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**The Impacts of the
Rural Potable Water Institutions Project
on Tunisian Families and Communities**

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Executive Summary

USAID has supported a Rural Potable Water Institutions Project in Central Tunisia since 1986. Beginning in the mid-1980s, local Water User Associations (WUAs) have been created and supported, with the major tasks of supervising well operation and maintenance (including collection of funds to pay for pump fuel), supervising access to the water, and providing water-related health education. The larger association at each well site is comprised of one person from each family that pays a monthly "membership" fee for water use, and each group has a governing committee of three to nine members who may be elected or appointed. The larger association provides the funds, and the governing committee collects them, purchases fuel, and acts to keep the pump functioning and the site well maintained. To date, all committee members are male, and this situation is one of the motivations for the current research.¹ Since females are the primary providers and users of water in Central Tunisia, the ability of an all-male group to meet their needs was questioned. Further, a major intended benefit of potable water is improved health, and women must be involved for this goal to be reached.

This research examines whether the WUAs and the national water strategy differently affect women, men, and children, and more or less advantaged community members. It also explores reasons for differential effects on various women, and how well all-male WUAs² can and do meet women's expressed and observed needs.

The data on which conclusions are based were collected during six weeks in May and June in the Kasserine and Kairouan governorates of Central Tunisia. Both areas have been pioneers in the formation of WUAs, and provide interesting contrasts in type and level of support for the groups, as well as in managing finances. Six sites were involved, two in Kairouan and four in Kasserine. In each governorate, one site without a water point was chosen to highlight the impact of the potable water. At each site, twenty representative households were surveyed, then four of these were selected for open-ended interviews and observation. A third visit provided the opportunity to explore other questions and to interview WUA officials, pump operators, and teachers (if a school had water) on the effects of the potable water and on local problems and solutions.

¹ Although two sites had female pump operators who worked closely with the governing committee, both "inherited" their jobs from a deceased male relative and were thus atypical; women's viewpoints were not systematically included.

² Most female-headed households belong to the larger WUA association by paying monthly dues, but the women do not feel comfortable attending the infrequent general meetings, where nearly everyone is male.

Results

All women and girls benefited greatly from the potable water, in terms of less time and effort spent in getting water, with water reported nearby. The new water was generally reported to be of good quality. The main use of time saved was reported to be in housework, which could lead to benefits for the whole family in terms of a cleaner environment and clothing.

Some women reported engaging in potentially economically productive activities, mainly producing wool blankets and rugs and working in agriculture, either as laborers or on their own land. The majority did not sell their blankets or rugs, but kept them for children—which could lead to indirect social benefits. Rugs and blankets may be sold in times of need and thus serve as "savings." While few women have their own funds, income from agricultural work benefits the whole family.

The women most likely to benefit economically from time gained by not hauling water long distances are those from families who are already better off than the majority. This is because the most likely gains are from increased agricultural productivity, and only the better off have land on which to plant crops, and cash to pay for agricultural inputs, including tankers of water for spot irrigation when necessary. Poorer women may benefit from employment as day laborers, but to a lesser degree in terms of greater income. Or, they may not benefit. As one poor woman said ". . . the time I gained, I haven't done anything with it because I don't have anything to do, not wool to work or anything at all." Thus if income-generating projects for women are encouraged in the area, they should be focused on poor women, who have more time available. An intriguing point was raised by one man who commented (as we were interviewing his wife) that only well off or middle class people got onto the WUA governing committee, and that the poor were not elected; his wife commented that they gave their own land first priority for WUA water use. While this could be a serious structural problem, no one else mentioned it; it may be that women have less access to such information.

Families purchasing water from WUAs pay about 1-3 dinars³ a month, while those who buy from private sources pay 20-28 dinars monthly, for three or four citernes. For example, at Drabliya, the site without any WUA water, 65% of families reported paying 28 dinars a month for water, and 85% paid 20 dinars or more. Boukraa (Vol. I:1990) reports costs of similar magnitude in the Kasserine area, with water sellers buying WUA water by the tractor-drawn citerne for 0.500-1.500 dinars and selling it for 3-12 dinars, depending on distance and water use. Often water for drinking is less expensive. Most women felt WUA water was a bargain.

Family health should also benefit from the availability of more and cleaner water, directly, from not ingesting "bugs" in water stored for weeks in a cement cistern, and, less

³ A U.S. dollar was worth about 0.93 dinars in June 1991.

directly, from washing children, dishes, the home, and clothing more often, but our results show that these benefits are not automatic. If we look at ease of access to water and illness, we find that 38% of those living near a water source reported no recent illness . . . and 37% of those living far from water reported the same. Although water is potable at the source, the ways it is collected, carried, stocked, and drunk all influence its purity when used. General health knowledge and practices can be improved with the presence of a village health worker (VHW), and incidence of illness may be reduced. Villages with and without VHWs differed strikingly on measures of water purification knowledge and practice, and also on knowledge of water-related illnesses and to some degree on level of recent illness.

Most women would prefer to reside in rural areas if they had basic amenities like electricity and nearby water. It thus appears that the Potable Water Project may help stem the tide of rural-urban migration.

Women do report problems with limited supplies of water, interruptions in service, or difficult access (in sites lacking water). Given the separation of the sexes in rural Tunisia, it would be difficult for women to solve such problems themselves; the solution usually involves calls or trips to the provincial CRDA, which women would be much less able to accomplish than men. In fact, the male WUA committee members sometimes find themselves helpless where the solutions to such problems seem to depend on things like the administration's whim, vehicle availability, or financial problems. On the other hand, some people said that service interruptions were shorter and fewer since the WUA committee took over; it seems useful to have a locally based interest group. Women's interest groups (AIFs) were seen as a potential solution to the lack of women's input; our data show that information moves readily within same-sex groups, but appears to have difficulties crossing the 'sex barrier': women whose husbands were on the WUA governing committee often could not describe the reason for having a WUA. Yet after a pilot period, the all-female AIFs appear not to be a workable option without a high level of support, especially in terms of leadership. Income-generating projects were introduced to encourage AIF membership, but the projects quickly came to dominate the group, at the cost of attention to water concerns. A female village health worker could readily communicate information to women, and perhaps oversee income-generating projects.

Conclusions and Recommendations

Reinstating the VHW program. It is strongly recommended that the health impact of the Potable Water Institutions Project be augmented by reactivating the village health worker program. One function of the WUAs is to provide water-related health education, but a) it seems they do this very little, which is understandable - if they do not collect the money to keep the well operating, their other functions are moot, and b) even if they did more health education, it would be difficult for these men to communicate with the females who provide and manage water for their families. Thus a female, locally known VHW could better fill the health function of the potable water program. Unfortunately, no Government agency is willing to provide funds for the program. While women would probably feel WUA water was cheap up to 3 or 4 dinars a month (most pay 1-1.5 dinars now), it is unlikely that the WUA governing committee or the

government officials related to it would favor raising the monthly rate just to fund a Village Health Worker. Many feel cost recovery for pump fuel or electricity is the main goal, and that better health is of lesser importance; education is needed to stress its importance. If WUA fees were raised to cover more fuel, an additional 0.500 dinar could be added for the VHW; it would be more acceptable in the context of a general increase.

Providing additional rural water points. In general, the benefits of these wells are great, in saving labor, potentially improving health, and generating economic development mainly through spot irrigation of fruit trees. Further, most respondents said they would prefer to live in a rural area IF there were the basic amenities of water and electricity; providing potable water can help stem the rural exodus.

Providing washing platforms at water points. Although washing platforms are apparently in some plans for the area, very few currently exist. Since women transport heavy water to their homes to wash large items, they would save time and energy with a washing site at a sanitary distance from the taps.

Increasing taps at water points. Additional taps at water points will help avoid/diminish conflicts arising from too many users, and also decrease the time necessary to fill.

Installing taps in homes where feasible. Since wells were not designed with this in mind, taps are not feasible for all households, but it was one of the few water needs that women expressed, and again would save time and energy.

Of the four points above, the first three would probably have to be funded by the Government; local WUAs would not be able to cover the expenses. However, several individuals mentioned they would like household taps, and at one site (Ouled Ali Ben Salem) individuals had begun to install them, at a cost of about 120 dinars per connection for materials and labor. Most of the families surveyed would find this expensive, but some could afford it, and groups of relatives might pool resources.

I. Introduction

Objective

The goal of this research is to examine the effects of providing potable water to families in rural communities, and to see whether all segments of the population benefit equally.⁴ USAID has supported a Rural Potable Water Institutions Project in Central Tunisia for several years. Since the mid-1980s local Water User Associations (WUAs) have been created and supported in Kasserine, Kairouan and northern Gafsa provinces,⁵ with the major tasks of supervising well operation and maintenance (including collection of funds to pay for pump fuel), supervising access to the water, and providing water-related health education. The larger association at each well site is comprised of one person from each family that pays a monthly "membership" fee for water use, and each of these associations has a governing committee of three to nine members who may be elected or appointed. To date, virtually all committee members are male, and this situation is one of the motivations for the current research. Since females are the primary providers and users of water in Central Tunisia, the ability of an all-male group to meet their needs was questioned. We examine this question here, and also whether different groups of women, or economic groups, benefit differentially from the Rural Potable Water Project.

Previous work

A concern with the importance of women's roles and whether they are adequately considered in development activities is not new in work on the Kasserine area. A study of the organization of agricultural production points out women's important participation, and notes that male extension agents rarely work with them (Salem-Murdock 1985). Many of the studies associated with the Rural Potable Water Institutions Project financed by USAID mention women's roles as important, and several studies focus on work with women specifically.

Among the more general studies, women are mentioned in relation to their central role in providing and working with water, often as this is related to family health. For example, the midterm evaluation of the Project says that one goal of the WUA is "to encourage a more effective participation of women [in managing water], taking into account the preponderant role they play in using water" (Jennings et al 1989:2). Among the problems they found were a need for increased female participation, and a need to communicate health information more effectively, toward a final Project goal: "to improve the health and the productivity of the

⁴ For complete scope of work, see Appendix A.

⁵ Kairouan province is not included in the USAID-funded project, but was included in the current research because it has been quite active in promoting WUAs.

family" (1989:9). A comparative study of the creation of WUAs echoes the importance of the health aspect and its relation to women: "One of the main reasons for providing potable water service to rural communities is to improve the general health level of the population. This ultimate purpose is sometimes easy to forget amidst the concerns for the technical functioning of the WUA" (Hopkins et al 1990:25). They continue "From the standpoint of improving the general level of rural public health, a way must be found to inform women of health-related issues, and most importantly, change some of the practices" (1990:28). One of the five major recommendations was that health education be continued on a pilot basis, including the VHWs in Kasserine and AIFs in Kasserine and Kairouan. Yet, to foreshadow the conclusion of the current research, these health interventions with women are not being pursued. The current report attempts to monitor some of the results of these programs, so they can be seriously considered for inclusion in the national strategy for WUAs. However, it may be too late. A report on the development of the national strategy had as one objective to determine the best approach to hygiene education (Rosensweig et al. 1990). The options included the use of VHWs, a school health and hygiene program, and the use of current Ministry of Health (MOH) employees to do rural health education. While the GOT had not made a final decision, training modules were being prepared for the last two options, but there was no action with the VHWs.

Reports by Boukraa (1990) and Fikry (1991) derive from a survey-based case study of the economy of water in Kasserine Governorate. Boukraa again stresses that special attention must be paid to problems of water and hygiene, "otherwise the benefit of the access to clean water is negated by unsanitary storage techniques" (1990 II:24). One of Fikry's conclusions was that communities should better understand what it means to belong to the WUA, and that this would be facilitated by involving women more in decisions and activities (1991:xii). She also notes that she designed the study to sample communities with a dispensary and a VHW, with just a dispensary, and with neither, and wanted to follow illness incidence month by month to see the effect of these interventions. Unfortunately this was not possible, but the current research attempts to address some of these issues by comparing communities with and without a VHW, and asking about illness in the last month or so. Another Fikry recommendation was that data be collected on what people used to pay and what they pay now for water, and how they felt about those prices; one goal was to see what people might be able to afford from their past expenditure. She found many complaints about current water prices. We provide here similar information on a limited scale. By including Drabliya, a community without potable water, we can see what people near a WUA currently pay. And through questions about water and price, we gain some information on how they feel about prices.

Several studies focus more specifically on women and their activities with water, often as related to health. Thaddeus (1989) and Rossi (1990) both looked at approaches to health education and how women were involved. Thaddeus helped develop and facilitate the beginning of pilot AIFs or female versions of the WUAs, and Rossi describes the functioning of both AIFs and VHWs. Harrison (1991) is a consultant who worked in Kasserine Governorate for a year on establishing eight pilot AIFs, and her report contains specific information on problems encountered and important factors for success. The 1991 report of Engelhardt-Bennani et al summarizes the monthly reports of VHWs, which contain information on water storage and

disinfection for the thirty households visited by each over a year's time. Most report nearly 100% of families with healthy practices at the end of the period, suggesting their visits were effective. The report concludes that this is an apparent success, but would be even more convincing with an outside evaluation of VHW effectiveness; that author wonders about VHW objectivity. The current report, in comparing knowledge and reported practices at VHW and non-VHW sites, provides some of this information.

This research, with documentation on women's central role with water, and their importance in the success of health education, answers several questions posed in previous work on the Rural Potable Water Project in the Kasserine and Kairouan Governorates. Its conclusions reinforce their stress on the importance of improved health in the Project's success.

The research settings

All the sites selected had a rural character, even though one (Doghra) was on a main road only ten minutes from Kasserine. Houses were usually simple, of one story in stone or concrete, with pens for sheep, goats, or donkeys in the courtyard or nearby. Most women wore the traditional *milhafa*, a garment of a brightly colored fabric fastened with large silver pins or fibula at the shoulders; daughters more often wore western-style skirts and tops.⁶ Men wore trousers and jackets, with various types of headcovers. Although housing appeared quite basic, many families had television sets, run off car batteries if electricity were unavailable.⁷ The barley harvest was in progress and wheat just beginning during the research, and at times we had to return to find women who had been out harvesting. Men's participation varied; it seemed women did nearly all the cutting of grain south of Kasserine, while both sexes worked in the fields to the northeast toward Kairouan. The seclusion of females or separation of the sexes also varied; Drabliya and Ouled Ahmed, the two sites furthest south of Kasserine, seemed to sequester women more.

Women's activities

To help readers better understand the more detailed data below on women's activities, we insert here an excerpt from an interview in Drabliya on May 29, 1991.⁸ The young woman

⁶ See photographs in Appendix E.

⁷ One Kairouan WUA is earning additional money and providing a community service by charging members' batteries nearby and at a lower price than people paid before.

⁸ Drabliya does not yet have a potable water source; it was selected for inclusion here to illustrate both the difficulties of women far from a water source, and the problems that many have when the new water source breaks down. Appendix C contains the transcripts of interviews with 23 rural women at six sites.

speaking is about 20. She lives with her mother, father, and two younger brothers in a two-room stone house; one sister has married and moved. Her mother had 11 pregnancies, and only four children survived.

She always gets up before 6 AM. "I washed my face, cooked breakfast [vegetables and flatbread], prepared yeast bread, picked up the blankets, picked up the house, swept, and went out to harvest [green barley]. I came back at noon, made the dough into several round loaves, and got some firewood to light the outdoor oven. I cooked the bread, and sat and spun wool. Then I went back and harvested in the afternoon. In the late afternoon [about 6], I came home, swept the house, and after I cooked dinner, put out the blankets. After that we had dinner [couscous] and went to bed. We don't stay up late because we don't have TV." They go to bed about 8 PM.

"My mother is old; she doesn't work in the house. It's me who does everything. I work wool for us." The mother did help her harvest. The daughter last washed clothes 3 days ago; since there aren't small children, they don't need to do it too often.

"Yesterday it rained; we collected the water, and now we're drinking it." Usually, they go to the mountain spring daily to get water, but didn't go today because of rain water. Usually she takes a donkey and gets two plastic containers of 20 liters each. "Men don't do anything at all with water: they only drink it." She's the only one who gets water from the spring; her brothers are too small. "I go to the spring after I cook breakfast and get back at noon." She goes to the spring with a group of women, and takes one of her brothers if she's alone.

II. Methodology

Several methods were used in this research, including survey questionnaires and in-depth interviews and observations for rural girls and women, and brief questionnaires for WUA officials and employees and for local teachers at schools with a water tap. An overview of the schedule provides an idea of the levels of effort involved for each. The first few days in Tunis were spent meeting with government officials and academics to discuss their views of the WUAs and potential gender issues, and in attempting to locate a female research assistant. The first two weeks in the field were used to meet with the Kasserine and Kairouan officials and teams responsible for WUAs, to learn about the local groups, and to obtain their help in determining relevant site characteristics and then in site selection, and in questionnaire preparation. The questionnaire was pretested and revised, and in the third week it was administered at six sites. The next (fourth) week we returned to each site and interviewed four women and observed their daily activities, sometimes accompanying them to water sources. We returned again in the fifth week to ask further questions of these women and also of local WUA and school officials. The last week was devoted to summarizing results, reporting them to local and national officials, and obtaining their suggestions for the final report.

Assistance

Tunisian cadres working with the potable water program were very helpful in both Kasserine and Kairouan. They described the progress of the program in their area, pointed out local variations, and assisted in site selection first with suggestions and then with visits to sites and introductions to local people. Once we were at a site, local WUA committee members often introduced us to people.

For the research itself, two female assistants were required to administer the questionnaire and then the in-depth interviews and observations.⁹ While teachers or health assistants were suggested as researchers, at this time all were working at regular jobs and thus unavailable. Fortunately Zakia Haggui, a local young woman who had worked previously with the Kasserine Unité or local unit supporting WUAs, was currently available. Her knowledge of local behavior and idiom was invaluable. She had also previously worked with female water-user groups (Associations d'Intérêt Féminines or AIFs), and so provided important information on past functioning and also current contacts. The other assistant was located through a research group in Tunis, the Cabinet de Prospective Social, which specializes in questionnaire research. The assistant, Nihaya Saadi, was also originally from the area and experienced in quantitative and qualitative data collection. While local students could have been hired, the tight time frame allowed limited training, and the quality of work would not have been up to the high standard achieved by these two assistants.

Site Selection. Six sites were studied; more were desired, but the method of revisits made more unfeasible. Criteria for site selection included the presence or absence of a potable water source, the effectiveness of the local WUA, whether there were alternative water sources, the presence or absence of a village health worker (VHW) and of a women's water group (AIF), the economic base (dryland or some irrigated agriculture, herding, working elsewhere), and the nearness to larger centers and access to infrastructure.¹⁰ See Table 1.

Of the six sites chosen, four were in the Kasserine and two in the Kairouan Governorates. One in each governorate was chosen because they did not yet have a potable water source nearby, yet were programmed for one soon. This allowed us to compare them with nearby sites that already had water, and also provides baseline data to be used in future

⁹ My Moroccan Arabic, with its difference in accent and some vocabulary, disconcerted many rural women. I was always present with one of the research assistants and could follow conversations and pose additional questions.

¹⁰ See Appendix D for more detailed information on the sites chosen.

work on the impact of potable water.¹¹ Thus Drabliya without water was compared to Ouled Ahmed; they were about four kilometers apart in the province of Feriana south of Kasserine. Ouled Amer used the water of a WUA about 3 kilometers away, and was compared to Sidi Ali ben Salem, where several taps served dispersed hamlets; both sites were about an hour from Kairouan. The other two sites were Lajred, in the mountains of Haidra province, and Doghra, near Kasserine in Kasserine South.

Site	WUA Water	WUA Strength	VHW	AIF	Economic Base*	Near City and Infrastructure
Doghra	yes	weak	yes	no	1,2,3,4	yes
Lajred	yes	weak	yes	yes	4	not city
Ouled Amer	no**	strong	no	no	2,4	not city
Drabliya	no	none	no	no	1,3	no
Sidi Ali	yes	strong	no	yes	1,2,4	fairly
Ben Salem						
Ouled Ahmed	yes	strong	no	no	1,2	only school

* 1 = rainfed agriculture, 2 = some irrigation, 3 = herding, 4 = city jobs

** Ouled Amer does not have its own WUA, but buys from one nearby.

The first four sites are in Kasserine Governorate, the last two in Kairouan.

People were courteous, helpful, and sometimes embarrassingly generous. They nearly always offered coffee or tea or fresh milk, and women had to be encouraged to continue their usual work during the in-depth interviews. At the poorest site we visited, one family slaughtered a sheep for us.¹²

¹¹ It was also more comfortable for us to be able to tell the really water deprived that their situation should improve soon.

¹² At that site, we brought each of the four in-depth interviewees a package of groceries on our next visit.

Survey. The survey questionnaire went through two versions. The first was prepared by the Cabinet de Prospective Sociale, modeled on a version worked out with the Unité in Kasserine. One strength and unique characteristic of the Cabinet is that they often write questions in the Tunisian dialect, something this researcher has never seen. It is obvious that distortions will be introduced by using a questionnaire in French or literary Arabic, which each surveyor must translate, yet in broad experience with research in the Maghreb, I have never encountered a questionnaire in dialect. They are handwritten in small format to fit on one or two pages; they feel that flipping multiple pages disconcerts interviewees.

The first questionnaire was tested at one site, and then reworked and considerably expanded into the final version.¹³ Administration usually took between 15 and 30 minutes; thirty minutes was the upper limit in order not to bore or inconvenience people. Women or older girls were always interviewed, since it is they who deal with water.

The questionnaire was then administered to twenty families at each of the six sites.¹⁴ My two assistants and I would first have met the délégué or regional official and explained our work, and then gone to the site and met a local official who would introduce us to families.¹⁵ We attempted to select a sample representative of the economic levels at each site by asking our local guide (usually a government or WUA official) first about the relative number of families at different economic levels, and then requesting he point out a representative number of families. Usually he responded that there were a few well-off families, a few more that were middle level, and that most were poor. We thus usually requested two better-off families, four middle level, and fourteen poor, trying to include some female heads of household. Our attempts at systematization were not entirely successful, first because the estimates of number of families per level were quite rough. Second, it appeared to us that at some sites we saw more middle-level families than we should have; they may have been friends of our local guide, or the local level may have appeared better off in contrast to a previous poorer site. At one site, Drabliya, the local official said that "the best off people here are middle level, and most are poor." However, a reasonably successful attempt was made to obtain a representative sample.

¹³ see Appendix B for Arabic version and translation.

¹⁴ We have a total of 118 questionnaires, 20 for each site except 17 for Lajred and 21 for Ouled Amer.

¹⁵ We insisted that assistants be female, in order to talk to women, but at one site we were followed by a group of about eight men of various ages, who just trooped into each house and sat down with us. An elder even attempted to answer all the questions each time, saying the women didn't know; the consultant used her "outsider" status and repeatedly asked him please to let the women speak.

Although most of the survey results are below, a bit of the data collected will give a more quantitative picture of the 118 women interviewed. Eighty-four of these women were housewives "at home." There was a category for "working wife" (and it becomes clear below that they all do), but only three women were classed this way; the question was interpreted to mean "employed." Twenty others were daughters, and the rest varied. Eighty-six women were married, twenty-one single, seven widowed, and four divorced.¹⁶ Ninety-six reported living in nuclear families, and most currently had three to seven people living in the household. In the parental generation, few had attended school: 86% of mothers and 67% of fathers were illiterate. Fourteen percent of mothers and 25% of fathers had attended primary school, and no mothers and 5% of fathers had been to secondary school. Children presented a different picture. We asked each woman if the family had a female and then a male child in primary school, secondary school, university, or school age who had never attended. Detailed data will be provided below, but to illustrate the difference between generations, 55 families had a girl in primary school and 75 had a boy.

In-depth interview and observation. After we collected the questionnaire data and sent it to Tunis for coding and preliminary analysis, we revisited each site, selecting this time four women for an open-ended interview, to supplement data from the questionnaire and to provide other information. At the same time, we asked women to continue their routine activities in order to observe their work. This interview included questions on regular activities by requesting a description of what she did yesterday, how her routine varies by season, what tasks use water and how often they are done, and how males are involved with water. We also asked what changes she had seen with the potable water, who benefited, whether she had water problems, and whether her family's economic level or activities had changed.¹⁷ The four women were again intended to be representative, with one well-off, one middle-level and two poorer women.

Women's responses to questions were recorded in Arabic by the research assistants, who were instructed to use the women's own words as much as possible. The assistants often but not always wrote in the dialect (which is difficult, because it is never done in school or published materials). The responses of the twenty-three women interviewed are included in Appendix C, and will be used to elaborate on questionnaire results as well as to describe women's activities and feelings more fully.

¹⁶ All but two of the divorced and widowed women reported buying WUA water, so would count as "members." We did not ask if they attended meetings, yet meetings were rare in any case.

¹⁷ See Appendix B for the English translation.

These women were asked whether they would like to be photographed, alone or with their families. This was a minor way to repay them for their help, since it is often difficult for them to go to town for photographs. It also provides visual documentation of the sites and of some women's activities, and delivering the photos on our last visit gave us a chance to ask further questions.

WUA officials and employees, teachers. Brief questionnaires were also prepared for the WUA president, the well guard, the pump operator, and teachers at schools with a water connection. It was hoped that these people would be well informed about the potable water source and its benefits and problems, and to examine whether the WUA people had views on women's problems and their solutions. These are available for five sites, since Drabliya had no WUA. Even though the people of Ouled Amer did not have their own local well site, they used water from a nearby site, and the WUA president there was interviewed. These responses are used to elaborate the results below.

III. Results

Overall, the new sources of potable water have been a great benefit for rural people, women probably most of all. This was highlighted by a visit to two nearby sites, one with and one without a local water source, on the same day. A description of that visit will give the reader a sense of the difference ready availability of water has made; the survey and interview data will be included in a more detailed discussion below.

On a hot, sunny June day, my assistant Zakiya and I decided to visit the spring where Drabliya women get their water when they cannot afford to buy it by the citerne, or when the citerne man doesn't come readily. We had been told it was an arduous walk, and indeed the father of Jamila, the young woman who accompanied us, warned us that we would get very tired.

As we set off, Jamila pointed toward low rocky mountains and said the spring was behind them—as indeed it was. Forty five minutes later, after descending dry river beds and scaling rocky slopes, we arrived at the spring.¹⁸ Water ran out from a hole in a hillside, and a nearby tree made it a pretty scene and provided shade for the water gatherers. We were the only people there, either because no one else would go at midday, or because it had rained recently and people were drinking that more easily accessible water. Jamila told us she never goes alone, since it's a long deserted walk; girls and women go together, or she at least takes a little brother.

We returned back at the house to find the rest of the family sitting in one of their two rooms. Jamila's mother swept the dirt floor ineffectually, only stirring up clouds of dust. We

¹⁸ See Appendix E for views of the route.

were not offered water; they probably knew we would hesitate to drink the rain water from the majen or underground cement cistern. The family offered lunch and we insisted we were not hungry, not wanting to strain their resources, but they would not let us leave without giving us cooked eggs to eat.

Our next visit was to Ouled Ahmed, several clusters of dwellings about four kilometers away that has a potable water system. As soon as we arrived, we were brought a cup of water and basin, and told to "cool yourselves off—it's such a hot day." We washed our hands and faces, and were also offered water to drink. The tile floor of the house was clean and cool; many people mop floors to cool the house in summer. The children and their clothing were noticeably cleaner than at our previous hosts, where people had said one sometimes must choose between drinking and washing.

The survey provided us with many answers to questions on the impact of the potable water project on families in these rural communities. These follow, often clarified with comments from the in-depth interviews.

Water collection

One way in which women benefit from the new potable water is as the family members most likely to collect water. For all sites, 61% of respondents said the mother collected water, 37% a daughter, 9% a son and 14% the father.¹⁹ (Totals are over 100% because more than one person could be named.) At individual sites 60-90% of mothers got water, except that at Ouled Ahmed only 10% did so. There is a similar pattern for fewer girls to get water at that site, with only 15% at Ouled Ahmed and 25% at Drabliya. At first this appears to be related to greater seclusion of women, seen in fewer girls attending school, but another factor is the purchase of water from tractor-drawn citernes or tanks, which occurs only at these two sites. See Table 2.

Water is transported in several ways. The most common is for people to carry it by hand in ten liter pails, twenty liter plastic bottles, or to roll 50 liter plastic barrels along the ground; overall, 52% of women said their families got water in one of these ways. Twenty percent said they had animals carry water in plastic containers, and people used animal-drawn tanks (of 500 liters) only at Ouled Amer and Ouled Ahmed. Tractor-drawn tanks (of 3500 liters) were used only at Ouled Ahmed and at Drabliya, where people purchased water delivered in them.²⁰

¹⁹ See graph 1 in Appendix G.

²⁰ See Appendix E for photographs of different methods of water transportation.

Site	Mother	Daughter	Son	Father
Doghra	67	52	0	0
Lajred	65	41	6	24
Ouled Amer	60	50	20	20
Drabliya	85	25	5	10
Sidi Ali	90	40	0	5
Ouled Ahmed	10	15	25	30

The in-depth interviews flesh out this picture. We asked women to tell what they had done yesterday and probed for more information on tasks involving water. Then we said "You've told us many things women do with water; how are men involved with it?" The basic answer was "very little," but most women's answers were more specific, like "Men don't do anything at all with water; they just drink it." Another woman at Drabliya said "A woman uses water more because she mops, and washes clothing and dishes, and cleans house. But the man just buys the water." At Sidi Ali ben Salem, where several families irrigate crops, women use water even more: they irrigate trees and vegetables for themselves, and wash, clean house, and mop. Men sometimes irrigate potatoes. "It's the woman who gets all tired out. A man bring water? It's the woman who gets tired, going back and forth bringing water." Although one (only) woman at the same site had a somewhat different view: "My husband brings me the water—why should he sit around? He brings me water and I cook, wash, and clean."

Water use

Virtually all women reported using potable water for drinking, cooking, and cleaning, as one would expect. In addition, water was used for animals at all sites, but the rate varied from a low of 35% at Lajred to a high of 95% at Drabliya. It was much less often used for irrigation,²¹ with women at most sites reporting this for 10% or less, except water was used for irrigation by 25% at Drabliya and 80% at Ouled Ahmed.

²¹ Irrigation at potable water sites was nearly always limited to what is called "irrigation à point," in which a tank of water is used for individual trees instead of pipes or canals.

Water quality

Another benefit is the better quality of the potable water. Overall, 86% of the women said the water was good quality, and only 14% said it was bad. The highest percentage of those who said it was bad (30%) lived in Drabliya, the site without a nearby potable water site, who either brought water from the spring we visited (which appeared clean), bought it in tanks filled at a potable water source, that they stored for about a week, or collected and drank rain water.

One young mother in Drabliya, whose husband works abroad, explained her water problems. "The water in my *majen* (cistern) is probably more than two weeks old, and a scorpion fell into it. But what can I do? I don't have money to buy other water If I get water, I only decrease money available for my childrens' food Water is very, very expensive. A large tank (3500 liters) lasts 15 days, and if it rains, we drink that because it's free."

Distance to water source

The only two sites where women said they lived "far" from their source of water were Ouled Amer and Drabliya, the sites that were chosen because they had not been provided with a potable water source. At all other sites women said they lived a medium distance or nearby, with 40-70% at all but the two sites mentioned saying they lived nearby.

Time to collect water

The time necessary to collect water is closely related to the distance, as one would expect. Of the sites with potable water sources, 75-100% said it took them one hour or less. The one exception is at Lajred, where the potable water has been tested as pure to drink, but tastes of sulfur, so most people use it only to wash, and collect drinking water from a weakly flowing spring in a hard-to-reach river gorge. There, only 47% said it took an hour or less to collect water. For those who benefited most, it took less than one half hour for 90% of the women at Sidi Ali ben Salem and for 70% of the women at Ouled Ahmed. On the other hand, 75% at Ouled Amer spent 1-3 hours and 10% over 3 hours, and 75% at Drabliya spent over three hours.²² Time is clearly saved with the new sources of potable water.

Our interview data on how women spent their time provides information on what women do with the time they gain. Most said they spend it in housework, washing more, mopping floors, and so on. While this does not have a clear financial benefit, it probably increases family health through better sanitary conditions. Again, the interviews provide information:

²² See graph 2 in Appendix G.

We asked Bornia, a married woman with eight children at water-starved Drabliya, when she washed her family's blankets. "Blankets? I rarely wash them. A large tank [of water] costs 7 dinars, and if God just provides for the children . . . I haven't washed blankets for two years. If we don't have enough water, we don't wash clothes." She now washes clothes every four to seven days.

A contrast is provided by Miriam, a mother of four at Sidi Ali ben Salem, who has a water tap almost in front of her house. She washes clothes daily, sometimes twice a day. She washes the adults' blankets yearly in the summer, and the childrens' twice or three times a year, because they get dirtier. Miriam said that since getting potable water "conditions have changed, we wash very well; water is always available, and we clean really well." She also said that both rich and poor benefit from the new water sources: the poor with cleanliness and the rich by planting trees and raising more animals.

Time gained

Most women (58%) said they gained an important amount of time with the new source of potable water. However, at two sites this was not the view: only 5% at Ouled Amer felt this way, and 20% at Lajred. The former is understandable, since they used to get water from an even more distant source, but still had to go 2-4 km. Lajred has a source close to most homes, but as mentioned above, the sulfur taste leads most women to continue collect drinking water from a riverbed spring. One surprise is that 75% of women at Drabliya said they gained much time, yet 75% also said they spent over three hours getting water. They may be referring to the fact that when they can afford to buy water in a tanker, it saves them the three hour trip.

Cleanliness

We noted above that most women said they did more housework with time gained with a nearer source of water; one result of this might be a generally cleaner environment. We had one questionnaire item that involved observing the general cleanliness of the home and the children, but it did not reveal consistent differences related either to the easy availability of water or the time saved. Overall, the site with the highest percentage of cleanliness (53%) was Sidi Ali ben Salem, and one might infer that the several water spigots dispersed around the settlement did make access to water very easy, resulting in a cleaner household. The site with the lowest rating was Drabliya (0%), again expectable because of the scarcity of water—until one finds that their water-rich neighbors in Ouled Ahmed had only 16% of households rated clean, and one of the highest rates of unclean households at 53%. Drabliya had the highest percentage of unclean households (56%), but Doghra with water nearby had 52%.

The relation of distance from water and household cleanliness was examined specifically, again with what might seem contradictory results. The highest percentage of households rated unclean (46%) occurred among people who rated themselves as close to their water supply, while for people rating themselves far, 41% had clean environments and 42% moderately clean.

Water purchase and cost

At all sites but Drabliya, people bought water from the local WUA; this occurred even at Ouled Amer, selected because the people there did not have a nearby potable water source. Since they were linked to a relatively nearby source by a good road, they bought from that WUA. Less than half the households purchased at Lajred, mainly because of a sulfur taste in the AIC water and the availability of alternate sources, which were used by households a bit distant from the standpipe. In addition, the pump motor had been broken for over a month at the time of the research. See Table 3.

Water users usually paid between one and two dinars a month for water from the WUA; some families at Ouled Amer paid 3 dinars because they filled a donkey-drawn 500 liter tank daily instead of 20 liter containers. Only at Drabliya did people pay much more, with 27% of families paying 20-21 dinars and 68% paying 28 dinars, which was based on seven dinars each week for 3500 liters. Thus the community that appeared the poorest paid by far the most for water. Several of the women interviewed underscored this when they said that poor people benefit from the new water sources by finally being able to afford water. As Bornia from Drabliya said, "The poor would benefit, because they don't have money to buy water; for the rich, even if it's far, he has money to bring it." And Jamila, also from Drabliya, said "We now

Site	Percent of Surveyed Households
Doghra	100
Lajred	47
Ouled Amer	100
Drabliya	0
Sidi Ali Ben Salem	100
Ouled Ahmed	75

spend 7 dinars a week for a large tank load. If we get a potable water source nearby, it would be almost free [at 1-2 dinars a month]." Yet Warida, a poor woman at Sidi Ali ben Salem, is less sanguine about the benefits for the poor: "Those with a tank benefit more than those who don't have one. And those with irrigated trees too. But me, even the bottle I use to fetch water leaks!" Women are ready to pay for water, as Hnia from Ouled Amer points out in saying "Water is necessary; even if I am deprived of something else, I have to get water." Another woman there illustrates that women are ready to pay for convenience. She says she finds a dinar a month a "little expensive" for water that is sometimes shut off [for repairs], but she would

gladly pay 5 dinars a month for a more reliable household connection. And Zina at Ouled Ahmed expressed many women's satisfaction when she said "Before, the well was free. Now, the potable water costs money—and thank God [al hamdullah] for it!"²³

A recent report on potable water (Fikry 1991) suggests that data be collected on what people previously paid for water, partially to assess what they could possibly pay. Our data on this is limited, since at most sites water was previously from wells and free. But at Drabliya people now pay about 7 dinars for a large tank, and at Ouled Ahmed some people said they used to pay 6-10 dinars for a large tank from a nearby irrigated perimeter. It thus appears that people can and do pay more than the 1-2 dinars a month they now pay the WUA for potable water, and the comments above suggest that most women would gladly do so.

Resource control

Although most women would gladly pay, and even more, for their water, very few are able to do so themselves. In the open-ended interviews we were able to ask who handled family funds and whether women had their own money to spend. Very few bought things for the family; the few who did were often widows or had husbands working in the city. There was also variation by site, with several girls and women in Ouled Amer, but few elsewhere, reporting buying at shops. Most purchases were at the weekly suq, and very few women attended.

Even women who worked to earn money seldom kept it themselves. Several worked in the *halfa* or palmetto grass fields with their husbands, but the men would collect the pay for the whole family. One woman wove tent strips for a merchant who came to her home to buy them, but she kept just enough money to buy more wool and gave her husband the rest.

The exceptions, who went to markets and spent their own money, were widows with no male relatives to send to the suq, and a few older and/or better-off women. Thus a woman at Sidi Ali ben Salem who wove *mergoums* [flatweave carpets or kilims] sold them herself in the district capital and used the money usually to buy clothing or medicine for the children or something like curtains for the house. An older woman at the same site was given money by her children, which she used to buy gold jewelry for herself. And a middle-aged woman at Doghra was given money by her sons with which she purchased clothing and shoes for herself. Nearly all the widowed and divorced women bought water from the WUA; we heard of a few cases in which they were too poor, and the WUA committee let them use water gratis.

²³ Fikry (1991) reports many complaints about the expense of water, while we did not find them at sites with a WUA. One wonders if it may be because her sample was mixed, while we had only females. They may be less accustomed to complaining about prices, or may value the water more.

