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Republic of Egypt
Governorate of Fayoum

Government of the Netherlands
Royal Netherlands Embassy, Cairo

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MISSION ON USER INVOLVEMENT AND HYGIENE EDUCATION IN WATER SUPPLY AND SANITATION IN THE FAYOUM GOVERNORATE

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9-23 APRIL 1994

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The Hague
April 1994

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1 INTRODUCTION

1.1 El Azab / FSD and the Fayoum Drinking Water and Sanitation Project [1]

In the Governorate of Fayoum, El Azab Water Works is the Egyptian Executive Authority for drinking water supply, being responsible for all drinking water supply activities in the Fayoum, outside the City of Fayoum which has its own water supply.

Since 1991, the Fayoum Governorate also has an embryonic Sanitation Department, which directly reports to the Governor. At present, the responsibility for sanitation in general, and sewage treatment plants and sewer systems lie with the municipalities. The Fayoum Sanitation Department (FSD) provides support to and monitors the work of the municipalities in these fields.

The Fayoum Drinking Water and Sanitation Project (hereafter called the Project) is a cooperation between the Netherlands Government and the Governorate of Fayoum, in particular El Azab Water Works and the Fayoum Sanitation Department. The Project is being executed within the scope of the Egyptian - Netherlands development cooperation programme.

The general aim of the Project is:
"To improve the drinking water and sanitation conditions in the Fayoum Governorate to such an extent that it has a long lasting impact on the public health and the well being of the population of the Governorate."

El Azab Water Works and the Fayoum Sanitation Department are implementing the Project, with a consortium of ECG Engineering Consultants Group (Egypt), IWACO Consultants for Water and Environment and DHV Consulting Engineers (both of the Netherlands) providing services as counterpart to the Egyptian organisations.

Support and supervision for the Project is provided through an Advisory Committee, headed by the Secretary General of Fayoum Governorate and with members representing various Departments.

Technical supervision is provided by the National Organisation for Potable Water and Sanitary Drainage (NOPWASD).

The Project has now defined two major fields of operation :
- the sub-project "Drinking Water Supply", including institutional strengthening, master planning, rehabilitation and extension of the present network, and revenue improvement;
- the sub-project "Sanitation", including institutional strengthening, master planning, and implementation of works.

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[1] *Further in-depth information on the Fayoum Governorate, the existing situation and future plans concerning water supply and sanitation, are laid down in the Master Plan, Vol I-IV, October 1993, published by the Project, and in other Project-related documents (see Annexe K)*

Additional activities planned in relation to both sub-projects include :

- community information and involvement activities, aimed at increasing the awareness of the population with respect to the proper utilisation of drinking water and sanitary facilities;
- setting up a hygiene education component, to further support the appropriate use of safe, clean water, and increase awareness of the need for sanitary hygiene and of health risks related to unhygienic disposal of waste water and solid waste.

The Project started in 1991 with a first phase, in which the Master Plan for both sub-projects has been completed, and a start has been made with institutional strengthening and the rehabilitation of technical facilities.

Related to both user involvement and hygiene education aspects, a paper "Report on Socio Economic Aspects of Drinking Water and Sanitation in Fayoum Rural Communities", published in December 1992, set out the results of socio economic surveys in five villages and attached hamlets.

In 1993 a pilot hygiene education programme has been executed in two villages where the Project was working on rehabilitation of water supply and improved revenue collection. The pilot programme provided some recommendations on possibilities for hygiene education in relation to activities of the Project.

A report by Consultant Ms. A. Hoogenboom in October 1993 discussed a potential customer and community services component for the Project and made a number of proposals.

However, apart from giving some attention to customers relations in connection with improved revenue collection, the Project so far has developed no special activities for community information and involvement, and hygiene education has been limited to the above-mentioned pilot programme. Both areas of activity have been seen as something to be taken up as part of, or parallel to, Phase II.

At present a proposal for the second phase of the Project has been submitted for appraisal. Based upon the completed master plan, the Project proposes to work further along the lines which have been set out in the first phase. A supplementary proposal for a community hygiene component had also been submitted.

The common denominator in these initiatives is that there seems to be fairly general agreement on the importance of users' involvement and hygiene education, and the need for them to become well structured and integrated complementary components of El Azab / FSDs' work. However there is much less agreement on what such activities might entail, how they should be implemented and by whom, and within what institutional and organisational framework.

The Netherlands Embassy in Cairo felt that the issue of community involvement and hygiene education components needed additional consideration. Accordingly the Embassy invited the present mission to advise them further on these issues.

1.2 What were the objectives of the mission ?

The most important objectives and tasks of the mission can be summarised as follows (flipchart 1) :

* to advise on a hygiene education component, including an indication of possible pilot activities;

* to advise on a strategy for the implementation of users involvement, with attention to gender awareness;

* to give a description of options for possible and feasible institutional and organisational set-ups for the management of users involvement and hygiene education.

The full terms of reference for the mission can be found in Annexe G.

The mission was executed by two consultants, Mrs. M. A. Boesveld, a social scientist and Mr. M. Seager, a public health engineer, both from the IRC International Water and Sanitation Centre in The Hague, and an anthropologist, Mrs. H. A. F. El Hadidi, an independent consultant from Cairo. During the mission, in discussions with informants, in field visits, and in presenting the results, we mostly worked together as a team, only occasionally dividing tasks to save time.

2 WHAT METHODOLOGY DID WE USE?

2.1 Discussions with informants and field visits (flipcharts 2, 3, 4)

Discussions with key persons from institutions in direct relation to El Azab/FSD and the supporting Project

To be able to fulfil our obligations we felt that it would be important to get to know the experiences and opinions of people from the Egyptian institutions as well as the expatriate staff directly connected with the Project. We wanted to hear their views on the work of the Project so far, and on possibilities and ways firstly to increase users involvement in El Azab's and FSD's activities, and secondly to include hygiene education as a necessary component of improvements in water supply and sanitation.

Discussions with key persons from other relevant institutions at National and Governorate level

Also, we wanted to learn about the experiences of others who had worked in Egypt in the fields of hygiene education and community participation, preferably in relation to water supply and sanitation.

As there was obviously a time constraint for visiting a large number of institutions, we followed suggestions from the Netherlands Embassy and from the Project staff in choosing the most relevant informants. A full list of the persons and institutions we visited is given in Annexe C.

Discussions with staff working on the Fayoum Rural Health and Family Planning Project

This is another project organised and implemented through cooperation between the Egyptian and the Netherlands Governments. It aims at the improvement of the health status of mothers and children and the increase of the use of fertility regulating methods in Itsa district in Fayoum Governorate.

One of the main strategies of the project is to train village Health Promoters, who can reach local people, in particular women, with information concerning health, family planning, and hygiene.
In documents of the Health Project (Yearplan 1994, p.13) as well as the Drinking Water and Sanitation Project (Phase II - Community Hygiene Component, January 1994, p.8, 10) some suggestions are made for cooperation between the two projects on the issue of hygiene education.

We had discussions with Egyptian and expatriate staff of the project, and with some Health Promoters at one of the project centres in Moutoul.

The Programme for the mission is in Annexe B, and a full list of all persons we consulted can be found in Annexe C.

Field visits

Finally we thought it indispensable to get at least an impression of water supply and sanitation in rural towns and villages in the Fayoum. Not only did we find it necessary to see the existing facilities, and observe some of the ways people use them. We also wanted to talk to some local leaders and ordinary villagers about their ideas on possible improvements, and

their potential involvement in such improvements and in managing some aspects, including operation and maintenance.

For the selection of villages for a field visit we asked the help of the Project staff. Together we defined a number of criteria, and accordingly a selection of 5 villages was made. To the sixth village, Tunis, we were introduced by the Egyptian member of the mission team.
The list of villages visited, including criteria for selection, and a short checklist of issues for investigation, are shown in Annexe D.

Summary accounts of the visits are presented in Annexe E.

2.2 Presentations to the Advisory Committee, Project Staff and the Netherlands Embassy: a methodology based on flipcharts

Besides the requirement for de-briefing at the Netherlands Embassy, we were asked to present the preliminary findings of the mission at a discussion with the Project staff, and at a special meeting of the Advisory Committee of the Project.

We decided to structure the presentation by using a flipchart. This would give us the opportunity to present the information condensed, in a visual manner, and in a logical sequence. Use of a flipchart in a discussion can be very stimulating, because it is possible to "flip" back and forward between issues without losing the total flow of the arguments.

An additional advantage of presenting text on a flipchart is that it allows for an easier translation into Arabic than spoken words only. This translation, needed during the meeting with the Advisory Committee, has been provided by the ECG staff member of the Project.

The Committee liked the method of flip-chart presentation, feeling that it was stimulating to the discussion, and that it enabled the translation of key points to proceed at a comfortable pace.

The reactions of the Advisory Committee members to the substance of our findings were very positive. The findings were felt to very much reflect Government policy to bring beneficiaries and the agencies that support them closer together. The Committee also recognised the importance of user involvement and hygiene education, alongside technical excellence, as ways of making water a more valued commodity, an essential part of the move towards privatisation. The need for an innovative approach to these areas by El Azab / FSD, and the need for linkage mechanisms between agency and user on, amongst other matters, issues such as pollution and use of detergents, were also highlighted.

During the meeting Committee members also made an enthusiastic recommendation to hold a workshop with all relevant people, to have a wider discussion on the issues presented on the flipcharts.

For continuity, at points in the text that follows, cross reference is made to the flipcharts as used for the presentation of the mission's preliminary findings.

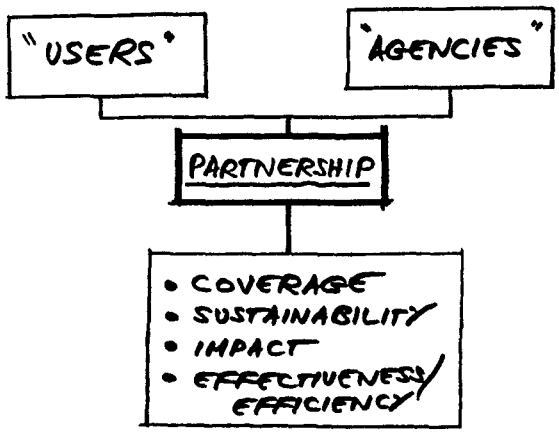
The complete set of flipcharts, in reduced size, is presented in Annexe F.

3 BUILDING IN PARTNERSHIP CONCEPTS

3.1 The partnership approach - in general and in the Fayoum (flipchart 5)

In Egypt, like elsewhere, the need for participation of the community in water supply and sanitation projects has long been recognised. There are too many examples of neglect, misuse or abuse of installed water supply systems, where the users have not taken up any responsibility for its proper use and maintenance. Lack of involvement and commitment leads easily to under-use of the system and unwillingness to pay for clean water - people revert to their old sources (in the Fayoum these are the canals, i.e. polluted water), instead of contributing towards repairs or paying adequate revenues.

It has become increasingly clear that the "agencies" - in this case El Azab Water Works and FSD, and perhaps also local government - cannot alone be held responsible for an improved water supply and sanitation. The users have to share in this responsibility, in partnership with the agencies.

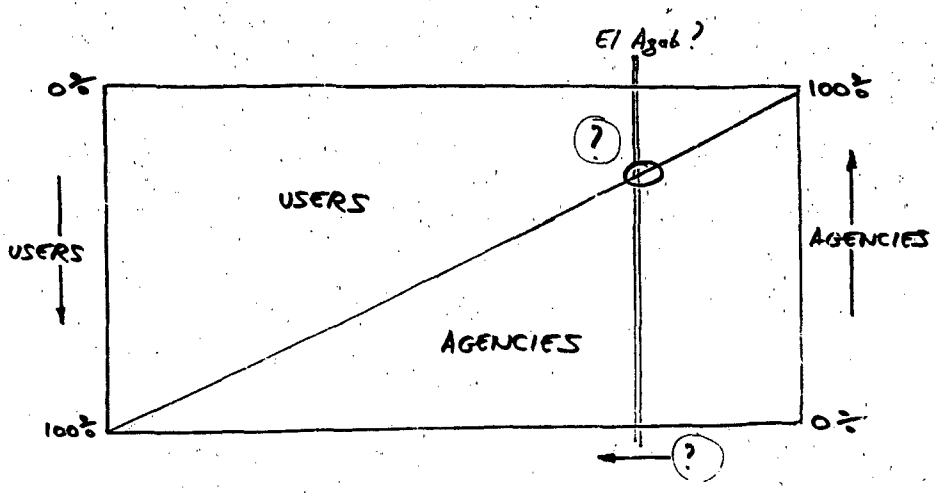


Only genuine commitment and support by the users can bring about long-lasting benefits from the improvements. For example:

* the facilities will be used more efficiently and effectively (e.g. higher reliability, fewer breakdowns, lower operation and maintenance costs, fewer losses), leading to growing impact in terms of hygiene and health improvements;

* more awareness by the users of the value and worth of water and sanitation services will lead to increased willingness to pay adequate revenues, which in turn will enable the agencies to increase their coverage;

* increased users' involvement will lead to better operation and maintenance, and consequently to more sustainable improved water supply and sanitation.



As illustrated above, responsibility for water and sanitation can in general be divided between "Agencies" and "Users", each on a scale of 0-100%. Systems can be largely Agency-based or largely User-based. However even with piped water supplies and sewered sanitation systems, agencies are nowhere 100% responsible, without any involvement whatsoever of the users.

In the case of El Azab, the agency has at present a small department for handling complaints, and through the Project, an improved system for the collection of revenues is being set up. These seem successful. So there is some user input already, though exactly what proportion of the overall effort that is debateable.

What is clear is that this minimum of users' involvement could almost certainly be increased in line with what is feasible in the Egyptian situation, and what would meet the requirements of El Azab / FSD in terms of efficiency, sustainability, and health and hygiene impact. Providing there is good communication, information and support, on skills as well as requirements, much more could be done by users than is currently the case.

In addition it is important to be aware of gender differences in users involvement: men and women in Egypt, like elsewhere, may have different responsibilities and interests in caring for water and sanitary facilities. To overlook these differences may lead to the neglect of a substantial number of users and their potential contributions and needs.

3.2 What can "users involvement" mean ?
(flipchart 6)

To make clear how the agencies and the users could contribute towards an increased and meaningful partnership, we give here an example for El Azab and the users of piped water supply in the Fayoum :

What can the users do ?

* The users of communal water points can contribute through:
  - forming small users' groups or committees;
  - participating in decisions on the siting of standposts;
  - planning and design of a water point;
  - managing and operating its use (looking after opening hours, cleanliness, and the prevention of vandalism);
  - collection of revenues;
  - doing small repairs.

* The users of house connections can contribute through :
  - taking responsibility for small repairs;
  - better use of water (no leakages, no excess waste water);
  - more direct feed-back to the agency (e.g. leakage and vandalism reports)

From our visits to Nazla and Tersa we found that villagers are not informed about plans and activities of El Azab. In Nazla a communal water point had been closed without warning for several weeks, in preparation for rehabilitation. Rebuilding had started, but in an awkward, undesirable place in the middle of a road. The villagers said that they had not been consulted about a new site for the water point.

In Tersa a communal water point had been newly fitted with a water meter, without any explanation or discussion with the users. It was unclear who would be responsible for the meter, and what consequences meter reading would have in terms of payments for water.

What can El Azab do ?
It can encourage users involvement through :
- good information about activities at the planning stage, and when implementing;
- discussion of planned activities with users, in particular also women;
- assessing needs and priorities of users (for design, siting, etc.), and taking these seriously;
- giving users responsibility for small repairs (such as standpost repair, tap replacement, small diameter pipeline repairs);
- giving users of standposts responsibility for management and operation;
- giving users promotional material showing clearly the advantages to themselves, the users, of increasing involvement.

