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An Analysis of AID's Automated Data

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SECTION ONE

OVERVIEW

An examination of material on potable water projects in AID's automated data bases* indicates that there are 12 planned, 50 active, and 29 completed or terminated projects in this subsector**. Basic project design data is available on all 91 projects. In a large number of cases, project activity consists of the construction of water and sewage systems that are aimed at improvements in health conditions. Evaluations have been carried out for 15 of the projects.

Table I-1 shows the distribution of projects by Bureau and percent of total planned obligations.

TABLE I-1. DISTRIBUTION OF PROJECTS BY BUREAU AND PERCENT OF PLANNED OBLIGATIONS

BUREAU(S)	NUMBER OF PROJECTS	PERCENT OF PLANNED OBLIGATIONS
Africa	14	8.8%
Asia	11	22.1%
Latin America	26	27.5%
Near East	24	40.6%
Centrally Funded	8	.9%
Total	83	100%

*Data for this analysis comes from four automated AID files: TEXT, BREF, PBAR and ACCT.

**The data bases were developed using the following criteria: all projects that were active in October 1974, and all subsequent projects are included. Thus some projects with start dates as early as 1960 are considered to be part of the portfolio as are a number of projects that have been completed since data base development.

The projects in the data base span the period from 1960 through the present. Of the 91 projects, 27 were grants, 55 were loans, and another 9 were found to contain both loan and grant components. The value of this portfolio exceeds \$600,000,000*** (planned obligations).

Table I-2 shows the distribution of these projects by status: planned, active and completed (or terminated). Projects in the planning stage account for 20.3% of the total reported planned obligations (\$114,776,000). Nearly half of the planned projects are Near East Bureau efforts. Active projects account for another 61.3% of the reported planned obligations. As Table I-2 indicates, the majority of these are in the Latin America and Near East Bureaus. The total planned obligations reported for projects in this status is \$346,679,000. Completed projects account for the final 18.4% of reported planned obligations.

TABLE I-2. DISTRIBUTION OF BUREAU PROJECTS BY STATUS

BUREAU(S)	PROJECT STATUS		
	PLANNED	ACTIVE	COMPLETED OR TERMINATED
Africa	3	8	5
Asia	2	7	4
Latin America	2	14	12
Near East	5	16	3
Centrally Funded	0	5	5
Total	12	50	29

***Eight projects provide no data on planned obligations: 2 are Africa Bureau projects, 2 Asia, 2 Latin America and 2 are centrally funded.

As Table I-2 suggests, the majority of the completed projects are Latin America Bureau efforts. Thus, while this bureau has the largest percent of planned obligations for the full period, its share of planned obligations for active projects and those in the planning stage is significantly less. When only the active and planned projects are considered we find that 49.7% of the planned obligations are for Near East Bureau projects, 26.5% for Asia, 14.4% for Latin America. Africa has the smallest proportion of planned obligations for active and planned projects among the regional bureaus, 8.5% and only .9% of the total is set aside for centrally funded projects.

Taking a slightly different approach to the data, Table I-3 considers projects with start dates after January 1977 or currently in the planning stage. From this perspective, we can see that for some Bureaus potable water projects are really a new type of effort. For example, in the Africa Bureau, 77.7% of all Bureau obligations for potable water are associated with projects started in 1977 or later. For the Asia Bureau this figure is 75%. The Near East Bureau has been involved in potable water efforts for a somewhat longer period; only 46.3% of this Bureau's planned obligations are associated with post-1977 projects. The Latin America Bureau was the first of the four regional bureaus with a sizable number of potable water projects. However, that trend has slowed. Only 13.2% of planned obligations for the Latin America are associated with the 7 projects they have begun or planned since 1977.

TABLE I-3. REGIONAL BREAKDOWN OF PROJECTS IN PLANNING STAGE OR WITH START DATES IN 1977 OR 1978

BUREAU	COLUMN 1 TOTAL NUMBER OF PROJECTS	COLUMN 2 AS % OF ALL PROJECTS	COLUMN 3 TOTAL PLANNED OBLIGATIONS	COLUMN 4 AS % OF PLANNED OBLIGATIONS	COLUMN 5 # OF PROJ. STARTING 1/77 OR NOW IN PLANNING STAGE	COLUMN 6 AS % OF COLUMN 1	COLUMN 7 TOT. PLANNED OBLIGATION FOR PROJ. AS OF 1/77 OR PLANNED	COLUMN 8 AS % OF COLUMN 3
Africa	16	17.6%	49,816	8.1%	10	62.5%	38,696	77.7%
Asia	13	14.3%	125,060	22.1%	5	38.5%	93,800	75%
Latin America	28	30.8%	155,692	27.5%	7	25%	20,524	13.2%
Near East	24	26.4%	229,995	40.6%	10	41.7%	106,571	46.3%
Centrally Funded	10	11%	5,123	.9%	1	10.	77	1.5%
Total	91	100.1%	565,686	99.9%	33	36%	259,668	45.9%

Over the period from 1960 to the present, the composition of the potable water project portfolio has changed. As Table I-4 shows, the majority of the projects are either quite large or relatively small (in planned obligations). The Latin America Bureau, which began the period with a large number of projects of all sizes, has proportionally less of its investment in potable water projects in the period from 1977 on. The Near East Bureau, on the other hand, has almost reversed this pattern. It began the period with only relatively small projects; it now has the largest number of active and planned projects which are in the class of large scale efforts. The Asia Bureau, like the Near East Bureau, has increased its number of project efforts during the period. Starting out with only one relatively small project, it now has seven active including two planned projects in excess of 5 million dollars. The Africa Bureau has shown the most stable pattern, with projects in all three size categories in the active and completed stages, and planned projects in both the relatively large and relatively small planned obligation categories. Table I-5 shows the year by year changes in project activity by bureau. In this table projects are displayed by their start dates.

TABLE I-4. DISTRIBUTION OF BUREAU PROJECTS BY THREE SIZES* (PLANNED OBLIGATIONS)

BUREAU(S)	UP TO 1 MILLION DOLLARS	1 TO 5 MILLION DOLLARS	OVER 5 MILLION DOLLARS
Africa	6	4	4
Asia	1	3	7
Latin America	14	4	8
Near East	6	4	14
Centrally Funded	5	3	0
Total	32	18	33

TABLE I-5. BUREAU PROJECTS BY START DATE**

BUREAU(S)	1972 AND BEFORE	1973	1974	1975	1976	1977	1978
Africa	4	0	-	2	1	1	3
Asia	3	2	1	1	1	1	2
Latin America	10	1	1	5	4	5	-
Near East	0	3	1	5	5	5	-
Centrally Funded	3	3	-	2	1	1	-
Total	20	9	3	15	11	16	5

*Data on planned obligations was not available for 2 Africa, 2 Asia, 2 Latin America and 2 Centrally funded projects.

**Information on project 'start date' was not available for 12 projects: 2 Latin America projects, 5 from the Near East Bureau, 3 Africa Bureau, and 2 Asia Bureau.

Not only has the pattern of potable water projects changed as regards the size of the effort, it has also changed substantively. If we examine the PURPOSE of each project, we note that there are both overall patterns and patterns within Bureaus. Table I-6 displays regional projects against seven distinct PURPOSE statements found in the data base. The patterns in terms of project GOAL are similar, as Table I-7 indicates.

In both instances the rationale for a project may well be a local--mission or project--specific decision. While there are clusters of projects with similar PURPOSES (or similar GOALS) these clusters are not clearly associated with other variables such as region, project size, length, etc. The most common PURPOSE: construction and maintenance of water and sewerage systems actually describes the activity of the project rather than its purpose level intent or expected benefits. It should, however, be noted that this statement was on occasion given as one of two project PURPOSES, in which case the "second purpose" may have captured expected project benefits.

TABLE I-6: BUREAU PROJECTS BY PROJECT PURPOSE

PURPOSE CATEGORY	AFRICA	ASIA	LATIN AMERICA	NEAR EAST	CENTRALLY FUNDED	TOTAL
General development	1	2	4	3	-	10
Systems capability to plan, implement, and maintain public works projects	0	6	4	2	2	14
Construction and maintenance of water and sewerage systems	4	3	9	9	3	28
Technical training	-	1	-	-	1	2
Research into water and other development problems	-	-	-	1	5	6
Health, including health delivery systems	-	1	9	1	-	11
Miscellaneous*	-	-	2	1	-	3

*Objectives which do not easily fit into specific categories.

Frequent identification of health improvement as a GOAL was the pattern for all geographic regions. The relatively high number of GOAL statements that identify water, per se is partially explained by centrally funded projects (which account for five of the 12 projects that gave water as a GOAL).

The PURPOSE and GOAL statement review suggests data of this sort did not become plentiful until 1973 (shortly after the Agency evaluation system was installed). Examination of this data on an Agency wide basis indicates agreement that operational water and sewage systems are an integral element of programs aimed at improving the health, general development or quality of life in project areas. Most of the deviations from this pattern seem to be explained by the presence of centrally funded (backup and research) efforts and/or by lack of Agency directions for constructing project PURPOSE and GOAL statements prior to 1972, e.g. the use of activity statements such as "construction and maintenance" have their highest frequency in pre-1972 projects.

TABLE I-7. BUREAU PROJECTS BY PROJECT GOAL

GOAL STATEMENT	BUREAU(S)					TOTAL
	AFRICA	ASIA	LATIN AMERICA	NEAR EAST	CENTRALLY FUNDED	
Improvement of quality of life, including provision of social services	-	4	4	3	2	13
Health improvements	4	4	17	8	2	35
Increased water availability	-	2	2	3	5	12
Development/Modernization	2	1	5	2	-	10
Economic/Social Reform	-	2	-	1	1	4
Miscellaneous*	1	-	1	-	-	2

*Objectives which do not easily fit into specific categories, e.g., improved balance of payments.

SECTION TWO

REGIONAL SUMMARIES

A. AFRICA BUREAU PROJECT PATTERNS

The Africa region lists 16 projects with potable water components (17.6% of all AID water projects) with a total planned obligation of \$49,816,000 (8.8% of all planned obligations for AID water projects).

Of the 12 potable water projects in the planning stage Agencywide, three, or 25% are in Africa. Their value in planned obligation is \$18,880,000 (16.4% of all planned obligations for water projects in the planning stage.) In terms of Africa's own portfolio, planning projects represent 18.8% of its total potable water projects and 37.9% of total planned obligation for potable water projects in the Bureau.

Using the same analysis for active potable water projects, we find eight active potable water projects in Africa (or 16.3% of Agencywide active potable water projects). Their planned obligations account for \$20,316,000 (5.9%) of total planned obligations for active potable water projects. Within their regional context they are 50% of all potable water projects and represent 40.1% of Africa Bureau's planned obligations.

If we add to the "planned" potable water projects those active potable water projects with 1977-1978 start dates, the Africa Bureau has ten water projects that represent 62.5% of all African potable water projects. The planned obligation for these 10 projects is \$38,696,000 or 77.7% of planned obligations for potable water within the Africa Bureau, suggesting that such projects are relatively new in the Bureau.

Four African potable water projects (25%) have planned obligations of over \$5 million. Three of these larger projects began in 1978 or are currently in planning. Together, their planned obligation is \$32,690,000 or 65.6% of all African planned obligations for potable water. (Note that two projects list no planned obligations).