Illness

A potential benefit of a clean water source would be better health, both from fewer water-related diseases as well as more water to wash dishes, clothing, and to bathe. Yet it must be borne in mind that although water is assumed to be uncontaminated when it comes out of the ground, the way it is collected, stored, and drunk influences its purity. To assess health we asked if anyone in the family had been ill recently, and small children were mentioned overall more than older children or parents. Most types of illnesses had too few cases to report; those with some frequency are listed in Table 4 below. The category "other" includes a variety of problems, such as "nerves," "swollen glands," and broken limbs.

Perhaps the most interesting category for us is that of no illness, since it reflects relatively healthy families. The healthiest site was Doghra, the site closest to a city (Kasserine). It was followed by Lajred, Ouled Amer, and Sidi Ali ben Salem. Water-deprived Drabliya had only 30% report no illness, but their neighbors with water, Ouled Ahmed, were the least healthy with only 20% not ill recently. The latter also reported the most fever and diarrhea (35%), with Drabliya having a much lower 20% and Ouled Amer with the lowest (10%) even though they have to go quite far for water.

Looking directly at the relation between illness and the distance to water, the lack of a clear association is apparent. Of those living near their water source, 38% reported no recent illness—and 37% of those living far reported the same. Thus, reduced illness was not a clear benefit of the new water sources.

Site	None	Fever/Diarrhrea	Allergy/Skin	Other
Doghra	67	14	5	14
Lajred	53	29	0	18
Ouled Amer	50	10	0	30
Drabliya	30	20	5	40
Sidi Ali B. S.	40	25	0	5
Ouled Ahmed	20	35	20	20

Health and illness knowledge and practices as influenced by village health workers

If better health does not seem to follow directly from provision of potable drinking water, perhaps women (since they handle the drinking water) need to be taught some basic facts about water and health. We built in the possibility to test this by including two sites where village health workers (VHWs) had been trained and worked as part of the potable water institutions project.²⁴ The VHWs were young women who lived locally, so were both known to village women and always present, instead of facing the transportation problems common for non-resident workers in rural areas. They were paid 30 dinars a month and expected to visit 30 families by working part-time.

Unfortunately, at one site the VHW worked only for three months, but at the other she worked for two years and was so zealous that we could not find families she had not visited in order to do a local comparison. Thus 94% of our sample at Lajred had been visited by Atika, the VHW, and 24% at Doghra and 25% at Ouled Ahmed reported a visit. Although the latter site had no VHW, the Ministry of Health had sent someone to visit households at least once.

Several questions were designed to measure health knowledge and practices, including whether women could name water-related illnesses, whether water-related illnesses or illness in general were less common at sites with a VHW, whether women treated their water to purify it, and whether they knew the correct dose of javel (chlorine bleach) to use. Some of these show striking improvements with the presence of a VHW, but others do not.

1. Knowledge of illnesses. The presence of a VHW seemed to increase women's knowledge of water-related diseases, but not a significant amount. Thus for all sites, 17% of women mentioned kidney problems as related to water (and several at Doghra said their previous potable water source had been closed by the Ministry of Health for this reason), while 45% of sites with a VHW mentioned kidneys. This is probably elevated by the fact that Doghra had a VHW and reported kidney problems in the past. For the whole sample, only 8% of women said water could cause fevers, but with a VHW 20% mentioned this. And 19% overall related diarrhea to water, while 23% of those with VHWs did. However, if we look at women who could name water-related disease(s), there is a significant effect with the presence of a VHW: 86% named at least one disease, while only 66% of those with no VHW did so.

²⁴ As noted in the introduction, several previous reports suggest more evaluation of the effectiveness of the VHWs. We provide here some data on this question, although less extensive than ideal, since this was not the only focus of this research.

2. Incidence of illness: If people are better informed about the sources of illness and its prevention,²⁵ the actual rates should go down.²⁶ We see a mild indication of this in the fact that Doghra reported the highest rate of no family members ill recently (67%) and Lajred the second highest (53%); both sites had VHWs. But Lajred's VHW worked longer and more intensively, and Ouled Amer with no VHW had a nearly equal 50% report no illness. It may be that longer is needed for the health messages to take effect (Lajred's began in spring 1989), or that other factors are involved; all three of the previous sites have a dispensary in the village, and the other three (with only 20-40% not ill recently) do not. Even the presence of a dispensary may not itself be the determining factor; sites without dispensaries may be generally neglected, and the residents have several types of disadvantages. While Sidi Ali ben Salem in Kairouan did not seem to fit this description, Drabliya and Ouled Ahmed south of Kasserine did. Though the latter group had recently received potable water and things were improving, the change was recent and not complete, and Drabliya was nearly in a "pristine" state as far as state assistance was concerned. For example, although most people seemed very poor, very few had any medical coverage, though several had applied for the "poverty card," and nearly the same was true for the Ouled Ahmed.

3. Javel dosage: The presence of a village health worker dramatically increased the percentage of women who knew the correct or approximate dose of javel needed to purify a given amount of water. Overall, 19% knew the correct dose, 20% knew approximately, and the remaining 61% gave a wrong answer or did not know. However, at Lajred [with VHW] 71% of women knew the correct and 23% the approximate dose, with only 6% not knowing. This demonstrates that illiterate rural women (the overall rate was 86%) can and do learn health information if taught carefully and consistently; it is unlikely this result would have been reached with one quick visit.

4. Water treatment: Although instructed on the benefits of javel, using it to purify water was somewhat less common for Lajred women, and much less in general. For all sites, 67% of women said they used no purification, 7% said they filtered water (most at Drabliya, where they reported dirty water, including insects called "water dogs" that grew in water stored in a majen), and 26% said they used javel. Lajred women are again very different, with 76% reporting using javel. While this is less than the 94% who know the correct or approximate

²⁵ The village health workers also taught mothers the sequence of preventive injections for children and referred them to the local dispensary, and distributed packets of oral rehydration salts to families who needed them. The Lajred worker reported that women were eager for all kinds of health information, which she visited the dispensary to obtain for them.

²⁶ Soltane (n.d.) reports a Ministry of Health campaign at a site in Kairouan province that extended over several months and used local people as consultants and colleagues. The area was chosen for its high incidence of hepatitis, nearly 50%; it was reduced to zero within three years.

dose, it is still strikingly more than at other sites. Other reports have questioned the validity of reported javel usage, finding that women saying they used it actually had none in the house, and that possibility exists here too. Still, the fact that so many women report using javel as opposed to other sites indicates increased health awareness, mainly absent at other sites. See Table 5.

Site	Filter	Javel	None	Total
Doghra	0	33.3	66.7	100.00
Lajred	5.9	76.5	17.7	100.00
Ouled Amer	0	5.0	95.0	100.00
Drabliya	35.0	15.0	50.0	100.00
Sidi Ali ben Salem	0	20.0	80.0	100.00
Ouled Ahmed	0	15.0	85.0	100.00
Total	6.8	26.3	67	100.00

Thus in general the presence of a village health worker has the potential, and often the effect, of improving the benefits to be derived from the availability of potable water.

Preferred residence

We asked women whether they would rather live in the country, the city, or the country if they had amenities like water and electricity. Overall, 14% said country, 18% city, and 68% "improved" country. When we looked at this preference in relation to how far people reported living from water, the highest percentage preferring country (63%) lived near water, and the highest percentage preferring city (43%) lived far from water. One goal of the potable water program has been to improve the quality of rural life, and these answers indicate that providing water is one important way to do so, and thus of helping stem the rural exodus.

Some of our questions were too detailed to ask all respondents, and so were made part of the in-depth interviews and observations. One example is the daily routine of women's activities, above; other information from these interviews follows.

Time use

While we noted above that in the survey a majority of women felt they gained important amounts of time with the new water source, the interviews allowed us to examine what they did

with this time. Nearly all said they used it for housework, including more washing and cleaning. However, several said they used it to work wool, or to work in agriculture. Many women's programs envision income-generating activities with time gained²⁷, but this does not seem to be occurring explicitly in the study area. The women who work wool already did so, and nearly all say they will make blankets or floor coverings (*mergoums*) for their families, not for sale.²⁸ In one well-off Sidi Ali ben Salem family women wove and sold *mergoums* themselves, and spent the money themselves. In a poor Doghra family, the only cash income was provided by an unmarried woman who wove *mergoums* for local families with wool they provided; she had recently finished a large one in 1 1/2 months for which she was paid 60 dinars. Her father was dead, and she gave the money to her mother to manage.

Women's participation in harvesting grain is traditional. Their additional work in agriculture is probably more directly income-producing in that higher yields will mean more income. Yet while several women reported agricultural work, especially in irrigation, they did not usually receive cash for themselves. Earnings went to the whole family and were managed by the husband. In one Ouled Ahmed family we observed one woman cooking the noon meal alone, and then several more arrived with young children. They had all been in the fields weeding and preparing for irrigation, which they did morning and afternoon at this time of year. This family was well-off, and were benefiting from the new water supply to irrigate crops. Yet the women now had new work to do: do they benefit or not? A first idea was no, they were just more overworked. Yet on asking, we learned that they preferred the outdoor work to preparing lunch because the former was more relaxed and without "deadlines."²⁹ And while they received no cash directly, they said husbands bought them clothing or silver jewelry when asked, since the women helped so much.

Thus there are probably economic benefits for the whole family if women use the time saved when water is nearby to work in irrigated agriculture, but the interviews revealed that this can also have negative effects on them and on the children. One woman at Sidi Ali ben Salem said in the summer she irrigated the family's almond trees with an animal-drawn tank,

²⁷ If a woman is already overworked, imposing another job on her may not be the most beneficial approach.

²⁸ In Morocco, most women say the same thing, and while they do not sell routinely, the rugs are "stockpiled" and used as savings to be liquidated in times of family need. Tunisian women may do the same.

²⁹ Daughters who helped with irrigation in another Ouled Ahmed family said the same thing, e.g., they preferred outdoor work to housework, mainly because of the more relaxed pace.

sometimes every other day, and this meant working mornings and afternoons.³⁰ Now she has a sister-in-law in the household to help her, but in the past she would tie her young son so he wouldn't wander, and leave him home alone. A woman at Drabliya has three children under five, one of whom is retarded, and a husband in Libya. She goes to harvest their grain, leaving the children with their grandmother. The retarded son is especially difficult, and sometimes the grandmother ". . . ties him up and leaves him alone in the house . . . I go out to the fields and think about him, that when I get home they'll say he died." Thus one must assess carefully the costs and benefits of additional work for women.

Usually families who have crops to irrigate are among the better off. Among the poorest, the extra time will probably not be parlayed into economic gain. As Warida at Sidi Ali ben Salem says "We have gained a lot more time compared to before . . . but the time I gained, I haven't done anything with it because I don't have anything to do, not wool to work or anything at all." This suggests that if projects for women were introduced, they should be aimed at poor women, who in these rural communities have more disposable time than the better-off.

We had hypothesized that an important use of time freed from water tasks would be increased school attendance for young women. Graph 3 in Appendix G shows that, for all sites, there are still many children not attending school, and more girls than boys. By sites, the site most lacking water, Drabliya, indeed had no girls attending primary school in the 20 families sampled, while 45% of those same families had boys. However, the next lowest percentage for girls was at the nearby Ouled Ahmed, with a new water point, where 25% had girls attending, as opposed to 70% who had boys. Thus water alone is not the determining factor. Several people at Drabliya mentioned the primary school was 5 km. away, a difficult walk for young children. Also, both sites had several very poor families whose children moved with them to pick palmetto grass (halfa) in the winter.

From the open-ended interviews, it appears that a changing mentality is responsible for increased rates of school attendance for girls. One woman at Ouled Ahmed told us how she had sent her eldest daughter, now married at 17, to first grade. She had been ridiculed by the neighbors and withdrew her, but said now she will enroll her daughter of five next year; times are changing.

Changes

We asked a general question about how things had changed with the new water supply, and women's answers provide some striking examples of benefits they have derived.

³⁰ It was even harder for her mother-in-law in the past, who used to haul water up from a well, put it into a clay jar and carry it to irrigate.

At Drabliya, although there is not a nearby source of potable water, some families can afford to buy tank-loads. One such woman said "Before, a woman used to pass the whole day in the mountains to bring water . . . When she returned at the end of the day, sometimes her husband would come home hungry from the suq and not find a meal—and he'd hit her." At Sidi Ali ben Salem, a poor young woman said "The new *sondage* has let us rest. Before, we carried water from far, from the river . . . And for housework, we economised, so we would have enough for drinking." A woman at Doghra, where many residents used to drink from large majens filled at least partly with rain water, said "Now it's better; water is close and good. Before, even if we were thirsty, we were afraid to drink water because we would get diarrhea. And now water is clean and good, it doesn't cause anything." Finally, a woman at Doghra told a story that we heard more than once. "Before, when we used to bring water from the river, we brought it with animals. The place was very steep. We used to carry the water up the hill so the donkey could climb up; he often couldn't make it with the containers filled. We used to eat less grain and feed it to the donkeys, so they would be strong and able to carry the water all the way up. And because it was so far, we washed ourselves and our clothes with water from the majen." While conditions are better now in Doghra, they are still the same at Drabliya. The new water sources improve the quality of women's lives in many ways.

Another type of change is possible: an increased economic development at the sites with potable water. Although the water is intended mainly for drinking, spot irrigation of trees is seen by many as a path to increased income. Especially families at Sidi Ali ben Salem and Ouled Ahmed had planted trees in the last 3-4 years, but said they had not yet had much production. And Tunis, a poor woman at Ouled Ahmed, said "When they made the new water point, our situation got a lot better. Even those without land started to work for those who have it.³¹ And the whole village improved." Several women also said that if there were water, their husbands could return from jobs in the city and work on the land. Fattoum at Ouled Amer, where most of the men work in Tunis, elaborated on this, and on how her life would improve. "If there was water, all the problems would be solved. There would be more work; our men would return [from the city] . . . If my husband is not here, I work with the men. I go out and work our land, and harvest, and hoe around olive trees. But if he were here, he would do the work."

³¹ This comment raises an interesting point for development workers planning such projects. One farmer at this site told us that he had land and crops planted and water, but could not afford to hire laborers until he had made some profits, which required the crops be tended. When hiring on a crop-sharing basis was suggested, he said it would not work because those willing to work were so poor that they needed cash now, to buy food.

Water problems and solutions

When asked if they had problems with water, women's responses varied widely by site, from limited or meager supply, difficult access, expense, conflicts, and frequent interruptions in service to the need for household connections. We also asked for their ideas on solutions.

All of the women interviewed at Drabliya and at Doghra noted problems; the former isn't surprising, given the lack of potable water, but Doghra has a standpipe that was never crowded when we observed it. Bornia at Drabliya summed up the situation there: "There's no water problem—the problem is, there's no water! Even if I get exhausted, what can I do? It's necessary to get all tired out, because the children need water." Others in Drabliya mentioned the distance to the spring, or the high price of purchased water, with a large tank costing 7 dinars and lasting about a week, or the fact that only one person delivers and sometimes cannot meet all the demands and they must wait up to five days. An interesting sidelight at Drabliya was that evidently the person with the tank decided to "go on strike" and sell water only for 10 dinars a tankload, but the local people met and decided to "strike" themselves, and not buy any water until the price came down—which it did. This suggests a basic level of community solidarity that should be useful in the work of a Water Users Association. Most felt a nearby source of potable water would solve their problems, and they are supposed to have one soon, extended from another well.

At Doghra, three of the four women interviewed said the problem was when water was shut off because people had not paid their assessment and thus the WUA could not buy fuel. This highlights a management problem of this WUA that results in women having to "beg" water from neighbors with wells quite often. This WUA only asks people to contribute when the fuel runs out (and they have no backup fund), so they are not accustomed to regular payments, and there is always a wait until the "holdouts" pay up. At first one WUA official said people who don't pay can't have water because then others complain, but later he said that he says they've paid, to avoid disputes, and lets them have water. In any case, women find water cut off regularly, although one said it is less often than before they had the WUA and they depended on the State, especially in the case of repairs. We asked if there wasn't some kind of social pressure on those who had not paid (of whom we saw a list of 18 on a June visit) since they inconvenience all the rest, but heard not. They are probably not publicized; perhaps their names posted at the water source would encourage them.

One young woman, still a secondary student, cited a different problem. She said it was very heavy to transport the water in 50 liter plastic barrels, either in wheelbarrows or rolled along the ground, and suggested household connections. She felt this was a desire of women that men did not care about or support; she said a local official's wife had asked him, and he said "all right" but did nothing. When asked, she said she thought she could get local women to sign a petition for water and present it to the government, but when I suggested half in jest that I'd come back and pick it up next week, she said she was too busy just now.

Both these cases suggest women have water problems that are not dealt with by men, and in the latter that a young woman might be able to enlist support for her needs. Yet she was not willing to try to do so informally. However, Doghra also shows that women can and do discuss water problems with men in some cases. The guard's wife said that she would tell her husband if a faucet needed repair, and so would other women, "since it was their water that was being wasted." There seemed to be no problem of hesitancy, even though many there said no men went to the water tap because the sexes should not mix; talk about repairs was clearly job-related.

Ouled Amer, the other water-deprived site, also had rather serious problems, caused by too many people using only one tap. That group used (and paid for) the potable water of a nearby well. A girl of sixteen said "Water is all problems! There are always arguments at the tap. Sometimes they fight [about turns] with sticks, and end up going to court. The only solution is for people to take turns, and to add more faucets." While one of the functions of the WUA is to regulate access to water, and the guard at the water site could do so, it seemed he did not in this case. Later we heard from the WUA president that Ouled Amer currently had no guard, and had had several quit in the last few months. It seemed the monthly salary of about 70 dinars should be attractive to an otherwise unemployed young man, but the president said they preferred to hire older men, both because they were more respected and could thus keep order, and because girls and women might be disconcerted by a young man—illustrating accommodation to women's needs. They had hired several older men, but most left after one month, saying it was not worth working all day every day for only 70 dinars.

At Lajred, two women mentioned problems with limited water and the steep river bank one must descend and then climb with 20 liters of water.³² One said "Yesterday a neighbor's daughter fell and nearly broke her leg. The problem won't get solved unless they bring in piped water from Kohl, which they have been talking about."

At Sidi Ali ben Salem, women's problems were of a different order. With a regular water supply, one woman mentioned that she would like a household connection. A few families were installing them, at a hookup cost of about 120 dinars. She made and sold mergoums, but said she could not save up enough (though profit on each was about 40 dinars) to pay for the connection. She said she had been thinking about it for five years, ever since the water tap had been installed near her home. One of the best-off families at the same site had had water taps in the house for twelve years, well before the potable water project. The two women of the household said it was one of the husbands' idea: he had installed a well that was piped to faucets

³² Everyone mentioned that no one drank the "potable" water because it produced egg-tasting belches, and a few that the water had been shut off because of a broken pump. But these were taken as "givens," and women mentioned problems with the water they do drink, which flows weakly (in June; we hear it's less in summer) from a pipe in a riverbed.

in the house. They said WUA water now cost less and was more available than in the past, since their own motor broke down frequently, and they had to pay for fuel.

As illustrated above, a few women suggested solutions to their problems, but since most problems involved a new or increased water supply, the solution was for "them"—e.g., others—to make the changes. Women did not suggest that they could work to change things. This was especially clear with the young woman at Doghra: though she said household connections interested women more than men, and that women would sign a petition requesting them, she was not ready to start such a campaign. In general, women cite problems of interrupted water supply, or a weak flow or long distance, which they in fact cannot solve as women with a limited range of movement and contacts in this part of rural Tunisia.

Another aspect of this situation is revealed by the fact that several women mentioned no problems, even when others at the site did. For example, one woman at Ouled Ahmed said there were no water problems, but later mentioned that she sometimes took her raw wool and heavy blankets and clothing to Feriana to wash in the irrigation ditches—although she lived very close to the water tap, and there was even a washing platform. She said it cost 0.300 dinars to wash each sheep's worth (*duzza*) of wool, while there was no charge in Feriana. Later, her husband told us it "only" cost 1 dinar each time at the tap, no matter how much one washed. This would seem a real inconvenience for women, who wash the family's heavy wool blankets once a year, and many of whom wash and process much wool. Yet none mentioned this as a problem. And at several other sites, women were being told not to wash clothing or wool near the water tap, to avoid contamination with parasites in the wool and to prevent dirty water leaking back into the source, or to eliminate pools of muck that collected because of poor drainage. Since it is much easier to carry blankets and clothing to the water than vice versa, it seems washing at the tap could save women time and energy . . . yet none complained when they could not. Fikry (1991) found that women washed more at home than at potable water sites, and our interviews confirm this; further, none commented on it, positively or negatively.

Women's communication and seclusion

We wondered if one effect of having water nearby might be less chance for women to spend time with other women, either while collecting water or washing at a river or spring, away from men and the center of the village—where water taps are often located. Thus we asked whether women went out less with the new water source, whether they missed the previous outings, and where they now heard "the news."

While some women said they went out less now, most revealed a naiveté in the question when they replied that no, they still went out—to cut grass for the animals, harvest grain, graze animals, and gather firewood. And recall that some go out more with the new water, since they have begun irrigated crops and trees. So women are not suddenly secluded, and many of these activities are done in groups. Most, when asked, said they didn't miss talking to women at the well or on the way; it was just "empty talk," and they preferred having water close. While the more convenient water probably did overshadow the benefit of talk, one suspects that part of the

response was "socially conditioned," e.g., that "women's talk" was not seen as beneficial in general. Yet useful information on illness or other topics may have been communicated. One woman said she used to hear "the news at the well—if there was a sickness, or a marriage, or a circumcision." Now, she hears the same things at the water tap. Two Sidi Ali ben Salem women with a tap in the house might seem the most cut off from this kind of contact: "Now we don't go out; we don't have anywhere to go. With water in the house, where would we go? We used to like to get water, because we'd see lots of women." This sounds like a problem, until Habiba concludes: "Now, if something happens [to discuss], women come here to the house." A mother at Doghra points out the importance for girls, who are sometimes more secluded than married women: "My daughter goes to the water tap and stays there; I have to go and get her. She likes to go there and talk because she has no place else to go." One woman at Ouled Ahmed really did miss the contact, but she was rare—in her feelings, or perhaps her frankness. "Before, we went to get water, and we talked and really discussed things. Now, I don't go anywhere at all."

Knowledge about the WUA

Since one concern of this research was how well an all-male WUA could represent women's needs, we asked on both the survey and in the interviews what women knew and thought about the WUA. Overall, at the sites buying water from a WUA, about half or 54% said the WUA's work was good, 19% said they "hadn't seen much" (a polite way of saying poor), and 27% didn't know. The range was from 83% saying good at Lajred to 37% at Ouled Ahmed. The highest negative response was 44% at Ouled Amer, where the WUA water was quite a distance away, and there were often conflicts at the water point.

In terms of knowledge, overall 58% of the women knew something about what WUA work was, with most answering that they collected money; a few mentioned they guarded the tap or were responsible for repairs. Even this limited knowledge varied widely by site, from 86% knowing some function at Doghra to only 20% at Ouled Ahmed. This is interesting in light of the fact that the latter WUA was reportedly more effective than the one at Doghra; communication does not seem to be one of their effective activities. Or it may be that since the sexes seem more separated at Ouled Ahmed, women hear less from men about the WUA. However, the two sites with the most women knowing about the WUA were also those with VHWs, with double the rate of sites without VHWs. Another comparison to make is that of sites with and without an AIF (Association d'Intérêt Féminin), or women's water interest group. Women at these sites should be better informed about the WUA's activities, since the women's groups were to report women's concerns to the male WUA, and to discuss water problems with community women in general. However, such an effect does not appear significant in the survey results. See Table 6.

Lajred had probably the most active AIF and Doghra had none, yet women's knowledge of the WUA was nearly identical at these two sites; both had VHWs. Sidi Ali ben Salem had a nascent AIF (they had only two meetings), but women's knowledge there was the same as that at Ouled Amer, which had no AIF.

AIF sites	48.6
Non-AIF sites	44.3
Sites with Village Health Worker	65.8
Non-VHW sites	33.3

Comments during the interviews showed a similar tendency. A founding and central member of the AIF at Sidi Ali ben Salem was asked about the WUA and replied "I don't know their work exactly; I just know they collect money." And her husband was secretary general of the WUA! At Ouled Ahmed, the comments of Tunis and Zina reinforce and may help clarify this situation. Both said they knew nothing at all about WUA activities, and Tunis added "I don't enter into the work of men—so people won't say about me that I've gone crazy." Yet her husband is the pump operator. It's possible that, in this community where the sexes are very segregated, it would be improper for a woman to admit she knows anything about men's activities. Yet for the previous group (Sidi Ali), the sexes are much less separated, and indeed the woman quoted above goes into Kairouan to sell her own mergoums, is young, and has a very relaxed relationship with her husband . . . so probably the information does not regularly move between the sexes. This indicates that information meant for women should be communicated to them directly, by another woman.

Women's interest groups

The women's interest groups, AIF in French (and referred to here by those initials, since there is no regularly used English acronym) were a potential solution to this problem. Several observers of the potable water institutions project commented on the importance of addressing the needs of women, as the primary collectors and users of the household water supply. As USAID project officer in Tunis, Diana Putman strongly supported such concerns. An AIF, a group of women who would discuss village women's water needs and potential solutions, and communicate this information to the men of the WUA, was one way to get across the barrier created by the spatial and often conceptual separation of the sexes. Since organizing water users, collecting money, and requesting and helping with repairs is seen as "men's business," and indeed most women in Central Tunisia do not have the mobility for such activities, a separate organization for women would be one way to locate and verbalize their needs. Even if women's traditional roles did not allow them to meet all these needs themselves, the WUA could at least be made aware of them.³³

³³ See Thaddeus 1989 for more details on the goals of AIFs.

Women's interest groups were initiated in the fall of 1989 after being recommended in a midterm evaluation of the potable water project (Jennings et al 1989). They were to be overseen by a newly hired female member of the CRDA group working with the WUAs, but her job was not secure and she left; in her stead a consultant, Denise Harrison, was hired to work for a year. She worked closely with the VHW in each of eight communities in Kasserine province, and began eight AIFs.

There was an initial meeting to which all women of the community were invited, at which goals were explained and a president and secretary elected. Sometimes a male member of the WUA was present. While meetings were separate, the AIF was to communicate women's needs to the WUA, and sometimes an AIF member attended WUA meetings.

While the primary goal of the AIF was to explore and communicate women's water needs, AIF members were also to visit several local households voluntarily each month, observe water usage, and discuss proper water storage and purification. This was similar to the work of the VHW, although she was paid 30 dinars a month. The consultant also located funds for several small income-generating projects to encourage women and girls to participate; some were given chickens to raise, some wool to weave, and some materials for kitchen gardens.

Since our research was concerned with meeting women's water needs, we looked quite closely at the current functioning of the AIFs. A detailed discussion of the AIFs is not possible here; see Harrison for a more complete description of the activities and problems at each site. However, what we found about six months after Harrison had left, and 1-2 months after the VHWs had stopped working because the Project funds supporting them had run out, was that apparently none of the AIFs were functioning as such. Zakiya Haggui, a young woman who had worked with Harrison in establishing the AIFs, worked with the Unité at CRDA who supervised the WUAs, and was supposed to follow-up and support the work of the AIFs. But it appears she was mainly relegated to secretarial work after Harrison left in November 1990. She was unable to find transport to visit the field sites (a common problem in GOT), whereas Harrison had her own vehicle. She visited the field only twice between November and April, once with a Ministry of Health official to collect VHW follow-up sheets.

One of our sites, Lajred, was selected because of the presence of a strong VHW and AIF. We interviewed the AIF secretary in June to ask about the group's progress. They had not met since the end of March, when the VHW's funding ran out. It was she who called their meetings and led the discussions, and without her they just stopped meeting. They had met a total of 12-13 times, once or twice a month. At first twelve attended, and by the end there were five or six, about half of whom were married. They discussed water and also projects; the secretary said they preferred one involving weaving, but instead were given one raising chickens.³⁴ The secretary said 16 families received chickens, up to four per family, but that

³⁴ It is not clear how this decision was reached; it may have been the consultant's choice of what was more appropriate.

many had been ill when purchased and subsequently died. Also, hawks often carried them off in this area. Her own family had two chickens die but now had three, and did eat about one egg a day. But the AIF was not functioning.

Although Kairouan province was not involved initially in the AIF project, Mr. Moncef Hajji, Director of the WUAs at the CRDA, heard about and was very interested in them. He invited Denise Harrison to come to Sidi Ali ben Salem and speak to interested women; this was one factor in our choice of this site, which had had two AIF meetings to date. The same woman who didn't really know about the WUA described the AIF (of which she was a founding member): "Its work is washing, cleanliness, care for water and cleanliness of the site of the water tap, and to clean house. They work wool and sell it." Her sister-in-law, also a founding member, first said "Oh—the wool group?" These answers illustrate some of the strengths, and problems, of the AIFs, also seen above.

Women can and do learn about proper water use, but it appears very difficult to get them and keep them involved as volunteers. Indeed, WUAs themselves are having some problems maintaining their unpaid officers; we heard of the salaried pump operators or guards taking over several functions. Few people are accustomed to the idea of volunteer work. The income-generating projects for AIFs were a way to motivate women, and in that sense a good idea, but it seems that the idea of a project came to dominate the organization and be seen as its main goal, overshadowing the objective of dealing with water problems. At Sidi Ali ben Salem, four looms were donated to the AIF, with the goal of having women weaving in a small "factory" located in the home of the women quoted above. They reported only two meetings, one with Ms. Harrison and one with seven local women. The idea of a project was raised at the first meeting and they chose to work wool; they said water was also mentioned. At the second meeting five of the women said they wanted a man to pay them for the rugs and transport and sell them; when this was not possible, they elected to weave at home or in a nearby town factory, as they had before . . . and that appears as far as the AIF got. Thus projects are probably necessary as motivation, but can easily dominate the group to the exclusion of water. Strong guidance and leadership are also important. At Sidi Ali ben Salem, the consultant was only present once; the group began near the end of her stay. The group in Lajred continued after she left, yet when the village health worker quit working, so did the group. And the problem with women wanting their rugs marketed must also be kept in mind when choosing women's projects; marketing is often a critical obstacle.

Thus while the AIFs could be a way to ensure that women's water needs were communicated to the all-male WUA, they did not seem viable as continuing institutions without better support than they received. If a VHW were in place at a site, she could organize meetings, provide health information, and perhaps help with projects. But as independent voluntary organizations without support, they do not seem feasible. This is the case at Lajred, chosen because it was a strong group, and had an exceptionally able and dedicated VHW. If

anyone were to work gratis, it would be Atika.Mnasri, the Lajred VHW, but she did not, and the AIF then stopped functioning.

IV. Conclusions and recommendations

Benefits

In general, the potable water project has had important benefits for families in the Kasserine and Kairouan areas. Nearly all the women gained time, and usually saved energy, getting water at the new source. With the water and this time, many provided cleaner environments for their families, benefiting both sexes and all ages. While one might expect the potable water and cleanliness to lead to better health, in our results these two alone were not sufficient. But their effectiveness was improved with a resident female village health worker to educate women about water purification and storage, and childhood illness and vaccinations. It appears that all economic levels consume the potable water. First, one dinar is easily accessible to nearly all. Further, at some sites the very poor are allowed to have access without paying. At some sites the rule is "no water unless you pay," to avoid causing jealousy or disputes. We heard this was true of Lajred, but in the next breath the woman said sometimes the guard pays for her because he knows she is very poor. In general, while some women said they had to pay, even though poor, none said they had no water because they could not manage the price.

Economic benefits are also appearing. Many families have planted fruit or nut trees that they irrigate using the new water in tanks. While few trees are bearing fully yet, families expect increased income. These benefits are greater for the better-off part of the population; one must obviously have land and some capital to start such a project. For example, it cost 1.400 dinars to have one hole for a tree dug in 1989, a year many started trees in Ouled Ahmed. One woman at Ouled Ahmed said she felt the WUA committee used the water on their own land and didn't give it to others. Her husband added "The problem is that the WUA committee is all from the rich or middle class. But the poor don't get onto the committee, they don't elect poor people." This is the only direct statement we heard suggesting the WUA leaders were from, and provided special benefits for, one economic group. It is significant that it was made by a man; perhaps women have less access to such information. Thus the better-off are probably reaping greater economic benefits, although some women suggested that they also provide jobs for the poor.

Problems and solutions

HEALTH RECOMMENDATION. A local village health worker would increase the benefit of potable water for rural families by teaching women the health and sanitation aspects of water storage and use.

While the WUA is supposed to do health education in addition to collecting funds and basic-level well and tap operation and maintenance, they appear to limit their effort on health

to telling people to keep animals away from the taps or not to wash too nearby. A telling example occurred at a meeting of Kasserine area WUA presidents in June 1991. All of the topics above were on the agenda, as well as water management or access. In a meeting that lasted from 10 AM until 1 PM, only five minutes at the very end were devoted to health, and there was no Ministry of Health representative present. Health is obviously not a priority—and that is understandable. Unless WUAs can collect the funds to buy fuel to keep the pump running (and with deeper wells, fuel is subsidized), they will have no health or other roles to play.

Even if the WUA had the time or training to do health education, the results here suggest it is not common for men to transmit such information to women. A female is in a much better position to meet and communicate with other women, and it is clear, above, that village health workers can and do convey health information to women, and that women are eager for this.

A resident village health worker could also fill other functions, including collection of funds and administration of small income-generating projects. Women benefit most directly when water is reliably available, and most seemed eager to pay 1 or 2 dinars for this service. Most WUAs are having some problems collecting fees; perhaps women would pay more readily. It would be an interesting experiment to reinstate VHWs at a few sites, and have them carry on their former functions and, in addition, collect fees and give out the receipts. Women are less ready and less accustomed than most men to be in debt, and would probably pay the fees or pressure their husbands to pay more regularly than is now the case. One could establish the average amount collected over the last several months (allowing for seasonal variation, with fewer paying in the rainy season), and declare that funds over that amount would go to pay the VHw.

Many of the poorest women we spoke to stressed their dire need for income-generating projects; this was especially true of divorced and widowed women. While the main goal of the VHw should be health education, she could also serve as facilitator or coordinator for small projects. A US-based organization called Trickle-Up provides grants of \$100 to groups of five or more people who are willing to work a total of 2000 hours within three months and to reinvest 20% of their profits in the enterprise. A literate person, not one of the group and usually from a local development agency, acts as coordinator and assists the members in filling out an initial request that results in \$50, and a mid-term report of progress for the final \$50.³⁵ Although \$100 seems very small, young women in the Kohl area were each given about 20 dinars (\$18.60) to buy wool and weave mergoums as part of an AIF project. Some said they needed to buy more wool themselves, but they did complete the mergoums.³⁶ And recall the

³⁵ See Appendix F for a coordinator information sheet and application form.

³⁶ However, two young women we visited had just kept the mergoums, not sold them and passed the funds on to benefit another local woman as initially planned. One said there was no

Doghra woman who wove all day every day for 40 dinars a month and was the main support of her family. The limited amounts offered are much more than what they have now, and in addition provide a chance to improve skills.

Finally, the VHWs could assist MOH officials in informing village women when vaccinations would be available, or mobilizing them to attend special health events. At Génie Rural in Tunis we heard that the MOH in one province was planning a special day on water and health at a rural site. While probably a useful gesture, and certainly inexpensive, such activities will be much less effective than ongoing, locally available health advice and consultation. The Lajred VHW said women often asked her health questions she could not answer but she could and did ask at the dispensary and report back to them.

Unfortunately, it appears that it will be very difficult to locate funds for VHWs, 36 of whom were trained and worked in Kasserine province with Potable Water Institutions Project funds of 30 dinars a month.³⁷ The suggestion of reinstating the VHW program was presented in debriefings at the Kasserine and Kairouan CRDAs, at Génie Rural, and to USAID in Tunis, and all said they had no funding. The CRDA group suggested perhaps USAID funds for training or institutional development could be used, or perhaps other bilaterals or the Kreditanstalt für Wiederaufbau (KfW) could be involved. When asked if perhaps the Governorate's *chantier* funds to offset unemployment might be used, one said that they were usually meant for needy household or family heads, and that meant males. There seemed to be no idea that females might be household heads. USAID pointed out that its funds had been severely cut, and in any case it had no funding for such a program. Génie Rural also had no funding and suggested that the Ministry of Health should really take on VHWs. However, when asked in Kasserine, MOH workers also said no funds were available. As noted above, it appears that the MOH will extend the duties of restaurant inspectors to include rural health education; it is predicted that this will not be effective. Thus while all those consulted felt VHWs could

market locally, since everyone wove, and she had no way to get them to a city to sell. The other was selling hers to her brother for cost; she will receive benefits from this transaction, but not in regularly increased income. When asked if she might then pass the initial amount on to someone else, she said "And have done all that work for free?" This illustrates the need for a coordinator, to think through the feasibility of proposed projects. The VHW will probably need advice, which the province's WUA coordinators could provide or direct them to. If the beneficiaries also attended meetings concerning water and health, it would increase the VHW's impact, and be in the purview of WUA activities.

³⁷ While the VHWs' work is certainly worth 30 dinars a month, and one hates to suggest shortchanging them, they might even work for 20 dinars a month—recall the woman who wove full time for 40 dinars. And the lower the amount, the more likely that limited WUA funds might be used toward their salary.

provide valuable assistance with the WUA task of health education, none were optimistic about funding.

The volunteer-based AIFs or women's water groups may appear to be a salary-free alternative. However, from what we observed, it appears unlikely that they would function without leadership and supervision, and some kind of financial motivation. Further, it seems more efficient and effective to expect one young woman to be well-trained and have the interpersonal skills to work with village people than to expect to find several like this. Thus while AIFs may play a secondary role, it is unlikely they will be able or motivated to do effective health education on their own, even after training.

Another possible alternative for health education has been considered in the Potable Water Institutions Project: educating teachers and then school children on water-related health issues.³⁸ A teacher-trainer training module has been prepared and tested, and pilot tests were done and some materials prepared for students.³⁹ However, these programs have been very slow moving, leading one to question their progress now that the Project is ended, although they are scheduled to continue. We asked teachers at schools at the water sites whether they gave specific lessons on water and health, and answers were on the order of "It's very important information and I stress cleanliness . . .", but there appeared to be no special unit taught at present.

