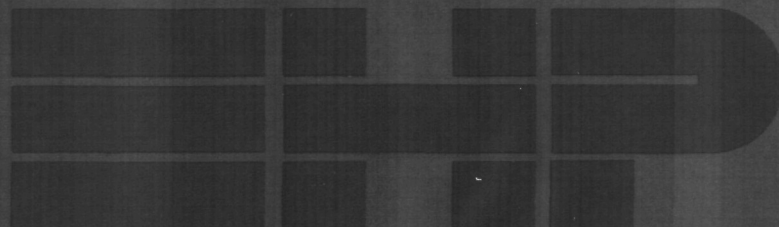


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ENVIRONMENTAL HEALTH PROJECT

WASH Reprint: Field Report No. 324

Lessons Learned from the Experiences of the
Kasserine Regional Health Education Team

Sumana Brahman
Elaine E. Rossi

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Center for Population, Health and Nutrition
Bureau for Global Programs, Field Support and Research
U.S. Agency for International Development



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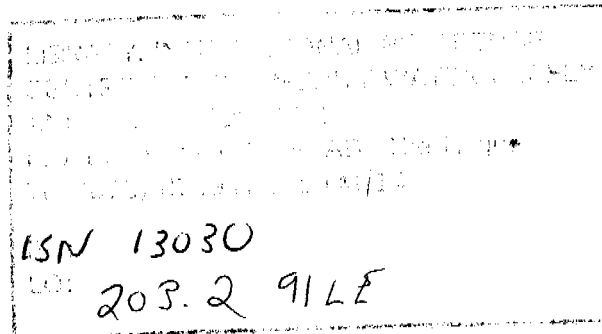
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Prepared for the USAID Mission to Tunisia
under WASH Task No. 138



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WASH and EHP

With the launching of the United Nations International Drinking Water Supply and Sanitation Decade in 1979, the United States Agency for International Development (USAID) decided to augment and streamline its technical assistance capability in water and sanitation and, in 1980, funded the Water and Sanitation for Health Project (WASH). The funding mechanism was a multiyear, multimillion-dollar contract, secured through competitive bidding. The first WASH contract was awarded to a consortium of organizations headed by Camp Dresser & McKee International Inc. (CDM), an international consulting firm specializing in environmental engineering services. Through two other bid proceedings, CDM continued as the prime contractor through 1994.

Working under the direction of USAID's Bureau for Global Programs, Field Support and Research, Office of Health and Nutrition, the WASH Project provided technical assistance to USAID missions and bureaus, other U.S. agencies (such as the Peace Corps), host governments, and nongovernmental organizations. WASH technical assistance was multidisciplinary, drawing on experts in environmental health, training, finance, epidemiology, anthropology, institutional development, engineering, community organization, environmental management, pollution control, and other specialties.

At the end of December 1994, the WASH Project closed its doors. Work formerly carried out by WASH is now subsumed within the broader Environmental Health Project (EHP), inaugurated in April 1994. The new project provides technical assistance to address a wide range of health problems brought about by environmental pollution and the negative effects of development. These are not restricted to the water-and-sanitation-related diseases of concern to WASH but include tropical diseases, respiratory diseases caused and aggravated by ambient and indoor air pollution, and a range of worsening health problems attributable to industrial and chemical wastes and pesticide residues.

WASH reports and publications continue to be available through the Environmental Health Project. Direct all requests to the Environmental Health Project, 1611 North Kent Street, Suite 300, Arlington, Virginia 22209-2111, U.S.A. Telephone (703) 247-8730. Facsimile (703) 243-9004. Internet EHP@ACCESS.DIGEX.COM.

WASH Field Report No. 324

**LESSONS LEARNED FROM THE EXPERIENCES
OF THE KASSERINE
REGIONAL HEALTH EDUCATION TEAM,
1987-1991**

Prepared for the USAID Mission to Tunisia
under WASH Task No. 138

by

Sumana Brahmam

Elaine E. Rossi

and

Members of the Regional Health Education Team

July 1991

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Related WASH Reports

Technical Assistance and Planning for Health and Hygiene Education and Women's Involvement in the Tunisia Rural Potable Water Institutions Project by Elaine Rossi. WASH Field Report No. 307. March 1990.

Health and Hygiene Education and Women's Involvement in the Tunisia Rural Potable Water Institutions Project by Sereen Thaddeus. WASH Field Report No. 277. November 1989.

Midterm Evaluation of the USAID/Tunisia Rural Potable Water Institutions Project by Lee Jennings, Ridha Boukraa, Mohamed Frioui, Richard Swanson, Sereen Thaddeus, and Alan Wyatt. WASH Field Report No. 256. July 1989.

The Health Education Program of the Rural Potable Water Institutions Project in Tunisia by Pamela Pine. WASH Field Report No. 255. March 1989.

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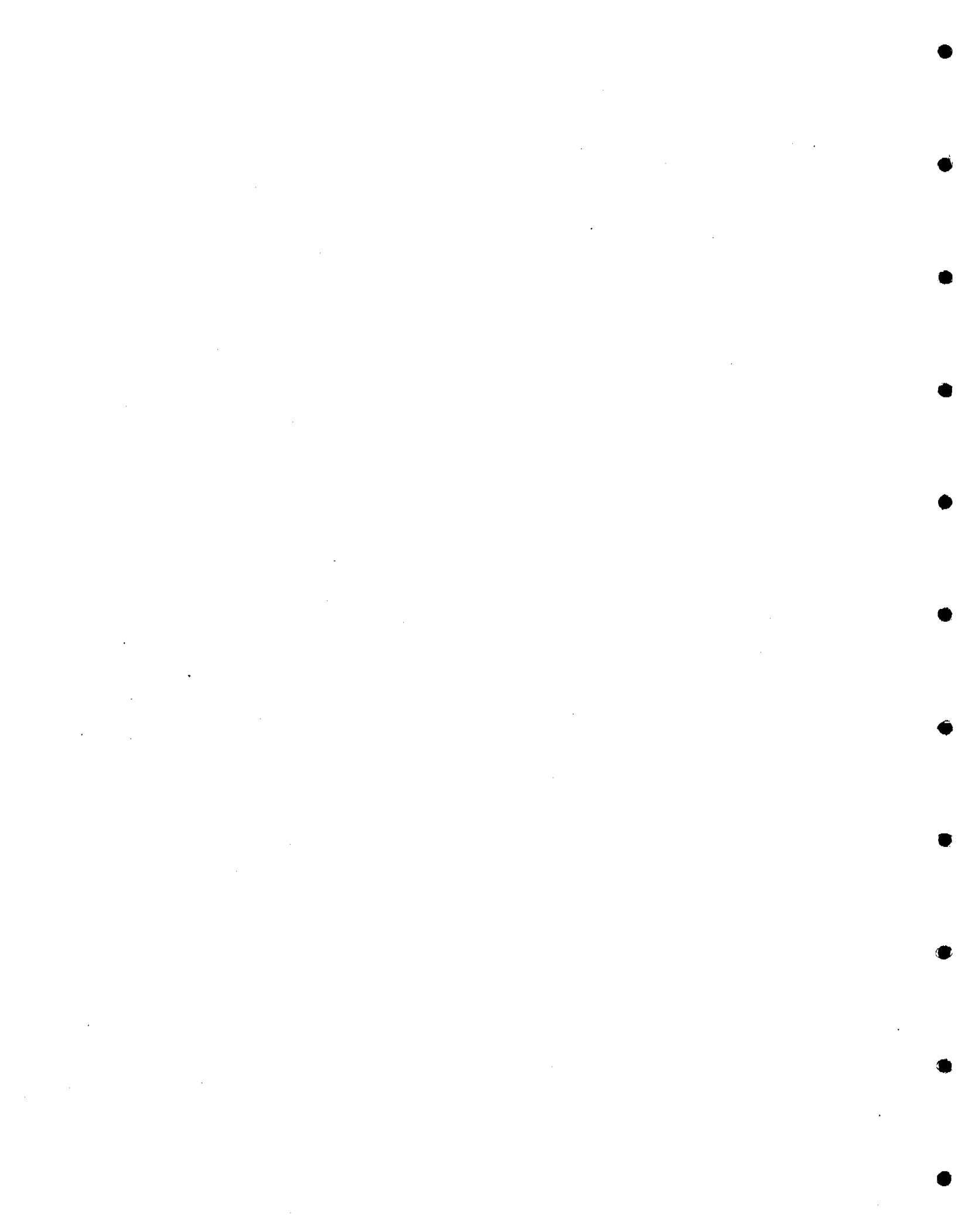
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ACRONYMS

AIF	Association d'intérêt féminin (Women's Interest Groups)
CRDA	Commissariat régional au développement agricole (now includes the ex-ODTC), Regional Agricultural Development Commission
CTDA	Central Tunisia Development Agency (<i>Office de Développement de la Tunisie Centrale</i> or ODTC)
GOT	Government of Tunisia
KAP	Knowledge, attitudes, and practices
MOAg	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
ODTC	Office de développement de la Tunisie centrale
ORT	Oral Rehydration Therapy
PACD	Project Activity Completion Date
RHET	Regional Health Education Team (<i>Equipe régionale d'éducation sanitaire</i>)
TD	Tunisian Dinar (.9 TD = US \$1)
UAG	Unité d'autogestion, Regional WUA Support Unit
USAID	United States Agency for International Development
VHW	Village Health Worker (<i>Animatrice de base</i>)
WASH	Water and Sanitation for Health Project
WIG	Women's Interest Groups (<i>Associations d'intérêt féminin</i>)
WUA (or AIC)	Water User Association (<i>Association d'intérêt collectif</i>)



ACKNOWLEDGMENTS

We would like to thank the members of the RHET team for their active support during our two-week consultancy. They were all willing to provide us with the necessary information, and eager to help us compile a comprehensive overview of the health/hygiene component of the Kasserine Rural Potable Water Institutions Project. Indeed, this program would never have succeeded without their valuable input and contribution.

Dr. Abdelmalek Laarif, the regional director for health of the Ministry of Health, and Mr. Ali Boudabous, the Commissaire of CRDA, have continuously supported and encouraged the health programs, and have always taken time from their busy schedules to meet with us. The former Commissaire of the CRDA, Mr. Ridha Fekih, gave RHET and its program priorities his support from the onset of the project.

Finally, we wish to thank Dr. Diana Putman (the former USAID Project Development Officer) and Mr. Hafid Lakhdhar for their enthusiastic support throughout the duration of the project. Special thanks to Mr. Lakhdhar and Mr. George Carner, Director of USAID/Tunis, for helping to troubleshoot and keep things on track after Dr. Putman's departure.

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EXECUTIVE SUMMARY

This report constitutes the final document about activities of the Health and Hygiene Education component of the Rural Potable Water Institutions Project (USAID/Government of Tunisia No. 664-0337). These activities were conceived as an integral part of the Project Design Logical Framework and were to be complementary to the development of Water User Associations (WUA) throughout Kasserine. The Project Activity Completion Date (PACD) was March 31, 1991.

The Kasserine Regional Health Education Team (RHET) was formed to plan and implement the health and hygiene education component of the project. The idea of an inter-ministerial team holding the responsibility for programmatic decisions and field work on a regional level was a new one, and in many ways was a successful experiment. RHET worked together for more than three years and was responsible for the design, implementation, and follow-up of several programs: a female village health worker program, a program for hygiene education in primary schools, the identification and construction of water-and-sanitation-related community development projects, formation of women's interest groups, and the development of the necessary educational and training materials to assure program success.

By and large, the health and hygiene component of the project had many unique features, and could serve as a useful model on how such a project could be implemented with input from different ministries. The idea of an inter-ministerial team holding the responsibility for programmatic decisions and field work on a regional level was a new one, which involved cooperation between government experts from several disciplines. Despite the complexities that inevitably arise in such collaborative endeavors and the fact that the composition of RHET itself changed over time to reflect both personnel and programmatic changes, most of the objectives were met.

This report summarizes and evaluates all health and hygiene education component activities to determine the lessons learned during the Kasserine Regional Health Education Team's 3-plus years of experience. Listed below are some of the main lessons. Chapters 2 through 7 provide a complete listing of the lessons derived for each project component.

Female Village Health Worker Program

- It is nearly impossible to implement a successful community-based health program in rural areas without a regular, assured form of transportation. The lack of transportation for RHET members was frustrating and added to team stress, as well as blocking field follow-up visits to village health workers (VHWs) throughout the life of the project.

- For rural regions with limited health personnel, the VHW seems to be a viable model for reaching communities as long as the VHWs are well trained, well supervised, and are asked to communicate very specific health messages related to actual existing behaviors. An analysis of existing behaviors should precede the VHWs' training and activity, so that the messages are related to actual local knowledge, and not just based on perceived needs.
- Any reported changes should also be evaluated through household observations to determine the accuracy of the information provided.

School-based Hygiene Education Program

- This program greatly increased the knowledge level of both teachers and students regarding water and sanitation, personal hygiene, and household cleanliness.
- There is a great need for the active participation of the Ministry of Education personnel in this program, and more active participation from the teachers is necessary.

Small Community Development Programs

- An evaluation must be planned and implemented for all community development activities instead of being left as an optional programmatic task. However, given all the other responsibilities of the RHET members, it was often difficult for them to find adequate time to implement this activity.
- The lack of strong UAG leadership after the departure of the UAG Director led to a paucity of data collection and systematic monitoring activities. This, in turn, meant that only project outputs could be assessed.

Women's Interest Groups

- Implementing a novel concept such as WIGs at a community level in Tunisia requires a significant commitment of time and resources. Having an outside party take a lead role in creating these structures without the active participation of a local, permanent counterpart diminishes any chance of sustainability after the outside staff member leaves.

- The support of community leaders is critical to the success of the WIG. This groundwork must be laid well in advance. In several cases, however, the local officials tried to control the WIG instead of allowing the women to do so.
- The planning process for the WIG program should have included an assessment component. This would have enabled an analysis of the effectiveness of these community groups in representing women's points of view to the WUAs.

Materials Development

- Flexibility in project design and budgeting can lead to some good, complementary activities and materials for existing programs.
- Pretesting and field-testing of educational and training materials is a difficult technique to reinforce. (Even with training in these areas, RHET members actively resisted these steps.) It takes constant technical advising to insure that pretesting will take place.

Management and Organizational Issues

- Lack of a formal, administrative arrangement between the various ministries involved in RHET activities sometimes hampered these activities.
- The services of an outside budget manager were necessary to the smooth functioning of RHET and encouraged more innovation and programmatic diversity.
- The absence of a formalized structure for RHET led to internal conflicts between RHET members that were impossible to resolve in any satisfactory way. Creating the position of UAG Director for project purposes was necessary, but in the long run it left RHET without management, because it was impossible to recruit someone to replace the original Director given the particular administrative circumstances of the Ministry of Agriculture position.

Chapter 1

INTRODUCTION

1.1 Purpose of this Report

This report constitutes the final document to be produced about activities of the Health and Hygiene Education component of Rural Potable Water Institutions Project (USAID/Government of Tunisia No. 664-0337). These activities were conceived as an integral part of the Project Design Logical Framework (Appendix A) and were to be complementary to the development of Water User Associations (WUA) throughout Kasserine. The Project Activity Completion Date (PACD) was March 31, 1991 (then extended to May 31, 1991 for health activity and to June 30, 1992 for National Strategy activity). The goal of this report is to summarize all health and hygiene education component activities including their evaluation and to determine the lessons learned during the Kasserine Regional Health Education Team's more-than-three years of experience.

1.2 Project and RHET Background

In 1987 and 1988, the Regional Health Education Team (RHET) was formed and trained in basic health and hygiene education techniques and program development by a U.S. consultant (CTDA 1987; Rull 1987, 1988). Ten people were trained: they came from the Ministry of Public Health, the Ministry of Social Affairs, and the Central Tunisia Development Association, now a part of the Ministry of Agriculture. RHET then worked with the consultant to develop the original health and hygiene education plan for Kasserine Governorate to be completed by the PACD.

Other U.S. consultants worked with RHET members to review and revise the work plan and to provide technical assistance to the various activities (Pine 1989; Jennings et al. 1989; Thaddeus 1989; Rossi 1990a and 1990b). Some RHET members also benefitted from a study tour to Egyptian potable water projects with important health education activities and several short workshops in Tunisia covering training of trainers and evaluation methods for health education. One RHET member attended a one-month communications workshop in the United States.

Over time, the composition of RHET changed to reflect both personnel and programmatic changes. Of the original group trained, there was only one woman. However, the core group that implemented the activities included two women from the Ministry of Health and one from the Ministry of Social Affairs. Original RHET members requested the participation of a representative from the Ministry of Education once the schools were targeted for activities, and this was quickly implemented in 1988.

Of the original RHET members, four have remained throughout the life of the project. The Ministry of Social Affairs was not represented during the last 15 months of the project. When the Potable Water Institutions Project created the Regional WUA Support Unit (UAG) within the CTDA/CRDA, all four members of the UAG functioned as an important part of the RHET. Later on, the UAG Director (1987-89), the UAG Intern for Women's Interest Groups (1989), and the Consultant to the UAG (1989-90) all supported and participated in RHET meetings and activities to varying degrees. The bulk of the RHET activities were implemented by eight RHET members during 1990-91, while the WIG activities were assured by the UAG Consultant and a female UAG member recruited in mid-1990.

1.3 Activities

The original health and hygiene education activities plan, and its later versions, emphasized use of the following strategies to reach rural populations targeted by the potable water project. (The topic is covered in the chapter listed in parentheses.)

