursed over three years.

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	7,000	13,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

*The GOC and benefitted farmers

1. COUNTRY: Colombia
2. PROJECT TITLE: Rural Integrated Development (PVO)
3. NUMBER: 514-13-190-202 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To provide an integrated package of technical assistance to the northern part of Colombia; one of the four components is the construction of rural aqueducts in thirty small communities
 - 4.2 Number of People to be Covered: Thirty small communities
 - 4.3 Intended Impact: To improve the agricultural production and income of the small farmer
5. RWSS ACTIVITIES: Water supply - construction, and institution-building
6. IMPLEMENTATION: The rural aqueducts will be constructed by CARE, in cooperation with the Colombian government National Institute for Special Programs; part of the CARE and AID contributions will be repaid by the community into a revolving loan fund from which loans will be made to individual community members for productive purposes or to the community for improvement in the provision of social services.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1975-1976

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	165	842*						
FY1975	70/25							
FY1976								
Fifth Quarter								
FY1977								

*Care - \$188,000; local communities \$235,000 and other organizations within Colombia \$419,000

1. COUNTRY: Dominican Republic
2. PROJECT TITLE: Agriculture Sector
3. NUMBER: Sector Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To increase food production, income and employment among small farmers by promoting efficient and equitable land tenure and utilization practices, by promoting price stabilization of food crops and by increasing rural income and employment through rural cooperative and infrastructure projects
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: To improve the standard of living of the rural poor
5. RWSS ACTIVITIES: Irrigation- construction and institution building
6. IMPLEMENTATION: The borrower will be the BODR; the Secretary of State for Agriculture will be the executing agency and will coordinate the activities of several public and private organizations among Government activities benefitting the target group which the project will support is the establishment of an institutionalized program of rural infrastructure investment related to agricultural development and rural employment including small scale irrigation and small market and storage facilities.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	12,000	29,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* The GODR

COUNTRY: El Salvador

2. PROJECT TITLE: Small Farmer Production

3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To provide an estimated 11,000 farm families with essential resources to improve their productivity.

4.2 Number of People to be Covered: 11,000 farm families

4.3 Intended Impact: To increase employment and income opportunities of the rural poor.

5. RWSS ACTIVITIES: Irrigation - construction and institution - building

6. IMPLEMENTATION: The borrower will be the GOES; coordinating executing agencies will be the Institute of Agrarian Transformation, the Agricultural Development Bank, the National Center for Agricultural Research, Education and Extension, and the Grain Marketing Institute; the first of these will provide improved land and organize farmers into cooperatives so that other executing agencies can direct their services to concentrated groups of small farmers; complementary resources include credit, technical assistance, and infrastructure investments served as minor irrigation and drainage, and marketing services.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	11,000	11,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* Government of El Salvador

COUNTRY: Guatemala

PROJECT TITLE: Village Water Systems and Latrines

NUMBER: 520-15-520-231 Grant

CATEGORY: Population Planning and Health

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

4.1 Nature of Project: Provision of potable water systems and latrines to the rural population of the Department of Quiche

4.2 Number of People to be Covered

4.3 Intended Impact To improve health conditions in rural areas.

PROJECT ACTIVITIES: Water supply and sanitation- construction, research, sanitary education

ADMINISTRATION: AID will provide funding; CARE & GOG Ministry of Health water survey potable water requirements and potential supplies for the small rural communities; medical auxiliaries will assist communities to organize for planning and construction of facilities, auxiliaries will also provide education in healthful use of facilities to communities

RELATED ONGOING ACTIVITIES: This program will support and reinforce activities financed under AID's two rural health loans by promoting the involvement of medical auxiliaries in community development.

FUNDING

8.1 Duration or Loan Agreement Dates FY1975 - 1977

8.2 Estimated Total Costs (in \$000)

Period	PROJECT		WATER		SANITATION	
	AID	Other	AID	Other	AID	Other
Complete Project	300	50*				
FY1975	100					
FY1976	100					
Fifth Quarter	25					
FY1977	75					

*The Guatemalan Min. of Health will contribute equivalent in local currency for construction materials, salaries of professional staff and administrative costs.

1. COUNTRY: Guatemala
2. PROJECT TITLE: Small Farmer Development
3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To increase small farmer income, to extend public sector services and cooperative institutions to greater numbers of small farmers, to develop institutional capacity to initiate and implement labor-intensive rural infrastructure projects, to accelerate implementation of the GOG's agrarian restructuring program
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: To improve the well-being of rural Guatemala
5. RWSS ACTIVITIES: Irrigation - ~~design~~, construction, institution building
6. IMPLEMENTATION: The borrower will be the GOG; executing agencies will be the Guatemalan Agricultural Development Bank, Min. of Agriculture, Min. of Public Work National Land Institute and National Municipal Institute; the loan will support: 1) expanding of agriculture credit, primarily in the Indian highland zone; 2) expansion of public sector agricultural training facilities and scholarships of training abroad; 3) development of programs utilizing labor - intensive techniques to improve access roads and small farm irrigation systems and 4) implementation of minimal infrastructure and service activities and the preparation of studies designed to open new lands for settlement.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	13,000	13,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

*The GOG

COUNTRY: Guyana

2. PROJECT TITLE: Food Crop Production

3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To increase food yields, expand food crop average and improve the capacity of Guyanese institutions servicing the small farm sector

