664-0312-④
PD-AAG-133-A1

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INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523

QPG PROPOSAL

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TUNISIA - CARE MEDICO Kasserine
Water Improvement Sub-Project

664-0312.14

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8/13/79

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PP

2. DOCUMENT CODE: 3

3. COUNTRY/ENTITY: Tunisia

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 664-0312.14

6. BUREAU/OFFICE: A. SYMBOL: NE; B. CODE: 03

7. PROJECT TITLE (Maximum 40 characters): Kasserine Wells/Rural Hygiene

8. ESTIMATED FY OF PROJECT COMPLETION: FY 82

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 79; B. QUARTER (Enter 1, 2, 3, or 4); C. FINAL FY 79

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

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	(1,050)	( )	(1,050)	(1,050)	( )	(1,050)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1. Peace Corps	12		12	40		40
OTHER U.S. 2.						
HOST COUNTRY		58	58		407	407
OTHER DONOR(S)	211		211	240		240
TOTALS	1,273	58	1,331	1,330	407	1,737

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 79 F. GRANT	E. 1ST FY 79 G. LOAN	H. 2ND FY 80 I. GRANT	H. 2ND FY 80 J. LOAN	K. 3RD FY 81 L. GRANT	K. 3RD FY 81 M. LOAN
(1) Health	510	545		1,050					
(2)									
(3)									
(4)									
TOTALS				1,050					

A. APPROPRIATION	N. 4TH FY ___ O. GRANT	N. 4TH FY ___ P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1)					1,050	
(2)						
(3)						
(4)						
TOTALS					1,050	

12. IN-DEPTH EVALUATION SCHEDULED: MM 09 YY 82

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

1 (1 = NO, 2 = YES)

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE:

TITLE: Kerry MacNamara
Acting Director, NE/TECH

DATE SIGNED: MM 08 DD 24 YY 79

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM 08 DD 13 YY 79

AID 1330-4 (3-78)

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS PART I

1. TRANSACTION CODE: A (A - ADD, C - CHANGE, D - DELETE)

PAF

2. DOCUMENT CODE: 5

3. COUNTRY/ENTITY

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits): 664-0312

6. BUREAU/OFFICE: A. SYMBOL: NE; B. CODE: 3

7. PROJECT TITLE (Maximum 40 characters): Kasserine Wells/Rural Hygiene-CTRD

8. PROJECT APPROVAL DECISION — ACTION TAKEN: A (A - APPROVED, D - DISAPPROVED, DE - DEAUTHORIZED)

9. EST. PERIOD OF IMPLEMENTATION: YRS. 03 QTRS

10. APPROVED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 79 F. GRANT	E. 1ST FY 79 G. LOAN	H. 2ND FY ___ I. GRANT	H. 2ND FY ___ J. LOAN	K. 3RD FY ___ L. GRANT	K. 3RD FY ___ M. LOAN
(1) Health	510	545	- -	1,050					
(2)									
(3)									
(4)									
TOTALS				1,050					

A. APPROPRIATION	N. 4TH FY ___ O. GRANT	N. 4TH FY ___ P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1)					1,050	
(2)						
(3)						
(4)						
TOTALS					1,050	

11. PROJECT FUNDING AUTHORIZED — A. GRANT: 1; B. LOAN:

ENTER APPROPRIATE CODE(S): 1 - LIFE OF PROJECT; 2 - INCREMENTAL LIFE OF PROJECT

C. PROJECT FUNDING AUTHORIZED THRU FY 82

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED ($000)

A. APPROPRIATION	B. ALLOTMENT REQUEST NO. ___ C. GRANT	D. LOAN
(1) Health	1,050	
(2)		
(3)		
(4)		
TOTALS	1,050	

13. FUNDS RESERVED FOR ALLOTMENT

TYPED NAME (Chief, SER/FM/FSD)

SIGNATURE

DATE

14. SOURCE/ORIGIN OF GOODS AND SERVICES: [X] 000 [ ] 941 [X] LOCAL [ ] OTHER ___

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE MM DD YY	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE MM DD YY

AID 1330-4 (7-79)

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D.C. 20523

ASSISTANT
ADMINISTRATOR

BEST AVAILABLE DOCUMENT

PROJECT AUTHORIZATION
AND REQUEST FOR ALLOTMENT OF FUNDS

PART II

Name of Country: Tunisia Name of Project: Kasserine Wells/ Rural Hygiene

Number of Project: 664-0312.14

Pursuant to Part I, Chapter I, Section 104 of the Foreign Assistance Act of 1961, as amended (the "Act"), I hereby authorize an Operational Program Grant ("OPG") to CARE (the "Grantee") of not to exceed One Million Fifty Thousand United States Dollars ($1,050,000) to assist in financing the foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph (the "Project").