- Recruiting and training young (unmarried) women from project communities as village health workers (VHWs) to provide information and practical advice about selected health and hygiene interventions to women and their families at home and in the local dispensary and school (Chapter 2)
- Training primary school teachers in basic health and hygiene principles and using them to impart this knowledge to fifth and sixth grade children in project communities in the hope that this information will reinforce positive health behaviors at home (Chapter 3)
- Implementing health- and water-related projects (e.g., latrines or showers in communities that have themselves identified the need for such projects (Chapter 4)
- Establishing women's interest groups (WIGs) to foster discussion of problems related to potable water and health in their communities, to encourage communication between the VHW, women, and the Water User Association (WUA) in the project community, and thus to begin to institutionalize the participation of women in local decision-making about potable water issues (Chapter 5)
- Development of educational materials for the WUA communities, VHWs, teachers, and students; and development of training materials

for the VHWs, teachers, students, and WIG members (Chapters 2,3,5,6)

1.4 Definition of Tasks

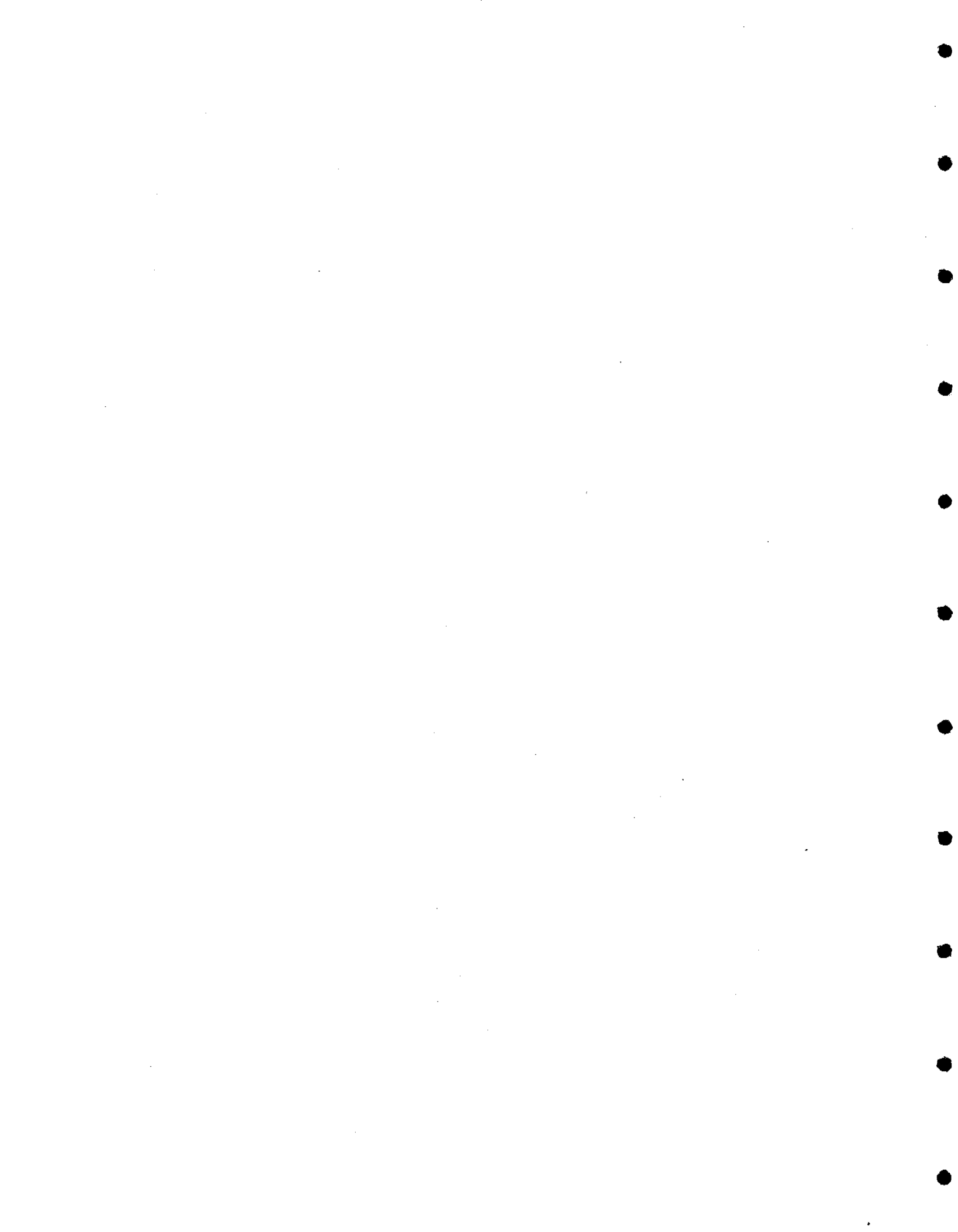
The scope of work (Appendix B) for this consultancy includes the following tasks:

- To determine the lessons learned from the RHET and WIG experiences and to produce a final report
- To provide RHET with technical assistance for continuing project activities, to prompt the completion of certain activities funded by USAID, and to record activity progress up to the PACD
- To officially draw to a close the USAID funding of RHET activities and to attempt to encourage RHET to continue to work together whenever possible.

See Appendix C for the schedule of activities in carrying out these tasks.

1.5 Methodology of Work

The methodologies used by the consultants assigned to this task included: collection and review of all documents; review of developed health and hygiene education materials; analysis of the results of all training activities and follow-up documentation; site visits, including inspection of a site where a sanitation message sign was placed; and consultations with RHET members and other officials in Kasserine. See Appendix D for list of persons and organizations Contacted.



Chapter 2

THE VILLAGE HEALTH WORKER PROGRAM

2.1 Program Background

The Village Health Worker Program is a community-based health education activity designed to empower rural people to play a leading role in initiating needed changes related to water and sanitation. The original program design included the recruitment of three groups of female VHWs based on geographical divisions called delegations over the three years of the project:

1988: Sbiba, Jedliene, Sbeitla, Kasserine Sud Sened (Gafsa Governorate)

1989: Foussana, Thala, El Ayoun, Haidra Gafsa Nord (Gafsa Governorate)

1990: Feriana, Majel Ben Abbes, Kasserine Nord, Hassi El Frid

Each group of VHWs was to include 20 young women, one from each of 20 communities meeting the following criteria: epidemiological evidence of the existence of water-related disease, especially cholera or typhoid; the presence of an active WUA; the existence of both a community health center and a school. (See Appendix E for a map of VHW communities.)

The VHWs were chosen by RHET members with the input of community leaders according to these criteria: acceptability to the local community; results of a short written test administered by RHET members; willingness to accept work that included entering homes of families not related to their own; and enough education to enable them to collect basic data about the families that they serve. Each VHW was responsible for filling out a monthly report form and returning it to RHET. The results of these reports are discussed in Section 2.6 below.

VHWs were trained by RHET members and other personnel in Kasserine, and then invited to refresher seminars throughout the term of their employment. The topics covered in these training sessions included:

- Communication of health messages
- Techniques of health education
- Working in groups and collaboration
- Water-borne and water-related diseases and their transmission

- Sanitation around water points
- Disinfection of drinking water with bleach
- Transportation and proper storage of water in homes
- Vaccination schedule
- Prevention of diarrhea
- Use of oral rehydration therapy (ORT) and Oral Rehydration Salts (ORS)
- Prevention of scabies and ringworm
- Nutrition for pregnant women and infants

The VHWs were recruited with the understanding that they would receive a monthly stipend from RHET of TD 30 per month of service as an encouragement to do good work, but that they were not being hired either by the project or by the government. They were initially asked to work for a period of 12 months, and were to work with RHET members and their communities to identify 30 target families within a two kilometer radius of their own home. Each of the 30 families was to receive a VHW visit at least once per month.

2.2 First-year VHWs

The first group of VHWs, referred to hereafter as first-year VHWs, were recruited and trained in February 1988. Seventeen localities were chosen, and a VHW selected for each one. By 1989, 15 of these young women were still providing services in their communities and all attended a refresher training course after the results of the midterm evaluation were analyzed. In 1989, a request was made by RHET and a U.S. consultant to extend the funding for the first-year VHWs for a full second year; the request was approved, enabling the VHWs to receive their stipends until April 1990.

2.2.1 Midterm Evaluation of First-year VHWs

A household survey was designed and administered by RHET members to 10 of the 30 families visited by each VHW during the first year of service. (The survey is included in Appendix F.) The administration of the survey was hampered by transportation problems, but it was completed. A report synthesizing the results of the 140 surveys (RHET 1989) was produced after a lengthy delay but it does include some useful information.

- 0 to 40 percent of the women surveyed in 15 communities knew the correct dose of bleach to disinfect water.
- 50 percent of the same women knew what to do when a child had diarrhea.
- Bleach was not for sale in some communities that had only one store.
- 10 to 40 percent of the same women cleaned their water storage containers once a month.

The data from these household surveys showed very clearly that the VHWs needed extra training, supervision, and encouragement in their work. A 3-day refresher course was organized for them in September 1989, and it emphasized the areas that showed the greatest weakness in the survey.

At this point, it was also suggested that RHET consider producing and using a field follow-up form for the VHWs, so that each follow-up visit would consistently reinforce the same knowledge and messages to be transmitted. RHET discussed the issue at length in 1989 and early 1990 without making a final decision until mid-1990, when a draft follow-up guide was drawn up for use. It includes both the collection of statistics and recording of observations, but it was never systematically put into use. One of the main obstacles to the field follow-up of VHWs was the unavailability on a regular basis of a vehicle for RHET use in spite of a formal agreement by the CTDA to arrange said vehicle at least three times each week. The Rural Potable Water Institutions Project had budgeted for the purchase of a RHET vehicle, but the government's quota system for the importation of automobiles has left RHET without its transportation for more than three years.

2.2.2 First-year VHW Final Evaluation

The household survey (Appendix F) was administered again in late spring 1990 as a final evaluation tool for the first-year VHWs; 118 surveys were administered, a drop from the 140 surveyed during the midterm evaluation. (Some families had moved, and two refused to be surveyed a second time.) RHET members once again had difficulty with transportation arrangements, and the survey was completed in May 1990. Once again, a report summarizing the data collected was prepared by RHET members (RHET 1990).

This report presented only partial statistics from the survey; four communities were chosen by lottery for presentation, one from each of the four delegations represented by the first-year VHWs. The rationale for this small selection was that a presentation of all data would be too detailed, unwieldy, and difficult to remember. The information available from the comparison of midterm and final evaluation data is presented in Appendix G. As can be noted from this information, hard conclusions are difficult to draw because of the choice of

representing only four communities. However, the percentage of correct responses given during the final evaluation survey was higher in most cases than the percentage of correct responses given during the midterm evaluation. Among the most important are those responses concerning disinfection of water at home:

- Knowledge of the correct bleach dose increased in three communities (by 11, 23, 40%) and remained the same in the fourth.
- Knowledge of the minimal settling time after the addition of bleach rose in all four communities (by 5, 70, 80, 50%).

RHET reported that some families have difficulty following the taught hygiene behaviors due to financial constraints (cost of bleach, storage jars with lids, etc.) or because of the reticence of rural women to change long-held traditional behaviors. It was also put forth that some of the VHWs might not have been systematic in their follow-up with each of their assigned families.

2.2.3 Current Status of First-year VHWs

In April 1990, the first-year VHWs finished their second complete year of service. RHET organized a ceremony to mark the end of their service (from the point of view of receiving stipends). All of the VHWs attended the ceremony. During this meeting, the regional Director for Health in Kasserine asked the VHWs to continue to work as volunteers in their communities. There was some discussion of this request, followed by a positive response from some of the young women. Unfortunately, this has not proven to be the case.

The issue of the stipend (ending after a year or two) has been under discussion since the beginning of the program and various solutions had been discussed. No mechanism to continue funding all of the VHWs had been identified, however. Some RHET members continued to seek alternatives and, with the help of the Ministry of Health in Kasserine, convinced the Governor to provide financing for two VHWs per delegation for one year. The VHWs would not receive the stipend every month, however, so they might only work during the months for which they are paid. At this time, the promised funding has ended, and no other alternatives have arisen to provide funding for the VHWs. According to RHET, none of the VHWs are continuing to do formal work on a voluntary basis.

2.3 Second-year VHWs

The second group of VHWs was recruited and trained in mid-1989. The communities were chosen according to the above-mentioned criteria, and 21 potential VHWs were identified in these communities. All 21 were trained, but one left the job within a few months. The training covered the same main topics as the training for the first-year VHWs, but it took

place over a longer period of time (a day longer) and focused on four main themes: transportation and hygienic storage of drinking and cooking water, methods for disinfecting water, diarrhea and the use of ORS, and the vaccination schedule for children and pregnant women.

A new, better monthly report form for all VHWs was put into use with this new trainee group, which allowed both the VHWs and RHET supervisors to follow each family's progress better over time. (See Appendix H.)

2.3.1 Second-year VHW Midterm Evaluation

The second-year VHW midterm evaluation took place in late spring 1990 over a period of several weeks. As with the first-year evaluations, data from the household surveys were collected from 10 of the 30 families visited by a VHW in each of 20 communities. The results were presented in a report (RHET 1990a) and certain conclusions drawn were later used to structure this group's refresher training course. Some of the results cited were:

- 60 to 100 percent of all households surveyed reported using bleach to disinfect water.
- 100 percent of the respondents in 17 of the 20 communities did not know the correct dosage of bleach to use. (In the remaining 3 communities, the results were 20, 20 and 100 percent correct responses).
- More stores carry bleach and report higher sales than before the VHWs began their work.
- 80 to 100 percent of the respondents knew how to treat a child with diarrhea.

Two other important elements were noted by RHET members during the administration of this survey:

- VHWs collaborated well with nurses in the community health centers and with the WUAs when necessary.
- VHWs had difficulty collaborating with the teachers at the local schools. This is thought to be due to social reasons and status.

Refresher training was conducted in May 1990.

2.3.2 Second-year VHW Final Evaluation

The final evaluation for the second-year VHWs—administration of the same household survey—was scheduled for January and February 1991. The surveys were never done by RHET for several reasons including the following: inter-ministerial problems that prevented coordination and transportation for RHET personnel, lack of a RHET manager or coordinator who supported the activity, the Gulf War situation and limitations on the possibility for field work due to disturbances in some areas of Kasserine.

Field supervision visits to the VHWs were not regular or systematic, so it is not possible to use any information from this source to serve as an evaluation tool. Supervisory visits were difficult due to limited access to transportation, a limited number of female agents of RHET (female agents worked more effectively with the VHWs), and some internal conflicts among RHET members.

2.3.3 Current Status

The 20 VHWs of the second group received their last stipends in March 1991. RHET members believe that none of them have continued to work formally by doing house visits, as was the case with the first group.

2.4 Third-year VHWs

The recruitment and training of a third group of community health workers from the four delegations without a VHW program was planned for March 1990. The process was stalled by a number of factors.

- RHET had fallen behind on VHW follow-up and evaluation because of transport and coordination problems.
- There was no consensus within RHET about whether it was desirable to recruit a third group given the difficulties of following up on the other two.

Eventually, RHET decided (by default) not to recruit a third group of VHWs, but discussions about this topic continued late into 1990 even though the PACD was in March 1991.

2.5 Evaluation Plan

The evaluation of the VHW program was mentioned in most WASH consultancy reports as needing attention and specific planning. The following sections discuss some of the planned evaluation strategies.

2.5.1 Socioeconomic Study

In December 1989, a WASH consultant produced a document detailing all the necessary elements of a study which aimed to measure the socioeconomic and health impact of the USAID/GOT Rural Potable Water Institutions Project (Fikry 1989). This document included a portion that aimed to evaluate the impact of VHWs by collecting and analyzing data in 20 VHW-served communities and comparing it with the data from unserved communities.

Coordination of data collection and its analysis were the responsibility of the UAG Director. Another portion of this study, collection of statistics about eight water-related diseases, was also to be undertaken for preliminary analysis of the health impact of the VHW program and other project interventions. Arrangements were made as to who would train the nurses and collect and analyze the data over a one-year period.

Unfortunately, no data has been produced that will help to evaluate the impact of the VHWs on their communities. The socioeconomic study was implemented with a certain disregard to the sampling laid out by the WASH consultant; thus a comparison of data from VHW-served communities and unserved communities is not possible. (Only six communities with VHWs were included in the sample that was studied.)

The collection of water-related disease statistics from community health centers never took place. The reasons for this are not clear, but the following reasons have been cited by RHET members and MOH personnel: no arrangements were made for the study to take place; the study was not a "regional priority" and therefore MOH personnel could not participate in it; health statistics are not considered public information and therefore the collection and analysis of data in this way was not an easily approved activity.

2.5.2 Analysis of the VHW Monthly Reports

The monthly reports completed and returned to RHET members were not being used for supervisory purposes, nor were they being analyzed. A WASH report (Rossi 1990b) suggested that this activity be contracted out; RHET agreed with this request. An outside consultant residing in Tunisia was contracted to do this work and it was completed and submitted in report form in March 1991 (Engelhardt-Bennani 1991).

2.5.3 Behavior Survey

The WASH report mentioned above (Fikry 1989) also suggested that an outside contractor be identified to design and administer (with RHET help) a field survey to quantify behavioral change in a comparative form between families visited by a VHW, and those not visited by a VHW. This was suggested because the RHET evaluation by household survey did not give any information about observed behavior change, but only about self-reported reported behavior change.

No information was gathered on behavior related to water in any of the program communities.

2.6 Analysis of VHW Monthly Reports and Notebooks

A report completed in 1991 by a USAID consultant to the Kasserine Potable Water Institutions Project synthesized and analyzed the information from the VHW monthly reports. The following is a brief summary of the findings.

2.6.1 First-year VHW Monthly Reports

Less than 30 percent of the monthly reports from the first-year VHWs were completed and turned in to RHET members. The original report forms were not well designed and gave little information to either the VHW or her supervisor. No conclusions or commentary can be drawn from the content of these reports.

2.6.2 Second-year VHW Monthly Reports

The monthly reports were summarized and data compared for January to December 1990. Four delegations (Foussana, El Ayoun, Kasserine Nord, Haidra) had VHWs from this group, and data was collected and analyzed concerning all four delegations. The VHW monthly reports indicate that in all four delegations, the communities improved their methods of storing and disinfecting water. Since there was no other research done comparing communities with VHWs with unserved communities, it is only an assumption that these behavior changes were due to the VHWs home visits.