4.2 Number of People to be Covered: Over 8,000 small farmers

4.3 Intended Impact: To increase production of food crops in Guyana.

5. RWSS ACTIVITIES: irrigation - construction, maintenance, institution building

6. IMPLEMENTATION: The borrower will be the Cooperative Republic of Guyana; the Min. of Agriculture will be responsible for execution of the following project activities: 1) land clearing 2) irrigation and drainage improvement on both new and existing croplands; 3) introduction of yield increasing technology and new crops; 4) establishment of improved standards for grading and measuring food crops; 5) specialty training.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	3,500	6,100*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

*The Cooperative Republic of Guyana

1. COUNTRY: Haiti
2. PROJECT TITLE: Rural Community Development
3. NUMBER: 521-15-810-061 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To institutionalize community action efforts in rural communities of northwestern Haiti, one of the country's most impoverished regions.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. RWSS ACTIVITIES: Irrigation and water supply - construction, and institution building
6. IMPLEMENTATION: The project is administered through CARE; it provides otherwise lacking public services through the installation of area service centers from which teams provide public health, dental and family planning services; technicians help communities council plan and carry out projects which include the installation of water & irrigation systems; the project operates a comprehensive program of community development through an organization called HACHO (Haitian American Community Help Organization); projects also provides for the selection and training of Haitian employees to replace U.S. contract personnel.
7. RELATED ONGOING ACTIVITIES: Under the auspices of CARE, PL 480 Title II food-for-work programs are often used to support HACHO activities; the U.N. is carrying out on agricultural development project in the Trois Rivières Valley; the World Food Program provides food for irrigation rehabilitation development in the same area.
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1966-1978
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	4,276							
FY1975	390	500						
FY1976	525							
Fifth Quarter FY1977	111							

1. COUNTRY: Haiti
2. PROJECT TITLE: Agricultural Development Support
3. NUMBER: 521-15-190-069 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Continuing analysis of technical, economic and policy aspects of the Haitian agricultural sector
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. RWSS ACTIVITIES: Irrigation - research and maintenance
6. IMPLEMENTATION: Among other activities studies of the rehabilitation of two community irrigation systems are under way.
7. RELATED ONGOING ACTIVITIES: Several international and bilateral donor groups are active in irrigation - related projects

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1973-1977

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1,742							
FY1975	620	550						
FY1976	561							
Fifth Quarter	160							
FY1977	75							

1. COUNTRY: Haiti
2. PROJECT TITLE: Potable Water (PVO)
3. NUMBER: New Grant
CATEGORY: Selected Development Problems
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project To provide public potable water systems to an estimated forty communities in Northwest Haiti
 - 4.2 Number of People to be Covered
 - 4.3 Intended Impact To increase water availability
5. PROJECT ACTIVITIES: Water Supply Construction, Maintenance
6. ADMINISTRATION: AID is funding project with CARE administrating design and construction; affected communities contributing labor and locally available construction materials and continuing system maintenance.
7. RELATED ONGOING ACTIVITIES: Under the HACHO Project CARE administers a comprehensive community development program in northwest Haiti. This activity will use personnel and other resources of that project for overall direction of that effort.

8. FUNDING

- 8.1 Duration or Loan Agreement Dates FY1975 to 1976
- 8.2 Estimated Total Costs (in \$000)

Period	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>	
	AID	Other	AID	Other	AID	Other
Complete Project	121		121			
FY1975	61/10		61/10			
FY1976	60		60			
Fifth Quarter FY1977						

1. COUNTRY: Haiti
2. PROJECT TITLE: Integrated Agricultural Development
3. NUMBER: Project Loan
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To use labor intensive techniques to rehabilitate and protect up to 15 irrigation systems covering 25,000 acres and to stimulate small farm cultivation of the irrigated areas through expanded credit and extension services
 - 4.2 Number of People to be Covered: 60,000 people
 - 4.3 Intended Impact: To increase production, employment and cash income of the rural population in selected areas of Haiti through the application of improved technology and better extension of services for the rural poor.
5. RWSS ACTIVITIES: Irrigation - construction, maintenance and institution building
6. IMPLEMENTATION: The borrower will be the GOH with the Dept of Agriculture, Natural Resources and Rural Development assuming responsibility for project execution; specific project elements include 1) rehabilitating and protecting the community irrigation systems, 2) introduction of crop production packages adaptable to each specific site. 3) provision of credit to cooperatives and similar community groups to facilitate the purchase of agricultural production inputs, 4) initiation of watershed management to protect the infrastructure.
7. RELATED ONGOING ACTIVITIES: IBRD plans an area development program for the Cap-Haitian area

8. FUNDING

8.1 Duration or Loan Agreement Dates: 5th Quarter initial obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	8,000	4,600*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* The Haitian Government

1. COUNTRY: Honduras
2. PROJECT TITLE: Non-Formal Rural Education
3. NUMBER: 522-15-690-108 Grant
CATEGORY: Education and Human Resources Development
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To develop an alternative learning system directed toward low income men and women to enhance their ability to improve incomes and standards of living.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact:
5. WATER RELATED ACTIVITIES: Sanitation - sanitary education; institution-building
6. IMPLEMENTATION: AID will support preparation of training facilities in agricultural areas which will train rural leaders and young adults in basic and intermediate agriculture technology, elementary nutrition, family planning, Literacy and numeracy as well as hygiene.
7. RELATED ONGOING ACTIVITIES: Project will complement an agriculture-technology training program for beneficiaries of Agrarian Reform Program