The Project will provide potable water to approximately 35,000 people in five rural provinces of Kasserine governorate (Foussana, Thala, Djediliane, Sbiba and Sbeitla) by reconstructing or renovating 100 wells. The Project will also strengthen local water supply institutions so that the water improvement, maintenance and hygiene education programs continue to function. The entire amount of the A.I.D. financing herein authorized for the Project will be obligated when the OPG Agreement is executed.

I hereby authorize the negotiation and execution of the OPG Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority subject to the following term, together with such other terms and conditions as A.I.D. may deem appropriate:

a. Source and Origin of Goods and Services

Except as A.I.D. may otherwise agree in writing, goods and services financed by A.I.D. in support of the Project shall have their source and origin in the United States or Tunisia.

Section 612(b) Determination

I hereby determine in accordance with Section 612(b) of the Act, that (a) the expenditure of United States Dollars for the procurement of goods and services in Tunisia, as authorized above, is required to fulfill the purposes of the Project; (b) the purposes of the Project cannot be met effectively through the expenditure of United States-owned local currencies for such procurement; and (c) the administrative official approving local cost vouchers may use this determination as the basis for his certification as required by Section 612(b) of the Act.

Joseph C. Wheeler
Assistant Administrator
Bureau for Near East

August 31, 1979
Date

MEMORANDUM

Date: August 14, 1979

To: NE/TECH/HPN, Joseph Haratani, Project Chairperson

From: NE/PD/PDS, Stephen F. Lintner, Environmental Coordinator
SFL

Subject: TUNISIA - Kasserine Wells/Rural Hygiene (664-0312.14) - Environmental Clearance

I have reviewed the proposed project and recommend that it be given a "Negative Determination" in accordance with the provisions of 22 CFR 216, "AID Environmental Procedures". This environmental clearance is contingent on the following issues being addressed during the implementation phase:

1. That in all cases where wells will be fitted with pumps the potential impacts of water withdrawal be evaluated in advance by the proper technical authorities. This is especially important at sites where animal watering and/or irrigation is anticipated to occur.

2. That procedures be developed to insure the proper disposal of diesel fuel and oil wastes to avoid well contamination at sites where pumps are provided.

3. That animal water troughs be located at reasonable distances from the wells.

cc: GC/NE, Bunyan Bryant
AID/Tunis, Ernest F. Gibson, Environmental Officer
AID/Tunis, Gerald Zarr, Regional Legal Officer

guidelines jointly established with the project staff. The project will assist in the training of the regional and community health/sanitation improvement agents and will participate in the evaluation of education methods and results.

The proposed project envisions the institutionalization within the regional MOPH of both maintenance and education components in order to lend continuity to construction activities by assuring the up-keep of the pump systems to be used, and to encourage a substantial self-help input form target beneficiaries.

The expected duration of the project will be from July 1979 to July 1982.

2. PROJECT DESIGN

Statement of the Problem (s): The majority of the population of Kasserine depends on well or spring sources for its upply of water. Most of these sources, especially those in the poorer rural regions of the governorate, remain open and have not benefitted from casing, covering, or the installation of pump delivery systems to minimize contamination. Some have only dirt or mud-lined walls which too frequently permit cave-ins at water bearing levels. This may lead to a drying up of the well during the summer months. Furthermore, such wells are difficult to chlorinate since the amount of organic matter in the water is usually so high that after a few hours little or no residual chlorine remains.

Open and unprotected water points such as these must be considered contaminated and this is borne out by the regionalMOPH laboratory analyses of their water. Not surprisingly, such statistics indicate extremely high

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MULTI-YEAR PLAN - PROJECT PROPOSAL

Country: TUNISIA 20 Project Title: Kasserine Wells Rural Hygiene Project

MYP Period: 1979-1981

1. INTRODUCTION

CARE, in close collaboration with the governorate of Kasserine and the Ministry of Public Health, proposes a three-year project to renovate and reconstruct 100 existing open wells in five of the seven rural provinces of Kasserine (Foussana, Thala, Djijiliane, Sbiba and Sbeitla). Construction will include the deepening, cleaning, casing and capping of each well, or drilling of new wells if appropriate. Ten of the wells will be equipped with motor pumps and 10,000 litre reservoirs. The aim will be to transform each site into a closed system, and thereby provide cleaner drinking water to approximately 35,000 of the poorest and most isolated inhabitants of rural Kasserine. This project attempts to distribute potable water interventions and technologies in such a way as to meet the needs of the greatest number of people at the least cost.