What advantages could this have for El Azab ?
* the users will feel more responsible for their water point; they will keep it in a better condition, therefore less costly repairs will be necessary and any improvements to the system will be more sustainable;
* by encouraging the users to do small repairs themselves (eg standpost repair, tap replacement, small diameter pipeline repairs), El Azab can save funds and work more efficiently;
* a better prevention of water losses will be possible when users are encouraged to feel more responsible;
* if users are better informed and more involved in planning and decisions concerning their water points they will be more willing to pay an adequate price for appropriate facilities and service;

3.3 What can "hygiene education" mean ?
(flipchart 7)

It has been widely recognised that to establish successful and sustainable improvements in water supply and sanitation, they have to be accompanied by adequate information on hygiene and health aspects. Alongside the need to increase awareness, based on the users own experiences, of the link between water, sanitation, uses/practices and health, hygiene education can also

address the relief from burden and the need to safeguard the services through proper operation and maintenance.

Activities of El Azab/FSD concerning hygiene education could focus on ensuring that:

* users are informed of proper use and functioning of the facilities;
* users are informed of the benefits, in paying attention to health hazards of inadequate water use and sanitary facilities;
* users are involved in planning, designing and siting water supply and sanitary facilities, to increase their appropriateness and hygienic use;
* users are aware of the need for the proper disposal of waste water (overspill, "grey" water and foul water) and solid wastes.

Advantages of proper attention to hygiene and health aspects for the users are :

* it can contribute to maximum general benefits of safe water and sanitation;
* it can contribute to the prevention of diseases;
* it can contribute to the improvement of living conditions in general, including comfort, convenience and time saving.

Advantages for El Azab / FSD are :

* a better appreciation of the value of water by the users, and therefore increased willingness to pay;
* a more efficient use of facilities;
* better, and more sustainable planning of new facilities.

3.4 What can "gender awareness" mean ?
(flipchart 8)

To be aware of gender means that the different tasks, responsibilities and interests of men and women are taken into account.

What is the importance of gender awareness for El Azab/FSD and the Project?

* To maximize inputs from users, women as well as men, and to ensure better, more efficient and more hygienic use of facilities, it is necessary to give sufficient attention to the importance of women's roles in providing water and hygiene for their families.

* To ensure sufficient attention for women's and men's different roles and interests, it is necessary to have a sufficient number of female as well as male staff, for reaching women as well as men users.

USER INVOLVEMENT AND HYGIENE EDUCATION: WHAT IN SUMMARY ARE THE ADVANTAGES FOR EL AZAB AND FSD?

User involvement / hygiene education will help raise efficiency and effectiveness:

THROUGH:

* *raising user awareness of joint responsibility (partnership)*
* *raising user awareness of the added health value and other benefits of water and sanitation*

WHICH HELPS BY:

* *ensuring people pay for water and sanitation services*
* *assisting acceptance of increasing tariffs*
* *preventing water losses and wastage*
* *avoiding expensive call outs for minor repairs and maintenance*
* *enhancing the sustainability of the system*
* *extending the service life of the water and wastewater assets*
* *raising the level of demand*
* *increasing the willingness of the users to pay the investment costs of extensions*
* *enabling the "health impact" El Azab / FSD objectives to be met, rather than only the supply water / remove wastes objectives*

4 IMPLICATIONS

4.1 Introduction

This Chapter seeks to identify the implications of a decision to take action on user involvement, hygiene education and gender. The mission's own insights and ideas gained from its period in Fayoum are used to identify three options for handling these relatively new areas in the development of Fayoum rural water supplies and sanitation, and to recommend a preferred course of action.

Important implications for amending or clarifying the "mission statements", or guiding mandates of El Azab and FSD, are also presented.

4.2 What are the possible options for User Involvement and Hygiene Education?

Option A: "Direct Role"
(Flipchart 11A)

The first option we look at is the case where El Azab and FSD, recognising the importance and advantage of user involvement and hygiene education, might decide to implement such activities directly, with its own staff and resources.

This would have major implications in terms of organisational set up, budgeting and staffing. A completely new set of activities would have to be added to the current workplan of both organisations.

Large scale external support would probably be needed in terms of setting up such a new range of activities, staff recruitment, training and guidance. This would be supported by Phase II of the Project if it could still be accommodated, or more likely, through a separate project, which would need to be formalised urgently.

Advantages:
- user involvement and hygiene education remain firmly under the control of El Azab and FSD
- activities can be well integrated with technical and institutional developments

Disadvantages:
- expensive to set up and operate
- El Azab and FSD have no staff or experience in this field
- probably unsustainable in the long term, in that the level of direct effort and expenditure is unlikely to be covered by revenue improvements
- takes no account of existing efforts in hygiene education and user development by others
- misses the opportunity of integrating user involvement and hygiene education with more "marketable" developments such as low-cost credit
- exceeds the normally accepted role and mandate of water and sanitation agencies

Option B: "No Role"
(Flipchart 11A)

At the other end of the scale to Option A is the case where El Azab and FSD might decide to have nothing at all to do with user involvement and hygiene education activities. They would leave such activities entirely to others, with El Azab and FSD concentrating solely on the technical and administrative aspects of an efficient and effective safe water supply / sanitary waste removal service. This would mean that El Azab and FSD continue their largely technical and service-oriented roles, adopting the view that a water and waste utility's task does not extend beyond the provision of water and waste removal services, without responsibility for their impact and benefit, or the degree of joint-effort with the users that may be realisable.

Advantages:
- El Azab and FSD retain well defined and manageable technical and service-related responsibilities, easily managed and monitored
- All effort is directly related to revenue earning without the necessity to get involved in activities that are not so easily linked to profitability

Disadvantages:
- fails to meet the moral obligation of a water supply / sanitation utility to ensure maximum public health and convenience impact from its services
- contradicts the health impact objective of the Project and the suggested El Azab and FSD "mission statement" mandates
- misses opportunities for user involvement / hygiene education to contribute to efficiency and effectiveness
- neglects user involvement as a valuable potential resource
- unrealistic. User involvement and hygiene education impact will probably not happen without someone to coordinate and support these activities

Option C: "Management / Liaison Role"
(Flipchart 11B)

A third option, Option C, combines the advantages and minimises the disadvantages of both Options A and B. Under this option, El Azab / FSD take up only "management and coordination" responsibility for user involvement and hygiene education. This is effected through a small "Liaison Department".

Guided by the Liaison Department, actual implementation of user involvement and hygiene education is tried out by others (outside of El Azab / FSD), through four or five "pilot approaches".

The long-term aim of such an approach would be user involvement and hygiene education activities implemented at full scale by others, but managed and coordinated by the El Azab Liaison Department.

Thus a distinction is made between actually implementing activities (Option A) and managing, coordinating and guiding activities (Option C) - "making sure things happen" rather than "doing them directly". At the same time such a Department could take up also the tasks of public relations and information, implying a more direct involvement.

Advantages:
- El Azab / FSD retain their moral and mandated responsibility for maximising impact and benefit of the services they provide, whilst avoiding costly in-house expenditure to develop new expertise
- by making sure user involvement and hygiene education happen, El Azab and FSD benefit from contributions to increased efficiency and an increase in "effective demand"[2]
- maximises contribution of others already active and experienced in these and related fields, rather than duplicating effort

Disadvantages:
- Needs strong political and managerial commitment and support and good inter-agency liaison and partnership to make it work
- depends very much on the right positioning of the Liaison Department in El Azab and the early recruitment of able and well experienced Egyptian personnel to staff it

On balance, we strongly recommend Option C for further consideration. It enables El Azab / FSD to take up their responsibility to make sure that user involvement and hygiene education happen, without burdening them with responsibility for direct action, with the associated staffing, budgetary and organisational implications.

Initial consultations with the Egyptian Project Advisory Committee at the end of the mission confirmed that this option has strongest support amongst the policy makers in Fayoum Governorate.

4.3 The need for an improved Mandate and Performance Parameters

An important precondition in making Option C work would be that the management, guidance and co-ordination of user participation via a Liaison Department is given sufficient weight, credibility and resources within El Azab / FSD. This would be assisted if it was clear from the outset that El Azab and FSD had a moral and corporate responsibility to ensure that user involvement and hygiene education happened, as essential components of more technical water supply / waste removal services.

Many organisations and agencies these days find it important to have a "Mission Statement" giving overall guidance to their corporate activities. Such a statement sets out the overall vision and mandates for the organisation's work. In the short time the mission was in Fayoum, despite several enquiries, we were unable to find out if a Mission Statement exists for El Azab / FSD or if the development of one is planned.

The supporting Netherlands-assisted Project on the other hand does have something akin to a mission statement in its "General Project Objective". This is:

> "To contribute to improved rural health through the improvement of water supply and sanitation conditions in the rural areas of Fayoum. This objective is realised through the execution of a programme which provides technical and financial assistance to El Azab waterworks of Fayoum and to the Fayoum Sanitation Department"

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[2] *"Effective Demand": a measure of the willingness and ability to pay the necessary price for a certain technology and level of service*

The emphasis on and acknowledgement of a contribution to **improved health** is noted and supported. (However an improved formulation would include contributions to rural life-style also, including convenience, comfort and time-saving).

If they already exist, Mission Statements for El Azab and FSD should be checked for sufficient emphasis on user involvement and health. If they do not exist, the mission proposes that they be formulated soonest, with sufficient emphasis on user involvement and hygiene education, in order to support and give authority to the work of the proposed new Liaison Department.

If the summary advantages to El Azab / FSD set out in Chapter 2 are kept in mind, this need not interfere with the more commercial objectives of profitability and financial efficiency in the run up to possible future transition to a public or even fully private company status.

One option for a proposed formulation of an El Azab Mission Statement, based on experience elsewhere and adequately reflecting the need for user involvement and hygiene education roles would be:

"The Mission of the El Azab Waterworks is:

1 To provide safe, sufficient and reliable water for normal domestic purposes to all of the rural population of Fayoum Governorate at an acceptable cost;

2 To make a contribution to the improved health and quality of life of the rural population of Fayoum Governorate through such supply and through the promotion of improvement in hygiene-related behaviour;

3 To move as rapidly as possible towards a position of financial viability through improvements in efficiency, reduction in unaccounted for water, and through maximising users' involvement in terms of financial and other contributions and the uptake of operation and maintenance and other responsibilities."

A similar statement could be formulated for the Fayoum Sanitation Department.

Such a Mission Statement would have implications in terms of both the development of performance indicators and aspects on which El Azab would be required to regularly report. These would help safeguard the obligation of El Azab to be active in these areas, and the role and status of the Liaison Department within the organisation.

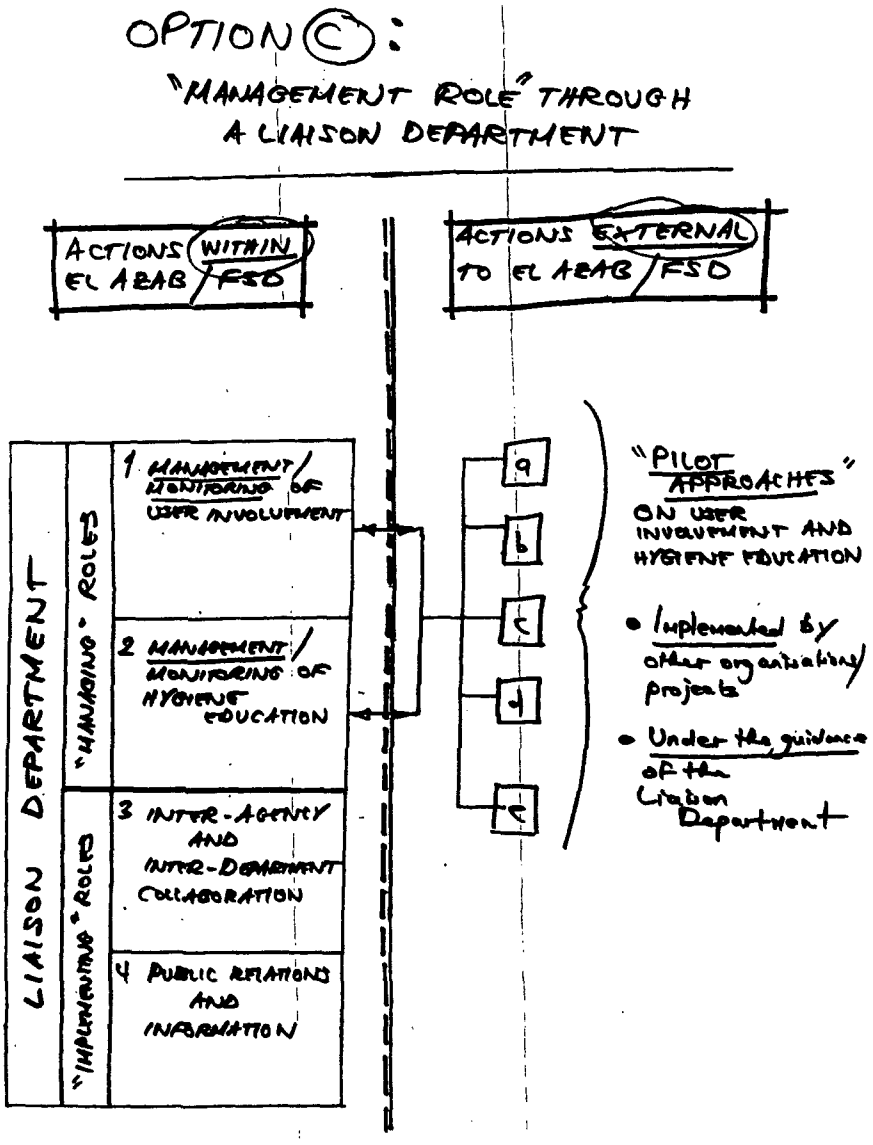
5 OPTION C SPELT OUT: A LIAISON DEPARTMENT

5.1 Introduction

Chapter 4 described several options for the way in which El Azab / FSD might respond to the need for user involvement and hygiene education. Option C, whereby El Azab takes management responsibility only through a new Liaison Department, was recommended. This Chapter gives more detail about how this could be realised, and further specifies the roles of the proposed Liaison Department, both managing roles where the Department oversees activities in user involvement and hygiene education by others and implementing roles where the Department plays a direct role in implementing and taking initiatives.

Also set out are possible pilot approaches the Liaison Department might supervise, its organisational position within El Azab, staffing and support needs, and the proposed timing of such an organisational development.

5.2 Roles of the Liaison Department (Flipchart 12)



Which groups of activities would be **managed and monitored** by the Liaison Department?
(Flipchart 14)

Two groups of activities would be "managed and monitored" (rather than being directly implemented) by the El Azab Liaison Department. They are:

Users Involvement in Water Supply and Sanitation

Through a number of "learning by doing" pilot schemes, various initiatives concerning users involvement would be tried out by others, from outside El Azab / FSD, but under the overall guidance of the Liaison Department. Suggested pilot approaches and the agencies / projects that might act as prime movers are put forward in section 5.3 Each scheme would carry out activities related to identifying and enhancing selected aspects of users' involvement, a number of which were set out in Chapter 3.

All or some of the following process stages will be developed in connection with the pilot schemes:

- preliminary investigation
- development of an extension service
- development and dissemination of information
- training, and the development of appropriate training services, for different levels
- indicator development, monitoring, evaluation and feedback

The "preliminary investigation" would include gaining insights on knowledge, attitude and practises. Who does what and how? What skills exist? What is the potential? What are the real needs and priorities?