The village health workers are the most effective way to fill a gap in the operation of the WUA program at present. The WUAs have neither the time, the training, nor the chance to communicate with women, to convey important information on water and health that would increase the benefits of the potable water project. Healthier families would be a benefit greatly appreciated by, but not limited to, women. VHWs have been trained and used in Kasserine province, and appear to be quite effective in reaching women with information on water and health. Women's level of knowledge at most sites surveyed left much to be desired; the VHWs are needed. Funding them is a major problem, however. Génie Rural officials at the Kasserine, Kairouan, and national levels frankly admitted they had no funding and saw few possibilities. Mr. Moncef Hajji, WUA Director in Kairouan where some groups have surplus funds, suggested that a WUA might contribute 10-15 dinars a month in some cases, and perhaps a few other funds might be found. He was the most enthusiastic and optimistic of the CRDA officials, and the most likely to try and succeed at a pilot program with VHWs; his efforts should be supported. The délégué at Haidra, Mr. Abdelaziz Jmii, was also interested in reinstating the VHW program, and said he would seek funding, perhaps from chantier funds. The results of this

³⁸ See Brahman, Rossi and Members of the Regional Health Education Team, WASH Field Report 324, for full details.

³⁹ Materials included a board game teaching basic facts about diarrhea.

report will also be communicated to the KfW program in Germany, now a major funder working on the National Strategy for Potable Water in Tunisia; perhaps they can offer some support.

If funding is found, it is strongly suggested that VHWs be carefully chosen to be hard working, and skilled at tactfully communicating advice; Atika Mnasri at Lajred provides a good example. In addition, local women's health knowledge and practices should be surveyed before and a year (and more) after the VHW's work begins, so that effects can be specifically examined and demonstrated.

PROVIDING ADDITIONAL RURAL WATER POINTS. More water points would extend the benefits cited above to more rural Tunisians. In general, the benefits of these wells are great, in saving labor, improving health, and generating economic development mainly through limited irrigation of fruit trees. Further, most respondents said they would prefer to live in a rural area IF there were the basic amenities of water and electricity. Thus, providing potable water can help stem the rural exodus.

CONVENIENCE. Three modifications in the physical or engineering aspects of the Potable Water Institutions Project would provide special benefits for women.

ONE would be the provision of a washing platform at the site of the water tap. Currently most women must carry heavy loads of water to their homes to wash large items like blankets and the annual yield of sheep's wool; they are forbidden to wash at the tap for sanitary reasons, and we saw a notice at Ouled Amer that fines will soon be imposed for disobedience.⁴⁰ A platform should be far enough from the tap to prevent pollution from seepage of dirty water into pipes, and well drained to prevent the gathering of polluted and perhaps parasite-infested water from collecting where women and children would walk in it. Sites with platforms should be visited and women interviewed about the advantages and disadvantages of different types before a model is chosen.

A SECOND benefit would be the provision of several taps at water sites whenever possible, unless the user population is very small. These would cut down on women's waits at congested sites like Ouled Amer. Water pressure may not always permit this, but it should be attempted.

A THIRD way to benefit women would be to provide household taps whenever possible. Again, most existing sites were not built with this in mind, but several women expressed a desire for such convenience. Khmouda II in Kasserine has household connections that are reported to be very successful. The WUA collects the monthly metered fee instead of the water agency,

⁴⁰ At Ouled Ahmed we heard of charges ranging from .300-1.000 dinar for washing at the water tap. It may be that these were fines—or are fines seen as a way to generate additional income?

SONED. A Génie Rural official in Kairouan said that while not everyone could have such taps, at several sites many households could, and indeed he has begun making them available at Sidi Ali ben Salem. Household connections might even be tied to women's income-generating projects: a goal of a family group could be to save money for a household connection.

Overall, the Rural Potable Water Institutions Project has provided many benefits for rural Tunisian families. These benefits could be greatly increased with effective and culturally appropriate health education for women done by village health workers, by extending the benefits with more wells, and by making water collection and use easier with washing platforms at taps, and more taps and household connections where possible.

Appendix A

Scope of Work

Appendix A

Scope of Work

Susan Schaefer Davis

Senior Researcher

Gender, Water User Associations, and Water Management in Central Tunisia

General Background

Since 1985 the USAID-funded Central Tunisia Potable Water Institutions Project has enacted a program to establish Water User Associations (WUAs) around water points in central Tunisia. The purpose of these associations is to regulate access to potable water, provide for the ongoing costs of pumping and well maintenance, and undertake water-related health education. The success achieved in the governorates of Kasserine, North Gafsa, and Kairouan has sparked interest in the concept of water user associations at the Tunisian government and donor organization level and there is currently a program to develop a national strategy for the creation and monitoring of WUAs. The national strategy program is investigating many of the financial and institutional aspects of WUAs, but it has not set forth a research agenda to examine the entire range of socioeconomic factors affected by the new associations. This is particularly true for concerns about the ability of WUAs to address the needs of the unprivileged primary users of water: women, children, and the elderly. The purpose of the present study is to carry out short-term field research on the correlation between gender, differential access to resources, and access to potable water in the context of the new national water and WUA policies and strategies. Specific questions guiding this research include the following:

- Are community members benefiting equally or do the WUAs disproportionately benefit already advantaged segments of the population?
- What is the impact of WUAs and the national water strategy on women and children?
- Since women are not elected to most WUAs, how well could their interests be represented by an organization in which they have no formal influence?
- Since women are not a homogeneous group, what are the factors that dictate differential impact of these water points and strategies on various women.

Tasks

The base of operations for this study will be in the town of Kasserine. From Kasserine, fieldwork will be conducted within several communities in the governorates of Kasserine, Gafsa North, and Kairouan. In accordance with the purpose of this assignment, you will undertake a research program that will complete the following tasks and address the following issues:

1. Review AID, Ministry of Agriculture-Genie Rurale/Tunis, CRDA/Kasserine, and CRDA/Kairouan documents and reports on WUA formation and socioeconomic studies undertaken to date.
2. In conjunction with CRDA/Kasserine and CRDA/Kairouan personnel, the researcher will select approximately four to six communities for further studies. The selection of communities should emphasize differentiation in terms of settlement pattern, production systems, distances to water points and other infrastructure, and degree of WUA activity.
3. Two types of data collection techniques will be undertaken in the selected communities. First will be a rapid community and household survey. A questionnaire will be devised to investigate the following issues: household composition; productive activities; distribution of yields and income from productive activities; distance to water points; household involvement in WUA; method and frequency of water transportation; and intra-household water use.
4. Based on a preliminary analysis of the rapid community and household survey, a smaller number of individual households will be selected for intensive interviewing. Selection of households for interviewing should again emphasize differentiation of composition, productive activities, and social status. The topics for investigation during the intensive interviews include those utilized during the rapid survey, although in far greater detail, and other issues related to the research goals and questions that require further analysis.
5. The Senior Researcher will present the findings and conclusions of the research at a meeting with USAID/Tunis, Ministry of Agriculture-GR/Tunis, CRDA/Kasserine, and CRDA/Kairouan. Comments and suggestions will be gathered and incorporated into the final report which will be submitted to IDA within two weeks of the researchers return to the United States. The final report should include an executive summary of the research and its conclusions.
6. The Senior Researcher will be responsible for full and accurate accounting of any funds advanced for research assistants, car rental, and other miscellaneous expenses.

Level of Effort

The required level of effort will be a maximum of 60 working days, beginning 30 April 1991. A six-day work week is approved for this study. A total of 45 working days will be spent in Tunisia. The remaining 15 working days will be spent, if necessary, in the United States preparing a draft final report and making revisions as needed following submission of the report to IDA.

Appendix B

Research Instruments

<p>المسألة: كيف تقيم ظروف العائلة؟</p> <p>1- تعبئة 2- متوسطة 3- خراب</p> <p>31</p>	<p>هل تفضل الحياة في:</p> <p>1- البادية 2- المدينة 3- البادية أو المدينة</p> <p>30</p>	<p>بالنسبة لوالديكم ما هو الأمر:</p> <p>1- تفضلوا البادية 2- تفضلوا المدينة 3- تفضلوا البادية أو المدينة</p> <p>30</p>	<p>حل المشكلة الجلبى للأمر:</p> <p>1- طيبة 2- متوسطة 3- رديئة 4- آخر</p> <p>34</p>	<p>كيف تقيم ظروف العائلة؟</p> <p>1- أرض صغيرة 2- أرض متوسطة 3- أرض كبيرة 4- ليس عندى أرض</p> <p>47</p>
<p>المسألة: كيف تقيم ظروف العائلة؟</p> <p>1- تعبئة 2- متوسطة 3- خراب</p> <p>31</p>	<p>لماذا وقع تفضيل البادية؟</p> <p>1- ماء كثير 2- ماء قليل 3- حار الزراد 4- ناء الجفينة</p> <p>33</p>	<p>المسألة: كيف تقيم ظروف العائلة؟</p> <p>1- تعبئة 2- متوسطة 3- رديئة 4- آخر</p> <p>34</p>	<p>المسألة: كيف تقيم ظروف العائلة؟</p> <p>1- تعبئة 2- متوسطة 3- رديئة 4- آخر</p> <p>34</p>	<p>المسألة: كيف تقيم ظروف العائلة؟</p> <p>1- تعبئة 2- متوسطة 3- رديئة 4- آخر</p> <p>34</p>
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APPENDIX B-2

TRANSLATION OF
 "QUESTIONNAIRE : EFFECTS OF WATER USERS ASSOCIATIONS ON FAMILIES USING
 WATER"

(From research in Tunisia May and June 1991 by Susan S. Davis)

Numbers in top right square identify the individual respondent.

Numbers before variable correspond to numbers on questionnaire. In some cases items are not numbered; they are recorded here in the order in which they appear on the questionnaire, without numbers.

1. Location of the interview [site]
 1. Doghra
 2. Lajred
 3. Ouled Amer
 4. Drabliya
 5. Sidi Ali Ben Salem
 6. Ouled Ahmed
2. House type
 1. "haouch", with room(s) around earth courtyard
 2. improved, eg with cement courtyard
 3. "modern" style house, without a courtyard
 4. house under construction
3. Position of respondent
 1. head of household
 2. employed wife
 3. non-employed wife
 4. son or daughter [only females were interviewed]
 5. other

Individual's name was also written in this square, to enable us to locate people chosen for second interview

4. Age
5. Marital status
 1. single
 2. married
 3. widowed
 4. divorced
6. Family type
 1. nuclear
 2. nuclear plus grandparents
 3. nuclear plus married children
 4. extended

[not quite the way anthropologists would do it, but...]
7. Number [currently residing] in family [household]

8. Education, marriage and employment of children

girls [top row, left to right]; 1=yes, 2=no, numbers not given
in primary school

in secondary school

in university

dropped out of school

unemployed

married

never been to school

boys [bottom row, left to right]

in primary school

in secondary school

in university

dropped out of school

unemployed

married

never been to school

9. How do you go to the medical dispensary? Do you have:

1. a social security card [indicating a government or other regular job]

2. a poverty certificate [indicating poverty]

3. without a document [usually indicates they pay themselves so are relatively well-off, but we found several very poor people lacking any document, so this variable cannot be used to indicate economic level as initially planned]

10. Where do you get your water

1. well

2. spring

3. river

4. sondage [new water point]

5. other

11. What do you use water for

1. drinking and cooking

2. cleaning [clothing, home, bathing]

3. to water animals

4. agriculture [to irrigate]

5. other

[note: question 10 often had arrows drawn from a particular water source to a use on question 11; this was not preserved in the coding.]

12. Who in the family brings water

1. mother

2. daughter

3. son

4. it's purchased [in citernes]

5. father

13. How is water transported [to the home]
1. citerne drawn by tractor [3500 liters]
 2. citerne drawn by animals [500 liters]
 3. animals carrying plastic containers [us. 20 liters each]
 4. by hand [people with containers of 20, 25 or 50 liters]
 5. different ways

[above 14]

For primary water source, how many times a week do you get water
[sometimes was given in times a day; usually clear]

14. How many times a week do you bring water if the primary source is cut off

[above 15]

How much water do you bring each time [for primary source]

15. How much water do you bring each time [secondary source]

16. Last time you got water, how long did it take

1. less than 1/2 hour
2. 1/2 to 1 hour
3. more than one hour
4. more than 2 hours
5. more than three hours

17. When they made the new water point, did you gain time

1. an important amount
2. a middle amount
3. it's about the same as before, eg not much

18. Where do you store your water

1. majen [cement lined container in ground]
2. cistern [metal container in which it's transported]
3. plastic containers [in which it's transported]
4. other

19. Do you buy water from the WUA [water user's association]

1. yes
2. no

20. How much do you pay each month [includes purchase from individuals, not just WUA]

21. In your opinion, is the water you drink:

1. very clean
2. a little dirty [off-color]
3. sort of clean
4. dirty
5. dangerous [polluted]

22. What do you do to purify your water
1. boil
 2. filter
 3. add javel [bleach]
 4. nothing
 5. let it settle
23. How much javel do you need to add to purify a 10 liter container of water
1. knows ["one spoon", but is dispute whether large or small]
 2. knows approximately
 3. doesn't know
 4. without amount
24. In you opinion, what illnesses come from [dirty/bad] water
1. kidneys
 2. fever
 3. diarrhea
 4. cancer
 5. doesn't know [sometimes another disease was written here]
25. Has anyone in the family been ill recently
1. parents
 2. small children
 3. older children
 4. other [on questionnaire; in coding, 4 was used to mean "several" or "none"]
26. What illness(es) did they have
[written in; coded as:]
1. fever, diahorea
 2. kidneys
 3. weakness, blood
 4. women's illnesses [gynecological]
 5. allergies, skin
 6. others
 7. no illnesses mentioned
27. What do you think of the activities of the WUA
1. they're always helpful [good]
 2. I haven't seen anything [results]
 3. they only help the lucky/rich [coded as "doesn't know"]
 4. other [used to code no response too]
28. Why did they form the WUA, in your opinion [what does it do]
written out, coded as:
1. knows
 2. doesn't know
 3. no response [groups without WUA not asked]

29. In the last year, has a social assistant from _____ visited you
[each below coded yes or no]

1. family planning
2. health
3. social assistance [for poor]
4. women's union [or political party - coded as "other"]

30. For your family, which of the following is most important

[since this question was not asked consistently - sometimes all possibilities were read off, as I instructed, but more often not - I do not place much faith in the responses]

[each of the following was coded yes or no]

1. food
2. housing
3. health
4. the children's future
5. work

[before 31]

Would you prefer to live

1. in the country
2. in the city
3. in the country if life was improved [with water and electricity was often suggested]

31. What is the distance between your house and water

1. far
2. medium
3. close

32. Do you have land

1. a little bit
2. a middle-sized piece
3. a large amount
4. none

[above 32]

Do you plant your land

1. yes
2. no

33. How do you water your land

1. with our own well
2. with a citerne
3. with river water
4. with WUA water
5. with rainwater [added in coding; also means none]

34. "Health" [means cleanliness] of the house [and people]

[this was observed, not asked]

1. good
2. middle
3. poor

35-46. People were asked if they had each of the following; 1=yes, 2=no

35. radio
 36. T.V.
 37. motorbike
 38. car or truck
 39. tractor
 40. well
 41. gas [bottled] for cooking
 42. electricity
 43. chickens
 44. goats
 45. sheep
 46. cows
47. What is the job of the household head
1. farmer
 2. full-time agricultural laborer
 3. seasonal [part time] agricultural laborer
 4. stable worker, with social security benefits
 5. merchant
 6. other (driver, employee, middle civil servant)
 7. unemployed, without job
48. Do you have a family member abroad
1. yes
 2. no
49. Do you have a family member in the city
1. yes
 2. no
50. Total family income
[coded as]
1. less than 50 Tunisian Dinars = DT
 2. 50-100 DT
 3. 100-150 DT
 4. 150-200 DT
 5. over 200 DT
 6. undeclared
51. Father's educational level
1. illiterate
 2. primary
 3. secondary, first cycle
 4. secondary, second cycle
 5. higher [not coded; no cases]
52. Mother's educational level
1. illiterate
 2. primary
 3. secondary, first cycle
 4. secondary, second cycle
 5. higher [not coded; no cases]

53. What is your view of your family's condition

1. very difficult
2. difficult
3. it varies
4. thank God [good]
5. other [not coded]

54. What are you lacking

1. nothing
2. infrastructure: water, electricity, roads [many said housing, which was coded here]
3. work and money
4. health and food
5. everything
6. an economic project in the area
7. school for the children
8. thank God [literally things are fine, but not coded 1. because Tunisian colleague feels it means more like "I don't want to tell you"]

[after 54 is interviewer]

1. Zakiya
2. Nihaya

APPENDIX B 3

Questions for In-Depth Interview of Women Water Users

The following were guiding questions, to be expanded and clarified as necessary. They were asked after explaining to women that we had returned to some of the survey households where women spoke especially well to ask more about women's activities, especially water use. We also asked them to continue their work, and we could still talk (and observe).

1. To understand women's work better, please tell us what you did yesterday, step by step, from the time you got up until you went to bed. (Pay special attention to water use: source, time of day, ask frequency of doing laundry.)
2. How does the daily routine above vary with seasons (again with special attention to water-related activities: irrigation? crowds in summer?)
3. What is men's involvement with water? If you run out, is it difficult to get him to get more? Is there a long wait?
4. What changes have you seen (or do you expect, for those without a source yet) with the new water source? (general)
 - a. Do the old or young benefit more? How?
 - b. Men or women? How?
 - c. Rich or poor? How?
5. Do women have more time with the new water? How do they/you use it?
6. Do women go out more, less, or the same amount since getting the new water? Can you give an example?
7. Do girls go to school more now? With the new water? Can you give an example? Why or why not?
8. Have your family's economic activities, or level, changed with the new water? How?
9. Do women control resources, especially money? How do they get it? How do they use it?
10. Do you have problems with water? Can you give me an example? (Ask about details, and solution)
11. Do you see other ways to solve your water problems? What would you think of a group of women who talked about water problems, and helped women with health information?
12. Do you know about the WUA? What do they do? How do you know?
13. What did your water cost before the new water supply and what does it cost now?
14. What do you hope for in your daughter's future?

Appendix C

Qualitative Interviews

APPENDIX C
QUALITATIVE INTERVIEWS

1

tunqual2

OULED AHMED

Zina May 27, 1991 Monday Nihaya [1st text] and Zakiya
Her husband's father is the pumpist. This was our first "qualitative" and both girls did it, as training - and thus we have just 3 for this group. Her hu drives his own little truck, privately; he's partners with someone.

Z[akiya]: They're middleclass.

2. She gets up at 6 AM, washes her face, hands and feet, cooks coffee, washes her kids' faces and changes their clothes. The men get up afterward and go out to work. She picks up and cleans the rooms, cooks bread, cooks lunch, then combs wool. She spins wool, and the mo-in-law pulls wool apart [tenshif]. The men come for lunch, and after lunch the women work wool more. In the Eashiva [4-7 = def], about 5, she puts out the blankets before it gets dark [because they, among all the vills, don't have electricity]. They had makaruna for lunch and couscous for dinner. Zina always cooks.

The hu of Tunis, the pumpist, he goes to work in the AM, and gives water to people who want it from the potence; if none there, he sits. He comes back at noon for lunch, and goes back to work.

Sisters of Zina's hu: The youngest is 11, oldest is 17. They work on irrigated land, sometimes with their mother (Tunis) and father. They hoe the earth [ihemmeru], and make borders of earth to plant ful and other vegetables (eg to hold irrigation water andn to separate). They don't only work the land; they do housework too. When she gets married, she stops working on the land. The youngest said she likes to work on the land, but not in the house. [Said she gets bored in the house, and more work in the house; it's more relaxed outside].

How used water yest? washed clothes, mopped floors and washed dishes. (N noticed that they were all clean, so probably bathe daily; Zina helps bathe the girls, eg sis in laws)

Z: Up at 6:15-30, washed face and hands, then made breakfast for students and workers. Cleaned up the house and picked up. Then I washed dishes, then made bread dough, washed clothes, then sat a little and spun wool, and after made lunch. Fed the men first, then returned to wool. Put out bedding, and washed dishes to cook dinner. Since we don't have elec, we put out bedding early, about 6, and cook dinner early. AM makarona, noon kisra, eve couscous.

They work on irrigated ag. The oldest girl is 17 and the youngest 11. The mo-in-law worked with us before got sick [skin]. The girls go with their dad to the land near the sondage. Their work is to hoe around the trees or make plots/borders [for diff crops]. The girls work on their own schedule, work and come home when get tired. Girls work on land more than in house. When a girl gets married, she stays home. She works in her house and with her kids [darha u sgharha] andn doesn't go anywhere. Girls prefer working in ag to housework because there's lots of housework.

With water, we do laundry every day.

11 yr girl: "I know how to do all t̄ country work: land, wool, housework, everything."

3. summer: harvest wheat, wash blankets in gzaE in house, using water from majen or citerne. They irrigate fruit trees, they weave. Z: "Each season has its work. In summer we harvest, wash blankets; in summer we work with water a lot."

winter: Use rain water for animals to drink and to irrigate land. Sometimes they drink it, if sondage is broken. Z: gather wood, and gather rain water to wash with.

fall: plow land Z: weave wool

spring: wash wool Z: we clean grass, and wash wool

Z: If water is far away, the man brings it; if it's near, the woman brings it.

4. The woman washes wool, dishes and clothing. The man washes his extremities and irrigates land. When water runs out [in majen], they wash it with javel, let it dry and re-fill it.

Z: My uncle, my hufa, is the pompist. He goes early, we make him brft, comes home at noon, finds luch ready, or soemtimes we take it to him. Big men harvest with us [women], and boys today, no.

The man drinks and washes, that's all. And he irrigates and works in ag. When water runs out, the man goes to the tractor to bring us water. Everytime water runs out, we wash teh-majen with javel, -and-then put in the new water.

5. Before this sondage, they brought water from a further sondage [poss from PFI] or from a faraway well. Was lots of work, wore them out. Had to get animals ready, etc, and go very far, and added to all that, had to pull water up from well in buckets...they got very tired.

Our whole family benefited from water [new], but the rich benefit more [eg than them, tho well off]. Because they have animals, lots, and they drink lots of water. And lots of land to irrigate.

Z: The water from the sondage is better. Women don't go to hte hammam; they wash at home.

The rich benefit more, they use more water because they have lots of sheep and cows and land.

6. I gained a lot of time, and use it to work on the land [Tunis]. The woman gained time, and the man lost money.

Z: Water now is better than before. Before, the whole day you went for water, but now water is close. The time we use to work in ag, or wool. It's the woman who gained time, and the man lost money.

7. The man goes out more, because he gets water and works on teh land. Also the woman goes out to work the land.

C: Now women don't go out to work, except in ag.

8. The age of my daughters [Tunis] is past the age of school. My hu went to the sheik to enroll them, but he didn't want to, because the girl was too old. [girls were too old by the time they built a school -? ouled H small one or bigger at Garat NaEm? I think latter

Z: Now lots of girls go to school. Doesn't kn/kow why.

9. Tunis: Our economic condition is just the same; it didn't change. [N saw that the hu became a pumpist and they irrigated land, and did irrig trees after sondage - so they did get more comfortable ecic'ly].

Z: T: It's the man who works at the sondage. Before the state paid him, now they cut him off, to be paid by the AIC. They don't have \$. He's workign without money.

10. The woman has no responsibility with her hu. Her work is at home, on the land, and to care for the kids, that's all.

Z: It's the man who buys things. Even if the man is in teh city or abroad, her nearest male relative will buy things. With wool, we make blankets for ourselves, not to sell.

11. She has no problem at all with water. "We'd like pipes for irrigation."

The woman only works with her hu and children. When they hire [ikriuw] men to work the land, the woman doesn't work the land then.

In 1969 we hired men to work the land, the first time we did irrigation. The men made holes for trees; each was 1400 mm [1.4 DI].

Our problem is related to money, eg economic. The solution is that they need to give us pipes for irrigation.

Z: Women have no problem with water. It's the man who deals with it [serref]. Women work outside, unless someone [male] not from the family is there.

Z: When we have money, we hire a worker/s; women don't go. We dig ^{holes} ~~holes~~ [for trees], each for 1.400D.

Our problem is irrigation, and electricity. The solution is for them to make underground irrigation pipes and connect us to the electricity. By God, even if one buys a refrig or TV or anything good that works with electricity, we put it away and then sell it."

12. They don't accept the idea of an AIF because "we know everything" [about javel], and men don't like their daughters to go out.

Z: Our kids are educated; we know everythign"
'q u'!

13. Don't know at all about AIC [Tunis] "I don't enter into the work of men, so they won't say about me that I've gone crazy." [N and I both think that the women may know about it, but it's not "proper" to say so. For example, Tunis is an older woman, not shy, and her hu is the pumpist, and they wash the citerne with javel - who told them that? Her comment that people will say she's crazy shows. N says, that she's afraid of kiam an-nas or what people will say.]

Z: We don't enter into men's business. I don't know what they do.

14. With the well, water was free. With the far sondage, it cost 4-5 D for big citerne, but now 5-6 D. [S said it seemed a lot, since they're just near the sondage there isn't much mazzot used, but it turns out that the citerne guy also irrigates the trees one by one - with another man's help - so uses fuel and time that way.]

Z: Before, the well was free. Now the sondage costs money - and thank God!"

Zina May 27, 1991 Monday Mihaya

Very poor, house behind one with dog that scared us.

2. Gets up at 7, and she and hu both go out to harvest. At noon, they come back and have lunch. [N: asked who makes lunch, and there's her sidau who cooks lunch and picks up house, and makes bread in tajine and tea and sends to them in fields for breakfast. She doesn't go to school.] Rest after lunch [N said - seems not complete]

3. summer: wash blankets and wool and clothes. Wash clothes daily, more than other seasons. Women only go out in spring and summer.
fall: work land, hoe it.

4. Women use water more than men, because she washes and cleans house.

When water runs out and my husband isn't here [he sometimes works abroad], she asks the tractor man to bring water - and he's some kind of relative [? xal rajelhal. And when she doesn't have money, the Hajj gives her on credit. "If the Hajj got mad at us, it would be a problem. Because of that, we always try not to make him mad. Because he's the richest one in the Earsh or tribal fraction. If he got mad at us, he wouldn't keep giving us credit to get water." [N asked and they said sometimes they don't pay at all, so they like him lots. He's rais shEouba -cr pol! party presdt]

5. Before the sodage, got water from faraway well, or the other sondage, far from us. The problem was that people who irrigated at the far sondage wouldn't let us fill up/ take water.

"The one who benefits more from water is the one who owns more [land, animals etc]"

"Imagine, there are those who irrigate 35 hours, and each hour costs 5.250! But who has a little irrigates a little, for 1-2 hours." [N eg: those who are rich benefit more]

6. "Before the new water point, we stayed thirsty until a tractor came from Feriana. But now, the tractor goes in 5 min to get us water and returns."

"We gained time, but don't do anything at all with it, because even wool, we don't work it. We don't have money to buy it. If we get 10 or 5 D, we chose to buy smid or bread, they're better than an other thing. We're not like rich psople; we dont' have lots of work."

7. With the new water, people could irrigate. Because of that, women go out more than men, because she works on the land. But the man works abroad or helps her on the land. But the woman's work is more tiring because seh works in teh house and on teh land.

8. "We don't educate girls, because if she had gone to school, she wouldn't accept [to marry] our men [from here, country]. However/even, there are families who let their girls go to school more than before. And the reason is that the school is nearer, more than before."

9. "When they made the new water point, our condition progressed a lot. Even those without land started to work for those who have it. And the whole village improved [tehesenet]."

10. The problme is that water is expensive. What men earn from working, they use to buy water. And another problem is that the leina [AIC] don't do their work exactly/ they're negligent. They use the water on their land, and us, they don't give it to.

Hu: The problem is that the AIC group is all from the rich or the middle class. But the poor doesn't get into the group [council], and they don't elect the poor one [itEarfush bih].

11. Before water was expensive, for 10 D a citerne. But it lasted longer. Now a citerne is 5 D, but with irrigation, we use it up in a short time.

[prblem with #s fix]

15. The mother wants her daughter to be an engineer. the father wants her to be a doctor or a minister responsible for women.

Hu: N asked what he owned. "I own my wife and my kids and six chicks." [N: he laughs as he says, but is true.] N asked if shix comes to see. He-said he comes once or twice in 6 mos.

but the party pres [Hajj] helps the poor and always gives us water on credit.

N asked re work, he said "If there's work in Egypt or Mcrocco, men go work abroad. But if there's none, the man stays home, and the woman works on teh land. Sometimes he helps her a little."

Reem May 27, 1991 Monday Zakiva

Chosen as poor household. Hu does not work but two sons do sometimes; she supports them by processing wool and weaving tent strips [flll] that a merchant comes and buys from her weekly for about 27-30 D. She buys 3 dzaz or sheep's worth [at 2.5 D each] of wool and 3 1/2 k goat hair [at 3.5 D each] for each one, so total cost is 12.725 D. She sold one last Fri and asked if I'd buy one. Her dau Halima is married into the rich Hajj's family; both Z and Toufik said rich/poor differences don't matter in the country - it's whether you're a good person. The mother is from Oum Ali, and sent Halima to primary school for 2 years, but the neighbors laughed at her and she took her out. The little girl of 5 spins wool just - like her mom. Are 11 in hhld.

2. Got up early, warmed water, washed dishes, washed kids' faces, cooked kiera and marga. Had breakfast. I had a little wool and I dyled it [black]. Went and gathered firewood, made kiera and made lunch marga, washed clothes [daily] -part, and left some cuz ran out of soap. I had some barley drying on the roof, went up and got it, brought it in, put them away, and now I'm sitting spinning wool. I work

wool to make filj and sell them. A small one is 26 D and a big one is 59. Then put out bedding, cooked dinner.

Yest: In the AM I harvested mermez, brought it home and broke it, steamed it, and put it out to dry. We have TV, but we don't watch it because we're too tired.

Son of 11: We don't watch TV because our little brother makes lots of noise and we can't hear.

R: After dinner, we go to bed right away. We can't watch TV; we only watch in Ramadan.

I do laundry daily, unless I don't have soap.

3. summer: If there's lots of grain, we harvest it; if not, work wool and sell it. In summer we irrigate trees, they have small ones. In summer, we use more water: we drink more and wash more and clean more and wash blankets (in house). Usually in su take clothes and blankets to Feriana and wash in the sagia (irrigation ditch) of the govmt, and they don't say anything. Because they want lots of money at teh sondage. [eg extra to wash at sondage - .300 for each sheep's worth]. Bathe every week or two, old women sometimes once a month. Later, harka told 2. it's 1D for any amount wash ² sondage

spring: Cut grass, sometimes for us, sometimes we sell it. And wool we wash leave it.

fall and winter: Pull halfa and sell; halfa lasts 5-6 mos.

4. Teh man irrigates trees or bathes with it. A man has the tractor to bring water. Sometimes he doesn't bring it right away, and I have to use some of the neighbors'. We get water with credit, and have no problem with it.

5. The thing that changed, water was 6000, now it's 4000 cr less. [I have 8 to 5 D]

11 yr: We young like to play in the water, and before it wasn't very available, and it was expensive. Now it's available, and cheap.

R: All people have benefitted. Water is close, we can wash and clean everything.

"Rich use more water. They have lots of animals, and lots of trees, and lots of houses. and the poor, what do they have but their faith in God [ken wejh rebbi, iman]."

6. Used to spend more time getting water, when young, elsewhere, got water with women, on her back. But had fun with women.

"Now, I've saved time. With it, I do some housework. I work wool, or something else."

7. Before, we went to get water, we talked and really discussed things, and now I don't go anywhere at all."

Before, there was trust between a man and a woman. She could go wherever she wanted. but now there isn't thiga, and people are afraid of each other. Because people will "laugh at"/talk about us.

8. Girls in education have become many, more than before. I, for example, am going to put this little girl [age 5. spins], and I don't care about people. At first, with Halima, people made me make a mistake. they said "she'll study with boys" She'll turn out bad. And everyone laughed at/talked about because I sent my daughter to school. They said "No girls study except yours?"

9. Since the sondage, the economic level has changed a little. They planted trees, and they got cleaner which improved their health. [I have water a little cheaper.]

10. I don't have any responsibility. The money that I sell for, I give to my husband. the man is everything. From filj, she keeps out money to buy more wool [Z says he buys it], gives him the rest. With alfa. both work, hu is paid.]

11. There's no problem with water.

12. AIF: She'd accept the idea of educ girls telling re javel, it's good, but other people here wouldn't accept it. Who'd let their daughter go from village to village?

13. AIC: She doesn't know them. "I only know that water comes to the house [ie with citerne].

14. Water was 8 D, now for 5D [vs told Z 6 to 4]. [poss re far and near sondage]

LAJRED

While there we saw the delegue in the aft, talking to people, hearing their complaints. He told them the water had been tested and wouldn't make them ill, but he recognized that it tasted bad and/or made rotten egg burps, and said for that they're bringing in new water, from the Kohl sondage. Said didn't know just when; another day Z said maybe not till late 91, and a maintenance guy at the AIC pres. mtg on 6/8 said it would be silly to replace/fix? the old pump for lots of \$ if they're putting in different water.

No one drinks the sondage water, which has been off for 2 mos with a broken part/pump that noone comes to fix in any case. All get drinking water from what they call a "well" but is really water coming out of a pipe in a ravine, so is more like a spring. Z said it was salty, but it didn't taste that way to me. The families across the ravine (from the "main" Lajred) that we spoke to seem to use that water for everything, even washing, since the sondage is a little far away.

This was also the day when it rained, people said we could stay over, we found the Haidra river full, and the delegue drove us across after his little R4 [?] did it first.

Note: most remarks in [] on Zakiya's interviews were comments I added later from my notes.

Malika May 28, 1991 Tuesday Zakiva

Middle class family, with 2 girls at home, and a son in France, one son in Tunis, and two married daughters in cities. Have color TV, video. Have lived there 21 years, are originally from Tbagha near Haidra and still have land and irrigated crops there. We spoke to the eldest dau who has brown eyes. Her sister Hafsiya is three years younger and has blue eyes. The mo Al Alia has blue eyes and likes to laugh, and the fa only worked in the mines 8 years, and hasn't gotten sick like so many others. Z asked why not live at Tbagha, and they said it's better here, with electricity, and people are better; we've gotten used to them.

Neither girl went to school [now in 20s]; they didn't live here [but Tbagha?]. Said "ras merbot" about uneducated girls.

2. Up at 6, made coffee, prepared kiswa dough, washed dishes, mopped rooms, cleaned kitchen, washed clothes [every other day], came back and made bread into loaves, gathered wood, heated oven, cooked kiswa, made marga [peas], put out lunch and all ate, went and got a bottle of water [25 l], came back at hot time and slept a little. At 5 made dinner [makarona and sauce], had dinner, watched a film on video, and went to bed.

We don't have lots of work; we don't have animals, so we don't pick grass like other people.

Mo El Ealia: From the morning, I work on wool to make blankets for my daughters [saw her in side room as arrived]. They buy the wool, and don't sell the blankets.

Malika: I learned to make mergoums, and rugs, and embroidery and sewing, everything at the "factory". There was a factory here 1961-1983. [sounds more like a nadi, where girls learned weaving, crochet and embroidery. It lasted only two years, something about there was a good director [male form], but then he left and it seemed to fall apart, or girls quit or something.] I just recently finished a margoum and now I'll rest a few days and start again. [I think said don't sell, but keep like for trousseau.] [? like Morocco, where also say don't sell, but serves as form of savings if in need.]

3. summer: We go to our land in Tbagá and harvest and come back here. ⁷We have a house there, and stay in it when we harvest. [Malika and Fa stay in Lajred.] In the summer, my siblings come from the cities, and si and br from France and stay with us.

winter: If we have wool, we weave. If we don't have money to buy it, we stay and don't do anything. [They buy dyed wool, about 5-6 kilos at a time. The mother buys, not the girls. A big mergoum takes about 4 kilos [Maïma said 12 in Ali Ben Salem, but is diff't style.] One kilo costs 4.200 D, so that's 16.800 for a mergoum, and Z said they sell at the Kass. suq for about 40 D.]

spring and fall: Don't do anything unless they have wool to work. Keep bees, mo and fa do, but just takes a few minutes to smoke them out and get the honey.

4. "The man...the well belongs to women. Men don't go to it. And we laugh at a man who does women's work. If we buy water, the man pays. [don't irrigate] The woman has the responsibility.

We go get water at midnight [in summer] so we don't run into lots of people. In spite of that, we find more than ten people. [Sometimes stay two hours waiting turn; sometimes in summer there are people at the "well" 24 hrs a day.] We have a spring called Ain Kebrit [sulfur]. If someone has itching [hekka; scabies, I think; is also ringworm, and they don't differentiate too finely in derja], they can bathe in it and rest. [I think this family uses the kebrit water for housecleaning too, since it's near and not too crowded.] If we had another sondage it would be good - and sweet [eg drinkable].

5. They made another older one [sondage] near it before, [it was good water and people drank from it] but it ran out of water [when did present one]. And the new one is salty [eg tastes like sulfur. People don't get sick, but burps taste like eggs and they don't drink it.] The sondage is far from us. Other people cook with it and wash with it, but don't drink from it; they drink from the well.

[If water can settle in reservoir, it's better, but comes out from the well yellow.]

"Everyone benefits from water: we all drink, we all wash, and we all eat=cook."

Water benefits rich and poor the same.

Women benefit more...men only drink and bathe.

6. The women who live near the sondage, they gain lots of time. The sebbala is near, and has a powerful flow, so they can fill [containers] quickly [vs "well"]; they can clean and wash quickly. But us, it's far from us.

Girls and women gain time. In it, they [can] work wool, weave, embroider, maybe study [but no concrete exs].

7. With new water, women don't go out a lot. The sebbala is near, in front of the house, she goes and gets back quickly. [some women like it, some not.]

For us, it's the same as before; we only go out for water. When we went to the factory, we used to get wood. Yesterday we went out at 8 AM and got back at 10 AM. I brought wood on my back [hizma]. Every 15 days we get wood [from the nearby mtn.]

8. The percentage of girls getting educated has gotten to be high. Now everyone has electricity, and gas, and water nearby. [Said fehemma - now they understand? it's now OK for 1 girl to help her mo and the others to go to school.]

9. Our economic condition hasn't changed; it's like before. We're not doing anything with it [sondage water]. [Nor are their neighbors who use it.]

[Yet at Tbagá, where they have land and there is a new sondage, people plant and irrigate vgs like tomatoes, peppers and parsley. They plant trees, too, and thus see a change there with water, but not here since people don't irrigate.]

10. Mo: "If I have money, I don't give it to my husband. I keep it to buy something for myself, or wool, or something for the house." [She doesn't go to buy food, just wool, and young married women don't go at all.]

[Previously mo said if she favored a hu for her daus and her hu not, her view would prevail.]

Women work wool and sell it. If the man runs out of money, she gives ^{it} to him. If he has some, she gives him none, and buys something for herself.

"Electricity is better than water. Even if water is far, we can go get it, but we can't do that with electricity. And we like the tape recorder and TV, and they need elec."