The second major activity of the project is to increase the awareness of residents of communities served by the project wells of improved health and sanitation practices and to encourage them to adopt these health-promotive practices. Through this activity attempts will be made to reach the target population in a variety of ways using the existing health and education insfrastructure as well as developing additional types of health/sanitation improvement agents at the governorate (provincial) and community levels.

The majority of the community awareness activities will be carried out by the regional health authorities a long

rates of fecal contamination and point to the high incidence of water borne diseases in these target areas. Intestinal parasites causing gastro-enteric diseases such as dysentery are common and especially serious since they reduce productivity in agricultural regions where most of the work is physical labor. Cholera and typhoid remain as ever-present dangers where sources of drinking water have not been adequately protected.

This situation has been compounded in the past few years by near-drought conditions and a serious drop in the water tables in many areas. This has led to even higher incidences of water-borne illness as people drink from open rain cisterns, at ground levels, rivers, and other contaminated sources of water which are not normally used. Cattle have also suffered, both through parasites and disease, and also because of the often long distances that must be travelled during the summer months to reach the nearest dependable water supply.

The proposed project seeks to extend to this area the knowledge CARE has built up over the years in previous well construction and health education projects. Efforts will be directed at those public wells and springs either un-constructed or in a severe state if disrepair. The number of such water points in the 5 delegations of Kasserine is approximately 210, of which 150 are wells and 60 are springs. Following a detailed survey of these sites, 100 will be chosen for construction and incorporation within the planned maintenance and educational components.

BASELINE DATA

1) Quantitative Indicators- CARE has engaged in water point reconstruction for some time and has employed methods to evaluate its effectiveness with varying amounts

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of success water samples analysed with a potable water laboratory (Millipore) in the Bizerte Wells Project (1974-76) showed a substantial improvement in the pattern of coliform counts of "before" and "after" construction samples. A tabulation of "after" tests showed that approximately 33% had potable water (0-1 coliform), 52% had a count between 2 and 50, and 15% were in a 50-208 ranges. Given the state of the water in these same sites before construction, all of which evidenced dangerously high coliform counts, there is no question that the quality of this water was greatly improved. Results from tests now being run on wells involved in the present Kef reconstruction project are showing similar positive results. A recent introduction in Kef of an extensive MOPH program to install jar-type chlorinators ("Gargoulettes") in order to provide continuous chlorination an all public wells, should improve water quality even more.

2) Socio-economic factors- The economy of the Kasserine region is predominantly agricultural with some cattle and sheep raising, in areas of concern to this project. These undertakings are often engaged in at a subsistence level, such rural dwellers are often isolated from community services; and their lands, in most cases, are dry and suffering from severe erosion induced by a steady loss of groundcover. With little available capital. These people find it difficult to participate in Government sponsered matching grants and loans for public works.

FINAL GOALS

1) To reduce the incidence of water-borne diseases among the target population.

2) To transform contaminated water sources into sources capable of providing potable water and thereby decreasing

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the incidence of water-borne illness among the target population.

3) To improve the quantities of water available to the rural population by upgrading yields from existing sources of water, and creation of new sources where applicable.

4) To institutionalize pump systems installation and maintenance capabilities within the Governorate's technical services

5) To establish an effective and continuous water-related community health awareness and motivation activity within the regional health structure.

INTERMEDIATE GOALS

1) Availability of improved quality of water in 100 rural villages.

Indicators: 70% improvement in before-after coliform tests.

90% of wells equipped with jar-type continuous chlorinators.

2) Establishment of an effective maintenance and disinfection program.

Indicators: 90% of pump systems functioning 1 year after installation.

3) Establishment of an effective regional community health awareness and motivation activity.

Indicators: Increased health/sanitation Knowledge and improved practices among the target population.

PROJECT ACTIVITY TARGETS

1) To reconstruct and renovate 100 water points into closed systems serving approximately 35,000 rural inhabitants of Kasserine. These wells will be deepened, lined and capped or drilled.

2) Of these 100 water points, 10 will be constructed as motorized pump cistern systems in areas where population is especially concentrated, and where the water table is relatively deep.

3) To disinfect and purify the well's water during and periodically following the renovation process, thereby lowering the rate of water-borne diseases among the target population.