The "development of an extension service" would include the identification/selection, orientation, monitoring and support of an appropriate group of persons to work in partnership with users on users' involvement. It would include consideration of administrative and logistical support and management, motivation and development of the team.

The "development and dissemination of information" would include the design, field testing, refinement, production, dissemination and appropriate use of materials and visual aids to assist users to build their awareness of what the needs are, and how they might contribute to meeting them. At the same time material will be needed to inform extension service workers and Agency Staff on opportunities and the roles expected of them.

"Training and the development of appropriate training services" would include designing and testing formal and informal training courses and methods for users, leaders, extension workers, El Azab / FSD staff, and others on the potential and practical implications of users' involvement.

"Indicator development, monitoring, evaluation and feedback" leading to adjustment of approaches, will be key features in this "action research" process. This is important not only for the constant adjustment and improvement of each of the pilot approaches, but also for the Liaison Department to eventually assess which approach is most viable for subsequent scaling up to full scale.

Hygiene Education in Water Supply and Sanitation

In a similar way and probably at the same locations, a number of pilot schemes would also try out initiatives concerning hygiene education. Again the prime movers would be from outside El Azab / FSD, but under the overall guidance of the Liaison Department. Suggested pilot approaches and the agencies / projects that might act as leaders are put forward in section 5.3 Each scheme would carry out activities related to introducing hygiene education, a number of aspects of which were set out in Chapter 2.

All or some of the following process stages will be developed at the pilot schemes:

- preliminary investigation (knowledge, attitudes, practice, needs)
- identification of targets and required messages
- development of an extension service
- development and dissemination of information
- training, and the development of appropriate training services, for different levels
- indicator development, monitoring, evaluation and feedback

The implications of these activity areas are similar to those for "Users' Involvement in Water and Sanitation", set out above.

As for users' involvement, the development of indicators, constant monitoring, feedback and adjustment of approaches will be key features in this "action research" process. This is important not only for the constant adjustment and improvement of each of the pilot approaches, but also for the Liaison Department to eventually assess which approach is most viable for subsequent scaling up.

Which groups of activities will be **"directly implemented"** by the Liaison Department? (Flipchart 15)

A second pair of activity groups would be directly implemented (rather than being only managed and monitored) by the El Azab Liaison Department. They are:

Inter-Agency and Inter-Departmental Collaboration

This is a very important activity area if the "management role" for user involvement and hygiene education is to work in practice. Clearly very close formal and working linkages will need to be established with agencies and projects that have a capacity and willingness to collaborate with El Azab and to take the lead in trying out one or more pilot approaches. There will be a need for the Liaison Department to play an active role in negotiating with partner agencies, reaching and documenting agreement, and securing clearance from all necessary levels of Government on these matters. The Liaison Department will also have to control and disburse funds, as may be required in support of the pilot approaches.

A wider external Liaison function will also be necessary in order to share information with others active in similar fields, at National and Governorate level, including the water and wastes services of Fayoum City.

An example of the advantages of working together would be close liaison with those Egyptian agencies that UNICEF is supporting, in the context of which a number of practical hygiene education materials in support of water and sanitation have been developed. Examples of these have been passed to El Azab / FSD during the mission.

At the same time, the Liaison Department will have an important internal function. It will be in a good position to assist and promote liaison and cooperation between departments and between head office and the field within El Azab, and also between El Azab and the Fayoum Sanitation Department. This enhanced internal collaboration is very important both to sensitise more technical staff to the user involvement and hygiene education issues, and to maximise opportunities for co-ordinating the engineering and non-engineering initiatives.

An example of where closer internal liaison is needed is the current exercise to paint numbers on the walls of houses to better identify consumers and facilitate billing and collection. However on a field trip to Tersa, it was clear that a number of house owners did not know what the numbers were for, and had not given their permission. A valuable opportunity for agency / user interface and for discussions on billing, operations, even hygiene behaviour, had been lost.

Areas for inter-agency and inter departmental collaboration which the liaison department might take up include:

- investigating who does what in promoting user involvement and hygiene education and what the potentials are for better collaboration

- liaising and developing joint activities (eg joint planning, co-funding, training, workshops, regular meetings) with:
  - government agencies at national, governorate and local unit level
  - Non Governmental Organisations
  - External Support Agencies
  - relevant projects and programmes in the area

- setting up specific working relationships for the implementation of pilot projects to investigate users' involvement and hygiene education approaches

- facilitating the further strengthening of the coordination within El Azab and between El Azab and FSD on aspects of users' involvement and hygiene education

Public Relations and Information

This again is a most important activity area for the new Liaison Department, covering the public image of both El Azab and FSD on the one hand and making sure that information and experiences are freely available to all who may need it on the other.

Consulting and sharing early information on plans and activities with users helps identify and prevent any future customer relations problems. The public relations and information functions also reflect the basic accountability of El Azab and FSD to the customers themselves, alongside accountability to Government and future shareholders.

The public relations aspect would incorporate many of the current activities of the small existing Customer Relations Unit, which handles customer queries and complaints on behalf of the General Manager. To this it would add the broader functions of media liaison (TV, radio, press), the preparation of brochures and booklets, and the organisation of public visits and open days.

The information focused activities would include setting up a small information centre (library) on water supply, sanitation user involvement and hygiene education, and the promotion of information sharing and ideas-generating initiatives such as internal and customer newsletters, ideas boxes, targeted workshops, the setting up of working groups or task forces on specific issues, and encouragement of staff to prepare and present papers on their experiences.

POSSIBLE PILOT APPROACHES
(TO BE IMPLEMENTED EXTERNALLY TO EL AZAB /FSD)
(Flipchart 13)

Various opportunities exist for trying out ways of promoting user involvement and hygiene education in the Fayoum rural setting. The limitations of mission duration meant that these could not be explored in great detail beyond identification of their potential. Further investigation and selection of appropriate institutional partners, followed by discussion with the agencies involved, would be a priority for the Liaison Department staff and their external supporters. Public Relations and Information would better remain directly implemented by the Liaison Department (see text).

The mission makes the following suggestions for further consideration:

(a) via an additional component to an existing externally supported project

The prime example would be the Netherlands-supported Fayoum Rural Health and Family Planning Project, active currently in Itsa District. Early experiences with the recruitment, training and work of village-based Health Promoters are positive, as is the linking of health messages with more pragmatic support such as low-interest credit and animal husbandry advice. There is already good and increasing operational and financing integration of the Health Promoters within the Department of Health.

Given extra resources, possibly disbursed via the Liaison Department, and a clear mandate, the mission's impression was that the project might well be agreeable to modelling, on El Azab's / FSD's behalf, user involvement and hygiene education approaches in support of water and sanitation.

(b) through selected Community Development Associations (CDAs)

Community Development Associations are semi-independent non-governmental development associations at the community level. Their strengths and degree of initiative vary from village to village. A number have been supported by international NGOs such as CARE. Several of the more active examples of CDAs might be selected to initiate and carry through pilot user involvement and hygiene education activities, perhaps guided and supported in these new areas of initiative by CARE or other supporting agencies.

Given additional resources, possibly disbursed via the Liaison Department, the mission's impression concerning the capability of some CDAs to take this task up, and the willingness of CARE to support such developments were positive.

(See El Rada findings in Field Visit Reports Annexe E)

(c) through Local Governments

Both the Department of Health and the Department of Social Services are represented throughout Local Government and have staff posted at Local Unit level in the "mother villages". The Department of Health has a team of Sanitarians active at community level, whose function includes hygiene education.

Given additional resources, possible disbursed via the Liaison Department, and ideally some external guidance and support, the mission's impression is that selected Local Governments may themselves be in a position to pilot approaches to both user involvement and hygiene education in support of water and sanitation.

(d) through a possible new Netherlands-supported project for this purpose, in support of an appropriate Egyptian Agency

A further possibility to implement one or possibly several pilot schemes would be through a separately funded mini-project, supporting and progressively transferring responsibility to an appropriate Egyptian agency, governmental, non governmental or possibly private or semi-private sector.

(e) possible other options

To be further identified and explored as part of detailed formulation.

5.3 Some Examples of the possible impact of the Liaison Department

How the issues of on-site sanitation and water supply for marginal users might be catered for are good illustrations of the way in which the integration of "hardware" (especially the engineering works) and "software" (the non-technical aspects, including users involvement and hygiene education), might be facilitated by the Liaison Department.

How might "on-site sanitation" be handled?
(Flipchart 16)

FSD's primary responsibility is for piped sewerage and sewage treatment. Nonetheless it has a responsibility also (and this should be spelled out in its Mission Statement) to facilitate the servicing of more remote communities and individual dwellings with satisfactory excreta disposal facilities and to monitor solid wastes (garbage) service by local governments and the private sector. At the same time it needs to make sure that user inputs into all forms of sanitation are maximised and that impact and benefit is assisted by appropriate hygiene education.

There is probably a temporary need for further direct input on hardware by FSD, including research, pilot studies and development of model solutions to the sanitation problems of more scattered dwellings. This could be carried out as a temporary activity by FSD, with project support, during Phase II of the project. But after a few years, possibly as early as 1996, it could be anticipated that this work would be complete, and the responsibility for construction, pit emptying and solid wastes established with local authorities, and local entrepreneurs. This transfer process would be facilitated and subsequently supported by the Liaison Department.

The ongoing promotion and management of the software, particularly the promotion of user involvement and hygiene education, would remain a permanent management responsibility of the Liaison Department, acting on behalf of FSD in line with its El Azab / FSD coordination role.

How might "water supply to the marginal users" be handled?

Similarly to the above example, El Azab's primary responsibility is for the supply of piped water and maximising its benefits. Nonetheless its proposed mission statement embracing all rural dwellers would not allow it to ignore those marginal communities who are beyond the present outreach of the distribution network.

The Liaison Department could assist here in exploring ways in which such users could be better served, either through users' own contributions or cross-subsidy mechanisms to make network extension more viable, or through improvements in existing donkey-cart water collection and transport, re-distribution, storage and use arrangements.

5.4 Possible Organisational Set-Up (Flipchart 17)

In order to give the new liaison roles sufficient weight, it will be important to establish a new Liaison Department within El Azab,

The special needs of users' involvement and hygiene education as related to sanitation must not be neglected. In the future, as FSD grows, and if felt appropriate, it may wish to consider setting up its own Liaison Department.

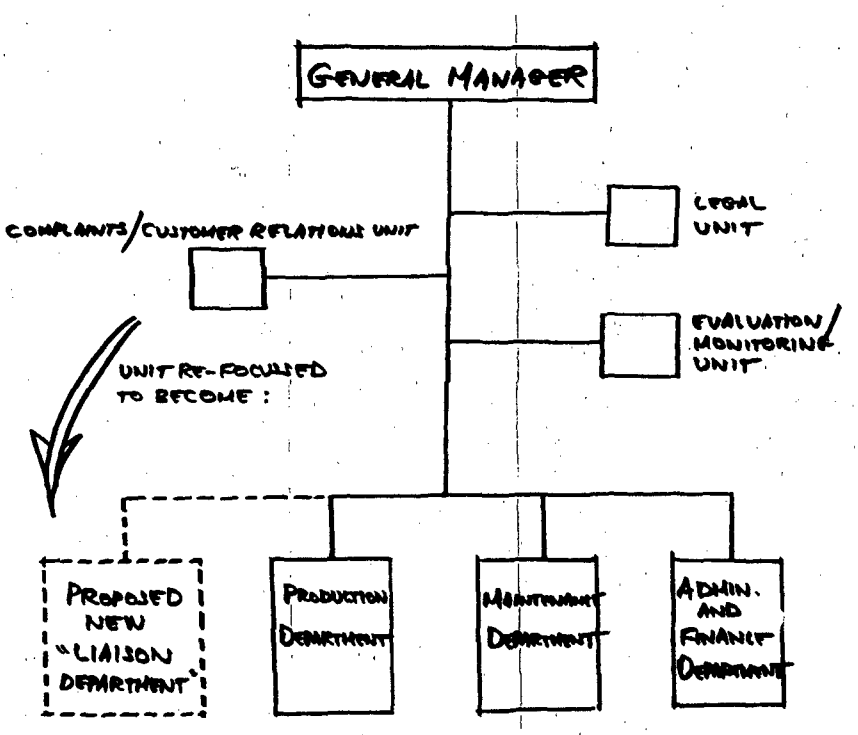
In the interim however, it is proposed that the El Azab Liaison Department will act as an agent also for the liaison requirements of FSD. This will be reflected in its mandates.

The El Azab Liaison Department would have the same organisational and reporting status as the existing Production, Maintenance and Administration and Finance Departments, and report directly to the General Manager. This status is important in order to avoid any danger of the work in this area becoming marginalised, or of its work becoming a simply a "token contribution".

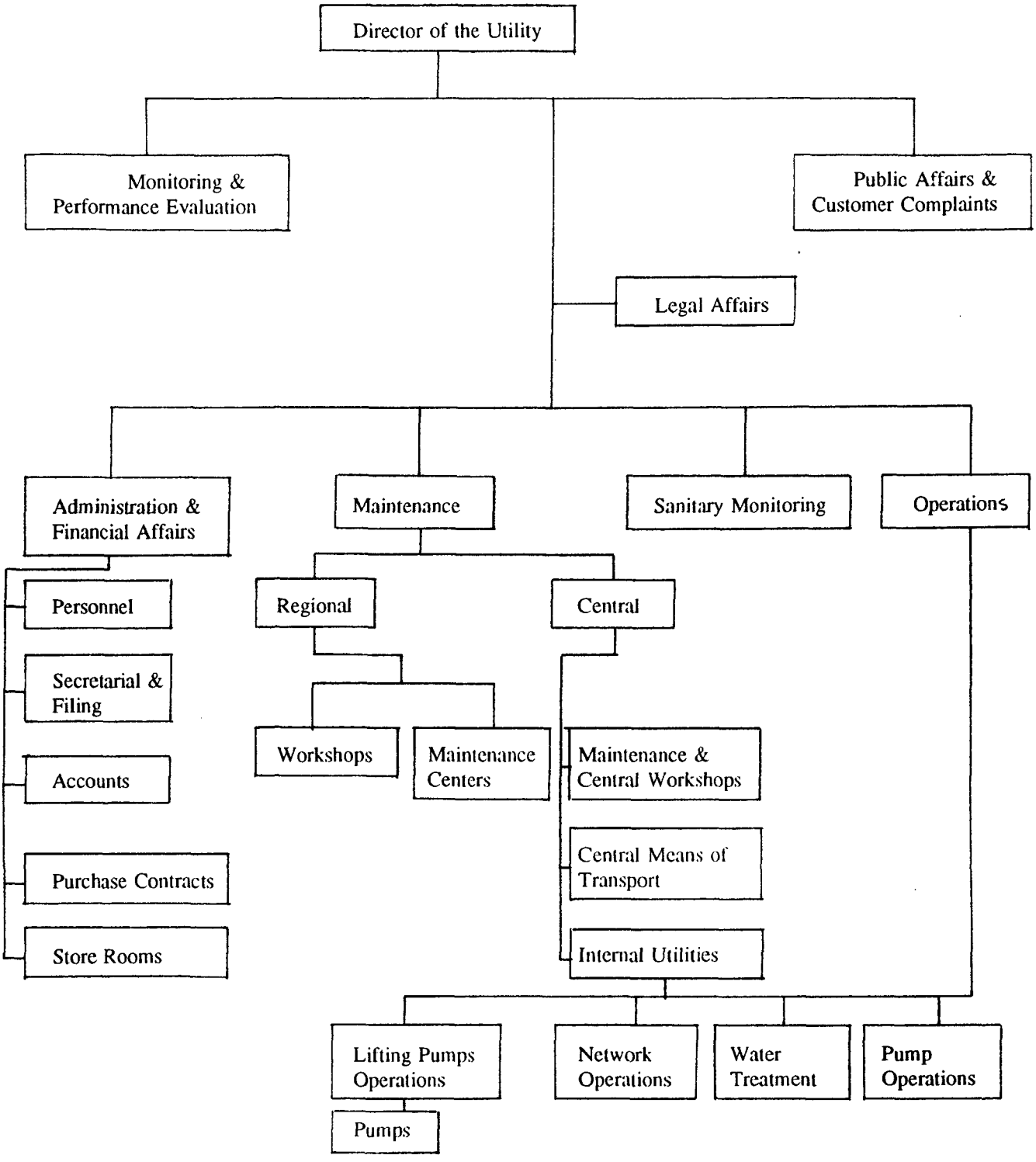
On the contrary, it is vital that the work of the Liaison Department is seen as very much in the mainstream of El Azab's activities. It should quickly establish its credibility in making a key contribution to the profitability, user impact and user benefit of the El Azab / FSD work. Establishing the liaison function within a principal line-Department will be an important step in helping bring this about, coupled with the right staffing and essential senior management support.