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 - 1978

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	665	285*						
FY1975								
FY1976	155							
Fifth Quarter	260							
FY1977								

* GOH to contribute 30% of project costs in counterpart participant salaries, maintenance costs and facilities

COUNTRY: Nicaragua

PROJECT TITLE: CARE Irrigation Project

NUMBER: 524-15-120-112 Grant

CATEGORY: Food and Nutrition

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

- 4.1 Nature of Project: To assist the Nicaraguan Agrarian Reform Institute (IAN) in a pilot effort to test the feasibility and cost effectiveness of a project to benefit small farmers; approach will be to bring irrigation, electric power and a potable water system to lands occupied by these farmers and thus encourage them to move into improved housing located in a village center where further services can be offered.
- 4.2 Number of People to be Covered 715 people from 110 families with ave. per capita \$200 per year
- 4.3 Intended Impact To raise income and standard of living of pilot farmers and to provide revolving fund to extend benefits to other areas.

PROJECT ACTIVITIES: Water supply and irrigation - construction

ADMINISTRATION: AID will finance purchase of equipment for irrigation system; CARE will provide engineering, technical and supervisory services; IAN will provide staff time, transport of equipment and infrastructure inc. electrical and water systems plus low cost housing valued at \$112,000, AID financing will also cover drilling and lining of wells.

RELATED ONGOING ACTIVITIES:

FUNDING

8.1 Duration or Loan Agreement Dates FY1975 - FY1976

8.2 Estimated Total Costs (in \$000)

Period	PROJECT		WATER		SANITATION	
	AID	Other	AID	Other	AID	Other
Complete Project	200	112				
FY1975	100/75					
FY1976	100					
Fifth Quarter						
FY1977						

1. COUNTRY: Nicaragua
2. PROJECT TITLE: Rural Community Health Services

3. NUMBER: 524-15-530-110 Grant
 CATEGORY: Population Planning and Health
 ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To develop a system that will identify, on a continuing basis, the principal health needs so that government health sector institutions can appropriately and effectively respond to them.

4.2 Number of People to be Covered:

4.3 Intended Impact: To assist in improving the health levels of the poorest majority of the Nicaraguan population particularly in rural areas.

5. WATER RELATED ACTIVITIES. Water supply and sanitation - construction, training, institution-building, and evaluation.

IMPLEMENTATION: Assistance will be provided to the Min. of Health (with support from UNDP, PAHO, and IDB) to develop a pilot community health committee in rural area to determine if such groups can serve as a focal point for establishing health service priorities and coordinating the delivery of such services; the general work plan includes: 1) development of health committee approaches 2) training of community health committee members, 3) training of Min. personnel to assist community health committees, 4) pilot projects in potable water, sanitation and communicable diseases and 5) evaluation

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976-1977

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	385	*						
FY1975								
FY1976	85							
Fifth Quarter	100							
FY1977	200							

*35-40% of total project costs from GON

COUNTRY: Panama

PROJECT TITLE: Non-formal rural education

NUMBER: 525-11-690-174 Grant

CATEGORY: Education and Human Resources

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

- 4.1 Nature of Project: Development of pilot non-formal education program with Min. of Education emphasizing radio instruction and supplemented by printed materials, cassettes and application of educational gaming education to meet practical education needs of rural poor including sanitation
- 4.2 Number of People to be Covered
Area to be selected
- 4.3 Intended Impact To address campesino's needs in a manner understandable to him and consistent with his own values and attitudes

5 PROJECT ACTIVITIES: Sanitary education

- 6 ADMINISTRATION: Study of selected area, development of materials, plan for dissemination and audio software to be developed for teaching community leadership, agriculture, technology, literacy, health sanitation, family planning and nutrition

7 RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates FY1976-1978

8.2 Estimated Total Costs (in \$000)

Period	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>	
	AID	Other	AID	Other	AID	Other
Complete Project	1,000					
FY1975						
FY1976	295					
Fifth Quarter	85					
FY1977						

COUNTRY: Panama

PROJECT TITLE: Rural Health

NUMBER: Sector Loan

CATEGORY: Population Planning and Health

ORIGINATING OFFICE: Mission

SPECIFIC OBJECTIVES:

- 4.1 Nature of Project: To assist the Government of Panama to institutionalize and operate integrated, low cost health delivery systems capable of providing by 1980 preventive and curative health services on a regular basis to the rural population in selected provinces
- 4.2 Number of People to be Covered
- 4.3 Intended Impact To improve the health status of Panama's widely dispersed and poorly educated rural population

4. PROJECT ACTIVITIES: Water supply - construction, institution-building

6. ADMINISTRATION: AID will provide loan to Government of Panama; executing agency will be the Min. of Health in cooperation with the Panamanian Social Security Institute; program elements include establishment of effective administrative system for health delivery; educating health personnel to educate the population; and using rural community health committees to establish community gardens, rural water systems and hand pumps.

