THE HEALTH EDUCATION PROGRAM
OF THE RURAL POTABLE WATER
INSTITUTIONS PROJECTS
IN TUNISIA

WASH FIELD REPORT NO. 255
MARCH 1989

Prepared for
the USAID Mission to the Tunisian Republic
WASH Task No. 014
THE HEALTH EDUCATION PROGRAM
OF
THE RURAL POTABLE WATER INSTITUTIONS PROJECT
IN TUNISIA

Prepared for the USAID Mission to the Tunisian Republic
Under WASH Task No. 014

March 1989

Water and Sanitation for Health Project
Contract No. 5942-C-00-4085-00, Project No. 936-5942
is sponsored by the Office of Health, Bureau for Science and Technology
U.S. Agency for International Development
Washington, DC 20523
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>ACRONYMS</td>
<td>v</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>vii</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Project Background and Scope of Work</td>
<td>1</td>
</tr>
<tr>
<td>1.2 The Health Education Plan</td>
<td>2</td>
</tr>
<tr>
<td>1.3 Overview of Health Education Activities</td>
<td>3</td>
</tr>
<tr>
<td>1.4 Setting: The Area—Its People, Environment, and Health</td>
<td>3</td>
</tr>
<tr>
<td>1.5 Methodology</td>
<td>7</td>
</tr>
<tr>
<td>2. NEEDS ASSESSMENT</td>
<td>9</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>9</td>
</tr>
<tr>
<td>2.2 Specific Training Needs</td>
<td>9</td>
</tr>
<tr>
<td>2.2.1 RHET</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2 Animatrices</td>
<td>9</td>
</tr>
<tr>
<td>2.2.3 Instructors</td>
<td>9</td>
</tr>
<tr>
<td>2.2.4 Pump Operators</td>
<td>9</td>
</tr>
<tr>
<td>2.3 Available Resources</td>
<td>10</td>
</tr>
<tr>
<td>2.3.1 Health Education Materials</td>
<td>10</td>
</tr>
<tr>
<td>2.3.2 Other Materials</td>
<td>10</td>
</tr>
<tr>
<td>2.4 Institutional Support Needs</td>
<td>10</td>
</tr>
<tr>
<td>2.4.1 AU</td>
<td>10</td>
</tr>
<tr>
<td>2.4.2 RHET</td>
<td>10</td>
</tr>
<tr>
<td>2.4.3 USAID</td>
<td>10</td>
</tr>
<tr>
<td>3. TRAINING PLAN</td>
<td>11</td>
</tr>
<tr>
<td>3.1 Elements of Strategy</td>
<td>11</td>
</tr>
<tr>
<td>3.1.1 Training of Trainers</td>
<td>11</td>
</tr>
<tr>
<td>3.1.2 Curriculum and Materials</td>
<td>11</td>
</tr>
<tr>
<td>3.1.3 Follow-Up System</td>
<td>12</td>
</tr>
<tr>
<td>3.2 Proposed Training</td>
<td>12</td>
</tr>
<tr>
<td>3.2.1 RHET</td>
<td>12</td>
</tr>
<tr>
<td>3.2.2 Animatrices</td>
<td>12</td>
</tr>
<tr>
<td>3.2.3 Teachers in School Program</td>
<td>13</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. RESOURCES REQUIRED</td>
<td>15</td>
</tr>
<tr>
<td>4.1 Training Team</td>
<td>15</td>
</tr>
<tr>
<td>4.2 Materials Required</td>
<td>15</td>
</tr>
<tr>
<td>4.3 Equipment</td>
<td>15</td>
</tr>
<tr>
<td>4.4 Logistical Support</td>
<td>15</td>
</tr>
<tr>
<td>4.5 Technical Assistance Needed</td>
<td>16</td>
</tr>
<tr>
<td>4.5.1 Health Education Consultant</td>
<td>16</td>
</tr>
<tr>
<td>4.5.2 Epidemiologist</td>
<td>17</td>
</tr>
<tr>
<td>4.5.3 AU</td>
<td>17</td>
</tr>
<tr>
<td>4.5.4 RHET</td>
<td>17</td>
</tr>
<tr>
<td>4.5.5 USAID</td>
<td>19</td>
</tr>
<tr>
<td>5. NEXT STEPS</td>
<td>21</td>
</tr>
<tr>
<td>5.1 Conclusions</td>
<td>21</td>
</tr>
<tr>
<td>5.2 Recommendations</td>
<td>22</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>25</td>
</tr>
</tbody>
</table>

### APPENDICES

| A. List of Persons Contacted | 29 |
| B. Itinerary | 33 |
| C. Schedule for April-May 1988 Consultancy | 37 |

### TABLES

| 1. Governorate of Kasserine: Statistical Information | 5 |
ACKNOWLEDGMENTS

At the WASH Project in Washington, DC, I would like to thank May Yacoob, Teresa Sarai, and Graeme Frelick who were all enormously helpful, insightful and down-to-earth. Carla Rull, former consultant to the health education program of the Potable Water Project helped me a great deal by giving me background information, to which I would otherwise not have been exposed; further, her commitment to this program was a delight to see. I would like to thank the USAID Mission staff in Tunis and the Autogestion Unit (AU), Regional Health Education Team (RHET), the animatrices and others in Kasserine. Diana Putman provided greatly appreciated commentary on the findings of the consultancy. Nancy Hooff at AID provided continual help and support. I would also like to thank Nancy Tumavick and George Carner who took time out of their busy schedules to meet with me and share ideas. In Kasserine, at the CTDA I worked most closely with Belgacem Khessasia, Taofik Charsailli, Moktar Laouit M'hossen Pelhi, and Lazhar Laabidi whose intelligence and good spirits were always appreciated. At the Ministry of Health, I worked with Ammar M'raihi, the health education specialist who offered a health educators perspective, advice and insights into the program and anecdotes about "the old days". I would like to also thank all of the other individuals from the other "Directions" who make up the RHET—Ben Aissa Naoual of the "Direction Regionale de l'Action Sociale". Their help was invaluable. Dr. Nicholas Hopkins of the American University in Cairo was extremely helpful; he shared both the background of the program with me as well as theoretical insights. The Egyptian Team with him also helped provide excellent ideas from their work in Egypt—and all were wonderful company as well! The "animatrices" provided insight into their work and their program. Other community members from both established groups such as Save the Children and Peace Corps, as well as women from the Kasserine community helped to explain and define the key elements of the Potable Water Project as well as shared a small but potent part of their lives with me.
ACRONYMS

AIC  Association d'Intérêt Collectif or Collective Interest Associations. The AICs oversee the work of the Water User Associations (WUAs).