It is proposed that the small existing "Complaints / Customer Relations Unit", currently acting as an auxiliary unit in support of the General Manager, would be fully absorbed in the new Liaison Department.

Importantly, because of the complex role the Liaison Department will have to fulfil, it is essential that it has sufficient support, at the political level, within El Azab / FSD, and in terms of external support, to ensure that it can function effectively. It also needs to have adequate budgets and clear mandates to negotiate and prepare agreements with third parties for the implementation of the pilot schemes and provision of other services. The mechanisms for the flow of financial resources needs to be very clear. For example if Department of Health is executing a pilot approach in partnership with the El Azab / FSD Liaison Department, the mechanism for the flow of funds for these purposes needs to be spelt out.



POSSIBLE ORGANISATIONAL SET-UP



EXISTING ORGANISATIONAL STRUCTURE OF EL AZAB

5.5 Staffing and other Resources for the Liaison Department (Flipchart 18)

Staffing

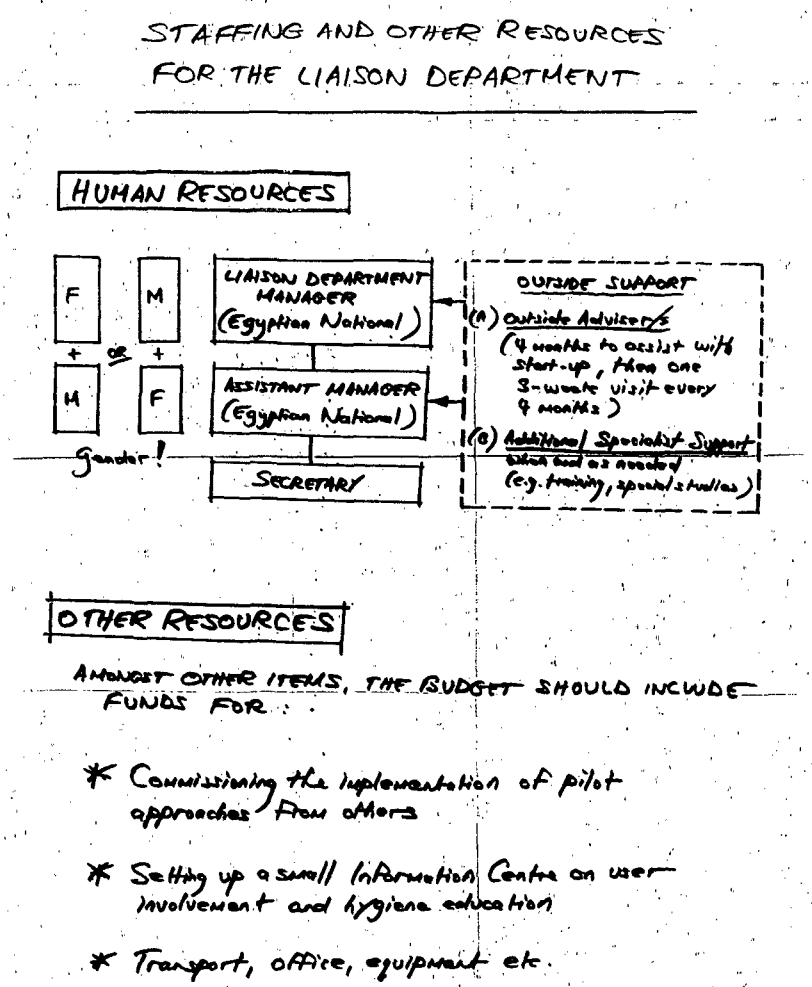
It will be very important that the Liaison Department has its own well experienced and committed staff. Because of the intended permanent nature of the Department and the need for close awareness of the sensitivities related to user and inter-agency liaison, it is essential that the staff should be Egyptian nationals. The initiatives thus remain Egyptian ones with corresponding improvement in sustainability prospects.

Two key positions are proposed, a Liaison Department Manager and an Assistant Manager. There will also be a need for secretarial support. These incumbents of these two positions will between them contribute the necessary skills.

Because the sociological, communications, hygiene education and public relations skills are not currently available within El Azab / FSD, it will probably be necessary to recruit new staff externally, or arrange transfer from other Government departments.

Because of the gender sensitivity of user involvement and the importance of giving more attention in the future to gender issues, it will be important to get both genders represented in the Liaison Department staff. Either the Manager will be female with the Assistant a male, or vice versa.

Proposed candidate profiles are attached in Annexe H.



Outside Support

Because of the newness of the tasks to be assigned to Liaison Department and the need to both set it up organisationally and establish its credentials within El Azab / FSD and externally, it will be helpful to have access to have occasional outside support. This is particularly so in the initial stages, when the pilot approaches will need to be further identified, set up with various partners, and got under way.

It is proposed therefore that an outside specialist adviser, either from within Egypt or outside, be available in Fayoum for the first four months of the Department's life. Subsequently the adviser might make support visits of say 2-3 weeks' duration every three to four months. Additional specialist support could also be called up as and when needed, for example for training, or special studies.

Such arrangements would have the advantage of rapidly institutionalising the Liaison Department as an Egyptian-staffed organisational unit within El Azab, whilst at the same time giving backstopping for the necessarily innovative approaches that will be necessary to establish the new roles and tasks involved.

Other necessary resources

Amongst other things, the Liaison Department will need funds for commissioning the pilot approaches to user involvement and hygiene education, the setting up of a small information centre on user involvement, hygiene education and gender, and for transport, offices and equipment.

Financing the Liaison Department

It is clear that the major costs of staff, pilot approaches, transport etc. would have significant budgetary implications. One suggestion would be for a significant proportion of these costs to be covered either by Phase II of the current project, or a new project to run parallel to it. El Azab would contribute a part of these costs from day one as a gesture of commitment, from its subsidy or revenue income. The proportion of its contribution would increase as the value of the Liaison Department's work, and its spin off in terms of increased user willingness to pay, acceptance of tariff increases, and contributions in kind (reducing construction and operation and maintenance costs) become more and more apparent.

The intention would be that at the earliest date the Liaison Department would become an entirely internally funded Department of El Azab:

- recognised as playing an essential role in fulfilling the El Azab / FSD mission, to include "health" and "quality of life" components

- further justified by spinoff improvements in the value of user inputs, reduced O and M costs, reduced losses, realistic tariffs and improved payment discipline

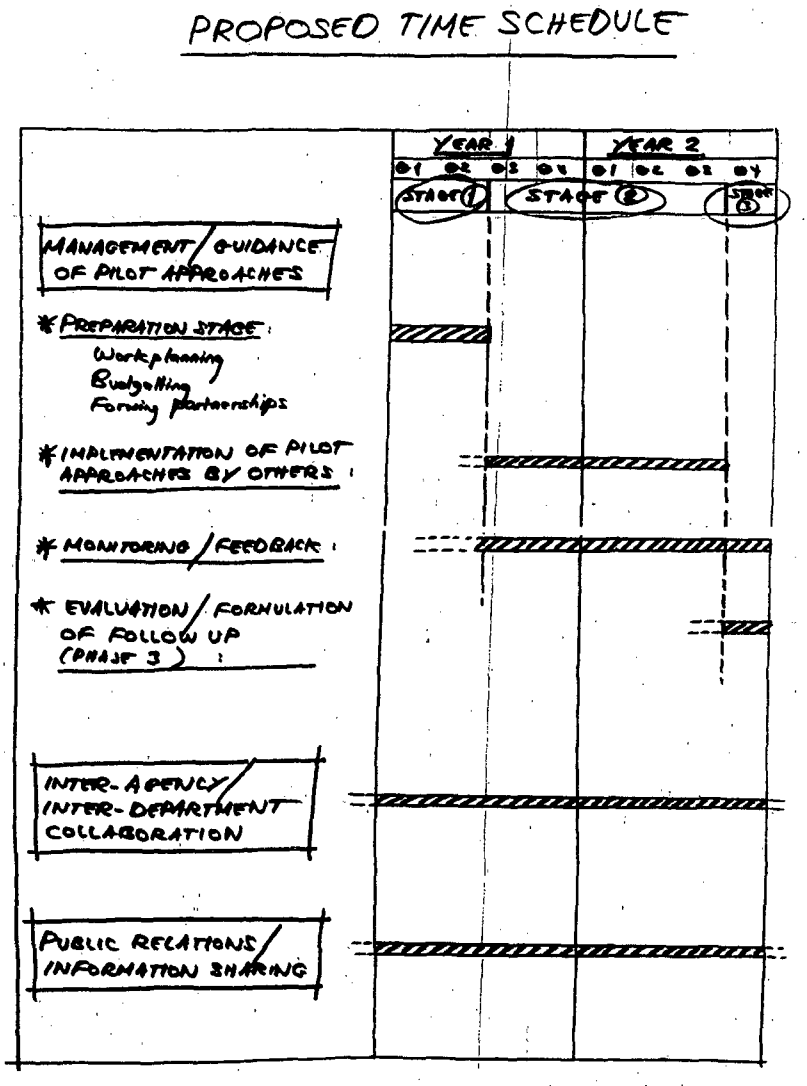
5.6 Timing (Flipchart 19)

A proposed programme for the initial development of the Liaison Department's activities is shown in Chart 19. This covers a minimum of a two year period during which the Department is established and, amongst other activities, guides and manages the development of a number of pilot approaches in which innovative approaches to user involvement and hygiene education are trialled. As has been discussed, this period would probably be externally supported on a reducing basis, at the end of which:

- the Liaison department would be a fully fledged operational Department within FSD, funded from internal revenue

- pilot approaches will have been developed, monitored and assessed, and a strategy developed for the full scale application of user involvement and hygiene education throughout the governorate

A period of two years has been chosen in order to match with the proposed Phase II extension of the present project. However it may well be that a longer period is more appropriate for complex tasks in hand, and three years would therefore be ideal.



In terms of the two management and guidance roles of the Liaison Department, relating to user involvement and hygiene education, the first two years are split into three stages:

Stage 1: Preparation Phase
recruitment; induction; training; workplanning; budgeting; forming partnerships; identifying and setting up pilot approaches

Stage 2: Implementation Phase
management of the implementation of pilot approaches by others; monitoring; feedback

Stage 3: Evaluation
evaluation of pilot approaches and of Liaison Department activities; formulation of follow up

The two more direct action roles of the Liaison Department, relating to inter-agency and inter-departmental collaboration and public relations / information sharing, are continuous activities spanning Stages 1, 2 and 3.

5.7 Summary of Sustainability Considerations

The need for the Liaison Department to be well founded in El Azab / FSD and therefore sustainable in the long term is axiomatic, and has been addressed several places in the preceding text. In particular the following aspects may be highlighted as being particularly important:

- the integration of the user involvement, hygiene education, inter agency / departmental collaboration and public relations and information activities as a integral part of El Azab from "day one", through the formation of an in-house Liaison Department;

- the emphasis on Egyptian staffing and management, with advisory support only being provided intermittently, as and when required;

- the development of indicators and a monitoring system that quickly helps justify the expenditures on these new activities, and shows the links between them and improved revenue returns, and enhanced benefits through better hygienic practices;

- a built-in decline in the level of external funding, encouraging increasing self sufficiency of the Liaison Department and its work. This will ultimately be funded from water and sanitation services revenue, justified by both the Department's contribution to overall efficiency and its role in ensuring the proposed "health" and "quality of life" as well as economic aspects of El Azab / FSDs' mission are achieved.

ANNEXES

ANNEXE A

MISSION TERMS OF REFERENCE

The revised mission Terms of Reference, issued to the mission at the Royal Netherlands Embassy in Cairo on 10th April 1994, are attached.

28/3/94

TERMS OF REFERENCE

For a mission to formulate
Community Participation in Drinking Water Supply and Sanitation
in Fayoum Governorate

Background

The first phase of the Fayoum Drinking Water and Sanitation Project (FaDWS) took place from 1990-1993 as a joint undertaking of the Government of Egypt and the Government of the Netherlands. FaDWS has two counterparts: El Azab Waterworks and the Fayoum Sanitation Department (FSD). El Azab has existed for quite some time and is responsible for water supply, while FSD is a relatively new institution responsible for on-site sanitation, improvement of sanitary facilities in rural areas, waste water management etc. Currently, the request for support of a second phase is being considered.

During the first phase, a pilot project was initiated in the field of hygiene education. Its outcome stimulated awareness about the need for more activities in this field. It also generated interest in community participation in general, for example in public tap rehabilitation, on-site sanitation, sanitary improvements at village level and customer relations.

Community participation in water supply and sanitation encompasses two main themes: customer relations and environmental health education (EHE). FaDSW has started activities in customer relations during the first phase, which need to be developed further within the second phase. Environmental health education is actually a new initiative. Its institutional setting has not yet been decided on. It has been argued that EHE should form an integrated part of FaDWS. Another line of thinking envisages pilot EHE activities as new component of the Fayoum Rural Health and Family Planning Project (FaRHFP) or even as separate project between FaDWS and FaRHFP, without the counterpart institution being specified as yet. During the first phase of FaDWS both customer relations as well as EHE received limited attention only, because the emphasis during this phase was put on masterplanning and service delivery with consequently lack of expertise and adequate funding to develop the community participation component.

Thus, the Netherlands Embassy in Cairo has decided to field a mission to look into the community participation component. It will consist of 2 expatriates with expertise in community participation in drinking water and sanitation, one with a social science background and the other with a technical background. They will be assisted by an Egyptian social scientist/health educator to be recruited by the Embassy.

Objectives

The main objectives of this mission are to advise Royal Netherlands Embassy on:

- the formulation of the environmental health education component including a description of organisational aspects e.g. counterpart organisation, strategy, staff, budget and other requirements, and
- the description of what constitutes good customers relations for FaDWS including the formulation of a strategy to implement this aspect of community participation, not excluding a considerable number of 'would be' customers which are presently un(der)served.

Tasks

- The mission will describe the components of good customers relations for the FaDWS project in a realistic manner and formulate a step-by-step strategy to attain a customer relations department within the project.
- The mission will explore different options for the feasibility and possible institutional set up of the environmental health education activities, including the perceived advantages and disadvantages of these options. They will formulate a proposal to start such activities on a pilot basis during the second phase of the project. The mission will also provide some indications on the design and testing of health educational materials.
- In the implementation of community participation, interest in and sensitivity to gender issues will be essential. The mission will develop a number of gender-specific indicators that can be used to monitor and evaluate the activities of FaDWS in general and of the community participation component in particular.
- In preparation for the fieldwork, the mission will contact Mr. Van Schaik at the RIVM, member of the Monitoring Commission to the FaDWS, in order to be informed about the current vision of RIVM with regard to activities in the field of customer relations and environmental health education.
- Apart from briefing and debriefing sessions at the Netherlands Embassy, the mission will reside in Fayoum Governorate to enable adequate discussions with all parties involved, including the Governorate, Department of Health, Department of Social Services, Department of Sanitary Drainage, Environmental Affairs Agency, El Azab Water Works, Fayoum City Water Works, Fayoum Rural Health and Family Planning Project, ORDEV, CARE and other relevant parties.