2.7 Outputs

The following results can be attributed to the health education program:

- 35 trained female community health workers—15 with two years of experience and 20 with one year, ten months experience

- Home visits to 1050 families (30 families per VHW), which may have improved health and hygiene behaviors
- Training plans and materials for female VHWs in potable water projects
- A monthly report form for VHWs was designed, revised, and tested
- Collection of survey data from more than 300 households in rural Kasserine about knowledge and household practices related to water, vaccination, and treatment of diarrhea
- Collection of data from VHW monthly reports and notebooks

2.8 Lessons Learned

The following lessons emerge from 3 years' experience of the VHW program:

- It is practically impossible to implement a successful community-based health program in rural areas without a regular, assured form of transportation to the target areas. Lack of transportation for RHET members was very frustrating, affected the dynamics of the team, and caused stress. This problem blocked field follow-up visits to VHWs throughout the life of the project.
- For rural regions with limited health personnel, the VHW seems to be a viable model for reaching communities as long as the VHWs are well trained, well supervised, and are asked to communicate very specific health messages related to actual existing behaviors. An analysis of existing behaviors should precede this stage, so that the messages are related to actual local knowledge, and not just based on perceived needs.
- VHWs should be asked to communicate a limited, specific set of health messages that are inter-related.
- Supervision of female VHWs in rural, conservative areas is best done by female agents with enough health training for effective problem-solving with the VHWs.
- Paying a stipend to young girls in rural areas, even with a clear explanation that it is not a salary, seems to raise false hopes about

future long-term employment. Once a stipend has been paid, the idea of asking the trained workers to continue their efforts as volunteers does not work.

- WUAs do not have as a financial priority paying a stipend to a VHW for their community.
- VHWs completed monthly reports, but comments and observations were never written in the space on the form; it can be anticipated that only specifically-asked-for data will be provided.
- Any changes noted in monthly reports should also be evaluated through household observations to determine the accuracy of the information provided.
- Training VHWs of the same background and education as in this project takes at least a week for the first training period, followed by 2 to 3 day refresher courses every year.

Chapter 3

THE SCHOOL HEALTH PROGRAM

3.1 Program Background

In the original 1987 RHET activities plan (Rull 1987), primary schools serving targeted communities were to play an important role by using teachers and children to reinforce the ideas and behaviors suggested by the VHWs. This activity fell far behind on its action plan, and the teacher training for six pilot schools did not take place until February 1990. Six primary schools out of 235 in the governorate were chosen according these criteria: existence of a functioning WUA; existence of a working VHW; existence of a community health center; past history of water-related illnesses in the community; the presence of two teachers who grew up in the community. The communities chosen as pilot zones were Boulaaba (Kasserine Nord), Dogra (Kasserine Sud), Khmouda (Foussana), Hinchir Werghi (Thala), Rakhmete (Sbeitla), and Abartaghout (El Ayoun).

The content of the school health education program was designed to respond to the needs assessed by two KAP surveys, one administered to 39 primary school teachers, and the other to 177 children in the 4th, 5th, and 6th grades. These KAP surveys are included in Appendix I. In March 1990, teachers from four of the six pilot schools were trained together in a one-day program. Teachers from the other two schools were trained at their sites in April.

Problems with printing the program materials prevented the program from beginning in April. All the print shops were busy with election materials. Due to this delay, the preparation period for exams coincided with the beginning of the program and the hygiene education curriculum was not completed before the summer recess. Two schools carried out a successful summer program under the auspices of RHET, and the program was completed in all six pilot schools during the fall of 1990. (Please refer to Chapter 6 of this report for details on the materials produced for this program.)

3.2 Current Status

The school health program in six schools was completed and evaluated in 1990. No plans were made to increase the coverage of this intervention because of the approaching PACD. It is not known whether any of the teachers involved in the pilot schools will continue to teach hygiene education to their 5th and 6th grade classes.

3.3 Evaluation Plan

The evaluation of the school health program was planned from the beginning and included the use of the pre- and post-program KAP surveys. The comparative results of these surveys are found in Appendix J. All of the pilot zones were included in the studies. All of the knowledge questions received higher percentages of correct responses in the post-test than in the pretest, varying in the amount of improvement from 5 percent to almost 65 percent.

3.4 Lessons Learned

- This program greatly increased the knowledge level of both teachers and students regarding water and sanitation, personal hygiene, and correct household cleanliness.
- RHET members were unanimous in their opinion that elementary schools are the best focal point for a health and hygiene education program because they are the training ground of the next generation.
- Training of teachers took longer than the one day allotted for this training.
- There is a great need for active participation of personnel from the Ministry of Education in this program, as well as more active participation from teachers.
- Some teachers served as resources for their communities outside of the schools by providing community health education and reinforcing the work of the VHWs.

Chapter 4

THE COMMUNITY DEVELOPMENT PROJECTS PROGRAM

4.1 Program Background

The health education activities included a community development project component. Its purpose was to encourage and motivate community members to take an active role in decision-making; to help poor communities achieve higher levels of sanitation through construction of latrines or showers or the improvement of other water-related installations; and to improve the overall well-being of the community. A small ear-marked fund provided modest sums of money to communities to identify needs for health- and potable water-related construction. In exchange, the communities contributed the labor required to complete the installations, or to pay for some or all of the construction.

Three criteria were used to select the project sites: predisposition of the community to participate, and an expressed felt-need for the project from within the community; communities with recent epidemics of water-related diseases, especially cholera or typhoid; and the geographic division of the projects within the governorate. (Within UAG, each of the four field agents covers a specific geographic region or "secteur", and a decision was made to try to identify one community in each UAG region to participate in this program.)

Project activities financed by USAID took place in three communities: Zelfène, Ouled-Ahmed, and Dhraa. In addition, smaller projects were financed by non-USAID funds in three more communities: Bir Chaabane, Zaouit Ben Ammar, and Chouabnia.

4.2 Current Status

4.2.1 USAID-Funded Community Development Projects

All the small community development projects have been completed as scheduled. The community projects chosen were latrines (Zelfène and Dhraa) and piped water and latrines for a school (Ouled-Ahmed). In addition, a total of 20 cisterns were completed, 10 in Ouled-Ahmed and 10 in Machrak Chams (Sbeitla). Before latrine construction activities began in Zelfène and Dhraa, two RHET members provided a session on the correct usages and maintenance of latrines for those families requesting them.

4.2.2 Non-USAID-Funded Community Development Projects

Outside funding was provided for three additional community development projects: showers and latrines (Bir Chabaane), rehabilitation of a well (Zaouit ben Ammar), and fountain tap and spigots (Chouabnia).

4.3 Evaluation Plan

During an October 1990 evaluation workshop held for RHET members, two individuals agreed to develop and implement an evaluation plan for the small projects. Latrine and shower projects are easily evaluated from the standpoint of completion or non-completion, but assessing the success of related education and information campaigns is more difficult. The evaluation plan included two main components: observation of hygiene standards through field/site visits and mini-household surveys of the project users. The evaluation should have taken place in December 1990, at which time the RHET members in charge of this activity were to draft a short document that included questions for key community members. Part of the evaluation process was to include an assessment of whether or not the project served as a catalyst for more construction of latrines in any of the communities. However, these activities did not take place as planned.

4.4 Project Outputs

4.4.1 AID-Funded Community Development Projects:

<u>Zelfène:</u>	Number of latrines completed: 10 (but 3 were damaged) Number of latrines functioning: 7 Number of families served: 10
<u>Dhraa:</u>	Number of latrines completed: 10 Number of latrines functioning: 10 Number of families served: 10
<u>Ouled-Ahmed:</u>	Number of latrines completed: 2 in the school Completion of piped water in school Number of latrines functioning: 2 Number served: 100 students

4.4.2 Non-USAID-Funded Community Development Projects:

Bir Chaabane: Number of latrines completed: 20
 Number of families served: 20

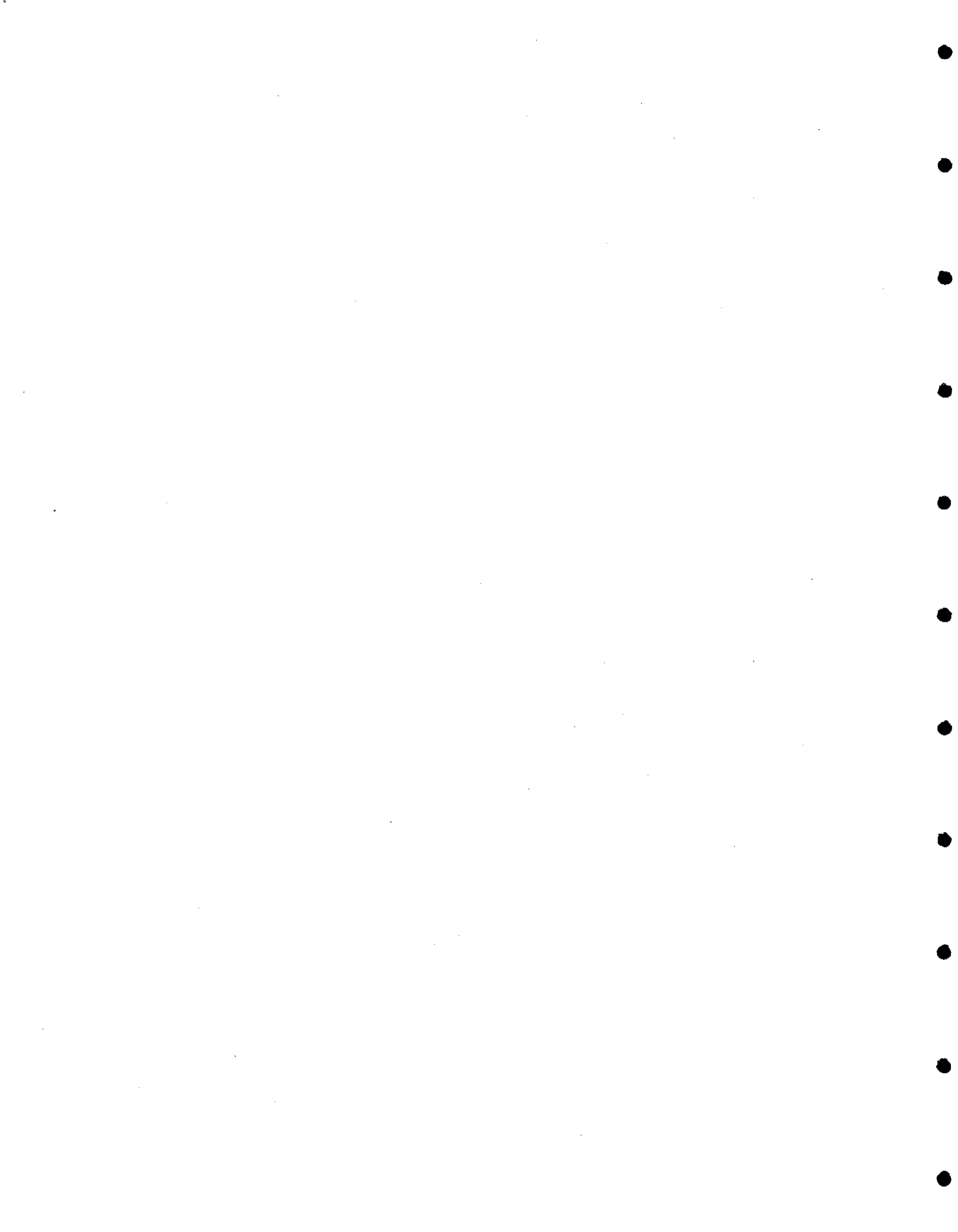
 Number of showers completed: 2
 Number served: 110 families/660 people

Zaouit Ben Ammar: 1 well site rehabilitated
 Number served: 400 families or 2400 people, and
 4000 animals.

Chouabnia: Fountain tap and spigots completed
 Number of families served: 45

4.5 Lessons Learned:

- An evaluation must be planned and implemented for all community development activities instead of being left as an optional programmatic task. However, with all the other responsibilities of the RHET members, it was difficult for them to find adequate time to implement this activity.
- The lack of strong UAG leadership after the departure of the UAG Director led to little data collection and few systematic monitoring activities. This, in turn, meant that only project outputs could be assessed.
- These projects showed the ability of the WUAs to support other community-level endeavors. They also served to strengthen the confidence of communities in the expanded role that WUAs can play.
- Identifying and implementing small projects is an extremely labor-intensive and time-consuming task, particularly with the number of actors involved. RHET members spent an inordinate amount of time assuring their successful completion.



Chapter 5

THE WOMEN'S INTEREST GROUP PROGRAM

5.1 Background

The crucial role played by women in the collection and management of water is well documented. In rural central Tunisia, young girls and women manage the domestic water supply for both human and animal consumption. Their responsibilities include fetching and transporting water by donkey or mule from distant points, or on their heads/back from closer points. Women use water to cook, clean, wash clothes, drink, and store, and are indeed the informal managers of the family's potable water supply.

There is a distinct and clear separation between the roles of men and women in Central Tunisia, which is particularly obvious within the structure of the WUA. WUA membership is limited to men, who are often unaware of the water-related concerns of women. Thus, though it is the women who are the primary beneficiaries of project activities, they often have, at best, limited input into the design and evaluation of project interventions. Recognizing this shortfall, one of the recommendations in the midterm project evaluation (Jennings et al. 1989) was that informal groups known as Women's Interest Groups (WIGs) be established within WUAs to help address this imbalance. The purpose of forming a WIG was to provide women with a forum through which they could voice their opinions on various project activities, and to provide a mechanism for women to communicate their opinions and concerns to the WUAs.

5.1.2 Process of Forming a Women's Interest Group

Under any circumstance, the creation and monitoring of a WIG would be a time-consuming and involved activity. It is, however, a particularly difficult task in a culture without a tradition of women's groups. In rural central Tunisia, it is not common practice for women to meet in groups, except for special family occasions such as weddings or circumcision ceremonies. Thus, organizing meetings for women to discuss water problems is a novel idea for rural communities.

Under this project, WIGs were formed by first making contact with prominent local officials, in particular the WUA president, to explore their interest in the idea of forming a WIG. At the same time, the VHW also provided an informal assessment in the community of the women's receptivity to such an idea. If the community agreed to form a WIG, a preliminary meeting was then organized by the VHW to elect WIG council members. The women in the community then elected representatives, a project coordinator, and a secretary, to form the WIG. Once the WIG was formed, monthly meetings were held to discuss water-related

problems and concerns. The meeting notes were then transmitted to the president of the WUA, who would sometimes attend the meetings.

Another feature of this initiative was to finance small income-generating projects of the WIG's choice, for those WIGs which functioned well. Though the projects were managed by the WIGs, they often benefitted women who did not work directly with the WIG. There were three projects executed under this particular aspect: family gardens in two WIGs, chicken raising, and weaving. Plans were also underway in one community to construct a washing area for the women.

5.1.3 Structure of the WIG

Each WIG had the same structure: the women in the community elected the WIG council members, with the approval of the President of the WUA and sometimes the community leader (the umda). One project coordinator, one secretary, and several representatives comprised the WIG. The number of representatives varied from group to group, and depended on the number of clans or families in the community. The VHW would also serve as a council member.

5.2 Current Status

Over the course of one year (1989-90) a total of eight communities were examined to assess their interest in creating a WIG: Khmouda (Foussana), Zaouit Ben Ammar (Sbettla), Lajred (Haidra), Abar Taghout (El Ayoun), Ouled Mansour (Foussana), Foumm'dhfa (Haidra), Boulaaba (Kasserine Nord), and Kohl (Haidra). Out of the eight attempts to create WIGs, four were still functioning in November 1990. Since the UAG consultant in charge of the organization and monitoring of the WIGs departed in November 1990, it is unclear whether the WIGs are still in operation, since there was no person in charge of the follow-up. A brief summary of the status of the WIG within each of the communities is provided below.

Khmouda (Foussana) and Zaouit Ammar (Sbettla): Attempts to create WIGs in these communities did not succeed for a number of reasons, including lack of support or interest from the women (Khmouda) and resistance from the local government's representative (Zaouit Ammar). Thus, though the community leaders (umda and WUA president) were interested in forming a WIG, it was not possible to do so.

Lajred (Haidra): A WIG was successfully formed in this community. The VHW, the AIC president, and the women themselves all expressed a very strong interest in the idea. The local leader (umda), however, opposed the WIG, and it was only the strong support provided by the local government representative that enabled its creation. A small chicken-raising project took place in this community.

Abar Taghout (El Ayoun): Though there were a series of attempts to create a WIG, they were not successful. The women were not used to meeting in groups and were not comfortable in group discussion sessions. In addition, the AIC president made the decision that the WIG should concentrate solely on the small projects and not on issues concerning health/hygiene education. This was not the main reason for creating WIGs, and the organizing effort was not fruitful.

Ouled-Mansour (Foussana): Despite many difficulties, a WIG was finally formed in this community. Significant support to this idea was provided by the AIC president, women of the community, and the umda. The WIG chose small kitchen gardens as its project, which was financed in part by outside funding and in part by the women themselves.

Foum'dhfa (Haidra): This community was also successful in establishing a WIG, in spite of many start-up problems. Women expressed concern about several water-related issues, such as unsanitary conditions around the water source, that were subsequently resolved by the AIC president. A weaving project was chosen by this WIG.

Boulaaba (Kasserine Nord): This could be considered one of the most active and successful WIGs. Unfortunately, it no longer exists due to problems with the AIC president. The community members chose a small gardening project, but then had a number of disagreements with the AIC president on how the money earned should be spent. This conflict resulted in the cancellation of the project by the AIC president.

Kohl (Haidra): This was the last community within which a WIG was formed; it enjoyed strong support from the AIC president and local community leaders. After some initial start-up problems, the WIG understood the reason for its creation and concentrated on transmitting the women's water-related concerns to the AIC president. This community also chose the creation of a washing area as its special project. It was successfully completed in early 1991.