AU  Autogestion Unit; a unit created by the CTDA to oversee the creation of community-controlled water programs.

CRS  Catholic Relief Service

CTDA  Central Tunisia Development Agency (Office du Développement de la Tunisie Centrale). The CTDA oversees all development concerns for Central Tunisia. It is primarily concerned with agricultural and development projects including:

- Potable water—drilling new wells, repairing motors, creating WUAs.
- Health—construction of dispensaries in rural zones, supplying mobile health units, supporting health education.

GIH  Groupement d'Intérêt Hydraulique or Hydraulic Interest Group; a regional committee presided over by the governor. Its members are responsible parties of regional organizations concerned with potable water. The role of the GIH is the creation and staffing of the AIC.

GOT  Government of Tunisia

MOH  Ministry of Health

RHET  Regional Health Education Team. The RHET is under the AU and is composed of 10 members from various organizations: Social Affairs, Public Health, and National Education.

TD  Tunisian Dinar

URC  University Research Corporation

USAID or USAID Tunisia  U.S. Agency for International Development Mission to Tunisia

WASH  Water and Sanitation for Health Project

WUA  Water User Association; Community organizations which oversee activities, such as health education, having to do with improvement of water and hygiene conditions.
EXECUTIVE SUMMARY

At the request of USAID/Tunisia, the Water and Sanitation for Health (WASH) Project sent a health education consultant to review and facilitate the health education program of the Rural Potable Water Institutions Project (Project #664-0337) from December 4-31, 1988. The consultancy, the first intervention by WASH on this project, was a continuation and expansion of work performed a year earlier by a consultant under other sponsorship.

The scope of work directed the consultant to outline activities for the program after conducting a needs assessment; to identify communities where activities would take place; to assess the availability and appropriateness of health education materials; to develop training plans; and to make recommendations for the sustained development of the program.

Following is a summary of the consultant's findings, conclusions, and recommendations.

Findings

1. The Regional Health Education Team (RHET) has largely carried out its planning for the school health component.

2. Sixteen of the twenty communities selected for the first year of activity have taken steps to reduce water-related diseases through health education. (The animatrices in the other four communities dropped out of the program during the year for various reasons.)

3. The program has attracted regional, national, and international attention because of its innovative approach and record of success.

4. Progress within the school health program, the major focus of this consultancy has been slow, but steps to move the program along have been taken.

5. The WUAs have not been made responsible for procuring funds to support the initial group of animatrices, nor have community development project funds been secured for this purpose.

6. The major problems reported in the last consultancy, as well as some others, remain unresolved. Training of RHET members in the U.S. has not yet occurred. RHET's request for "argent d'encouragement" has gone unheeded. Inadequate staffing and the lack of a vehicle are hampering RHET's work. Funding for the project when AID support ceases in 1991 is still undetermined.
Conclusions:

1. RHET and supporting personnel should be able to carry out most of the planned activities, given additional staffing, continued training, and support.

2. The community and individuals from the various government agencies have shown the capacity to work toward the goals of the program and ensure its viability.

3. More frequent and closer collaboration is needed between RHET, those providing technical assistance, and USAID to ensure the transfer of technical expertise, follow-through, and general support.

4. It may have been unrealistic for USAID to assume that communities would be willing and able to assume responsibility for development programs after one year.

5. Community health education programs are unlikely to be sustained if the work of the animatrices in the original sixteen communities is discontinued.

Recommendations:

1. RHET should be assured of the maximum support of USAID and the technical assistance team.

2. Expanded collaboration between the program and those agencies of the Government of Tunisia that can be of assistance should be considered a priority.

3. USAID/Tunisia, the WASH staff, and the consultant should move forward with the training planned in Egypt and the United States.

4. The Government of Tunisia should immediately begin investigating international funding agencies to replace USAID support ending in 1991.

5. The staff of the AU should be increased—preferably by two women—as soon as possible to ease the present workload on personnel and permit outreach into communities for water-related health activities.

6. Funding to support the animatrice program should continue for one more year, and then means should be explored for funding by communities.

7. The Government of Tunisia should support the acquisition of a badly needed vehicle for RHET staff travel, and the procurement of essential teaching aids.
1.1 Project Background and Scope of Work

The grant agreement for the Rural Potable Water Institutions Project, a joint undertaking of the Government of Tunisia and USAID/Tunisia, was signed in April 1986, and the project was launched in January 1987 to provide reliable drinking water to approximately 300,000 semi-nomadic people in the interior of Tunisia and to reduce the incidence of water-related diseases.

The objective was to sink deep wells in dry zones and, recognizing the importance of community participation in such an enterprise, to invest leaders among the target population with a large measure of responsibility for project management at the local level. To this end, the Central Tunisian Development Agency (CTDA), the overall supervisory agency, set up Water Users Associations (WUAs)—community organizations with powers over finance, maintenance, sanitation, the resolution of disputes, and health education.

Early recognition of the importance of health education was the genesis of the health education program as a major component of the project. In June 1987 and again from August to October of that year, a consultant was brought in to provide guidance and direction. She organized a 10-member Regional Health Education Team (RHET), trained them in health and non-formal education techniques, and outlined a plan of action for the first year’s activities that emphasized community involvement and community decision-making from the very start.