On the other end of the spectrum, six potable water projects (37.5%) have planned obligations of under \$1 million. Their total planned obligation is \$3,117,000 or 6.2% of the planned obligations for potable water in the Africa Bureau. Of these smaller projects, four are either in planning or have start dates in 1977 or 1978. Thus, the Africa Bureau appears to be mixing its projects by size fairly evenly. Even within its group of projects over \$5 million, only exceeds 10 million in planned obligation.

Following the Agencywide pattern, most of the Africa Bureau projects list the construction and maintenance of water systems as project PURPOSE (four out of five that have PURPOSE statements). The same number list health improvement as project GOAL, which is consistent with the overall finding for GOAL statements.

Our automated search located one Bureau evaluation.

B. ASIA BUREAU PROJECT PATTERNS

The Asia region lists 13 projects with potable water components or 14.3% of the total AID set of 91 water projects. Their planned obligation is \$125,060,000 or 22.1% of all AID potable water planned obligations. (Note that two projects of the 13 list no planned obligation.)

Of the twelve potable water projects in the planning stage Agencywide, two, or 16.7% are in the Asia region. Planned obligation for the two projects is \$30,000,000 (26.1% of all planned obligations for all potable water projects in the planning stage). In terms of the Asia Bureau portfolio, potable water projects in the planning stage represent 15.4% of their potable water projects and 24% of their planned obligations for potable water projects.

There are seven active potable water projects in Asia (14.3% of all active potable water projects). Their planned obligation is \$92,403,000 or 26.7% of total Agency planned obligations for all active potable water projects. With reference to the region itself, active potable water projects make up 53.8% of the region's potable water projects, and constitute 73.9% of all planned obligations for potable water projects.

Five Asian potable water projects are either in planning or have start dates in 1977 or 1978. Together they have planned obligations of \$93,800,000. In the Bureau, these projects account for 38.5% of all potable water projects and 77.7% of all planned obligations for such projects, suggesting a recent movement toward relatively large projects.

Five Asian potable water projects are listed with planned obligations of over \$10 million. They represent 38.5% of all Asia Bureau potable water projects, and 82.2% of all planned obligations in the region for potable water. In sharp contrast, there is only one Asian water project with a

planned obligation under \$1 million. Its actual value is \$657,000. Four of the five larger projects (\$10 million) are in planning or have start dates in 1978. The Asia Bureau shows an overwhelming preference for including potable water efforts as a component within large projects.

The Bureau's projects, and primarily the Philippines projects, deviates from the general tendency in the Agency to identify construction/maintenance as project PURPOSE. In this Bureau the development of a general capability in public works projects is the most frequently cited PURPOSE. Construction/maintenance ranks in second place. The GOAL statements for the Bureau's projects are concentrated around health improvements and quality of life improvements.

The Bureau has four potable water evaluations on the data base.

C. LATIN AMERICA BUREAU PROJECT PATTERNS

The Latin America region has 28 projects with potable water components. In all they have a planned obligation of \$155,692,000. As part of AID's potable water program, Latin America has 30.8% of all potable water projects and 27% of planned obligations for potable water projects.

Of the 12 potable water projects in the planning stage throughout the Agency, Latin America has two (16.7%), with planned obligations of \$551,000, or .4% of all AID planned obligations for planning stage potable water projects. In the context of the Latin America region, potable water planning stage projects are 7.1% of all potable water projects and capture 3.5% of the planned obligations for potable water projects. Seven potable water projects in the region are either in the planning stage or have start dates in 1977 or 1978. The seven projects have planned obligations of \$20,524,000. They make up 25% of all regional water projects and realize 13.2% of all planned obligations for Latin America potable water projects. At the beginning of the period the vast majority of AID potable water projects were in the Latin America Bureau.

There are 14 active potable water projects in Latin America with a total planned obligation of \$66,164,000. These projects constitute 28% of all AID active potable water projects and 19.1% of AID's planned obligations for active potable water projects. Considering Latin America separately, these 14 projects account for half of the region's total potable water projects and 42.5% of its planned obligations in the potable water sector.

Eight potable water projects have planned obligations of over \$5 million and represent \$136,113,000 of all regional planned obligations for potable water. That is 28.6% of all Latin America water projects and 87.4% of all planned obligations for potable water projects in the region. Projects under \$1 million in planned obligations number 14, or 50% of all Latin American projects in potable water. They account for \$3,580,000 or 2.3% of planned obligations for Latin America potable water projects.

Of the eight large potable water projects only one has a start date in 1977 or later. Five of the large projects had start dates before 1972. By comparison the two planning stage projects are both small projects. Five small projects have start dates in 1977 or 1978, or are planning stage projects; that number increases to 13 if we go back to 1975. The trend in Latin America is clearly toward undertaking potable water activities in smaller projects.

Of the 28 Bureau projects listing PURPOSE statements, nine identified health and health delivery (and larger after 1975) and another nine listed system construction and maintenance (most of which began before 1972). Four more projects identified a capability in public works projects and four identified general development as the project PURPOSE.

At the GOAL level there was greater clustering, with 17 projects (56%) citing health improvements, another nine cited either quality of life or general development as the GOAL. The Latin America Bureau profile on PURPOSE and GOAL statements is relatively consistent with the overall findings for the Agency.

Three potable water projects in the Latin America Bureau have evaluation references.

D. NEAR EAST BUREAU PROJECT PATTERNS

Twenty-four projects, or 26.5% of AID's potable water projects, are in the Near East region. Their combined planned obligation is \$229,995,000, or 40.6% of all planned obligations for potable water projects.

Of AID's 12 potable water projects in the planning stage, five, or 41.7% are in the Near East. Their planned obligation is \$65,345,000, or 56.9% of total planned obligations for potable water planning stage projects. Within the context of the Near East potable water program the planning stage projects are 20.8% of all potable water projects and 28.4% of all potable water planned obligations.

Ten Near East potable water projects are either in the planning stage or have start dates for 1977 or 1978. Together, they have planned obligations of \$106,571,000. These ten projects encompass 41.7% of the region's potable water projects and 46.3% of its planned obligations for potable water.

There are 16 active potable water projects in the Near East with total planned obligations of \$164,105,000. These 16 projects represent 32.6% of the Agency's potable water projects and 47.4% of the Agency's total planned obligations for potable water. These projects also represent 66.6% of the Near East's potable water projects and 71.4% of the region's total planned obligations for potable water.

Fourteen potable water projects in the Near East have planned obligations of over \$5 million per project for total planned obligations of \$214,351,000. They represent 58.3% of all Near East potable water projects and 93.2% of such projects' planned obligations. Six projects, or 25% of Near East water projects, have planned obligations under \$1 million. Their combined planned obligation is \$2,022,000, or .9% of the region's total planned obligations for potable water.

Suggestive of the general trend in the Near East is that four of the five projects in the planning phase have planned obligations of over \$5 million per project. All of the "small" projects can be found in two countries: Tunisia or the Yemen Arab Republic. The investment in dollars and numbers of projects with potable water projects is unmistakably into larger projects with potable water components. The Near East has edged out Latin America by 20 projects to 16 as the major investor in potable water efforts since 1974.

The Near East Bureau's statements of project PURPOSE and GOAL are prototypical construction and maintenance of water systems (52% of those giving PURPOSE) to improve health (50% of those providing GOAL). There are no other clusters of PURPOSE and GOAL that taken alone account for a sizable proportion of the remaining Bureau projects.

Of the Bureau's 24 projects, five contain evaluation data.

E. CENTRALLY FUNDED PROJECT PATTERNS

In AID's potable water portfolio ten out of ninety one water projects (11%) are centrally funded. Their combined planned obligation is \$5,123,000 out of a total of \$565,686,000 (.9%) for all AID water projects. (Note that two projects list no planned obligations.) There are no centrally funded projects now being planned. Five of the projects are active and capture \$3,691,000 in planned obligations. They represent

10.2% of all AID active potable water projects and 1.1% of planned obligations for such projects. For centrally funded potable water projects as a group active potable water projects are 50% of the whole and account for 72% of planned obligations. Only one project or 10% of all centrally funded potable water projects has a start date in 1977 or 1978. With a planned obligation of \$77,000 it encompasses only 1.5% of the planned obligations for centrally funded projects.

No centrally funded potable water project has a planned obligation over \$5 million. In contrast five potable water projects or 50% of centrally funded potable water projects have planned obligations under \$1 million. Their total planned obligation is \$918,000 or 17.9% of all centrally funded potable water projects.

The trends for centrally funded potable water projects are very straightforward. They tend to be small with most of them clustering in the period since 1972. The momentum for new research projects into potable water problems is clearly at a low point at the present time.

SECTION THREE

RECOMMENDATIONS FOR FURTHER ANALYSIS

The analysis of AID's automated data on potable water projects has suggested a number of things that should be considered in terms of (a) examination of this particular subsector, and (b) examination of other sectors. These basic ideas are captured by the following:

- For potable water projects, and perhaps all projects, time (Project start dates) may be a primary method for determining major patterns. The "New Directions" legislation may have been one stimulant to project activity in some regions. Further, information on project design can be more readily accessed, and classified in the post-1973 period. The timing of this change as can be seen through PURPOSE and GOAL statement examination, relates to the installment of the Agency evaluation system and the Logical Framework. In examining other sectors and subsectors it may be advisable to make an initial break between projects on this factor, and then to examine only the post 1972-73 set on the PURPOSE and GOAL variable. The activity rather than outcome entries in the pre-1972 period only serve to distort the picture of overall and bureau patterns.
- The information on project size is potentially very powerful. However, the automated data is not proving adequate to explain what is happening. The entry against which size should be mapped--project complexity, i.e., the number of activities going on in one project, is not well recorded in the automated data. What is probably occurring is a move toward rural development and integrated rural development projects in the more recent years. To substantiate this 'best guess', documents on the potable water projects would need to be examined.
- Evaluations appear to be the only source of information that will confirm whether there is a rational and empirical basis for the repeated conjunction of "construction and maintenance of water systems" Purposes with "health improvement" Goals. Table III-1 displays all documents containing potential evaluation data by region.

TABLE III-1

EVALUATIVE AND OTHER DOCUMENTS BY REGION

DOCUMENT TYPE	BUREAU					TOTAL
	AFRICA	ASIA	LATIN AMERICA	NEAR EAST	CENTRALLY FUNDED	
AID SUPPORTED STUDY		1		2		3
ANNUAL REPORT			1			1
BIBLIOGRAPHY				1		1
END-OF-TOUR REPORT			26			26
FEASIBILITY STUDY				1		1
FINAL REPORT	2		2			4
INCOMING CABLE			1		1	2
<u>PROJECT APPRAISAL REPORT</u>		10	9	3	3	<u>25</u>
PROGRESS REPORT/INTERIM REPORT			1		5	6
RESEARCH STUDY				1	2	3
SECTOR ANALYSIS/ASSESSMENT			3	1		4
<u>SPECIAL EVALUATION</u>	1		4	1	1	<u>7</u>
UNDIFFERENTIATED REPORT		1		1		2
WORKING PAPER			1			1
TOTALS	3	12	48	11	12	86

In some cases PPs might make references to past success with this formula. All the automated data can tell us is that this is a frequent pairing.