4) To train equip and deploy a pump maintenance component for disinfection and pump systems installation and repair in the project area.

5) To establish a community health awareness and motivation program within the regional health structure.

6) To provide one interested and responsible person at each handpump-equipped well, with the tools and instruction necessary to carry out simple pump repairs.

7) To train elements of the MOPH maintenance teams to be able to service and repair the 10 motorized units of the pump/cistern systems. Further, to provide a paid guardian for each of these systems who will be responsible for their maintenance and protection.

8) To provide training for Tunisian supervisory personnel who will assist in project implementation and extend project activities upon project completion.

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3. PROJECT OVERVIEW

Project Development: The proposed project forms a part of the efforts to develop the poorest delegations of governorates of Kasserine, Siliana and Sidi Bouzid that comprise the area under the developmental administrative direction of the Central Tunisia Development Authority. This area is receiving priority in GOT and USAID development plans in an effort to redress the social and economic disparities between the more developed northern and costal region, and the interior of the Country.

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The proposed project is very much in step with current GOT and USAID thinking to increase income and employment and to improve the quality of life within the zone targeted by the Central Tunisia Development Authority. In addition the proposal is clearly linked to the water development strategies to be followed by the CTDA. Well and spring development since it is geared to improving water quality and availability, can have a fairly rapid impact on the quality of life amongst the poorest of the poor. Furthermore, since it is by its very nature a labor intensive operation, it can have a quick impact on productivity, income, and employment.

Project Impact: A project, such as this one, conducted on a large scale relative to its rural setting, invariably produces effects outside the immediate target group. As an employer of between 50-70 people, it offers a livelihood and educational experience for many in an area where unemployment is a major concern. The purchases of equipment and supplies such a program demands is a further way in which the effects go beyond the immediate beneficiaries.

Well construction itself, by cleaning and increasing the availability of water, can have such effects. Farmers no longer have to take their cattle, goats and sheeps so far for drinking water, and this consumption by animals no longer taxes the community water supply as much. The construction of pump/cistern systems will open up limited possibilities of irrigation of adjacent lands. This could certainly be applied to school garden projects, private farmers, or even the irrigation of communal stands of trees for firewood. The project will have no negative effect on the local ecology.

The community health awareness and motivation activities will form a project component which has considerable flexibility and potential for expansion into many areas. In addition to fundamental messages regarding treatment and use of water, and the mobilizing of community self-help inputs, demonstrations of improved methods of water storage and purification in the homes and the hygienic disposal of human wastes will be conducted. The activities will

also include the training and orientation of local teachers and leaders.

Project Continuity: The Governorate's technical and health services will take responsibility for all hand pump installations and repair, and health education services to the population. These two components will exercise sole responsibility for these facets of the project both during the actual project period and after. It is agreed that CARE will be allowed to make site inspections, after the completion of the project, to insure that proper maintenance is being carried out.

Project Potential: The potential for the wider application of this project has already been demonstrated since it is, in effect, an extension of a similar project, and a companion to the other wells projects now underway in Siliana and Kairouan. The potential for the application of this work in Tunisia exists wherever rural water delivery systems fall short of practically attainable health standards.

Project Constraints: The unavailability of continuous supplies of well construction materials, personnel recruitment difficulties, lack of, or tardy transfer of funds.

4. PROJECT IMPLEMENTATION

Pre-implementation conditions: A two month long survey of the 210 existing water points in the Delegations of Foussana, Thala, Djidiliane, Sbiba and Sbeitla has been undertaken. The list of the 210 existing wells and springs has been researched by the Omdats (local leaders) of each community and compiled by the MOPH Kasserine.

The survey itself was conducted by personnel from CARE, and the Ministries of Public Health and Agriculture. This involved visits to each site named on the list with

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each Délégué and Omdat being notified when a survey began within his area of responsibility. The local Omdat was present at each site visit, and his experience was relied upon to furnish the necessary information as to population, seasonal water table variation, and previous work carried out on the site. Local inhabitants form the surroundig community were also contacted to discuss all the relevant isuues that pertain to their particular well. This offered an opportunity for person to person interaction in which the attitudes of potential beneficiaries and their willingness to participate in actual construction and maintenance, could be evaluated. In the case of the 10 pump/cistern systems, exact readings on re-charge rates and salt content will be required. Preliminary decisions on construction design and methodology and the numbers of handpumps to be installed was made at this time.