At the request of USAID/Tunisia a year later, the Water and Sanitation for Health (WASH) Project in its first intervention in this program sent the present consultant to Tunisia from December 4 to 31, 1988, to review the program, evaluate its accomplishments and deficiencies, and make recommendations for the future.

The original scope of work, drawing on the accomplishments and recommendations of the previous consultant, directed the consultant to focus on improved training for the "animatrices de base," or community health educators; to develop health education materials and, as appropriate, to modify materials already in use; to outline a plan of activity for the 1988-89 and 1989-90 school years; and to prepare a distribution schedule for materials developed for the Gafsa and Kasserine Governorates.

The final scope of work, resulting from discussions to clarify the assignment, encompassed the following tasks:

1. Conduct a needs assessment at the different program levels in Kasserine and Gafsa, including:
   a. The Central Tunisia Development Agency (CTDA)
1.2 The Health Education Plan

The health education plan was designed to assist in reducing water-related diseases in sixty selected communities (twenty each year over a three-year period) located around deep wells in the Kasserine governorate and in the delegations of Gafsa Nord and Sened. The two delegations were subsequently dropped because of certain logistical constraints.

Specifically, the plan set out to achieve the following objectives*:

- A change in practices and behavior patterns responsible for transmitting water-related diseases in the target areas by the end of the project.
- Seventy-five percent of the communities taking measures to improve water-related hygiene.
- Fifty percent of the communities meeting their objectives after one year of project activity.
- Eighty percent of the primary school teachers trained during the project integrating health education into their curriculum.

* See the Health Education Plan, CTDA and MOH, October 1987 and "Report of a Non-formal Health Education Consultancy to the Central Tunisian Potable Water Project, August-October 1987," both by Carla Rull.
Seventy-five percent of the participating primary schools establishing student health committees to improve hygiene and sanitation.

Seventy-five percent of the participating schools showing a marked improvement in hygiene conditions.

Fifty percent of the communities completing projects to improve water and sanitation conditions.

1.3 **Overview of Health Education Activities**

The health education plan is generally moving along on schedule, with some exceptions. Members of RHET have established a good working relationship and freely share ideas. When occasional differences have arisen among them, they have shown a readiness to quickly seek a resolution.

The communities covered by project activity have been invited to participate in the decision-making process when objectives affecting them are being determined. Community participation has been and will continue to be the cornerstone of the program.

The animatrices are making strides in each community, and a process for evaluating their work has been developed. But the future of this first group is clouded by the uncertainty of continued funding. It might be appropriate for USAID to agree to extend support for the animatrice program while RHET works with the WUAs to arrive at a means of financing it.

The school health program has barely begun, though many ideas for it have been proposed. Few health education materials are available, and no concrete plan had been drawn up before the arrival of the consultant, who helped develop one during a planning workshop with RHET.

Cancellation of a trip to the United States for two or three members of RHET to take a course in information, education, communications, and community development has lowered morale to some degree. The GOT has failed to provide a vehicle for staff travel, first because of budgetary constraints and later because a vehicle was unavailable. The absence of a health education consultant and of essential teaching aids has also been a problem.

1.4 **Setting: the Area—People, Environment, and Health**

The people of Kasserine, once nomads and, by certain accounts, still not altogether comfortable in settled communities, often consider themselves a people apart, both because of their lifestyle in widely scattered groups and because of their affiliation with specific clans, often with ties to Algeria. They are generally more conservative and poorer than most Tunisians, which has implications for interventions whether in education, agriculture, or health.
Most families are agriculturally based, with 45 percent of them having average holdings of 22 acres and average incomes of TD 550 ($63) per month. The climate is not conducive to the cultivation of a wide range of crops. Winters are cold and summers are hot and dry. The cereal crop has been badly affected by last year's drought. (See Table 1 for general statistics of the Governorate of Kasserine.)

Food shortages and high unemployment are permanent features of the harsh environment in which the people of Kasserine live. Nutritional levels are lower than in other areas of Tunisia. Tuberculosis and other respiratory diseases, as well as diarrheal disease, are more widespread.* Partly because of the climate and living conditions, it is difficult to recruit medical practitioners for the region, so that health care is not always available. But even when it is, transportation costs, local customs, and fear inhibit the people from using the medical centers.

Not all is bleak, however, in this seemingly hopeless landscape. The people are strong-willed and capable. The government has set up a number of medical care facilities—hospitals, health centers, a school of public health, and seven mobile health units—and has recruited health professionals to staff them. The health care professionals whom the consultant met are dedicated and knowledgeable. As a result of these measures, immunization rates and the utilization of facilities have increased.

The previous project put in new wells and improved a number of others. This project has added 14 deep wells to serve both the domestic and agricultural needs of the Kasserine governorate. Although the original goal was to have 30 new wells in operation at the project's close in February 1991, the final tally will be closer to 20 because of funding constraints. In addition, two extensions and a New Mexico model pilot house hook-up are to be constructed.

The wells have a tap from which individuals draw clean water which they carry away in buckets or tanks loaded on their mules. Design improvements as the project has progressed have added washing stations away from the wells to prevent accidental pollution by detergents and the saturation of the surrounding ground, which affords a breeding place for insects and harmful bacteria and makes access to the well difficult. Members of the community are taught to keep the area around the well free from contamination. Project areas visited by the consultant had the older wells, which lacked separate washing facilities and much evidence of careful maintenance.