We probably need go no further to learn that people in the Agency believe that the two are related; we would, however, need to go further to prove the connection. The supply of evaluations in this subsector does not, however, promise that such an analysis will be fruitful. With only 16.5% of the projects evaluated, final conclusions might be hard to draw, especially if we sought to associate success with such factors as size, region, etc. Nevertheless, of all the documents that would be likely to add information to the automated data analysis, the evaluations are probably the best source.

- A large number of the automated data variables have not proven very useful. Included among these are the funding codes, much of the financial material, and some of the information on project scope (because it is ambiguous). In examining other sectors and subsectors these items should probably be ignored.
- A large number of the questions raised by the Studies Division cannot be answered by the automated data at all. Some questions, such as whether projects are rural or urban, could be examined on a 'guesstimate basis' using the presence or absence of key words in the text to determine whether projects were or were not following one or another pattern. However, this 'guesstimate' approach may lead to faulty answers, since the data base was not developed in a way that required project information on such factors. The majority of the questions that were not answerable from the automated data would be answered by an examination of the PPs, as Exhibit A (included at the end of this section) indicates.
- The examination of the automated data serves to reduce the scope of possible additional analyses by suggesting exactly what should be reviewed in more detail to answer certain questions, e.g.:
 - To examine the success of the most frequent hypothesis, review evaluations where the purpose was construction and the goal was health.

However, it seems premature to trust this conclusion on the basis of one set of automated data.

It is our judgement that the Studies Division's best approach at this point would be to:

1. Undertake two more of the five scheduled automated data reviews immediately and quickly to determine if the general findings concerning the type of data that can come out of this form of analysis holds true for other subjects, and
2. Proceed on a limited basis to examine (a) evaluations that would provide insight on the most frequent project hypotheses, and (b) PPs to determine how difficult it would be to use this source to rapidly answer other questions posed by the Studies Division about project patterns in a sector. In order to take these two steps concurrently, the two additional analyses should be made with potable water projects, and should be limited to roughly three evaluations and three PPs.

EXHIBIT A*

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
<u>PHASE I - Cluster I: Water: Independent Variables - Technical</u>		
How far away are the pre-intervention water sources	PP	High
How is their quality characterized	PP	Med.
What is the pre-intervention liters per capita per day level of local H ₂ O	PP	High
What is the difference between that level and the WHO Norm Country average	PP	Low
Is there a description of the pre-intervention water use patterns	PP	Med.
<u>PHASE I - Cluster II: Water: Independent Variables - Health</u>		
Incidence of typhoid	PP or WHO	Med.
Incidence of infectious hepatitis	PP or WHO	Med.
Incidence of Trachoma	PP or WHO	Med.
Incidence of Scabies	PP or WHO	Med.
Incidence of Shigella	PP or WHO	Med.
Incidence of Schisto somias	PP or WHO	Med.
Incidence of Guinea worm	PP or WHO	Med.
Incidence of Gambian sleeping	PP or WHO	Med.
Incidence of Onchocerciasis	PP or WHO	Med.
Other water-related diseases	PP or WHO	Med.
Is the T.G. aware of the connection between water quality and health	PP	Med.
<u>PHASE I - Cluster III: Water: Independent Variables - Administration</u>		
National or regional water authority	PP	High
Municipality	PP	High
Ministry of Public Health	PP	High
Ministry of Public Works	PP	High
Integrated rural development agency	PP	High
Other host country agency	PP	High
<u>PHASE I - Cluster IV: Water: Independent Variables - Technical</u>		
Who established the norm for water quality	PP	Med.
Was the norm accepted as appropriate for the project	PP	Med.
Norm for water quality	PP	Med.
Who established norm for water quantity	PP	Med.
Was it accepted as appropriate	PP	Med.
What was the norm for water quantity	PP	High
<u>PHASE I - Cluster V: Water: Dependent Variables - Technical</u>		
% of system supply from groundwater	PP	High
From surface water sources	PP	High
Number of groundwater sources	PP	Med.
Number of surface water sources	PP	Med.
Sources protected or unprotected	PP	High
Given protected how protected	PP	High
No treatment of water	PP	High
Chlorination treatment	PP	High
Filtration treatment--simple	PP	High
Technology--e.g., sand	PP	High

If there are no entries for either the "source" or "probability" columns, the data is available from automated data bases.

<u>DATA</u>	<u>SO</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
Give number	I	Med.
Filtration technology--complex technology, e.g., charcoal-- give number of each	I	Med.
Other treatment--no. and description	I	Med.
No distribution users come to source	I	High
Standpipe or public hydrant	I	High
How many	I	High
Distribution to house connection: number of single-top connection	F	Med.
Distribution to house connection: number of multi-tap connections	P	Med.
Distribution to house connection: number of metered connections	P	Med.
Hours of daily operation	P	Med.
Projected system capacity in liters per capita per day	P	High
Projected water used safe yield ratio	P	High
What are the projections of future demand increments	PI	Low
Has expansion been considered in project design	PI	High
Is the system upgradable	PI	Low
Type of pump	PI	High
Locally manufactured or imported	PI	High
Has consideration been given to durability	PI	Med.
Are spare parts easily available	PI	Med.
How long is AID's involvement scheduled to last	PF	High
How many person's months are planned	PF	High
What is the project lifespan of the project	PP	Med.
 <u>PHASE I - Cluster VI: Dependent Water Variable - Economic</u>		
Construction cost per liter	PP	High
O/M costs per liter	PP	High
Total project costs per liter delivered	PP	High
How are health benefits quantified, if they are	PP	High
Are health benefits assumed to accrue only when system is utilized at full capacity	PP	Med.
If not, at what utilization rate are they expected to materialize	PP	Med.
Mention any non-health related benefits	PP	High
Values assigned to non-health related benefit	PP	High (if they exist)
Value of total project benefits quantified	PP	High (if they exist)
 <u>PHASE I - Cluster VII: Dependent Water Variables - Financial</u>		
Unmetered variable pricing	PP	High (if they exist)
Increasing block rate	PP	High (if they exist)
Constant block rate	PP	High (if they exist)
Decreasing block rate	PP	High (if they exist)
Partial cross-subsidy from urban water systems	PP	High (if they exist)
Partial subsidy from local or regional government	PP	High (if they exist)
Price scheme which discriminates between commercial and resident users	PP	High (if they exist)
Ratio of average monthly water fee to average monthly family income	PP	Low
Are all users charged according to the same scheme	PP	High
Is there any provision for a reserve fund to finance future system expansion or upgrading	PP	High

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
<u>PHASE I - Cluster VIII: Dependent Water Variable - Technical</u>		
Is there a concomitant sanitation or sewage component	PP	High
Component Type: community sewage facility	PP	High
Component Type: individual family facility	PP	High
Is there a concomitant health education component	PP	High
<u>PHASE II - Cluster IX: Dependent Water Variable - Technical</u>		
Actual hours of daily operations	PAR	Low
Operational/ed level	PAR	Low
Were the sewage activities associated with the project:	PAR	High
On time	PAR	High
Operating at expected capacity	PAR	High
Were public health education activities associated with the project: implemented on time	PAR	Med.
Reaching the planned number of people	PAR	Low
What % of the time is the system: out of operation	PAR	Med.
Operating substantially below capacity	PAR	Low
What is the average length of the down period	PAR	Low
Number of operational sources by type	PAR	Low
Output per source of water	PAR	Low
Differences in number of operational sources and output per source between planned and actual	PAR	Med.
Number of operational standpipes	PAR	Low
Number of operational individual connections: single-top	PAR	Low
Multi-top	PAR	Low
Metered connections	PAR	Low
Differences between planned and actual single-top and multi-top connections	PAR	Low
Do post AID managers make routine system repairs and adjustments	PAR	Med.
If not, is it due to poor management of maintenance activities	PAR	Low
Is it due to inadequate understanding of the equipment	PAR	Low
Is it due to the unavailability of space, parts and/or replacement machinery	PAR	Low
<u>PHASE II - Cluster X: Dependent Water Variables - Social</u>		
Ex post infant mortality rate		Evaluation (if it exists)
Ex post life expectancy		Evaluation (if it exists)
Ex post disease incident for typhoid		Evaluation (if it exists)
Infectious hepatitis		Evaluation (if it exists)
Trachoma		Evaluation (if it exists)
Scabies		Evaluation (if it exists)
Shigella		Evaluation (if it exists)
Schistosomiasis		Evaluation (if it exists)
Guinea Worm		Evaluation (if it exists)
Gambian sleeping sickness		Evaluation (if it exists)
Onchocerciasis		Evaluation (if it exists)
Other water-related diseases		Evaluation (if it exists)
Has any attempt been made to survey beneficiaries to get their subjective appraisals of the change in their health status over the course of the project		Evaluation (if it exists)
How aware is the target population of the link between water quality and health		Evaluation (if it exists)
Neighboring communities: Have they shown a change in their demand for better water		Evaluation (if it exists)
Have they asked for or started their own water supply project		Evaluation (if it exists)
Are there demonstrable changes in their demand for better sewage		Evaluation (if it exists)
Are there demonstrable changes in their demand for health education		Evaluation (if it exists)

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
<u>PHASE II - Cluster XI: Dependent Water Variables Technical</u>		
Differences (+/-) between planned benefits to users and actual benefits to users		Evaluation (if it exists)
Is project-generated research being utilized or marketed		Evaluation (if it exists)
Where?		Evaluation (if it exists)
With what effects		Evaluation (if it exists)

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
<u>Cluster I - Basic Project Data</u>		
Bureau		
Functional Account used for Funding:		
Country		
Purpose Codes:		
Primary		
Secondary		
Technical Codes:		
Primary		
Secondary		
Special Concern Code		
Keywords		
Starting Date		
Ending Date		
Status		
Original Estimate of life of project Costs		
Obligations to Date		
Expenditures to Date		
 <u>Cluster II - Independent Variables: Social and Geographic</u>		
Demographic	PP	High
Population Density	PP	High
Settlement Typology	PP	High
If a village: Size	PP	High
Seat of local or regional	PP	High
Climatic/Geographic	Atlas	High
Tropical/Non-Tropical	Atlas	High
Annual rainfall	Atlas	High
Are there low rainfall mo	Atlas	High
Highland/Lowland	Atlas	High
Income	PP	High
Per capita income	PP	High
Project info on income di	PP	Low
Mean years of schooling	PP	Low
Health (general)		
Infant mortality		
Life expectancy		
Principle health problems		
Target pop. ethnic group/s:	PP	
Majority of minority	Encyclopedia or State Dept. Papers	
Target pop. religion/s	PP	
Majority of minority	Encyclopedia or State Dept. Papers	