When agreement was reached on the specific wells to be reconstructed, and the time frame for such work established, contracts were submitted to the GOT/MOPH and the Governorate of Kasserine. CARE/Tunis will be responsible for securing GOX and MOPH approval. CARE/New York will secure AID approval in collaboration with CARE/Tunisia and AID/Tunisia.

Implementation Plan and Schedule: A logistical plan will be laid out in order to determine how best to proceed with construction taking such factors as terrain and weather into account. Major equipment will be ordered and materials stockpiled.

A CARE representative will direct the operation and be responsible for major purchases and overall financial transactions and reporting.

The reconstruction work will follow this general pattern: draining the well in order to clean, deepen, repair and line

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the well walls. The well is then covered and a platform poured. The pump/cistern systems will be equipped with heavy diesel pumps and a poured cistern. The maintenance team will install all handpumps and undertake the periodic chlorination of wells. (See Annex I for additional details.)

Technical Considerations: Construction design and technical information of this nature is readily available from the numerous previous wells projects in Tunisia. It is likely that construction designs and hand-pump designs can be modified and carried over from earlier projects along with trained masons who have served on earlier projects who will greatly assist early project implementation. Counterparts in the Ministries of Agriculture and Public Health should have no problem in incorporating and sustaining project technologies. The handpump used is unfamiliar locally (as are handpumps in general, with the exception of a few remaining French installations) and familiarization with this technological innovation will be gained by counterparts, who will ultimately be responsible for the maintenance of these pumps, through participation in the actual installation of the project pumps. In addition, CARE will prepare a comprehensive manual on pump maintenance which will include all types of pumps which will be used on this project.

Emphasis will be placed on technical improvements which will increase the cost effectiveness of these water sources from the standpoint of construction/reconstruction costs and which will reduce the maintenance requirements. Special attention will be paid to the following:

1. Development of lower cost site construction techniques.
2. Improvement of latrine construction.
3. Continued development and refinement of handpumps.

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It is currently premature to estimate the potential number of drilled wells which could eventually be undertaken. However, in the early phases of the project, CARE will undertake site surveys and make cost estimate comparisons to determine the feasibility of drilling new wells in lieu of renovating existing water points.

In those cases where drilling of new wells is indicated as a preferable alternative to the renovation of existing wells, CARE will enter into a contractual arrangement with Regie de Sondage or established local commercial enterprises for the actual drilling operation. For these well drilling activites CARE will engage qualified engineering services to participate in contract preparation and negotiation and subsequent work inspections. Such engineering services will be locally procured to the extent possible.

The community health/sanitation awareness and motivation activities will be undertaken through the existing health services of the Governorate with the cooperation and support of the project staff. This activity will include training of the existing health services field staff and recruiting and training of community health/sanitation agents. Emphasis will be placed on developing and using effective demonstration tools and techniques which can be used at the village level. These demonstrations will include: 1) construction of water-seal community latrines; 2) potable water storage and filtration equipment and techniques; 3) visual aids for developing health/sanitation awareness in the communities and the schools. The project staff will participate in the construction and preparation of these materials and will evaluate the effectiveness of the various demonstration techniques.

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At the end of each year of the project a joint program review will be conducted by CARE, GOS, MOPH and the Central Tunisia Development Authority (CTDA) to insure that the project activities relate to the evolving potable water strategy and to compare the effectiveness of the various potable water use interventions employed in the project.

PROJECT MATERIAL AND EQUIPMENT REQUIREMENTS ($000)

	First	Second	Third	Project
Construction materials *	36.5	51.9	55.7	144.1
Pumps & pump parts	21.5	30.7	32.8	85.0
Construction Teams' Equip. **	12.0	-	-	12.0
Depot Equipment **	20.0	-	-	20.0
Mechanic's Equipment **	5.0	-	-	5.0
Air Compressor	20.0	-	-	20.0
Drainage Pump	3.5	-	-	3.5
Diesel Winch	5.0	-	-	5.0
Cement Mixer	6.0	-	-	6.0
Depot Construction	20.0	-	-	20.0
Education-Demonstration Materials	33.7	66.3	70.9	170.99
Evaluation Data Processing Equipment (desk top programmable calculator, with printing peripherals, supplies and service)	16.0	-	-	16.0
Vehicles ***				
Truck 17.0				
Pick-up Truck 5.5				
6 Land Rovers 66.0				
Tractor 12.3				
Trailer 2.7				
Staff Car 4.5				
	108.0	-	-	108.0
Equipment Replacement & Maintenance	7.1	15.1	16.2	38.4
Totals	314.3	164.0	175.6	653.9

* Cement, cement prompt (hydrolid cement), rock, sand, gravel, wood, rebar, wire, heavy wire netting, cement pipe, galvanized pipe, white wash, sockets, paint, sheet metal, manufactured doors (for latrines).