7. RELATED ONGOING ACTIVITIES:

8 FUNDING

8.1 Duration or Loan Agreement Dates FY1976 initial obligation

8.2 Estimated Total Costs (in \$000)

Period...	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>	
	AID	Other	AID	Other	AID	Other
Complete Project	6000	3000				
FY1975						
FY1976						
Fifth Quarter						
FY1977						

1. COUNTRY: Peru
2. PROJECT TITLE: Improved Water and Land Use

3. NUMBER: Project Loan
 CATEGORY: Food and Nutrition
 ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To finance an irrigation and conservation program benefitting small farmers in two major river basins of the Peruvian highlands - the Cajamarca/Condebamba and the Mantaro

4.2 Number of People to be Covered: 10,000 poor farm families

4.3 Intended Impact: To increase food production, generate employment opportunities and raise income in rural areas.

5. WATER RELATED ACTIVITIES: Irrigation - construction

IMPLEMENTATION: The borrower is the GOB with its Ministry of Agriculture the executing agency; loan to be disbursed over 3 year period; funds will be used for the construction of small dams, intakes and canals; installation of water control measuring devices; development of on-farm land and construction of access roads; technical assistance will also be provided; additional sites will be considered for inclusion in the project

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1976 Initial Obligation

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	11,000	10,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* The GOP and small farmer participants

1. COUNTRY: Chile
2. PROJECT TITLE: Arid Zone Land and Livestock Management
3. NUMBER: Project Loan (Shelf Item)
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To assist a portion of Chile's poorest rural population to participate in the agricultural economy on an acceptable commercial basis through long-term improvement in pasture management and increased output of livestock products.
 - 4.2 Number of People to be Covered: 27,000 people
 - 4.3 Intended Impact: To support Chile's agricultural program which is directed at increasing and improving distribution of food production, farmer income and rural employment.
5. WATER RELATED ACTIVITIES: Water for livestock - construction, institution-building
6. IMPLEMENTATION: The National Development Corporation of Chile will be the borrower and primary executing agency; the project will help provide farmers capital and know-how for clearing land, fencing and improving pasture, improving livestock (sheep and goat) mix, developing better marketing channels and improving water supply; the loan will finance fencing materials, breeding stock, veterinary supplies, plant machinery, water wells and technical assistance.
7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: Initial Obligation FY1976

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	2,000	2,000*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* Borrower and participants

1. COUNTRY: Chile
2. PROJECT TITLE: Water Supply and Disposal System
3. NUMBER: 513-0293- PID Loan
 CATEGORY: Food and Nutrition
 ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
- 4.1 Nature of Project: To provide the means to improve water sampling, analysis, testing, and treatment procedures including chlorination, delivery systems, waste collection, and disposal systems in small communities where it can be shown that the lack thereof is a causal factor in malnutrition related to water-bovine bacteria.
- 4.2 Number of People to be Covered: 650,000
- 4.3 Intended Impact: To substantially reduce the incidence of malnutrition in the smaller population centers of Chile by eliminating water-borne bacteria.
5. WATER RELATED ACTIVITIES: Water supply and sanitation: construction, maintenance, training, research
6. IMPLEMENTATION: AID loan to be borrowed by GOC through the Ministry of Public Works; the Department of Sanitation (DOS) will be the executing agency.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	4,700	5,200	4,700					
FY1975								
FY1976								
Fifth Quarter								
FY1977	4,700	5,200	4,700					

1. COUNTRY: Guatemala
2. PROJECT TITLE: Potable Water Systems for small villages
3. NUMBER: 520-L- Grant PID
 CATEGORY: Population Planning and Health
 ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: 1) The reinforcement of the role of the rural health technician as an important and influential agent of change for health purposes. 2) The provision of potable water and latrines to those living in small villages in 2 departments, containing primarily Indian inhabitants living little above subsistence levels.
 - 4.2 Number of People to be Covered: 20,000
 - 4.3 Intended Impact: To improve the health of rural Guatemalans
5. WATER RELATED ACTIVITIES: Water supply and sanitation - training, construction
6. IMPLEMENTATION: AID grant will be channeled through PVO "Agua del Pueblo" which will provide materials, supplies, and technical assistance. The project will be undertaken with close cooperation of the Department of Environmental Engineering of the Ministry of Public Health and Social Assistance. The MOH will provide transportation, engineering services, and some administrative costs, the communities will provide labor.
7. RELATED ONGOING ACTIVITIES: CARE/Guatemala is working in another department with rural potable water and latrine construction program.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	230	230						
FY1975								
FY1976	50							
Fifth Quarter								
FY1977	80							

1. COUNTRY: Haiti
2. PROJECT TITLE: Integrated Agricultural Development
3. NUMBFR: 521-078 Loan Grant PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: The purpose of the project is to stimulate lagging agricultural production in Haiti and to reverse the accelerating problems caused by poor land use. The project proposes to strengthen the technical services responsible for irrigation water management, agricultural research, agricultural extension and soil conservation by directing these activities through rural community cooperatives and groups.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: The goal of the project is to develop and implement intensive crop production programs on community-organized and community-maintained irrigation systems. The project also foresees the use of soil conserving practices to protect the irrigation system from damage by erosion.
5. WATER RELATED ACTIVITIES: Irrigation: construction, maintenance, institution building, training, surveys.
6. IMPLEMENTATION: AID grant/loan package will be administered by the GOH which will provide 100 man years of technical personnel plus supporting sub-professionals and staff. In addition GOH will provide other inputs equal to 25% of the project costs in cash or kind, e.g. volunteer labor services of farmers.
7. RELATED ONGOING ACTIVITIES: AID is supporting an analysis of the Dubreuil Irrigation System by an outside consultant.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	11,000*	4,000	11,000*	4,000				
FY1975								
FY1976								
Fifth Quarter	8,800**							
FY1977								