---

* Cluster sample statistics on diarrheal disease in Kasserine are to be available in January 1989 through the National CCCD/Tunisia survey. Statistics on everything from health to unemployment are available through the General Census, Institute de Statistique, May 1984.
### Table 1

**Governorate of Kasserine: Statistical Information**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Delegations:</td>
<td>12</td>
</tr>
<tr>
<td>Number of Municipalities:</td>
<td>10</td>
</tr>
<tr>
<td>Area:</td>
<td>8,260 km² (5.3% of the country)</td>
</tr>
<tr>
<td>Population:</td>
<td>298,740* (including 209,470 in rural areas and 52,000 in the town of Kasserine)</td>
</tr>
<tr>
<td>Percent of Population under Poverty Line:</td>
<td>14.2</td>
</tr>
<tr>
<td>Active Population: (Age 18-59)</td>
<td>70,430</td>
</tr>
<tr>
<td>Percent Unemployment:</td>
<td>16.9** (national average: 13.1)</td>
</tr>
<tr>
<td>Percent Homes connected to STEG grid:</td>
<td>30.2** (national average: 63.4)</td>
</tr>
<tr>
<td>Percent Homes with Potable Water:</td>
<td>25.2** (national average: 49.4)</td>
</tr>
<tr>
<td>Rate of Literacy (percent):</td>
<td>39.5 (national average: 53.8)</td>
</tr>
<tr>
<td>Employment by Sector:</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>27,840</td>
</tr>
<tr>
<td>Industry</td>
<td>22,700 (incl. 13,360 in construction)</td>
</tr>
<tr>
<td>Services</td>
<td>7,695</td>
</tr>
<tr>
<td>Administration</td>
<td>5,650</td>
</tr>
<tr>
<td>Other</td>
<td>2,055</td>
</tr>
<tr>
<td>Health Sector:</td>
<td></td>
</tr>
<tr>
<td>Hospitals:</td>
<td>One Regional Hospital (Kasserine)</td>
</tr>
<tr>
<td></td>
<td>Four area hospitals (Thala, Sbeitla, Feriana and Sbiba)</td>
</tr>
<tr>
<td>Health Centers:</td>
<td>68</td>
</tr>
<tr>
<td>Maternities:</td>
<td>11</td>
</tr>
<tr>
<td>Maternal and Infant Care Centers:</td>
<td>11</td>
</tr>
<tr>
<td>Physicians:</td>
<td>15 specialists</td>
</tr>
<tr>
<td>Dentists:</td>
<td>5 (including 2 private)</td>
</tr>
<tr>
<td>Pharmacists:</td>
<td>15 (including 10 private)</td>
</tr>
<tr>
<td>Number of Hospital Beds per 100,000 inhabitants:</td>
<td>63 (national average: 210)</td>
</tr>
</tbody>
</table>
Agricultural Sector
Rainfall: 330 mm/year (50 year average)
Arable Land: 777,427 ha broken down as follows:
- Field crops 155,000 ha
- Fruit Trees (irrig.) 5,526 ha
- Fruit Trees (dry) 56,803 ha
- Irr. Truck Crops/Forage 3,500 ha
- Forage Plantations & Natural Ranges 204,085 ha
- Esparto Grass 173,428 ha
- Forests 151,085 ha
- Fallow Land 28,000 ha
Livestock:
- Sheep 302,000 head
- Goats 62,000 head
- Cattle 15,100 head
- Other 19,900 head
Water Resources:
- Deep Aquifers: 74 million m^3
- Shallow Aquifers: 26 million m^3
- Water actually utilized: 73 million m^3 through 128 drilled wells (59 for potable water, 57 for irrigation and 12 for industrial use) and 2592 hand dug wells of which 1443 are equipped with pumping units.

Education Sector
Primary Schools: 196** with an enrollment of 53,113 (including 20,253 girls)
Teachers: 1250
Secondary Schools: 16** with an enrollment of 16,192 (including 6,033 girls)

Industry Sector
Number of Industrial Units:
70 located as follows:
- Kasserine: One paper pulp plant, one tile factory, one brick plant, one soft drink plant and one paper bag plant.
- Sbeitla: Household paper plant and one olive press
- Thala: One marble cutting unit
- Feriana: One rug weaving unit

Tourist Sector
Tourist Class Hotels:
- 3 at Kasserine
- 2 at Sbeitla
Total Beds: 282

*As of 1984
**As of 1986
It is worth noting, as well, that the idea of community development and participation was a novel one when this project began. While the traditional structure supports community initiative, government acceptance of this process is new and represents a significant advance. There is a great deal of work still to be done before any notable improvement in the quality of life occurs. But the independent spirit of the people and their willingness to support each other in times of need are assets which can be exploited. The Rural Potable Water Institutions Project and its health education component are geared to take advantage of the desire of people to help themselves and organize within cultural groups. The self-help philosophy is perfect for Kasserine, and could be used eventually to address problems of population, education, and social and economic uplift. It also fits in with the government's new attitude to private initiative. The WUAs and animatrices can be seen as a first step toward the building up of independent and self-sustaining units for water, health, and economic programs.

1.5 Methodology

The consultant was in Tunisia December 4-31, 1988. The first few days were spent in Tunis reviewing documents and meeting with USAID officials connected with the Rural Potable Water Institutions Project and with agencies such as Save the Children and Catholic Relief Services engaged in related work.

The consultant was in Kasserine December 8-22. Her time was spent getting acquainted with the individuals responsible for the health education program (See Appendix A for a list of people contacted in Tunis and Kasserine), discussing matters pertaining to project activities, and taking field trips to familiarize herself with the realities of operating conditions and to conduct informal needs assessments. The consultant was able to gather some valuable insights from an Egyptian team from the Women and Water Project which was attending a three-and-a-half-day meeting with RHET and others. Armed with all this information on the history and development of the program, she took part in a full-day workshop with RHET, at which a comprehensive plan for the remaining years of the project and for the years immediately following the termination of USAID funding was drawn up.

The consultant's remaining time in Kasserine was spent with the Regional Director of Education and the Regional Health Educator, as well as with other members of RHET, discussing qualitative and quantitative methods of data gathering for needs assessments, materials development and testing, training, and evaluation. She continued to review pertinent documents, make field trips, and review forthcoming possibilities. Final meetings were held with the director of the AU and RHET.

From December 23-31, the consultant was back in Tunis to draft a report of her activities and to take part in final discussions on the direction and progress of the health education program.