11. "Aren't there any water problems? Ah - water is a big problem. Women fight over water. Everyone has her turn. Sometimes in the summer, we stay there from morning until 3 PM. Once a little rain fell, and we went to get water, and there were lots of people. We left our bottles at the spring, and the water came carried them all away...[re once a kid peed in someone's bottle as it waited in line; seems they put the bottles in order to mark turns - sounds innately moer organized than Moroccc.] Sometimes little kids play with the caps, and they fall off and get carried off in the stream.

The solution? If there's lots of water. [with a new sondage; the current one isn't good, and costs \$.]

12. AIF: When Denise was here, she worked with them, they had meetings and talked about water and water problems, and how to use javel in water, and AIF projects. They used to work, and go see women. But when Denise left, they stopped working.

Those two girls went to a meeting once and stopped. Their mother said not to go; they'd gain nothing from it, it was volunteer, there was no money.

I asked about the chicken project, and they said it was going well, people were eating eggs, and profiting. Others said the chickens all died.

[At the first AIF meeting, they said Denise and Atika talked about water, they saw the "well", and that there was no solution. After I asked, they said they were told about javel.]

13. AIC: I don't know anything at all about them.

[I have 'don't know if good or bad; don't knkow their job.']

14. Water before was free, and now people buy it. [They've never bought it, cuz not nearby.]

15. When I have a daughter, I'd like to educate her, and her to work and live very well, to live better than me, to live in the city, to rest from the work in the country. [I have she'd like her to live in the city, not here, and "I'd like her to live better than me" and "teshadd blasa", eg get a job."]

JimaE bent Salah May 28, 1991 Tuesday Zakiya

Widow, lives with one son, has four more married sons, one poor and one middle class [color TV, no blankets, insisted we do questionnaire]. Son with her works in construction sometimes. They got 4 goats on some project, and 2 died. Someone else got 15 twice, which the apparently well-off son told us heatedly. [In general, at several points noted how men butt in and take over the conversation, are quite vehement [a style?], and don't seem conscious of interrupting.]

2. Up before 8, picked up bedding, cleaned house, washed dishes, cooked breakfast [couscous], went to see my 4 married sons, took son [middle class] to dr in Foussana. Went at 9, rtd at 1. Wehn I got back I cooked lunch and rested. Tehn cooked dinner and we watched TV [her without]. At 4 I went to get 2 pails of water, each 10 l. I stayed at the well an hour [tl trip]

"I swear to God, Even at the Eid, I buy one kilo of meat, I'm not like other people. They slaughter; me, I swear to God, I don't know slaughtering."

3. spring: pull grass if has animals, wash wool, pulls wool apart, [milk animals. She has 2 goats with her dau.]

summer: harvest grain, for 1/10 for others, [on foot]

fall: works wool [no olives or fruit to harvest]

winter: get firewood, carries on back. Is always forbidden, but don't get caught in the winter]

In summer we use lots of water; we wash and bathe lots, and wash our covers. [use about twice as much]

Don't cook or drink from sebbala; do bathe in it

4. Men just wash and drink, that's all.

Her son of 25: "I bring water, I bring 2 pails [from the "well"] because my mother had an operation and I want to help her."

5. [there's much less work [eg closer, tho^{ab} been off for 3 mos]

There's a difference between the rich and the poor. The poor has no sheep, he has no land, and he has not lots of rooms. And the rich has lots of rooms, lots of sheep."

[women have profited more because they carry water

The rich use more, for their animals. The poor, if they have no money, don't get water.]

6. Who's near water [sebbala] benefits a lot; they benefit a lot of water and a lot of time. In the time saved, we work on something in/for the house. [like wash dishes, cook, put out bedding]

7. Women went out more before. I like to get back quickly, I don't like to waste time [eg in talk]. "The well is the one place where several women meet [and they still do]. And we meet at the dispensary."

8. More girls go to school than before. It isn't the same now as before.

9. Our condition hasn't changed. [They don't work with the water.]

10. Before her dau married, they worked blankets and sold together and the dau had/kept the \$. Now sick, and doesn't weave. If I had money from selling something, it stays with me, I spend it [hu dead].

[She's planning to make a blanket for her single son, in his mid-20s. Her dau used to go to the "factory", where each got 6D/mo plus oil, flour, cheese, etc.]

11. "Water - there's a problem at the sondage, when the water is cut off. With us and water, there's a big crisis [asma']. the solution is to fix the sondage, bring the parts. The guard is responsible."

12. AIF: "Girls came, with sheets [fiche de suivi - Miriam and Safia came]. They came twice. They talked about cleanliness. [said Miriam mentacha didn't speak well, politely] wasn't good. She didn't know how to clean better than me. [Her house isn't that clean.] Atika is good. She speaks well, and she shows us gradually.

[I start with Denise brought food, and some educated girls went to Kasserine to learn about the fiche de suivi. She said they came to see about cleanliness and dishes. She didn't let her dau go to the AIF. It stopped now.]

[Said Atika asks a lot, and "den wek lhaja", I think tells you what to do. Said maybe a girl's parents wouldn't like her to be one. People said they had a good murshda, Atika, so don't need other ones.]

13. AIC: One is the guard, and the other collects money. And I always pay, even if I have to borrow. They collect money, and watch kids so they don't mess up the water, and they wash the reservoir with javel and put javel in it.

[2 come for the \$, and sometimes the guard pays for her cuz she doesn't have it]

14. Before we didn't buy water, now we pay a dinar [monthly - used to be .500.]

15. She hopes her sons would study and succeed [but they failed at school].

Thleyja [I think the name is from snow] May 28, 1991 Nihaya

2. She (the mother) got up at 5 AM and went with her divorced daughter and her own husband to the fields to get grass for the animals. She returned about 11 AM.

Fuzia, her daughter of about 20, stayed at home to wash dishes and laundry and make lunch.

At noon, they all ate together. They all took a short rest, and then Thlejiya combed wool. The divorced daughter got water from the "well" [a pipe by the river]. Fuzia is the only one who knows how to iron her brothers' clothes [electric iron], and also is the one who cleans the house and washes dishes, and makes flat bread in a clay dish over the fire.

Other women's work includes:

Sometimes the mother and oldest daughter go to the mountain to get firewood about 3 PM and get back around 6. And sometimes, esp in summer, they go about 5 AM and get back about noon. Last time they went was day before yesterday; they go about every other day. It's very tiring, esp during winter.

3. In the winter, they work wool and weave blankets, floor covers or men's cloaks. Plus the regular housework. In summer, they wash blankets and wool clothing and harvest grain. Women also go to fields and cut grass to keep to feed animals in the winter. In spring, they buy wool, wash it and prepare it to weave the next winter. In fall, there isn't special work.

4. It's the woman who goes to the well to carry water, but the man stays home or does some other work. The man uses water, but doesn't work to provide it. She got water today about 9 AM and at noon; she goes to the well whenever the water runs out. Each time she gets a 20 l plastic bottle. The problem today was that there were lots of people at the "well", and each waits for a turn.

5. "The one thing we really lack is water connected to the house"

"Ash khass ken idexluna al ma' l-ddar"

Everyone uses the water in the same way, except two families. They have majen at home and buy water to fill them in cisterns, or fill them with rain water. (eg, they're better off than the others, with money to make majens and buy water.)

6. no answer, since don't use new sondage; use well. (Irkun' ^{side of} ravine)

7. (who goes out more, before or now?) Men go out more than women now. Girls here only go out to do something specific. Men go out whenever they want. Girls can't go see her friends, or go to the suq. She only goes out to get water or cut grass/fodder.

8. A large percent of girls start school now, because of a change in the way people think from before. You can't say the percent of girls who are educated has changed, because before even boys didn't go to school - just rarely...

"xall! Ead el Tefla" "let alone a girl". She thinks this is because of the long distance between the house and the school. "For example, I started school like my brother." She left school because she didn't pass, and got engaged the same year. She could have repeated the year, but didn't want to since she got engaged.

Besides that, she had a big problem. In their customs, a pretty girl is married just to her paternal cousin, and she was pretty. So her cousin wanted to marry her, but she didn't like him, and defied the whole family by refusing. Instead, another guy asked for her hand, she liked him and accepted him. But after she'd turned down the cousin, her chosen one dropped her. People said it served her right, for defying her family. Her family stopped talking to her. She still isn't married (Fuzia).

9. Economic life has changed because her brother has a job as a primary teacher. She didn't mention an effect of the water point.

10. "The father and the grandfather are the ones who buy things, but the woman has no economic responsibility [lura ma Eandhash hetta mesuliya iqtisadiyal] in the family."

11. Water problems are that there isn't enough water, and also, it's hard to get to, down a steep hill. Yesterday the neighbor's daughter fell and nearly broke her

leg. The problem won't get solved unless they bring in piped water from ¹Kohl, which they've been talking about.

12. It's necessary that the water be connected to the houses. The AIF was a very good project, and they should have encouraged them. She didn't know at all about the AIC. She was in the AIF and quit, because she's the only one who worked at home; eg not enough time. She wasn't in it long.

Mabruka May 28, 1991 Nihaya

A widow, the poorest woman in Lajred; her daughter Safia? is/was secretary of AIF. Also, we took her picture getting water.

2. She gets up between 7 and 8. Her daughter washed dishes and cleans the house. The mother goes to get water, and firewood. the daughter cooks lunch. In the afternoon, the mother gets water again [in 25 l bidon]. In the evening her daughter starts to put out bedding, because they don't have electricity. Just after dinner they go to bed, because have no TV to watch.

3. spring: She washes wool if she has it; if not, washes for richer people who have it, for money. They wash at the kebrit spring, because people don't drink there.

summer: If people have grain they harvest it; we who don't, we harvest for 1/10.

4. I have a sick son, he has an allergy to water. Because of that, I'm the one responsible to bring water. [her son works in the city, and sends no money. 'He's a laborer in construction, and sometimes works and sometimes doesn't, esp when his hands get wet. Her neighbor told N as she left that Safia and her sister were registered by the mom as "children of Bourgiba", eg the state pays for their education, food, and even covers.] The mother is responsible for getting water; the daughter uses it.

5. We'd like them to make a new water source with new water because it's really hard to carry water from the "well" [a pipe, down a steep hill].

All the residents benefit the same from water. Partly because there's no irrigation, and also cuz there's just a little water, not enough to have projects [ag].

6. The well isn't very far from the sondage, that is, the time difference between them isn't much.

7. From my point of view, my husband's dead and my son is in the city. So I'm the only one responsible for work outside the house.

8. Now it's the same, that is, the percent of girls who go to school hasn't changed much. For example, all my girls went to school. I have a daughter who's in high school in Kasserine, and the other got to 8th year secondary in agriculture. She found a job with the weather bureau [in the mts] but her mother didn't let her go, because all the rest working there were men.

9. Our economic condition hasn't changed, before or now, because the water from the sondage isn't good to drink. And more, it's always broken, [N asked how she lived, and she said "serf l-Hana' w el ghelba" of the misery and the beaten ones.] The woman is the responsible one, because her hu is dead.

10. Our problem is that the water is far away, and it's place isn't good. [eg steep hill]

11. The work of the women's group is better. One result is they put javel in the water [probly at home]

12. doesn't know any thing about the AIC

Jamila (Habara) bent Ali Derbali May 29, 1991 Zakiya

Five live in the household: Jamila [about 20], her mother and father, and two younger brothers. She had on a red sweater last time. Her mother had 11 pregnancies, and only four survived. There's a married daughter at Ouled Ahmed named Reem; we think she's one we interviewed the other day, the mother of the young bride Halima married into the "big" family. And she said she was from elsewhere, and sent Halima to school for two years before local pressure made her stop.

2. She always gets up before 6 AM. "I washed my face, cooked breakfast [shakchouka and kesra-flat], prepared the other kesra bread [yeast], picked up the covers, picked up the house, swept, and went out to harvest [green barley - used in soup, as mermiz]. I came back at noon, made the dough into several round loaves, got some firewood to light the outdoor oven. I cooked the bread (kisra), and sat and spun wool. Then I went back and harvested in the afternoon. In the late afternoon [avshia, about 6], I came home, swept the house, and after I cooked dinner, put out the blankets. After that we had dinner [couscous] and went to bed. We don't stay up late because we don't have TV." They go to bed about 8 PM.

"My mother is old; she doesn't work in the house. It's me who does everything. I work wool for us. [? literal] I buy it to make blankets for us, to cover up with." The mother did help her harvest.

She last washed clothes 3 days ago; since there aren't real little kids, they don't need to do it too often.

Jamila buys 5-6 duzzas of wool a year, to make blankets for the family; they aren't sold. She has no loom, but borrows from the neighbors. She's wanted to make a rug for 3 years, but hasn't had the money for the wool. Said she knows how to do rugs and mergoums, but later said she'd never done either.

3. Summer: harvest, weave, work in grains [idersul], wash blankets [I don't have latter in my notes]. Sometimes help others harvest and thresh, and get 1/10 [Eashur]. Wash covers in summer with rain water. If have none, don't wash them.

fall: Is more water, they pull up halfa. "We moved there [whole family] and lived in the mountains near Feriana.

Her brother was in school to second grade, but we took him out because we didn't have money to buy school supplies.

In halfa, men and women do the same work, and we sell it to the factory. The season is October to March.

winter: "We go out and gather firewood at 8 PM and get back the next day at 5PM. The mountain is very far from here. We spend the night there, under the trees." A group of women goes, with one or two men. They go about every 3 days. They also pull halfa in winter.

spring: "It's wool season and grass-cutting season." Wash wool, comb it and spin it. They cut grass from mountains. Sometimes, if need money, they sell the grass. [Use grass for their donkeys, which carry water, halfa to the collection site, and firewood.]

"Yesterday it rained, we collected the water, and now we're drinking it." Usually, go to the mountain spring daily to get water, but didn't go today because of rain water. Usually takes animal and gets two bidos.

4. "Men don't do anything at all with water: they only drink it." She's the only one who gets water from the spring; her brothers are too small. "I go to the spring after I cook breakfast and get back at noon." She goes to the spring with a group of women, and just takes one of her brothers [even the little one, about 12] if she's alone.

5. If they had water, they'd plant trees: almonds and pistachios. And we'd wash [clothes and selves] a lot. We'd get lots of sheep [fa said latter].

benefit: man would because it's men who work in farming. "If we got water, we women would be careful of it, because waste isn't good."

Older people would benefit more, because they understand better, because they understand its value, they work to get it.

Rich would benefit more, because they have more land and sheep and houses [to clean]. "The poor only have their clothes."

6. Women would gain time, and in it she could work on something else: "wash clothes, cook, do housework."

7. Women would still go out, to harvest, cut grass. Admitted she might get to see women less to talk on way to spring, but said that's OK, talk isn't useful. She'd rather have water close.

8. "before, girls didn't go to school, now a few do." Only a few, because the school is very far away -[ca 5 km].

9. "Water - we now spend 7000 [7 D] a week for a citerne. If we get the new water, it would be almost free [at 1-2 d mo]." [I have they get a citerne sometimes, if they have the \$.] If we got water, we'd use it for everything: trees, sheep...naturally, it would change." Man said amount of activity depended on how much water got: with a lot would do sheep and trees, if not, just drink it.

10. "The man is the responsible one. For a woman, even if her husband was away or dead, she'd give the money to other men to buy for her." [sons, brother]. If a woman sells something, she gives her husband the money.

11. "The problem with water is that there are so many people, and that it's so far away. There isn't any solution. The one solution is for there to be lots of water."

12. An AIF would be a good idea. "If someone came to work with us, would we tell them no?" [I have if it's good for the citizens they'd accept it, if not, not.]

13. Women don't know re Awled Ahmed AIC, men do.

14. Water now costs 7 D for 3500 l citerne.

15. re dau - embarrassed in front of father.

Bornia bent Brahim Derbali May 29, 1991 Zakiya
Are 10 in family

2. "I got up early, before the sun came up. I have a little girl of two months; I changed her and bound her, swept the house, and made couscous for breakfast." [asked why] "I fed the children, and picked up the clothes and the bedding." "I made the couscous so we could have it for breakfast, and find it ready for lunch when we get back from harvesting grain. And afterward I took the scythe and went to the school [eg dispensary]. I got a shot [she's sick, didn't say with what], and went right back to harvest [9:30-11]. I got back home about one. Now I'm going to "shell" the merme, and boil it over a wood fire, and let it dry [in the sun]. And afterward I came and swept the house and fed the chickens. I cook dinner, put out the bedding, because we don't have electricity. We have dinner and go to bed; we don't have TV.

3. summer: harvest grain
spring: cut grass, and buy wool if have money, to make blankets.
winter: bring firewood
fall: work in halfa. Leave little kids alone, with girl about 6-7, and older daughter and her and hu go to halfa.

4. [wash blankets?] "Blankets?! I rarely wash them. A citerne is 7000, and if God just provides enough for the children..." Said she hadn't washed them for two

years. If we don't have enough water, we don't wash clothes. "If we don't have money, we bring water with [excuse me] animals from the spring." If there are lots of people, she sometimes leaves at 8 AM and gets back at sunset. Also, if the tractor guy doesn't have/come with water, she goes to the spring. Her husband tells him to bring it, not her. She only asks her husband to get water if she knows he has the money [eg, no problem with him saying can't afford it]. If her husband works, they have money for water, if not, they don't; eg, it isn't different by seasons. He works in construction [mrumma], and is away 1-2 months at a time, and she has no money. He's sick, so sometimes doesn't work. [do you mop with water?] "Water - we don't mop at all. It's not there." "A man doesn't work with water at all; the woman does it all."

5. "IF we get water, I'd always wash clothes, and bathe the kids, and mop the floors." [now wash clothes every 3-7 days]

Profit? Older would benefit, because with water nearer, they wouldn't get so tired.

The woman would benefit, because she brings it. "I'm the responsible one; he doesn't have anything to benefit [eg cuz not responsible]."

"The poor would benefit, because they don't have money to buy water, but for the rich, even if it's far, he has money to bring it."

6. With time saved, would buy wool and weave - she doesn't now.

7. Women would go out less cuz not so far, but she'd prefer new water, even if there isn't another place that women gather and talk.

8. Girls study more now; there wasn't a school before. But her daughters don't study because they don't have money [for supplies]. She'd like to educate them.

9. If had water, she'd plant trees, and thinks her economic condition would change.

10. Even if she has money, if her husband isn't there, she gives money to male relatives to buy for her. Uses her own money to buy food for kids.

11. "There's no water problem; the problem is, there's no water...even if I get tired/exhausted [taEb], what can I do? It's necessary to get tired out, because the children need the water."

13. She hears about the male water group, but doesn't know them. She hears the Awled Ahmed have trees...they have everything.

12. Thinks the AIF [we explained] is a good idea, but not sure if her husband would let the daughter do it "I don't have anything to say about it."

14. At first, said "They'd work..like me, like them. We Arabs are in the house." Later I hope for good things for them. I'd like education, but it's not available. I hope that they'll have nice houses, well furnished, and that they will be happy."

Naema bent LEazuz [we all had lunch later] May 29, 1991 Nihaya

She has three sons, 5 and under, with the oldest apparently retarded. Her husband works in Libya. Lives in her own house, with about 4 rooms around a courtyard, and part being built. N asked to use the toilet and wash shown to the stable. Most local houses are in rock.

2. She gets up at 6 AM, feeds and dresses the kids and takes them to her mother's. She goes out to harvest grain and comes back at noon to cook lunch. "I have a handicapped son. I go out to the fields and think about him, that when I get home, they'll say he died." She gets the kids from their grandmother's, feeds them lunch and takes them back, and goes back to harvesting. "Sometimes, their grandmother gets tired of them, so she ties him up [the retarded one] and leaves him alone in the house."

3. Summer: harvest grain, and combs wool.

winter: "I go to the mountains [for firewood] in the morning and only get back about three in the afternoon...After I get back, I wash clothes and hte dishes and clean up and cook lunch."

spring: "In spring, we don't have anything to do, because we're poor. If we had sheep, we'd have some work. We'd work wool or take them out to graze."

fall: If we have wool, we weave. If without, cut up old clothes and make floor covers.

4. Women use water more because she mops and washes [clothes and dishes] and cleans house. But the man, just buys the water. for me, I buy water when I have money, because my husband is in Libya.

"The water in the maien is perhaps older than two weeks. And a scorpion fell into it. But what can I do? I don't have money to buy other water."

"When the water ran out once, I drank my mother-in-law's water for a month, because I had no money."

"Us, we're holding onto/back poverty, so it doesn't 'catch' [as in contagious] other people."

5. They used to get water from the mountain spring, but now get it by citerne from the new sondage. The water from the mountain was better [probly tastel], but the water with a citerne is less work. Because at the mountain, when we go, we stay the whole day to bring 20 liters. Us here, noone knows our condition. The sheik, only collects his monthly check. But we here, are suffering. We hope they gave us a sondage nearby.

In Drebliya, noone benefits from water because we're all poor; we only have one person with a tractor adn he only brings for himself, and we have conflicts with him. Because he won't give us credit. sometimes the tractor guys agree not to sell us water except for 6 d, after it was 5 D. And we all got together and told the sheik. They sent us a tractor from the baladiya [feriana?] for 4 D. But it broke and they sent us another tractor with a Hamdi [ouled hamed], a citerne for 5 D.

6. "the woman gained more time than before, and spent more money than time." The time we gained we use keeping house.

7. Women before, when we brought water from the mountain, went out more than now, because now we bring water in a citerne.

8. The percentage of illiterate and educated hasn't changed, because the school is far away. Oh brother, a woman sends her daughter at 5 AM and she comes back at 5 PM, that's not reasonable.

9. Economic conditions have changed; ours have decreased because water costs money.

10. I'm the one who's responsible for my kids, because my husband is abroad. Sometimes he sends me money, if he works, and sometimes I get credit from the shops.

11. The problem of water is a problem with money, because water is expensive for us. "If I bring water, I only decrease money for my children's food, and this problem won't be solved unless we remove the sheik we have and put in another one to talk about our rights."

Here, all of us are related, and we trust our husbands. We work together, women and men.

The problem I have is more than other women, becasue my husband is abroad. If my husband was here, I wouldn't work harvesting and leave my children alone. And especially the retarded/handicapped one that I haven't been able to get medical treatment. Sometimes we have a Dr's appointment, and I don't have money to rent a car to go. Then I'm pregnant and I go from Drebliya to Feriana on foot to go to the doctor.

12. The solution is it's necessary for them to make us a sondage, esp in this tribe. It should be near to us, so we don't need to buy a citerne for 5000 and we need it [for something else].

13. Doesn't know about AIC at all - they don't have one.

14. The price of water is very, very expensive. A citerne lasts 15 days, and if it rains, we drink from it, because it's free.

Oum El Khir May 29, 1991 Wed. Nihaya

Family that slaughtered a sheep for us the first time, and where at least three don't hear well, and one son is retarded. It's a big household, and probably the best off in Drabliya, eg about middle.

2. The whole family gets up at the same time, before sunrise. She and two daughters go to harvest, and her humo stays home, because she's old; she spins wool. Oom's hu goes out before sunrise to graze the sheep and all come back about noon. The women cook lunch and put in front of her hu. [at lunchtime, they rush around: one cooks lunch, one brings water to wash, another puts it down, and one stands beside him as he eats, in case he needs something - N saw it]. After lunch, he goes out with the sheep again, and the women go back to harvesting.

3. spring: She works and washes wool. Use water from rain or that brought from the mountain spring.

summer: harvest season

fall: pull halfa [go live there ?]

winter: go to the mountains late afternoon to get hteb, firewood. They spend the night there, and gather and return the next day. They sleep under trees. [probably man along]

4. It's the woman who washes and cooks. Our water ran out last Tuesday [eg 1 wk and 1 day]. The problem we have is that the whole "tribe" [village] has only one tractor [eg one rich guy with one], and people are always asking for water. Because of that, he comes late, and doesn't bring water fast. We stayed thirsty for 5 days.

5. We'd like water nearby to relieve ourselves of buying water.

The one who benefits most from water is the man with a tractor, and also who has a big family.

6. I gained time more than before. Before a woman used to pass the whole day in the mountains to bring water. But now, water is expensive, 5000 millimes - sometimes we buy it twice or three times a week. Before the sondage, the woman spent her whole day getting water. When she returned at the end of the day, sometimes her hu would come home hungry from the suq and not find lunch, he'd hit her. The time we've gained we use to work wool more than before, because now we have time to rest. But before, we worked night and day.

[brother speaks] "By God, yesterday I called the tractor guy to bring water, but he didn't want to see me. We were 5 days without water. Sometimes we stay without water."

7. There aren't a lot of changes from before to now. Before women went out to get water, now she goes out to harvest, to get wood, and to cut halfa.

8. The school is far away. There's no one who would want their daughter to go to school, and stay all day [fel xela'] elsewhere/outside. And also in winter, we move to the halfa fields and we don't have anywhere to leave the kids - that's why we haven't put them in school.

9. Water is the same now and before, but before it was a little better¹⁷ before, because we didn't pay for it, but now we buy it for 10 D.

10. The woman doesn't get money at all; it's the man who buys things.

11. Water is expensive, and not enough for us. And this problem hasn't been solved yet, and won't get solved unless they make a sondage nearby.

12. The solution I suggest is to make us a sondage.

[N said she didn't understand the rest]

QUALITATIVE INTERVIEWSOULED ALI BEN SALEMHabiba and Traki May 31, 1991 Zakiya

Two sisters married to two brothers, and were paternal cousins. The richest family there; one worked in France and now gets retirement \$ from there, and the other has a shop in El Ala nearby. Traki's Hu was in France, and they had only one daughter. Habiba has 4 sons. One got his bac and works in a bank in Haffouz, another is surveillant in lycee in Kair and is married to Traki's dau. Another is a hairdresser, and another got to 6th industrial and works with dad in shop. Are 7 in house now, 9 altog.

They have running water in the house, with a personal counter, and had before, piped in from their own well pump.

2. Habiba:

Up at 7, made breakfast, men ate and left, she ate, cleaned the earth in front of the house, went in and organized and cleaned the rooms, put lunch on to cook, [merga and bought bread...usually cook kisra, rarely buy - just if ill or rainy]. son came from shop, brought bread and took lunch at shop. Retired guy had lunch, then we [women] ate, took cow to drink at sebbala - it's easier for me, rather than carrying water to her. Slept a little, then cooked couscous for dinner. We stayed up watching TV and drank tea, the boys went and bathed, mopped up the bathroom, went to bed.

Does laundry daily.

Traki:

Up before si, about 6:30, washed dishes [other always cooks], prepared bread dough [other says bought - probably re day we visited, cuz did cook kisra, give us some], put into loaves, picked up her own room and mopped lightly. Washed dishes after lunch [re yest], and washed clothes. Didn't go out, bed 8-10.

3. summer: harvest, if have it. For wool, hire women to weave, later. Wash blankets at home, did first with well.

spring: cut grass for cow, spin etc wool, hire others to weave [blankets?]

fall: wash wool and comb

winter: have olives, pay others with oil or \$ to pick; they don't.

4. With water they irrigate trees and vgs for selves, wash, clean, mop. Man sometimes irrigates potatoes. "It's the woman who gets tired. The man brings water? [of course not]. It's the woman who gets tired and who goes back and forth getting water."

5. "Everything has changed." Cleaning has increased, and we don't get tired any more. It's been 3 mos since we got a faucet from the sondage. Used to go out, plus in past had faucet from pump, but broke down lots and stopped using it. The Hu with the shop had the idea to put a faucet in the house.

"With a faucet in teh house, we've [women] gained. We irrigate [?] with it, we clean with it, it's nearby. We like to have a faucet in teh house."

The poor has benefitted [more]. It's near, he can irrigate tomatoes or trees with it, or have a small [vegl] garden.

6. "We've gained time. It's near to us. We used to go to teh outside faucet for 30-40 min round trip [5-7x day]. With that time now we can keep house, do laundry, light mop the floor.

7. Now women don't go out [eg self]. We don't have anywhere to go. With water in teh house, where would we go? We used to like to get water, because we'd see lots of women. Now, if something happens [to discuss], women come here to the house. People don't ask me for water.

8. Girls go to school more now. Before, parents didn't value education for girls, but now they know its value. Only two girls here went to school in past, now "barsha". Traki's dau got to 6th industrial, studied sewing; doesn't work now.

9. Economic sit'n not changed [own], [but planted apricots and vegs/potatoes]. For people, not change for rich or poor, but people have gotten much cleaner than before.

10. Traki: "If I have money, I buy myself. I go to my daughter's in Kair. and buy myself. I buy gold. The money is from by brothers, who inherited from their father."

Women don't go to the suq, even if hu is away. Only the widow with ^ydiv'd dau that N saw goes to suq, cuz no male reins.

11. "We don't have problems, praise God. The water in teh house doesn't get cut off." It doesn't cost much, from .700-2 D/mo so far. It may be 5 D next time, I think cuz irrigated.

don't know re AIC; have faucet in house. Only knows pompist [was with us].

12. Don't know AIF

13. see above

14. Before water was a dinar a month, and now sometimes it's more, sometimes it's less, depending on what we use. WE use lots, we wash lots, adn mop always, and bathe. For us, we had a sebbala before, but now it's better. Before it was from our well, and it used lots of money, and it would break and be cut off, but not now. We've had this faucet in teh house for 12 yrs. And before we had any water in teh house, we brought water in jarre or big clay jars or with a pail, and pulled it up from the well with a rope. After we put in teh faucet, I rested from all that work [taEb].

15. not asked; dau grown up

Miriam Selmi May 31, 1991 Zakiya

From the household of the "AIF" family in town. On the survey N spoke to ^{he}is-in-law Mesaouda, who she said knew nothing; since they live in the same household [they eat together] and work together, we decided it's OK to ask Miriam. I thought she was smart the first time we met, since she said they couldn't fill out ^{AIF}"follow up sheets" to show us without training - eg, got herself off the hook neatly. The two women are married to brothers; the more attractive one is Miriam's hu and they have four sons. I think he's secretary general of the AIC. The pumpist is married to Mesaouda, who's pregnant with the first. The men's dad and mom are in the same house, but the mom was off with another son whose Moroccan wife had just had a baby. ^{'s tchr} ^{paing tchr}

They both weave, using their own looms and not those of the AIF, which are wood vs their metal; 4 AIF ones are lying in the courtyard, with the metal parts rusting. Either one of them sells blankets or mergoums in Kairouan; Miriam can leave her youngest home, cuz he uses a bottle. He was cute and blonde, but cried a lot - either spoiled, or cuz he was burned and got scared of nurses in the hosp.

2. for both women, who said they share all work:

Up at 7, cooked coffee for son who studies in primary, el ala and goes early, washed him up and got him dressed, cleaned up courtyard, shook out blankets (prev is singular, following plural). We washed dishes, cleaned kitchen, woke up other kids, dressed them, fed them, picked up their bedding, wiped up the rooms. Cooked our breakfast [last night's couscous], made kisra dough, cooked it and marga, lit brazier, made tea, had lunch. After, we started to weave until 4, then went out and picked up the rooms and cleaned, washed lunch dishes, wash clothes [daily, qqf 2x], cooked our dinner. Put out kids' bedding, and out ours so we could stay up. The kids go to bed first, and we stay up. [not watch TV, no time]. Bed at 11:30-12.

Usually are weaving, one goes and the other stays and runs the house.

We both bring water together, whenever we run out. One said twice yest, one said many times. EACH time 2-10 l pails. Yesterday found a woman washing clothes at the sebbala [nearly in front of their house] and chased her away, said it was dirty. [like AIF work...but does that hassle women?] They said it's OK to wash heavy stuff there.

3. summer: gather [own] almonds, harvest own wheat and barley. Men help with harvest, and shell almonds with wives as watch TV. The hu mo does most/lots of this work. Wash blankets, and kids' [more dirty] 2-3x yr. Wash at sebbala, used to do at home. Irrigate almond trees etc with citerne, qqf every other day. It takes lots of time, AM and PM. Miraim irrigated with citerne before had sis-in-law, and used to tie up her kid and leave him at home. Before not irrigate -yet- have that her mo-in-lae used to haul well water with a clay jar and irrigate with it.

winter: pick olives, men and women, or hire someone. Preserve olives, or make oil. Sell if have lots.

spring: No animals, so not pick grass. work with wool, but it, process and weave selves.

fall: weave, pick hindi, eat and sell a few

4. "Men have only farming [with water], but women use it for everything." Men and women pay the same price, 1 D/mo. Us, men pay, unless none there.

5. "Conditions have changed, we wash very well, water is always available, we clean very well." Also, when she came, wasn't water, elec or guest room we ate in.

Both rich and poor benefit: the poor benefit with cleanliness, and the rich benefit with animals and trees.

Men and women benefit the same.

Old and young the same, both can wash when want.

6. Women gain time. Water was far, took 2-3 hours, now it's close. With the time we can do housework, or work to benefit ourselves [incl mergoum].

7. "We don't go out at all" [eg without a reason, probably, since harvest, go to Kairouan, etcl].

Before they heard "the news" at wells, now at the sebbala; hear-re "sickness, marriage, circumcision."

8. "Now lots of girls to school, before boys came first. Before, men didn't like to educate daughters, even if he had money. Now ideas have changed. Now girls go to school, even if their father is very poor."

9. "Didn't change" [economic sitn]...but have planted plums, apricots, pomegranates, olives...but not in production yet, only about 3 yrs old.

10. "When I have money, I buy for myself; I don't care about my husband. I buy somethign for the kids or for the house [gave ex of clothes, rx, milk, curtains]."

11. "We have no problem at all with water. But we'd like a faucet in the house. For less work, or lighter." She thought of it since they put the one nearby [ca 5 yrs]. Asked if not do it herself with mergoum S, she said wasn't enough.

12. AIF: "It's work is washing, cleanliness, care for water and cleanliness of sebbala site, and clean house. They work wool and sell it." First one said "wool group?" as soon as I asked.

Were 7 members in AIF. The other five work at home and/or in a factory in \$l Ala. They wanted to have a factory right in this house, in their garage. There were 2 AIF meetings. Denise came to the first, and they said talked about projects [eg right away, and/or first in their minds]. Asked if they wanted to do chickens, rabbits, wool. They chose wool. She also mentioned water.

At the second meeting, D-wasn't there. They discussed having a 'factory', but the 5 other women wanted a man to be responsible, eg sell things and pay them, and the

11. We don't have any problem [with water]; the water is close; we don't have any problem.

12. I don't know anything at all [about AIF] and I don't understand the problems of girls now.

13. The water group collects the water money and is concerned with water. My husband told me.

14. The water before was free, and now it costs money.

15. If I had a daughter, I'd like her to be a primary teacher.

Warida bent Sellouha Selmi May 31, 1991 Nihaya
daughter

2. Us, we don't have any housework. We get up in the morning and mop, clean up, wash dishes or clothes, and that's it. We have no land to work, or anything. Water we bring every time however; sometimes we bring it once and sometimes twice [daily].

3. Summer is like spring - like all seasons. We don't have anything else extra like wool or harvesting or sheep; we don't have anything at all.

4. We are just women living here. It's me who does housework, and bring water, and use it.

5. The new sondage has rested us. Before we brought water from far, from the river. Even our clothes we took and washed in the river, with clay, when I didn't have soap. And for housework, we economized so we'd have enough for drinking.

6. "Who has a citerne benefits more than those who don't. And who has saniya [us. irrigated fruit trees] too. But me, even the bottle I fetch it in leaks [mengob]."

7. "We have gained a lot more time compared to before. Water before was far from us, but the time I gained, I don't have anything I did with it because I don't have anything to do, not wool to work, or anything at all."

8. It's just the same, now and before, but now it's less, because the sebbala is near.

9. Now girls go to school more than before because before whenever it got to be summer, we went out in tents and harvested land for 1/10. And there wasn't anywhere to leave them [the girls if they were in school]. But now girls go to school, because we live in houses, and some have a little land.

10. My economic condition hasn't changed. I hear about change from people [from change with new regime here, uses word change].

11. My mother is the responsible one [for hhd economics], she buys for me every souk what's necessary. And sometimes we remain without.

12. Water- we have no problem with it. But now, the sebbala is broken; the pipe leaks. [she tells someone AIC to fix it, but they don't; she wonders where the money goes.] And they need to forbid women to wash clothes and wool near the sebbala because it makes us ill [eg can]. [was in AIF]

13. I don't know the water group [male]. they should fix the sebbala, and our money, I don't know where they put our money.

others said that wasn't possible, maybe cuz women have to get rugs stamped in Kair. selves, maybe somethign else. So all decided to work on own^{or} at previous factory.

They said in fact it's better to work at home, but the idea of a "factory" was that they'd put in more hours, like have an excuse to neglect house?, and thus produce and earn more.

The four wooden looms Hajji got from rural develepment. Not used cuz don't work well with local mergoums, which are very tight, and come out crooked without metal loom.

13. "I don't know their work exactly; I just know they collect money."

14. Before water was free, now it's for money. It's not expensive [at 1 D/mol]

15. "I don't have a daughter, I wish I did. If I had one, I'd wish her to be an excellent student and succeed and have a good future. If I had a daughter, I'd educate her more than the boys [hers], and I'd dress her better than the boys, because I like girls better than boys."

* N. says all the words [following] are those of the women, but she wrote in classical; the quotes are where she wrote in deria. I'm not real sure, but it's the best we can do.

Quirida Selmi May 31, 1991 Nihava

2. I get up at dawn, pray, wash dishes, if there's wash I do it. My husbaand brings water with bottles and an animal. She cooks lunch and they eat. Then I go to the loom until about 7 PM. And I stop to pray at prayer times. I cook dinner, and we go to bed. [have no TV].

3. In the summer we work wool, we wash it and set up the loom. We don't plow, so we don't harvest. Because we don't have anything [\$] to plant with. If we had planted, we'd have good results [becaue lots of rain].

Fall: we eat prickly pears.

winter: In the winter we do all our housework [gathiyatna] at night: we wash, we cook, and at dawn we go out and gather olives [theirs].

spring: Who has sheep, shears them and washes it, and weave [they don't have]

4. My husband brings me the water. Why should he sit around? He brings me water and I cook, wash, and clean.

the last time he brought water was day before yesterday; he filled quickly and came. We don't have any problem because the "sontage" is nearby.

5. Water now is nearby, and better - it washes really well. Now there's a big difference: before we got the water in 2 hours and now it's 1/4 hour.

Everyone benefits from the water; now we thank God. But those with citernes, and irrigated trees, benefits more.

6. Before, there were times we went at night to get a little water. Now we have gained lots of time.

With the time gained, she does more housework.

7. Women went out before, and it's the same now. But now the woman goes out more, because the sebbala is nearby. Before, some men wouldn't let their women go far.