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
<u>Cluster III - Independent Variables - Technical (Design)</u>		
Design Team Characteristics	PP or contracting office	Low
Name	PP or contracting office	Low
Profession	PP or contracting office	Low
Nationality	PP or contracting office	Low
Previous Country Specific Experience	PP or contracting office	Low
Languages Spoken	PP or contracting office	Low
Prior Affiliation	PP or contracting office	Low
Prior Project Experience	PP or contracting office	Low
<u>Cluster IV - Independent Variables: Administrative</u>		
Other Donors	PP	High
Design Team led by AID/W or Mission personnel	PP	Med.
AID/W person is/is not back stopping project	PP	Low
Name of design firm	PP	Low
Host Country Participation		
No. of host country personnel on design team	PP	Low
Type of H.E. agency involved	PP	High
Km. from project site to nearest office of participating agency	PP	Low
<u>Cluster V - Independent Variables: Technical (Design - Intellectual and Organizational Context)</u>		
Earlier projects cited as models	PP	High if any are cited
Earlier projects cited as disasters	PP	High if any are cited
References to authors, articles, books	PP	High if any are cited
References to prescribed norms	PP	Mid.
Significant mention of Appropriate Technology	PP	High
Discussion of Technical Alternatives	PP	High
No. of feasible alternatives	PP	High
Feasible alternatives	PP	High
Reasons for no choosing	PP	High
Project stated problem	PP	High
Assumptions explicitly identified in design documents	PP	High
Reference to AID/W influence	PP	High if any exists
Ref. to AID/W or Congressional expression of priorities	PP	High if any exists
Ref. to AID procurement constraints	PP	High if any exists
Ref. to AID contracting constraints	PP	High if any exists

COSTS	SOURCES	PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCES
Other constraints	PP	High if they exist
Description of Target Populat	PP	High
Ethnically	PP	High
Religious	PP	Low
Linguistically	PP	Med.
Is description consistent with	PP	High
<u>Data Cluster VI: Dependent Vi</u>		
Total Project Costs	PP	High
Construction Costs	PP	High
Capital Costs	PP	High
Labor Costs	PP	High
Consultant's Fees	PP	High
Ratio of Capital Costs to La	PP	High
Other Costs	PP	High
Operation and Maintenance Cost	PP	High
Participant Costs	PP	High
Ratio of total construction costs to operation and maintenance costs	PP	High
Total project cost per unit of service delivered	PP	Low
Total costs per capita	PP	High
Construction costs per capita of T.G.	PP	High
O/M costs per capita of T.G.	PP	High
Project Benefits are quantified: Yes/No	PP	High
If yes, unit of value assigned to benefit	PP	High
Cost/benefit ratio	PP	High
Indirect costs or benefits cited	PP	High if figured
Are they calculated into estimated C/B ratio	PP	High
Estimated rate of return	PP	High
Discount rate used	PP	High
<u>Data Cluster VII: Dependent Variable - Financial</u>		
Project Construction Funding	PP	High
AID Grant	PP	High
AID Loan	PP	High
H.C. Contribution	PP	High
Local Contribution	PP	High
Other Donor's	PP	High
Project O/M Funding	PP	High
AID Grant	PP	High
AID Loan	PP	High

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
H.C. Contribution	PP	High
Local Contribution	PP	High
Other donor's contribution	PP	High
Nature of local contribution	PP	High
Value of financial contribution	PP	High
Value of in-kind commodity contribution	PP	High
Value of labor contribution	PP	High
Is this system to pay for itself: Yes/No	PP	High
Is there provision for expansion of the services delivered: Yes/No	PP	Med.

Data Cluster VIII: Dependent Variables - Environmental and Socio/Cultural

Environmental Aspects acknowledged in design	PP	High
Positive Aspects	PP	High
Negative Aspects	PP	High
Other Possible Effects		Evaluation
Positive		Evaluation
Negative		Evaluation
Socio-Cultural effects acknowledged in design	PP	High
Positive	PP	High
Negative	PP	High
Other Socio-Cultural Effects	Evaluation	
Positive	Evaluation	
Negative	Evaluation	

} PP may be

Data Cluster VIII: Dependent Variables - Administrative and Instit.

AID Project Management Personnel		AID Contracting Office
Name		AID Contracting Office
Profession		AID Contracting Office
Nationality		AID Contracting Office
Country Specific Experience		AID Bio Data if anywhere
Languages Spoken		Aid Bio Data if anywhere
Prior Affiliations		AID Bio Data if anywhere
Prior Project Experience		AID Bio Data if anywhere
AID contracted firm	PES	
Name	Proposal	High
Profession	Proposal	High
Nationality	Proposal	High
Country Specific Experience	Proposal	High
Languages Spoken	Proposal	High
Prior Affiliations	Proposal	Med.
Prior projects	Proposal	Med.
H.C. Agency Personnel		PP if anywhere
No. of host country personnel on construction site		Contracting firms of Missions Financial records

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
Distance of project site from nearest permanent office of H.C. agency		PP if anywhere
How many of the target group are involved in the project?		PP if anywhere
Who is to manage completed system	PP	High
AID field staff working on O/M		AID Financial records
Name		AID Financial records
Profession		AID Financial records
Nationality		AID Financial records
Country specific experiences		AID Bio Data if anywhere
Languages spoken		AID Bio Data if anywhere
Prior affiliations		AID Bio Data if anywhere
Prior projects worked on		AID Bio Data if anywhere
Name of O/M firm contracting with AID	PES	High
Name	Proposal	High
Profession	Proposal	High
Nationality	Proposal	High
Country specific Experience	Proposal	Med.
Languages Spoken	Proposal	Med.
Prior Affiliations	Proposal	Med.
Prior Project Experience	Proposal	High
H.C. agency for O/M	PP	
Number of H.C. personnel working on O/M		PP if anywhere
Distance of project site from nearest		PP if anywhere
Agency Type	PP	
Type of H.C. agency managing system after AID leaves	PP	High
Same H.C. agency as performing construction: Yes/No	PP	High
Same H.C. agency as coordination O/M while AID still on project	PP	High
No. of H.C. personnel trained for system management	PP	High
Total man months of training	PP	High
Average length of training	PP	High
Technical fields in which participants are trained	PP	High
Institutions at which training occurs	AID Financial records	High
No. of locals involved full time in O/M	AID Financial records	
No. of local involved in O/M part time	AID Financial records	
Is there to be a local manager	PP	Med.
Is local manager full time/part time	AID Financial records	
Has local advisory board been set up for system O/M	PP	High
Have routines and procedures for O/M been passed on to local staff?		Evaluation (PES)
Has a set of remedies been drafted for local staff for system breakdown?		Evaluation (PES)
Broad economic Effects seem in the Des:		
Positive	PP	High
Negative	PP	High

<u>DATA</u>	<u>SOURCE</u>	<u>PROBABILITY THAT DATA WOULD BE FOUND IN THIS SOURCE</u>
Gross annual product of new industry or trade		Evaluation (if it exists)
Number of jobs created		Evaluation (if it exists)
Gross value of new plant		Evaluation (if it exists)
Difference (+/-) between pre- and post inter- in the target community		Evaluation (if it exists)
Who has benefitted from the price change		Evaluation (if it exists)
Who owns the property now		Evaluation (if it exists)
How many locals work on the system		Evaluation (if it exists)
What is their average wage		PES or contractor records
What types of jobs are held by locals		PES or contractor records

PHASE II - Data Cluster XIII: Dependent Variables

Actual capital costs	PES	High
Actual labor costs	PES	High
Actual consultants costs	PES	High
Ratio of actual capital costs to actual labor	PES	High
Actual O/M costs	PES	High
Actual participant training costs	PES	High
Actual construction costs	PES	High
Ratio of O/M costs to construction costs	PES	High
Actual construction cost per unit of service		Evaluation (if it exists)
O/M costs per unit of service delivered		Evaluation (if it exists)
Construction costs per capita		Evaluation (if it exists)
O/M costs per capita		Evaluation (if it exists)
Actual rate of return		Evaluation (if it exists)
AID grant contribution to construction costs	PES	High
AID Loan contribution to construction costs	PES	High
HC contribution to construction costs	PES	High
Local contribution to construction costs	PES	High
Other donor contribution to construction costs	PES	High
AID grant contribution to O/M costs	PES	High
AID Loan contribution to O/M	PES	High
HC contribution to O/M	PES	High
Local contribution to O/M	PES	High
Other donor contribution to O/M	PES	High
Value of local financial commitment	PES	High
Value of in-kind commodity involvement	PES	High
Revenues generated from project		Evaluation (if it exists)
Difference (+/-) between actual and planned revenues		Evaluation (if it exists)
Any discussion of fee incidence among different income groups		Evaluation (if it exists)
Sources making up revenue shortfalls		Evaluation (if it exists)
Differences between planned and actual holdings of reserve fund.		Evaluation (if it exists)

DATA

SOURCE

PROBABILITY THAT DATA WOULD
BE FOUND IN THIS SOURCE

PHASE II - Data Cluster XIV: Dependent Variables - Environmental

Type of environmental impact	Evaluation (if it exists)
Cost estimate of impact	Evaluation (if it exists)
Extent of area of impact	Evaluation (if it exists)
Number of persons affected by impact	Evaluation (if it exists)
Who is affected by impact	Evaluation (if it exists)

PHASE II - Data Cluster XV: Dependent Variables - Social Impact

Change in population growth rate	Evaluation (if it exists)
Change in population size	Evaluation (if it exists)
Change in ethnic mix	Evaluation (if it exists)
Change in religious mix	Evaluation (if it exists)
Change in linguistic mix	Evaluation (if it exists)
Erosion of influence of old opinion leaders	Evaluation (if it exists)
New bureaucratic power center/opinion leaders	Evaluation (if it exists)
Other changes in the structure of society	Evaluation (if it exists)
Is the community more or less capable of making its voice heard by national or regional authorities	Evaluation (if it exists)
Are there any new community-based political parties	Evaluation (if it exists)
Has the community lobbied for the provision of any other services Effectively?	Evaluation (if it exists)
How are people using the benefits from the project	Evaluation (if it exists)
Have any groups lost their jobs because of the project	Evaluation (if it exists)
Other social impacts	Evaluation (if it exists)
Has the project been replicated in other communities	Evaluation (if it exists)
By whom	Evaluation (if it exists)
Has the project generated a replicable design package for export to other community	Evaluation (if it exists)
Components of the package	Evaluation (if it exists)

APPENDIX A: SUPPLEMENTARY ANALYSIS

The tables which constitute Appendix A are more specific versions of most of the summary tables found in the body of the report. The majority of the tables in this Appendix report data at the project level.