A detailed itinerary appears in Appendix B.
Chapter 2
NEEDS ASSESSMENT

2.1 Introduction

Kasserine was the focus of the consultancy. It was there that the consultant discussed the program and its needs with officials at various levels, and conducted five field interviews with community women, animatrices, and teachers respectively.

The interviews posed questions about the adequacy of training and of teaching materials, about success in the communication and acceptance of health education messages, and about problems and constraints that were impeding the achievement of program objectives. The responses were tested for reliability against similar information from other sources, such as RHET, and against demographic, health, and economic data for the region.

2.2 Specific Training Needs

2.2.1 RHET

The training of RHET is of prime importance because the 10-member team is responsible not only for training the groups below it but also for orchestrating the entire health education program. Members of RHET generally have college degrees. The areas in which they need instruction are: non-formal education methodology; the training of trainers; information, education, communication (IEC); social marketing; and the design and evaluation of materials.

2.2.2 Animatrices

The animatrices, most of whom have some high school education but whose skills are largely dependent on native intelligence, need continued training in non-formal techniques of instruction and basic information on disease transfer and control.

2.2.3 Teachers

The teachers should be helped in materials development and testing and in devising innovative health education lessons, so that children can take back information that will influence health and hygiene practices in the home.

2.2.4 Pump Operators

The pump operators, whose educational levels approximate those of the animatrices, need the same training as the young women. But their training, being of lower priority, should be postponed until the end of 1989, when RHET can determine whether the progress with other groups allows time for it.
2.3 Available Resources

2.3.1 Health Education Materials

Though materials for the schools are not plentiful, some are available. Ammar M'raihi and the MOH have developed instructional materials, as has the office of "l'Enseignement" (instruction). Stories and exercises left by the previous consultant provide learning through fun and interaction. The AU has obtained materials from the Egyptian Women and Water Project. Culturally-specific and -sensitive materials are being developed by WASH. During the summer, RHET will work on the preparation of new materials to augment materials it already has, and will also design evaluation tools.

2.3.2 Other Materials

The program has occasional access to flipcharts, markers, paper, and slide projectors from the Kasserine hospital. But to function effectively, it should have its own supplies and equipment. A list of basic requirements is provided in the Recommendations (5.2).

2.4 Institutional Support Needs

2.4.1 AU

The AU must have two additional staff members if it is to provide the needed oversight for water outlets and health and development activities. The AU must continue to ensure that health education issues are addressed at the monthly meetings with USAID, and must agree on the distribution of responsibilities among its members for carrying out the tasks assigned at these meetings.

2.4.2 RHET

RHET must ensure that two monthly meetings—one with USAID and one among its own members—are held regularly. One member of the team should be given the responsibility for seeing that each task discussed has a person assigned to carry it out.

2.4.3 USAID

USAID must allot time during its meetings with the AU for discussions on health education and community development activities. Questions to be considered should relate to the tasks outlined in RHET's responsibilities.
Chapter 3

TRAINING PLAN

3.1 Elements of Strategy

The training strategy has three main elements: the training of trainers, curriculum and materials, and the followup system.

3.1.1 Training of Trainers

The successful training of RHET is essential to the health education program because its members are responsible for training at the lower level—the animatrices, teachers, and pump operators.

Two or three RHET members were to have been sent to the University of Santa Cruz Health Policy Studies Department in 1988. But the training did not take place as planned because the GOT did not budget for international airfares as required by the project agreement. Every effort should be made to ensure that the training does take place this year. USAID, in conjunction with the AU, RHET, and the CTDA, should determine which ministries will be directly responsible for carrying through on each candidate for training.

Four or five members of RHET are slated for training in Egypt in March 1989 under the Women and Water Project. One of the problems identified by the social analysis preceding the original design of the project was reaching and involving women. Bringing women into RHET will facilitate the involvement of women at other levels.

Training in health education should become more and more fine tuned, focusing on study design, materials development and testing, evaluation tools, etc. Training might also encompass intercultural approaches to management and negotiation. All members of the team should ultimately participate in at least one or two training courses. The consultant is looking into training opportunities in the U.S. over the next few months.

3.1.2 Curriculum and Materials

RHET should investigate what health education materials are available elsewhere while also designing its own. All must be tested. The focus groups for teachers and the KAP survey of students, both in February, should yield ideas. These should be shared with the teachers, who should have a say in determining the curriculum as well as materials design and focus, considering they are most familiar with the needs of the community and will be the ones instituting the program. The same is true for the animatrices' input to curriculum and materials developed in their program. All this should begin immediately, and should take firm shape during the training for teachers and animatrices in May.
3.1.3 Followup System

The animatrice program currently has a followup system conducted on an ad hoc basis. Members of RHET occasionally observe the young women at work after training. This should continue, but a regular schedule of visits should be established and adhered to for continued coaching and support. The same should apply to the school program once it gets under way. Evaluation must be given much greater emphasis so that it can be determined whether a message or demonstration is successful, whether any changes need to be made, and whether program objectives are being realized. Evaluation will involve the findings from focus groups, KAP surveys, the testing of health education materials, and the mid- and end-of-year questionnaires given to students. RHET will be responsible to see that the followup activities are in place.

3.2 Proposed Training

3.2.1 RHET

As was noted earlier, the training of members of RHET is key because of their central role in training others.

Their training should consist of: non-formal education, basic elements of health education, community development, and then increasingly sophisticated elements of evaluation design. The U.S. training should take place as soon as possible. The training in Egypt in community education with the Women and Water project will take place in March. Other members of RHET might want to concentrate on negotiation skills and intercultural management. A course in the latter is available through the School for International Training in Vermont.

3.2.2 The Animatrices

The training and performance of the animatrices thus far have been very satisfactory. Each community, represented by its WUA, joins the RHET in determining the criteria for selecting the young women (e.g., they must live within the area, be motivated, and be literate—though exceptions are made) and in the actual choice of candidates.