** Mason, carpenter and construction hand tools, tents, canvas, drainage siphons, pumps, buckets, lanterns, boots, rope, pulleys, drainage pump with generator, mechanics tools, welding equipment, mobile water system.

*** Vehicles will not be purchased from grant funds.

Personnel Requirements: An important aspect of the staffing pattern is the opportunity it gives for local Tunisian project staff to be trained and to assume greater project responsibility. While the Assistant Project Director for Education and Evaluation is an American Peace Corps Volunteer, it is expected that by the second year of the project this role will be filled by a Tunisian (probably the Education Coordinator or someone deputed from the Kasserine Health Services) who has been trained for this role.

While, at the outset, the Construction and Training Supervisor is a Peace Corps Volunteer, it is expected that this replacement will be found, either within the project staff or from an existing government agency nine months after the commencement of the project.

It is expected that the actual community awareness and motivation field activities will be carried out by the regular staff of the Kasserine Health Services and the project staff will concentrate chiefly on training, evaluation, and experimental activities.

Whenever possible, and if suitable candidates are available, project staff especially health education/evaluation and administrative personnel will be recruited on deputation from appropriate government agencies. At the conclusion of the project, CARE will take steps to integrate any direct hire (i.e. not on deputation) staff members in appropriate Tunisian government institutions where they will be able to further use the expertise developed during the course of the project. The Kasserine health services have been judged sufficiently large to provide the majority of health education/evaluation personnel for the project as well as to incoporate any direct hire staff at the conclusion of the project.

The following full-time staff will be required for the execution of the project:

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Position	Source
Project Director	CARE
Ass't Project Director	Local
Ass't Project Director (Edn. & Eval.)	Peace Corps - Local
Education Coordinator	Local
Evaluation Consultant	Local
Data Processing Assistant	Local
4 Education/Evaluation Workers	Local
Construction & Training Supervisor	Peace Corps - Local
Depot Assistant	Local
Driver	Local

5. PROJECT EVALUATION

The evaluation activities are closely associated with those of the community awareness and motivation activities of the project. By having one Assistant Project Director responsible for both, an effective integration can be accomplished.

The major evaluation activities will be:

1) A site study of the water-relationship of the community and existing health/sanitation beliefs and practices prior to the project activities. This information, as well as being used for departure reference for the community health/sanitation awareness activities will also serve as base-line data for measuring the effectiveness of project activities.

2) A thorough and continuing monitoring of the community awareness and motivation activities to measure not only the adoption of improved health and sanitation practices but the relative effectiveness of the methods used within the project for promoting improved health and sanitation practices.

3) Monitoring of water consumption and seasonal variation of each site before, immediately after and at regular intervals

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thereafter will supply data for measuring changes in household water consumption. This activity will also provide for the periodic evaluation of maintenance activities.

During the project steps will be taken to introduce this evaluation methodology into the on-going activities of the government agencies which will ultimately be responsible for the maintenance of the wells and continuing community awareness activities.

a. Indicators

1. The primary indicator will be the number of wells reconditioned and the number of hand and motorized pumps installed.

2. The water from each well will be examined both before and after construction.

3. A percentage reduction in the number of waterborne diseases will be investigated.

4. The formation and deployment of pump maintenance and education teams and the performance and competency of these components.

5. The hiring of 10 trained guardians for the pump/cistern systems, and one local beneficiary equipped with the tools necessary for simple maintenance and repair at each site having a handpump (s).

b. Methods

1. Tabulation of well-completion reports both by CARE and the Ministries of Public Health and Agriculture and by physical count.

2. A potable water laboratory (Millipore) and the services of the regional MOPH laboratory in Kasserine will be relied upon to furnish analyses of well water.

3. Examination of records at the regional MOPH office will be relied upon for statistic dealing with the incidence

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of water-borne diseases in target areas.

4. CARE inspection through periodic visits will aim at supervision of the three existing pump maintenance team. Their performance will be evaluated on their initial installation of project pumps and in their subsequent effectiveness in maintaining them.

5. Inspection of the education component and the receipt of their reports on the number of people reached and problems incurred. Direct observation of, and discussion with beneficiaries on their use and treatment of water and concrete evidence of self-help input from the community.