8. Now girls attend school more than before. Before, I put my daughter in school, but the neighbors started to laugh at me. After a month, I took her out because people said "Si Bashir sent his daughter to school. I don't know what he will get from it. Now she'll grow up and get married."

9. Our economic condition hasn't changed, because we don't have land.

10. Me, my girl, I'm a woman, I don't know anything at all. [re economic info]

14. [AIF - she was in it]. The idea of a women's group is a good idea, because women and girls here have nothing to do. If they at least did a project for them, it would help our youth. Because we here are mehroumin left out [?] of everything. We hear about projects, but haven't seen anything at all. I cook in my little mud kitchen, with worms and snakes, and why don't they help me to make a kitchen? And why does one have fish and meat for dinner, and we go to bed without? And in the grave, we're all the same. If there was a project, everyone would be happy.

OULED AMOR

Mufida bent Salah Rahamani May 30, 1991 Zakiya

Probably the best off local family. M is the daughter [age 16] and went to 6th grade primary, her mom is Kaamla, but didn't talk much. Her fa works in Tunis as a guard, and she has one brother who studied to 6th grade primary and failed, and sometimes works in Tunis in construction, but it's hard and his hands get hurt. In house with her fa, but each family eats sep.

2. Got up at 7, washed and prayed, made bread dough, picked up bedding, cleaned up rooms and courtyard, washed dishes, heated oven and cocked kisra, cooked sauce, fed calf hay, went to work in "factory" from 11-2 [she goes to learn mergoums, near the road where we stopped and found a teacher and a few girls], cleaned stones from wheat, prayed 2 prayers, slept a little, got up and went to the shop, came back and cooked dinner, prayed, we had dinner, and my mother and I went to my mosi house. We went to help her weave a blanket a bit. We got back after 11 and went to bed.

My mother harvests, she gets up first [at 5], prays and harvests all day.

Mufida has been learning in factory for 1 yr, and gets 9 D every 3 mos. Takes 3 mos to do a mergoum, with all the girls, cuz still learning. Has to leave at 17. Factory is run by rural development. I'd like to learn more, and it's good in order to see the girls.

3. summer: wash blankets in summer at home with sebbala water, and harvest, and wool - the 'yellow' we send to Kairouan to be dyed and make klims [striped only]. It's our wool; my mother spins it, I don't know how yet. Wash wool at river, not with sebbala water, and mo does, dau not know how.

Spring: mother cuts grass. I do the housework and my mother does outside.

winter: Oct-dec/jan: she and mother pick own olives, make oil. Men can harvest too. Weave in fall too.

Wash clothes 2 days ago, with sebbala water, brought on animals.

Get water 2-3 times a day. I went at 3 with cousin [female] to get water. We get more in summer: We wash clothes a lot, and bathe a lot, and the sheep drink a lot. And the sebbala is shut off most of the time [achleb lwegt]. We fill a cistern (500 l) quickly with the potence, but with the gran it takes a long time, because it's with turns. If it's full [sebbala], it takes a long time; if there are few people, we get back quickly. Takes less than a half hour if few people, about 1 1/2 hours if are many.

If the sondage is broken, we go the Hdaya sondage, and stay an hour or so. We fill quickly cuz there are lots of faucets. We pay every month here, but not there, because we don't go regularly.

4. If a man's wife is busy, he'll go for water. My dad and brother work in Tunis, so don't bring it.

They have irrigated almonds, near the river and use it to irrigate, and other dryland trees.

5. With closer water, would wash more, irrigate trees, grow vegs for household with water.

women benefit because it's women who bring water. The man doesn't do housework; it doesn't matter to him.

/ rich and poor, all would benefit from water, and besides, here we're all the same, average.

6. Women, if water was close, would gain a little time. And in that time, we'd do housework, mop and wash.

Have had the sebbala for 8 years, and it's 2.5 km away [eg not their "own"]

7. Even without water, we go out. We always go out. Women go out and herd sheep.

8. Girls go to school more now. All people like education. Before people didn't have money, but now they're better off [so can educate girls].

9. If water comes conditions will change; people will wash a lot, plant trees, and work all kinds of ag, eg vegs for house, etc.

10. My dad is in Tunis. When we have money, we buy from the shop ourselves [mo and dau]. Neither goes to suq; send \$ with a man.

11. "The water is all problems." There are always arguments at the sebbala. Sometimes they fight with sticks, and end up going to court. The solution is for people to get organized/take turns, and to add more faucets.

12 Aif: "good idea" Are some who would accept, others wdh wouldn't. Those who wouldn't accept would be those who didn't believe her.

13. AIC: Don't know them.

14. Before the sondage, we got water free from a sprng. Now it's a dinar a month, and 2 for a [small] citerne.

15. not ask re dau cuz men there.

Hnia May 30, 1991 Thursday Zakiya

She's the talkative and joking "future mother-in-law" of Zakiya. I'd said we should skip her cuz she's middle class, not poor, but Z wanted to visit and had said she would. During our visit she stressed the need for a project for her educated-to-8th-primary [then flunk out] daughter, Hafitha, who's no good for outside/farm work. Hnia suggested they were poor, but they had a big TV, pretty fancy cabinet, and nicely tiled floors in their guest room, plus 2 of the daughter's mergoums. There are 9 in the household, five girls and two boys ranging about 24-4 years, and the parents. Z's supposed fiancée is in Tunis at the university, and the other son is in 6th yr secondary.

Her daughter not for outside work; wants to work on loom, but has none. Something about if were a project, someone would give stuff to his relations, not to her.

"We like to clean. I don't like to leave my house unpainted. I like my house white, and clean and good, even if I stay hungry."

N's interviewee [I think Fattoum; it was the one with one son] came in near the end, and said she'd like a faucet in the house, and be glad to pay 5D/mo, and be really clean. She now pays 1D, but it's off and on, and not great.

2. Mo: Up at 5, went out to harvest [own bled], returned and prepared bread dough, made marga, heated oven, cooked kisra, and went to get water with my daughter. Went about noon, got it with a citerne [500 l]. Went at 11, rtd at 12. I have some wheat, and ground it into flour by hand [rHan]. Then went and got the barley I'd harvested. I made the ground flour into couscous.

The citerne we bring lasts 3-4 days. We bring it from the sondage, and pay 2 D/mo. Water, even if it's expensive, we have to bring it; it's the first thing [abje] we need. Have pd for water for last 3 yrs or so; before rural develmt pd.

Dau: [Z says she talked better than her mo, eg more accurate; the mo more in general] Up at 7, washed face, went and prepared bread dough, picked up rooms, washed dishes, went to the shop and bought a few vegetables, heated oven, cooked kisra, cooked marga [poss tog], cleaned in front of the house, my mother came from harvesting [? inconsis] at 12, lit brazier to cook tea, had lunch, cooked tea. We went and harnessed donkey to get water. Returned in Eashiya, returned to shop and

brought vegs [again], started dinner, cooked tea and went to bed. Watched TV a little in aft, not at night cuz tired.

3. summer: harvest, wool. Use lots of water then, because we mop daily to cool house, and wash selves and clothes daily.

fall: weave [together]. Early fall, prepare couscous.

winter: bring wood from tree trimming, pick olives [own]

spring: pick grass, cut and wash wool, wash blankets sometimes with rain water by dispensary, sometimes at home. Not done yet.

Have almond and olive trees, rarely irrigate with citerne; Mo said not enough \$, later that didn't want to get trees used to much water. If irrigate trees, girls [and mo?] do it,; if have \$, rent male worker. Wash clothes daily.

4. "The men are all in Tunis; they stay 5 or 6 months and then return." So don't work with water. Her hu older, qqf does construction in Tunis.

5. "If we've just gotten water, we drink it fresh. But now, it lasts 5 days in the citerne. We don't use javel [not in shop, they said, and that it's expensive]. [eg if nearby, would be fresher.]

Older benefit, because it's they who wash and clean.

"The rich and poor are the same. Even the poor has to pay." If not pay, not get. [cuz others not like if did]

"Women benefit more, because they do all the work: wash, cook and clean; men just drink and bathe. Even washing, they find everything washed."

6. "The time, we'd work something in it, or rest in it."

7. Women still go out, to get wood and grass. She prefers to get water fast, not to talk.

8. Girls study more now. From before, I had a good view of education [mo]. I didn't educate my oldest daughter cuz no \$, Allah ghalib [eg that's more powerfull]. [I have that the eldest, with us, studied to 6th and failed 2x, and mo without \$ for private school. Second dau in 6th; if passes will go to El Hajeb and board in hs for 60 D every 3 mos; will send her if can afford it.] Mo said something re wished she'd studied, so she could read bus #s and signs, and not risk getting lost.

9. "Things changed; cleaning is the main thing. And the animals drink, we irrigate trees, we clean ourselves [clothes and bathe]. We mop."

10. If I have \$ [sell qqch], I give to my hu to buy vegs or other household stuff. I don't go to the city [or suq]. I sometimes get things from the shop right here, but don't go to the suq."

11. "Water is far. We have one faucet, and there have been lots of problems of fights."

12. AIF is good idea, everyone would accept it. [But her idea was more of a project than of water management.]

13. AIC: "work with water, one writes/records, one collects money."

"14. Before water was free, now it's for money, 2 D/mo [for oiternel]. Water is necessary, even if I lack everything else, I have to get water. And it's a little expensive for us, because we don't have much."

15. I'd hope for something good for her. If she'd continued in school, I'd have liked her to be a doctor.

Her husband works in Tunis, and she and son live alone. Sometimes he doesn't send money for 3 mos, and she has to provide for herself, sometimes by selling something, or by working wool or something for people [for \$]. Her Hu father is dead, and the mother eats with her sometimes and sometimes with her hubrw1. The brother is in Tunis too. Her house is by itself; when we came, there was lots of worked and unworked wool in it. She'd be a good candidate for AIF leader: she speaks well, even tho she didn't go to school - which she regrets. She had a curretage because she got pregnant soon after her son's birth, and hasn't gotten pregnant since. She also had a miscarriage before her son's birth. She's about ____.[25] now.

N says it's all F's words, except where noted not.

2. She gets up before the sun, gets her son up, and goes out to harvest, taking her son, age 4, along. She gets back about noon, washes dishes, and clothes, gets water [maybe with wheelbarrow], comes back and cooks lunch. We have lunch, and in the afternoon we rest a little, and I start working wool, until night. Afterward, I put out the bedding and we sleep.

3. summer: harvest season. When it rains, I wash the wool blankets. If it doesn't rain, I buy a citerne of water, and wash blankets and all the winter clothes.

winter: We rest.

Fall: There's no work; only housework.

spring: Who has sheep works wool, and who has none buys it, or someone [a relative] gives it to them. Me, for example, my family gave me some [wool].

4. Me, my husband is in Tunis [day laborer], I'm responsible for water. Even if he comes home, he does nothign with it. I bring water, and wash and cook and do whatever is necessary with it. The last time I brought water was yesterday, a 30 l plastic bottle, with a wheelbarrow. I ran out of water and I had none, until I asked my neighbor for some. I didn't find any problem [getting water] because people were still out harvesting. Because the sebbala was empty, I filled right away and came. But the one problem, is the distance. And the genreal problem, is that there isn't enough water; there's one faucet, and lots of people. So we stay waiting, till those who came before us fill.

5. For me, when they used to bring water from the well, I was little, so I don't know about it. But our problem is the lack of water. If they put a sondage nearby, it would improve our condition. Even cleaning, we'd be ckeaner. [house, selves clothes]. Even at the dispensary, sometimes a poor woman goes to get medicine, her son doesn't let her becuase he's thirsty. She goes home, because there's no water [at dispen] to drink. Another time, a woman went to the dispensary and died there, and they didn't find any water to give her [should in religion], and she died thirsty, the poor thing.

Who has a citerne, benefits more from water. And those with citernes, either the gov'm't helped them [gave them], or he's well-off economically.

6. Me, when I grew up, I found the sondage working; I don't remember when they got water from the well.

7. The sondage and the well are the same [in distancel]; women go out now, and before, the same amount.

8. Now the percent of girls who study is more than before. Because the generation now is more cultured [methegef] than before. It knows the value of education, and girls now, like to start school to learn, and their parents help them. Because their idea changed about girls.

9. Our economic situation hasn't changed, because there is a lack of water. "My brother", our economic condition changes with water: people plant fruit trees with it, and irrigate the land, and we don't have water to change our condition. [she has a little land].

10. [n's words] Fattouma tesref or buys what's necessary. "I'm the responsible one. Sometimes I buy something and use it for more than a day, fearing I'll be without at the end of the month. I don't use a lot, because the conditions are poor/poverty, it's necessary to satisfy what's available.

11. Our problem, it's the water. If there was water, all the problems would be solved. There'd be more work, our men would come back [from city], even with cleaning, we'd be cleaner than like this.

If my husband is not here, I work with men. I go out and work our land, and harvest, and hoe around olive trees. [all in area with little land] But if he were here, he would work.

"The woman whose husband is in the city has more problems. Because she's carrying the responsibility of the house, and the responsibility of buying things. She even goes to the shop herself, and she brings water and works land and everything."

A woman's group is better [than AIC]. It would show me and help me more to understand and to learn to take care of [hafeth] my health and my son's health.

13. At the end of the month, they collect the money. Their work is to collect money at the end of the month, and they take care of water. If kids play in the water and mess it up, they don't let them. And they don't let women wash clothes and wool near the sebbala. It's better that they don't let them, because they'll get germs in the water.

14. People's condition is that they live in poverty. sometimes someone has nothing [S], he'll sell a chicken to pay for water. But before, they say water was free.

15. For me, a girl and a boy are the same. If I had a daughter, I'd like her to arrive teussell and to go to school and get a good job. Because, I've seen poverty and know the value of education, and I've regretted that I didn't study.

Eawisha Rahmani May 30, 1991 Nihaya

We had a light lunch our first visit at her father's house; she cooked. She lives nearby, with her husband's father and in-laws. But she eats with her parents-in-law, not sister in law, cuz latter has more kids [5 vs 2 or so]. The fa-in-law pays for them all - but still they eat separate. Both husbands work in Tunis as laborers.

2. Gets up at 7 AM, goes out to harvest [her land] and comes back at noon, cleans house, washes clothes and dishes and cooks lunch for kids and gets water. They have lunch, and in the late afternoon, she gets water again and doesn't get back till late - about 7 PM. Because it's far, and there's little water, eg only one faucet. At night they don't stay up cuz they're tired, and get up early.

3. All summer, we're out [at harvest]. We get very tired at it. We get very tired in summer: we harvest, we wash winter blankets.

spring: we wash wool, with spring water that's salty and dirty. We don't drink it, we just wash wool. Only animals drink it.

fall and winter: It's a little better than summer. We pick prickly pears and eat them and give the animals some. And in winter, we roast the leaves on the fire and cut them up and the animals eat them.

4. Men here are all in the city. It's women who bring the water, and uses it for cleaning and washing. But men, when they come back, they get the water.

Yesterday, the water ran out, and my husband's sister went and got a citerne [500 l, with animal, poss from govt] and came back. The one problem she ran into was that there were lots of people at the sondage. And another problem is that the sondage is far from the house.

5. The quality of water has changed. Before the sondage, we brought it from a well. It was salty, and didn't wash very well.

Who benefits from water more is the person who lives near the sondage/sebbala.

6. The woman has gained a little time, more than before. The time we gained, everyone does something different with it. Those with sheep graze them, and those with land harvest it, and everyone with what they own.

7. Women go out more than before, but it isn't that different. Before and now, the water is the same; since it's not near the house, it's nothing.

8. It's the same [girls study]. Water didn't change things, and it's still far from us, even so, we educate girls.

9. Economic conditions haven't changed; before and now are the same. Water, please god, should be enough to drink. Us now, all our men are in the city. If we got lots of water, they could live by having irrigated crops. And there wouldn't be unemployment or migrants. Our land would even grow saffron, that is, it's very rich soil. But it's lacking - lacking water. If there was water, the land would put out [xeri] gold.

10. The man is everything. Woman's work is only children, or wool, or some other work - she gives her money to the man. When I sell wool, or wheat, I give my husband the money if he's here. If he's not here, I give it to his father, and he buys things.

11. Water is far, almost 2 or 3 km. And it's not sufficient. We bring a citerne and three families use it, mine and my parents-in-law and my sister-in-law.

12. They need to add a sondage and make a nearer faucet [sebbala].

A women's group [aif] is a good idea, but now they've put javel in the reservoir. [eg no reason to tell women]

13. [aic work] distribution of water and collect money every month. I know from what I see.

14. Before the water was free from a well, but now we pay every month. Sometimes, we don't pay our share, and we don't get a drop until we pay. sometimes I sell a chicken to pay for water.

15. It's the girl and her ideas. I'd like her to be a lawyer or anything else good. [has a daughter who is little and hasn't begun school yet]

DOGHRA

General observations:

This site is about 10 minutes south of Kasserine on the Feriana road. Women here go to shops and sometimes the suq themselves, esp those with no male relatives to send, but some others too. This is different from most other places we've seen [the women whose men work away in Ouled Amor go to shops]. Seems more, and older, girls go or went to school too.

Does closeness to city lead to these changes? While the house structures look nice, inside they're often not great, eg are they richer than others? Not obviously or greatly.

Mahbouba Yahyawi, and Al Khamsa and Hnia May 3, 1991 Mon. Zakiya

Three sisters of the sheikh, who live with their mother [who we saw] and grandmother [who was in Kasserine getting medical treatment]. The oldest, Mahbouba, was 4 when her father died, and the youngest wasn't born yet. The Sheikh dresses fancy and is engaged to a woman at CRDA, and seems to take no interest in them. They live in a building divided into two rooms, with a stick shelter in the yard for their few sheep. Mahbouba worked at her weaving as we spoke, and the youngest

sister, Hnia, ended up doing most of the talking. Mehbouba works margoums for people, who buy her the wool and pay for her work. They live on her weaving; the brother gives them nothing.

We asked if the local animatrice de base, Nadia Heyawi, had been to see them before she stopped working 2 yrs ago. She didn't visit them; they said she just talked about many kids, not about water or health.

Their oldest sister is now a grandmother; she married at 12, a year before she had her period [and I think slept with her hu right away].

Of the married sisters, the oldest didn't go to school, one went to first and one to 4th grade; school was far away.

They had land and used to live on the mountain, in the old Doghra; they sold it and moved here. They've lived there 16 or 20 yrs.

2. Mahbouba gets up at 7 and weaves all day; just stops at noon to lunch.

Al Khamsa: sick with cardiac, gets dizzy. Got up at 7:30, had breakfast, picked up dirty clothes and washed them. Went and got grass, came back and went to my sister's house, came back and took the sheep to graze.

Hnia: Up at 8, made breakfast, cleaned rooms, cooked lunch, gathered and washed dishes, washed clothes with sister. We wash clothes daily. In the winter we do too, when it doesn't rain. Tho' usually wash daily, it's rained lots lately, so hadn't washed for 3 days.

Mother: Feeds sheep [grass that was gathered] and harvests grain, on her own land, planted under olive trees. Girls don't help harvest; they don't know how. [saw at other household too].

water: from sebbala, in 50 l bittiy or plastic bottle, Al Khamsa got one a 9 AM yesterday. Sometimes they get 2. Yesterday there were lots of people so it took her about 1/2 hr; if are few it's 10 min.

They wash wool at the "state" majen, where we saw women washing wool, or in the river. The state majen fills with rain water. Blankets they wash at home in the summer. Their olives are only irrigated with rain water.

educn: Mehbuba is 23 or 28, got to start 2nd grade, primary, and left herself when the teacher hit her once. Al Khamsa got to 6th grade primary. Was sick during exams and didn't pass. The next year her younger sister was in the same grade, and the elder didn't like it and quit. Hnia just passed her 6th year of secondary at the top of her class, with 13 of 20 [which Z says is good]. She liked science and math, failed and didn't want to repeat, so went to a private school [for \$, 25 D/mol. Her sister pays, and the school is a Doghra person's, so she may get a discount.]

3. Mahbouba: weaves year-round

Al Khamsa and Hnia:

winter: olives, only women work on their own. If outside men come, women don't. Few men harvest. They pull off olives with fingers, onto something on the ground.

spring: pick grass for animals

summer: harvest, work wool: wash, comb, spin [only Mo and Al K], wash blankets in summer.

wood: Mah. used to get about monthly, but now is afraid to go to mountain because of crazy guy [Eisha's hu] there.

"[kima] Whether gathering grass, or harvesting grain, or olives" it's all women's work.

4. Men build with water, or irrigate crops. They don't go to the sebbala; here it's Eib. Boys get water when small, about upto 10 or 12. With siblings near the same age, the girl brings the water. Here the sexes don't mix, so women even fill 500 l citernes with animals, not men.

At first sondage water cost 1 D, now 1.5, or 2 or 2.5 for people who use lots, and those with lots of animals who drink pay 4-5 D/mo.

5. Before, water was far: Wed Darb, or by citerne from Kasserine. After, did another sondage, but not good; it was very salty, and caused kidney illness. A dr came and did an analysis and said should'nt drink from it. They closed it and made the sebbala we have now. "Now, thank God, the [kidney] illness has decreased." "Before, when we used to bring water from the river [ca 16 yrs before], we brought it with animals. The place was very difficult [steep]. We used to carry the water up the hill, so the donkey could climb up [couldn't make it full]." We used to cut our food portions and feed them to the donkeys, so they'd be strong and able to carry the water all the way up. Because it was far, they only drank it, and used to wash selves and clothes with majen water.

"We've become bilqdaE/very good. Now we have water and electricity and a school nearby, [naEma] thank God now."

"Women benefit more, of course, men have no responsibility for water, men find everything [ready]."

Old and young benefit equally, but the mother benefits most, because she cleans everything.

The poor benefit more, because they used to go far to get water, but the rich buy it, for whatever price. Even if others don't have water, they can buy it.

Sometimes the sondage breaks for 2 mos at a time, and they get water from wells. [free?]

6. We've gained time, and take care of kids with it, weave, work wool. Also wash clothes more, than the once a week previously.

7. Women go out now too, to the sebbala. "For us, our male relatives don't let women go out." "ihalqu fe sebbala"= eg talk, get news. Because it's a small town, they hear all the news, even about fights.

8. Now lots girls go to school, more than before. Before, the mother didn't like girls to go to school because she wanted her to help her at home. She'd help herd sheep, and now fewer people have them, or they hire a herder. And now, that idea is gone.

They had lots of sheep before, now just a few, because they have less - they're lots of work, to graze, and they "ate" them for cash.

9. Economic conditions in general have changed a little. Before, to build you had to wait for rain, and now we can do it whenever, with the sebbala. Before, we didn't mop much, now we do. [I have : For ourselves, we use more water, wash more. Ones with kids benefit, cuz wash them more.]

10. Men spend the money; women give it to him, even if it's theirs. Women don't go to suq. But we buy things ourselves [cuz no men]. Sometimes younger, educated girls go to shops - if there aren't lots of men, which there usually are. Alkhamisa goes to the Kasserine suq usually, for 0.250 bus fare. She went last week. The others are busy with school or weaving.

Mahboubas's last mergoum for people [we saw her working on her own, copying a cross-stitch pattern like a roman vase, with two human figures] was 2.5 by 4 [40 D/mo] meters, and took her about 1-1/2 months to finish. They gave her 60 dinars, plus buying the wool, which was 6-7 kilos for 30-40 D. She gave the money to her mother.

11. The water is a little far, and the plastic barrel [50 l] is very heavy. If they put sebbalas in the house, it would be better. Getting water would take less time, and it could be used for something else.

Hnia got talking about women would like water in t^{eh} house, but men don't listen to them about it [eg women's problem that men not help]. She said [probably] the shik's wife asked for it and he'd just say something like maybe later. And do nothing. [he apparently neglects her in general].

12. People here would easily accept an AIF-type group, because it's local girls. Nadia the health worker was accepted.

Hnia said women could ask for household connections with a written request and several signers; she said if she asked, women would sign. So I said go ahead and

I'll check back next week, and she said she hasn't time - and I suggested maybe she didn't want to. I suggested she could tell her Er the shikh, and she said she hsim-s from him lots.

13. The AIC pays attention to the cleanliness of the sebbala area, and don't let people waste water, and collect money. Before water was free [even with sebbala], now it's 1.5 D/mo. Not let those who don't pay get water, and not wash clothes there. [later] said they let the poor have for free, and locals don't mind, because they know who's poor and who's not.

The sondage hasn't broken for 1-2 years.

14. cost

15. She'd like her daughter to succeed at school, in the math area, and to get a college degree in math. And all the conditions of her life to be good. [Hnia].

Al Khaamsa June 3, 1991 Monday Zakiya

She's the wife of the assess of the sebbala, and has two sons [one other died] who work as day laborers. She has no daughter to help her, and her sons don't - and she doesn't want them to. We found her and her Hu at home, with sort of a double house, one part where her sons stay, and another for her and Hu; we interviewed her on their double bed. [which 2. ~~hotel was made~~, + rest of house merged]

The guard asked why people are asked to pay for mazot, not the gov'm't like before. I said it cost the gov'm't a lot, and he said they'd paid lots to build the sondage. Z added 'just add to that the price of everyone's mazot! Later, I added that the gov'm't wants people to learn to manage things themselves, and it's more efficient, and he agreed with the latter.

He also asked why the water group isn't paid, though he and the pumpist are. I said it had been suggested; I think he said he does most the work because the others don't want to, unpaid.

He said he's worked as guard 13 years [I think as long as the 'new' sebbala has been there], and still isn't official [resmi]. Though he's been asked for info for it.

He said about 80 people pay each month, 1.5 D each, and if not enough pay, they don't buy fuel. They buy it in a 200 l barrel for 63 D [so with 80 paying 1.5 shouldn't run out - tho he said the barrel lasts about 25 days], and rent a car for 8D to get it [so don't buy less, since the car is the same cost]. He showed us a list of 18 people who hadn't paid last month. He goes around to collect, and sometimes people bring money to his house; his wife takes it if he's out, and tells him later and he fills the ticket. She hasn't been to school. Usually men give the money, but sometimes women. I tried to ask if people put pressure on others to pay when \$ runs out and water is off, but didn't seem to get through. [see other interview, official!]

2. [She does all the work herself.]

She got up in the dark, made breakfast for her sons so they could go to work, and "I pick up the scythe and go out to harvest? When I get back, I bring it along, break it with a stick, steam it, spread out to dry." I cooked lunch [kisra and margal]. After, she processed milk in a shikwa [goatskin, with 2 day old goat milk], made dinner [same as before]. TV last night was fuzzy, so we didn't watch. Went to bed about 9, cuz tired. [said us 11 or 12]. I bring water in plastic bottles [20l], with 2 on a donkey, gets 2-4 x a day, cuz animals drink lots. Took about an hour to get [or less?], cuz not full.

3. spring: Pull grass

summer: harvest, wash blankets at home with sebbala water, wash wool, at home with sebbala water, or rain if available

winter: weave blankets, but not klim or mergoum.

fall: wool

4. Men bathe with water, we wash their clothes. Before men used to help us, and now they're embarrassed [because people will see them]. Sons don't get water here, just maybe one pail; she said they respect the women at the sebbala.

5. Have lived here about 4 yrs. Before, lived 6 km. away from this town, (in old Doghral. There was a gov'm't-built majen that filled with rain water, and she'd pull it up with a pail.

Water here is fine, good. We aren't thirsty, and people have gotten cleaner. Now if the water is cut off, we get thirsty. Before we had lots of water, it didn't cut off. The sebbala was just off recently, cuz needed money for fuel. Sometimes it's off for 6-7 days. There are 3 faucets: one at school, one for the principal, and tãh public one.

If off, people with wells nõt want to give, and hard, with animals and all. ^{hu} ^{to drink}

"Men? It's women who benefit. Because men don't care. All they care about is finding water in the house, that's all."

Young and old benefit the same.

Rich and poor are equal, all drink, and all miss it.

6. I gained time with water, and house and electricity, and with it I do something to benefit myself, like clean the house or wash wool. It took about 2 hrs to get water from majen, now about 1/2.

7. She still talks with women, with my relatives, and at sebbala. I go out with the sheep [hu does tool, or to harvest. Said doesn't learn anything from talk, it's "empty".

8. Without daughter, so no idea on girls and education. Then she said there are problems with girls and school, meaning-Z says-that girls think about clothes and boys and not studying.

9. When the sebbala came, thank God, water is ready. [I have:] "We changed and differed aãn became lebas". Had lots of sheep before and sold to build house. [later]House was given to them.

10. Are both responsible for buying things and do. Her hu gives her money and she buys; some things she knows better than him. Sometimes hu and son, sometimes she and son buy. She and sons buy from shops, and sheep, aãh go to Kasserinã suq. Money from sheep she raised is used for the whole family, and they make decisions about buying things together.

11. The water problem is when it's shut off.

12. Told re AIF, as if taught 3-4 girls about javel in water. Said it's a good idea, and all people would accept it. If someone came to teach me something, would I say no?

She can tell hu if has water problems.
Nadia not to her house.

13. AIC duties are collecting money, and fix sebbala if broken, and watch out for sebbala. Knows cuz Hu is guard, on it. If faucet broken, she'll tell hu and he'll fix it. Other women/people would tell him re problems too, cuz it's their water that's wasted. People also pay her the monthly fee.

14. Before water was free, and now 1.5 D/mo. And now it's more, and clean.

Hedia Delhoumi June 3, 1991 Mon. Zakiya

She's the daughter, 18 yrs. Her mother Mbarka and older sister are with her, plus a married older sister with 2 kids was visiting. Are 2 sons working, one a nurse in Sbiba, and one an army sergeant. Have no animals. Seem middle class, with a 2 room house, tape recorder, adolsecent room, 15 video cassetes. Z thinks they're middle class. Are a total of 6 kids, mo and fa in family.

They've lived here about 20 yrs, came because there was a school here and not at the other place [old Doghra?]. Nearly everyone there came, except those with lots of sheep.

Sat in "adolescent room", with pictures incl Madonna on walls and writing in French, Arabic and English [red on pink walls]. Z said it's not normal to write on walls. -maybe son is crazy...

2. H: Up at 10, picked up rooms, had breakfast, mopped rooms [every other day, wipe floors otherwise], washed dishes, washed clothes - sometimes every other day, sometimes daily. They washed for 3 days yest cuz of rain. Had lunch [sometimes she makes, sometimes sil, washed hair. Rested, took in clothes from rain. Ate dinner at 8:15 on makarona, made tea and stayed up talking [TV broken], and went to bed at 11.

Mo: Up at 6:30, washed and prayed, cooked breakfast for hu, made tea and drank. Cut up old clothes for rag rugs. Had lunch, and cut some more. At 3 went to Kasserine to visit someone sick in t^{ah} hosp. Came home, rested a little, had dinner and stayed up.

Bring water 4x a day [2-5x]. H and oldest dau get water in 20 l bottles, one or 2 at a time.

3. summer: harvest, work wool, wash blankets, in house or in river
spring: wash wool, cut grass [all 3 women] for donkeys
winter: pick olives for people [haven't selves], sometimes for \$, sometimes for olives, sometimes for oil. Sometimes for 1/10. Only mother does it, girls don't want to.

fall: Sell hindi; cars come from south and buy them for .500 a basket, can get 2 or 2.5 D/day. Both d^{aus} and mo do sometimes, but leave someone in t^{ah} house.

4. Women work with water, men don't. Her sons never brought water.

5. Sebbala has been here 13 yrs. "We're relieved of bad water now. We were very tired, with water from river with donkeys; now we can even go get it at night." [Before we used to deny ourselves food and give barley to the donkeys.]

Women benefit, naturally, because s^{ah} cleans.

Older ones benefit, because they use water.

Poor benefit more, because the rich could buy water, even if it was far.

6. We gained time, to wash clothes, work wool. Before we mopped once a week, now we do more.. Also before it took about 1 1/2 hours from the river, now it's much faster. Tho' girls sometimes took 2-3 hours at river, played in water and even swam.

7. Now we don't have lots of housework, and when something comes up, we go out. Women still get together, in the house or out.

8. More girls study now. "Women have gotten freedom; not like before."

Her daughters left school on their own; mom said it wasn't her fault.

Of 3 girls there, oldest went to 2nd primary, next to 2nd yr 2dy, last to 5th primary. Middle one left school cuz needed money for board and lacked.

9. When water came, people were happy [feradhu=diversion/matreffal] more than before. Houses are cleaner.

10. It was free till 3 yrs ago. Before it broke a lot. "When we started paying, water was always available."

11. If she has money, she can buy things herself. For ex, her son gives her money; she doesn't own anything to produce it. The sons give her hu \$ separately. She buys melhafa or shoes for herself.

12. The problem is when the faucet is off. The solution is to have enough money [to buy fuel]. Her hu pays, guard comes to house.

13. AIF is an accepted and good idea. Nadia, the animatrice, didn't come here. Her dau said not everyone thinks like mo, and some might not accept AIF.

13. They collect money and care for water/ stop waste.

14. Water was free from well, now is 1.5 D/mo.

15. Wants happiness for daughters, to get a good hu with a job, and well-brought up [mutarebbi].

Eisha Dalhoumi [called El Kehial] June 3, 1991 Mon. Zakiya

She's divorced from a crazy husband, has four kids who she works to support. The kids are 19 [boy, in 4th yr 2dy], 17 [girl, failed 8th primary twice and quit], 13 [male in 6th primary] and 12 [girl in 4th primary, said to be dumb]. She's dau of fasi of previous mother, Mbarka. (E)

2. I get up at 6, washed face, made kisra dough, made coffee, woke up kids, fed them breakfast, they went to school, picked up bedding, cleaned house, mopped, washed clothes, harvested a little barley, broke it up, divided bread, heated outdoor oven, baked bread, made merca, fed kids lunch, steamed barley, spread to dry, made tea, rested a little, made dinner [cous cous], put out kids' bedding, they watched TV and I went to bed at 8 because I was tired.

Girl of 17 helps mother at home. Yesterday brought water late aft. She brings two 20 l bottles at once, 3x a day, in a wheelbarrow. $240 \times 3 = 720 \text{ l/5} = 242 \text{ l/day}$ wash clothes daily. Spend more money on Omo and javel than on food.

3. summer: Harvest, wool work [she buys, no sheep], washes wool at home with sebbala water, and blankets too.

spring: Pull grass for their one donkey to eat in winter.

fall: Sell own hindi, and pick for others. Only her. and weave, knows balnkets, mergoum, rugs, oldest dau knows too, not youngest, maybe cuz spoilt.

winter: bring hteb, only her, with many women. Doesn't work in olives.

4. Men use water for building, but even then women carry the water to them if it's their own house. My son of 19 never goes to the sebbala. Men only bathe.

5. Her here about 11 yrs, and had water before, and now we have lots of water. Before they had water in a big majen, and it stayed full for 5-6 yrs. We put medicine in it - 6 liters of javel. [or 4-5]. The health people put in the javel, they brought it. Even put it in animal troughs.

Women benefit more

Older benefit more, cuz women with water, kids just take off clothes.

Poor benefit more, cuz rich can buy a citerne from wells or the suq; poor hafta beg from people with wells, who say they hafta pay for fuel.

6. Now it's better; water is close and good. Before, even if we were thirsty, we were afraid to drink water, because we'd get dishhrea. And now, water is clean and good, it doesn't do anything [eg make ill]."

7. The time is about the same. My daughter goes to the sebbala and stays there. I have to go get her. she likes to go there and talk because she has no place else to go."

8. Girls study more now. Before the school was far, and besides, they had the idea was born for the house, not for education.

9. Didn't really ask, since she came here ghdbana or mad at her crazy hu, from the other Doghra, and stayed with her Br. Seven years ago she started working at the dispensary to support family.

10. She's responsible for the family. Before she was with her Br, and now I work for myself.

11. "We have no problems" except when the water is cut off. The reason is that people don't pay, or if the sebbala breaks. But not mad at neighbors if don't pay.

12. AIF: It's a good idea and people would accept it; why not? But she's not sure re others. Nadia talked to her, about cleaning and water, and she accepted her, even tho she said she knew about it before.

13. AIC: Their work is to collect money and buy fuel."

14. Before water was free and now it costs, 1.5 D mo

15. I hope for my daughter to be happy, and to marry a man with a job. She'll choose better than dau, who may just think about love. The mo will reject someone the dau loves if the mo doesn't like him.

Appendix D

Site Selection and Sites Chosen

APPENDIX D

Site selection and sites chosen

Site selection was based on the need to include several important variations, including:

whether there is a new water point or not (Since an important goal is to see the effects of the new water points, but we lack baseline data, nearby areas with and without a water point were chosen in each governorate. This will provide a facsimile of longitudinal observation at this point, and since the two areas without water are programmed to receive water soon, there will exist baseline data to facilitate future research.)

the availability or unavailability of alternate water sources besides the new water point(s); if there are none, participation in the new organization should be better

the relative age of the new water point; it may take people a while to adjust

the organizational strength of the AIC

whether water is used for drinking only, or also for irrigation

the subsistence base: dryland or irrigated agriculture, herding, or wage labor

whether the settlement pattern is agglomerated or dispersed

whether there has been a women's water group (AIF) at the site or not

whether an animatrice de base or village health worker (VHW) has worked in the area, teaching women about water purification

whether there is a school at the site which has or lacks a connection to water

Although the sample is not large enough to test each of these variables for statistical significance, careful examination of the data should indicate the effects of each, or of a combination (eg irrigated agriculture is associated with a certain subsistence base and settlement pattern).

Based on these characteristics, the following sites were chosen:

Lajred, in Haidra Delegation

Lajred is in an area of low mountains about 70 km northwest of Kasserine, quite near the Algerian border. The water point is relatively old, with the pump installed in 1985, and the water is used just for drinking, not irrigation - though because of a bad taste [sulfur or iron], people don't like it. Because of the mountains, springs provide an alternate source of water, which have been used quite a bit because people did not like the taste of the water at first. The AIC administration is relatively weak. Settlement is quite grouped, and the basic economic activity used to be mining of various metals and stone. The mine has been closed for several years [since 1977] but there is talk that it may reopen; in the meantime the main source of income seems to be migration to jobs in other cities, though many former miners get small pensions. There is a school, but it is not connected to the water supply. Finally, an important criteria for selection was the presence of a strong AIF group and also an animatrice de base or village health worker, both of whom talked to women about proper use of water.

Ouled Hamd in Feriana Delegation

Ouled Hamd is about 40 km. southwest of Kasserine, in an area without alternative sources of water. The site had neither an AIF women's group or an animatrice de base. Their water supply is recent, since September 1989, and their AIC functions well. Water is used for drinking and a little irrigation. People live mainly on irrigated agriculture and a few import things from nearby Algeria. The settlement is somewhat grouped, but less than Lajred. There is a primary school which is connected to the water supply. In this area, people store water in a traditional majel, a covered cistern sunk in the ground.