- The mission shall incorporate existing relevant information, experience and expertise within the FaDWS, FaRHFP, FSD, Department of Health and similar activities in Egypt. They will also provide FaDSW and FSD with relevant documentation on community participation in drinking water and sanitation.

- At the end of the mission the team is expected to summarise findings and recommendations in a draft report and advise the Royal Netherlands Embassy on community participation in drinking water and sanitation activities in the Fayoum.

- The duration of the consultancy shall be 18 days in total, including 14 days in Egypt, with an additional 2 days for preparation and 2 days for report writing in the Netherlands. The consultants are expected to start their work in Egypt on April 10, 1994.

- The consultants will be assisted by one Egyptian expert, in complementary fields, which will be arranged through the Royal Netherlands Embassy.

ANNEXE B

MISSION PROGRAMME
Egypt, 9th - 23rd April 1994 [3]

Saturday 9th April

PM: - Travel Amsterdam to Cairo

Sunday 10th April

AM: - Briefing at Royal Netherlands Embassy

PM: - Team discussions on mission methodology

Monday 11th April

AM:
- Travel by road Cairo to Fayoum City
- Meeting with Project staff
- Meeting at El Azab with current and previous General Manager El Azab, General Manager Fayoum Sanitation Department and Staff of Fayoum Drinking Water and Sanitation Project
- Meeting with Director and staff of Department of Health
- Lunch discussion with RNE First Secretary (Women in Development)

PM:
- Meeting with Project Staff, Fayoum Rural Health and Family Planning Project
- Joint mission planning with Project staff, including field visit criteria and selection
- Transfer to hotel

Tuesday 12th April

AM:
- Telephone discussion with Monitoring Team Member (Dr. Gaber) in Cairo
- Briefing by Project Staff on relevant experiences
- Meeting and demonstration by the El Azab Revenue Improvement Team

PM: - Field Visit 1: Ezbet Tunis (Ibshaway District) (village walk)

Wednesday 13th April

AM:
- Team brainstorming
- (ORDEV appointment *)
- Opportunity to brief the Project Egyptian Advisory Committee, chaired by the Secretary general of Fayoum Governorate, on the mission

PM: - Field Visit 2: El Nazla (Ibshaway District) (village walk, community discussions)

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[3] *: indicates appointments that did not materialise

Thursday 14th April

AM:
- Meeting with Social Affairs Department
- (appointment with coordinator of pilot hygiene education activities *)
- Team discussions, reading and setting appointments

PM:
- Field Visit 3: Tersa (Senoures District)
(village walk, community discussions, meeting with Head of Local Unit)

Friday 15th April

AM:
- Team brainstorming

PM:
- Field Visit 4: El Roda (Tamia District)
(meeting with Mayor and with members of a representative Community Development Association

Saturday 16th April

AM:
- Meeting with Environment Department
- Meeting with Fayoum City Water Department
- Meeting with Social Department
- Meeting with USAID-supported Fayoum City Waterworks project
- Lunch discussion with CARE representative and with El Azab co-ordinator of pilot hygiene education activities

PM:
- Field visit 5: Matartares (Senoures District)
Discussions with Local Unit Head and Officials
- Travel to Cairo by road

Sunday 17th April

AM:
- Discussion at Royal Netherlands Embassy
- Meeting with UNICEF
- Meeting with CARE
- Meeting with NOPWASD

PM:
- Meeting with Save the Children Fund
- Meeting with Danida
- Return to Fayoum by road

Monday 18th April

AM:
- Field Visit 6: Fidimeen (Senoures District)
- Team discussions

PM:
- Discussions with Administration Department and Maintenance Departments of El Azab
- Discussions with Project Staff

Tuesday 19th April

AM:
- Discussions with Fayoum Rural Health and Family Planning Project

PM:
- Field Visit 7: Health Centre in Metoul (Itsa District) with staff of the Fayoum Rural Health and Family Planning Project
- Team work developing concepts

Wednesday 20th April

AM: - Finalising concepts and proposals

PM: - Preparing flip chart presentation
- Presentation and discussion on findings to Project staff
- Presentation and discussion on findings to Egyptian Project Advisory Committee

Thursday 21st April

AM: - Travel by road to Cairo

PM: - De-briefing presentation and discussion at the Royal Netherlands Embassy

Friday 22nd April

AM: - Review and consolidation of findings and comments and report frameworking

PM: - ditto

Saturday 23rd April

AM: - Travel Cairo - Amsterdam

ANNEXE C

LIST OF PERSONS CONSULTED

Royal Netherlands Embassy Cairo
Mrs. Joke Buringa, First Secretary (Women and Development)
Mr. Carel D. L. Brands, First Secretary (Rural Development)
Dr. Tarek A. Morad, Programme Officer, Development Cooperation Section

Directorate General for Development Cooperation
(pre and post mission)
Mr. Joep Blom, Sector Adviser DST/TA

El Azab Waterworks
Mr. Mahmoud Massoud, General Manager of El Azab Water Works
Mr. Abdel El Rachman, previous General Manager
Mr. Sabra, Manager, Administration and Finance Department
Mr. Khalid, Head of Maintenance Centre, Senoures District
Eng. Nadia Abd Al Wahab Sayyid, Community Involvement

Fayoum Sanitation Department
Dr. Hassan Aly Abd El Gawad, Director Fayoum Sanitation Department

Fayoum Drinking Water and Sanitation Project
Mr. Cees A. M. Vulto, Project Manager, IWACO
Mr. Hassan El Bana Miez, co-Project Manager, ECG
Mr. Jaap Butter, Water and Sanitation Expert DHV
Mr. Mark de Bel, Associate Expert DGIS (BAD)

Fayoum Rural Health and Family Planning Project
Dr. Mohamed Abdel Zacharia Saad El Din, Project Director General
Dr. Ahmed Abd El-Hakim, Executive Director
Dr. Anwar El Suaify, Assistant Project Director
Mr. Sadam Arkwas, Project Secretary General
Drs. J. N. Van Luijk, Senior Technical Adviser
Ms. Hanna Geerling, Associate Expert (BAD)
Ms. Wil van Steenbergen, Project Consultant

Advisory Committee, Fayoum Drinking Water and Sanitation Project
Mr. Salah Helmi Fahmi, Secretary General, Fayoum Governorate
Mr. Hamzah Abd El Rahman El Gahed
Deputy Secretary General, Fayoum Governorate
Mr. Mahmoud Massoud, Director / General Manager of El Azab Water Works
Mr. Hassan Aly Abd El Ganad, Director Fayoum Sanitation Department
Mr. Farouq Abd El Aziz, Director of Fayoum Water Networks
Mr. Mostafa Bazak, Director of Planning Department
Mr. Assad Salamah Atiyah
Representative of the Technical Division, Fayoum Govenorate
Mr. Ahmed El Bishihy, Director of Finance Department, Fayoum Governorate
Mr. Faiq El Saadouny, Financial Advisor, Fayoum Governorate
Mr. Hosni Abd El Nabi
Director of Production Department and Economic Affairs,
Fayoum Govenorate
Mr. Fayez Fahmi, Director of Legal Affairs
Mr. Salah Mahmoud Salah
Director of Monitoring Department, Fayoum Govenorate

Monitoring Committee, Fayoum Drinking Water and Sanitation Project
Dr. Ahmed Gaber (by telephone)
Ir. Henk van Schaik, RIVM (prior to departure)

Fayoum Governorate
Mr. Salah Helmi Fahmi, Secretary General, Fayoum Governorate
Mr. Hamzah Abd El Rahman El Gahed
Deputy Secretary General, Fayoum Governorate

Health Department:
Dr. Mohamed Abdel Zacharia Saad El Din, Director of Health
Dr. Abd El Aal Abd El Aal, Director, Primary Health Care
Head of Monitoring

Social Affairs Department:
Mr. Abd El Ghani, Director General of Social Affairs
Mr. Makram El Tawi, Director of Planning, Social Affairs

Environmental Affairs Department:
Engineer Nabil El Zaiatt

Fayoum Municipal Council
Mr. Fawzi El Tablawi, Deputy Director (Public Utilities)
Mr. Ibrahim Musa

Fayoum City Waterworks Project

Mr. Jan L. Langnecker, Senior Operator
Mr. Thomas H. Lenze, Maintenance Supervisor
Mr. Mahmoud Kamul, Chemist

ORDEV
Mr. Hamed Abd Allah Gad, ORDEV Representatative, Matatares village

National Population Council
Mr. Abd El Salam Mostafa, Fayoum Director

UNICEF
Dr. Hagag

Danida
Mr. Kurt Moerck Jensen, Councellor Development

CARE
Mr. Daniel O. Coster, CID Program Manager
Mr. Ahmed A. Kh. Abdel Karim, CID Program Management Assistant
Dr. Nabila Azmi Mena, Fayoum Representative

Save the Children Fund
Dr. Atallah Shafic Kuttab, Director

NOPWASD
Engineer Mohamed Negm El Din Mohamed
Head of Central Department for Research and Studies

Tunis Village
Mrs Eveline Porrett

Nazla Village
Villagers, men, women and children

Tersa Village
Head of the Local Unit
Village Unit Secretary
Villagers, men, women and children

El Roda Village
Mr. Ayoub Mayhoub Abd Ailan
Deputy Director, Local Administration, Tamia City Council
Mr. Sayed Faraq Daib, Village Unit Head, Local Administration
Community Development Association and Youth Board Members:
Mr. Mokhtar Gomaa Abd El Maqsoud
Mr. Faraq Sayed Mohamed
Mr. Ahmed Ata El El Ramid
Mr. Abd El Rahman El Rahman
Mr. Mahmoud Fawzi Abd El Bakr
Mr. Fadel Mohamed Abd El Bakr

Matartares Village
Mr. Mohamed Hagag Abd El Bawad, Village Unit Head
Mr. Mizar Gebali Fadel, Village Unit Secretary
Mr. Salama Abd El Faran, Maintenance Director, Village Unit
Mr. Gamal Ahmed Havez, Water Fee Collector, Village Unit
Mr. Sultan Aly Abd El Aaj, Village Unit staff
Mr. Kamal Abd El Aziz, Village Unit staff
Mr. Hassan Said, Village Unit staff
Mr. Hamed Abd Allah Gad, Matatares ORDEV Representatative

Fidimeen Village
Mr.Saad Hashem, Kiosk Fee Collector
Mr. Walid Maamoun, Meter Reader, Gabala village

Metoul Village
Head of the Local Health Centre
Nurse Supervisor
4 Health Promotors

ANNEXE D

VILLAGES
(Flip Chart 4)

A: LIST OF VILLAGES VISITED

EZBAH TUNIS Ibshaway District
small, less prosperous
water supply not rehabilitated, not maintained
sanitation: mostly animal shed
outside the scope of the Project

EL NAZLA Ibshaway District
medium size, average prosperity
water supply not rehabilitated, not maintained
sanitation: all types
special feature: model cost recovery scheme for sanitation
outside the scope of the Project

TERSA Senoures District
medium size, more prosperous
water supply partly rehabilitated
sanitation: all types
special feature: model cost recovery scheme included in pilot hygiene education programme

EL RODAH Tamia District
medium size, less prosperous
water supply not rehabilitated, partly non existent
sanitation: all types
special feature: damaged by earthquake in October 1992
outside scope of project

FIDIMEEN Senoures District
large size, prosperous
water supply partly rehabilitated and maintained
sanitation: all types
special feature: has market kiosk for water revenue collection and complaints
served by NOPWASD

MATARTARES Senoures District
medium size, more prosperous
water supply not rehabilitated, not maintained
sanitation: all types
special feature: village garbage collection, tipping, tanker dumping
outside scope of project

B: CRITERIA FOR CHOICE OF VILLAGE

A. Water supply

1. rehabilitated public tap, maintained
2. rehabilitated public tap, unmaintained
3. unrehabilitated public tap, maintained
4. unrehabilitated public tap, unmaintained
5. kiosk revenue collection
6. no service

B. Health/hygiene education

7. health promoter (Fayoum Health Project)
8. included in pilot hygiene education programme

C. Sanitation

9. pit latrines
10. aqua privies
11. septic tank
12. use of groundwater tank
13. animal shed
14. nothing at all
15. refuse collection
16. sullage drains
17. tanker dumping
18. refuse tipping/burning
19. model cost recovery scheme for sanitation

D. Project status

20. served by project
21. outside Phase II
22. served by others

E. Size and socio economic status

23. small : pop. 1500 and less
24. medium : pop. 1500 - 15000
25. large : pop. 15000 and more
26. less prosperous
27. average prosperity
28. more prosperous

C: CHECKLIST OF QUESTIONS AND OBSERVATION AREAS FOR VILLAGE VISITS

1. What is there?

   * water supply
     - house connections
     - communal water points
     - institutional connections
     - what other sources are used for what purpose

   * sanitation
     - systems for disposal of waste water (drainage)
     - systems for disposal of human waste
     - systems for disposal of solid waste (garbage)

   * impressions on possible improvements of hygiene (general cleanliness in the village)

2. How are facilities used?

   * general state
     - cleanliness
     - facilities maintained or not

   * how many people use one unit (men and women)
     for what purpose
     any gender difference in use

   * how much water is used per household (average)

   * transportation and storage practices
     any treatment practices

   * who is responsible for caretaking, maintenance, repairs (men, women)

3. Opinions about facilities
   (incl. gender differences in opinions)

   * water supply
     - quantity
     - quality
     - level of service
     - operation and maintenance

   * systems for waste water disposal/removal

   * systems for human waste disposal/removal

   * systems for solid waste disposal/removal

4. Opinions about costs
   (incl. gender differences in opinions)

   * investments
   * recurrent costs

5. What would be desirable

(incl. gender differences in opinions)

* what facilities, where
  design, type

* what organisation for planning and implementation, and for management

* what costs are acceptable

6. <u>What would be the benefits of improved facilities</u>
(incl gender differences in views)

* for men, women, children

* in terms of improved health
  time
  costs
  other

7. <u>Perceptions on roles and responsibilities of agency and users</u>
(incl. gender differences in perceptions)

* ownership of water
  structures
  waste disposal/removal systems
  present situation/desired situation

* what skills do users have, to be used in improvements

* how could the agency support/strengthen the users
  in terms of : development of skills, training (what subjects)
  dissemination of information (what subjects)
  other

ANNEXE E

SUMMARY VILLAGE VISIT REPORTS

1. EZBET TUNIS

Ezbet Tunis is a hamlet consisting of approximately 150 households with around 900 inhabitants. The main source of income for the villagers is farming and agricultural related activities. That is, in addition to, seasonal migratory wage labour in Libya and other Arab countries. Tunis is administratively annexed to El Qariya El Oulah Local Unit in Qaroon, Ibshaway district. The hamlet is socially connected to the neighbouring village Abadiyat Waly. The village is outside the scope of the project but was chosen because it was accessible and familiar to the Egyptian team member. The information provided is based on discussions with village inhabitants as well as observations over a long period of time.

The community has had access to potable drinking water at least for the last 10 years through one public tap. For the Local Unit, the responsible local government body, the public tap is a source of nuisance. It has continuously caused problems of maintenance as well as the havoc caused by the accumulation of excess water around its base. Three month ago, the Local Unit in El Qariya El Qulah has ordered the public tap shut without any consultation with its users.