TABLE A-1

DISTRIBUTION OF PLANNED OBLIGATIONS BY REGION

<u>REGION</u>	<u>TOTAL NUMBER OF PROJECTS</u>	<u>AS % OF ALL PROJECTS</u>	<u>TOTAL PLANNED OBLIGATIONS</u>	<u>AS % OF PLANNED OBLIGATIONS</u>	<u># OF PROJ. WITH P.O. (* OVER \$5 MILLION</u>	<u>AS % OF COLUMN 1</u>	<u>P.O. (*) FOR PROJECTS OVER \$5 MILLION</u>	<u>AS % OF COLUMN 3</u>	<u># OF PROJ. WITH P.O. (*) PER PROJ. UNDER \$1 MILLION</u>	<u>AS % OF COLUMN 1</u>	<u>TOTAL P.O. (*) FOR PROJ. WITH P.O. UNDER \$1 MILLION</u>	<u>AS % OF COLUMN 1</u>
Africa Region	16	17.6%	49,816	8.8%	4	25%	31,690	65.6%	6	37.5%	3,117	6.2%
Asia	13	14.3%	125,060	22.1%	7	53.8%	116,405	93.1%	1	7.7%	657	5.2%
Latin America	28	30.8%	155,692	27.5%	8	28.6%	136,113	87.4%	14	50%	3,580	2.3%
Near East	24	26.4%	229,995	40.6%	14	58.3%	214,351	93.2%	6	25%	2,022	.9%
Centrally Funded	10	11%	5,123	.9%	0	0	0	0	5	50%	918	17.9%
<u>TOTAL</u>	91	100.1%	565,686		31	34.1%	485,959	85.9%	32	35%	10,294	1.8%

* P.O. = PLANNED OBLIGATIONS

TABLE A-2

SUMMARY TABLE OF POTABLE WATER PROJECTS BY REGION, START DATE,
AND PLANNED OBLIGATION

Country	Project Number	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	No. Active	Plan Total	
CENTRAL AMERICA	Number				1						1		1		3		2	1	1				10
	Planned Obligation										1,880		1,810		307		1,800	190	77				6123
AFRICA REGION	Number		1			1			1				1					2		4	2	2	16
	Planned Obligation		8,120										2,700					800		10,290	9,045	10,000	69,816
LATIN AMERICA	Number		1				1	1		2	1	1	3		1	1	5	4	5			2	26
	Planned Obligation						416			27,854	29,000	18,796	30,203		3,800	7,000	794	6,873	19,973			897	146,098
NEAR EAST	Number														3	1	5	5	5			5	24
	Planned Obligation														6,468	4,322	84,174	80,422	41,324			30,170	221,996
ASIA	Number	1								1	1				2	1	1	1	1	2	2	2	13
	Planned Obligation									857					4,498	15,805	3,900	6,800	6,800	57,000	20,000	20,000	125,000
TOTAL NUMBERS		1	2		1	1	1	1	1	3	3	1	5		9	3	15	11	16	5	12	91	
TOTAL PLANNED OBLIGATION			8,120				416			22,241	27,000	18,796	69,273		75,151	27,067	90,849	65,006	70,300	86,000	134,770	102,000	

TABLE A-3

AFRICAN REGION POTABLE WATER PROJECTS BY START DATE AND PLANNED OBLIGATION

Country	Project Number	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	No. Bids	
Africa Regional	1750210																					
Benin	6500001																					
	Case No. 25152																					
	6500070																				1200 (A)	
	6600007																				600 (A)	
CAE	6760202																					
CAF	6250024																				600 (A)	
Chad	6770022																				3000 (A)	
Sierra	6410074																				6000 (A)	
Kenya	6190166																				300 (C)	
Liberia	6690004																					
	6490167																				207 (A)	
Senegal	6490037	8170 (1)																				
OSARAC	6900014												2700 (C)									
Togo	6430014																				6000 (A)	
Upper Volta	6040070																				12200 (A)	
Total Planned Obligation		8,170											2,700				600		19,470	9,400	16,000	
Total Number																				6	3	3
*To indicate the planned obligation figure is missing.																						

TABLE A-5

LATIN AMERICA REGION POTABLE WATER PROJECTS BY START DATE AND PLANNED OBLIGATIONS

Country	Project Number	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	To Date
Latin America																					
Bolivia	5110064												27,200(A)								
	5110458																		4199(A)		
	5110478																		300(A)		
Brazil	5120062		2 (C)																		
	5120039							2 (C)													
	5120078									16,384(C)											
	5120280											35,244(C)									
	5120281												24,800(C)								
Colombia	5140183															7500(A)					
El Salvador	5190173																			28(A)	
Guatemala	5200231																288(A)				
	5200264																			955	
Guyana	5040051						416(A)														
	5040048									5,000(C)											
Haiti	5210078																121(A)				
	5210080																45(A)				
	5210112																				101(P)
Honduras	5220177																				450(P)
Jamaica	5320048																				15000(A)
Nicaragua	5240102																132(T)				
	5240110																			382(A)	
	5240118																280(T)				
	5240114																				642(A)
*ps indicate the planned obligation figure is missing																					

TABLE A-5 (cont.)

LATIN AMERICA REGION POTABLE WATER PROJECTS BY START DATE AND PLANNED OBLIGATION

Country	Project Number	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	No. Bids
Panama	5250138										20,000(C)										
	5250170														3500(C)						
	5250183																	9500(A)			
Peru	5270177																		450		
	5270134												3000(L)								
Total Planned Obligation							416			21,564	20,070 (C)	15,746	55,282		3,800	7,500	786	10,573	19,973		561
Total Number			1				1	1		2	1		3		1	1	3	4	5		2

TABLE A-6

NEAR EAST REGION POTABLE WATER PROJECTS BY START DATE AND PLANNED OBLIGATION

Country	Project Number	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	Planned Obligation	
Near East Federation	3060131															4362(A)						
	3060144																	7130(A)				
Egypt	2630038																		7130(A)			
	2630089																		7130(A)			30,000(P)
Israel	2710005																					
Jordan	2790183																					
	2790211																					10,000(P)
Lebanon	2800306																					6,000(P)
Morocco	6060127																					
Portugal	1900005																					
	1900010																					
Syria	2780008																					
Tunisia	6640286																					
	6640288																					
	6640296																					
	6640299																					
YAR	2790017																					
	2790021																					
	2790022																					
	2790027																					
	2790028																					
	2790029																					
	2790041																					6,000(P)
	2790044																					3040(P)
Total Planned Obligation															6,466	4,369	84,174	11,422	41226			63,369
Total Number															3	1	5	5	5	0		5

TABLE A-7

REGIONAL BREAKDOWN OF PROJECTS IN "PLANNING" STAGE AND THEIR PLANNED OBLIGATIONS

<u>REGION</u>	<u>TOTAL NUMBER OF PROJECTS</u>	<u>AS % OF ALL PROJECTS</u>	<u>TOTAL PLANNED OBLIGATIONS</u>	<u>AS % OF PLANNED OBLIGATIONS</u>	<u># OF PROJECTS IN "PLANNING" STAGE</u>	<u>AS % OF TOTAL PROJECTS IN PLANNING STAGE</u>	<u>AS % OF COLUMN 1</u>	<u>TOTAL PLANNED OBLIGATION FOR PLANNING STAGE PROJECTS</u>	<u>PREVIOUS COLUMN AS % OF TOTAL (114,776)</u>	<u>AS % OF COLUMN 3</u>
Africa Region	16	17.6%	49,816	8.8%	3	25%	18.8%	18,880	16.4%	37.9%
Asia	13	14.3%	125,060	22.1%	2	16.7%	15.4%	30,000	26.1%	24%
Latin America	28	30.8%	155,592	27.5%	2	16.7%	7.1%	551	.4%	3.5%
Near East	24	26.4%	229,995	40.6%	5	41.7%	20.6%	65,345	56.9%	28.4%
Centrally Funded	10	11%	5,123	.9%	0	0	0	0	0	0
<u>TOTAL</u>	91	100.1%	565,686		12	100.1%	13	114,776	99.8%	20.3%

TABLE A-8

REGIONAL BREAKDOWN OF PROJECTS IN PLANNING STAGE OR WITH START DATES IN 1977 or 1978

<u>REGION</u>	<u>TOTAL NUMBER OF PROJECTS</u>	<u>AS % OF ALL PROJECTS</u>	<u>TOTAL PLANNED OBLIGATIONS</u>	<u>AS % OF PLANNED OBLIGATIONS</u>	<u># OF PROJ. STARTING 1/77 OR NOW IN PLANNING STAGE</u>	<u>AS % OF COLUMN 1</u>	<u>TOT. PLANNED OBLIGATION FOR PROJ. AS OF 1/77 OR PLANNED</u>	<u>AS % OF COLUMN 3</u>		
Africa Region	16	17.6%	49,816	8.8%	10	62.5%	38,696	77.7%		
Asia	13	14.3%	125,060	22.1%	5	38.5%	93,800	75%		
Latin America	28	30.8%	155,692	27.5%	7	25%	20,524	13.2%		
Near East	24	26.4%	229,995	40.6%	10	41.7%	106,571	46.3%		
Centrally Funded	10	11%	5,123	.9%	1	10%	77	1.5%		
<u>TOTAL</u>	91	100.1%	565,686		33	36%	259,168	45.9%		

TABLE A-9

REGIONAL BREAKDOWN OF PROJECTS IN ACTIVE STAGE AND THEIR PLANNED OBLIGATIONS

<u>REGION</u>	<u>TOTAL NUMBER OF PROJECTS</u>	<u>AS % OF ALL PROJECTS</u>	<u>TOTAL PLANNED OBLIGATIONS</u>	<u>AS % OF PLANNED OBLIGATIONS</u>	<u># OF PROJECTS IN ACTIVE STAGE</u>	<u>AS % OF ALL ACTIVE STAGE PROJECTS</u>	<u>AS % OF COLUMN 1</u>	<u>TOT. PLANNED OBLIGATIONS FOR "ACTIVE" STAGE PROJ.</u>	<u>AS % OF ALL PLANNED OBLIGATIONS FOR ACTIVE STAGE PROJ.</u>	<u>AS % OF COLUMN 3</u>
Africa Region	16	17.6%	49,816	8.8%	8	16%	50%	20,316	5.9%	40.1%
Asia	13	14.3%	125,060	22.1%	7	14%	53.8%	92,403	26.6%	73.9%
Latin America	26	28.0%	155,692	27.5%	14	28%	50%	65,164	19.1%	42.5%
Hear East	24	26.4%	229,995	40.6%	16	32%	65.6%	164,105	47.3%	71.4%
Centrally Funded	10	11%	5,123	.9%	5	10%	50%	3,691	1.1%	1.1%
<u>TOTAL</u>	91	100.1%	565,686		50	100%	53.8%	346,679	100%	-

APPENDIX B: RAW DATA

APPENDIX B: RAW DATA

A. INTRODUCTION: DEFINING THE UNIVERSE OF POTABLE WATER PROJECTS

The task of defining the universe of potable water projects was undertaken with both automated and manual searches. There were two types of automated searches:

- A 'key word' search of the TEXT data base. Exhibit B-1 lists the key words used.
- The PBAR data base was queried using three-digit purpose and technical codes. We concentrated our efforts on technical code 545, which stands for "potable water supply."

In addition to these automated searches, we also read the FY 79 Congressional Presentation and recorded all projects for which any mention of potable water was made. This yielded a number of projects in TEXT and PBAR that were not retrieved in the automated search. An examination of the TEXT projects not retrieved in the automated search revealed no mention of potable water activity. The Congressional Presentation usually mentioned potable water activity as a possible future effort, so that it is not surprising that the TEXT information makes no mention of potable water for these projects. An examination of the PBAR projects not retrieved by the automated search revealed that none of them had a purpose or technical code related to potable water, making automated retrieval of these projects impossible.

We estimate that the search described above retrieved over 90% of the potable water projects. This estimate is based upon similar subject area searches that we have performed for the Office of Rural Development.

EXHIBIT B-1

KEY WORDS USED IN SEARCH OF TEXT DATA BASE

1. Potable water
2. Water quality
3. Water borne disease
4. Urban water supply
5. Rural water supply
6. Chlorination
7. Public faucet
8. Cistern
9. Water resources development
10. Water supply

Projects containing the following key words were retrieved if they also contained any key word with the word "water" in it.