Training by RHET takes place over ten days and introduces the animatrices to the theory and practice of information exchange between RHET and themselves and between themselves and women in the community. Topics covered are water-borne diseases, diarrheal disease, general hygiene, oral rehydration therapy, preventive measures, and basic methods of treatment of common diseases. A test is given to assess their knowledge and their performance is observed in the field. The primary emphasis in training is placed on people-to-people communication, utilizing social and work gatherings as the settings for the transmission of information to women in the community. The animatrices are also carefully trained to observe whether their suggestions for improving domestic hygiene are carried out.
From all appearances, the animatrices are performing well. At a meeting with them, the consultant found that they had developed a good understanding of their responsibilities and that their ability to express themselves had greatly improved. This was evident from a videotape made during their training which showed them far less at ease and far less articulate than they were now.

The experience of the past year, considered an experimental period, will be a guide to improvements in the animatrice program. For example, RHET deliberately chose one animatrice who was not literate—though one of the criteria for selection is literacy—but who appeared to be the brightest in the group. She has proved a success and, though most animatrices work alone, has been going into homes with another young woman who is literate. This experiment has borne out RHET’s conviction that literacy need not be a precondition for recruitment. It has also established that the young women are more comfortable working in pairs. These findings will be integrated into the training guidelines.

Discussions with the consultant confirmed that further work is needed on both quantitative and qualitative baseline-gathering for knowledge, attitudes, and practices (KAP) of the animatrices before their training or work begins.

3.2.3 Teachers in School Program

The consultant heard numerous suggestions for the school program, all of which were carefully considered in the preparation of a plan. Criteria for the selection of participating schools will be added to those for the selection of communities, and the training of teachers can then begin.

RHET will do a baseline survey of teachers largely using focus groups to elicit information on ideas and behavior patterns useful in determining the best approach to both the teachers’ training and behavior change in students and community members. Focus groups have the advantage of an informal setting that does not intimidate participants in the way a set of test questions might by appearing to challenge their knowledge.

A two-day training course in the field for teachers will focus on communication techniques and the creative development of materials. An innovative idea from RHET is to bring the animatrices in for part of the time, not merely to refresh their knowledge but also to establish rapport between them and the teachers. It will be interesting to see how individuals from different walks of life react to each other in the same group, and whether communication will be restrained by discomfort, awe, or a sense of social distance. If the experiment is successful, it could provide a cross fertilization of ideas that would be beneficial for the design of future programs.
During the training RHET will introduce the idea of health clubs, which will teach students about better health practices they can carry back to the community. The clubs are expected to begin in the summer and continue through the year. If materials available at that time are suitable for the health clubs, they will be distributed. If not, appropriate materials will be prepared for distribution in September. A refresher workshop for teachers will also take place during that month.

In September students will be given another questionnaire as part of the evaluation process. Their responses will help identify the differences between students who have and who have not participated in the health clubs. Evaluations will be repeated at mid-year and at the end of the year, using both qualitative and quantitative techniques. Also in September the school health program will begin in full. Specific instruction will be given on water-related health and hygiene. The health clubs will continue. The school health program will be repeated in 1990-91.
Chapter 4
RESOURCES REQUIRED

4.1 Training Team

RHET is quite able to conduct training in non-formal and health education ideology, methodology, and techniques. Continued training for the team should be sought in increasingly sophisticated areas such as evaluation design and implementation and materials development, as well as negotiation skills and intercultural management. (Programs for this are available through the School for International Training in Vermont or through Professor Hornick at Annenberg School of Communications in Philadelphia)

4.2 Materials Required

Some materials are available for health education. They consist of pamphlets on hygiene, simple diagrams, and "health rules." These are not nearly as plentiful or focused as they should be. More emphasis must be put on helping students to recognize the connection between contaminated water and ill-health through the use of games, guided questions, and student interaction. Efforts should be made to design original materials, to research materials available through other programs, and to develop a distribution schedule.

4.3 Equipment

While some audiovisual equipment is available through the Kasserine hospital, the program must procure its own. At least one vehicle is also required to transport personnel and equipment. This is the responsibility of the CTDA.

4.4 Logistical Support

Logistical support is needed for training of the various groups, distributing materials, and gathering evaluation information. For training activities, the following tasks need to be accomplished:

- arranging the training site (consultant)
- arranging transport for participants (AU)
- arranging for per diem for participants (CTDA and RHET member)
- budgeting and keeping track of expenses (RHET member).
4.5 Technical Assistance Needed

4.5.1 Health Education Consultant

The health education consultant should be available three to four times a year to meet the needs of the program as outlined by the AU, RHET, and USAID. She should be at hand to facilitate the implementation of all aspects of the program, including the training of staff and members of the community in planning, research, and evaluation.

Under the present consultancy:

- A plan of action was developed with RHET to carry the health education program through 1991, and suggestions were made for its continuation beyond that date.
- The community outreach by the animatrices was found effective, as shown by the community's acceptance of their presence and its willingness to put into action the messages they bring.

An area of deficiency was the lack of planning in the school health education program. Accordingly the next consultancy (see Appendix C) will focus on this component, concentrating on the schools and schoolchildren to bring about a change in the behavior patterns and practices associated with the transmission of water-related diseases. A training workshop for teachers will target health education ideology and methodology, non-formal education, development of educational materials, and evaluation techniques.

The consultant will return in September 1989 to help launch the school health program, review evaluation processes, and steer the animatrice program toward complete support by the community. Assuming all takes place as planned, the September 1989 consultancy will focus on:

- evaluation of health clubs
- review of evaluation designs and their implementation
- continued training of instructors
- conducting student KAP surveys
- materials distribution.