* Grant - 3,000
Loan - 8,000

** Grant - 800
Loan - 8,000

1. COUNTRY: Peru

2. PROJECT TITLE: Use of treated sewage for irrigation

3. NUMBER: 527-15-120-150 Grant PID

CATEGORY: Food and Nutrition

ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To develop approximately 120 ha. of barren coastal desert for cooperative farming for food production utilizing Villa El Salvador sewage lagoon effluent (rich in mineral fertilizer) for irrigation

4.2 Number of People to be Covered: 80,000

4.3 Intended Impact: Demonstrate the practicality of irrigating thousands of acres of Peru's coastal desert with sewage lagoon effluent to raise needed food; conserve scarce water; eliminate contamination of streams and nearby ocean fronts.

5. WATER RELATED ACTIVITIES: Irrigation and sanitation construction

6. IMPLEMENTATION: The Direccion General de Aguas (DGA) of the Ministry of will organize the project and coordinate closely with the farmers cooperative in a timely manner. AID will also be working indirectly with the Directorate General of occupational Health and Environment of the ministry of Health, since they will be responsible for seeing that the effluent lagoons function properly and deliver bacteria free effluent at all times.

7. RELATED ONGOING ACTIVITIES: AID funds in FY76 will be used to evaluate lagoon operating costs, and farm production and operating costs. Work done to date by the MOA on developing parcels of land will be used for estimating costs for the irrigation system and for land development.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	200	70			200	70		
FY1975								
FY1976								
Fifth Quarter								
FY1977		125				125		

1. COUNTRY: Peru

2. PROJECT TITLE: Water Resources Planning

3. NUMBER 527-11-120-154 Loan Grant PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: 1) Development of technological packages for small farmers based on the results of research in soil, plant and water production
2) Improved programming of resources available for irrigation systems development to maximize the benefits for rural production and incomes.

4.2 Number of People to be Covered:

4.3 Intended Impact: Development of Peruvian water resources in order to increase food production, rural employment, and income.

5. WATER RELATED ACTIVITIES: Irrigation; research, training, institution-building

6. IMPLEMENTATION: AID will provide to the Directorate General of Irrigation of the GOP several long-term and short-term advisors, funds for training, and equipment to develop a Peruvian capability in water resources planning. The GOP will provide research personnel, staff-support, and facilities.

7. RELATED ONGOING ACTIVITIES: IBRD and IDB are financing medium-sized and large-scale irrigation projects throughout Peru.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1,207*	590	1,207					
FY1975								
FY1976								
Fifth Quarter								
FY1977		200Grant		200 Grant				

* Grant - 200
Loan - 1,007

AS

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>BANGLADESH</u>									
Rural Works	Project Loan	F + N		FY76	25,000				IR-C,M
<u>INDONESIA</u>									
Citanduy/Ciseel River Basin Flood Control, Irrigation and Drainage	Project Loan	F + N	(26 fam)	FY76	9,500				IR-C,M,T,I
<u>KOREA</u>									
Irrigation Construction	489-T-090 Loan	F + N		FY74	17,200				IR-C
	489-T-090A Loan	F + N		FY75	6,500				IR-C
<u>PAKISTAN</u>									
Water Management	391-11-110-401	F + N		FY76-77	850				IR-M,T,I
On-Farm Water Management	Project Loan	F + N	70,000 farmers	FY76	11,111	19,000			IR-C,M,T
<u>PHILIPPINES</u>									
Bicol River Basin Development	492-11-199-260	F + N	1,000,000	FY74-78	1,750				IR-C,R,T
Provincial Water Supply	Project Loan	PP + H	250,000	FY76	10,000		C,R,M,I		

ASIA

TITLE	PROJECT/LOAN NUMBER	AID CATECU	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>INDUS BASIN</u>									
Indus Basin Development Fund	Loans/Grants	other Proj.		FY74-1Q	47,200	926,800			IR-C,M
SHELF ITEMS									
<u>INDONESIA</u>									
Rural Sanitation Manpower Development	Project Loan	PP + H	8,000,000	FY76	3,300			T	
<u>PHILIPPINES</u>									
Small Scale Irrigation	Project Loan	F + N		FY76	1,500				IR-T,I
Provincial Water Supply	Project Loan	PP + H		FY76	10,000		C,M,I		
<u>THAILAND</u>									
Lam Nam Oon On-Farm Development	Project Loan	F + N	(11,200 fam)	FY76	3,520				IR-C,T
PROPOSED PROJECTS									
<u>BANGLADESH</u>									
Kurigan Flood Control and Irrigation(M. Unit)	Loan	F + N			15,000	26,200			IR-C