11. Health
12. Sanitation
13. Latrine construction
14. Pump
15. Sewage
16. Sewerage
17. Desalinization technique
18. Desalinization facilities
19. Intestinal disease
20. Preventive medicine
21. Well disinfectant

If a greater degree of confidence is needed, PCI recommends a review of the project data by AID personnel involved with potable water projects. This will fill in any important omissions and may delete a few projects where potable water activity has been listed as a possibility in the Congressional Presentation but has not even been formally planned. Defining the universe of projects for any subject area will be a continual task, because new proposed projects are constantly being added to the P3AR data base. It is in this area that we are least confident about maintaining a "universe."

I. MISSING DATA

The sources of data for this study are four data bases managed by various offices within the Agency: TEXT, BREF, PBAR, and ACCT. The TEXT and BREF data bases were created by the Office of Development Information and contain narrative descriptions of projects which DI has been able to obtain, abstract, and enter onto the data bases. Problem, strategy, and summary statements are available from TEXT, along with the narrative summaries of the Logical Framework. The BREF data base contains information on the actual contents of the project files which DI maintains.

Most of the information in the PBAR data base is obtained from planning documents. Consequently, this data base is the source of

planned cost, planned length, etc. The life cycle of a project is also monitored, from the planning stage to completion.

The ACCT data base keeps track of a project's current and past obligations and expenditures by fiscal year. This information can also be listed by input component (e.g., commodities, U.S. personnel, etc.). Retrieval of planned expenditures by fiscal year is also possible.

The problem of missing data comprises three separate issues:

- The absence of a project from one or more data bases;
- The absence of data for a specific variable within a given data base;
- The failure of the data bases to aid in the task of "defining the universe" of potable water projects.

The absence of projects from one or more data bases is most noticeable with TEXT and BREF. Twenty-nine of the ninety-one projects are not in TEXT or BREF. One other project is in TEXT but contains no Logical Framework. Without the information available from TEXT and BREF, we were unable to answer questions on the projects' goal, purpose, and problem. We could not determine if there were pilot or demonstration efforts, or if the potable water projects were part of a larger effort. We were also unable to obtain answers to questions about the availability of information on project staff or documents.

The TEXT and BREF data bases have smaller populations than the other data bases for the following reasons:

- Searches for many project files by the Office of Development Information have been unsuccessful.
- DI usually does not obtain a project file until the project has become active. Therefore, all projects in the planning phase are not in TEXT or BREF.
- There is a backlog in the process of entering newly abstracted projects onto TEXT and BREF.

The absence of data for a specific variable within a given data base was also noticeable. Planned expenditure data was often unavailable from ACCT even when other information from that data base was available. Actual expenditure and obligation data by fiscal year was listed for FY 75 to the present fiscal year. Data prior to FY 75 was listed under "FY 00."

The data bases cannot be relied upon for defining the universe of potable water projects because there is no parameter for retrieval of projects by subject area that is both detailed enough and shared by all of the data bases. The key words of TEXT and BREF are specific enough, but such key words are not available on the other data bases. A search of PBAR by purpose and technical codes retrieves potable water projects, but there are no narrative summaries available, so that the detail available from TEXT is not ensured with the other data bases.

II. DATA SUMMARY

The tables on the following pages present the full set of raw data used in the analysis. The computer printouts are appended as Exhibit B.

EXHIBIT B: RAW DATA TABLES

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
CENTRAL AFRICAN EMPIRE	6760202 751201 800630	56	<ul style="list-style-type: none"> • General health conditions are deteriorating A • Endemic water-borne diseases are spreading A • Dependence on unhealthy pools A • Shortage of water A • Drought 	<ul style="list-style-type: none"> • Deteriorating health conditions reduced 	<ul style="list-style-type: none"> • Permanent protected source of potable water A • 250 small bore-drilled wells in northern region of CAE 	No	Active	No		500	375 -Commodities • 339 -Other costs • 17	No
CENTRAL AND WEST AFRICA REGIONAL	6250929 771001 791001	24					Active	yes		850	1447 -Short-term contracts • 46 -Contracts • 24 -Consultant Services • 2 -Travel • 1 -Other costs • 1374	No
CHAD	6770022 780411 831031	67					Active			3009	10 -Long-term personnel • 10	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF BORDER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
SOMALI REPUBLIC	6490037 611101 741230	46	<ul style="list-style-type: none"> Poor quality water delivered in insufficient quantities at prohibitive cost Inadequate installations Inadequate methods of operation, maintenance, and admin 	<ul style="list-style-type: none"> Health hazards reduced Expenditures for health services reduced 	<ul style="list-style-type: none"> Potable water supplied at reasonable cost to residents of Mogadiscio 	No	Terminated	No		8120	8120 -US personnel • 804 -Participants • 10 -Commodities • 113 -Other costs • 7193	No
SOUTHERN AFRICA REGIONAL	6900012 710201 750430	19	<ul style="list-style-type: none"> Human and livestock overcrowding on Swazi nation lands could be relieved by underutilized land owned by non-Swazis 	<ul style="list-style-type: none"> Agricultural production of traditional sector is increased 	<ul style="list-style-type: none"> Swazi government land purchase and development program is implemented 	No	Completed	Yes	<ul style="list-style-type: none"> Heavy equipment supplied to soil conservation units Swazi credit and saving banks expanded Relending program provided with local currency support T.A. provided for activities related to equipment Land purchased 	2200	2200 (no breakdown given)	No
TOGO	6930214 770930 800930	36					Active			4000	0	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
UPPER VOLTA	6860228						Planning			12280		No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/BENCH-SITUATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
INDONESIA	4970247 761028 611029	60					Active			5800	200 -ATI other costs o 200	No
	4970262 770124 820124	60	<ul style="list-style-type: none"> Lack of potable water in Surakarta 	<ul style="list-style-type: none"> Improve health & sanitary conditions in Indonesia Increase supply of potable water to urban users from 350 MSD to 662 MSD. 	<ul style="list-style-type: none"> Increase amount of potable water to present users in Sukakarta Provide free water, sanitary facilities to the poor Evaluate impact of project outputs over 5 year period 	No	Active	Yes	<ul style="list-style-type: none"> Health/social/economic study Sanitary facilities, including paramedical health care units 	5800	0	Yes Undifferentiated Report AID Supported Study
	4970267 780330 830330	60	<ul style="list-style-type: none"> 1 out of 140 million families have electricity (50,000 rural) 	<ul style="list-style-type: none"> Standard of living of rural pop. in 10 selected areas improved 	<ul style="list-style-type: none"> Increase production of rural power Provide reliable electric power to rural areas Train Indonesians in all phases of rural electrification 	No	Active	Yes	<ul style="list-style-type: none"> Rural sanitation w/health education component 	36000	42 -Participants o 33 -Construction o 9	No
PAKISTAN	3910406						Planning			15000		

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
	3910425						Planning			5000		No
PHILIPPINES	4920233 680701 761231	102					Completed			657		No
	4920260 731001 800930	94	<ul style="list-style-type: none"> Lack of integrated rural development program at sectoral level Lack of institutional capability 	Develop rural sector of Philippines	<ul style="list-style-type: none"> Formulation to evaluation of IRD program in Bicol River Basin Institutional capability Organizational structure 	Yes	Active	Yes	<ul style="list-style-type: none"> Water resources Crops Transportation Agribusiness Livestock Fisheries Farm Mech. Agr. credit Land reform Coops Ag. Educ. Health Nutrition 	2498	<ul style="list-style-type: none"> 1842 -US personnel • 1391 -Participants • 75 -Commodities • 255 -Other costs • 121 	No
	4920263 740523 790510	50	<ul style="list-style-type: none"> Major health problems Poor quality water Lack of technical, financial, and managerial skills 	Improved public health in secondary cities of Philippines	<ul style="list-style-type: none"> Reliable public water service extended to secondary cities Technical and institutional capability developed 	No	Active	No		15805	<ul style="list-style-type: none"> 11097 -US personnel • 400 -Participants • 100 -Other costs • 10597 	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PICOTY/DEPOR-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
PHILIPPINE (cont.)	4920309 780117 791231	12	Community water-works systems in 125 urban communities unsafe	Improve health and economic welfare of provincial poor	<ul style="list-style-type: none"> • Economic development of target areas <li style="padding-left: 20px;">A • Increase use of safe, reliable, economic sources of water <li style="padding-left: 20px;">A • Institutional development of local water utilities admin. 	No	Active	No		21000	1525 -US Personnel • 0 -Other Costs • 1525	No
THAILAND	4930179 600901 760630	197	<ul style="list-style-type: none"> • Lack of basic rural health services <li style="padding-left: 20px;">A • Limited manpower and manpower resources • Poor education and communication channels between govt. & villages • Uncoordinated organizational activities 	Comprehensive health services to rural pop.	<ul style="list-style-type: none"> • Operational, integrated rural health delivery service 	No	Completed	Yes	<ul style="list-style-type: none"> • Training of health personnel • Mobile health education teams • Research prog. for various diseases • Distribution of high protein foods • Health Centers • Other sanitation services 		6168 -US Personnel • 1577 Participants • 1263 -Commodities • 3314 - Other Costs • 14	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PRIORITY/DEFER- STIPATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE	
BOLIVIA	5110364 711201 190619	91	<ul style="list-style-type: none"> • No viable community A • Diversity of language • Mass illiteracy • Poor production and practice of forestry and farming • Inadequate roads • Poor sanitation • Superstition • Outworn social and economic organizations 	<ul style="list-style-type: none"> • Modernization of rural sector 	<ul style="list-style-type: none"> • Development projects carried out by Bolivian community development program and • Permanent local institutions for self-help are encouraged 	No	Active	Yes	<ul style="list-style-type: none"> • Schools • Agriculture demonstrations • Irrigation works • Health facilities • Roads & bridges • Training in agriculture • Home improvement • Health & literacy 	27792	22257	<ul style="list-style-type: none"> - US personnel • 4655 - local & technical personnel • 151 - Participants • 389 - Commodities • 464 - Other costs • 10132 - Roads & trails • 2457 - Project Admin. • 18 - Project location • 146 - Production services • 1248 - Social service • 652 <p>27151*</p> <p>* the component parts total to 3305 less than the grand total</p>	Yes End-of-Tour Report (2)
	5110458 770916 821216	63	<ul style="list-style-type: none"> • High morbidity & mortality in all age groups A • High incidence of enteric & bacterial diseases in all age groups A • Inadequate sanitation & potable water 	<ul style="list-style-type: none"> • Improve health status of rural poor 	<ul style="list-style-type: none"> • Reduce incidence of enteric & bacterial diseases 	No	Active	Yes	<ul style="list-style-type: none"> • Rural sanitation w/health education component 	4199	0	No	