Originally, a female sociology graduate was recruited to work as an intern within the UAG to begin the development of the WIG program. After several months, she left once it became clear that there would be no long-term employment stability for her in this position. This particular component of the Rural Potable Water Institutions Project was then assumed by the full-time USAID consultant who was on a short-term (one-year) assignment with the UAG. In mid-1990, this UAG consultant obtained approval for the local recruitment of a female agent to work with her on the WIGs under the assumption that this agent would then continue the work after the consultant's departure. This arrangement was made after it became obvious that it was not possible to recruit a female sociologist or social worker to fill the position. This female agent continued to work until the March 1991 PACD, and was then released from service. To her knowledge, none of the WIGs will continue to operate without continued supervision and encouragement.

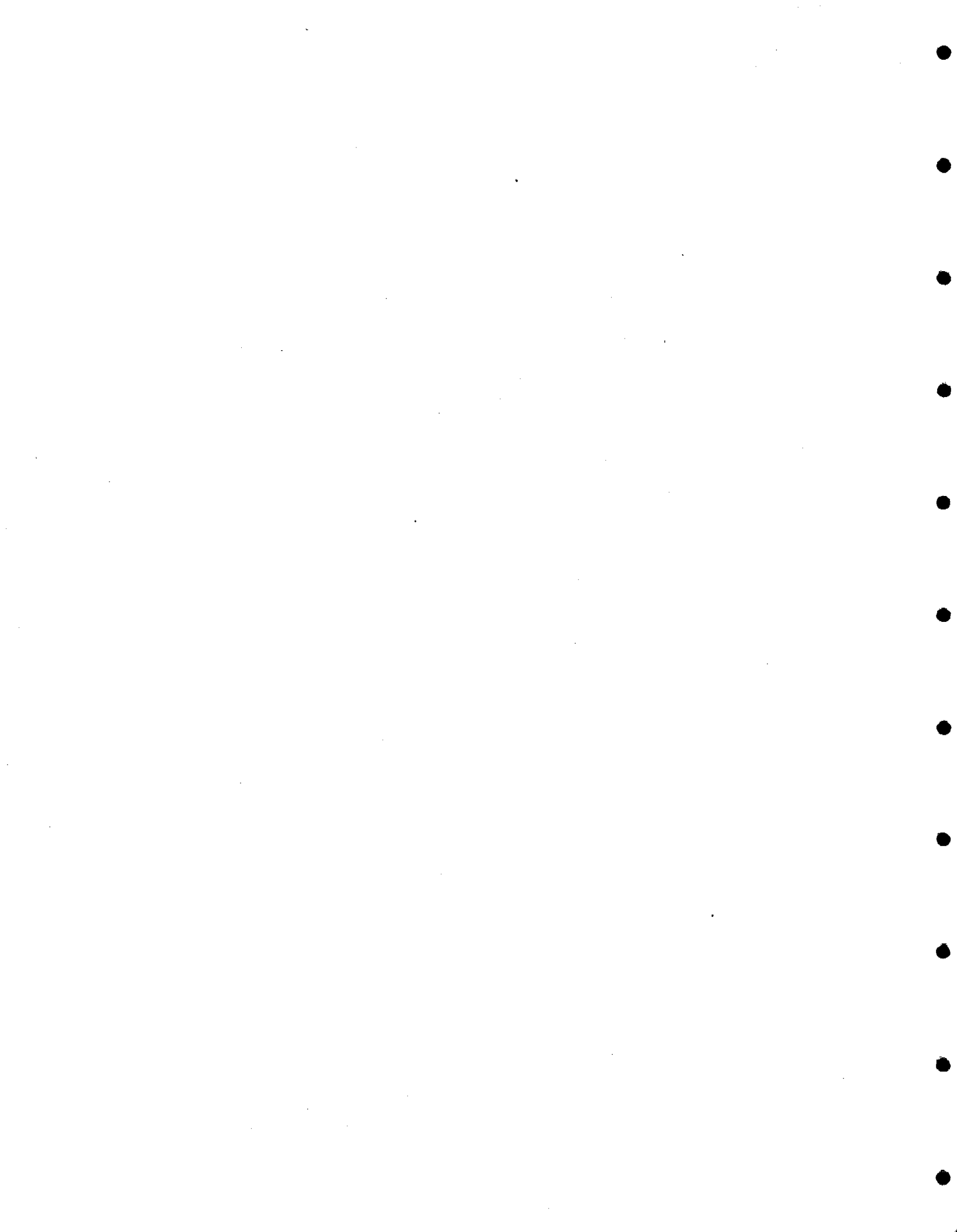
5.3 Evaluation

There was no formal plan instituted to conduct an evaluation of the efficacy of the WIG program. This omission was mainly due to lack of time and resources (human and financial) to conduct such a review.

5.4 Lessons Learned

- Implementing a novel concept such as WIGs at the community level in Tunisia requires a significant commitment of time and resources. Having an outside party take a lead role in creating these structures without the active participation of a local, permanent counterpart leads to a program without sustainability after the outside staff member leaves.
- A professional, female UAG staff person with a formal employment status to follow-up on established WIGs and to create new ones is necessary for the viability of the program. Many rural women feel comfortable only in an all-female setting and are not candid when a male is present.
- The majority of UAG agents did not actively foster the WIG concept. For the agents to become collaborators in the WIG program, a far greater information and education effort would have been necessary.
- Some of the RHET members resisted the concept of WIGs since they viewed it as an idea from an outside source and felt that their input was not requested or considered key to the formation of this concept.
- There was little high-level administrative support from the CRDA for the WIG program. This hurt the experiment in Kasserine.
- Community leader support is critical to the success of the WIG. Groundwork with community leaders must be done well in advance. In several cases the local officials tried to control the WIG instead of allowing women to do so.
- The planning process for the WIG program should have included an assessment component to analyze the effectiveness of these community groups in representing women's points of view to the WUAs.

- Small income-generating projects should have been introduced only after the WIGs were well-established. Some of the communities confused the role of the WIG with that of the small income-generating projects, and lost track of the original reason behind the creation of the WIG.
- Even though the Kasserine experience was fraught with difficulties, the idea of WIGs spread to the Kairouan Governorate, which has actively pursued the idea of organizing them.



Chapter 6

MATERIALS DEVELOPMENT AND OTHER ACTIVITIES

6.1 Background

After the first year of RHET activities, several ideas for additional activities in health and hygiene education surfaced among RHET members. USAID/Tunis was amenable to the idea of approving or disapproving new ideas on a case-by-case basis, and so a number of new programs and educational materials were approved and then developed through this mechanism.

A WASH consultant, during her visit in 1989, spent time identifying and locating examples of good health education materials about water and hygiene that could be used or adapted by the project. Some of these were used by the RHET member who was a health educator in the conception of the school health program materials.

6.2 Current Status of Materials Development

6.2.1 School Health Program Materials

A number of materials were developed, field-tested, and produced for use by teachers and students in the six pilot schools. These included:

- A children's coloring book about personal hygiene
- A teacher's guide for including hygiene education in the curriculum for 5th and 6th graders
- A puzzle for children depicting a child bathing with soap
- Posters in both notebook size for individual students and large size for school walls that list 13 rules for good hygiene

In late 1989 after the first draft of the teacher's guide and coloring book were ready, the WASH consultant strongly suggested that they be pretested before large amounts were printed up. This met with quite a bit of resistance, but the pretest was conducted in 1990. Unfortunately, the posters were not field-tested before printing, and their usefulness is not known. Since there are 13 messages per poster, in words only, the poster will only reach literate populations who take the time to read a large amount of information and know how

to put it into practice. The puzzle was a great success among the children, both as a game and as a teaching aid and method for beginning personal hygiene discussions in the schools.

All these materials are still in use in the six pilot schools; there are some extra copies at the MOH office for health education.

6.2.2 VHW and WIG Program Materials

RHET members from the MOH took a lead role in beginning to design health and hygiene materials for the VHWs to use. A few color-in posters about vaccination, breastfeeding, and the use of ORT were distributed and placed in some community health centers. The first draft of a basic guide for VHWs (4 pages long) was put together in 1989 for the training of the second-year VHWs, and was used again during their refresher course in an amended version. It was revised again and simplified, with pictures added, for use by WIG members during their training in October 1990. These materials are in USAID/Tunis files and should be available at the CRDA and MOH in Kasserine.

6.2.3 Games

RHET members designed four health education games to be played by adults with children, in schools, or among students in high school or technical schools. Two of them were produced before the PACD—a card game that reinforces the vaccination schedule for children and pregnant women and a board game that teaches how to treat a case of diarrhea and the use of ORT. The current consultants (authors of report) played the card game and are really pleased with the possibilities it presents. Distribution of the card games is taking place, while the board game is being finished by the print shop.

6.3 Current Status of Other Related Activities

6.3.1 Children's Poster Contest

A poster contest for children from the pilot schools was planned in 1987, but was delayed when the rest of the school health program did not begin until 1989. RHET members planned to talk about health and hygiene in pilot schools and to encourage students to submit poster designs with basic water hygiene messages on them. There was to be an awards ceremony in each community afterwards, during which the messages would be reinforced and the winners presented publicly. The winning posters would have then been used in all schools in Kasserine.

Two sets of letters were written to the school directors, asking them for their formal approval for the poster program. Unfortunately, there was no response to either of the letters from

any of the concerned schools. (The letters' receipt was confirmed.) At that point, RHET members decided not to pursue it since they were busy with other activities.

6.3.2 Water Point Signs

In 1990, several RHET members conceived the idea of placing large metal signs with relevant hygiene messages at certain water points throughout Kasserine. RHET and USAID approved the idea, and the signs were designed and produced in late 1990. The messages that are emphasized all revolve around the idea that water is a gift from God and therefore it should be treated with respect:

- Do not let water run when it is not in use.
- Keep the water point area clean.
- Do not dispose of waste water near the water point.
- Animals should not be around the water point except near their watering trough.
- Remember to disinfect water before use.
- Remember to store your water in clean covered containers.

The signs are about 2x6 feet in size, and bright blue in color with white writing. The letters are large and easily visible; the messages are short, each presented on the petal of the flower that dominates the design of the sign.

Two of the signs have been placed—at Dhaouada (Sbeitla) and Abartaghout (Thala)—with community people providing the labor necessary to set the poles deep in the ground. The other 18 signs are waiting for placement, and MOH and CRDA members will work in teams to place them. Since the PACD has passed, transportation issues became even more difficult since MOH employees were not supposed to go out in CRDA vehicles, but these are the only vehicles large enough to carry the signs. The Commissaire has intervened to assure that the signs can be placed with the use of vehicles from his organization.

6.3.3 Electric Bleach Dosage Pumps

RHET members and USAID agreed to experiment with the use of electric bleach dosage pumps; they are very expensive but assure adequate disinfection of water at sites where there is electricity and a large population. Four pumps have been purchased and the sites selected, but none of them are yet functioning.

The four sites chosen are Ohmali (80-100 families), Ain Khamaissia (150 families), Bir Chabaane (116 families), and El Gonna (140 families). Ohmali's pump cannot be installed until certain problems with the guardian-pumpist are resolved. In Ain Khamaissia, the WUA has not paid the electricity bill, so the electricity is off and the pump cannot work. Bir Chaabane is waiting for electricity to be turned on by the municipal authorities even though the installation has been made. In El Gonna, technical problems with piping due to the long distance between the water pump and the water storage area are being resolved.

6.4 Outputs

The following materials have been produced in this program:

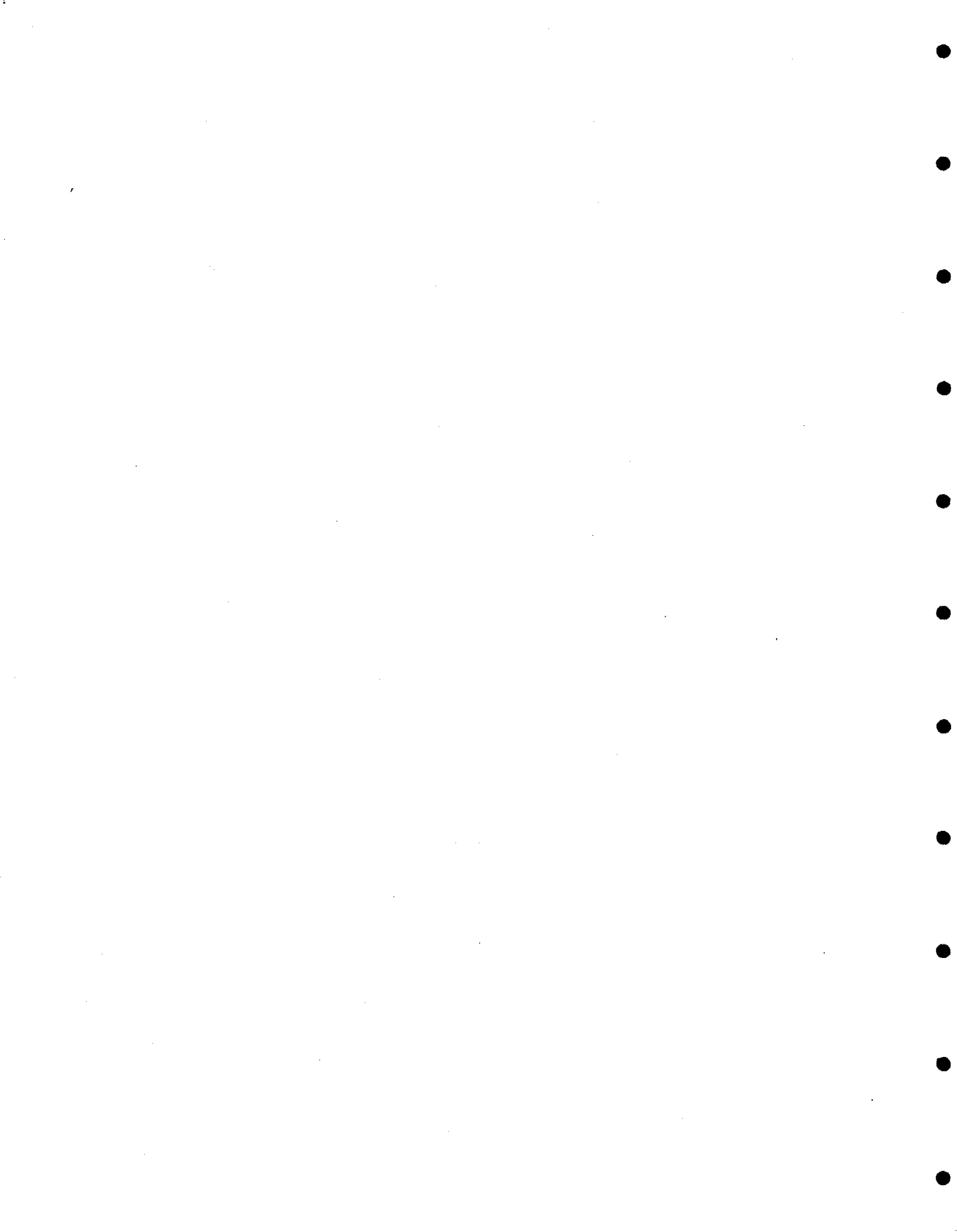
- 1,000 teacher's guides for hygiene education
- 1,000 puzzles about personal hygiene for children
- 1,000 children's coloring books about water and health
- 6,000 "hygiene rules" posters
- 6 hygiene education slide sets
- 20 large metal signs with sanitation messages for placement at water points (2 have been placed, the rest of the communities chosen)
- 4 electrical dosage pumps for water points that serve large communities.
- 200 vaccination card games
- 50 diarrhea and ORT board games
- A 4-page VHW guide to reinforce basic messages

6.5 Lessons Learned

- Flexibility in project design and budgeting can lead to some good, complementary activities and materials for existing programs.
- Pretesting and field-testing of educational and training materials is a difficult technical tool to reinforce. (Even with training in these areas,

RHET members actively resisted these steps.) Constant technical advising is necessary to insure that pretesting will take place.

- Before designing new materials, an inventory of existing materials should be done.



Chapter 7

MANAGEMENT AND PLANNING

7.1 Administrative Situation

RHET was created as an informal, inter-ministerial working group the Rural Potable Water Institutions Project. It was suggested by the original project consultant in 1987 that RHET be formalized to a certain degree by a letter of understanding between the concerned ministries to recognize the existence of RHET and the collaborative nature of its work, and to officially give RHET members the mandate to place RHET activities as a high priority in their portfolios of activities. Unfortunately, this was never accomplished.

Both the WASH consultants and RHET members believe such a document might have alleviated some of the administrative problems that arose. (For example, RHET members usually went on their field work visits in CRDA cars. The MOH would not reimburse its personnel working with RHET for the field per diem to which they were entitled because they were transported in another ministry's car.) There were also times when supervisors of RHET members did not support their participation in activities.

7.2 RHET Internal Management

From the beginning of the project, two coordinators of RHET were named: the MOH Regional Health Educator and the UAG Director. This seemed to work fine for the first project year. After the departure of the UAG Director in December 1989, the management of RHET activities became much more difficult and there were internal disagreements about the individual coordinating responsibilities. A new UAG Director was never recruited, and these conflicts continued over time. The American consultant to the UAG served as an organizer and coordinator for transportation during her tenure, but remained outside the realm of programmatic and personnel conflicts.

A clear and strong internal structure could have prevented some conflicts as well as provided needed overall coordination and direction. The position of UAG Director was created for project purposes and was nonexistent within the Ministry of Agriculture structure because sociologists were usually not hired. This was one of the reasons that a replacement was never located, which hurt RHET in numerous ways.

7.3 Budget Management and Procurement

7.3.1 Budget Management

The budget allocated for health and hygiene education activities was separate from the rest of the Rural Potable Water Institutions Project but was also managed by the ex-CTDA (which became the CRDA). During various periods of the project, different accounting personnel from the CRDA were responsible for disbursements. This worked with varying degrees of effectiveness, with some reimbursements taking months to be cleared.