NEAR EAST

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	COMMITMENT COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>AFGHANISTAN</u>									
Rural Works	306-51-131	F + N		FY74-78	1,836	4,545	C,M,T,I		IR-C,M,T,I
Helmand Valley Soil and Water Survey	306-11-120-145	F + N	259,000	FY75-76	1,210		S		IR - R
Helmand Vally Drainage	306-11-120-146	F + N		FY75-78	3,000				IR-C,M,I
Helmand Vally Drainage and Irrigation (Phase I and II)	Project Loan	F + N		FY76-1Q	10,000				IR-C,M
<u>MOROCCO</u>									
Doukkala Irrigation (2Phases)	Project Loan	F + N		FY76-1Q	13,000	16,000			IR-C
<u>TUNISIA</u>									
Integrated Agricultural Development	664-11-120-277	F + N		FY73-77	1,713				IR-C,R,I
Rural Development	664-11-190-285	F + N		FY76-81	3,500				IR-R,I,T
Bizerte Public Health	664-11-520-286	PP + H		FY75-76	155	155	C,M,I,A	E	
Rural Development	Project Loan	F + N		1Q	5,000		C,I		IR-C,I

NEAR EAST

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
<u>YEMEN ARAB REPUBLIC</u>									
Rural Development	279-11-190-031	F + N		FY76-77	1,400				IR-C,T,I
Agricultural Research and Development	279-11-110-030	F + N		FY76-80	1,219				IR -C,T,I
Rural Water Supply	279-11-125-022	PP + H	50 villages	FY73-77	4,840		C,M,T,I		
Water Supply Systems Management	279-11-521-028	PP + H		FY76-79	1,525		T,I		
Water and Mineral Survey of North Yemen	279-11-120-025	SDP		FY74-77	1,428		S,T,I		
SHELF ITEMS									
<u>AFGHANISTAN</u>									
Small-Scale Irrigation	306-51-120-137	F + N	41,000		500				IR-C,M,I
PROPOSED PROJECTS									
<u>EGYPT</u>									
Egyptian Rural Preventive Health Service Project		PP + H	100 villages		1,400	1,500		T,I,E,R,A	
<u>MOROCCO</u>									
Extended Agricultural Development	Loan/Grant	F + N	175,000		6,000	2,000			IR-C

NEAR EAST

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	FY OBLIGATION OF LOAN OR GRANT DURING FISCAL YEAR	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	ICULTURE
CURRENT PROJECTS <u>SYRIA</u> Euphrates River Irrigation Project	Loan/Grant				48,033	87,330			IR-C

1. COUNTRY: Afghanistan
2. PROJECT TITLE: Rural Works
3. NUMBER: 306-51-131 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To assist the GOA to plan, organize and implement an effective rural works program for the construction of fare-to-market roads, small bridges, small-scale irrigation dams and canals, village water-supply systems, village schools and other rural community facilities
 - 4.2 Number of People to be Covered: Approx. 28,000 acres of agricultural land to be covered.
 - 4.3 Intended Impact: To meet GOA goals for rural development
5. WATER RELATED ACTIVITIES: Irrigation and water supply -- construction, maintenance, training and institution building.
6. IMPLEMENTATION: AID will help the GOA's Rural Development Department (RDD) establish effective project selection and implementation procedures, upgrade small project engineering capability and train key personnel; specific project activities include the rehabilitation of 80 small-scale irrigation works, construction of 25 bridges to connect isolated communities to feeder roads and building of 100 km. of feeder roads.
7. RELATED ONGOING ACTIVITIES: In FY 1974 the U.S. began a \$50,000 pilot project to test the fixed-cost reimbursement method of financing rural works projects; since that project's initiation the RDD has demonstrated a substantially increased capacity to design, cost-estimate, mobilize for and execute rural projects.
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY1974 - FY1978
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1,836	4,545						
FY1975	450	154						
FY1976	710							
Fifth Quarter FY1977	308							

* The GOA will provide \$4,050,000 while other donors inc. the UNDP and West Germany will contribute about \$495,000 primarily for engineering design and construction advisory assistance.

1. COUNTRY: Afghanistan
-) PROJECT TITLE: Helmand Valley Drainage
3. NUMBER: 306-11-120-146 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To upgrade farmer productivity through land reclamation. In areas affected by water-logging and salinization; the project is part of a long-term Afghan effort.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Bring land back into productive use and increase production and income of farmers.
5. WATER RELATED ACTIVITIES: Irrigation-construction, maintenance, institution-building
6. IMPLEMENTATION: AID will provide advisory assistance to help upgrade the Helmand-Arghandab Valley Authority's capability to implement a drainage program, including ways of encouraging farmer participation in constructing and maintaining on-farm drains; the first phase will be the construction or improvement of 100 kilometers of farm drains and 80 kilometers of main drains; additionally an assessment and revision will be completed of the existing master drainage plan for four of the Valley's agricultural areas.
7. RELATED ONGOING ACTIVITIES:
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates: FY75 - FY78
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	3000							
FY1975	700						3000	
FY1976	706							
Fifth Quarter FY1977	348							

1. COUNTRY: Tunisia
2. PROJECT TITLE: Integrated Agricultural Development
3. NUMBER: 664-11-120-277 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To demonstrate effects of proper utilization and integration of all agricultural production factors on irrigated lands and to assist GOT in its development of integrated production program in a selected area.
 - 4.2 Number of People to be Covered: (Medjerda Valley)
 - 4.3 Intended Impact: To increase farm incomes through increased agricultural productivity and to improve irrigation institutional capabilities of GOT.
5. WATER RELATED ACTIVITIES: Irrigation - Construction research and institution building.
6. IMPLEMENTATION: Project activities up to FY 1976 have included the creation and staffing of a Tunisian regional office to direct the project and support of a joint US - Tunisian field team to implement a feasibility study; this study will determine the proper phasing and choice of project inputs, including hydraulic systems, to be carried out for the project's duration.
7. RELATED ONGOING ACTIVITIES: Since 1957 Tunisia has invested over \$140 million in developing irrigation systems, making irrigation water available for about 22,000 acres; however less than half of the estimated productive capacity of the area is being realized because of overall governmental and commercial institutional deficiencies.