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
BOLIVIA (cont.)	5110479 770331 790930	30	<ul style="list-style-type: none"> Rural development impeded High incidence of water-borne disease Lack of potable water Insufficient mechanisms for potable water delivery systems 	<ul style="list-style-type: none"> Improved health & nutritional status of selected rural communities 	<ul style="list-style-type: none"> Provide potable water to 56 rural communities (pop. 200-1999) in 5 southern provinces 	No	Active	Yes	<ul style="list-style-type: none"> Health education Mass media 	300	300 Other costs	Yes Working paper
BRAZIL	5120062 610401 740930	62	<ul style="list-style-type: none"> Lack of sewer & water facilities in urban areas Political favoritism Institutional inefficiencies Duplication of effort Lack of managerial ability at operational level Inappropriate financing techniques 			No	Completed	No			3182 - US personnel • 1512 - Local & TCN personnel • 141 - Participants • 392 - Commodities • 969 - Other costs • 168	Yes End-of-Tour Report (8) Final Report (2)

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
BRAZIL (cont.)	5120239 660801 731230	89	<ul style="list-style-type: none"> High incidence of water-borne diseases Inadequate water services Rapidly increasing urban pop/ 	<ul style="list-style-type: none"> Reduced incidence of water-borne disease in Guanabara State 	<ul style="list-style-type: none"> Potable water provided to people in Guanabara State 	No	Completed	No			2923	No
	5120279 680501 741231	67	<ul style="list-style-type: none"> 52% of Brazilian population lives in areas in which malaria has been endemic 	<ul style="list-style-type: none"> Agricultural & labor force is increased in areas previously affected by malaria 	<ul style="list-style-type: none"> Malaria is eradicated in Brazil by 1975 	No	Completed	Yes	<ul style="list-style-type: none"> Malaria control program 	16584	16584	<ul style="list-style-type: none"> Yes Special Eval. Project Appraisal Report
	5120280 700101 741231	50	<ul style="list-style-type: none"> High incidence of communicable, gastrointestinal diseases Lack of water and sewerage services 	<ul style="list-style-type: none"> Improved environmental sanitation & home hygiene system established 	<ul style="list-style-type: none"> Effective water & sewerage facilities constructed throughout Brazil 	No	Completed	Yes	<ul style="list-style-type: none"> Health education Preventive medical services 	15246	15246	<ul style="list-style-type: none"> Yes Sectoral Analysis
	5120291 710402 770331	71	<ul style="list-style-type: none"> Incidence of communicable, water-borne diseases in less developed urban centers Govt. lacks funds 	<ul style="list-style-type: none"> Reduced morbidity & mortality Reduced incidence of GI diseases 	<ul style="list-style-type: none"> Water & sewerage services provided to poorer urban centers 	No	Completed	No		24991	24991	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PICUT/DEMOM-STRATION	STATUS	PART OF DANGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
COLOMBIA	5140183 741217 771231	89	<ul style="list-style-type: none"> 50% of pre-school children's deaths caused by Gastro-Enteritis 30% of people in smaller cities served by nat. 	<ul style="list-style-type: none"> Improve health status in Colombia 	<ul style="list-style-type: none"> Enable nat. ins. for municipal devel. to invest in water & sewer systems 	No	Active	No		7500	7483	No
EL SALVADOR	5190173 760501 781231	31	<ul style="list-style-type: none"> Delivery of primary health services inhibited Lack of trained health personnel in rural areas 	<ul style="list-style-type: none"> Increased use of better health sanitation, nutrition, & parenthood practices in rural areas 	<ul style="list-style-type: none"> Delivery of primary health education & services to rural communities 	No	Active	Yes	<ul style="list-style-type: none"> Train health promoters & mid-wives Train community leaders in health matters 	28	20 - All other costs	No
GUATEMALA	5200231 750601 770530	25	<ul style="list-style-type: none"> Lack access to potable water Lack access to latrines Lack of community involvement in socio-economic development 	<ul style="list-style-type: none"> Improve quality of life Create sanitary & hygienic living conditions Communities involved in self-improvement projects 	<ul style="list-style-type: none"> Create high degree of purity available for domestic use Reduce quantity of human feces Create community self-help projects 	Yes	Active	No		268	267 - US personnel • 107 - Other costs • 160	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PICUT/DEKOR-STRATIGOM	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
GUATEMALA (cont.)	5200244 770301 750331	6	<ul style="list-style-type: none"> General poor health in rural sector Low quality drinking water & lack of latrines 	<ul style="list-style-type: none"> Improve status of health in Guatemala 	<ul style="list-style-type: none"> Increase availability of safe water supplies in rural areas 	No	Completed	No		24	24 - All methodology water latrine	No
GUYANA	5040031 650401 800930	186					Active			416	341 - Participants • 15 - Other costs • 326	No
	5040048 680824 760630	93	<ul style="list-style-type: none"> Lack of complete & efficient potable water systems Inadequate administration, management & development of public water supplies No central water authority 	<ul style="list-style-type: none"> Improve environmental health of Guyana population 	<ul style="list-style-type: none"> Project area provided with adequate & dependable water 	Yes	Completed	No		5000	5000 (No breakdown given)	No
HAITI	5210076 750601 780331	34	<ul style="list-style-type: none"> 3.5% of deaths in Haiti are caused by water-borne intestinal diseases 	<ul style="list-style-type: none"> Agricultural production of rural pop. improved Health of rural pop. improved 	<ul style="list-style-type: none"> Reduced incidence of gastro-intestinal diseases in rural Haiti 	No	Active	No		121	121 - All contract services	Yes Incoming Cable

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
HAITI (cont.)	5210080 751201 781231	37	<ul style="list-style-type: none"> Inadequate water supply ▲ Chronic drought and Decreased fertility ▲ Drought Erosion 	<ul style="list-style-type: none"> Improved health conditions & agricultural production 	<ul style="list-style-type: none"> Develop soil & water resources 	No	Active	Yes	<ul style="list-style-type: none"> Forestation Irrigation Hydrological survey 	45	122 - All contract services	No
	5210112						Planning			101		No
HONDURAS	5220177						Planning			450		No
JAMAICA	5320646 770930 810930	48	<ul style="list-style-type: none"> 4000 small, hillside farmers have low income ▲ Lack of soil conservation measures Disjointed credit, marketing & farm input systems 	<ul style="list-style-type: none"> Standard of living of Jamaican farmers improved ▲ Improved roads, housing, electricity, & water provided <p>Subgoal:</p> <ul style="list-style-type: none"> Replicable agr. production model established 	<ul style="list-style-type: none"> Increase agr. production on small hillside farms ▲ Control soil erosion ▲ Strengthen Ministry of Agriculture 	Yes	Active	Yes	<ul style="list-style-type: none"> Soil conservation Forestation Access roads Farming system introduction Training of technicians Small farmer credit Rural electrification Housing 	1500	5 - Personnel ● 3 - Participants ● 2 - Other costs ● 0 - Uncommitted ● 0	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	FILTRATION/DESALINATION	STATUS	PART OF CARRIER PROJECT?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
NICARAGUA	5240102 750401 760630	15	<ul style="list-style-type: none"> • Lack of health baseline data • Lack of planning capability • Separation of curative & preventive services • Lack of trained manpower in health planning & admin. • Lack of coordination by different government agencies 	• Improved health of population	• Improved rural health services	No	Terminate	Yes	• Health sector assessment	132	103 - US personnel • 78 - Commodities • 5 - Other costs • 20	Yes Sector Analysis
	5240110 760301 790330	37	• No capability to plan & test an integrated rural health delivery system	• Improved health status of rural & suburban population	• Integrated rural health delivery system instituted	Yes	Active	Yes	<ul style="list-style-type: none"> • Training of health personnel • Health education • Environment sanitation • Nutrition • MCH 	383	281 - Rur. hlt. del. system • 281 - Commodities • 0 - Other costs • 0	No
	5240112 750601 770930	28	<ul style="list-style-type: none"> • Low quality of life among agrarian reform colony • Low quality & quantity of yearly harvests 	• Improved quality of life of low income farmers	• Increased # of harvest & amount harvested by agrarian reform colony	No	Terminate	Yes	<ul style="list-style-type: none"> • Irrigation sys. • Seeds, fertilizers, insecticides • Cropping plans • Electrical sys. 	200	201 - US personnel • 0 - Commodities • 201	No