In December 1989 and January 1990 the consultant should be present for the midterm evaluation of students and its analysis, and help plan for the upcoming year's activities.
4.5.2 Epidemiologist

Of great benefit would be the services of an epidemiologist to measure the impact of the program on morbidity and mortality rates, using both hospital and clinic records as well as community surveys. If an epidemiologist can be brought in within the next two months, the effect of the full upcoming health education program could be gauged. If not, monitoring the effect of the school program alone would be a useful exercise. Help is available through the Faculty of Medicine in Monastire, the Regional Director of Health in Kef, and the Chef de Service de Soin de Santé de Base in both Tunis and Sousse. It will be up to the members of RHET who are associated with the MOH to request it.

If a long, formal epidemiological study is deemed too expensive or unrealistic, small recurrent KAP surveys would help determine the extent of change.

4.5.3 AU

The AU primarily needs to help support and coordinate the activities of the RHET. This includes making sure RHET is represented at monthly meetings with AID, that it has the collaboration of various government agencies (such as the MOH in obtaining the services of an epidemiologist), and that technical equipment and materials are procured through proper channels (including coordinating funding with AID).

4.5.4 RHET

RHET takes the lead in all health education activities. At a meeting with RHET on December 12, 1988, a plan of activity from January 1989 to the middle of 1990 was drawn up. It is an ambitious plan, but RHET felt capable of carrying it out and was at pains to ensure that all the proper steps were taken to guarantee a comprehensive and well-executed program. The main points of the plan and the target dates of each component appear below.

1. Participate in monthly meetings with AID, and the AU through the life of the project.


5. Explore with the MOH involvement of an epidemiologist in research/survey of disease (January).

6. Determine appropriate funding agencies for future proposal submission, make information available to CTDA, MOH (January 1989 to April 1990).
7. Select animatrices (first half of February 1989).
8. Conduct focus groups with teachers, extract data (February 1989).
10. Conduct a KAP survey with students (February 1989).
15. Form student health clubs (May 1989).
17. Conduct second part of teacher training (September 1989).
18. Conduct a second KAP survey with students (September 1989).
23. Write final report and collaborate with MOH, CTDA for submission of proposal for funding (June 1990).
Although USAID is interested in getting the overall model adopted by GOT and other donors, not just promoting one isolated component, USAID needs to support health education activities. It should coordinate logistics for RHET members' training, be available for monthly meetings, and be sure that the monthly meetings are used expressly for health education issues.
Chapter 5
NEXT STEPS

5.1 Conclusions

The next two years are going to be crucial to the continuation and expansion of the health education program after USAID funding ends. RHET has created a viable operation and has succeeded in drawing the community into all aspects of planning and development. The animatrices are being trained. The school health program should be on its way. There is manifest evidence of enthusiasm, an eagerness to learn, and a desire to make a contribution that shows up in the attitudes of all the parties involved.

But the staff in Kasserine is troubled by the uncertainty about funding, training, staffing, and equipment. The less-than-adequate progress in each of these areas is hindering the achievement of objectives and eroding morale. It cannot be stressed too strongly that every effort must be made to carry through with plans and recommendations that have been agreed upon.

In addition to these more obvious supports to sustain the program are two factors integral to its success. These are community development and income-generating activities for the people.

Education without resources is futile. If no latrine exists, if wood is unavailable and charcoal too expensive to provide fuel, if a dependable supply of water is a dream, then teaching personal hygiene has little meaning, instruction on keeping children warm or boiling water makes no sense, and stressing the washing of clothes and the body is an affront.

Funding and support of community development projects will make possible the construction of that latrine or water storage facility and provide a stimulus for the community to work together. Income-generating projects will provide the money for the purchase of that charcoal and perhaps for those shoes (a frequent topic of conversation when the consultant visited homes), freeing the minds of community members to pay heed to the health instruction they are given. Income-generating activities also mesh with the GOT's encouragement of private initiatives and should be acceptable within the general country plan.

Existing components such as community development and possibly income generation can be strengthened in the future. These are now of sufficient importance to warrant discussion at the monthly health education meetings between the AU, RHET and AID. The need for devising income-generating activities should be taken into account when RHET is investigating the most suitable organization to approach for future funding of the program. If the AIC or WUA become strong institutionally they can move into the next phase, however, they are now fledgling institutions which shouldn't be overloaded too soon.
5.2 Recommendations

Recommendations

Program achievements to date are encouraging. But they represent only a modest beginning in the process of bringing about a measurable improvement in the health and general welfare of the population of Kasserine. To consolidate the gains that have been made and to provide the momentum that will carry the program forward, the following recommendations are offered:

- RHET should be assured of the maximum support of USAID and the consultant. Regular monthly meetings, which could be part of the meetings now held between the AU and USAID, should focus specifically on health education issues and should involve a RHET representative who has been delegated to attend. By the end of each meeting, there should be a clear understanding of the responsibilities assigned to each member of the team.

- Expanded collaboration between agencies of the GOT should be considered a priority. Of immediate relevance is the opportunity to exploit MOH's impending capability to make and supply oral rehydration solution packets for distribution in the country, and the need to measure the impact of the health education program on morbidity and mortality rates through an epidemiologist (although only a relatively long and expensive prospective study will yield this type of data). A less formal alternative would be recurrent KAP surveys.

- USAID, the WASH staff, and the consultant should press forward with the training for RHET thus far planned in Egypt and the United States. Training should emphasize such skills as qualitative and quantitative data gathering, study design, and materials development and testing. The effects of the training can be multiplied by having participants prepare a written evaluation of what they have learned, to be shared with other team members through presentations and workshops on their return.

- The investigation of international funding agencies by the GOT (MOH and CTDA) should start immediately so that a proposal can be prepared for submission. The search should concentrate on agencies that focus on water, hygiene, and health education.

- The staff of the AU should be increased as soon as possible by the recruitment of at least two women who would be part of the CTDA/AU staff. Appointing women to the overall coordinating agency will ensure the best possible involvement of community women with
program personnel. The head of the AU should confer with the PDG in January to finalize this matter without delay.

An extension of funding for two or three years to support the animatrice program in twenty new communities should be considered, with the communities themselves assuming the responsibility for costs once USAID funding ends. The future of the original group of twenty animatrices, whose further participation is a matter for discussion at the monthly meetings between RHET and USAID.