Drebliya in Feriana Delegation

This site was chosen especially to compare with Ouled Hamed, since it is about 4 km away and does not yet have a water supply but is programmed for one soon, perhaps by the end of 1991. Thus there is not yet an AIC, and no AIF or animatrice de base. They also lack alternate water sources, and now get water from Ouled Hamd or a spring or well in the mountains. The houses are somewhat grouped, and people live by dryland farming and herding.

Doghra in Kasserine South Delegation

Doghra is about 10 km southwest of Kasserine, and has two water points, one for irrigation (it's too "salty"/calcareous to drink) and another that should be just for drinking but is used to irrigate too, especially fruit trees. Some people also have herds, or jobs in nearby Kasserine. There is no village health worker or AIF women's water group, but there

is an infirmary, and a school with a water connection. Housing is grouped, and surface wells provide an alternate source of water. The AIC is quite strong, and there has been a deep well nearby since 1940, although Doghra has been served since . There have been problems too, with the nearby community of Fej Buhseen using the same deep well, and people disputing about if each group was paying it's proper share of operation and maintenance costs. This has been partially resolved by uniting the two AICs, with three members of the administrative council coming from each group.

Ouled Ali Ben Salem in El Ala Delegation (Kairouan)

About 100 km (as the crow flies) northeast of Kasserine, this rather dispersed settlement is the only site which has household water connections - recently, and for about six families. Over a hundred families have asked for them, but a study needs to be done to see if there is enough water and water pressure for that many connections, since the water system was designed for about 7 taps. In addition, there are some meters for irrigation water, at a lower rate to encourage economic development. There is also an AIF at this site, begun in Oct. 1990, with wives of the local AIC group belonging. From their comments during our visit, it appears they have mainly made mergoums with the looms Mr. Hajji provided, and have not done much health or water education.

Ouled Amer in Hajeb el Aïoun Delegation (Kairouan)

Located about 80 km northeast of Kasserine, this site was chosen for comparison with Ouled Ali Ben Salem above because here they do not yet have a water point. The houses are grouped near the Kasserine-Kairouan road, and in addition there is a small commercial center with a cafe, grocery store and butcher, plus a nearby building where women are said to weave. The man who owns the commercial site is eager for water (which he now buys by the cistern), and has helped organize a pre-AIC. People here are poorer than at the previous site, and many work as day laborers in Tunis.

Appendix E

Photographs of Rural Women and Water Work



Even the young help



Women washing and
collecting water



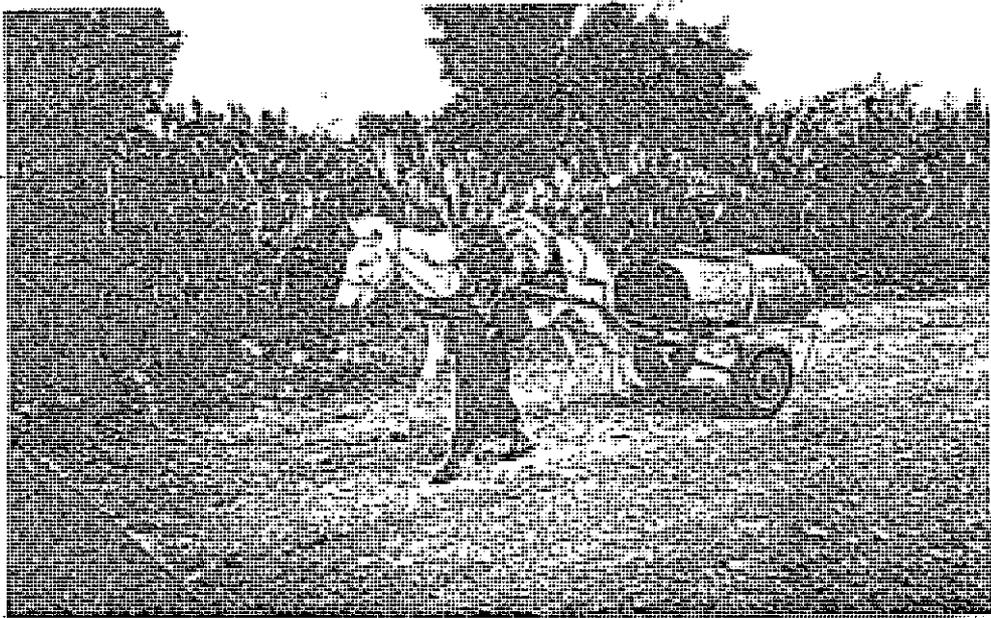
Girls collecting water
in 50 liter barrel
(hose used for filling)



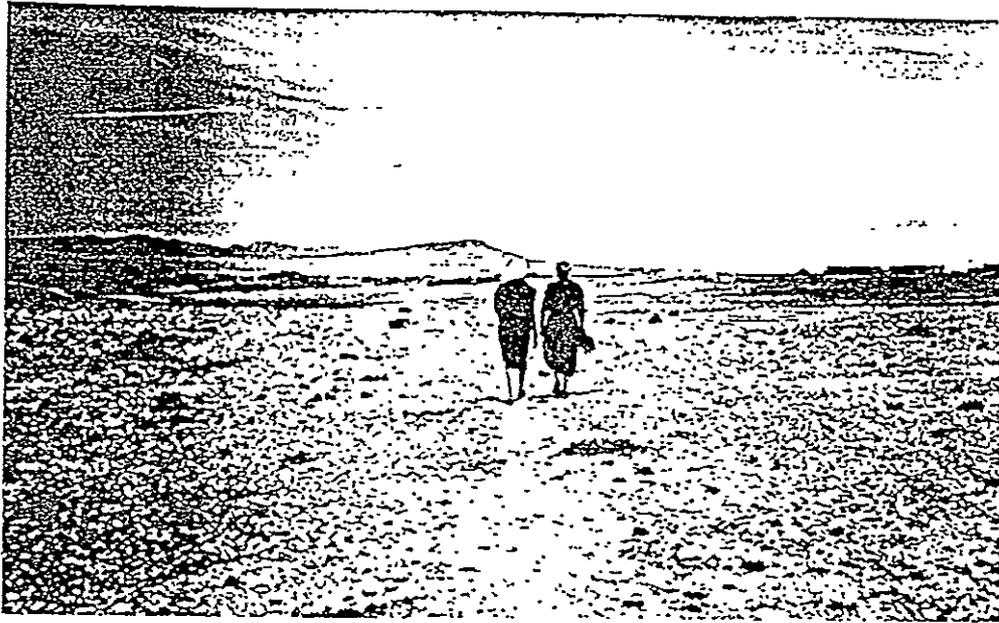
Rural family



Route to distant well



Animal-drawn water tank



Walking to distant well



Raising water from *majen* or cistern



Rural woman

Appendix F

**Information Sheet
and Application Form for
Trickle-up Coordinator**

ROLE OF THE TUP COORDINATOR

The Trickle Up Program is designed to reach people who are commonly by-passed by traditional development programs. Through the establishment of income-generating activities, TUP seeks to involve such groups as young people who have never had a job; women--many of whom have never earned money for the work they do; and people who are generally overlooked when development plans are made. TUP is based on respect for the ability of women and men to think, plan, and work together, and on the assumption that people have something important to contribute through their knowledge, their experience, their skills, and their unemployed or underemployed time.

The TUP Proposition expresses the essence of the TUP process. It states that if groups of five or more people wish to invest 1,000 or more hours of their unemployed time, they may apply for a Trickle Up Program Grant of US\$100, to be paid in two \$50 installments, for a profitmaking enterprise:

- 1) that they have planned themselves;
- 2) for which they have or can secure any necessary approvals or resources;
- 3) where the 1,000 hours of self-employment can be completed within 3 months;
- 4) where a profit is anticipated;
- 5) where not less than 20% of the profit will be reinvested;
- 6) where continuing and expanding levels of self-employment are anticipated; and
- 7) for which they will send reports on their enterprise and results to TUP.

We are often asked, "What IS this money? Is it a loan? Is it a handout to the poor?" The answer is a resounding NO to these questions.

It isn't a loan, because TUP does not ask to be paid back, at least not in monetary terms. And it isn't a handout, because something IS expected in return: a minimum investment of 1,000 hours of labor by the people who will receive the money, a minimum of 20% of their profits reinvested for expansion of the business, and the entrepreneurs' knowledge and skills.

"If it isn't a loan, and it isn't a handout, what is it?" The first \$50 check seals the agreement of the group to start a business together, work out a plan, and give themselves a name, recognizing that together they will have a greater chance of success in pulling themselves out of poverty. Each one's skills will be used, and they will learn from one another.

By putting \$100 into a small business, we believe we can do much more than simply alleviate hunger, important though that is. The TUP program aims to change peoples' lives by giving them pride in their own accomplishments, hope for the future, and a knowledge that they don't have to depend on handouts. They can depend on themselves.

As a TUP Coordinator, what will my duties be?

The term "Coordinator" is used to refer to employees of development organizations who become the intermediaries for TUP businesses. Coordinators are volunteers; they are not paid by TUP. They, or the field people they designate, provide information about TUP; identify and assist TUP businesses; approve Business Plans; deliver TUP grant checks; certify Business Reports; and correspond with TUP in New York.

TUP's principles and procedures are thoroughly explained in the TUP Guidelines. The Guidelines give step-by-step instructions on completing the Business Plan and Report, procedures for cashing TUP checks, and helpful hints in assisting businesses. Ways of becoming more involved in intensifying TUP's impact are also explained. **It is essential that the Coordinator read and fully understand the TUP Guidelines before identifying groups.**

Coordinators commonly find that TUP is a means of advancing the work of their own organizations. TUP is one of the resources they use to help motivate people to engage in income-producing and capital-creating activities, often in connection with the community development programs of their own organizations. In fact, the TUP process is often most effective when combined with the existing poverty-alleviation initiatives of their organizations, such as improved health care, literacy programs, water and agricultural projects, etc.

A person wishing to become a Coordinator is asked to complete and send the "Trickle Up Volunteer Coordinator Application," describing the person's agency, and telling TUP about themselves and the communities in which they will identify entrepreneurs.

Coordinators encourage people to do their own thinking and planning, and do not do the thinking and planning for them. They may, however, be very helpful in aiding a group to complete its Business Plan and its Business Report--the two, one-page forms which help entrepreneurs acquire business skills and which enable TUP to keep track of the businesses started, the results reported, and what happens to people's lives. Guidelines are provided to help Coordinators assist the new business groups with the two forms.

Coordinators are issued the initial \$50 checks in advance, and are expected to use them with extreme care. Coordinators may not issue any check to a group before receiving and approving a fully completed Business Plan from the group. Furthermore, Coordinators may only approve Plans for which they have checks on hand. The approved and funded Business Plan is then sent to the Trickle Up Program headquarters in New York.

The second form, the Business Report form, is completed by the business group, usually with the help of the Coordinator, when the group has met the conditions of the grant and is eligible for the final payment. Even when a group is not eligible for the final payment, they are asked to complete the Business Report and send it to TUP, so that we may track the success rate of the enterprises.

When Business Reports are received at TUP headquarters, they are reviewed, and --where appropriate--final payments of \$50 each are sent to the Coordinators to be issued to the groups. No further payments are given to any one group, and group members may only be involved in one TUP business.

It is because of the dedicated work of more than 2,700 Coordinators in 86 countries, in combination with the skills and work of the entrepreneurs, that the Trickle Up Program has succeeded in establishing over 15,000 enterprises.

TRICKLE UP VOLUNTEER COORDINATOR APPLICATION

Date _____

Name _____ Gender _____ Age _____

Home Address _____

Home Telephone _____ Nationality _____

1. Name of the agency you work for _____
 Address of agency _____
 Telephone number _____ Fax number _____ Telex _____
2. a) Purpose of agency _____

 b) Agency's experience with micro-enterprise or other development _____

3. Type of Agency: Governmental, Non-Governmental, Inter-Governmental, Other? _____
4. Geographic coverage: Nationwide, Regional, Local, Other _____
5. When was it founded? _____ 5. Number of workers: paid _____ volunteer _____
6. Names, titles, and addresses of principal officers:

7. Is your agency registered with the government? _____ If so, with what office? _____
 On what date was it registered? _____
 Registration number? _____
8. If your agency can provide assistance to the groups in addition to the TUP grant, (e.g. training or other assistance) please describe: _____

9. Briefly describe your education, training, and experience. _____

10. What is your position and what are your responsibilities? _____

11. Describe your work with low-income, unemployed and underemployed people and explain how your work as a TUP Coordinator relates to 2a) and b). _____

12. Why do you want to be a Trickle Up Coordinator? _____

13. How did you learn about Trickle Up? _____
14. Do you know any Trickle Up Coordinators? If so, who? _____

- 15. How long have you lived in your present location? _____
- 16. How long will you be able to work as a TUP coordinator there? _____
- 17. Do you have photocopy or microcomputer facilities at your disposal? _____

18. *The following information is requested for each community in which you intend to start Trickle Up businesses. If you plan to operate in more than one area, please provide the information for each area (use separate sheets if necessary).*

a) Indicate the geographic area(s) where you plan to start businesses:

Village/Town	Municipality/District	Region/Province
b) Is this area rural or urban? _____	c) Number of households _____	d) Estimated population _____
e) Size of area (in sq. miles or kilometers) _____		
f) Main language or dialect _____		
g) Area's main source(s) of income or employment (e.g. an industry, natural resource, crafts) _____		

h) Identify international and indigenous non-governmental organizations in the area involved in development _____

i) Identify the groups you will be working with in starting TUP businesses, e.g., subsistence-level farmers, groups of women, unemployed or underemployed workers. Please be specific. _____

j) How will you identify these groups? _____

k) Estimate their per capita monthly income _____

l) What are some of the social, economic, or environmental problems in the target area? _____

m) How might TUP businesses help make a difference 1) in the lives of the entrepreneurs and 2) in the community? _____

19. References (Please include address) _____

20. I hereby apply to become a volunteer Coordinator for the Trickle Up Program. I understand that the Trickle Up Program will not pay me for my services or for any of my expenses.

signature

date

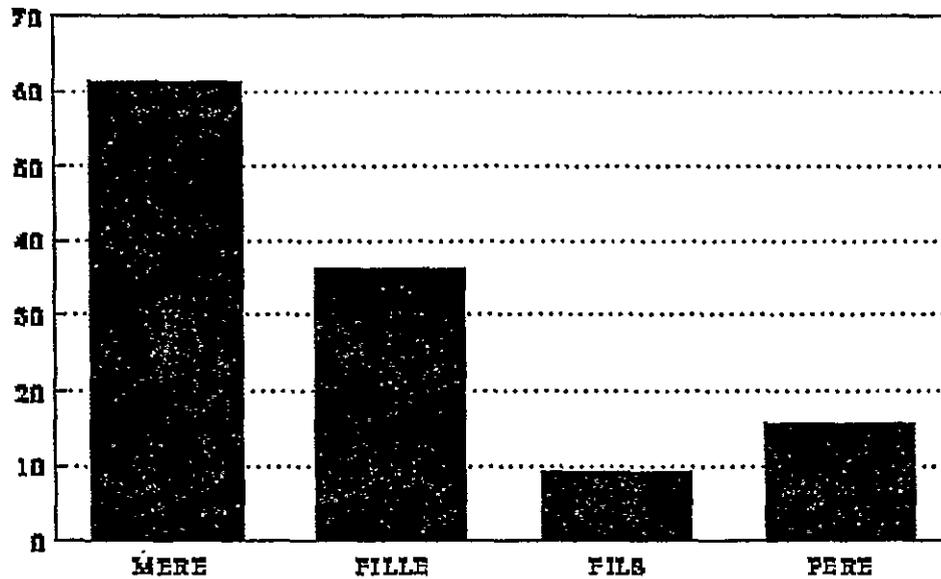
**RETURN THIS APPLICATION TO:
 TRICKLE UP PROGRAM
 54 RIVERSIDE DRIVE, PHE
 NEW YORK, N.Y. 10024-6509
 USA**

Appendix G

Graphs

graph 1

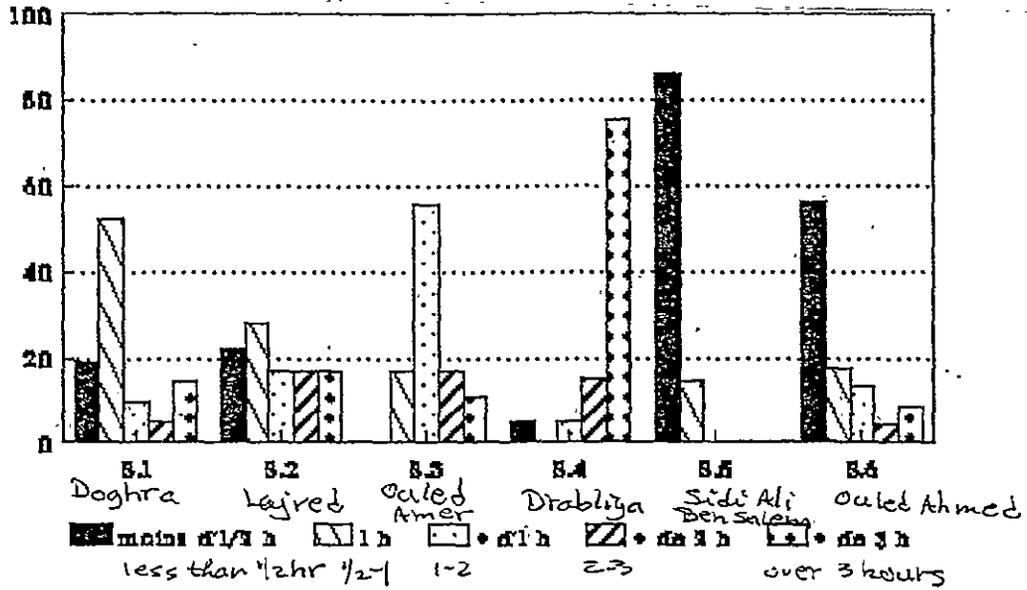
QUI PUISE L'EAU ? ZONES RURALES KASSERINE/KAIROUAN



C.R.S JUNIN 1991

Graph 2

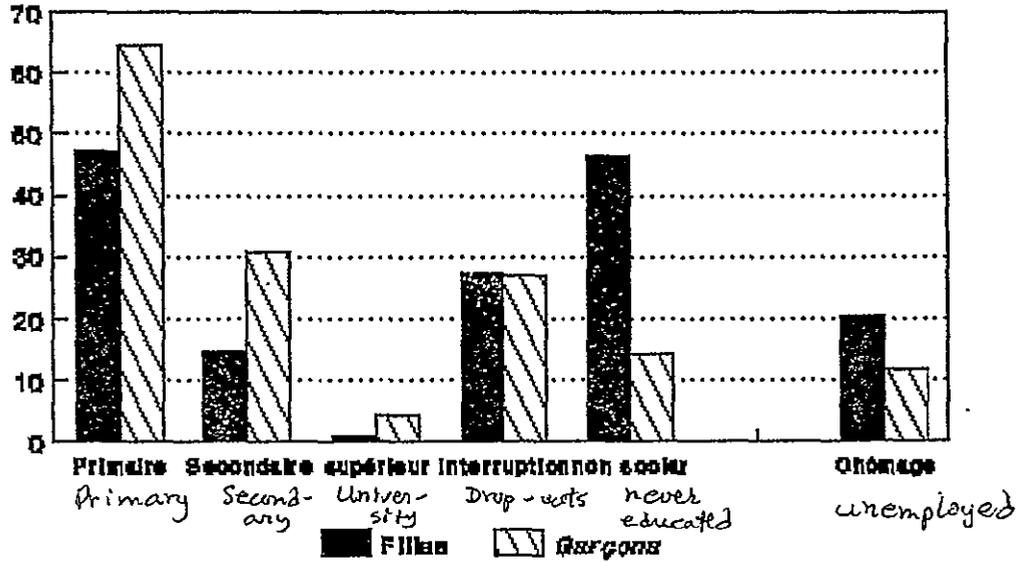
Temps passé pour puiser l'eau Par site



C.P.S Juin 1971

Graph 3

Zones rurales de Kasserine Scolarisation des enfants



OPS Juin 1991

tunqual2

OULED AHMED

Zina May 27, 1991 Monday Nihaya [1st text] and Zakiya
Her husband's father is the pumpist. This was our first "qualitative" and both girls did it, as training - and thus we have just 3 for this group. Her hu drives his own little truck, privately; he's partners with someone.

Zfakiya: They're middleclass.

2. She gets up at 6 AM, washes her face, hands and feet, cooks coffee, washes her kids' faces and changes their clothes. The men get up afterward and go out to work. She picks up and cleans the rooms, cooks bread, cooks lunch, then combs wool. She spins wool, and the mo-in-law pulls wool apart [tenshif]. The men come for lunch, and after lunch the women work wool more. In the Eashiya [4-7 = def], about 5, she puts out the blankets before it gets dark [because they, among all the vills, don't have electricity]. They had makaruna for lunch and couscous for dinner. Zina always cooks.

The hu of Tunis, the pumpist, he goes to work in the AM, and gives water to people who want it from the potence; if none there, he sits. He comes back at noon for lunch, and goes back to work.

Sisters of Zina's hu: The youngest is 11, oldest is 17. They work on irrigated land, sometimes with their mother [Tunis] and father. They hoe the earth [ihemmerul], and make borders of earth to plant ful and other vegetables [eg to hold irrigation water andn to separate]. They don't only work the land; they do housework too. When she gets married, she stops working on the land. The youngest said she likes to work on the land, but not in the house. [Said she gets bored in the house, and more work in the house; it's more relaxed outside].

How used water yest? washed clothes, mopped floors and washed dishes. [N noticed that they were all clean, so probably bathe daily; Zina helps bathe the girls, eg sis in laws]

Z: Up at 6:15-30, washed face and hands, then made breakfast for students and workers. Cleaned up the house and picked up. Then I washed dishes, then made bread dough, washed clothes, then sat a little and spun wool, and after made lunch. Fed the men first, then returned to wool. Put out bedding, and washed dishes to cook dinner. Since we don't have elec, we put out bedding early, about 6, and cook dinner early. AM makarona, noon kisra, eve couscous.

They work on irrigated ag. The oldest girl is 17 and the youngest 11. The mo-in-law worked with us before got sick [skin]. The girls go with their dad to the land near the sondage. Their work is to hoe around the trees or make plots/borders [for diff crops]. The girls work on their own schedule, work and come home when get tired. Girls work on land more than in house. When a girl gets married, she stays home. She works in her house and with her kids [darha w sgharha] andn doesn't go anywhere. Girls prefer working in ag to housework because there's lots of housework.

With water, we do laundry every day.

11 yr girl: "I know how to do all tē country work: land, wool, housework, everything."

3. summer: harvest wheat, wash blankets in gsaE in house, using water from majen or citerne. They irrigate fruit trees, they weave. Z: "Each season has its work. In summer we harvest, wash blankets; in summer we work with water a lot."

winter: Use rain water for animals to drink and to irrigate land. Sometimes they drink it, if sondage is broken. Z: gather wood, and gather rain water to wash with.

fall: plow land Z: weave wool

spring: wash wool Z: we clean grass, and wash wool

Z: If water is far away, the man brings it; if it's near, the woman brings it.

4. The woman washes wool, dishes and clothing. The man washes his extremities and irrigates land. When water runs out [in majen], they wash it with javel, let it dry and re-fill it.

Z: My uncle, my hufa, is the pompist. He goes early, we make him brft, comes home at noon, finds luch ready, or soemtimes we take it to him. Big men harvest with us [women], and boys today, no.

The man drinks and washes, that's all. And he irrigates and works in ag. When water runs out, the man goes to the tractor to bring us water. Everytime water runs out, we wash teh majen with javel, and then put in the new water.

5. Before this sondage, they brought water from a further sondage [poss from PPI] or from a faraway well. Was lots of work, wore them out. Had to get animals ready, etc, and go very far, and added to all that, had to pull water up from well in buckets...they got very tired.

Our whole family benefited from water [new], but the rich benefit more [eg than them, tho well off]. Because they have animals, lots, and they drink lots of water. And lots of land to irrigate.

Z: The water from the sondage is better. Women don't go to hte hammam; they wash at home.

The rich benefit more, they use more water because they have lots of sheep and cows and land.

6. I gained a lot of time, and use it to work on the land [Tunis]. The woman gained time, and the man lost money.

Z: Water now is better than before. Before, the whole day you went for water, but now water is close. The time we use to work in ag, or wool. It's the woman who gained time, and the man lost money.

7. The man goes out more, because he gets water and works on teh land. Also the woman goes out to work the land.

Z: Now women don't go out to work, except in ag.

8. The age of my daughters [Tunis] is past the age of school. My hu went to the sheik to enroll them, but he didn't want to, because the girl was too old. [girls were too old by the time they built a school -? ouled H small one or bigger at Garat NaEmf]

Z: Now lots of girls go to school. Doesn't knyow why.

9. Tunis: Our economic condition is just the same; it didn't change. [N saw that the hu became a pumpist and they irrigated land, and did irrig trees after sondage - so they did get more comfortable ecic'ly].

Z: T: It's the man who works at the sondage. Before the state paid him, now they cut him off, to be paid by the AIC. They don't have \$. He's workign without money.

10. The woman has no responsibility with her hu. Her work is at home, on the land, and to care for the kids, that's all.

Z: It's the man who buys things. Even if the man is in teh city or abroad, her nearest male relative will buy things. With wool, we make blankets for ourselves, not to sell.

11. She has no problem at all with water. "We'd like pipes for irrigation."

The woman only works with her hu and children. When they hire [ikriuw] men to work the land, the woman doesn't work the land then.

In 1989 we hired men to work the land, the first time we did irrigation. The men made holes for trees; each was 1400 mm [1.4 D].

Our problem is related to money, eg economic. The solution is that they need to give us pipes for irrigation.

Z: Women have no problem with water. It's the man who deals with it [serref]. Women work outside, unless someone [male] not from the family is there.

Z: When we have money, we hire a worker/s; women don't go. He digs holes [for trees], each for 1.400D.

Our problem is irrigation, and electricity. The solution is for them to make underground irrigation pipes and connect us to the electricity. By God, even if one buys a refrig or TV or anything good that works with electricity, we put it away and then sell it."

12. They don't accept the idea of an AIF because "we know everything" [about javel], and men don't like their daughters to go out.

Z: Our kids are educated; we know everythign"
'g.u!

13. Don't know at all about AIC [Tunis] "I don't enter into the work of men, so they won't say about me that I've gone crazy." [N and I both think that the women may know about it, but it's not "proper" to say so. For example, Tunis is an older woman, not shy, and her hu is the pumpist, and they wash the citerne with javel - who told them that? Her comment that people will say she's crazy shows, N says, that she's afraid of kiam an-nas or what people will say.]

Z: We don't enter into men's business. I don't know what they do.

14. With the well, water was free. With the far sondage, it cost 4-5 D for big citerne, but now 5-6 D. [S said it seemed a lot, since they're just near the sondage there isn't much mazot used, but it turns out that the citerne guy also irrigates the trees one by one - with another man's help - so uses fuel and time that way.]

Z: Before, the well was free. Now the sondage costs money - and thank God!"

Zina May 27, 1991 Monday Nihaya

Very poor, house behind one with dog that scared us.

2. Gets up at 7, and she and hu both go out to harvest. At noon, they come back and have lunch. [N: asked who makes lunch, and there's her sidau who cooks lunch and picks up house, and makes bread in tajine and tea and sends to them in fields for breakfast. She doesn't go to school.] Rest after lunch [N said - seems not complete]

3. summer: wash blankets and wool and clothes. Wash clothes daily, more than other seasons. Women only go out in spring and summer.
fall: work land, hoe it.

4. Women use water more than men, because she washes and cleans house.

When water runs out and my husband isn't here [he sometimes works abroad], she asks the tractor man to bring water - and he's some kind of relative [? xal rajelhal. And when she doesn't have money, the Hajj gives her on credit. "If the Hajj got mad at us, it would be a problem. Because of that, we always try not to make him mad. Because he's the richest one in the Earsh or tribal fraction. If he got mad at us, he wouldn't keep giving us credit to get water." [N asked and they said sometimes they don't pay at all, so they like him lots. He's rais shEouba -or poll party presdt]

5. Befoer the sodage, got water from faraway well, or the other sondage, far from us. The problem was that people who irrigated at the far sondage wouldn't let us fill up/ take water.

"The one who benefits more from water is the one who owns more [land, animals etc]"

"Imagine, there are those who irrigate 35 hours, and each hour costs 5.250! But who has a little irrigates a little, for 1-2 hours." [N eg those who are rich benefit more]

6. "Before the new water point, we stayed thirsty until a tractor came from Feriana. But now, the tractor goes in 5 min to get us water and returns."

4

"We gained time, but don't do anything at all with it, because even wool, we don't work it. We don't have money to buy it. If we get 10 or 5 D, we chose to buy smid or bread, they're better than an other thing. We're not like rich psople; we dont' have lots of work."

7. With the new water, people could irrigate. Because of that, women go out more than men, because she works on the land. But the man works abroad or helps her on the land. But the woman's work is more tiring because seh works in teh house and on teh land.

8. "We don't educate girls, because if she had gone to school, she wouldn't accept [to marry] our men [from here, country]. However/even, there are families who let their girls go to school more than before. And the reason is that the school is nearer, more than before."

9. "When they made the new water point, our condition progressed a lot. Even those without land started to work for those who have it. And the whole village improved [tehesenet]."

10. The problme is that water is expensive. What men earn from working, they use to buy water. And another problem is that the lejna [AIC] don't do their work exactly/ they're negligent. They use the water on their land, and us, they don't give it to.

Hu: The problem is that the AIC group is all from the rich or the middle class. But the poor doesn't get into the group [council], and they don't elect the poor one [itEarfush bih].

11. Before water was expensive, for 10 D a citerne. But it lasted longer. Now a citerne is 5 D, but with irrigation, we use it up in a short time.

[prblem with #s fix]

15. The mother wants her daughter to be an engineer. the father wants her to be a doctor or a minister responsible for women.

Hu: N asked what he owned. "I own my wife and my kids and six chicks." [N: he laughs as he says, but is true.] N asked if shix comes to see. He said he comes once or twice in 6 mos.

but the party pres [Hajj] helps the poor and always gives us water on credit.

N asked re work, he said "If there's work in Egypt or Morocco, men go work abroad. But if there's none, the man stays home, and the woman works on teh land. Sometimes he helps her a little."

Reem May 27, 1991 Monday Zakiya

Chosen as poor household. Hu does not work but two sons do sometimes; she supports them by processing wool and weaving tent strips [flijj] that a merchant comes and buys from her weekly for about 27-30 D. She buys 3 dzaz or sheep's worth [at 2.5 D each] of wool and 3 1/2 k goat hair [at 3.5 D each] for each one, so total cost is 12.725 D. She sold one last Fri and asked if I'd buy one. Her dau Halima is married into the rich Hajj's family; both Z and Towfik said rich/poor differences don't matter in the country - it's whether you're a good person. The mother is from Oum Ali, and sent Halima to primary school for 2 years, but the neighbors laughed at her and she took her out. The little girl of 5 spins wool just like her mom. Are 11 in hhld.

2. Got up early, warmed water, washed dishes, washed kids' faces, cooked kisra and marga. Had breakfast. I had a little wool and I dyed it [black]. Went and gathered firewood, made kisra and made lunch marga, washed clothes [daily] -part, and left some cuz ran out of soap. I had some barley drying on the roof, went up and got it, brought it in, put them away, and now I'm sitting spinning wool. I work

5
wool to make flij and sell them. A small one is 26 D and a big one is 30. Then put out bedding, cooked dinner.

Yest: In the AM I harvested mermez, brought it home and broke it, steamed it, and put it out to dry. We have TV, but we don't watch it because we're too tired.

Son of 11: We don't watch TV because our little brother makes lots of noise and we can't hear.

R: After dinner, we go to bed right away. We can't watch TV; we only watch in Ramadan.

I do laundry daily, unless I don't have soap.

3. summer: If there's lots of grain, we harvest it; if not, work wool and sell it. In summer we irrigate trees, they have small ones. In summer, we use more water: we drink more and wash more and clean more and wash blankets [in house]. Usually in su take clothes and blankets to Feriana and wash in the sagia [irrigation ditch] of the govmt, and they don't say anything. Because they want lots of money at teh sondage. [eg extra to wash at sondage - .300 for each sheep's worth]. Bathe every week or two, old women sometimes once a month. *Later, henter told 2. it's 1D for any suit & wash 2. sondage.*
spring: Cut grass, sometimes for us, sometimes we sell it. And wool we wash leave it.

fall and winter: Full halfa and sell; halfa lasts 5-6 mos.

4. Teh man irrigates trees or bathes with it. A man has the tractor to bring water. Sometimes he doesn't bring it right away, and I have to use some of the neighbors'. We get water with credit, and have no problem with it.

5. The thing that changed, water was 6000, now it's 4000 or less. [I have 8 to 5 D]

11 yr: We young like to play in the water, and before it wasn't very available, and it was expensive. Now it's available, and cheap.

R: All people have benefitted. Water is close, we can wash and clean everything.

"Rich use more water. They have lots of animals, and lots of trees, and lots of houses. and the poor, what do they have but their faith in God [ken wejh rebbi, iman]."

6. Used to spend more time getting water, when young, elsewhere, got water with women, on her back. But had fun with women.

"Now, I've saved time. With it, I do some housework. I work wool, or something else."

7. Before, we went to get water, we talked and really discussed things, and now I don't go anywhere at all."

Before, there was trust between a man and a woman. She could go wherever she wanted. but now there isn't thiga, and people are afraid of each other. Because people will "laugh at"/talk about us.

8. Girls in education have become many, more than before. I, for example, am going to put this little girl [age 5, spins], and I don't care about people. At first, with Halima, people made me make a mistake. they said "she'll sudy with boys" She'll turn out bad. And everyone laughed at/talked about because I sent my daughter to school. They said "No girls study except yours?"

9. Since the sondage, the economic level has changed a little. They planted trees, and they got cleaner which improved their health. [I have water a little cheaper.]

10. I don't have any responsibility. The money that I sell for, I give to my husband. the man is everything. From flij, she keeps out money to buy more wool [Z says he buys it], gives him the rest. With alfa, both work, hu is paid.]

11. There's no problem with water.

12. AIF: She'd accept the idea of educ girls telling re javel, it's good, but other people here wouldn't accept it. Who'd let their daughter go from village to village? 6

13. AIC: She doesn't know them. "I only know that water comes to the house [ie with citerne].

14. Water was 8 D, now for 5D [vs told Z 6 to 4]. [poss re far and near sondage]

LAJRED

While there we saw the delegue in the aft, talking to people, hearing their complaints. He told them the water had been tested and wouldn't make them ill, but he recognized that it tasted bad and/or made rotten egg burps, and said for that they're bringing in new water, from the Kohl sondage. Said didn't know just when; another day Z said maybe not till late 91, and a maintenance guy at the AIC pres. mtg on 6/8 said it would be silly to replace/fix? the old pump for lots of \$ if they're putting in different water.

No one drinks the sondage water, which has been off for 2 mos with a broken part/pump that noone comes to fix in any case. All get drinking water from what they call a "well" but is really water coming out of a pipe in a ravine, so is more like a spring. Z said it was salty, but it didn't taste that way to me. The families across the ravine (from the "main" Lajred) that we spoke to seem to use that water for everything, even washing, since the sondage is a little far away.

This was also the day when it rained, people said we could stay over, we found the Haidra river full, and the delegue drove us across after his little R4 [?] did it first.

Note: most remarks in [] on Zakiya's interviews were comments I added later from my notes.

Malika May 28, 1991 Tuesday Zakiya

Middle class family, with 2 girls at home, and a son in France, one son in Tunis, and two married daughters in cities. Have color TV, video. Have lived there 21 years, are originally from Tbagha near Haidra and still have land and irrigated crops there. We spoke to the eldest dau who has brown eyes. Her sister-Hafsiya is three years younger and has blue eyes. The mo Al Alia has blue eyes and likes to laugh, and the fa only worked in the mines 8 years, and hasn't gotten sick like so many others. Z asked why not live at Tabaga, and they said it's better here, with electricity, and people are better; we've gotten used to them.

Neither girl went to school [now in 20s]; they didn't live here [but Tbagha?]. Said "ras merbot" about uneducated girls.

2. Up at 8, made coffee, prepared kisra dough, washed dishes, mopped rooms, cleaned kitchen, washed clothes [every other day], came back and made bread into loaves, gathered wood, heated oven, cooked kisra, made marga [peas], put out lunch and all ate, went and got a bottle of water [25 l], came back at hot time and slept a little. At 5 made dinner [makarona and saucel], had dinner, watched a film on video, and went to bed.

We don't have lots of work; we don't have animals, so we don't pick grass like other people.

Mo El Ealia: From the morning, I work on wool to make blankets for my daughters [saw her in side room as arrived]. They buy the wool, and don't sell the blankets.

Malika: I learned to make mergoums, and rugs, and embroidery and sewing, everything at the "factory". There was a factory here 1981-1983. [sounds more like a nadi, where girls learned weaving, crochet and embroidery. It lasted only two years, something about there was a good director [male form], but then he left and it seemed to fall apart, or girls quit or something.] I just recently finished a margoum and now I'll rest a few days and start again. [I think said don't sell, but keep like for trousseau.] [? like Morocco, where also say don't sell, but serves as form of savings if in need.]

3. summer: We go to our land in Tbagā and harvest and come back here. We have a house there, and stay in it when we harvest. [Malika and Fa stay in Lajrēd.] In the summer, my siblings come from the cities, and sa and br from France and stay with us.

winter: If we have wool, we weave. If we don't have money to buy it, we stay and don't do anything. [They buy dyed wool, about 5-8 kilos at a time. The mother buys, not the girls. A big mergoum takes about 4 kilos [Naima said 12 in Alī Ben Salem, but is diff't style.] One kilo costs 4.200 D, so that's 16.800 for a mergoum, and Z said they sell at the Kass. suq for about 40 D.]

spring and fall: Don't do anything unless they have wool to work. Keep bees, mo and fa do, but just takes a few minutes to smoke them out and get the honey.

4. "The man...the well belongs to women. Men don't go to it. And we laugh at a man who does women's work. If we buy water, the man pays. [don't irrigatē] The woman has the responsibility.

We go get water at midnight [in summer] so we don't run into lots of people. In spite of that, we find more than ten people. [Sometimes stay two hours waiting turn; sometimes in summer there are people at the "well" 24 hrs a day.] We have a spring called Ain Kebrit [sulfur]. If someone has itching [hekka; scabies, I think; is also ringworm, and they don't differentiate too finely in derja], they can bathe in it and rest. [I think this family uses the kebrit water for housecleaning too, since it's near and not too crowded.] If we had another sondage it would be good - and sweet [eg drinkable].