The biggest barrier to efficient budget management was the reorganization of the Ministry of Agriculture including its absorption of the CTDA. This process took place late in 1989, and the accounts of the CTDA were frozen while new arrangements were made on a national basis. Because of this, RHET members waited upwards of eight months for some payments to be made, further delaying program activities.

After the reorganization was completed, a new financial arrangement was made to facilitate RHET's access to its budget. A bank account with a private bank was established, and a Kasserine resident was hired to manage and disburse the funds during the fall of 1990. RHET members were much happier with the results of this arrangements, and they were encouraged to follow through on new activities of their own initiative.

The other, unexpected result of this new procedure was that the accountant required certification of partial or total completion of the small community development projects before disbursing the new portion of funding. This helped to encourage RHET members to work with the communities to resolve problems that blocked the progress on several of these projects. (All the projects that were begun were finished before the PACD.)

7.3.2 Procurement

The only item to be procured through the Tunisian government system was the RHET supervision automobile. The request went through in 1987 or early 1988, and the automobile has not been obtained because it exceeds the "quota" for the Ministry of Agriculture. This delay damaged the RHET team's ability to implement and complete its programs, which were community-based by definition. The VHW program was probably the most adversely affected over time, because 35 communities spread throughout the governorate were to be supervised and evaluated using field data collection techniques.

7.4 Evaluation Planning

7.4.1 Project Documents

The Logical Framework (Appendix A) did not specify any indicators to evaluate either the process or the impact of the management and functioning of RHET.

7.4.2 Evaluation Workshop

In October 1990, RHET members participated in an evaluation workshop facilitated by two WASH consultants. The objective of the workshop was to give RHET members the chance to learn the basic theory of evaluation research, and to apply it in small groups to each RHET program. As an exercise, the group applied their new knowledge to the evaluation of RHET as an institution. The results of this exercise are found in WASH Working Paper No. 90 (Fikry and Rossi 1990). The most important issues raised are the following:

- RHET members felt that their efforts went unappreciated and, for the most part, unsupported by their ministries.
- Less than half of the original group trained to become RHET members remained with RHET; therefore, this basic training wasn't received by the majority of the team.
- RHET members believed that they should have been excused from part or all of their regular responsibilities during the implementation period for RHET programs.
- The lack of transportation and access to available audio-visual materials were major problems.
- Formal coordination did not exist in a way that was acceptable to all RHET members after the departure of the UAG Director.

7.5 Lessons Learned

- The lack of a formal, administrative arrangement between the various ministries involved in RHET activities sometimes hampered its activities.
- The services of an outside budget manager were necessary to the smooth functioning of RHET and encouraged more innovation and programmatic diversity.

- The Tunisian government quota system for the purchase of automobiles has effectively prevented RHET from ever receiving the car that was budgeted for its use; this created massive transportation problems throughout the life of the project that delayed the implementation of almost all activities at one point or another. It particularly limited the supervision of VHWs.
- Lack of a formalized structure for RHET led to internal conflicts between RHET members that were not resolved in any satisfactory way. Creating the position of UAG Director for project purposes was necessary, but in the long run it left RHET without management. Once the original director left, the position was not filled, due to particular administrative circumstances of the MOAg position.

Chapter 8

CONCLUSIONS AND MAIN LESSONS LEARNED

8.1 Conclusions

By and large, the health and hygiene component of the project had many unique features, and could serve as a useful model on how such a project could be implemented with input from different ministries. An inter-ministerial team holding the responsibility for programmatic decisions and field work on a regional level was a new idea, one which involved cooperation between government experts from several disciplines.

Most of the objectives of RHET were met, despite the complexities that inevitably arise in such collaborative endeavors and the fact that the composition of the team itself changed to reflect both personnel and programmatic changes.

There are many lessons to be learned from the implementation of a project design such as the one used to establish RHET. Listed below are some of the main lessons learned from each component and from the RHET experiment itself. They should be helpful when future projects of this type are being developed.

8.2 Female Village Health Worker Program

- It is almost impossible to implement a successful community-based health program in rural areas without a regular, assured form of transportation. The lack of a means of transportation for RHET members was frustrating, affected team dynamics, and added stress. This problem blocked field follow-up visits to VHWs throughout the life of the project.
- For rural regions with limited health personnel, the VHW seems to be a viable model for reaching communities as long as the VHWs are well-trained, well-supervised, and are trained to communicate very specific health messages related to actual existing behaviors. An analysis of existing behaviors should precede this stage, so that the messages are related to actual local knowledge, and not just based on perceived needs.
- As found with the VHWs, paying a stipend to young girls in rural areas, even with a clear explanation that it is not a salary, seems to raise false hopes about future long-term employment. Once a stipend

has been paid, asking the trained workers to continue their activities as volunteers does not work.

- Any reported changes should also be evaluated through household observations to determine the accuracy of the information provided.

8.3 School-based Hygiene Education Program

- In the pilot schools, this program greatly increased the knowledge level of both teachers and students regarding water and sanitation, personal hygiene, and correct household cleanliness.
- There is a great need for the active participation of the Ministry of Education personnel in this program, and more active participation from the teachers is necessary.

8.4 Small Community Development Programs

- An evaluation must be planned and implemented for all community development activities instead of being left as an optional programmatic task. However, given all the other responsibilities of the RHET members, it was often difficult for them to find adequate time to implement this activity.
- The lack of strong UAG leadership after the departure of the UAG Director led to a paucity of data collection and systematic monitoring activities. This, in turn, meant that only project outputs could be assessed.
- Identifying and implementing these small projects is an extremely labor-intensive and time-consuming task, particularly given the number of actors involved. RHET members spent an inordinate amount of time assuring the successful completion of the projects.

8.5 Women's Interest Groups

- Implementing a novel concept such as WIGs at a community level in Tunisia requires a significant commitment of time and resources. Having an outside party take a lead role in creating these structures without the active participation of a local, permanent counterpart

leads to a program without sustainability once the outside staff member leaves.

- For a viable program, a professional, female UAG staff person with formal employment status should be appointed to follow up on established WIGs and to create new ones. Many rural women feel comfortable only in an all-female setting and are not candid when a male is present.
- The majority of UAG agents did not actively foster the WIG concept in the communities in which they work with WUAs. For the UAG agents to become collaborators in the WIG program, a great information and education effort would have been necessary. Some of the RHET members resisted the concept of WIGs since they viewed it as an idea from an outside source and felt that their input was not requested or considered important.
- The support of community leaders is critical to the success of the WIG. Groundwork to gain this support must be done well in advance. In several cases, however, local officials tried to control the WIG instead of allowing the women to do so.
- The planning process for the WIG program should have included an assessment component. The effectiveness of these community groups in representing women's points of view to the WUAs has not been reviewed or assessed.

8.6 Materials Development

- Flexibility in project design and budgeting can lead to some good, complementary activities and materials for existing programs.
- Pretesting and field-testing of educational and training materials is a difficult technical tool to reinforce. (Even with training in these areas, RHET members actively resisted these steps.) It takes constant technical advising to insure that pretesting will take place.
- Before designing new materials, an inventory of existing materials should be done.

8.7

Management and Organizational Issues

- The lack of a formal, administrative arrangement between the various ministries involved in RHET activities sometimes hampered these same activities.
- The services of an outside budget manager were necessary to the smooth functioning of RHET and encouraged more innovation and programmatic diversity.
- The lack of a formalized structure for RHET led to internal conflicts between RHET members that were not resolved in any satisfactory way. Creating the position of UAG Director for project purposes was necessary, but in the long run it left RHET without management. Once the original director had left, the position was not filled, due to the particular administrative circumstances of the MOAg position.

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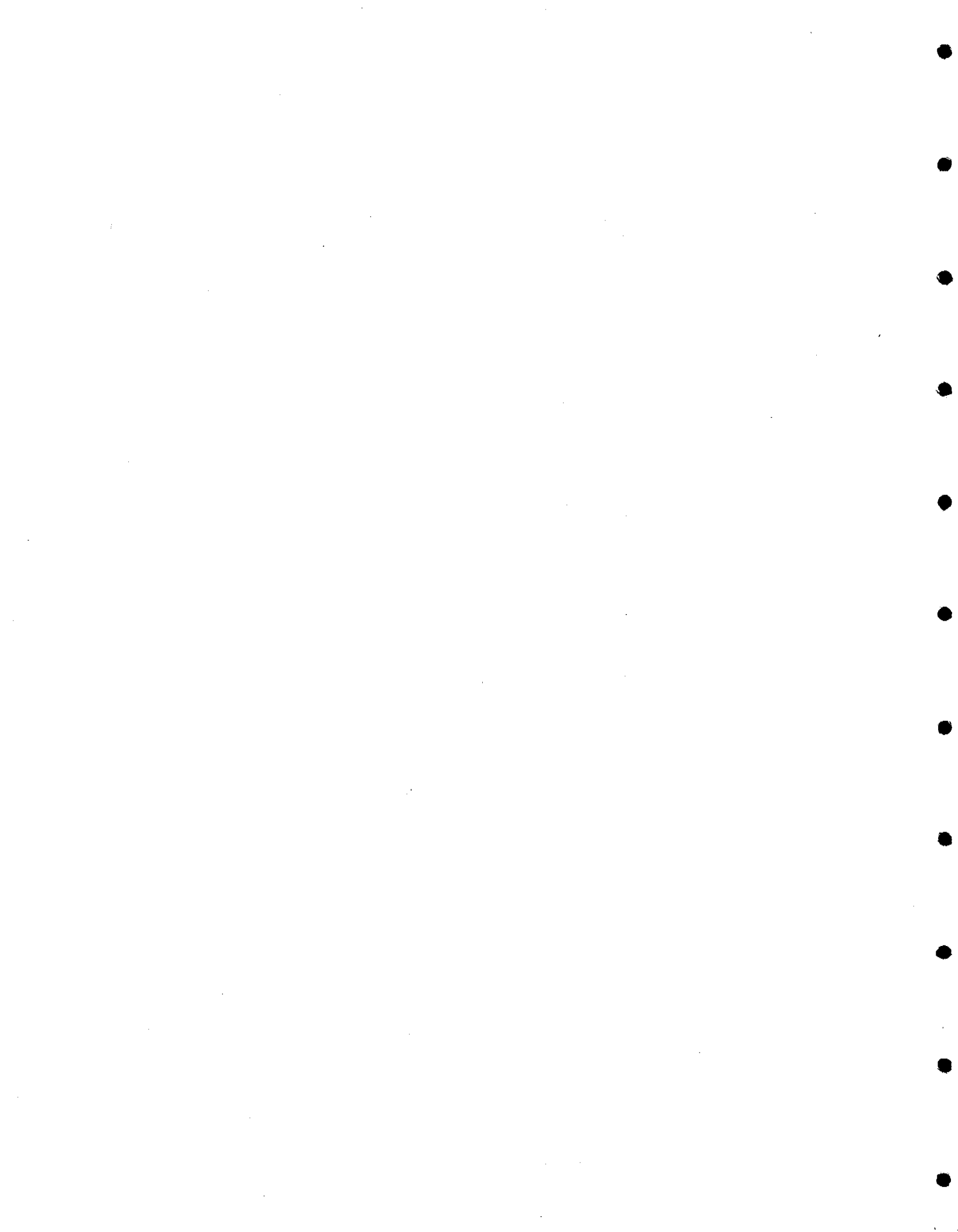
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Project Title: Rural Potable Water Institutions

Life of Project: FY 86 - FY 91

Total U.S. Funding: \$ 6.5 million

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program or Sector Goal:</u></p> <p>To improve the quality of life of the rural population in the CTIRD program area.</p>	<p><u>Measures of Goal Achievement:</u></p> <ul style="list-style-type: none">o Improved health of target populations (unquantifiable)o Increased productivity of family members (unquantifiable)	<ul style="list-style-type: none">o Regional Directorate of Health statistics on incidence of diarrhea, amoebiasis, scabies, etc.o CTDA monitoring and periodic studies	<ul style="list-style-type: none">o Improved <u>access</u> to water will lead to increased <u>use</u> of water; this <u>increased use</u> leads to improved healtho Time savings resulting from decreased distance to fetch water will be reallocated to more productive activity
<p><u>Project Purpose:</u></p> <p>1. Establish and refine a coordinated and decentralized institutional approach to rural water operations and maintenance, with user participation and user fees, demonstrating a model to the GWT which may be appropriate for adoption as a nationwide strategy.</p>	<p><u>End of Project status:</u></p> <ul style="list-style-type: none">o By 1990, Water User Associations (WUAs) will have been established at <u>all</u> water points in the program area and 85% of them will be covering 100 percent of O+M costs.o Regional & Local Potable Water Committees will be meeting regularly; site specific WUAs will have representatives on at least 4 local-level committees.	<ul style="list-style-type: none">o CTDA monitoring reportso WUA Accountso Minutes of Committee Meetings (thru CTDA)o Membership lists of Committees (thru CTDA)	<ul style="list-style-type: none">o High level political support for WUAs will continue.o Citizens will continue to accept need to pay for water themselves and will be able to pay at least O+M costs.o Regional & local technical services will continue to cooperate in improving rural water supply.

- o Regional and local private sector suppliers and service enterprises will have established linkages with WUAs for fuel, spare parts, and basic repair.
 - o SONEDE will have assumed service responsibility for at least one site administered by a WUA.
 - o At least one other rural area of Tunisia will be adapting the ~~area~~ area WUA model. *OTFC*
 - o Sample survey (informal) during project evaluations
 - o SONEDE records
 - o Ministry of Agriculture (Genie Rural) reports.
 - o Supply of private sector maintenance services will respond to demand in rural areas.
 - o SONEDE activities under IBRD 7th Loan will continue more or less as planned.
 - o The GOT will choose to adopt the WUA for another rural area.
- 2. Maximize water investments by improving site selection for new and improved water systems.**
- o Kasserine Regional Water Committee will have adopted a stronger policy for guiding site selection of Project and non-Project sites for installation of water points which includes cost effectiveness analysis of alternative approaches and regional/spatial considerations.
 - o Hydrogeologic data base in Kasserine, North Gafsa, and Sened will serve as basis for rational exploitation of water resources.
 - o DRES documents
 - o Site selection will continue to be undertaken through Regional and local Committees with WUA participation based on shared criteria and commitment.
 - o CTDA will improve cost center financial data analysis.
- 3. Provide improved access to potable water for underserved rural populations.**
- o At least 30 new installations (26 productive boreholes and 4 extensions) and up to 2 NMH systems
 - o Project monitoring and evaluation
 - o DRES in Gafsa Governorate will cooperate fully with CTDA and DRES/Kasserine
 - o Exploitable water resources exist in currently unreached areas.
 - o At least 26 out of 30 planned boreholes will yield a minimum of 1-5 LPS.

o Hydrogeologic resources in Kasserine, North Gafsa and Sened are such that cost-effective, productive wells can be drilled.

Outputs:

Magnitude of Outputs:

1. Water User Associations established and functioning in Kasserine Governorate and in Gafsa delegations of North Gafsa and Sened with

- o Legal status
- o Financial autonomy
- o Management autonomy
- o Defined membership
- o Trained leadership/management

1.a. All WUAs in both Governorates will have legal status to collect and disburse funds

- b. 90% of WUAs will have postal or bank accounts
- c. 90% of WUAs will have used local private sector for maintenance or repair.
- d. 50% of WUAs will have invested some funds in site improvement
- e. 100% of guardian-pumpjacks and WUA treasurers will have received formal and on-the-job training.

- a. Governorate or Ministerial action (decree, law, statute)
- b. PTT or BNT records; WUA records
- c. Evaluation survey
- d. Evaluation survey
- e. CTDA records and interviews during evaluations

o Regional administration maintains support for experimental efforts

2. Water User Associations supported by decentralized regional support systems coordinated by new "Unité d'Autogestion" (UAG); support includes:

- o inter-service committees for policy and regulatory actions
- o Unité for extension and training support
- o Maintenance Brigade for technical, 2nd degree support
- o "Education Sanitaire" for health, hygiene and education

2.a. Regional or Local committee representatives will visit each site once each quarter.

- b. "Unité d'Autogestion" staffed by 4/86;
- c. Each WUA receives 1 visit/month by UAG staff by 6/88.
- d. Regional Maintenance Brigade providing 2nd degree preventative maintenance *and* repair on a timely basis
- e. MOPH Regional Sanitarians and other staff conducting training sessions in each WUA perimeter on a quarterly basis.

- a. Evaluation Interviews; committee meeting minutes.
- b. CTDA reports
- c. Evaluation; records and interviews
- d. Evaluations; records and interviews
- e. Evaluation; records and interviews

o GOT will authorize positions promptly so that staffing UAG can be completed.

3. New water distribution sites established and functioning.

3. a. 30 boreholes, (of which a minimum of 26 are productive), 4 extensions and 2 house hook-up systems completed by 12/31/90
 b. RSH and DRES trained in use of equipment, testing equipment.
 c. Tunisian A&E firm providing timely design, advice and construction monitoring.

3.a. DRES and CTDA reports
 b. Project records
 c. Project records
 d. Project records

o The TH-60 drilling rig purchased during previous proj. will continue to be used in CTDA area
 o Research equipment provided by AID will be procured and delivered in a timely manner

4. Hydrogeologic data base in Central Tunisia improved

4. a. Water Resources Mapping completed by 6/86 to enable site selection to take place
 b. Hydrogeologic data improved through test drilling in southern Kasserine, North Gafsa and Sened in 1986, 87, 88 with new research.

4.a. DRES and CTDA reports
 b. Project records
 c. Project records
 d. Project records

o Contracting by AID is undertaken in timely manner with qualified and interested individuals and/or firms.

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Inputs:

Implementation Targets:
 (\$'000)

	<u>AID</u>	<u>TUNISIA</u>
1. Personnel and TA	1,162	795
2. Construction	3,967	-
3. Commodities	369	611
4. Training	189	187
5. Other	-	1,120
Evaluation/Audit	232	-
Inflation	581	677
Total	6,500	and 3,390

APPENDIX B

SCOPE OF WORK

LESSONS LEARNED FROM THE EXPERIENCES OF THE KASSERINE REGIONAL HEALTH EDUCATION TEAM, 1987-1991.