6. Individual inspection of the family latrines and their usage. (See Annex II for additional details.)

6. PROJECT FUNDING

A. SEE FORM 1.2A (ATTACHED)

B. NON-CARE MANAGED INPUTS

CARE will work in close collaboration with technical agents from the MOPH and the Ministry of Agriculture. It is nearly impossible to put figures for these inputs. However, they should be listed and they include:

a) Public Health - Access to laboratory facilities; previously formed pump maintenance personnel; one previously formed Health Education Team, various cadre inputs.

b) Minsitry of Agriculture (Génie Rural) - 10 salaried guards; fuel for 10 diesel pump systems; various and sundry data and reports.

FINANCIAL PLAN - CPG PROPOSAL

I. CARE Managed Inputs

	First 1st. Yr.	Second Year	Third Year	Total
A. In Kind Contributions				
1. Peace Corps	11,700	13,200	15,200	40,100
	11,700	13,200	15,200	40,100
B. Materials & Equipment				
1. U.S. Purchases	7,500	10,700	11,400	29,600
2. In Country Purchases	198,800	153,300	164,200	516,300
3. 3rd Country "	108,000	-	-	108,000
	314,300	164,000	175,600	653,900
C. Personnel & Operations				
1. Int'l Personnel	25,100	19,600	29,000	73,700
2. Nat'l Personnel*	138,200	191,400	205,200	534,800
3. Int'l Travel	2,100	2,200	2,400	6,700
4. In Country Travel	2,100	2,200	2,400	6,700
5. Office Costs incl. Equipment & maintenance	42,100	47,700	53,300	143,100
6. Vehicle Maintenance & Repair	34,100	40,000	42,800	116,900
7. Other Support Costs	6,200	7,000	7,100	20,300
	246,000	310,100	342,200	899,200
D. Training Costs				
1. Trainee Costs in Country	8,400	17,800	19,000	45,200
2. Trainee Costs 3rd Countries	-	-	-	-
3. Training Materials	10,000	5,600	6,000	21,600
4. Tuition & Other Fees	-	-	-	-
	18,400	23,400	25,000	66,800
Grand Total Excl. of O'head	591,300	510,700	558,000	1,660,000

~~26,447~~

* Figures include salaries of approximately 60 well mason and construction personnel in addition to the full-time project personnel listed on page 13.

** Local and internal figures include 2 percent per quarter increases for inflation.

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I. Summary Funds Requested AID/CPS

	First 1st. Yr.	Second Year	Third Year	Total
1. Material & Equipment	186,300	164,000	175,600	525,900
2. Personnel & Operations	106,800	129,700	143,800	380,300
3. Training Costs	18,400	23,400	25,000	66,800
4. Overhead at 7.92%	24,600	25,100	27,300	77,000
	336,100	342,200	371,700	1,050,000

II. Summary of CARE Manage[illegible] Income Sources

A. CARE Generated

1. General Public, principally from North America & Europe	210,600	39,700	-	250,300
2. Host Government	57,500	155,100	194,000	406,600
3. Other donor government agencies				
Peace Corps	11,700	13,200	15,200	40,100
	279,800	198,000	209,200	687,000
		198,000		687,000

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III. Projected Funding Obligations Per Line Item In U.S. Dollars or Equivalent by Source of Funding.

	Data Host Govt	AID PRO
A. Machinery and Equipment	[illegible]	525,900
Purchased in U.S.	20,000	9,600
Purchased in Tunisia	- 0 -	516,300
Purchased in 3rd Country	108,000	- 0 -
B. Personnel and Operations	518,900	380,300
International Personnel	73,700	- 0 -
National Personnel	234,800	300,000
International Travel	6,700	- 0 -
In-Country Travel	- 0 -	6,700
Office Costs	143,100	- 0 -
Vehicle Maintenance and Rep	40,300	73,600
Other Local Support	20,300	- 0 -
C. Training	- 0 -	66,300
In-Country Training	- 0 -	45,200
Training Materials	- 0 -	21,600

IV. Tunisian National Personnel Costs

Position	Year 1	Year 2	Year 3	Total
Asst Project Dir.	12,000	12,000	12,000	36,000
Education/Coord	8,000	8,000	8,000	24,000
Evalu Consultant	14,400	14,400	14,400	43,200
Data Proc Asst	4,800	4,800	4,800	14,400
2 Education/Evaluation Workers	6,400	6,400	6,400	19,200
2 Education/Evaluation Workers	3,200	6,400	6,400	16,000
Depot Assistant	4,000	4,000	4,000	12,000
Driver	4,000	4,000	4,000	12,000
	56,800	60,000	60,000	176,800
Construction Team Capped Wells	48,600	64,800	64,800	178,200
Motor Wells	12,300	16,400	16,400	45,100
Support Team	14,000	16,800	16,800	47,600
	74,900	98,000	98,000	270,900
	131,700	158,000	158,000	[illegible]
Plus 2 pct per quarter inflation				87,100
Total National Personnel				534,800

Current Per Diem Allowance for Travel in Country is $[illegible] equivalent.