5. They made another older one [sondagel] near it before, [it was good water and people drank from it] but it ran out of water [when did present one]. And the new one is salty [eg tastes like sulfur. People don't get sick, but burps taste like eggs and they don't drink it.] The sondage is far from us. Other people cook with it and wash with it, but don't drink from it; they drink from the well.

[If water can settle in reservoir, it's better, but comes out from the well yellow.]

"Everyone benefits from water: we all drink, we all wash, and we all eat=cook."

Water benefits rich and poor the same.

Women benefit more...men only drink and bathe.

6. The women who live near the sondage, they gain lots of time. The sebbala is near, and has a powerful flow, so they can fill [containers] quickly [vs "well"]; they can clean and wash quickly. But us, it's far from us.

Girls and women gain time. In it, they [can] work wool, weave, embroider, maybe study [but no concrete exs].

7. With new water, women don't go out a lot. The sebbala is near, in front of the house, she goes and gets back quickly. [some women like it, some not.]

For us, it's the same as before; we only go out for water. When we went to the factory, we used to get wood. Yesterday we went out at 8 AM and got back at 10 AM. I brought wood on my back [hizma]. Every 15 days we get wood [from the nearby mtn.]

8. The percentage of girls getting educated has gotten to be high. Now everyone has electricity, and gas, and water nearby. [Said fehemmu - now they understand? It's now OK for 1 girl to help her mo and the others to go to school.]

9. Our economic condition hasn't changed; it's like before. We're not doing anything with it [sondagel water]. [Nor are their neighbors who use it.]

[Yet at Tbagā, where they have land and there is a new sondage, people plant and irrigate vegs like tomatoes, peppers and parsley. They plant trees, too, and thus see a change there with water, but not here since people don't irrigate.]

10. Mo: "If I have money, I don't give it to my husband. I keep it to buy something for myself, or wool, or something for the house." [She doesn't go to buy food, just wool, and young married women don't go at all.]

[Previously mo said if she favored a hu for her daus and her hu not, her view would prevail.]

~~Women work wool and sell it. If the man runs out of money, she gives it to him. If he has some, she gives him none, and buys something for herself.~~

"Electricity is better than water. Even if water is far, we can go get it, but we can't do that with electricity. And we like the tape recorder and TV, and they need elec."

11. "Aren't there any water problems? Ah - water is a big problem. Women fight over water. Everyone has her turn. Sometimes in the summer, we stay there from morning until 3 PM. Once a little rain fell, and we went to get water, and there were lots of people. We left our bottles at the spring, and the water came carried them all away...[re] once a kid peed in someone's bottle as it waited in line; seems they put the bottles in order to mark turns - sounds innately moer organized than Morocco.] Sometimes little kids play with the caps, and they fall off and get carried off in the stream.

The solution? If there's lots of water. [with a new sondage; the current one isn't good, and costs \$.]

12. AIF: When Denise was here, she worked with them, they had meetings and talked about water and water problems, and how to use javel in water, and AIF projects. They used to work, and go see women. But when Denise left, they stopped working.

Those two girls went to a meeting once and stopped. Their mother said not to go; they'd gain nothing from it, it was volunteer, there was no money.

I asked about the chicken project, and they said it was going well, people were eating eggs, and profiting. Others said the chickens all died.

[At the first AIF meeting, they said Denise and Atika talked about water, they saw the "well", and that there was no solution. After I asked, they said they were told about javel.]

13. AIC: I don't know anything at all about them.

[I have 'don't know if good or bad; don't knkow their job.']

14. Water before was free, and now people buy it. [They've never bought it, cuz not nearby.]

15. When I have a daughter, I'd like to educate her, and her to work and live very well, to live better than me, to live in the city, to rest from the work in the country. [I have she'd like her to live in the city, not here, and "I'd like her to live better than me" and "teshedd blasa", eg get a job."]

JimaE bent' Salah May 28, 1991 Tuesday Zakiya

Widow, lives with one son, has four more married sons, one poor and one middle class [color TV, no blankets, insisted we do questionnaire]. Son with her works in construction sometimes. They got 4 goats on some project, and 2 died. Someone else got 15 twice, which the apparently well-off son told us heatedly: [In general, at several points noted how men butt in and take over the conversation, are quite vehement [a style?], and don't seem conscious of interrupting.]

2. Up before 8, picked up bedding, cleaned house, washed dishes, cooked breakfast [couscous], went to see my 4 married sons, took son [middle class] to dr in Foussana. Went at 9, rtd at 1. Wehn I got back I cooked lunch and rested. Tehn cooked dinner and we watched TV [her without]. At 4 I went to get 2 pails of water, each 10 l. I stayed at the well an hour [tl trip]

"I swear to God. Even at the Eid, I buy one kilo of meat, I'm not like other people. They slaughter; me, I swear to God, I don't know slaughtering."

3. spring: pull grass if has animals, wash wool, pulls wool apart, [milk animals. She has 2 goats with her dau.]

summer: harvest grain, for 1/10 for others, [on foot]

fall: works wool [no olives or fruit to harvest]

winter: get firewood, carries on back. Is always forbidden, but don't get caught in the winter]

In summer we use lots of water; we wash and bathe lots, and wash our covers. [use about twice as much]

Don't cook or drink from sebbala; do bathe in it

4. Men just wash and drink, that's all.

Her son of 25: "I bring water, I bring 2 pails [from the "well"] because my mother had an operation and I want to help her."

5. [there's much less work [eg closer, tho^{ab} been off for 3 mos]

There's a difference between the rich and teh poor. The poor has no sheep, he has no land, and he has not lots of rooms. And the rich has lots of rooms, lots of sheep."

[women have profited more because they carry water

The rich use more, for their animals. The poor, if they have no money, don't get water.]

6. Who's near water [sebbala] benefits a lot; they benefit a lot of water and a lot of time. In the time saved, we work on something in/for the house. [like wash dishes, cook, put out bedding]

7. Women went out more before. I like to get back quickly, I don't like to waste time [eg in talk]. "The well is the one place where several women meet [and they still do]. And we meet meet at the dispensary."

8. MOre girls go to school than before. It isn't the same now as before.

9. Our condition hasn't changed. [They don't work with the water.]

10. Before her dau married, they worked blankets and sold together and the dau had/kept the \$. Now sick, and does't weave. If I had money from selling something, it stays with me, I spend it [hu dead].

[She's planning to make a blanket for her single son, in his mid-20s. Her dau used to go to the "factory", where each got 6D/mo plus oil, flour, cheese, etc.]

11. "Water - there's a problem at teh sondage, when the water is cut off. With us and water, there's a big crisis [asma']. the solution is to fix the sondage, bring the parts. The guard is responsible."

12.AIF: "Girls came, with sheets [fiche de suivi - Miriam and Safia came]. They came twice. They talked about cleanliness. [said Miraim mentagha didn't speak well, politely] wasn't good. She didn't know how to clean better than me. [Her house isn't that clean.] Atika is good. She speaks well, and she shows us gradually.

[I start with Denise brought food, and some educated girls went to Kasserine to learn about the fiche de suivi. She said they came to see about cleanliness and dishes. She didn't let her dau go to the AIF. It's stopped now.]

[Said Atika asks a lot, and "den wek lhaja", I think tells you what to do. Said maybe a gir's parents wouldn't like her to be one. People said they had a good murshda, Atika, so don't need other ones.]

13. AIC: One is the guard, and the other collects money. And I always pay, even if I have to borrow. They collect money, and watch kids so they don't mess up the water, and they wash the reservior with javel and put javel in it.

[2 come for the \$, and sometimes the guard pays for her cuz she doesn't have it]

14. Before we didn't buy water, now we pay a dinar [monthly - used to be .500.]

15. She hopes her sons would study and succeed [but they failed at school].

Thleyja [I think the name is from snow] May 28, 1991 Nihaya

2. She (the mother) got up at 5 AM and went with her divorced daughter and her own husband to the fields to get grass for the animals. She returned about 11 AM.

Fuzia, her daughter of about 20, stayed at home to wash dishes and laundry and make lunch. 70

At noon, they all ate together. They all took a short rest, and then Thlejiya combed wool. The divorced daughter got water from the "well" [eg pipe by the river]. Fuzia is the only one who knows how to iron her brothers clothes [electric iron], and also is the one who cleans the house and washes dishes, and makes flat bread in a clay dish over the fire.

Other women's work includes:

Sometimes the mother and oldest daughter go to the mountain to get firewood about 3 PM and get back around 6. And sometimes, esp in summer, they go about 5 AM and get back about noon. Last time they went was day before yesterday; they go about every other day. It's very tiring, esp during winter.

3. In the winter, they work wool and weave blankets, floor covers or men's cloaks. Plus the regular housework. In summer, they wash blankets and wool clothing and harvest grain. Women also go to fields and out grass to keep to feed animals in the winter. In spring, they buy wool, wash it and prepare it to weave the next winter. In fall, there isn't special work.

4. It's the woman who goes to the well to carry water, but the man stays home or does some other work. The man uses water, but doesn't work to provide it. She got water today about 9 AM and at noon; she goes to the well whenever the water runs out. Each time she gets a 20 l plastic bottle. The problem today was that there were lots of people at the "well", and each waits for a turn.

5. "The one thing we really lack is water connected to the house"

"Ash khass ken idexluna al ma' l-ddar"

Everyone uses the water in the same way, except two families. They have majen at home and buy water to fill them in cisterns, or fill them with rain water. (eg, they're better off than the others, with money to make majens and buy water.)

6. no answer, since don't use new sondage; use well. (I think on the ^{side of} ravine)

7. (who goes out more, before or now?) Men go out more than women now. Girls here only go out to do something specific. Men go out whenever they want. Girls can't go see her friends, or go to the suq. She only goes out to get water or cut grass/fodder.

8. A large percent of girls start school now, because of a change in the way people think from before. You can't say the percent of girls who are educated has changed, because before even boys didn't go to school - just rarely...

"xalli Ead el Tefla" "let alone a girl!". She thinks this is because of the long distance between the house and the school. "For example, I started school like my brother." She left school because she didn't pass, and got engaged the same year. She could have repeated the year, but didn't want to since she got engaged.

Besides that, she had a big problem. In their customs, a pretty girl is married just to her paternal cousin, and she was pretty. So her cousin wanted to marry her, but she didn't like him, and defied the whole family by refusing. Instead, another guy asked for her hand, she liked him and accepted him. But after she'd turned down the cousin, her chosen one dropped her. People said it served her right, for defying her family. Her family stopped talking to her. She still isn't married (Fuzia).

9. Economic life has changed because her brother has a job as a primary teacher. She didn't mention an effect of the water point.

10. "The father and the grandfather are the ones who buy things, but the woman has no economic responsibility [lmra ma Eandhash hetta mesuliya iqtisadiya] in the family."

11. Water problems are that there isn't enough water, and also, it's hard to get to, down a steep hill. Yesterday the neighbor's daughter fell and nearly broke her

leg. The problem won't get solved unless they bring in piped water from Kohl, which they've been talking about.

12. It's necessary that the water be connected to the houses. The AIF was a very good project, and they should have encouraged them. She didn't know at all about the AIC. She was in the AIF and quit, because she's the only one who worked at home; eg not enough time. She wasn't in it long.

Mabruka May 28, 1991 Nihaya

A widow, the poorest woman in Lajred; her daughter Safia? is/was secretary of AIF. Also, we took her picture getting water.

2. She gets up between 7 and 8. Her daughter washed dishes and cleans the house. The mother goes to get water, and firewood, the daughter cooks lunch. In the afternoon, the mother gets water again [in 25 l bidon]. In the evening her daughter starts to put out bedding, because they don't have electricity. Just after dinner they go to bed, because have no TV to watch.

3. spring: She washes wool if she has it; if not, washes for richer people who have it, for money. They wash at the kebrit spring, because people don't drink there.

summer: If people have grain they harvest it; we who don't, we harvest for 1/10.

4. I have a sick son, he has an allergy to water. Because of that, I'm the one responsible to bring water. [her son works in the city, and sends no money. 'He's a laborer in construction, and sometimes works and sometimes doesn't, esp when his hands get wet. Her neighbor told N as she left that Safia and her sister were registered by the mom as "children of Bourgiba", eg the state pays for their education, food, and even covers.] The mother is responsible for getting water; the daughter uses it.

5. We'd like them to make a new water source with new water because it's really hard to carry water from the "well" [a pipe, down a steep hill].

All the residents benefit the same from water. Partly because there's no irrigation, and also cuz there's just a little water, not enough to have projects [ag].

6. The well isn't very far from the sondage, that is, the time difference between them isn't much.

7. From my point of view, my husband's dead and my son is in the city. So I'm the only one responsible for work outside the house.

8. Now it's the same, that is, the percent of girls who go to school hasn't changed much. For example, all my girls went to school. I have a daughter who's in high school in Kasserine, and the other got to 6th year secondary in agriculture. She found a job with the weather bureau [in the mts] but her mother didn't let her go, because all the rest working there were men.

9. Our economic condition hasn't changed, before or now, because the water from the sondage isn't good to drink. And more, it's always broken. [N asked how she lived, and she said "serf l-Hana' w el ghelba" of the misery and the beaten ones.] The woman is the responsible one, because her hu is dead.

10. Our problem is that the water is far away, and it's place isn't good. [eg steep hill]

11. The work of the women's group is better. One result is they put javel in the water [probly at home]

12. doesn't know any thing about the AIC

Jamila (Habara) bent Ali Derbali May 29, 1991 Zakiya

Five live in the household: Jamila [about 20], her mother and father, and two younger brothers. She had on a red sweater last time. Her mother had 11 pregnancies, and only four survived. There's a married daughter at Ouled Ahmed named Reem; we think she's one we interviewed the other day, the mother of the young bride Halima married into the "big" family.^A And she said she was from elsewhere, and sent Halima to school for two years before local pressure made her stop.

2. She always gets up before 6 AM. "I washed my face, cooked breakfast [shakchouka and kesra-flat], prepared the other kesra bread [yeast], picked up the covers, picked up the house, swept, and went out to harvest [green barley - used in soup, as mermiz]. I came back at noon, made the dough into several round loaves, got some firewood to light the outdoor oven. I cooked the bread (kisra), and sat and spun wool. Then I went back and harvested in the afternoon. In the late afternoon [ayshia, about 6], I came home, swept the house, and after I cooked dinner, put out the blankets. After that we had dinner [couscous] and went to bed. We don't stay up late because we don't have TV." They go to bed about 8 PM.

"My mother is old; she doesn't work in the house. It's me who does everything. I work wool for us. [? literal] I buy it to make blankets for us, to cover up with." The mother did help her harvest.

She last washed clothes 3 days ago; since there aren't real little kids, they don't need to do it too often.

Jamila buys 5-6 duzzas of wool a year, to make blankets for the family; they aren't sold. She has no loom, but borrows from the neighbors. She's wanted to make a rug for 3 years, but hasn't had the money for the wool. Said she knows how to do rugs and mergoums, but later said she'd never done either.

3. Summer: harvest, weave, work in grains [idersu], wash blankets [I don't have latter in my notes]. Sometimes help others harvest and thresh, and get 1/10 [Eashur]. Wash covers in summer with rain water. If have none, don't wash them.

fall: Is more water, they pull up halfa. "We moved there [whole family] and lived in the mountains near Feriana.

Her brother was in school to second grade, but we took him out because we didn't have money to buy school supplies.

In halfa, men and women do the same work, and we sell it to the factory. The season is October to March.

winter: "We go out and gather firewood at 8 PM and get back the next day at 5PM. The mountain is very far from here. We spend the night there, under the trees." A group of women goes, with one or two men. They go about every 3 days. They also pull halfa in winter.

spring: "It's wool season and grass-cutting season." Wash wool, comb it and spin it. They cut grass from mountains. Sometimes, if need money, they sell the grass. [Use grass for their donkeys, which carry water, halfa to the collection site, and firewood.]

"Yesterday it rained, we collected the water, and now we're drinking it." Usually, go to the mountain spring daily to get water, but didn't go today because of rain water. Usually takes animal and gets two bidos.

4. "Men don't do anything at all with water: they only drink it." She's the only one who gets water from the spring; her brothers are too small. "I go to the spring after I cook breakfast and get back at noon." She goes to the spring with a group of women, and just takes one of her brothers [even the little one, about 12] if she's alone.

5. If they had water, they'd plant trees: almonds and pistachios. And we'd wash [clothes and selves] a lot. We'd get lots of sheep [fa said latter].

benefit: man would because it's men who work in farming. "If we got water, we women would be careful of it, because waste isn't good."

Older people would benefit more, because they understand better, because they understand its value, they work to get it.

Rich would benefit more, because they have more land and sheep and houses [to clean]. "The poor only have their clothes."

6. Women would gain time, and in it she could work on something else: "wash clothes, cook, do housework."

7. Women would still go out, to harvest, cut grass. Admitted she might get to see women less to talk on way to spring, but said that's OK, talk isn't useful. She'd rather have water close.

8. "before, girls didn't go to school, now a few do." Only a few, because the school is very far away -[ca 5 km].

9. "Water - we now spend 7000 [7 D] a week for a citerne. If we get the new water, it would be almost free [at 1-2 d mol]." [I have they get a citerne sometimes, if they have the \$.] If we got water, we'd use it for everything: trees, sheep...naturally, it would change." Man said amount of activity depended on how much water got: with a lot would do sheep and trees, if not, just drink it.

10. "The man is the responsible one. For a woman, even if her husband was away or dead, she'd give the money to other men to buy for her." [sons, brother]. If a woman sells something, she gives her husband the money.

11. "The problem with water is that there are so many people, and that it's so far away. There isn't any solution. The one solution is for there to be lots of water."

12. An AIF would be a good idea. "If someone came to work with us, would we tell them no?" [I have if it's good for the citizens they'd accept it, if not, not.]

13. Women don't know re Awled Ahmed AIC, men do.

14. Water now costs 7 D for 3500 l citerne.

15. re dau - embarrassed in front of father.

Bornia bent Brahim Derbali May 29, 1991 Zakiya
Are 10 in family

2. "I got up early, before the sun came up. I have a little girl of two months; I changed her and bound her, swept the house, and made couscous for breakfast." [asked why] "I fed the children, and picked up the clothes and the bedding." "I made the couscous so we could have it for breakfast, and find it ready for lunch when we get back from harvesting grain. And afterward I took the scythe and went to the school [eg dispensary]. I got a shot [she's sick, didn't say with what], and went right back to harvest [9:30-11]. I got back home about one. Now I'm going to "shell" the mermez, and boil it over a wood fire, and let it dry [in the sun]. And afterward I came and swept the house and fed the chickens. I cook dinner, put out the bedding, because we don't have electricity. We have dinner and go to bed; we don't have TV.

3. summer: harvest grain
spring: cut grass, and buy wool if have money, to make blankets.
winter: bring firewood
fall: work in halfa. Leave little kids alone, with girl about 6-7, and older daughter and her and hu go to halfa.

4. [wash blankets?] "Blankets?! I rarely wash them. A citerne is 7000, and if God just provides enough for the children..." Said she hadn't washed them for two

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years. If we don't have enough water, we don't wash clothes. "If we don't have money, we bring water with [excuse me] animals from the spring." If there are lots of people, she sometimes leaves at 8 AM and gets back at sunset. Also, if the tractor guy doesn't have/come with water, she goes to the spring. Her husband tells him to bring it, not her. She only asks her husband to get water if she knows he has the money [eg, no problem with him saying can't afford it]. If her husband works, they have money for water, if not, they don't; eg, it isn't different by seasons. He works in construction [mrumma], and is away 1-2 months at a time, and she has no money. He's sick, so sometimes doesn't work. [do you mop with water?] "Water - we don't mop at all. It's not there." "A man doesn't work with water at all; the woman does it all."

5. "If we get water, I'd always wash clothes, and bathe the kids, and mop the floors." [now wash clothes every 3-7 days]

Profit? Older would benefit, because with water nearer, they wouldn't get so tired.

The woman would benefit, because she brings it. "I'm the responsible one; he doesn't have anything to benefit [eg cuz not responsible]."

"The poor would benefit, because they don't have money to buy water, but for the rich, even if it's far, he has money to bring it."

6. With time saved, would buy wool and weave - she doesn't now.

7. Women would go out less cuz not so far, but she'd prefer new water, even if there isn't another place that women gather and talk.

8. Girls study more now; there wasn't a school before. But her daughters don't study because they don't have money [for supplies]. She'd like to educate them.

9. If had water, she'd plant trees, and thinks her economic condition would change.

10. Even if she has money, if her husband isn't there, she gives money to male relatives to buy for her. Uses her own money to buy food for kids.

11. "There's no water problem; the problem is, there's no water...even if I get tired/exhausted [taEb], what can I do? It's necessary to get tired out, because the children need the water."

13. She hears about the male water group, but doesn't know them. She hears the Awled Ahmed have trees...they have everything.

12. Thinks the AIF [we explained] is a good idea, but not sure if her husband would let the daughter do it "I don't have anything to say about it."

14. At first, said "They'd work..like me, like them. We Arabs are in the house." Later I hope for good things for them. I'd like education, but it's not available. I hope that they'll have nice houses, well furnished, and that they will be happy."

Naema bent LEazuz [we all had lunch later] May 29, 1991 Nihaya

She has three sons, 5 and under, with the oldest apparently retarded. Her husband works in Libya. Lives in her own house, with about 4 rooms around a courtyard, and part being built. N asked to use the toilet and wash shown to the stable. Most local houses are in rock.

2. She gets up at 6 AM, feeds and dresses the kids and takes them to her mother's. She goes out to harvest grain and comes back at noon to cook lunch. "I have a handicapped son. I go out to the fields and think about him, that when I get home, they'll say he died." She gets the kids from their grandmother's, feeds them lunch and takes them back, and goes back to harvesting. "Sometimes, their grandmother gets tired of them, so she ties him up [the retarded one] and leaves him alone in the house."

3. Summer: harvest grain, and combs wool.

winter: "I go to the mountains [for firewood] in the morning and only get back about three in the afternoon...After I get back, I wash clothes and hte dishes and clean up and cook lunch."

spring: "In spring, we don't have anything to do, because we're poor. If we had sheep, we'd have some work. We'd work wool or take them out to graze."

fall: If we have wool, we weave. If without, cut up old clothes and make floor covers.

4. Women use water more because she mops and washes [clothes and dishes] and cleans house. But the man, just buys the water. for me, I buy water when I have money, because my husband is in Libya.

"The water in the majen is perhaps older than two weeks. And a scorpion fell into it. But what can I do? I don't have money to buy other water."

"When the water ran out once, I drank my mother-in-law's water for a month, because I had no money."

"Us, we're holding onto/back poverty, so it doesn't 'catch' [as in contagious] other people."

5. They used to get water from the mountain spring, but now get it by citerne from the new sondage. The water from the mountain was better [probly taste], but the water with a citerne is less work. Because at the mountain, when we go, we stay the whole day to bring 20 liters. Us here, noone knows our condition. The sheik, only collects his monthly check. But we here, are suffering. We hope they gave us a sondage nearby.

In Drebliya, noone benefits from water because we're all poor; we only have one person with a tractor adn he only brings for himself, and we have conflicts with him. Because he won't give us credit. sometimes the tractor guys agree not to sell us water except for 6 d, after it was 5 D. And we all got together and told the sheik. They sent us a tractor from the baladiya [feriana?] for 4 D. But it broke and they sent us another tractor with a Hamdi [ouled hamed], a citerne for 5 D.

6. "the woman gained more time than before, and spent more money than time." The time we gained we use keeping house.

7. Women before, when we brought water from the mountain, went out more than now, because now we bring water in a cisterne.

8. The percentage of illiterate and educated hasn't changed, because the school is far away. Oh brother, a woman sends her daughter at 5 AM and she comes back at 5 PM, that's not reasonable.

9. Economic conditions have changed; ours have decreased because water costs money.

10. I'm the one who's responsible for my kids, because my husband is abroad. Sometimes he sends me money, if he works, and sometimes I get credit from the shops.

11. The problem of water is a problem with money, because water is expensive for us. "If I bring water, I only decrease money for my children's food, and this problem won't be solved unless we remove the sheik we have and put in another one to talk about our rights."

Here, all of us are related, and we trust our husbands. We work together, women and men.

The problem I have is more than other women, because my husband is abroad. If my husband was here, I wouldn't work harvesting and leave my children alone. And especially the retarded/handicapped one that I haven't been able to get medical treatment. Sometimes we have a Dr's appointment, and I don't have money to rent a car to go. Then I'm pregnant and I go from Drebliya to Feriana on foot to go to the doctor.

12. The solution is it's necessary for them to make us a sondage, esp in this tribe. It should be near to us, so we don't need to buy a citerne for 5000 and we need it [for something else].

13. Doesn't know about AIC at all - they don't have one.

14. The price of water is very, very expensive. A citerne lasts 15 days, and if it rains, we drink from it, because it's free.

Oum El Khir May 29, 1991 Wed. Nihaya

Family that slaughtered a sheep for us the first time, and where at least three don't hear well, and one son is retarded. It's a big household, and probably the best off in Drabliya, eg about middle.

2. The whole family gets up at the same time, before sunrise. She and two daughters go to harvest, and her humo stays home, because she's old; she spins wool. Oom's hu goes out before sunrise to graze the sheep and all come back about noon. The women cook lunch and put in front of her hu. [at lunchtime, they rush around: one cooks lunch, one brings water to wash, another puts it down, and one stands beside him as he eats, in case he needs something - N saw it]. After lunch, he goes out with the sheep again, and the women go back to harvesting.

3. spring: She works and washes wool. Use water from rain or that brought from the mountain spring.

summer: harvest season

fall: pull halfa [go live there ?]

winter: go to the mountains late afternoon to get hteb, firewood. They spend the night there, and gather and return the next day. They sleep under trees. [probably man along]

4. It's the woman who washes and cooks. Our water ran out last Tuesday [eg 1 wk and 1 day]. The problem we have is that the whole "tribe" [village] has only one tractor [eg one rich guy with one], and people are always asking for water. Because of that, he comes late, and doesn't bring water fast. We stayed thirsty for 5 days.

5. We'd like water nearby to relieve ourselves of buying water.

The one who benefits most from water is the man with a tractor, and also who has a big family.

6. I gained time more than before. Before a woman used to pass the whole day in the mountains to bring water. But now, water is expensive, 5000 millimes - sometimes we buy it twice or three times a week. Before the sondage, the woman spent her whole day getting water. When she returned at the end of the day, sometimes her hu would come home hungry from the suq and not find lunch, he'd hit her. The time we've gained we use to work wool more than before, because now we have time to rest. But before, we worked night and day.

[brother speaks] "By God, yesterday I called the tractor guy to bring water, but he didn't want to see me. We were 5 days without water. Sometimes we stay without water."

7. There aren't a lot of changes from before to now. Before women went out to get water, now she goes out to harvest, to get wood, and to cut halfa.

8. The school is far away. There's no one who would want their daughter to go to school, and stay all day [fel xela'] elsewhere/outside. And also in winter, we move to the halfa fields and we don't have anywhere to leave the kids - that's why we haven't put them in school.

9. Water is the same now and before, but before it was a little better before, because we didn't pay for it, but now we buy it for 10 D.

10. The woman doesn't get money at all; it's the man who buys things.

11. Water is expensive, and not enough for us. And this problem hasn't been solved yet, and won't get solved unless they make a sondage nearby.

12. The solution I suggest is to make us a sondage.

[N said she didn't understand the rest]

QUALITATIVE INTERVIEWSOULED ALI BEN SALEMHabiba and Traki May 31, 1991 Zakiya

Two sisters married to two brothers, and were paternal cousins. The richest family there; one worked in France and now gets retirement \$ from there, and the other has a shop in El Ala nearby. Traki's Hu was in France, and they had only one daughter. Habiba has 4 sons. One got his bac and works in a bank in Haffouz, another is surveillant in lycee in Kair and is married to Traki's dau. Another is a hairdresser, and another got to 6th industrial and works with dad in shop. Are 7 in house now, 9 altog.

They have running water in the house, with a personal counter, and had before, piped in from their own well pump.

2. Habiba:

Up at 7, made breakfast, men ate and left, she ate, cleaned the earth in front of the house, went in and organized and cleaned the rooms, put lunch on to cook, [merga and bought bread...usually cook kiswa, rarely buy - just if ill or rainy]. son came from shop, brought bread and took lunch at shop. Retired guy had lunch, then we [women] ate, took cow to drink at sebbala - it's easier for me, rather than carrying water to her. Slept a little, then cooked couscous for dinner. We stayed up watching TV and drank tea, the boys went and bathed, mopped up the bathroom, went to bed.

Does laundry daily.

Traki:

Up before si, about 6:30, washed dishes [other always cooks], prepared bread dough [other says bought - probably re day we visited, cuz did cook kiswa, give us some], put into loaves, picked up her own room and mopped lightly. Washed dishes after lunch [re yest], and washed clothes. Didn't go out, bed 8-10.

3. summer: harvest, if have it. For wool, hire women to weave, later. Wash blankets at home, did first with well.

spring: cut grass for cow, spin etc wool, hire others to weave [blankets?]

fall: wash wool and comb

winter: have olives, pay others with oil or \$ to pick; they don't.

4. With water they irrigate trees and vegs for selves, wash, clean, mop. Man sometimes irrigates potatoes. "It's the woman who gets tired. The man brings water? [of course not]. It's the woman who gets tired and who goes back and forth getting water."

5. "Everything has changed." Cleaning has increased, and we don't get tired any more. It's been 3 mos since we got a faucet from the sondage. Used to go out, plus in past had faucet from pump, but broke down lots and stopped using it. The Hu with the shop had the idea to put a faucet in the house.

"With a faucet in teh house, we've [women] gained. We irrigate [?] with it, we clean with it, it's nearby. We like to have a faucet in teh house."

The poor has benefitted [more]. It's near, he can irrigate tomatoes or trees with it, or have a small [veg] garden.

6. "We've gained time. It's near to us. We used to go to teh outside faucet for 30-40 min round trip [5-7x day]. With that time now we can keep house, do laundry, light mop the floor.

7. Now women don't go out [eg self]. We don't have anywhere to go. With water in teh house, where would we go? We used to like to get water, because we'd see lots of women. Now, if something happens [to discuss], women come here to the house. People don't ask me for water.

8. Girls go to school more now. Before, parents didn't value education for girls, but now they know its value. Only two girls here went to school in past, now "barsha". Traki's dau got to 6th industrial, studied sewing; doesn't work now. 19

9. Economic sit'n not changed [own], [but planted apricots and vgs/potatoes]. For people, not change for rich or poor, but people have gotten much cleaner than before.

10. Traki: "If I have money, I buy myself. I go to my daughter's in Kair. and buy myself. I buy gold. The money is from by brothers, who inherited from their father."

Women don't go to the suq, even if hu is away. Only the widow with div'd dau that N saw goes to suq, cuz no male reins.

11. "We don't have problems, praise God. The water in teh house doesn't get cut off." It doesn't cost much, from .700-2 D/mo so far. It may be 5 D next time, I think cuz irrigated.

don't know re AIC; have faucet in house. Only knows pompist [was with us].

12. Don't know AIF

13. see above

14. Before water was a dinar a month, and now sometimes it's more, sometimes it's less, depending on what we use. WE use lots, we wash lots, adn mop always, and bathe. For us, we had a sebbala before, but now it's better. Before it was from our well, and it used lots of money, and it would break and be cut off, but not now. We've had this faucet in teh house for 12 yrs. And before we had any water in teh house, we brought water in jarre or big clay jars or with a pail, and pulled it up from the well with a rope. After we put in teh faucet, I rested from all that work [LaEb].

15. not asked; dau grown up

Miriam Selmi May 31, 1991 Zakiya

From the household of the "AIF" family in town. On the survey N spoke to his in-law Mesaouda, who she said knew nothing; since they live in the same household [they eat together] and work together, we decided it's OK to ask Miriam. I thought she was smart the first time we met, since she said they couldn't fill out ^{AIF} "follow up sheets" to show us without training - eg, got herself off the hook neatly. The two women are married to brothers; the more attractive one is Miriam's hu and they have four sons. I think he's secretary general of the AIC. The pumpist is married to Mesaouda, who's pregnant with the first. The men's dad and mom are in the same house, but the mom was off with another son whose Moroccan wife had 'just' had a baby. ^{h.s. tch} ^{spring tch.}

They both weave, using their own looms and not those of the AIF, which are wood vs their metal; 4 AIF ones are lying in the courtyard, with the metal parts rusting. Either one of them sells blankets or mergoums in Kairouan; Miriam can leave her youngest home, cuz he uses a bottle. He was cute and blonde, but cried a lot - either spoiled, or cuz he was burned and got scared of nurses in the hosp.

2. for both women, who said they share all work:

Up at 7, cooked coffee for son who studies in primary, el ala and goes early, washed him up and got him dressed, cleaned up courtyard, shook out blankets [prev is singular, following plural]. We washed dishes, cleaned kitchen, woke up other kids, dressed them, fed them, picked up their bedding, wiped up the rooms. Cooked our breakfast [last night's couscous], made kisra dough, cooked it and marga, lit brazier, made tea, had lunch. After, we started to weave until 4, then went out and picked up the rooms and cleaned, washed lunch dishes, wash clothes [daily, qgf 2x], cooked our dinner. Put out kids' bedding, and out ours so we could stay up. The kids go to bed first, and we stay up. [not watch TV, no time]. Bed at 11:30-12.

Usually are weaving, one goes and the other stays and runs the house.

We both bring water together, whenever we run out. One said twice yest, one said many times. Each time 2-10 l pails. Yesterday found a woman washing clothes at the sebbala [nearly in front of their house] and chased her away, said it was dirty. [like AIF work...but does that hassle women?] They said it's OK to wash heavy stuff there.

3. summer: gather [own] almonds, harvest own wheat and barley. Men help with harvest, and shell almonds with wives as watch TV. The hu mo does most/lots of this work. Wash blankets, and kids' [more dirty] 2-3x yr. Wash at sebbala, used to do at home. Irrigate almond trees etc with citerne, ggf every other day. It takes lots of time, AM and PM. Miraim irrigated with citerne before had sis-in-law, and used to tie up her kid and leave him at home. Before not irrigate -yet- have that her mo-in-lae used to haul well water with a clay jar and irrigate with it.

winter: pick olives, men and women, or hire someone. Preserve olives, or make oil. Sell if have lots.

spring: No animals, so not pick grass. work with wool, but it, process and weave selves.

fall: weave, pick hindi, eat and sell a few

4. "Men have only farming [with water], but women use it for everything." Men and women pay the same price, 1 D/mo. Us, men pay, unless none there.

5. "Conditions have changed, we wash very well, water is always available, we clean very well." Also, when she came, wasn't water, elec or guest room we ate in.

Both rich and poor benefit: the poor benefit with cleanliness, and the rich benefit with animals and trees.

Men and women benefit the same.

Old and young the same, both can wash when want.

6. Women gain time. Water was far, took 2-3 hours, now it's close. With the time we can do housework, or work to benefit ourselves [incl mergoum].

7. "We don't go out at all" [eg without a reason, probably, since harvest, go to Kairouan, etc].

Before they heard "the news" at wells, now at the sebbala; hear re^{re} "sickness, marriage, circumcision."

8. "Now lots of girls to school, before boys came first. Before, men didn't like to educate daughters, even if he had money. Now ideas have changed. Now girls go to school, even if their father is very poor."

9. "Didn't change" [economic sitn]...but have planted plums, apricots, pomegranates, olives...but not in production yet, only about 3 yrs old.

10. "When I have money, I buy for myself; I don't care about my husband. I buy somethign for the kids or for the house [gave ex of clothes, rx, milk, curtains]."

11. "We have no problem at all with water. But we'd like a faucet in the house. For less work, or lighter." She thought of it since they put the one nearby [ca 5 yrs]. Asked if not do it herself with mergoum \$, she said wasn't enough.

12. AIF: "It's work is washing, cleanliness, care for water and cleanliness of sebbala site, and clean house. They work wool and sell it." First one said "wool group?" as soon as I asked.

Were 7 members in AIF. The other five work at home and/or in a factory in El Ala. They wanted to have a factory right in this house, in their garage. There were 2 AIF meetings. Denise came to the first, and they said talked about projects [eg right away, and/or first in their minds]. Asked if they wanted to do chickens, rabbits, wool. They chose wool. She also mentioned water.

At the second meeting, D^w wasn't there. They discussed having a 'factory', but the 5 other women wanted a man to be responsible, eg sell things and pay them, and the

others said that wasn't possible, maybe cuz women have to get rugs stamped in Kair. selves, maybe somethign else. So all decided to work on ownor at previous factory.

They said in fact it's better to work at home, but the idea of a "factory" was that they'd put in more hours, like have an excuse to neglect house?, and thus produce and earn more.

The four wooden looms Hajji got from rural develepment. Not used cuz don't work well with local mergoums, which are very tight, and come out crooked without metal loom.

13. "I don't know their work exactly; I just know they collect money."

14. Before water was free, now it's for money. It's not expensive [at 1 D/mo]

15. "I don't have a daughter, I wish I did. If I had one, I'd wish her to be an excellent student and succeed and have a good future. If I had a daughter, I'd educate her more than the boys [hers], and I'd dress her better than the boys, because I like girls better than boys."

* N. says all the words [following] are those of the women, but she wrote in classical; the quotes are where she wrote in derja. I'm not real sure, but it's the best we can do.

Quirida Selmi May 31, 1991 Nihava

2. I get up at dawn, pray, wash dishes, if there's wash I do it. My husbaand brings water with bottles and an animal. She cooks lunch and they eat. Then I go to the loom until about 7 PM. And I stop to pray at prayer times. I cook dinner, and we go to bed. [have no TV].

3. In the summer we work wool, we wash it and set up the loom. We don't plow, so we don't harvest. Because we don't have anything [S] to plant with. If we had planted, we'd have good results [becaue lots of rain].

Fall: we eat prickly pears.

winter: In the winter we do all our'housework [gathiyatna] at night: we wash, we cook, and at dawn we go out and gather olives [theirs].

spring: Who has sheep, shears them and washes it, and weave [they don't have]

4. My husband brings me the water. Why should he sit around? He brings me water and I cook, wash, and clean.

the last time he brought water was day before yesterday; he filled quickly and came. We don't have any problem because the "sontage" is nearby.

5. Water now is nearby, and better - it washes really well. Now there's a big difference: before we got the water in 2 hours and now it's 1/4 hour.

Everyone benefits from the water; now we thank God. But those with citernes, and irrigated trees, benefits more.