BACKGROUND:

In Central Tunisia, the Rural Potable Water Institutions Project emphasized beneficiary involvement in the management and financing of recurrent costs of potable water points in the central part of the country. The long term goal of the project is to improve the quality of life of the rural poor in the CRDA program area. The project had three purposes: (1) to establish and refine coordinated and decentralized institutional approaches to rural water operations and maintenance, with user participation and user fees demonstrating a model to the Government of Tunisia, which may be appropriate for adoption as a nationwide strategy; (2) to maximize water investments by improving site selection for new and improved water system; and (3) to provide improved access to potable water for underserved rural populations.

The Kasserine Regional Health Education Team (RHET) was formed to plan and implement the health and hygiene education component of the Rural Potable Water Institutions Project. The idea of an inter-ministerial team holding the responsibility for programmatic decisions and field work on a regional level was a new one, which involved cooperation between government experts from several disciplines. RHET worked together for more than three years and was responsible for the design, implementation and follow-up of several programs: a female village health worker program, a program for hygiene education in primary schools, the identification and construction of water-and sanitation-related community improvements, and the development of the necessary educational and training materials to assure program success. In addition to this mandate, there was another component which involved the formation of Women's Interest Groups (WIG), to ensure that women's water-related concerns were being heard by the Water User Associations.

Since project activities in Kasserine ended in March 1991, a two-week consultancy was planned shortly thereafter, to assess the overall "lessons-learned" resulting from the health and hygiene education component of the project.

MAIN TASKS:

1. To review all project documentation pertaining to the health and hygiene education component, including WASH field reports, RHET reports, and any other materials outlining the status of these activities.
2. Meet with individuals from USAID, CRDA, and RHET to interview them on the various project outputs.
3. To determine the lessons learned from the RHET and WIG experiences and to produce a final field report outlining the main findings for each project component.
4. To provide RHET with technical assistance for continuing project activities, to prompt the completion of certain activities funded by USAID and to record activity progress up to the PACD;
5. To officially draw to a close the USAID funding of RHET activities and to attempt to encourage RHET to continue to work together whenever possible.
6. Debrief with USAID, CRDA, and RHET.
7. Incorporate any review comments into the final report.

PERSONNEL:

Two consultants with professional training in public health, and excellent evaluation and writing skills. Both consultants should be fluent in French, and have experience in working in rural settings.

SCHEDULE:

Two-weeks May 20-31, 1991.

APPENDIX C

SCHEDULE OF ACTIVITIES

May 15-16: Travel from San Francisco to Tunis (Rossi)

(May 17-18 were used for National Strategy activities)

May 18-19: Travel from Washington D.C. to Tunis (Brahmam)

(May 20-21: National Strategy Activities)

May 22: Drive to Kasserine; receive briefing from Mraihi.

May 23: Briefing from Guessmi, from CRDA representative, collection of new project documents and begin document review.

May 24: Briefing with UAG members, Commissaire. Site visit to a sign placement community in Sbeitla Delegation. (Prepare for pretest tomorrow.)

May 25: Brief Regional Health Director. Collect information from MOH statistician. (Perform pretest for National Strategy training guide.)

May 26: Begin to draft "Lessons Learned" Kasserine guide. (Incorporate information gained by pretest into training guide.)

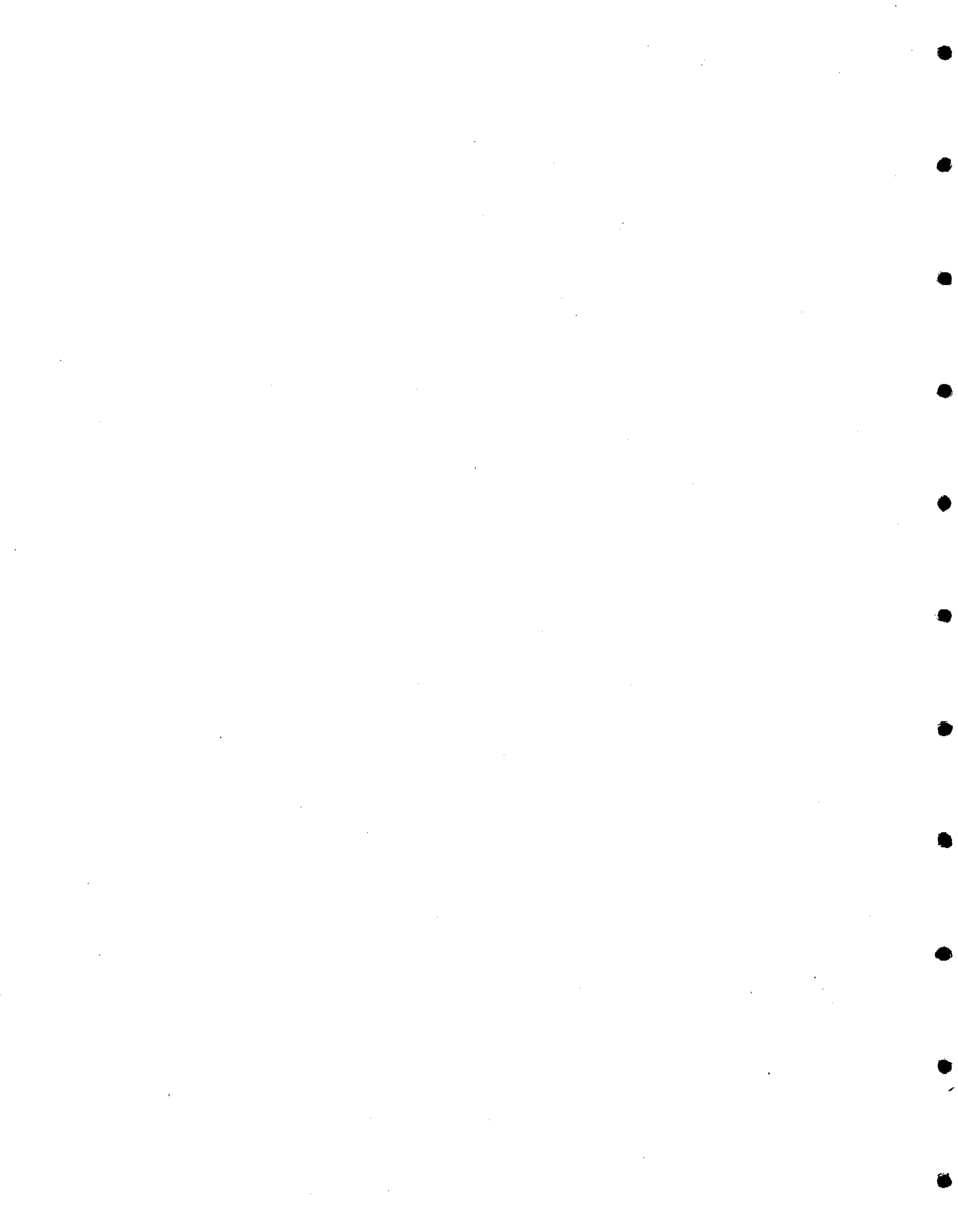
May 27: Last RHET meeting: review three year project results, proposed lessons learned, and conclude project activities with a luncheon.

May 28: Debrief with the Commissaire. Drive to Siliana (National Strategy work) and then to Tunis.

May 29: Finalize Kasserine Report and work on trip report.

May 30: Debrief at USAID, Genie Rural. (Planning meeting with Ministry of Health for the National Strategy.)

May 31: (Debrief with Health Department Director about National Strategy.) Travel back to the United States (Brahmam) and on to next assignment (Rossi).



APPENDIX D

LIST OF PERSONS AND ORGANIZATIONS CONTACTED

TUNIS:

USAID

Mr. George Carner	Mission Director
Mr. Hafid Lakhdhar	Assistant Project Manager
Mr. Charles Uphaus	Acting Assistant Mission Director

KASSERINE

REGIONAL COMMISSARIAT FOR AGRICULTURAL DEVELOPMENT (EX-ODTC, now CRDA)

M. Ali BOUDABOUS	Regional Commissaire Agricultural Development
M. Lamine Rahmouni	Engineer, Assistant Project Director (replacing Mr. Mosbah Hajji, director)

Representatives from the CRDA to RHET:

M. Lazhar LABIDI	Technician (UAG)
M. Taoufik GHARSALLI	Social Worker (UAG)
M. Mokhtar LOUITI	Social Worker (UAG)
M. Mohsen THEMRI	Social Worker (UAG)

REGIONAL PUBLIC HEALTH DEPARTMENT

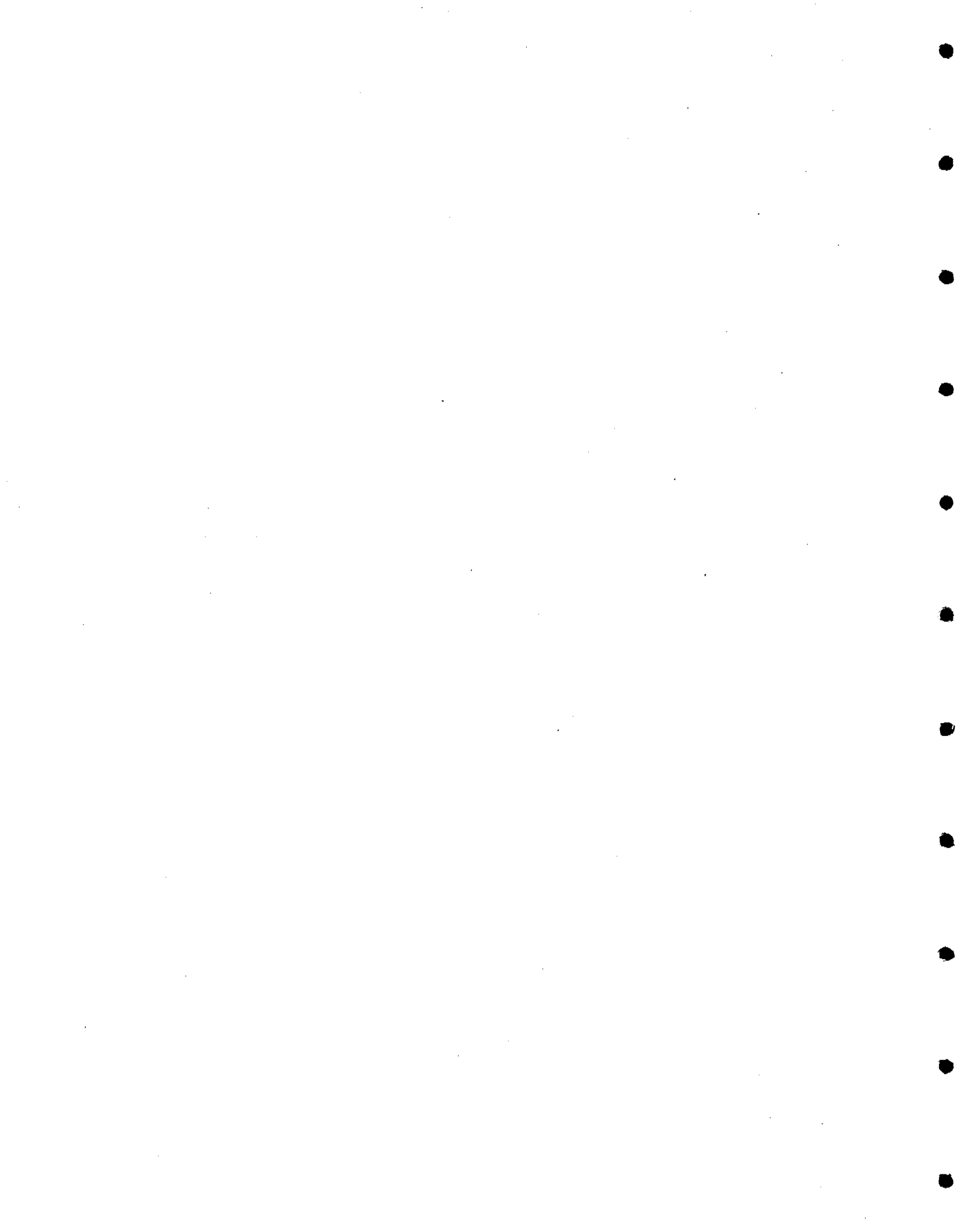
Dr. AbdelMalek LAARIF	Regional Public Health Director
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Representatives from the MOH to RHET:

M. Ammar M'RAIHI	Regional Health Educator
Mme. Fatma GUESSMI	MCH Coordinator
M. Mohsen FELHI	Statistician

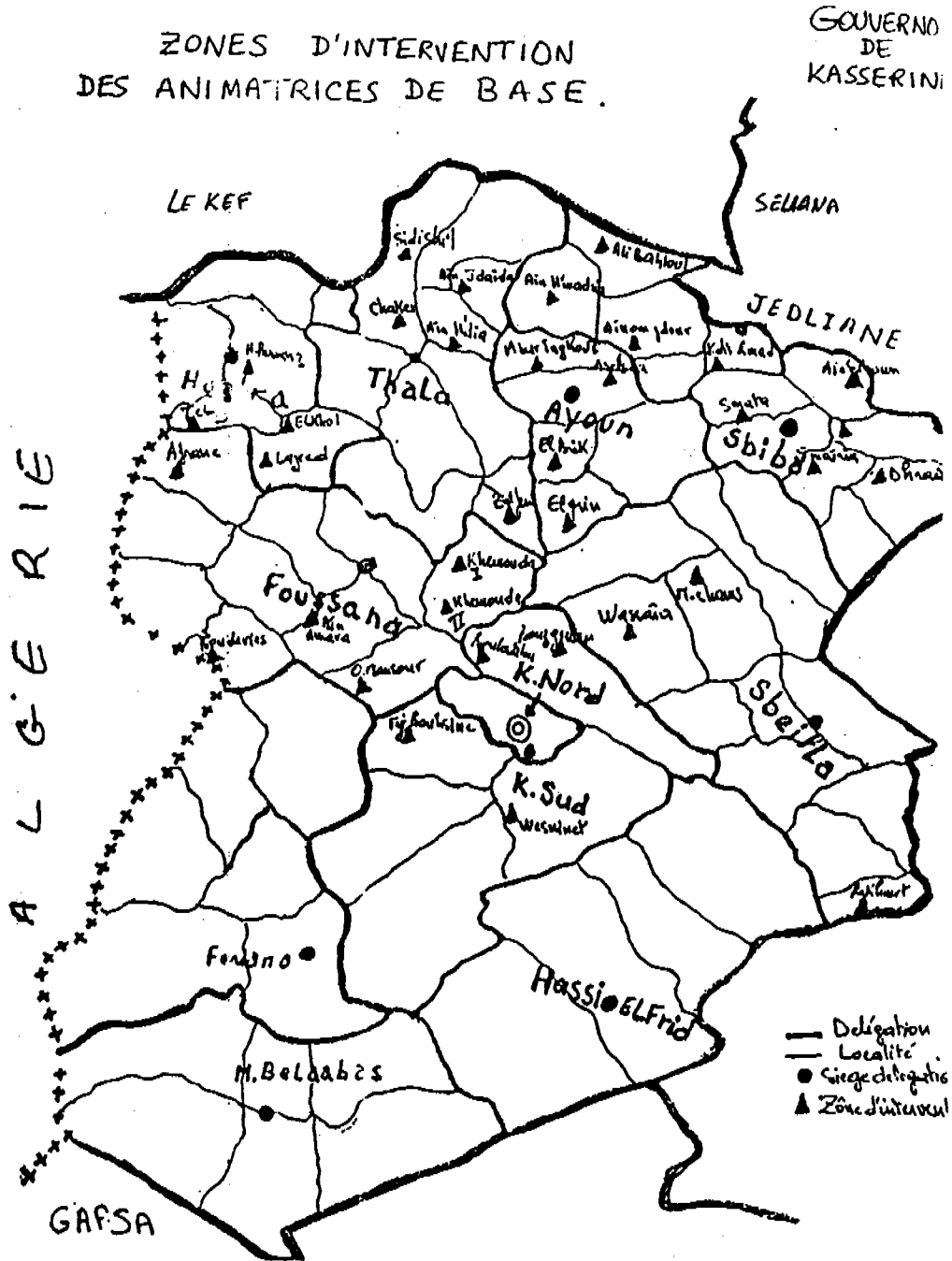
OTHER CONTACTS

Susan Schaefer-Davis	Independent Consultant
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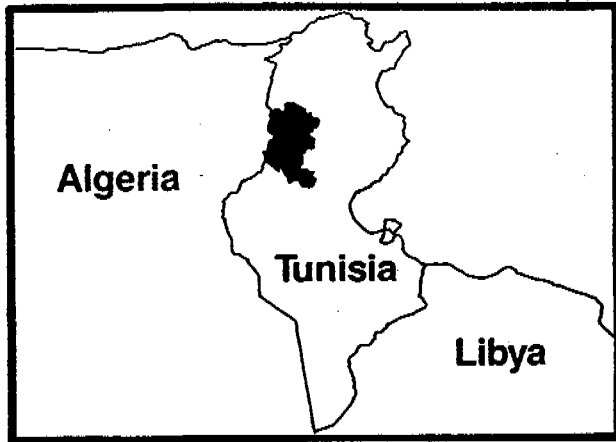