Since house connections for water supply were made available a few years ago, 30 households have connected, which covers around 20% of the population of the hamlet. Currently, it is this source of water that is providing potable drinking water to the rest of the people living in Tunis. Being such a close knit community, interdependency, as an alternative for the public water tap, has not created problems so far.

The responsibility for fetching potable water for household consumption lies with children and teenagers between the ages of six and fourteen. More girls than boys are involved in such activities. The water is normally carried in a "Jerrican" with a 20 litter holding capacity. Donkeys are often used to transport these "Jerricans".

When the public tap was still functioning some women and girls washed their household utensils under the tap whereas others still preferred using the canal. Washing machines are quiet prevalent in Tunis and grey water is disposed of in front of houses, particularly when they are not located in the dense part of the hamlet. Otherwise water is disposed in the canals or in empty building plots "Kharabah".

Although the hamlet has two grocery shops, the usual source of tin food and plastic bags in rural areas, solid waste has not been observed to be a problem. Hard plastic such as broken washing basins, flip flops and "Jerricans" are collected via a system of bartering peddlers who pass occasionally through the hamlet. Each broken plastic piece is worth a balloon or two for the motivated child. Those broken plastic objects are then collected in industrial centres for recycling.

The streets and thoroughfares of Tunis are reasonably clean except for the animal dung that is usually gathered by poor women to make fuel cakes or to use in making traditional oven surface "balatet forn" or to be used as an essential ingredient for making mud brick and mud plaster.

There are very few households who have installed traditional systems for human waste disposal such as pit latrines or septic tanks. For such a

purpose the animal shed is swept routinely and the waste is used as fuel for the bread oven or as organic fertilizer. Moreover, despite the fact that a few outsiders have moved into the village and have used dry pit latrines for human waste disposal, the idea has not been well received by the villagers. It seems that they are waiting to accumulate enough capital to install pit latrines connected to septic tanks.

During the field visit, the team members were told that some of the outsiders who own houses and land between the hamlet and Abadiyat Wali, the neighbouring village, were installing new water pipes as a group for seven or eight houses. Usually, in Tunis, whether for the outsiders or for the community, a group of users whose houses are closely located would get together to finance and elect one of them to oversee the pipe instalment operation. Normally, a pipe that runs from the main to the beginning of the street is 2 inches in diameter. This time, the pipe to be installed, was 4 inches. The users that have previously connected on the same 2 inches line were irritated. The news spread through the mosque informing the affected users that the 4 inches pipe would deprive them of their water and that they should do something about the matter. The concerned villagers came to the site where the 4 inches pipes were being installed and stopped the labourers from continuing the works until this problem would be solved.

2. EL NAZLAH

El Nazlah is a large very old settlement with a small rural town formation. It derives its fame due to its permanent market, spread over a couple of streets. It contains, in addition to the regular food stores, a few of the crafts and trades necessary for rural existence such as carpenters, ironmongers and potters. Unlike Ezbet Tunis, El Nazlah is itself a seat for the local administrative unit of Nazlah with a few neighbour villages and a few hamlets.

Although the village is outside the scope of the project it was chosen because it possesses a model cost recovery approach for a sewerage system. El Nazlah has had water through public stand pipes since the 1940's. Currently, it has six public stand pipes and a working house connection system. Some peripheral households of the settlement which have illegally settled on agricultural land have not been able to make use of the available water house connections. Those residents will continue to use public stand pipes until they are able to legalise the status of their houses.

The team had discussions with the users of the two communal standposts, who lived in the peripheral settlement mentioned above. We also discussed with the users of the oldest stand pipe in El Nazlah which had been shut down to be rehabilitated. The team was told by the users of that standpost that the Local Unit decided to change its place because the adjacent house residents had filed a complaint for leakage coming out of the drainage. The residents said that their house was in danger since it was built of mud brick and the leaking water was showing on the walls of the first floor.

The new stand pipe which is currently being constructed is connected to the new sewerage system. However, it is constructed in the middle of the road. The residents of that area were quiet upset about the new place of the pipe as well as the fact of not having accessible potable water for the last month. In their anger the women users of the old stand pipe believed that the government should reinstall the public pipe to its original place.

In such a short visit, it was impossible for the team to get the full details of the story, particularly concerning users participation in such an important decision such as the place of the new standpost. However, this

incident shows us that there is a need for better communication between water users and the water agency.

In El Nazlah, all traditional human waste disposal systems are available such as pit latrines, septic tanks, connection to the drains, aqua privies, as well as the use of animal shed. With the instalment of the new sewerage system, it is expected that the old systems, currently in use, will disappear slowly.

For a household to be connected to the new sewerage system, the head of the household has to apply to the Local Unit which manages the fee collection for the model cost recovery system. An advance fee of LE 58 for the connection and a monthly fee of LE 2 for running cost has to be paid. The team was told that the Local Unit intends to cover all the cost of installing the sewerage house connections and maintaining it.

3. TERSA

Tersa is a large village located in the heart of Fayoum Governorate in Senoures district. It is the seat of the local administrative unit. It administratively annexes a few villages and hamlets. It was recommended to the team because the Project has installed a full administration of all house connections by numbering the houses, as part of the activities necessary for a full cost recovery system.

All types of human waste disposal exist in the village. Septic tanks, pit latrines, aqua privies, connection to drains, as well as the use of animal sheds.

The village also witnessed the pilot hygiene education activities executed through the village Community Development Service as part of phase one of the Project. The team has met with villagers, Local Unit administrators and some of the employees of the Project who were involved in the hygiene education mentioned above.

Tersa has water house connections for almost four years. It has a few public taps which have been rehabilitated and maintained. The latest of those taps was particularly satisfactory to the women users who wished all the public stand pipes were the same as this one. The women were saying that the large amount of water coming from the tap was particularly convenient to them. Some women were still using canal water which was obviously polluted due to the discharge from household sewers. They attributed the convenience of their practise to the fact that they had no way of getting rid of the grey water and that their children play with it and soil the inside of their houses.

The villagers who have house water connection still cannot deny their neighbours access to tap water despite its cost. The villagers are used to the concept of sharing water and so it is still considered culturally inappropriate to charge community members. A container made of pottery, filled with tap water to cool in front of one's house, is available for household members and whoever passes by.

The team has asked the villagers the reason for the marked numbers on their houses, painted by the Project. However, the villagers did not know about it. Such an incident leaves room for improved communication with the water users of house connections.

The Local Unit is responsible for the collection of garbage from the general village and for sweeping the main streets. The solid waste collected is then burnt every couple of days. Any problems with water

supply are reported to the maintenance facilities available at the district level.

The hygiene education activities were hosted by the social affairs department. They consisted of a few lectures to local leaders. There was a monetary incentive given to encourage people to attend. However, we were told that during the follow-up those who attended the previous campaign were complaining about the lack of financial reward and therefore saw no reason to attend a refresher course.

4. EL RODAH

El Rodah was one of those villages that got badly damaged from the October 1992 earthquake. It is in Tamia district and situated to the north east of Fayoum Governorate. It is the seat of a local administrative unit and annexes five villages and twenty two hamlets. The total population of the cluster is about 40,000. El Rodah itself has about 10,000 to 12,000 inhabitants. We were told that bilharzia infection in recent years was reduced to 4% compared to 14% for the whole Governorate. Drinking water was introduced in 1949 through public standposts. Household water connections are also available in the village. All types of sanitation such as pit latrines, aqua privies, septic tanks and connection to drains are being used.

The Social Fund For Development is currently financing a sewage treatment plant for the village. El Rodah is outside the scope of the project, however early data collection took place before the involvement of SFD.

In the village the team met with the head of the Local Unit, the deputy director of Tamia district, one elected local council member and the board members of both the local CDA and the Youth Centre. The local Community Development Association (CDA) and the Youth Centre became very active after the earthquake incidence. They were involved in managing debris removal through a contract in which the youth of the village were employed. The local CDA acknowledges the role of Care's Revolving Fund Loan Programme in activating their association. They have come to realise the potential of their activities in the community.

When hygiene education was discussed they suggested training for the members of both CDA and Youth Centre attached to the village cleaning project. The information gained would then be disseminated in this area. It is through these motivated community members that a good hygiene education programme could take place.

5. FIDIMEEN

Fidimeen is a market centre situated in Senoures district. It is the seat of the local administrative unit and annexes a number of villages and hamlets. The town has a functioning water household water connection system, and public standposts, some of which have been rehabilitated and maintained. All types of sanitary systems such as pit latrines, aqua privies, septic tanks and connection to the drains, can be found in the town.

A visit to Fidimeen was recommended to the mission due to the presence of a pilot water payment system, through a market kiosk, the only one in the Governorate. After trying door to door collection of water revenues for some time, it was decided to try this new system in which customers come to pay their due fees according to the meter reading which is done by an employee of the Local Unit. The kiosk started functioning in February 1994. It is run by the Local Unit employee who was previously been responsible

for door to door collection. It is open to the public every day from nine to one o'clock in the afternoon. It is situated in the market place for easy access to the customers.

According to the fee collector who manages the kiosk, only five to seven customers come every day and very few of those pay their dues. Most of the clients who come to the kiosk come to enquire about the amount of money due, leaving without paying when they find the fee too high. The kiosk offers payment on instalment to encourage customers to pay. They are sanctions for those who do not pay regularly - they have to pay fines.

The officer said that the door to door collection ensures more revenues to the water company since customers are not motivated to pay. He also said that while he was doing his rounds the ratio of paying customers was higher among the part of the community that he was not familiar with. He attributed that difference to the degree of embarrassment he could provoke in strangers.

The major complaint of village women interviewed was the difference in water pressure between those who have installed domestic water pumps and those who have not. A village woman said that whenever the pressure is low she does not get any water because her next door neighbour has a water pump.

The team has observed a traditional human waste removal donkey-drawn cart. The tank of the cart is painted with bright colours. The waste is removed from pit latrines manually, trough the use of two buckets and sticks of wood. The operation is done by two men, who come from a "caste" of toilet cleaners. It was said that a household has to hire "sarabatliya", the name of that caste of workers, twice a year.

This practice is very common in Fayoum. The "sarabatliya" have a store in Fidimeen where customers order their service.

6. MATARTARES

This village is situated in Senoures district. We met with the Head of the Local Unit, some officers, and some members of the local Development Committee.

We had selected the village because it was said to have extensive services for waste removal. Unfortunately there was no opportunity to see the facilities, and a village visit seemed also not possible. Through the discussions we gathered that the village likes to look after things itself, without much interference from outside agencies. Apparently it has been able to set up and maintain good services for waste removal including sullage and drainage, and its water supply is satisfactory so far.

ANNEXE F

SET OF FLIP CHARTS, USED FOR DEBRIEFING

DRINKING WATER SUPPLY AND SANITATION IN FAYOUM

ADVISORY MISSION TO THE NETHERLANDS EMBASSY ON USER INVOLVEMENT AND HYGIENE EDUCATION

APRIL 1994

DE-BRIEFING ON PRELIMINARY FINDINGS

MRS. M.A. BOESVELD
MRS. H.A.F. EL HADIDI
MR. M. SEAGER

(1) What are the objectives of the mission?

* to advise on a hygiene education component, including an indication of possible pilot activities

* to advise on a strategy for the implementation of user's involvement, with attention to gender awareness

* to give a description of options for possible and feasible institutional and organisational set-ups for the management and implementation of user's involvement and hygiene education.

(2) What methodology are we using?

* Institutional consultations
  - discussions with key persons from institutions in direct relation with El Azab/FSD, and the supporting project.
  - discussions with key persons from other possibly relevant institutions at national and governorate level
  - discussions with staff working on the Fayoum Rural Health and Family Planning Project

* Field visits
  - discussions with some local government staff and village CDA's
  - discussions with some villagers: users of house connections, communal water points, and sanitary facilities
  - some observations on water use and hygiene practices

3- Which Institutions did we consult?

1- Royal Netherlands Embassy.
2- Fayoum Drinking Water & Sanitation Project
3- Fayoum Rural Health & Family Planning Project
4- Fa DWSP Stirring Committee.
5- EL Azab Water Works.
6- Fayoum Sanitation Department.
7- Directorate of Health.
8- Directorate of Social Affairs.
9- Environmental Affairs Department
10- Fayoum City Counsil (Water & Sanitation Division)
11- Fayoum City Drinking Water Plant Project (USAID)
12- Care

13- Save the Children Fund.

14- UNICEF

15- Danida.

16- NOPWASD

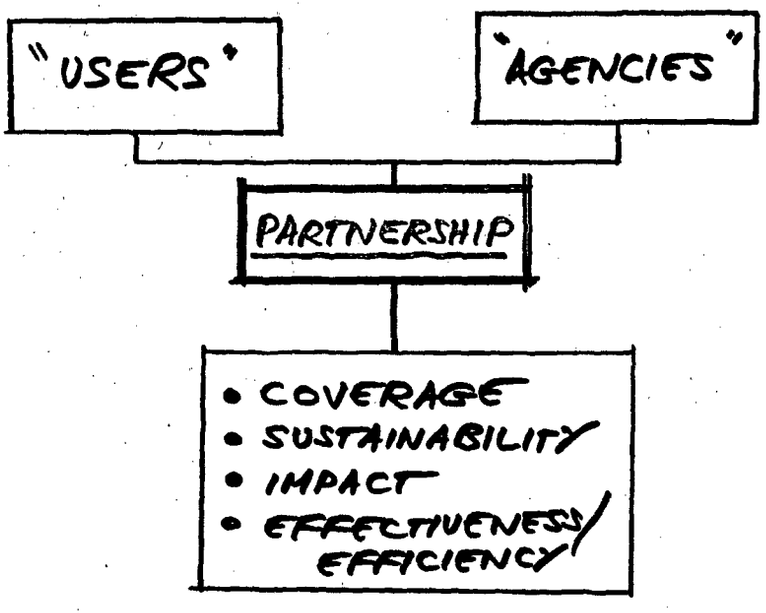
4-Field visits:

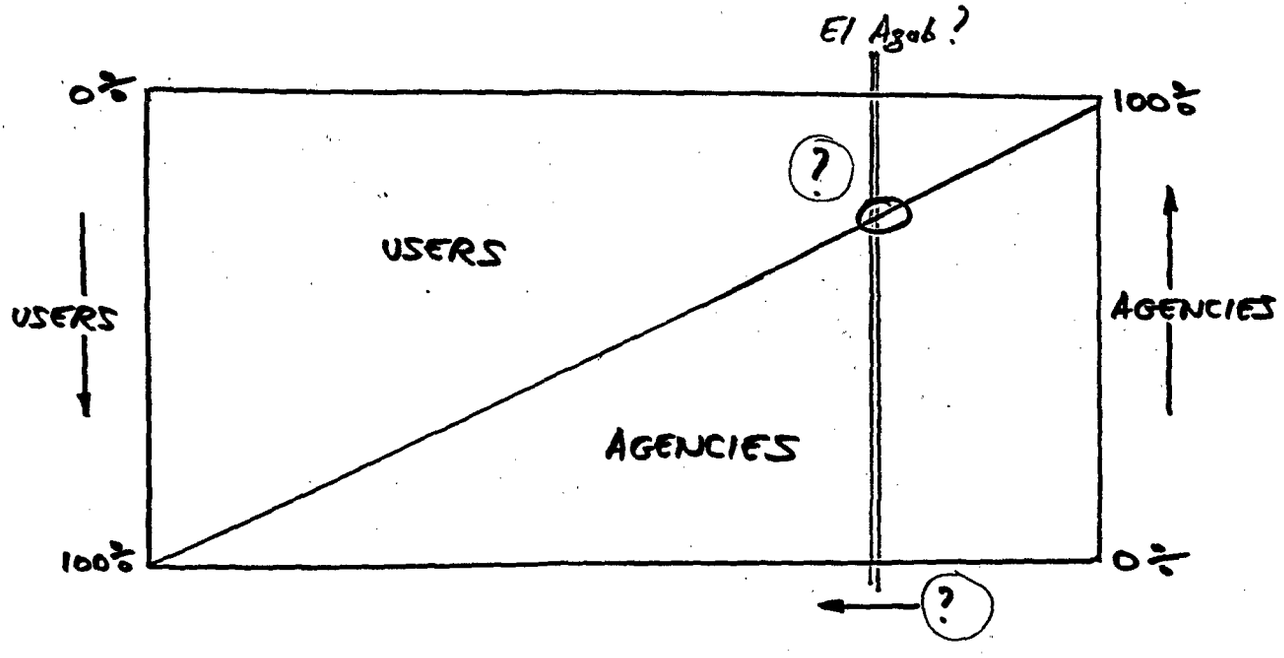
Village	Special Features	Discussions
Nazlah (Ibshaway)	Cost Recovery for Sewerage	- standpipes house connection users - sewerage system applicants
EL Roda (Tamiya)	Earthquake Affected	- Local Unit Staff - CDA Board members - Youth Center Board members
Tersa (Senouras)	Pilot Hygiene Education	- Standpipes house connection users - villager using canal water for domestic purposes - Local Unit Staff
Matartares (Senouras)	Solid Waste System	- Local Unit Staff
Fidimin (Senouras)	Water Users Payment Kiosk	- Kiosk Staff - Paying & inquiring users

Field visits (continued)

Village	Special Features	Discussions
Metol (Itsa)	FaR HFPPs' Health Promotors	- The head of Itsa Health District. - The head of Metol Health unit. - Heath Promotion team.