POTABLE WATER PROJECTS

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
NICARAGUA (cont.)	5240114 760601 781231	43	<ul style="list-style-type: none"> Lack of effective large scale preventive & primary health care for rural poor A Lack of rural outreach mechanisms 	<ul style="list-style-type: none"> Rural health coverage extended, improved & integrated 	<ul style="list-style-type: none"> Community health activities initiated 	No	Active	Yes	<ul style="list-style-type: none"> Vaccinations Training of health educators Training of health collaborators 	662	285 - US personnel • 198 - Participants • 46 - Commodities • 4 - Other costs • 37	No
PANAMA	5250138 690506 760830	98	<ul style="list-style-type: none"> Inadequate water treatment facilities A Water treatment plant's 30 MGD capacity reached 	<ul style="list-style-type: none"> Potable water needs of Panama city met 	<ul style="list-style-type: none"> New water supply system designed & built 	No	Completed	No		20000	20000	No
	5250170 730125 760630	41	<ul style="list-style-type: none"> Malnutrition & high incidence of disease A Poor distribution of basic health services A Ineffective health education programs A Lack of community involvement 	<ul style="list-style-type: none"> Improved health & nutrition status of 800 communities 	<ul style="list-style-type: none"> More effective health services provided 	No	Completed	Yes	<ul style="list-style-type: none"> Community development Rural health delivery Nutrition Agricultural training 	3800	3800	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	FILDT/DEMUN-STRATION	STATUS	PART OF COUNTRY PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
PANAMA (cont.)	5250181 (01) 5250181 (02) 761014 800810	46	<ul style="list-style-type: none"> Lack of integrated & generalize health care delivery system Lack of environmental sanitation & potable water 	<ul style="list-style-type: none"> Improve health of marginal Panamanian pop. 	<ul style="list-style-type: none"> Institutionalize public low cost integrated health delivery system 	No	Active	Yes	<ul style="list-style-type: none"> Efficient health service Training & utilization of health assts. Provision of health care services & facilities 	9500	<u>1172</u> <ul style="list-style-type: none"> Env. Hlth. Cons • 1105 - Health facil. construction & equipment • 9 - Nutrition • 0 - Training • 32 - Adm. • 26 - Remodel existin facilities • 0 - Unearmarked • 0 	No
PERU	5270177 770826 800930	37								450	<u>123</u> <ul style="list-style-type: none"> - Other costs • 123 	No
	5270134 71111? 751231	50	<ul style="list-style-type: none"> Community services interrupted • 1970 Earthquake 	<ul style="list-style-type: none"> Economic & social conditions in Peru improved 	<ul style="list-style-type: none"> Areas affected by earthquake provided with housing & community services 	No	Completed	Yes	<ul style="list-style-type: none"> Irrigation • Electricity • Small industry • Housing construction 	3000	<u>3000</u>	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF DESIGN PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
AFGHANISTAN	3060131 740601 800930	36	<ul style="list-style-type: none"> Politically and economically based discontent Lack of social services and infrastructure Lack of capital and expertise in the Rural Development Division 	<ul style="list-style-type: none"> Organizational capacity in the Rural Development Division for high impact rural development programs 	<ul style="list-style-type: none"> Rural works/experimental integrated rural development projects with direct impact on the rural poor are completed 	No	Active	Yes	<ul style="list-style-type: none"> Training 80 irrigation structures constructed 100 km. of farm-to-market roads completed Operations and policies of Resource Development Division reviewed 3 model IRD projects begun 	4352	1058 <ul style="list-style-type: none"> - US personnel • 628 - Participants • 65 - Commodities • 46 - Other Costs • 319 	Yes Progress Report
	3060144 760601 790630	37	<ul style="list-style-type: none"> Basic health needs of rural & isolated communities, i.e., basic health services emphasizing preventive health care & child & maternal care are largely neglected Medical care tends to be curative; to take place in urban settings & to specialize in special health problems 	<ul style="list-style-type: none"> Health of rural Afghan population is improved 	<ul style="list-style-type: none"> Basic health services delivered to 830,000 persons living in 50 minor civil divisions within 4 of Afghanistan's 6 health regions. Two or more alternative health delivery systems set up as pilots for replication in those areas where basic health services are not delivered 	Yes	Active	Yes	<ul style="list-style-type: none"> Training Operational regional health office supporting 50 B.H.S. and A.H.S. experiments B.H.C. supply system expanded Client record system operating 	7110	1683 <ul style="list-style-type: none"> - US personnel • 1263 - Participants • 374 - Commodities • 33 - Other costs • 13 	No
EGYPT	2630038 770929 820131	52					Active			15000	0	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
EGYPT (cont.)	2630089						Planning			30000		No
ISRAEL	7710005 750625 781230	31	<ul style="list-style-type: none"> • Lack of fresh water • Lack of desalination facilities 	<ul style="list-style-type: none"> • Water supplied to arid and semi-arid lands worldwide 	<ul style="list-style-type: none"> • Large-scale commercially viable water desalination technology completed 	No	Active	No		20000	756 ATT other costs	No
JORDAN	7780183 750601 791231	54	<ul style="list-style-type: none"> • Low standard of living • Overpopulation and • Lack of sufficient irrigation • Lack of financial assistance and integrated approach to Jordan Valley 	<ul style="list-style-type: none"> • Welfare and Productivity increased • Provide basic social services in self-sustaining communities 	<ul style="list-style-type: none"> • Population locates itself in specified services settlements 	No	Active	Yes	<ul style="list-style-type: none"> • Housing sites financed • Village streets • Health facilities • Municipal Buildings • Classrooms • Farm roads • Social development centers • Housing 	14485	7165 - US personnel • 324 - Other costs • 14150	No
	2760211						Planning			18500		No
LEBANON	2680306	18					Planning			6500		No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
MOROCCO	6080127 760601 830630	61	<ul style="list-style-type: none"> Large food import requirements Low income Shortage of water Irregular Rainfall Inadequate agricultural practices 	<ul style="list-style-type: none"> Lessen import requirements Increase agricultural production 	<ul style="list-style-type: none"> Irrigated agriculture on 15410 ha. of land in Doukkala region established by 1979 	No	Active	Yes	<ul style="list-style-type: none"> Sprinkler irrigation and drainage system Agricultural Credit Village and project infrastructure Roads Electricity Schools 	13000	2930 - Pumps & Motors • 816 - Movable sprinklers • 2114	No
PORTUGAL	1500005 760813 781231	28	<ul style="list-style-type: none"> High incidence of water-borne diseases Lack of basic sanitation facilities 	<ul style="list-style-type: none"> Improve general health status of affected communities Extend social benefits of basic sanitary services to greater % of population 	<ul style="list-style-type: none"> Provide water and sewerage service to small towns in remote regions of Portugal 	No	Active	No		8000	2495 - Basic sanitation (water) • 1032 - Basic sanitation (sewage) • 1463 - Uncommitted • 0	No
	1500010 770930 800930	36	<ul style="list-style-type: none"> High infant mortality High incidence of water-borne diseases 6% of rural pop has adequately piped water Unsanitary excreta disposal systems 	<ul style="list-style-type: none"> Diminish investment gaps between regions and income gaps within society Redistribute national wealth Increased quality of life for target population 	<ul style="list-style-type: none"> Provide balance of payments of support to Portugal 	No	Active	No		12000	0	Yes Sectoral Analysis

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
SYRIA	2760008 750630 800630	60					Active			48000	154 - All earmarked	No
TUNISIA	6640285 750501 761231	19	<ul style="list-style-type: none"> Lack of potable water Lack of maintenance capabilities 	<ul style="list-style-type: none"> Improve health status of rural poor 	<ul style="list-style-type: none"> Repair sanitation and maintenance of hand pumps and well sites 	No	Completed	No		154	154 - Commodities	No
	6640288 760201 780630	29	<ul style="list-style-type: none"> Government lacks proper and regular maintenance capabilities for potable water supply in El Kef 	<ul style="list-style-type: none"> Health status of rural poor improved 	<ul style="list-style-type: none"> Repair, sanitation, and future maintenance of hand pumps and well sites in rural El Kef assured 	No	Terminated	No		45	45 - all other commodities	No
	6640298 770425 790531	25	<ul style="list-style-type: none"> Morbidity and mortality rates GI diseases Lack of potable water 	<ul style="list-style-type: none"> Lower morbidity and mortality rates 	<ul style="list-style-type: none"> Potable water provided 	No	Completed	Yes	<ul style="list-style-type: none"> Latrines Training of health teams to teach sanitary techniques 	346	270 - Commodities	No
	6640299 761217 780630	18	<ul style="list-style-type: none"> Overcrowded urban areas Premature mortality in rural areas Sickness in rural areas Inefficient potable water 	<ul style="list-style-type: none"> Health in rural areas improved 	<ul style="list-style-type: none"> Upgraded environmental sanitation obtained 	No	Active	Yes	<ul style="list-style-type: none"> Health Education 	267	213 - US Personnel <ul style="list-style-type: none"> 30 Participants 0 Commodities 187 Other Costs 14 	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PICT/DISCON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
YEMEN ARAB REPUBLIC	2790017 730201 750630	28	<ul style="list-style-type: none"> Deteriorating and ineffective water system in Taiz 	<ul style="list-style-type: none"> Produce potable water to urban Yemen 	<ul style="list-style-type: none"> Rehabilitate Taiz water system to 1.2 million gallon/day capacity 	No	Active*	No		457	378 - US Personnel • 47 - Commodities • 188 - Other costs • 143	Yes Undifferentiated Report
	2790021 730201 780630	64	<ul style="list-style-type: none"> Most common water sources subject to seepage from cesspools and drought 	<ul style="list-style-type: none"> Provide adequate emergency water supply 	<ul style="list-style-type: none"> Install wells, network of water mains, and 1 hydrant per 500 people 	No	Active*	No		753	736* - US Personnel • 102 - Commodities • 288 - Other costs • 137 * Does not add up-- missing some entries	No
	2790022 730201 780630	52	<ul style="list-style-type: none"> Lack of adequate potable water supplies 	<ul style="list-style-type: none"> Improved health and productivity 	<ul style="list-style-type: none"> Capability of public works ministry to coordinate rural self-help projects is improved Capability of public works ministries to support large-scale rural water projects is improved 	No	Active	No		5256	4635* - US Personnel • 289 - Commodities • 2228 - Participants • 135 - Local and technical personnel • 51 - Other costs • 1535 * Off by 50	No
* Planned completion date has passed												

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POPULATION AND HUMANITARIAN ASSISTANCE	9320043 750601 781031	41	<ul style="list-style-type: none"> Poor majority lack health care Lack of planning and programming capability 	<ul style="list-style-type: none"> Humanitarian and economic assistance provided to poor majority in selected countries 	<ul style="list-style-type: none"> Capability developed to plan and develop economic and humanitarian programs The following skills are developed: Project design & analysis; project monitoring and evaluation 	Yes	Active	Yes	<ul style="list-style-type: none"> Staff training Development of consultant base Formulate, test and adopt system for program development and project management Application of program development systems to other countries 	1345	595 -US personnel • 595	No
TECHNICAL ASSISTANCE	9310079 760701 780900	26	<ul style="list-style-type: none"> Rural poor often use contaminated water supplies Lack of durable efficient, easily operable and inexpensively produced hand water pumps 	<ul style="list-style-type: none"> Potable water supplies more available to LDC rural population 	<ul style="list-style-type: none"> A hand water pump is produced which is optimum design: durable, easily used by women and children, resistant to vandalism, and capable of being mass produced by indigenous manufacturers 	Yes	Active	No		190	171 -US personnel • 171	No
	9310115 690401 7-231	116	<ul style="list-style-type: none"> Water loss and lack of proper drainage at terminus of a canal system Lack of properly designed water delivery & removal systems 	<ul style="list-style-type: none"> Water in canal systems in LDCs is optimally used 	<ul style="list-style-type: none"> Water loss and water logging is reduced Construction & maintenance by small farmers of systems to transport water from the terminal end of a canal 	Yes	Terminated	Yes	<ul style="list-style-type: none"> Maintenance of int'l school of water resources Organization of int'l symposium on soil/water Information and organization network maintained 	1050	1050 -US personnel • 1050	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMONSTRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
TECHNICAL ASSISTANCE (cont.)	9310564 730601 749930	15	<ul style="list-style-type: none"> Quality of life is very low Lack of training to enable people to better their living conditions Lack of non-formal education designed to relieve suffering Governments lack data on appropriate human and material resources 	<ul style="list-style-type: none"> Non-formal education programs employed in helping selected African and Caribbean peoples raise their quality of life 	<ul style="list-style-type: none"> Feasibility of developing non-formal educational programs in rural and urban family units is determined 	No	Completed	Yes	<ul style="list-style-type: none"> Literature search LDC families interviewed LDC university and staff interviewed Random interviews in LDCs Acquired data is published 		25 (No breakdown given)	No
	9310592 750701 771231	30	<ul style="list-style-type: none"> Lack of well designed water supply research 	<ul style="list-style-type: none"> Level of health in LDCs is improved 	<ul style="list-style-type: none"> More efficient water related health projects are designed by Foreign Assistance agencies 	Yes	Completed	No		264	241 -US personnel • 231 -Local and technical personnel • 10	<ul style="list-style-type: none"> Yes Progress Report Incoming Cable
	9310867 710501 780630	86	<ul style="list-style-type: none"> Research needed to establish the relationship between environmental sanitation factors and food malabsorption 	<ul style="list-style-type: none"> Nutritional losses caused by gastro-intestinal diseases is reduced worldwide 	<ul style="list-style-type: none"> A methodology for establishing the effectiveness of community potable water supply, improve waste disposal and sanitation education in reducing food waste due to intestinal malabsorption is developed 	Yes	Active	Yes	<ul style="list-style-type: none"> Medical research on nutrient waste and sanitation Pilot programs Studies on cost effectiveness of improved sanitation Results published Expansion of program 	1810	1808 -US personnel • 1806 -Other costs • 2	No

COUNTRY	PROJECT NUMBER AND DATES	PLANNED LENGTH	PROBLEM	GOAL	PURPOSE	PILOT/DEMON-STRATION	STATUS	PART OF LARGER PACKAGE?	IF YES, OTHER COMPONENTS	PLANNED COSTS	EXPENDITURES TO DATE	ANY EVALUATION DOCUMENTS & TYPE
TECHNICAL ASSISTANCE (cont)	9311133 770930 780930	12					Active			77	56 -US personnel • 56	No