APPENDIX E

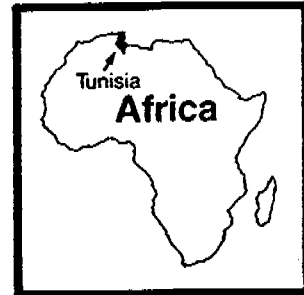
LOCATION OF VHW COMMUNITIES








Project Area Map

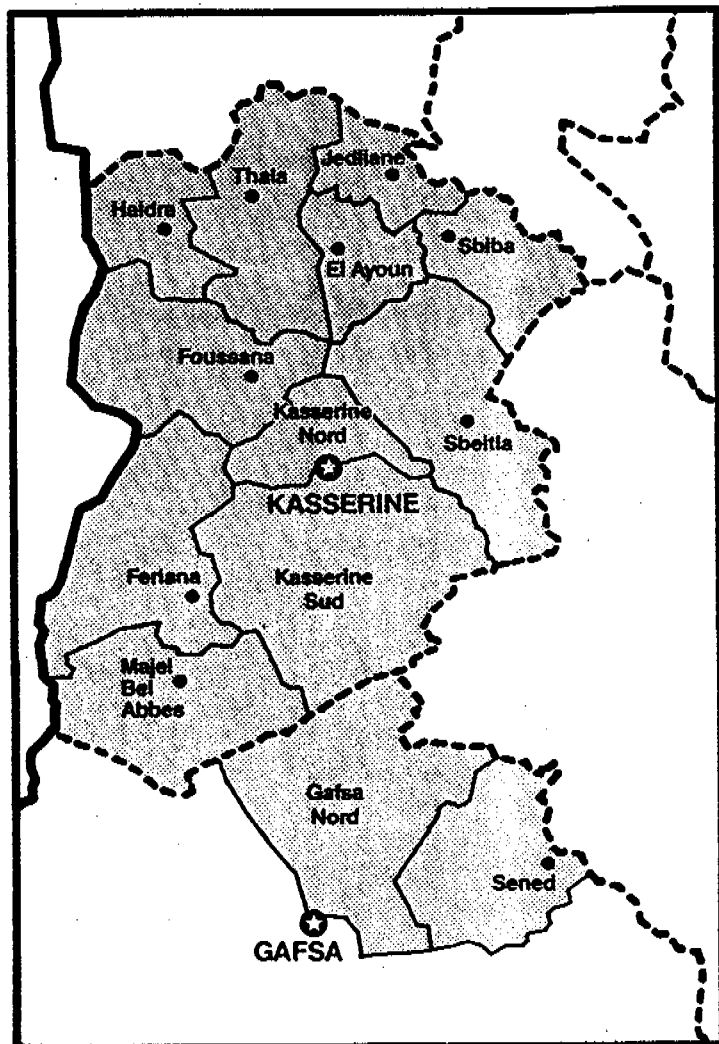


Region Map



Location Map

- Legend**
-  Project Area
 -  Governorate Boundary
 -  Delegation Boundary
 -  Capital of Governorate
 -  Capital of Delegation



Project Area Map

1. Répartition géographique des zones d'intervention des animatrices de base:

(Voir carte 5.1 Zone d'intervention des animatrices)

2. Données concernant les Animatrices de base des deux promotions:

5.2.1 Liste nominative des Animatrices de base

de la 1ère promotion

N	Noms et Prénoms	Localité	Délégation	Niv. Ins
1	Fakraoui Hayett	Ouisninet	Kass-Sud	6 A.Pr.
2	Fakraoui Ghalia	Ouisninet	Kass-Sud	6 A.Pr.
3	Guermazi Chedlia	Bouzgoume	Kass-Sud	6 A.Pr.
4	Guehri Melika	Fej Bouhcine	Kass-Sud	6 A.Pr.
5	Omri Zina	Wissaia	Sbeitla	3 A.Sc.
6	Derbali Beya	Rakhmett	Sbeitla	6 A.Pr.
7	Smiri Jamila	Smairia	Sbiba	3 A.Sc.
8	Yahyaoui Monia	Doghra	Kass-Sud	3 A.Sc.
9	Saamali Fethia	Smata	Sbiba	3 A.Sc.
10	Zeyani Soulef	Ain Saboun	Sbiba	3 A.Sc.
11	Saasougui Mehria	Dhraa	Sbiba	3 A.Sc.
12	Debbabi Monia	Machreg Chams	Sbeitla	6 A.Pr.
13	M'barki Hayett	Kdiss Errmad	Jedliene	3 A.Sc.
14	Yahyaoui M'barka	A.Oum Jdour	Jedliene	3 A.Sc.
15	Zitouni Raoudha	Ali Bahloul	Jedliene	3 A.Sc.
16	Rahali Hasna	A.Hmedna	Jedliene	6 A.Pr.
17	Adeili Sallouha	A.Jdeida	Jedliene	Analph.

5.2.1 Liste nominative des Animatrices de base

de la 2 eme Promotion

N	Noms et Prénoms	Localité	Délégation	N.Ins
1	Hsayaoui Samia	Chaker	Thala	3 A.Sc
2	Khelimi Aicha	Sidi Shil	Thala	3 A.Sc
3	Rahmouni Radhia	Ain Hdia	Thala	3 A.Sc
4	Assidi melika	Zelfene	Thala	3 A.Sc
5	Marouani Zina	Khmouda 1	Foussana	3 A.Sc
6	Hasni Neziha	Khmouda 2	Foussana	3 A.Sc
7	Abeidi Mabrouka	O.Mansour	Foussana	6 A.Pr
8	Tlichi Hedia	Afrane	Foussana	3 A.Pr
9	Ouni Hnia	A.Amara	Foussana	5 A.Sc
10	Omri Jamila	Bouderiess	Foussana	3 A.Sc
11	Mnasri Mabrouka	Khol	Haidra	3 A.Sc
12	Mnasri Atika	Lajred	Haidra	3 A.Sc
13	Belgasmi Radhia	Fom Dhfa	Haidra	6 A.Pr
14	Dhiri Hedia	Fom Dhfa	Haidra	3 A.Sc
15	Khalifaoui Netija	H.Bouanz	Haidra	3 A.Sc
16	Saadli Khemissa	El Brek	El Ayoun	3 A.Sc
17	Boughdiri Naima	El Grine	El Ayoun	6 A.Pr
18	Jedaoui M'hania	Abar Taghout	EL Ayoun	2 A.Sc
19	Saidi Faiza	Ain Selsla	EL Ayoun	3 A.Sc
20	Hagui Zakia	Boulaaba	Kass-Nord	6 A.Pr

5.2.2 Criteres de recrutement

Pour être recrutée, l'animatrice de base doit répondre aux critères suivants:

- Etre originaire et residente dans la Localité à couvrir.
- Elle doit être acceptée par la population pour pouvoir mener à bien sa mission éducative.
- Elle doit être disponible, engagée pour ne pas rencontrer des difficultés d'ordre familiales.
- La communauté couverte renferme une Association d'Interets Collectifs, une école primaire et une formation de soins.
- Elle a un certain niveau d'instruction lui permettant de

APPENDIX F

HOUSEHOLD SURVEY FOR VHW COMMUNITIES

REPUBLIQUE TUNISIENNE
MINISTERE DE LA SANTE PUBLIQUE
DIRECTION REGIONALE
SERVICE REGIONAL DES SOINS DE
SANTE DE BASE
UNITE DE KASSERINE

ENQUETE CAP EN SANTE ET HYGIENE DE L'EAU
(AUPRES DES CITOYENS)

- Délégation-----Nom du point d'eau-----
- Date de l'enquête-----
- Nom de l'enquêté(e)-----
- D'où ramenez-vous l'eau?-----
- Est-ce le même point d'eau depuis une année?-----
- Est-ce un autre point d'eau? oui (____) non (____)
- Pourquoi?-----
- Qui ramène l'eau?-----
- Est-ce la même personne depuis un an? oui (____) non (____)
- Pourquoi?-----

- _____
- _____
- _____

- Avez-vous de l'eau de Javel chez vous?-----
- Est-ce que cela se vend tout près de chez vous?-----
- Pourquoi l'utilisez-vous?-----
- Comment l'avez-vous eue? -----
- L'utilisez-vous pour l'eau? -----
- Quel dosage? -----
- Respectez-vous le temps de contact?-----
- Combien de minutes?-----
- Est-ce que vous nettoyez les récipients d'eau?-----
- Au cours du puisage?-----
- Une fois par semaine?-----

- Une fois par mois?_____
- Est-ce que vous couvrez l'eau?_____
- Pourquoi?_____
- Qui vous a appris cela?_____

 -

- Quelles sont les maladies dues à la pollution de l'eau?_____
- Quelles sont les règles de prévention?_____
- Comment le savez-vous? _____
- Savez-vous que la diarrhée est due à la pollution de l'eau?_____
- Quels sont les signes cliniques de la diarrhée?_____
- Que faites-vous devant un cas de diarrhée?_____
- Est-ce que vous lui donnez de l'eau?_____
- Pourquoi?_____
- Quelle est sa nature?

eau normale	_____
eau bouillie	_____
eau salée sucrée	_____
eau minérale	_____
eau d'oralyte	_____

- Pourquoi?_____
- Continuez-vous à allaiter en cas de diarrhée?_____
- Pourquoi?_____
- Donnez-vous à manger au diarrhéique?_____
- Pourquoi?_____

 -

- Est-ce que vos enfants sont complètement vaccinés?_____
- Quelles sont les maladies contre lesquelles on vaccine?_____
- Quand commence-t-on à vacciner les enfants?_____
- Est-ce qu'on vaccine la femme enceinte?_____
- Pourquoi?_____
- Vous-même avez-vous été vaccinée contre le tétanos?
- Pourquoi?_____
- Avez-vous fait les rappels nécessaires?_____
- Pourquoi?_____

NOM DE L'ENQUETEUR

T A B L E A U COMPARATIF DES R E S U L T A T S

(4)

LOCALITES	FAJ BOUH SINE (Sud Kasserine)		RAKMETE (Sbeitla)		DHRAA (Sbiba)		JAIN JOAIDA (Jedeliène)	
	% De la 1 ^{ère}	% De la 2 ^{ème}	% De la 1 ^{ère}	% De la 2 ^{ème}	% De la 1 ^{ère}	% De la 2 ^{ème}	% De la 1 ^{ère}	% De la 2 ^{ème}
Les questions posées	Enquêtes	Enquêtes	Enquêtes	Enquêtes	Enquêtes	Enquêtes	Enquêtes	Enquêtes
D'où apportez-vous l'eau?								
Puits	60	62,5	2,5	100	00	100		100
Robinet	40	37,5	2,5	00	100	100	0	10
Source	0							
Citerne							90	90
Est-ce que c'est le même point depuis une Année								
Oui	60	100	40	100		60	90	90
Non							00	10
Oui apporte l'eau ?								
Femmes	00	37,5	37,5	00	33	33		40
Autres							80	100
Est-ce que vous avez l'eau de javel chez-vous								
Oui	40	62,5	22,5	70	88	18	10	50
Non								
Pour quel usage utilisez-vous l'eau de javel ?								
eau de boisson	70	100	30	90	100	10	100	80
Autres								
Comment l'avez-vous sû ?								
Animat = ce	80	80	00	70	80	10	70	80
Autres								
dosage du javel								
Juste	30	30	00	10	33	23	10	50
Autres								
Respect du temps de contact								
Juste	70	75	5	30	100	70	00	80
Autres								
Quelles sont les maladies dues à la pollution de l'eau ?								
Diarrhée	00	50	50	00	44	44	30	50
Autres								
Savez-vous que la diarrhée est due à la pollution de l'eau ?								
Oui	70	100	30	60	100	40	90	100
Non								

COMPARATIVE VHW EVALUATION DATA

APPENDIX G

SUITE

Donnez-vous l'eau à l'enfant diarrhéique ? Oui	90	90	00	100	100	00	90	90		70	100	30
Donnez-vous à manger à l'enfant diarrhéique ? Oui	60	100	40	90	77		40	80	40	70	100	30
Continuez-vous l'allaitement de l'enfant diarrhéique ?	80	100	20	100	77		90	100	10	80	100	20
Vos enfants sont-ils complètement vaccinés ?	90	90	00	70	77	07	70	100	30	60	100	40
Quelles sont les maladies contre lesquelles vaccinez-vous ? 2 maladies et plus	00	50	50	20	33	13	40	90	50	60	100	60
.....												
Est-ce qu'on vaccine la femme enceinte ? Oui	50	100	50	00	44	44	100	100	00	60	80	20
Est-ce que toi-même as été vacciné contre le tétanos ? (mère) Oui	20	87,5	67,5	50	44		20	40	20	30	50	20
Est-ce que tu as fait les rappels nécessaires ?	10	62	52	20	44	24	20	40	20	00	70	70

TRADUCTION DE L'ARABE EN FRANCAIS

RAPPORT MENSUEL D'EDUCATION SANITAIRE

2^{me} promotion

ASSOCIATION D'INTERET COLLECTIF DE

Mois de:

N° ordre des familles	EAU DE BOISSON		VACCINATIONS			LUTTE ANTI DIARRHEIQUE			HYGIENE GENERALE	
	STORAGE	DESINFECTON	Séance d'edu	Cas à	cas vaccinés	séances d'edu	cas de diar	cas réhydratation	séance d'educa	Comportement.
	seances d'education	Comport	seances d'education	Comport	cation Vaccinés	seances d'edu	de diar	réhydratation	d'educa	Comportement.

	date de la visite	theme traité	lieu	public cible	nombre	observations ré
1	"					
2	"					
3	"					
4	"					
5	"					
6	"					
7	"					
8	"					
9	"					
10	"					
11	"					
12	"					
13	"					
14	"					
15	"					
	" Nbre de cas + Diarrhee		Gala	Picure venimeuse		autre

Nom et prénom de l'animatrice

signature

..... شهر

الجمعية ذات المصلحة المشتركة ب.....

رقم العائلات	الماء العالح للشرب		التلطيح			مقاومة الإسهال		النظافة العامة		غيره
	الضزن	التطهير	حالة لتعت	حالة تلتطيح	حالة إسهال	حالة أوراليت	حمة السلوك	حمة السلوك		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

بيرة	النظافة العامة		مخارج المياه		التلوث		الماء الصالح للشرب				المخلفات	
	الأواني للمنزل المحيط		مياه المراحيض	مياه الجاهز	حالة القنوات	مياه التلوث	التطهير		الذخون		مياه	مياه
	مياه	مياه					مياه	مياه	مياه	مياه		

اسم النشاط

PIECHE DE SUIVI DU TRAVAIL DE L'ANIMATRICE

Date de la visite. /

1) Concernant l'Animatrice ; ;

Cahier d'activité

Programme de visites.

Ryannement et place dans la communauté.

Collaboration avec l'école.

Collaboration avec la santé.

Collaboration avec l'AIC

Collaboration avec l'AIF.

2° Concernant le travail sur terrain.

Famille visitées.

Méthode de communication.

Acceptabilité du public cible

Eau.

La Diarrhée

Santé Maternelle et infantile.

Propreté

Remarques générales pour orienter l'animatrice.

.

.

LE SUPERVISEUR

بجانب جدول البيانات الصحي (الذي لا يمنة)

المدرسة = المنطقة =
المعمدية = الولاية =
صفة المستجوب السنة التاريخ

(1) ما معنى التثقيف الصحي حسب رأيك ؟

(2) هل حضرت حصص تثقيفية ؟ نعم () لا ()

(3) هل آتقت من هذه الحصص ؟ نعم () لا ()

كيف ؟

(4) من قام بهذه الحصص ؟

الماء الصالح للشرب

(1) هل تعرف صلة بين الماء والأمراض نعم () لا ()

كيف ؟

(2) أذكر بعض أسماء هذه الأمراض ؟

(3) ما هي طرق الرياينة من هذه الأمراض ؟

(4) هل أنت قادر على إقناع عائلتك وجيرانك بذلك نعم () لا ()

كيف ؟

(5) هل امتعمال بيت الراحة مضمّر ()

نافع ()

كيف ؟

(6) هل يوجد ماء الجفال في منزلكم باستمرار نعم () لا ()

كيف ؟

(7) في أي مجال يستعمل ؟

- 1) ما هو التلقيح حسب رأيك ؟
- 2) لماذا نتعمل التلقيح ؟
- 3) ما هي الأمراض التي نلقح ضدها ؟
- 4) متى يبدأ التلقيح ضد هذه الأمراض ؟

- 5) متى يكون التلقيح نائما ؟ مرة واحدة
- بتأدية الجرعات

الأمراض الجلدية

- 1) ما هو الجرب ؟
- 2) متى يصاب به الإنسان ؟
- 3) كيف نحمي أنفسنا منه ؟
- 4) ما هي طرق الوقاية منه ؟

- 1) ما هو مرض القرع ؟
- 2) متى يصاب الإنسان بمرض القرع ؟
- 3) كيف تكون العدوى ؟
- 4) ما هي طرق الوقاية منه ؟

ما هي المعلومات الصحية التي تمتنى معرفتها ؟

شكرا

مجلس التثقيف الصحي
(المرشون)

الهدسة المتمدية الولاية
المنطقة صفة المشروب

(1) هل تدرس التثقيف الصحي في القسم نـعم
 لا

(2) حول أي موضوع أو مواضيع

(3) هل أنت في حاجة لذلك ؟ نـعم
 لا

لماذا ؟

(4) ماهي المواضيع التثقيفية الصحية الهامة حسب رأيك في منطقتك ؟

(5) كيف عرفت ذلك ؟ بحوث - ملاحظة

- اصابات مرضية

(6) هل تم بحصص تثقيفية ؟ نعم

لا

لصالح من ؟ : التلاميذ

الايضا

المواطنين

(7) هل حاورت المواطنين أو التلاميذ قبل برمجة هذه الحصص ؟ نعم

لا

(8) ماهي الطرق التثقيفية الاكثر نفعا في منطقتك حسب رأيك ؟

- زيارات منزلية تكوين التلاميذ

- اجتماعات شعبية بالمواطنين تكوين تطوعيين

(9) طهي الوسائل التثقيفية الممكن استعمالها للرفع الهدف الصحي :