8.1 Duration or Loan Agreement Dates: FY 1973 - FY 1977

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1713							
FY1975	195	272						
FY1976	344							
Fifth Quarter	75							
FY1977	648							
FY1974	451							

1. COUNTRY: Yemen Arab Republic

2. PROJECT TITLE: Rural Development

3. NUMBER: 279-11-190-031 Grant
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To demonstrate benefits of self-help projects to GOY and local authorities in rural roads, irrigation works, agricultural and other rural development activities

4.2 Number of People to be Covered:

4.3 Intended Impact: To enable villages which have built water supply systems to expand and diversify local agricultural production.

5. WATER RELATED ACTIVITIES: Irrigation - construction, training, institution-building

6. IMPLEMENTATION: Initial activities include improved use of water for agriculture, simple irrigation work, land clearing and leveling, road improvement, and new agronomic programs. Later activities may include rural health, sanitation and further agricultural diversification. AID will finance specialists, training for Yemen managers, commodities and locally supplied equipment. The government of Yemen and local authorities will provide additional supplies and labor. PL 480 commodities are expected to be supplied under a Food for Work Program in conjunction with the project.

7. RELATED ONGOING ACTIVITIES: Project will build upon the demonstrated success of the Water Supply Project begun in FY 1973

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY 1976 - FY1977

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1400	*						
FY1975								
FY1976	639							
Fifth Quarter FY1977	185							

1. COUNTRY: Yemen Arab Republic
2. PROJECT TITLE: Rural Water Supply
3. NUMBER: 279-11-125-022 Grant
CATEGORY: Population Planning and Health
ORIGINATING OFFICE: Mission

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To bring potable water to 15 villages per year and to strengthen Rural Water Supply Division of Ministry of Public Works.

4.2 Number of People to be Covered: At least 50 villages

4.3 Intended Impact: To improve water supplies in rural Yemen.

5. WATER RELATED ACTIVITIES: Water supply - construction, maintenance, training and institution-building

6. IMPLEMENTATION: AID is assisting to finance technicians' training Yemen in engineering and related fields of water supply development and maintenance; local labor for rig maintenance, commodities and other miscellaneous local costs already completed are 5 small self-help water systems with 6 more underway. 4 deep wells were built to serve 50 villages from public hydrant* (under construction); operational bare of warehouse, repair shops, and training facilities have been constructed; targets include an annual drilling rate of 20 wells and distribution systems for 15 villages per year.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1973 - FY1977

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	4840		4840					
FY1975	1217	1050	1217					
FY1976	1025		1025					
Fifth Quarter FY1977	700		700					

1. COUNTRY: Yemen Arab Republic
2. PROJECT TITLE: Water and Mineral Survey of North Yemen
3. NUMBER: 279-11-120-025 Grant
CATEGORY: Selected Development Problems
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To develop primary data base of groundwater and mineral resources in North Yemen and to build Yemen's institutional capability to conduct surveys in other areas of the country.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: To determine available water and mineral resources.
5. WATER RELATED ACTIVITIES: Water supply - survey, training, institution-building
6. IMPLEMENTATION: The program includes a ground water and mineral survey of Yemen north of 15° North Latitude, an ERTS Survey of the entire country and training (for two geologists and sub-professional hydrogeological investigators.
7. RELATED ONGOING ACTIVITIES: Parallel efforts to assist the GOY build its survey capability are being made by the UN and the British and West German governments.

8. FUNDING

8.1 Duration or Loan Agreement Dates: FY1974 - FY1977

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1428							
FY1975	173							
FY1976	430							
Fifth Quarter	50							
FY1977	113							
FY 1974	662							

1. COUNTRY: Egypt
2. PROJECT TITLE: Egyptian Rural Preventive Health Service Project
3. NUMBER: PID (Draft)
CATEGORY: Population and Health
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To determine through a focused demonstration in a few representative areas a means of providing lasting incentives to producers and consumers of preventive health services.
 - 4.2 Number of People to be Covered: Two districts (approx. 50 villages each)
 - 4.3 Intended Impact: To reduce rural morbidity and mortality due to preventable diseases linked to availability and utilization of potable water, sanitation, esp. disposal of human excreta, control of flies and treatment of diarrheal diseases
5. WATER RELATED ACTIVITIES: Sanitation - training, institution-building, sanitary education, research and evaluation.
6. IMPLEMENTATION: The joint project will provide technical assistance in project design and evaluation, training of health providers and consumers, supplies and equipment to programs in environmental sanitation, nutrition, family planning, health education, supervision and training; project to be developed primarily through collaborative project planning activity; feasibility studies will be undertaken in the following areas: economic analysis, technical analysis to include feasibility studies for water supply systems, social studies directed towards attitudes, appropriate health education techniques and health delivery dynamics.
7. RELATED ONGOING ACTIVITIES: GOARE has already begun a water supply and sanitary latrine program; UNICEF provides supplies and equipment for rural health centers and village reconstruction projects.
8. FUNDING
 - 8.1 Duration or Loan Agreement Dates:
 - 8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	1,400	1,500*						
FY1975								
FY1976								
Fifth Quarter								
FY1977								