6. Before, there were times we went at night to get a little water. Now we have gained lots of time.

With the time gained, she does more housework.

7. Women went out before, and it's the same now. But now the woman goes out more, because the sebbala is nearby. Before, some men wouldn't let their women go far.

8. Now girls attend school more than before. Before, I put my daughter in school, but the neighbors started to laugh at me. After a month, I took her out because people said "Si Bashir sent his daughter to school. I don't know what he will get from it. Now she'll grow up and get married."

9. Our economic condition hasn't changed, because we don't have land.

10. Me, my girl, I'm a woman, I don't know anything at all. [re economic info]

11. We don't have any problem [with water]; the water is close; we don't have any problem.

12. I don't know anything at all [about AIF] and I don't understand the problems of girls now.

13. The water group collects the water money and is concerned with water. My husband told me.

14. The water before was free, and now it costs money.

15. If I had a daughter, I'd like her to be a primary teacher.

Warida bent Sellouha Selmi May 31, 1991 Nihaya
daughter

2. Us, we don't have any housework. We get up in the morning and mop, clean up, wash dishes or clothes, and that's it. We have no land to work, or anything. Water we bring every time however; sometimes we bring it once and sometimes twice [daily].

3. Summer is like spring - like all seasons. We don't have anything else extra like wool or harvesting or sheep; we don't have anything at all.

4. We are just women living here. It's me who does housework, and bring water, and use it.

5. The new sondage has rested us. Before we brought water from far, from the river. Even our clothes we took and washed in the river, with clay, when I didn't have soap. And for housework, we economized so we'd have enough for drinking.

6. "Who has a citerne benefits more than those who don't. And who has saniya [us. irrigated fruit trees] too. But me, even the bottle I fetch it in leaks [mengob]."

7. "We have gained a lot more time compared to before. Water before was far from us, but the the time I gained, I don't have anything I did with it because I don't have anything to do, not wool to work, or anything at all."

8. It's just the same, now and before, but now it's less, because the sebbala is near.

9. Now girls go to school more than before because before whenever it got to be summer, we went out in tents and harvested land for 1/10. And there wasn't anywhere to leave them [the girls if they were in school]. But now girls go to school, because we live in houses, and some have a little land.

10. My economic condition hasn't changed. I hear about change from people [from change with new regime here, uses word 'change'].

11. My mother is the responsible one [for hhd economics], she buys for me every souk what's necessary. And sometimes we remain without.

12. Water- we have no problem with it. But now, the sebbala is broken; the pipe leaks. [she tells someone AIC to fix it, but they don't; she wonders where the money goes.] And they need to forbid women to wash clothes and wool near the sebbala because it makes us ill [eg can]. [was in AIF]

13. I don't know the water group [male]. they should fix the sebbala, and our money, I don't know where they put our money.

14. [AIF - she was in it]. The idea of a women's group is a good idea, because women and girls here have nothing to do. If they at least did a project for them, it would help our youth. Because we here are mehroumin left out [?] of everything. We hear about projects, but haven't seen anything at all. I cook in my little mud kitchen, with worms and snakes, and why don't they help me to make a kitchen? And why does one have fish and meat for dinner, and we go to bed without? And in the grave, we're all the same. If there was a project, everyone would be happy.

OULED AMOR

Mufida bent Salah Rahamari May 30, 1991 Zakiya

Probably the best off local family. M is the daughter [age 15] and went to 6th grade primary, her mom is Kaamla, but didn't talk much. Her fa works in Tunis as a guard, and she has one brother who studied to 6th grade primary and failed, and sometimes works in Tunis in construction, but it's hard and his hands get hurt. In house with her fabr, but each family eats sep.

2. Got up at 7, washed and prayed, made bread dough, picked up bedding, cleaned up rooms and courtyard, washed dishes, heated oven and cooked kiswa, cooked sauce, fed calf hay, went to work in "factory" from 11-2 [she goes to learn mergoums, near the road where we stopped and found a teacher and a few girls], cleaned stones from wheat, prayed 2 prayers, slept a little, got up and went to the shop, came back and cooked dinner, prayed, we had dinner, and my mother and I went to my mosi house. We went to help her weave a blanket a bit. We got back after 11 and went to bed.

My mother harvests, she gets up first [at 5], prays and harvests all day.

Mufida has been learning in factory for 1 yr, and gets 9 D every 3 mos. Takes 3 mos to do a mergoum, with all the girls, cuz still learning. Has to leave at 17. Factory is run by rural development. I'd like to learn more, and it's good in order to see the girls."

3. summer: wash blankets in summer at home with sebbala water, and harvest, and wool - the 'yellow' we send to Kairouan to be dyed and make klims [striped only]. It's our wool; my mother spins it, I don't know how yet. Wash wool at river, not with sebbala water, and mo does, dau not know how.

Spring: mother cuts grass. I do the housework and my mother does outside.

winter: Oct-dec/jan: she and mother pick own olives, make oil. Men can harvest too. Weave in fall too.

Wash clothes 2 days ago, with sebbala water, brought on animals.

Get water 2-3 times a day. I went at 3 with cousin [female] to get water. We get more in summer: We wash clothes a lot, and bathe a lot, and the sheep drink a lot. And the sebbala is shut off most of the time [achleb lwegt]. We fill a cistern (500 l) quickly with the potence, but with the gran it takes a long time, because it's with turns. If it's full [sebbala], it takes a long time; ^(it takes 2 hrs on average) if there are few people, we get back quickly. Takes less than a half hour if few people, about 1 1/2 hours if are many.

If the sondage is broken, we go the Hdaya sondage, and stay an hour or so. We fill quickly cuz there are lots of faucets. We pay every month here, but not there, because we don't go regularly.

4. If a man's wife is busy, he'll go for water. My dad and brother work in Tunis, so don't bring it.

They have irrigated almonds, near the river and use it to irrigate, and other dryland trees.

5. With closer water, would wash more, irrigate trees, grow vegs for household with water.

women benefit because it's women who bring water. The man doesn't do housework; it doesn't matter to him.

rich and poor, all would benefit from water, and besides, here we're all the same, average.

6. Women, if water was close, would gain a little time. And in that time, we'd do housework, mop and wash.

Have had the sebbala for 8 years, and it's 2.5 km away [eg not their "own"]

7. Even without water, we go out. We always go out. Women go out and herd sheep.

8. Girls go to school more now. All people like education. Before people didn't have money, but now they're better off [so can educate girls].

9. If water comes conditions will change; people will wash a lot, plant trees, and work all kinds of ag, eg vgs for house, etc.

10. My dad is in Tunis. When we have money, we buy from the shop ourselves [mo and dau]. Neither goes to suq; send \$ with a man.

11. "The water is all problems." There are always arguments at the sebbala. Sometimes they fight with sticks, and end up going to court. The solution is for people to get organized/take turns, and to add more faucets.

12 Aif: "good idea" Are some who would accept, others wdh wouldn't. Those who wouldn't accept would be those who didn't believe her.

13. AIC: Don't know them.

14. Before the sondage, we got water free from a sprng. Now it's a dinar a month, and 2 for a [small] citerne.

15. not ask re dau cuz men there.

Hnia May 30, 1991 Thursday Zakiya

She's the talkative and joking "future mother-in-law" of Zakiya. I'd said we should skip her cuz she's middle class, not poor, but Z wanted to visit and had said she would. During our visit she stressed the need for a project for her educated-to-6th-primary [then flunk out] daughter, Hafitha, who's no good for outside/farm work. Hnia suggested they were poor, but they had a big TV, pretty fancy cabinet, and nicely tiled floors in their guest room, plus 2 of the daughter's mergoums. There are 9 in the household, five girls and two boys ranging about 2-4 years, and the parents. Z's supposed fiancée is in Tunis at the university, and the other son is in 6th yr secondary.

Her daughter not for outside work; wants to work on loom, but has none. Something about if were a project, someone would give stuff to his relations, not to her.

"We like to clean. I don't like to leave my house unpainted. I like my house white, and clean and good, even if I stay hungry."

N's interviewee [I think Fattoum; it was the one with one son] came in near the end, and said she'd like a faucet in the house, and be glad to pay 5D/mo, and be really clean. She now pays 1D, but it's off and on, and not great.

2. Mo: Up at 5, went out to harvest [own bled], returned and prepared bread dough, made marga, heated oven, cooked kisra, and went to get water with my daughter. Went about noon, got it with a citerne [500 l]. Went at 11, rtd at 12. I have some wheat, and ground it into flour by hand [rHan]. Then went and got the barley I'd harvested. I made the ground flour into couscous.

The citerne we bring lasts 3-4 days. We bring it from the sondage, and pay 2 D/mo. Water, even if it's expensive, we have to bring it; it's the first thing [abje] we need. Have pd for water for last 3 yrs or so; before rural develmt pd.

Dau: [Z says she talked better than her mo, eg more accurate; the mo more in general] Up at 7, washed face, went and prepared bread dough, picked up rooms, washed dishes, went to the shop and bought a few vegetables, heated oven, cooked kisra, cooked marga [poss tog], cleaned in front of the house, my mother came from harvesting [? inconsis] at 12, lit brazier to cook tea, had lunch, cooked tea. We went and harnessed donkey to get water. Returned in Eashiya, returned to shop and

brought vegs [again], started dinner, cooked tea and went to bed. Watched TV a little in aft, not at night cuz tired.

3. summer: harvest, wool. Use lots of water then, because we mop daily, to cool house, and wash selves and clothes daily.

fall: weave [together]. Early fall, prepare couscous.

winter: bring wood from tree trimming, pick olives [own]

spring: pick grass, cut and wash wool, wash blankets sometimes with rain water by dispensary, sometimes at home. Not done yet.

Have almond and olive trees, rarely irrigate with citerne; Mo said not enough \$, later that didn't want to get trees used to much water. If irrigate trees, girls [and mo?] do it,; if have \$, rent male worker. Wash clothes daily.

4. "The men are all in Tunis; they stay 5 or 6 months and then return." So don't work with water. Her hu older, qqf does construction in Tunis.

(2-4) (me/abae)

5. "If we've just gotten water, we drink it fresh. But now, it lasts 5 days in the citerne. We don't use javel [not in shop, they said, and that it's expensive]. [eg if nearby, would be fresher]."

Older benefit, because it's they who wash and clean.

"The rich and poor are the same. Even the poor has to pay." If not pay, not get. [cuz others not like if did]

"Women benefit more, because they do all the work: wash, cook and clean; men just drink and bathe. Even washing, they find everything washed."

6. "The time, we'd work something in it, or rest in it."

7. Women still go out, to get wood and grass. She prefers to get water fast, not to talk.

8. Girls study more now. From before, I had a good view of education [mol]. I didn't educate my oldest daughter cuz no \$, Allah qhalib [eg that's more powerfull]. [I have that the eldest, with us, studied to 6th and failed 2x, and mo without \$ for private school. Second dau in 6th; if passes will go to El Hajeb and board in hs for 60 D every 3 mos; will send her if can afford it.] Mo said something re wished she'd studied, so she could read bus #s and signs, and not risk getting lost.

9. "Things changed; cleaning is the main thing. And the animals drink, we irrigate trees, we clean ourselves [clothes and bathe]. We mop."

10. If I have \$ [sell qqch], I give to my hu to buy vegs or other household stuff. I don't go to the city [or suq]. I sometimes get things from the shop right here, but don't go to the suq."

11. "Water is far. We have one faucet, and there have been lots of problems of fights."

12. AIF is good idea, everyone would accept it. [But her idea was more of a project than of water management.]

13. AIC: "work with water, one writes/records, one collects money."

"14. Before water was free, now it's for money, 2 D/mo [for citernel]. Water is necessary, even if I lack everything else, I have to get water. And it's a little expensive for us, because we don't have much."

15. I'd hope for something good for her. If she'd continued in school, I'd have liked her to be a doctor.

Her husband works in Tunis, and she and son live alone. Sometimes he doesn't send money for 3 mos, and she has to provide for herself, sometimes by selling something, or by working wool or something for people [for \$]. Her Hu father is dead, and the mother eats with her sometimes and sometimes with her hubrwi. The brother is in Tunis too. Her house is by itself; when we came, there was lots of worked and unworked wool in it. She'd be a good candidate for AIF leader: she speaks well, even tho she didn't go to school - which she regrets. She had a carretage because she got pregnant soon after her son's birth, and hasn't gotten pregnant since. She also had a miscarriage before her son's birth. She's about ____.[25] now.

N says it's all F's words, except where noted not.

2. She gets up before the sun, gets her son up, and goes out to harvest, taking her son, age 4, along. She gets back about noon, washes dishes, and clothes, gets water [maybe with wheelbarrow], comes back and cooks lunch. We have lunch, and in the afternoon we rest a little, and I start working wool, until night. Afterward, I put out the bedding and we sleep.

3. summer: harvest season. When it rains, I wash the wool blankets. If it doesn't rain, I buy a citerne of water, and wash blankets and all the winter clothes.

winter: We rest.

Fall: There's no work; only housework.

spring: Who has sheep works wool, and who has none buys it, or someone [a relative] gives it to them. Me, for example, my family gave me some [wool].

4. Me, my husband is in Tunis [day laborer], I'm responsible for water. Even if he comes home, he does nothign with it. I bring water, and wash and cook and do whatever is necessary with it. The last time I brought water was yesterday, a 30 l plastic bottle, with a wheelbarrow. I ran out of water and I had none, until I asked my neighbor for some. I didn't find any problem [getting water] because people were still out harvesting. Because the sebbala was empty, I filled right away and came. But the one problem, is the distance. And the genreal problem, is that there isn't enough water; there's one faucet, and lots of people. So we stay waiting, till those who came before us fill.

5. For me, when they used to bring water from the well, I was little, so I don't know about it. But our problem is the lack of water. If they put a sondage nearby, it would improve our condition. Even cleaning, we'd be ckeaner. [house, selves clothes]. Even at the dispensary, sometimes a poor woman goes to get medicine, her son doesn't let her becuase he's thirsty. She goes home, because there's no water [at dispen] to drink. Another time, a woman went to the dispensary and died there, and they didn't find any water to give her [should in religion], and she died thirsty, the poor thing.

Who has a citerne, benefits more from water. And those with citernes, either the gov'm't helped them [gave them], or he's well-off economically.

6. Me, when I grew up, I found the sondage working; I don't remember when they got water from the well.

7. The sondage and the well are the same [in distance]; women go out now, and before, the same amount.

8. Now the percent of girls who study is more than before. Because the generation now is more cultured [methaqef] than before. It knows the value of education. and girls now, like to start school to learn, and their parents help them. Because their idea changed about girls.

9. Our economic situation hasn't changed, because there is a lack of water. "My brother", our economic condition changes with water: people plant fruit trees with it, and irrigate the land, and we don't have water to change our condition. [she has a little land].

10. In's words I Fattoum tesref or buys what's necessary. "I'm the responsible one. Sometimes I buy something and use it for more than a day, fearing I'll be without at the end of the month. I don't use a lot, because the conditions are poor/poverty, it's necessary to satisfy what's available.

11. Our problem, it's the water. If there was water, all the problems would be solved. There'd be more work, our men would come back [from city], even with cleaning, we'd be cleaner than like this.

If my husband is not here, I work with men. I go out and work our land, and harvest, and hoe around olive trees. [all in area with little land] But if he were here, he would work.

"The woman whose husband is in the city has more problems. Because she's carrying the responsibility of the house, and the responsibility of buying things. She even goes to the shop herself. and she brings water and works land and everything."

A woman's group is better [than AIC]. It would show me and help me more to understand and to learn to take care of [hafeth] my health and my son's health.

13. At the end of the month, they collect the money. Their work is to collect money at the end of the month, and they take care of water. If kids play in the water and mess it up, they don't let them. And they don't let women wash clothes and wool near the sebbala. It's better that they don't let them, because they'll get germs in the waater.

14. People's condition is that they live in poverty. sometimes someone has nothing [!], he'll sell a chicken to pay for water. But before, they say water was free.

15. For me, a girl and a boy are the same. If I had a daughter, I'd like her to arrive [tewsell] and to go to school and get a good job. Because, I've seen poverty and know the value of education, and I've regretted that I didn't study.

Eawisha Rahamani May 30, 1991 Nihaya

We had a light lunch our first visit at her father's house; she cooked. She lives nearby, with her husband's father and in-laws. But she eats with her parents-in-law, not sister in law, cuz latter has more kids [5 vs 2 or so]. The fa-in-law pays for them all - but still they eat separate. Both husbands work in Tunis as laborers.

2. Gets up at 7 AM, goes out to harvest [her land] and comes back at noon, cleans house, washes clothes and dishes and cooks lunch for kids and gets water. They have lunch, and in the late afternoon, she gets water again and doesn't get back till late - about 7 PM. Because it's far, and there's little water, eg only one faucet. At night they don't stay up cuz they're tired, and get up early.

3. All summer, we're out [at harvest]. We get very tired at it. We get very tired in summer: we harvest, we wash winter blankets.

spring: we wash wool, with spring water that's salty and dirty. We don't drink it, we just wash wool. Only animals drink it.

fall and winter: It's a little better than summer. We pick prickly pears and eat them and give the animals some. And in winter, we roast the leaves on the fire and cut them up and the animals eat them.

4. Men here are all in the city. It's women who bring the water, and uses it for cleaning and washing. But men, when they come back, they get the water.

Yesterday, the water ran out, and my husband's sister went and got a citerne [500 l, with animal, poss from govmt] and came back. The one problem she ran into was that there were lots of people at the sondage. And another problem is that the sondage is far from the house.

5. The quality of water has changed. Before the sondage, we brought it from a well. It was salty, and didn't wash very well.

Who benefits from water more is the person who lives near the sondage/sebbala.

6. The woman has gained a little time, more than before. The time we gained, everyone does something different with it. Those with sheep graze them, and those with land harvest it, and everyone with what they own.

7. Women go out more than before, but it isn't that different. Before and now, the water is the same; since it's not near the house, it's nothing.

8. It's the same [girls study]. Water didn't change things, and it's still far from us, even so, we educate girls.

9. Economic conditions haven't changed; before and now are the same. Water, please god, should be enough to drink. Us now, all our men are in the city. If we got lots of water, they could live by having irrigated crops. And there wouldn't be unemployment or migrants. Our land would even grow saffron, that is, it's very rich soil. But it's lacking - lacking water. If there was water, the land would put out [xer] gold.

10. The man is everything. Woman's work is only children, or wool, or some other work - she gives her money to the man. When I sell wool, or wheat, I give my husband the money if he's here. If he's not here, I give it to his father, and he buys things.

11. Water is far, almost 2 or 3 km. And it's not sufficient. We bring a citerne and three families use it, mine and my parents-in-law and my sister-in-law.

12. They need to add a sondage and make a nearer faucet [sebbalal].

A women's group [aif] is a good idea, but now they've put javel in the reservoir. [eg no reason to tell women]

13. [aic work] distribution of water and collect money every month. I know from what I see.

14. Before the water was free from a well, but now we pay every month. Sometimes, we don't pay our share, and we don't get a drop until we pay. sometimes I sell a chicken to pay for water.

15. It's the girl and her ideas. I'd like her to be a lawyer or anything else good. [has a daughter who is little and hasn't begun school yet]

DOGHRA

General observations:

This site is about 10 minutes south of Kasserine on the Feriana road. Women here go to shops and sometimes the suq themselves, esp those with no male relatives to send, but some others too. This is different from most other places we've seen [the women whose men work away in Ouled Amor go to shops]. Seems more, and older, girls go or went to school too.

Does closeness to city lead to these changes? While the house structures look nice, inside they're often not great, eg are they richer than others? Not obviously or greatly.

Mahbouba Yahyawi, and Al Khamsa and Hnia May 3, 1991 Mon. Za'kiya

Three sisters of the sheikh, who live with their mother [who we saw] and grandmother [who was in Kasserine getting medical treatment]. The oldest, Mahbouba, was 4 when her father died, and the youngest wasn't born yet. The Sheikh dresses fancy and is engaged to a woman at CRDA, and seems to take no interest in them. They live in a building divided into two rooms, with a stick shelter in the yard for their few sheep. Mahbouba worked at her weaving as we spoke, and the youngest

sister, Hnia, ended up doing most of the talking. Mehbouba works mergouns for people, who buy her the wool and pay for her work. They live on her weaving; the brother gives them nothing.

We asked if the local animatrice de base, Nadia Heyawi, had been to see them before she stopped working 2 yrs ago. She didn't visit them; they said she just talked about many kids, not about water or health.

Their oldest sister is now a grandmother; she married at 12, a year before she had her period [and I think slept with her hu right away].

Of the married sisters, the oldest didn't go to school, one went to first and one to 4th grade; school was far away.

They had land and used to live on the mountain, in the old Doghra; they sold it and moved here. They've lived there 16 or 20 yrs.

2. Mahbouba gets up at 7 and weaves all day; just stops at noon to lunch.

Al Khamsa: sick with cardiac, gets dizzy. Got up at 7:30, had breakfast, picked up dirty clothes and washed them. Went and got grass, came back and went to my sister's house, came back and took the sheep to graze.

Hnia: Up at 8, made breakfast, cleaned rooms, cooked lunch, gathered and washed dishes, washed clothes with sister. We wash clothes daily. In the winter we do too, when it doesn't rain. Tho' usually wash daily, it's rained lots lately, so hadn't washed for 3 days.

Mother: Feeds sheep [grass that was gathered] and harvests grain, on her own land, planted under olive trees. Girls don't help harvest; they don't know how. [saw at other household tool.

water: from sebbala, in 50 l bittiy or plastic bottle, Al Khamsa got one a 9 AM yesterday. Sometimes they get 2. Yesterday there were lots of people so it took her about 1/2 hr; if are few it's 10 min.

They wash wool at the "state" majen, where we saw women washing wool, or in the river. The state majen fills with rain water. Blankets they wash at home in the summer. Their olives are only irrigated with rain water.

educn: Mehbuba is 23 or 28, got to start 2nd grade, primary, and left herself when the teacher hit her once. Al Khamsa got to 6th grade primary. Was sick during exams and didn't pass. The next year her younger sister was in the same grade, and the elder didn't like it and quit. Hnia just passed her 6th year of secondary at the top of her class, with 13 of 20 [which Z says is good]. She liked science and math, failed and didn't want to repeat, so went to a private school [for \$, 25 D/mo]. Her sister pays, and the school is a Doghra person's, so she may get a discount.]

3. Mahbouba: weaves year-round

Al Khamsa and Hnia:

winter: olives, only women work on their own. If outside men come, women don't. Few men harvest. They pull off olives with fingers, onto something on the ground.

spring: pick grass for animals

summer: harvest, work wool: wash, comb, spin [only Mo and Al K], wash blankets in summer.

wood: Mah. used to get about monthly, but now is afraid to go to mountain because of crazy guy [Eisha's hu] there.

"[kima] Whether gathering grass, or harvesting grain, or olives" it's all women's work.

4. Men build with water, or irrigate crops. They don't go to the sebbala; here it's Eib. Boys get water when small, about upto 10 or 12. With siblings near the same age, the girl brings the water. Here the sexes don't mix, so women even fill 500 l citernes with animals, not men.

At first sondage water cost 1 D, now 1.5, or 2 or 2.5 for people who use lots, and those with lots of animals who drink pay 4-5 D/mo.

5. Before, water was far: Wed-Darb, or-by crterne from Kasserine. After, did another sondage, but not good; it was very salty, and caused kidney illness. A dr came and did an analysis and said should'nt drink from it. They closed it and made the sebbala we have now. "Now, thank God, the [kidney] illness has decreased." "Before, when we used to bring water from the river [ca 16 yrs before], we brought it with animals. The place was very difficult [steep]. We used to carry the water up the hill, so the donkey could climb up [couldn't make it full]." We used to cut our food portions and feed them to the donkeys, so they'd be strong and able to carry the water all the way up. Because it was far, they only drank it, and used to wash selves and clothes with majen water.

"We've become bilqdaE/very good. Now we have water and electricity and a school nearby, [naEma] thank God now."

"Women benefit more, of course, men have no responsibility for water, men find everything [ready]."

Old and young benefit equally, but the mother benefits most, because she cleans everything.

The poor benefit more, because they used to go far to get water, but the rich buy it, for whatever price. Even if others don't have water, they can buy it.

Sometimes the sondage breaks for 2 mos at a time, and they get water from wells. [free?]

6. We've gained time, and take care of kids with it, weave, work wool. Also wash clothes more, than the once a week previously.

7. Women go out now too, to the sebbala. "For us, our male relatives don't let women go out." "ihalgu fe sebbala"= eg talk, get news. Because it's a small town, they hear all the news, even about fights.

8. Now lots girls go to school, more than before. Before, the mother didn't like girls to go to school because she wanted her to help her at home. She'd help herd sheep, and now fewer people have them, or they hire a herder. And now, that idea is gone.

They had lots of sheep before, now just a few, because they have less - they're lots of work, to graze, and they "ate" them for cash.

9. Economic conditions in general have changed a little. Before, to build you had to wait for rain, and now we can do it whenever, with the sebbala. Before, we didn't mop much, now we do. [I have : For ourselves, we use more water, wash more. Ones with kids benefit, cuz wash them more.]

10. Men spend the money; women give it to him, even if it's theirs. Women don't go to suq. But we buy things ourselves [cuz no men]. Sometimes younger, educated girls go to shops - if there aren't lots of men, which there usually are. AlKhamisa goes to the Kasserine suq usually, for 0.250 bus fare. She went last week. The others are busy with school or weaving.

Mahboub's last mergoum for people [we saw her working on her own, copying a cross-stitch pattern like a roman vase, with two human figures] was 2.5 by 4 ^[=40 D(mo)] meters, and took her about 1-1 1/2 months to finish. They gave her 60 dinars, plus buying the wool, which was 6-7 kilos for 30-40 D. She gave the money to her mother.

11. The water is a little far, and the plastic barrel [50 l] is very heavy. If they put sebbalas in the house, it would be better. Getting water would take less time, and it could be used for something else.

Hnia got talking about women would like water in t^{eh} house; but men don't listen to them about it [eg women's problem that men not help]. She said [probably] the shik's wife asked for it and he'd just say something like maybe later. And do nothing. [he apparently neglects her in general].

12. People here would easily accept an AIF-type group, because it's local girls. Nadia the health worker was accepted.

Hnia said women could ask for household connections with a written request and several signers; she said if she asked, women would sign. So I said go ahead and

I'll check back next week, and she said she hasn't time - and I suggested maybe she didn't want to. I suggested she could tell her Br the shikh, and she said she hsim-s from him lots.

13. The AIC pays attention to the cleanliness of the sebbala area, and don't let people waste water, and collect money. Before water was free [even with sebbala], now it's 1.5 D/mo. Not let those who don't pay get water, and not wash clothes there. [later] said they let the poor have for free, and locals don't mind, because they know who's poor and who's not.

The sondage hasn't broken for 1-2 years.

14. cost

15. She'd like her daughter to succeed at school, in the math area, and to get a college degree in math. And all the conditions of her life to be good. [Hnia].

Al Khaamsa June 3, 1991 Monday Zakiya

She's the wife of the assess of the sebbala, and has two sons [one other died] who work as day laborers. She has no daughter to help her, and her sons don't - and she doesn't want them to. We found her and her Hu at home, with sort of a double house, one part where her sons stay, and another for her and Hu; we interviewed her on their double bed. [which 2. ~~was~~ ^{was} ~~unmade~~ ^{rest of house merged}]

The guard asked why people are asked to pay for mazot, not the govmt like before. I said it cost the govmt a lot, and he said they'd paid lots to build the sondage. Z added 'just add to that the price of everyone's mazot'. Later, I added that the govmt wants people to learn to manage things themselves, and it's more efficient, and he agreed with the latter.

He also asked why the water group isn't paid, though he and the pumpist are. I said it had been suggested; I think he said he does most the work because the others don't want to, unpaid.

He said he's worked as guard 13 years [I think as long as the 'new' sebbala has been there], and still isn't official [resmi]. Though he's been asked for info for it.

He said about 80 people pay each month, 1.5 D each, and if not enough pay, they don't buy fuel. They buy it in a 200 l barrel for 63 D [so with 80 paying 1.5 shouldn't run out - tho he said the barrel lasts about 25 days], and rent a car for 8D to get it [so don't buy less, since the car is the same cost]. He showed us a list of 18 people who hadn't paid last month. He goes around to collect, and sometimes people bring money to his house; his wife takes it if he's out, and tells him later and he fills the ticket. She hasn't been to school. Usually men give the money, but sometimes women. I tried to ask if people put pressure on others to pay when \$ runs out and water is off, but didn't seem to get through. [see other interview, 5 of 62]

2. [She does all the work herself.]

She got up in the dark, made breakfast for her sons so they could go to work, and "I pick up the scythe and go out to harvest." When I get back, I bring it along, break it with a stick, steam it, spread out to dry. I cooked lunch [kisra and margal]. After, she processed milk in a shikwa [goatskin, with 2 day old goat milk], made dinner [same as before]. TV last night was fuzzy, so we didn't watch. Went to bed about 9, cuz tired. [said us 11 or 12]. I bring water in plastic bottles [20l], with 2 on a donkey, gets 2-4 x a day, cuz animals drink lots. Took about an hour to get [or less?], cuz not full.

3. spring: Pull grass

summer: harvest, wash blankets at home with sebbala water, wash wool, at home with sebbala water, or rain if available

winter: weave blankets, but not klim or mergoum.

fall: wool

4. Men bathe with water, we wash their clothes. Before men used to help us, and now they're embarrassed [because people will see them]. Sons don't get water here, just maybe one pail; she said they respect the women at the sebbala.

5. Have lived here about 4 yrs. Before, lived 6 km. away from this town, [in old Doghral]. There was a gov'm't-built majen that filled with rain water, and she'd pull it up with a pail.

Water here is fine, good. We aren't thirsty, and people have gotten cleaner. Now if the water is cut off, we get thirsty. Before we had lots of water, it didn't cut off. The sebbala was just off recently, cuz needed money for fuel. Sometimes it's off for 6-7 days. There are 3 faucets: one at school, one for the principal, and ~~the~~ public one.

If off, people with wells not want to give, ^{no} and hard, with animals and all. ^{to drink}

"Men? It's women who benefit. Because men don't care. All they care about is finding water in the house, that's all."

Young and old benefit the same.

Rich and poor are equal, all drink, and all miss it.

6. I gained time with water, and house and electricity, and with it I do something to benefit myself, like clean the house or wash wool.

It took about 2 hrs to get water from majen, now about 1/2.

7. She still talks with women, with my relatives, and at sebbala. I go out with the sheep [hu does too], or to harvest. Said doesn't learn anything from talk, it's "empty".

8. Without daughter, so no idea on girls and education. Then she said there are problems with girls and school, meaning Z says that girls think about clothes and boys and not studying.

9. When the sebbala came, thank God, water is ready. [I have:] "We changed and differed and became lebas". Had lots of sheep before and sold to build house. [later] House was given to them.

10. Are both responsible for buying things and do. Her hu gives her money and she buys; some things she knows better than him. Sometimes hu and son, sometimes she and son buy. She and sons buy from shops, and sheep, and go to Kassering suq. Money from sheep she raised is used for the whole family, and they make decisions about buying things together.

11. The water problem is when it's shut off.

12. Told re AIF, as if taught 3-4 girls about javel in water. Said it's a good idea, and all people would accept it. If someone came to teach me something, would I say no?

She can tell hu if has water problems.

Nadia not to her house.

13. AIC duties are collecting money, and fix sebbala if broken, and watch out for sebbala. Knows cuz Hu is guard, on it. If faucet broken, she'll tell hu and he'll fix it. Other women/people would tell him re problems too, cuz it's their water that's wasted. People also pay her the monthly fee.

14. Before water was free, and now 1.5 D/mo. And now it's more, and clean.

Hedia Delhoumi June 3, 1991 Mon. Zakiya

She's the daughter, 18 yrs. Her mother Mbarka and older sister are with her, plus a married older sister with 2 kids was visiting. Are 2 sons working, one a nurse in Sbiba, and one an army sergeant. Have no animals. Seem middle class, with a 2 room house, tape recorder, adolescent room, 15 video cassettes. Z thinks they're middle class. Are a total of 6 kids, mo and fa in family.

They've lived here about 20 yrs, came because there was a school here and not at the other place [old Doghra?]. Nearly everyone there came, except those with lots of sheep.

Sat in "adolescent room", with pictures incl Madonna on walls and writing in French, Arabic and English [red on pink walls]. Z said it's not normal to write on walls. - maybe son is crazy -

2. H: Up at 10, picked up rooms, had breakfast, mopped rooms [every other day, wipe floors otherwise], washed dishes, washed clothes - sometimes every other day, sometimes daily. They washed for 3 days yest cuz of rain. Had lunch [sometimes she makes, sometimes sil, washed hair. Rested, took in clothes from rain. Ate dinner at 8:15 off makarona, made tea and stayed up talking [TV broken], and went to bed at 11.

Mo: Up at 6:30, washed and prayed, cooked breakfast for hu, made tea and drank. Cut up old clothes for rag rugs. Had lunch, and cut some more. At 3 went to Kasserine to visit someone sick in tãh hosp. Came home, rested a little, had dinner and stayed up.

Bring water 4x a day [2-5x]. H and oldest dau get water in 20 l bottles, one or 2 at a time.

3. summer: harvest, work wool, wash blankets, in house or in river
spring: wash wool, cut grass [all 3 women] for donkeys
winter: pick olives for people [haven't selves], sometimes for \$, sometimes for olives, sometimes for oil. Sometimes for 1/10. Only mother does it, girls don't want to.

fall: Sell hindi; cars come from south and buy them for .500 a basket, can get 2 or 2.5 D/day. Both daus and mo do sometimes, but leave someone in tãh house.

4. Women work with water, men don't. Her sons never brought water.

5. Sebbala has been here 13 yrs. "We're relieved of bad water now. We were very tired, with water from river with donkeys; now we can even go get it at night." [Before we used to deny ourselves food and give barley to the donkeys.]
Women benefit, naturally, because sãh cleans.
Older ones benefit, because they use water.
Poor benefit more, because the rich could buy water, even if it was far.

6. We gained time, to wash clothes, work wool. Before we mopped once a week, now we do more.. Also before it took about 1 1/2 hours from the river, now it's much faster. Tho' girls sometimes took 2-3 hours at river, played in water and even swam.

7. Now we don't have lots of housework, and when something comes up, we go out. Women still get together, in the house or out.

8. More girls study now. "Women have gotten freedom; not like before."
Her daughters left school on their own; mom said it wasn't her fault.
Of 3 girls there, oldest went to 2nd primary, next to 2nd yr 2dy, last to 5th primary. Middle one left school cuz needed money for board and lacked.

9. When water came, people were happy [feradhu=diversion/metreffa] more than before. Houses are cleaner.

10. It was free till 3 yrs ago. Before it broke a lot. "When we started paying, water was always available."

11. If she has money, she can buy things herself. For ex, her son gives her money; she doesn't own anything to produce it. The sons give her hu \$ separately. She buys melhafa or shoes for herself.

12. The problem is when the faucet is off. The solution is to have enough money [to buy fuel]. Her hu pays, guard comes to house.

13. AIF is an accepted and good idea. Nadia, the animatrice, didn't come here. Her dau said not everyone thinks like mo, and some might not accept AIF.

13. They collect money and care for water/ stop waste.

14. Water was free from well, now is 1.5 D/mo.

15. Wants happiness for daughters, to get a good hu with a job, and well-brought up [mutarebbil].

Eisha Dalhoumi [called El Kehlal] June 3, 1991 Mon. Zakiya

She's divorced from a crazy husband, has four kids who she works to support. The kids are 19 [boy, in 4th yr 2dyl], 17 [girl, failed 6th primary twice and quit], 13 [male in 6th primary] and 12 [girl in 4th primary, said to be dumb]. She's dau of fasi of previous mother, Mbarka. (E)

2. I get up at 6, washed face, made kisra dough, made coffee, woke up kids, fed them breakfast, they went to school, picked up bedding, cleaned house, mopped, washed clothes, harvested a little barley, broke it up, divided bread, heated outdoor oven, baked bread, made mergou, fed kids lunch, steamed barley, spread to dry, made tea, rested a little, made dinner [cous cous], put out kids' bedding, they watched TV and I went to bed at 8 because I was tired.

Girl of 17 helps mother at home. Yesterday brought water late aft. She brings two 20 l bottles at once, 3x a day, in a wheelbarrow. $40 \times 3 = 120 \text{ l/5} = 24 \text{ l/p/day}$ wash clothes daily. Spend more money on Omo and javel than on food.

3. summer: Harvest, wool work [she buys, no sheep], washes wool at home with sebbala water, and blankets too.

spring: Pull grass for their one donkey to eat in winter.

fall: Sell own hindi, and pick for others. Only her. and weave, knows balnkets, mergoum, rugs, oldest dau knows too, not youngest, maybe cuz spoilt.

winter: bring hteb, only her, with many women. Doesn't work in olives.

4. Men use water for building, but even then women carry the water to them if it's their own house. My son of 19 never goes to the sebbala. Men only bathe.

5. Her here about 11 yrs, and had water before, and now we have lots of water. Before they had water in a big majen, and it stayed full for 5-6 yrs. We put medicine in it - 6 liters of javel. [or 4-5]. The health people put in the javel, they brought it. Even put it in animal troughs.

Women benefit more

Older benefit more, cuz women with water, kids just take off clothes.

Poor benefit more, cuz rich can buy a citerne from wells or the 'suq; poor hafta beg from people with wells, who say they hafta pay for fuel.

6. Now it's better; water is close and good. Before, even if we were thirsty, we were afraid to drink water, because we'd get diahhrea. And now, water is clean and good, it doesn't do anything [eg make illl]."

7. The time is about the same. My daughter goes to the sebbala and stays there. I have to go get her. she likes to go there and talk because she has no place else to go."

8. Girls study more now. Before the school was far, and besides, they had the idea was born for the house, not for education.

9. Didn't really ask, since she came here ghdbana or mad at her crazy hu, from the other Doghra, and stayed with her Br. Seven years ago she started working at the dispensary to support family.

10. She's responsible for the family. Before she was with her Br, and now I work for myself.

11. "We have no problems" except when the water is cut off. The reason is that people don't pay, or if the sebbala breaks. But not mad at neighbors if don't pay.

12. AIF: It's a good idea and people would accept it; why not? But she's not sure re others. Nadia talked to her, about cleaning and water, and she accepted her, even tho she said she knew about it before.

13. AIC: Their work is to collect money and buy fuel."

14. Before water was free and now it costs, 1.5 D mo

15. I hope for my daughter to be happy, and to marry a man with a job. She'll choose better than dau, who may just think about love. The mo will reject someone the dau loves if the mo doesn't like him.