- معانيات أفلام

- صور ثابتة كتيبات

10) هل بإمكانك تنظيم بدور الشفاهة الصحي نميم
 لا

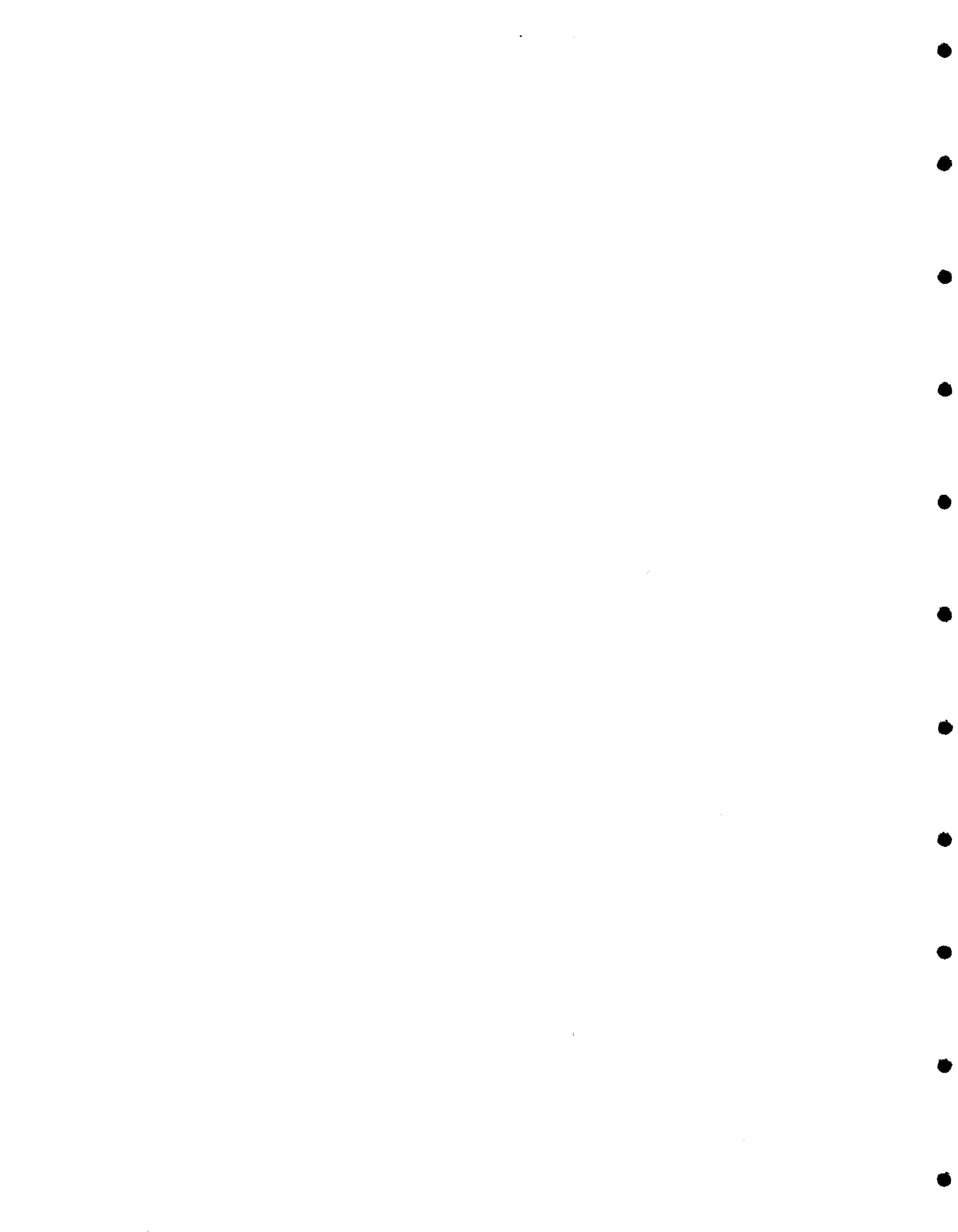
مع التلامذة هم
 لا

كيف ؟

مع المواطنين نميم
 لا

كيف ؟

شكرا



APPENDIX I

TEACHER AND STUDENT SURVEYS

DIRECTION REGIONALE DE KASSERINE
SERVICE REGIONAL DES SOINS
DE SANTE DE BASE
UNITE D'EDUCATION SANITAIRE
DE KASSERINE

ENQUETE CAP (CONNAISSANCES, ATTITUDES ET PRATIQUES
EN MATIERE DE SANTE ET HYGIENE DE L'EAU
AUPRES DES ELEVES)

Ecole _____ Localité _____
Gouvernorat _____ Délégation _____
Qualité de l'enquête _____ Classe _____ Date _____

1. D'après vous, qu'est-ce que c'est l'éducation sanitaire? _____
2. Avez-vous assisté à des séances d'éducation? oui (_____) ou non (_____) _____
3. Est-ce que c'était bénéfique? oui (_____) ou non (_____) Comment? _____
4. Qui a fait ces séances? _____

HYGIENE DE L'EAU

5. Connaissez-vous une liaison entre l'eau et les maladies? oui (_____) ou non (_____) _____
Comment? _____
6. Citez les noms de ces maladies _____
7. Quelles sont les règles de prévention contre ces maladies? _____
8. Etes-vous capable de convaincre votre entourage de ces méthodes de prévention? oui (_____) ou non (_____) _____
9. Est-ce que l'usage des latrines est bénéfique ou mauvais? Comment? _____
10. Est-ce que vous avez toujours de l'eau de Javel chez vous? oui (_____) ou non (_____) _____
A quelle fin l'utilisez-vous? _____

VACCINATIONS

1. D'après vous, qu'est-ce qu'un vaccin? _____
2. Pourquoi utilise-t-on les vaccins? _____

3. Contre quelles maladies vaccine-t-on? _____
4. Quand commence-t-on à vacciner contre ces maladies? _____
5. Quand un vaccin est-il efficace? Une seule fois
 Plusieurs fois

MALADIES DUES A UN MANQUE D'EAU

1. Qu'est-ce que la gale? _____
 2. Quand est-on atteint de la gale? _____
 3. Comment la transmission se fait-elle? _____
 4. Quelles sont les règles de prévention? _____
 5. Qu'est-ce que c'est que la teigne? _____
 6. Quand est-on atteint de la teigne? _____
 7. Comment la transmission se fait-elle? _____
 8. Quelles sont les règles de prévention? _____
- Souhaitez-vous avoir des informations relatives à la prévention? oui (_____)
ou non (_____)
- A quel sujet? _____



APPENDIX J

STUDENT SURVEY RESULTS

REPUBLIQUE TUNISIENNE
 MINISTERE
 DE LA SANTE PUBLIQUE
 DIRECTION REGIONALE DE KASSERINE
 S.R.S.SB.

RESULTATS DE L'ENQUETE CAP II.
 AUPRES DES INSTITUTEURS DANS 6 ECOLES.

Nombre d'instituteurs enquêtés : 28

QUESTIONS POSEES	% DES REPONSES
1 - est-ce que vous enseignez l'Ed. pour la santé	Oui 96 %
2 - classement des thèmes enseignés par priorité	
(la propreté	96 %
(l'Hygiène de l'Eau.....	96 %
(Les Vaccinations.....	60 %
3 - Est-ce que vous avez fait des séances d'éducation pour la Santé ? <i>Oui</i>	
- Elèves.....	82 %
- Parents.....	33 %
- Citoyens.....	16 %
4-Est-ce que vous avez discuté avec votre public cible avant exécution ?	Oui 50 %
5- Methodes d'Education utiles ?	
- Visite à domicile.....	56 %
- Réunion	50 %
- Formation des élèves.....	85,7 %
- Formation de volontaires.....	50 %
6 - Moyens Educatifs qu'il faut utiliser	
- Affiches.....	56 %
- Brechrures ou dépliants.....	56 %
- Diaporamas.....	60 %
- Film.....	76 %
7 - Que prférez -vous?	
- L'education des élèves.....	90 %
- L'eduçation des adultes.....	50 %

RESULTAT DE LA 2^{em} ENQUETE EN MILIEU SCOLAIRE (EVALUATION)

AUPRES DES ELEVES DE 5^{em} ET 6^{em} ANNEE.

-0-0-0-

(-coles Boulaaba - Khmouda - doghra - Kakhmete - Hinchir werghi-
Abarghout.

// Nombre d'élèves enquêtés : 256

QUESTIONS	POURCENT
Qu'est ce que c'est l'éducation pour la Santé ?	36, 71
Est-ce que vous avez assisté à des séances d'éducation pour Santé?	98, 43
Est-ce que vous avez bénéficié de ces séances pour la Santé ?	93, 35
Connaissez - vous la liaison eau maladie ?	98
Quelles sont les maladies causées par l'eau ? - Moins de 2 maladies	42, 18
- 3 maladies et plus	23, 82
Quelle est la prévention des maladies hydriques ? Javélisation - ébullition.	45, 31
Pouvez-vous convaincre votre entourage de cette prévention	97, 65
L'usage de latrines est bon ?	81, 64
Avez- Vous du javel à domicile ?	79, 68
Utilisez-vous l'eau de javel pour assainir l'eau ?	83, 98
Qu'est-ce que c'est le vaccin?	18, 75
Pourquoi est-ce qu'on vaccine ? Prévention	97, 20
A quel age on commencé à vacciner ?	40, 23
Qu'elles sont les maladies contre lesquelles on vaccine ?	
- Moins de deux maladies	50, 39
- Trois maladies et plus	32, 81
Quand est- ce qu'une vaccination est efficace ?	94, 14
Qu'est-ce que c'est la gâle ?	68, 73
Causes de la gale ?	80, 46
Transmission de la gâle?	77, 73
Prévention de la gâle ?	80, 85
Qu'est-ce que c'est la teigne ?	61, 32
Causes de la teigne ?	83, 98
Transmission de la teigne ?	85, 15
Prévention de la teigne ?	83, 20

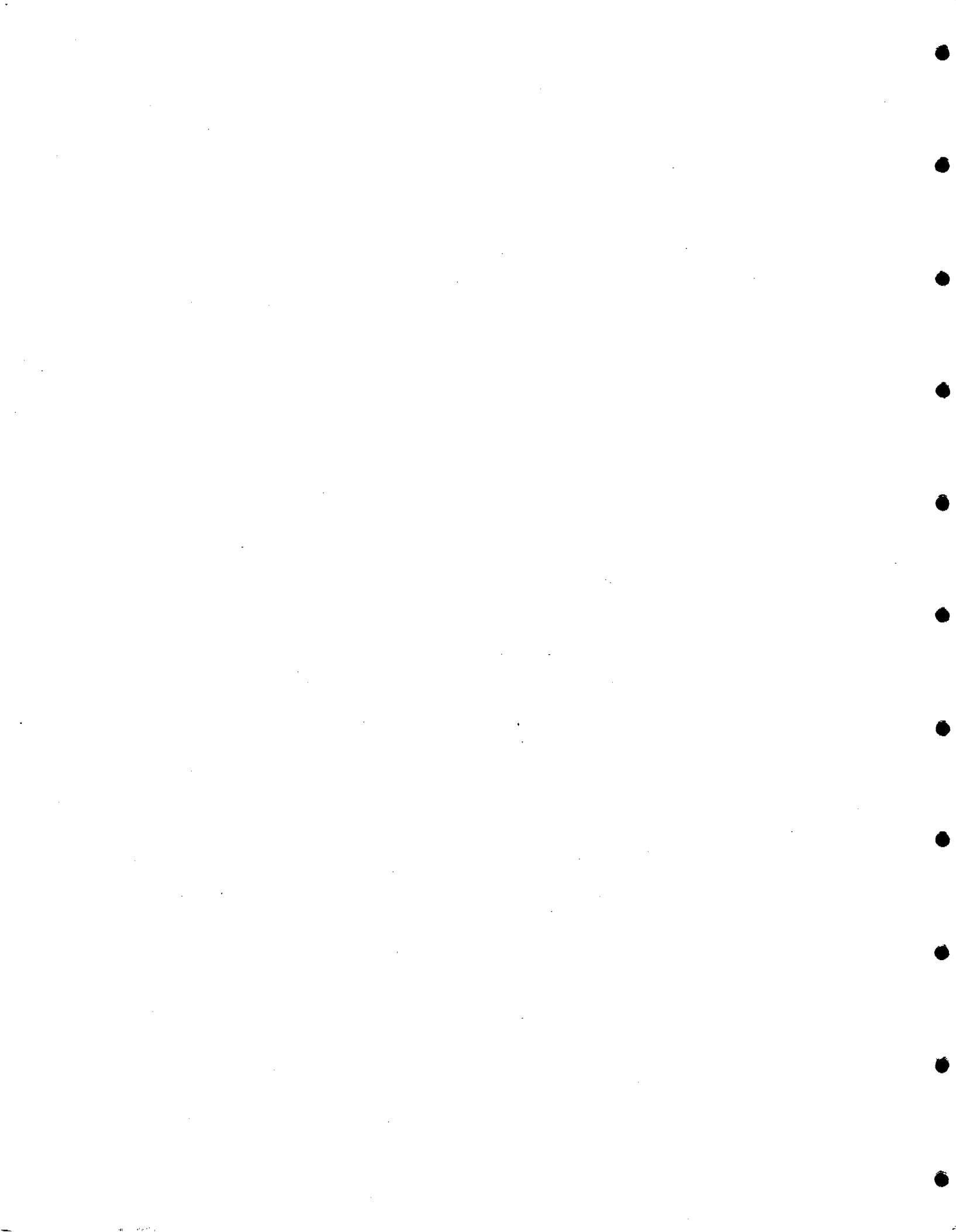
RESULTAT COMPARATIF DE L'EVALUATION 1 et 2 EN MILIEU SCOLAIRE/

-0-0-0-

ECOLES : Boulaaba - Khmouda - Doghra - Rakhmete - Hinchir Werghi - Abartaghout.

NOMBRE D'ELEVES: enquetés au cours de la 1ere enquête 428 } Classes de
NOMBRE D'ELEVES: Enquetés au cours de la 2° enquête 256 } 5em et 6e année

Q U E S T I O N S	% 1° en- quête	% 2° en- quête	% EV LUTI
Qu'est-ce que c'est l'éducation pour la Santé?	3,5	36,71	55,2
Est-ce que vous avez assisté à des séances d'éducation Pour Santé?	34,1	98,43	66,
Est-ce que vous avez bénéficié de ces séances ?	30,8	93,35	63,45
Connaissez-vous la liaison " Eau-maladie " ?	14,76	98	14,76
Quelles sont les maladies causées par l'eau			
- Moins de deux maladies	19,39	42,18	23,21
- Trois maladies et plus	16,58	23,42	7,24
Prévention des maladies hydriques: Javelisation-ébullition	42,28	65,31	3,3
Pouvez-vous convaincre votre entourage de cette prévention ?			
- Oui	65,42	97,65	32,23
L'usage des latrines est bon ? - Oui	58,41	81,64	23,23
Avez-vous le javel à domicile ? - Oui	67,99	79,68	12,31
Usage du javel pour assainir l'eau ? - Oui	53,50	83,98	30,48
Qu'est-ce que c'est le vaccin ?	1,80	18,75	16,91
Pourquoi est-ce qu'on vaccine ? - Prévention	65,88	97,26	31,58
A quel âge on commencé à vacciner ?	22,19	40,23	18,04
Quelles sont les maladies contre les quelles on vaccine?			
- Moins de deux maladies	45,79	50,39	4,6
- Trois maladies et plus	22,89	32,81	9,92
Quand est-ce qu'une vaccination est efficace ?	70,09	94,14	24,05
Qu'est-ce que c'est la gale ?	25,93	68,73	42,14
Causes de la Gale ?	44,39	100,46	36,10
Transmission de la Gale ?	39,48	77,73	38,23
Prévention de la gale ?	42,05	80,85	38,14
Qu'est-ce que c'est la teigne ?	15,65	61,32	45,61
Causes de la teigne?	32	83,98	51,98
Transmission de la teigne ?	30,6	85,15	55,9
Prévention de la Teigne ?	29,67	85,20	54,46



APPENDIX K

MATERIALS FROM THE SCHOOL HEALTH PROGRAM

couverture

copie de la brochure à colorer par les élèves



من إعداد منظمة الصحة العالمية بالتعاون مع وزارة الصحة التونسية

الجمهورية التونسية

وزارة الصحة
الجمهورية التونسية
الوزارة العامة للصحة
الوزارة العامة للصحة
الوزارة العامة للصحة

نظافة الجسم والمشيمة والماء والحفظ والتفحيط والرعاية الصحية



اعداد وحدة التثقيف الصحي
1990

l'hygiène corporelle, vestimentaire, de l'eau, de l'environnement et la vaccination pour préserver la santé.

نظافة الجسم + نظافة الهندام = جزء من نجاحك

وحدة التثقيف الصحي -

Jeu éducatif de
p438 le pour les éle

L'hygiène corporelle et
vestimentaire, une partie de
la réussite.



وزارة الفلاحة
المدوية الجهوية للتنمية
الفلاحية بالقصرين

الجمهورية التونسية

وزارة الصحة العمومية
الادارة الجهوية للصحة
القصرين

10

ميثاق حفظ المياه من التلوث

1. أحافظ على النظافة قرب نقطة الماء.
2. اغسل الملابس والاضطية والصوف بعيدا عن النقطة المائية.
3. اشقي الحيوانات في الحوض الخاص بها.
4. اساهم في نظافة نقطة الماء.
5. انظف وسائل صرف وتقل الماء باستمرار.
6. استعمل ثلاث قضبات من الجفال في كل لتر ماء للتضاء على الجراثيم.
7. لا استهلك الماء إلا بعد نصف ساعة من وضع الجفال فيه.

8. أطابب أسحاب المحلات التجارية بتوفير الجفال.
9. لا أرمي الأوساخ في البر أو الماكن أو الخزان.
10. أقضي حاجتي البشرية بعيدا عن نقط ومجاري المياه.
11. اغسل يدي بالماء والصابون بعد قضاء الحاجة البشرية.
12. اساهم في المحافظة على التجهيزات وصيانتها وأدعم عمل الجمعية ذات المصاحبة المشتركة في منطقتي.
13. في حالة حصول أي مشكل صعي اتصل بأقرب مركز لصحة.