* The GOARE

1. COUNTRY: Morocco
2. PROJECT TITLE: Extended Agricultural Development
3. NUMBER: 608-0131 Loan/Grant PID
CATEGORY: Food and Nutrition
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: To increase agricultural production and income of small farmers in the rainfed areas of the Moulouya Basin.
 - 4.2 Number of People to be Covered: 150,000 - 200,000
 - 4.3 Intended Impact: To improve the quality of life of Morocco's poor and deprived
5. WATER RELATED ACTIVITIES: Irrigation : construction
6. IMPLEMENTATION: The AID grant/loan package would be administered through the Ministry of Agriculture's ORMVAM (Regional Development Office of the Moulouya). AID monies would be utilized to support technical and capital assistance, which would include construction of small dams.
7. RELATED ONGOING ACTIVITIES: AID is currently undertaking with the of ORMVAM, feasibility studies in the area of water development.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	6,000*	2,000	6,000*	2,000				
FY1975								
FY1976								
Fifth Quarter								
FY1977	205**							

* Grant - 1,000
Loan - 5,000

** Grant

1. COUNTRY: Syria
2. PROJECT TITLE: Euphrates River Irrigation Project
3. NUMBER: 2760009 Loan Grant PID
CATEGORY:
ORIGINATING OFFICE: Mission
4. SPECIFIC OBJECTIVES:
 - 4.1 Nature of Project: Provide surface water for irrigation of 35,000 - 40,000 hectares of rural area in Euphrates river basin by constructing canals, ditches, and drainage structures to convey water from the TABGA reservoir. Construct ditch-bank roads and other ancillary works, including equipment maintenance and over haul facilities.
 - 4.2 Number of People to be Covered:
 - 4.3 Intended Impact: Increase rural production of food and agricultural products to sustain rural agricultural development, increase farm income, trade within regions, and employment.
5. WATER RELATED ACTIVITIES: Irrigation: construction
6. IMPLEMENTATION: AID monies will be administered through the GOS; Euphrates Dam Ministry (EDM). The EDM intends to do the work mainly on a force account basis which means that equipment to perform the work must be selected, operated and maintained.
7. WATER RELATED ACTIVITIES: Egypt has an agreement to provide technical assistance on land reclamation, development and training. USSR has contributed substantially to the construction of the Tabgo Dam and to the establishment of a State Farm of 50,000 hectares. Romania has agreed to assist in reclaiming 27,000 hectares in the Euphrates region. Arab Development Organization had loaned 20 million to increase land productivity, reclaim and develop 42,000 hectares.

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	PROJECT		WATER		SANITATION		AGRICULTURE	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	48,033*	87,300	48,033*	87,300				
FY1975								
FY1976	30,033**		30,033**					
Fifth Quarter								
FY1977								

* Grant - 33
Loan - 48,000

** Grant - 33
Loan - 30,000

TECHNICAL ASSISTANCE AU

TITLE	PROJECT/LOAN NUMBER	AID CATEGORY	POPULATION COVERED	OBLIGATION OR LOAN AGREEMENT DATES	ESTIMATED TOTAL PROJECT COSTS (\$000)		WATER RELATED ACTIVITIES		
					AID	OTHER	WATER SUPPLY	SANITATION	AGRICULTURE
CURRENT PROJECTS									
Environmental Health	931-11-590-H13	PP + H			6,920		R	R	
Water and Tropical Soils Management	931-11-130-A04	F + N			23,774				IR - R

1. COUNTRY: Worldwide

2. PROJECT TITLE: Environmental Health

3. NUMBER: 931-11-590-H13

CATEGORY: Population Planning and Health

ORIGINATING OFFICE: TAB

4. SPECIFIC OBJECTIVES:

4.1 Nature of Project: To address the impact of the environment upon the quality of human life.

4.2 Number of People to be Covered:

4.3 Intended Impact: To develop planning tools, field assessments, guidelines and methodologies to enable LDC planners and operational program personnel to make changes in the human environment that are beneficial, feasible, and financially viable.

5. WATER RELATED ACTIVITIES: Water-Research, Sanitation-research

6. IMPLEMENTATION: a) Contract to university of North Carolina for field testing of sanitation improvement measures in Guatemala; b) Contract to University of Oklahoma for identification and computerization of variables influencing lower cost methods of water treatment; c) Contract of U.S. Census Bureau for feasibility study and methodology development to determine the health and nutritional impact of improved water supply; d) Contract to U.S. Environmental Protection Agency for assessment of relevance of U.S. methodologies in water pollution control to developing countries.

7. RELATED ONGOING ACTIVITIES:

8. FUNDING

8.1 Duration or Loan Agreement Dates:

8.2 Estimated Total Costs (in \$000):

PERIOD	<u>PROJECT</u>		<u>WATER</u>		<u>SANITATION</u>		<u>AGRICULTURE</u>	
	AID	Other	AID	Other	AID	Other	AID	Other
Complete Project	6,920							
FY1975	1,329							
FY1976	2,054							
Fifth Quarter FY1977	350							