CTDA's support is needed for the acquisition of a vehicle to facilitate the extensive travel required of RHET staff, and for the procurement of the following essential teaching aids which were budgeted into the PIL for local procurement:

- 10 flipchart stands
- 100 magic markers
- 5,000 sheets of flipchart paper
- 2 slide projectors
- 2 overhead projectors
- 100 transparencies
- 5 packets of grease pencils
- miscellaneous office supplies.
BIBLIOGRAPHY
BIBLIOGRAPHY


22. "La Reunion pour Elaborer le Plan d'Education Sanitaire, Maison des Jeunists, Kasserine, Oct. ___?


24. Telex to Bill Egan, USAID/Tunis, Subject: U.S.-based Training in NFE.

25. The Role of Women as Participants and Beneficiaries in Water Supply and Sanitation Programs by Mary L. Elmendorf and Raymond B. Isely, Water and Sanitation for Health Project, Arlington, VA, 1981.


APPENDIX A

LIST OF PERSONS CONTACTED
APPENDIX A

LIST OF PERSONS CONTACTED

Belgacem Khessasia, ODTC
Toufik Gharsailli, ODTC
Lazhar Laabidi, ODTC
Mohamed Sakii, ODTC
Hajji Mosbaah, ODTC
Moncef Hossein, ODTC
Ahmed Ridha El Fekih-Salem, PDG
Omni Raoudha, Santé de Base
Fatima Guesmi, Public Health
Moktar Laouili, Autogestion Unit
Cherifa Saadaomi, Regional Kasserine Hospital
Mohamed Salah Saidi, Social Affairs
Ammar M’Raihi, Public Health
Ben Qissa Hagui, Regional Direction for Learning
Mohamed Monsour, CRS
Ahmed Bahget, CRS
Nancy Hooff, USAID
George Garner, USAID
Humphrey Davies, Save the Children
Nancy Tumavick, USAID
Bill and Patty Stedham, PVCs
Mohamed Hassairi, USAID
Diana Putman, USAID

- 31 -
APPENDIX B

ITINERARY
APPENDIX B

ITINERARY

Itinerary and Dates

December 4 - Leave National Airport, Washington, D.C., arrive Tunis
December 5 - Review documents
- Meet with Nancy Hooff to go over project activities/briefing
December 6 - Meeting with Nancy Tumavic, briefing
- Meeting with George Carner, briefing
- Review project documents
- Meeting with Mohamed Ali, overall health education activities, project history
- Arrange for logistics for trip to Kasserine
- In evening, reception at John Sperling's house
December 7 - Meeting with Autogestion Unit
- Meeting with CRS; the history of health programs, future involvements, how "animatrices" have been used in other projects
- Meeting with Save the Children: "animatrices", and training
- Review documents
- Meeting with Belgacem Khesaisia, AU head, and dinner
- Drive to Kasserine at night
December 8 - Kasserine
- Meeting with AU, review program
- Introductory meeting with PDG
- Introductory meeting with MOH
- Meeting with Ministry of Education, introduction
- Discussions with AU staff
- Writing
December 9 - Field trips to communities
  ◆ Meeting with individual "animatrices"
  ◆ Meeting with individual community women
  ◆ Meeting with school personnel
- Writing
December 10 - Field trips
- Writing
December 11 - Planning for meeting 12/12
  PM free
December 12 - All day meeting/workshop with Regional Health Education Team
  ◆ Design of program over next year, two years in the future
December 13 - Reading, review, discussions with AU
  - Writing
  - Review material
  - Discussions with AU
December 14 - Review audiovisual history of project
  - Discussions with AU
  - Reading, planning for meetings
  - Telephone conversation with Nancy Hooff - update
  - Preliminary meeting with Egyptian team and AU
  - Discussions with Dr. Hopkins and Egyptian team, dinner
December 15 - Review literature for meeting with health educator and other RHET members on 12/19
   - Meeting with Tofiq for 12/19 meeting
   - Field trips to WUAs
   - Review program activities/share information with Egyptian team
December 16 - Meeting with Ammar M'raihi and Egyptian team on health
   - Education strategies at MOH
   - Meeting with "animatrices"
December 17 - Field trips with Egyptian team to water sites
   - Writing
December 18 - Planning for Monday 12/19 meeting
   - Free
December 19 - Meeting regional education director and other RHET members to go over plans and approaches
   - Meeting with Tofiq, final review of files, discussion
December 20 - Meeting with Belgacem, final points
   - Meeting with RHET, final plans
December 21 - Visit to mobile health team and clinic, Shiba nad Sbeitla
December 22 - Get final materials from MOH
   - Drive to Tunis
December 23 - Report writing
December 24 - Report writing
December 25 - Free
December 26 - Report writing
December 27 - Meeting with AID director, present observations
   - Meeting with Nancy Hooff
   - Meeting at CRS, discuss observations, materials, health projects
   - Finalize draft of report
December 28 - Meeting with Diana Putman, present and review draft of report
December 29 - Finalize corrections
December 30 - Finalize draft
December 31 - Leave for U.S., work on plane.
APPENDIX C

SCHEDULE FOR MAY-JUNE 1989 CONSULTANCY
APPENDIX C

SCHEDULE FOR MAY-JUNE 1989 CONSULTANCY

The approximate dates and activities for this consultancy are as follows:

Saturday, May 20, 1989  - Leave D.C., arrive Tunis

Monday, May 22  - Review progress with AID staff, Tunis

Tuesday, May 23  - Review health education evaluation procedures
                    Review evaluation procedures in place
                    Review plans for training of school instructors
                    Review materials developed
                    Review research and plans for program continuation
                    Help plan and carry out workshops for the training
                    of teachers in health and non-formal education.

Sunday, June 11  - Return to Tunis

Monday, June 12  - Review health education program with USAID, present
                    draft report

Leave Tunis week of June 12, 1989