ANNEX I

Implementation Plan

A month 0-6. (1) AID/CM agreement signed, (2) C/M/GOK/MOPH agreement signed, (3) C/M/GOK/MOPH Care Team recruitment, (4) PC provides part of Care Team, (5) GOK/MOPH Geneie Rural Employee Destination, (6) C/M Evaluation Consultant Recruitment, (7) C/M Data Processing Assistant recruitment, (8) C/M initiates 1 st tranche of non-expendable materila (Cement, steel, tools, etc.) (9) C/M initiates 1 st tranche of non-expendable material (vehicles), (10) C/M renovation of the existing depot, (11) C/M organization of the depot (inventory, telephone, staff, etc), (12) C/M/GOK/MOPH final field review of sites survey, (13) C/M/ moph education team recruitment, (15) C/M/GOK PCV (construction) Tunisian counterpart recruitment, (16) C/M/GOK PCV (constructions) Tunisian counterpart recruitment, (18) C/M/GOK PCV (Education) Tunisian counterpart training, (19) C/M site delivery of material, (20) C/M wells construction commencement, (21) C/M existing health service field staff training, (22) C/M preparation of visual aids and education material, (23) C/M sites study of the water relationship of the community and existing health/sanitation beliefs and practices prior to the project activities.

B months 6-12 (24) C/M/GOK 3 guardians for motorized pump and cistern wells recruitment, (25) C/M/GOK maintenance team recruitment, (26) C/M maintenance team training, (27) C/M/MOPH maintenance team MOPH motorized units training, (28) C/M purchases education-demonstration materials, (29) C/M/GOK/MOPH first joint program review, (30) C/M education team training, (31) C/M PCV (construction) replaced by counterpart.

C months 12-18 (32) C/M/GOK 3 guardians for motorized pump and cistern wells recruited, (33) C/M writing of a comprehensive manual on pump maintenance, (34) C/M initiates 2nd tranche procurement of expendable material, (35) C/M initiates 2nd tranche procurement of non-expendable material, (36) C/M PCV (education) replacement by counterpart, (37) C/M periodic analysis of wells water, (38) C/M/MOPH periodic disinfection and purification of wells water, (39) C/M survey to find out when drilling is indicated as a preferable alternative to the renovation of wells.

D months 18-24. (40) C/M/GOK/MOPH 2nd Joint Program Review, (41) MOPH/GOK team working independantly, (42) MOPH/GOK education team working independantly, (43) C/M evaluation of the methods used for promoting improved health and sanitation practices, (44) C/M periodic evaluation of maintenance activities, (45) C/M contractural arrangements with Regie de Sondage or established local commercial enterprises for drilling (46) C/M drilling sites delivery of equipment, (47) C/M commencement of drilling.

E months 24-30. (48) GOK 4 guardians for motorized pumps and cistern wells recruitment, (49) C/M 3rd tranche procurement of expendable material, (50) C/M survey to measure changes in household water consumption.

F months 30-36. (51) C/M/GOK/MOPH 3rd Joint Program Review, (52) C/M writing and presentation of the evaluation consultant's report.

ANNEX II

EVALUATION PLAN

Evaluation will be a continuing activity, providing continual feedback on project activities and improvements, since site studies carried out initially provide a baseline portrait of each beneficiary community's use of water and the matrix relationships in which use occurs, mid-project and end of project evaluations will attempt to discover what changes in that matrix have occured. Community awareness of health and sanitation needs and the extent to which improved practices have been adopted will be examined not only as a partial measure of success or failure but also to identify the most effective outreach techniques. An evaluation consultant is to be hired. He or she will design a schedule and or sampling frame, and a methodology as an initial task. The ECPS indicators listed in the proposal paper will be the principal, but not the only measures against which activities will be examined. Others include the degree of integration into other health activities that is achieved, community awareness and practice, etc. While a regular flow of evaluatory reports will exist in CARE/MEDICO, two thorough (as appropriate to stage of work) evaluation reports are planned - - at mid-project and at end of project, USAID will be involved in preparation of both, and if they are available, outside evaluators, especially for end of project evaluation.