(5) FROM WHAT CONCEPTS ARE WE WORKING ?





(6) What can „users involvement" mean?

What can the users do?

Some water supply examples:

* users of communal water points can contribute in:
  - planning and design of a water point
  - managing and operating its use (opening hours; cleanliness; prevention of vandalism)
  - collection of revenues
  - doing small repairs
* users of house connections can:
  - take responsibilities for small repairs
  - better use of water (no leakages; no excess of waste water)
  - feed-back to the agency

Advantages:

- users will take responsibility for their water point
- it will be kept in a better condition
- better recovery of costs of water and maintenance
- better prevention of water losses

What can the agency do? (water supply examples)

* encourage user's involvement, through:
  - good information about activities at the planning stage and when implementing
  - discussion of planned activities with the users (in particular also women)
  - assessing needs and priorities of users, and taking these seriously
  - giving users responsibility for small repairs (and for communal water points: responsibility for management and operation)

(7) What can 'hygiene education' mean?

for users it can contribute to:

* maximizing general benefits of safe water supply and sanitation
* preventing diseases and maximizing health benefits of improved water supply and sanitary facilities
* improving living conditions in general

through e.g.: (agency activities)

- informing users of proper use and functioning of the facilities
- informing users of benefits, in paying attention to health hazards of inadequate water use and sanitary facilities
- involving users in planning, designing and siting water supply and sanitary facilities, to ensure their appropriateness and more hygienic use

for the agency it can contribute to:

* better appreciation of the value of water by users, and therefore increased willingness to pay
* more efficient use of facilities
* better planning of new facilities

(8) What can "gender awareness" mean?

To be aware of gender means:
to take the different tasks, responsibilities and interests of men and women into account.

What is the importance of gender awareness for El Azab/FSD and the project?

To maximize inputs from users, women as well as men, and to ensure better, more efficient and more hygienic use of facilities,
⇒ it is necessary to give sufficient attention to the importance of women's role in providing water and hygiene for their families.

To ensure sufficient attention for women's and men's different roles and interests,
⇒ it is necessary to have a sufficient number of female as well as male staff, for reaching women as well as men users.

(9) USER INVOLVEMENT AND HYGIENE EDUCATION: WHAT IN SUMMARY ARE THE ADVANTAGES FOR EL AZAB AND FSD?

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* USER INVOLVEMENT / HYGIENE EDUCATION WILL HELP RAISE EFFICIENCY AND EFFECTIVENESS

- THROUGH:
  - RAISING USER AWARENESS OF JOINT RESPONSIBILITY (PARTNERSHIP);
  - RAISING USER AWARENESS OF THE ADDED HEALTH VALUE AND OTHER BENEFITS OF WATER AND SANITATION.

- WHICH HELPS BY:
  - Ensuring people pay for water and Sanitation services;
  - Assisting acceptance of increasing tariffs;
  - Preventing water losses and wastage;
  - Avoiding expensive call-outs for minor repairs and maintenance;
  - Enhancing the sustainability of the system;
  - Raising the level of demand;
  - Increasing the willingness of the users to pay the investment costs of extensions;
  - Enabling the "Health Impact" El Azab / FSD / Project objective to be met, alongside the "supply water / remove waste objectives.

(10) How does this all fit with existing thinking so far?

* General objective of the FaDWSP:

To improve the drinking water supply and sanitation in Fayoum Governorate to such an extend that it has a long lasting impact on public health and the well being of the rural population in Fayoum Governorate.

* further objectives, as formulated in the proposal for Phase II - Community Hygiene Component:

- to effectuate a positive impact of physical improvements on public and environmental health
- to involve customers in upkeep and maintenance of public and private facilities, resulting in more responsibility of users
- to give sufficient attention to gender differences, and to support women in their role of providers of water and hygiene to their families
- to increase people's awareness of the importance of water supply and sanitary facilities, as a precondition for their willingness to pay

* FaDWS Final Report - Pilot Hygiene Education Programme

* different other studies and drafts

Conclusions: * general agreement on the importance of users involvement and hygiene education as a well-structured component of El Asab/FSD activities

* no agreement as to how and who

(11A) WHAT ARE THE POSSIBLE OPTIONS FOR USER INVOLVEMENT AND HYGIENE EDUCATION ?

OPTION (A) : "DIRECT ROLE"

EL AZAB/FSD IMPLEMENT USER INVOLVEMENT AND HYGIENE ACTIVITIES DIRECTLY, SUPPORTED BY PHASE II OF THE PROJECT

DISADVANTAGES :

- EXPENSIVE TO SET UP
- NO STAFF OR EXPERIENCE IN THIS FIELD
- UNSUSTAINABLE

OPTION (B) : "NO ROLE"

EL AZAB/FSD HAVE NOTHING TO DO WITH USER INVOLVEMENT AND HYGIENE EDUCATION ACTIVITIES AND LEAVE THEM ENTIRELY TO OTHERS, CONCENTRATING SOLELY ON A WATER SUPPLY/WASTE REMOVAL SERVICE

DISADVANTAGES :

- FAILS TO MEET HEALTH IMPACT OBJECTIVE OF PROJECT AND AL AZAB/FSD MANDATES !
- MISSES OPPORTUNITIES FOR USER INVOLVEMENT/HYGIENE EDUCATION TO CONTRIBUTE TO EFFICIENCY AND EFFECTIVENESS
- UNREALISTIC (USER INVOLVEMENT AND HYGIENE EDUCATION WILL NOT HAPPEN WITHOUT SOMEONE TO COORDINATE IT)

(11 B)

OPTION (C) : "MANAGEMENT ROLE"

EXECUTED THROUGH A "LIAISON DEPARTMENT"

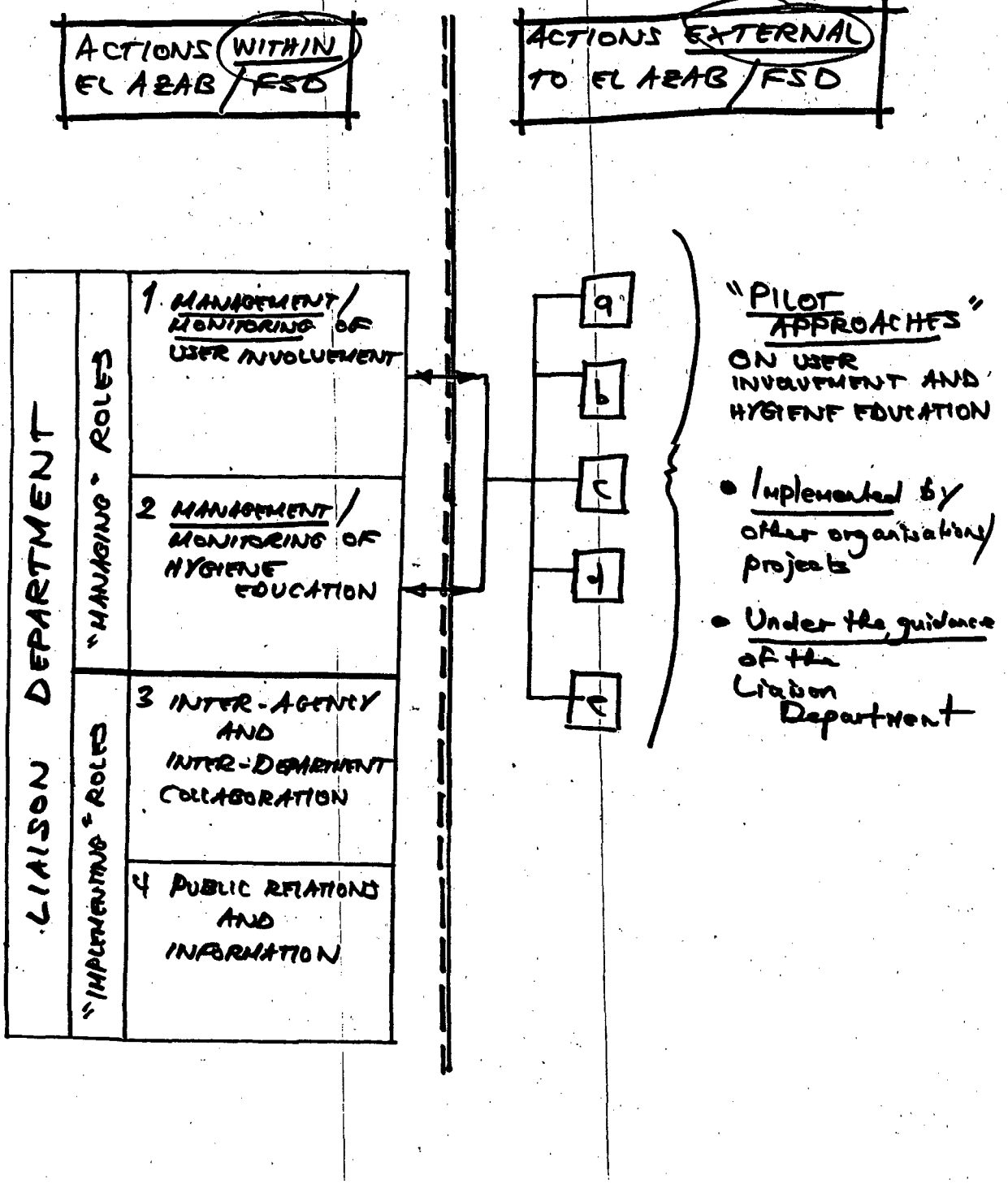
* EL AZAB TAKES MANAGEMENT AND CO-ORDINATION RESPONSIBILITY ONLY, THROUGH A SMALL LIAISON DEPARTMENT

* GUIDED BY THE LIAISON DEPARTMENT, ACTUAL IMPLEMENTATION OF USER INVOLVEMENT AND HYGIENE EDUCATION IS TRIED OUT BY OTHERS (OUTSIDE OF EL AZAB / FSD / THE PROJECT), THROUGH 4 OR 5 PILOT APPROACHES.

* LONG-TERM AIM WILL BE USER INVOLVEMENT AND HYGIENE EDUCATION ACTIVITIES IMPLEMENTED AT FULL-SCALE BY OTHERS, BUT MANAGED AND CO-ORDINATED BY THE EL AZAB LIAISON DEPARTMENT

(12) OPTION (C):

"MANAGEMENT ROLE" THROUGH A LIAISON DEPARTMENT



(13) Possible pilot approaches

Subject to further investigation :

(A) An additional component to an existing project

e.g. extra resources to the FaRHFP Project, with earliest integration of user's involvement and hygiene education in Department of Health

(B) Through selected community development associations (CDA's)

perhaps supported by NGO's such as CARE

(C) Through local government

e.g. Department of Health ; sanitarians ; Local Units

(D) Through a possible new Netherlands supported project for this purpose, in support of an Egyptian agency

(E) ?

(F) ?

(14) Which groups of activities will be managed and monitored by the Liaison Department, through the pilot approaches :

* User's involvement in water supply and sanitation

- preliminary investigation
- development of an extension service
- development and dissemination of information
- training, and the development of appropriate training services, for different levels
- monitoring and evaluation

* Hygiene education in water and sanitation

- preliminary investigation
- development of extension service
- development and dissemination of information
- training, and the development of appropriate training services, for different levels
- monitoring and evaluation

(15) Which groups of activities will be directly implemented by the Liaison Department?

* inter-agency and inter-departmental collaboration

through e.g.:

- liaising and developing joint activities with
  - government agencies at national and governorate level
  - NGO's
  - external support agencies
  - relevant projects and programmes in the area
- setting up working relationships for the implementation of the pilot projects
- investigating further strengthening of the coordination between El Azab and FSD on aspects of user's involvement and hygiene education

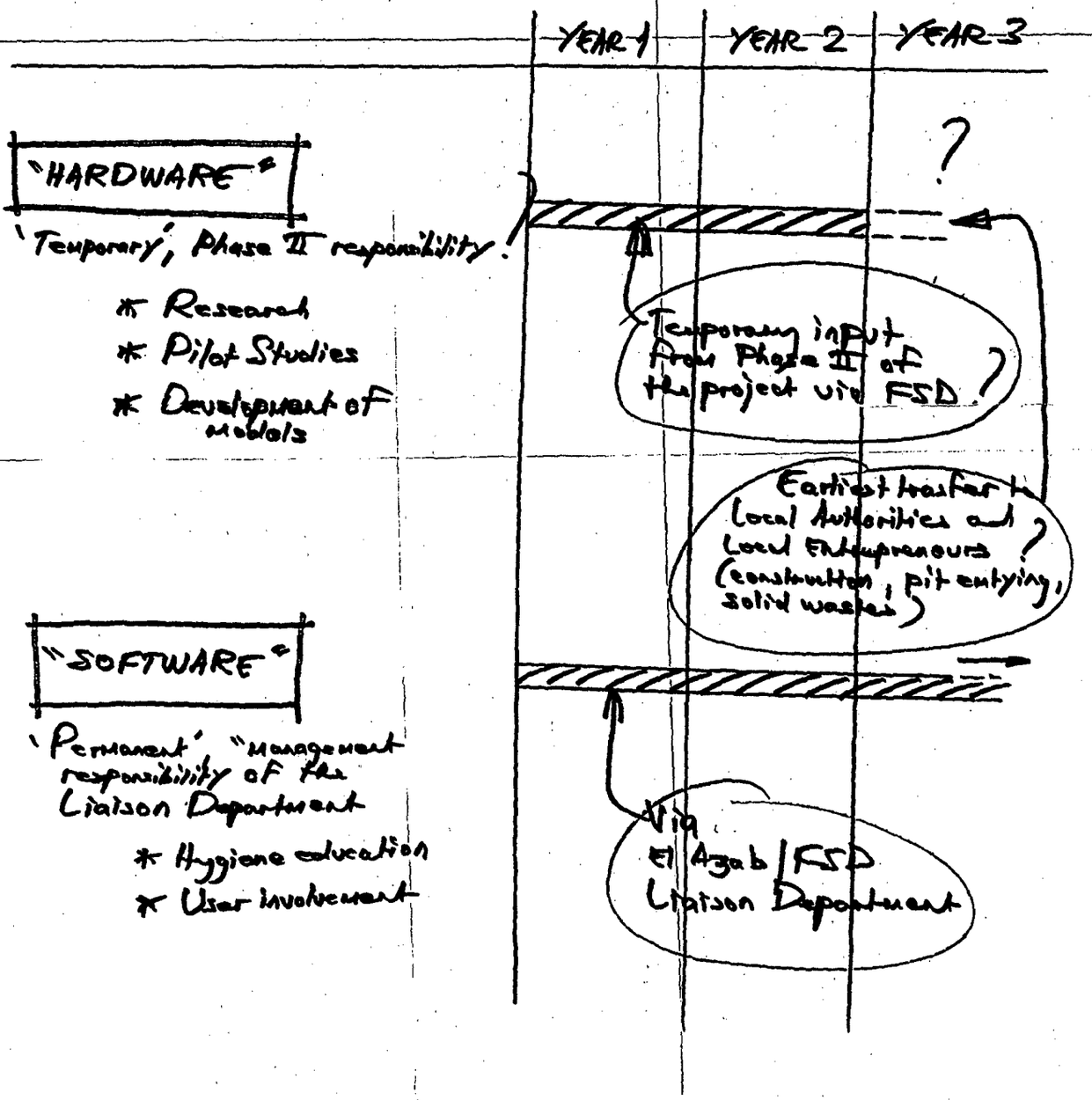
* public relations and information

through e.g.:

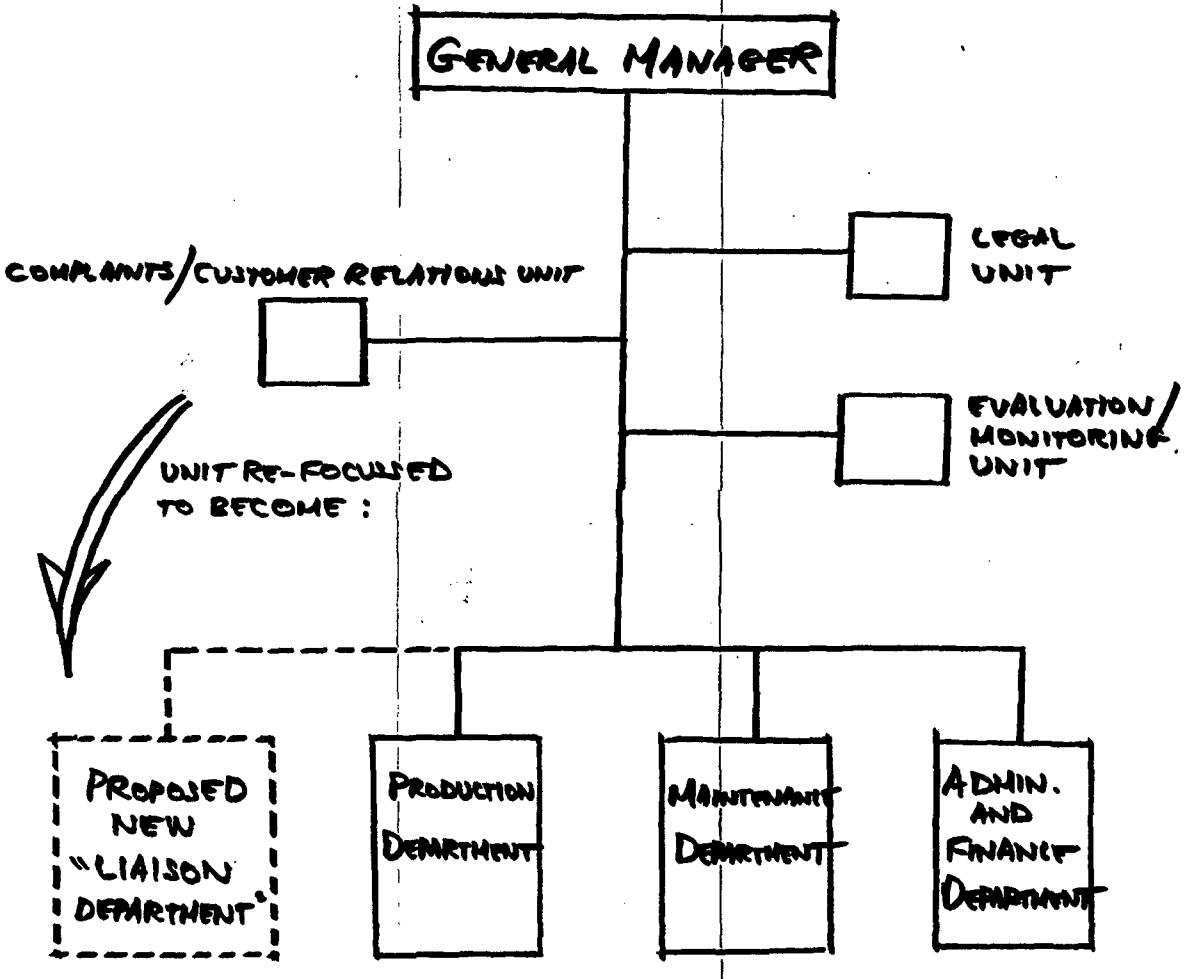
- media liaison (t.v.; radio; press)
- brochures and booklets
- public visits and open days
- setting up an information center (library) on water supply, sanitation, and hygiene education

(16) HOW MIGHT ON-SITE SANITATION BE HANDLED (?)

Excreta + Sullage + Solid Wastes

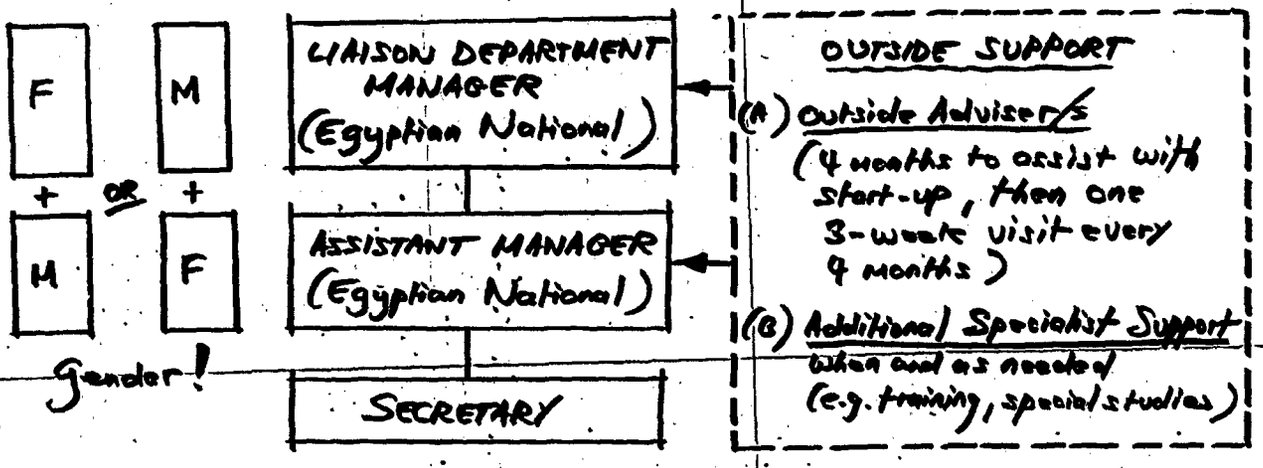


(17) # POSSIBLE ORGANISATIONAL SET-UP



(18) STAFFING AND OTHER RESOURCES FOR THE LIAISON DEPARTMENT

HUMAN RESOURCES

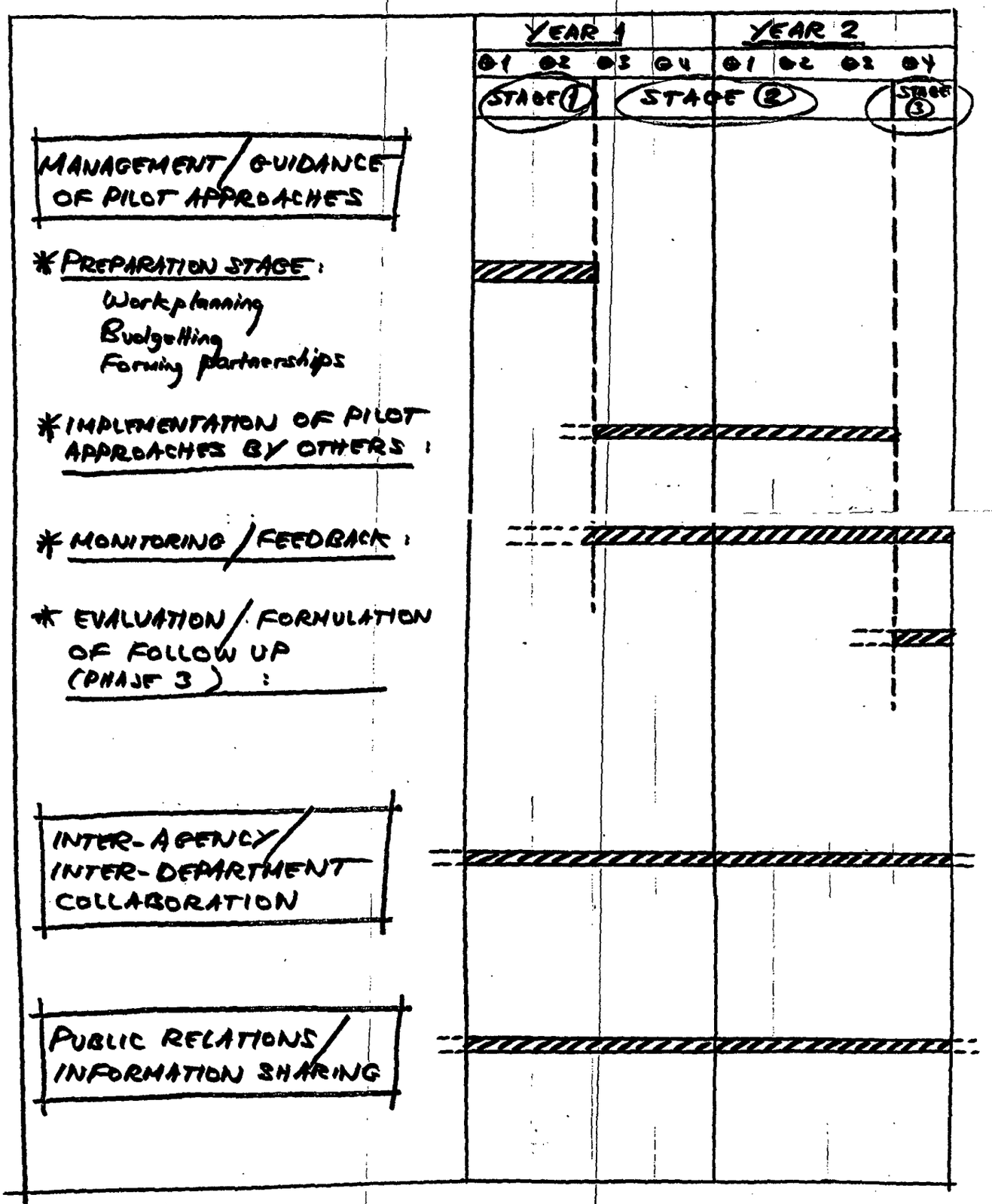


OTHER RESOURCES

AMONGST OTHER ITEMS, THE BUDGET SHOULD INCLUDE FUNDS FOR:

* Commissioning the implementation of pilot approaches from others
* Setting up a small Information Centre on user involvement and hygiene education
* Transport, office, equipment etc.

PROPOSED TIME SCHEDULE



ANNEXE G

PROPOSED TERMS OF REFERENCE FOR THE LIAISON DEPARTMENT

DRAFT

The Liaison Department is one of the principle permanent Departments within El Azab. Its mandate entrusts it with the important responsibility for El Azab's interface with its customers on the one hand, and with its sister Agencies on the other. This is particularly related to, but not limited by, the key areas of users' involvement and hygiene education. The Department also has an important role in terms of stimulating inter-departmental co-ordination, and, more directly implemented roles, concerning public relations and information.

The Department is headed by a full time Manager, supported by an Assistant Manager and a Secretary. The Manager reports to and is directly responsible to the El Azab General Manager.

The Department acts also for and on behalf of the Fayoum Sanitation Department, within its area of operational expertise. *(Modus operandi for this role need to be further discussed and developed)*

The Liaison Department's principal Terms of Reference include:

- coordination and monitoring of users involvement in water supply and sanitation

- coordination and monitoring of hygiene education for water supply and sanitation

- implementation of activities to promote inter-agency and inter-departmental collaboration

- implementation of activities related to public relations (including customer relations and complaints) and information (including setting up and managing a resource centre)

In carrying out these tasks the Department will give special attention to:

- gender issues throughout the sphere of operations of El Azab and FSD
- the development of appropriate indicators to monitor the progress of its work, particularly indicators related to user involvement, hygiene education and gender

In executing these responsibilities, the Department will need to implement a number of tasks including, but not limited by:

- workplanning
- negotiating and managing agreements with partners
- budgeting
- monitoring
- reporting
- development of case studies
- information exchange

ANNEXE H

PROPOSED CANDIDATE PROFILE FOR LIAISON DEPARTMENT STAFF

Both the Manager and the Assistant Manager will be educated to at least first-degree level and will be Egyptian Nationals. Ideally one will be female, the other male.

One of the two will have a background in users' involvement in development, but this need not necessarily be in water and sanitation. The other will have a background in participatory hygiene education or health promotion. Recent field experience, say with a pro-active NGO in these areas of work would be ideal.

The candidates should be mature and confident, with pleasant personalities and an ability to get on with and influence people and developments. Some management experience would be needed, and ideally negotiation skills.

Attitude and commitment to the idea of the partnership approach, the importance of sanitation as well as water, user involvement, the role of participatory hygiene education, and the merits of inter-agency co-operation are particularly important.

The candidates should be willing to reside in Fayoum, with extensive travel to the field and occasional visits to Cairo and other areas.

ANNEXE I

SOME SUGGESTED BACKGROUND MATERIALS FOR THE DEVELOPMENT OF INDICATORS, INCLUDING GENDER ASPECTS AND DEVELOPMENT OF HYGIENE EDUCATION MATERIALS

Adequate indicators for the Project's phase II, as it has been planned, for the new Liaison Department, and for the pilot projects to be managed by the Liaison Department, should be developed according to their respective specific workplans.

To provide a basis for this detailed development of indicators, and specifically for the inclusion of indicators on gender issues for monitoring and evaluation, we have selected a number of relevant overviews from existing documents. Together they give a good basis for the development of gender specific indicators for users' involvement in water and sanitation.

To provide a basis for development of hygiene educational materials a number of relevant papers are included. UNICEF has given us good examples of hygiene education materials prepared for use in Egypt. These have been left in Fayoum for El Azab / FSD.

ANNEXE J

MATERIALS DISTRIBUTED TO EL AZAB AND FSD

In line with the Terms of Reference, the following materials were passed to El Azab and FSD as general background, at the Advisory Committee de-briefing meeting:

Marieke Boot, (1991), Just Stir Gently. The way to mix hygiene education with water supply and sanitation. TP 29.
IRC, The Hague.

Marieke Boot & Sandy Cairncross (eds.), (1993), Actions Speak. The study of hygiene behaviour in water and sanitation projects.
IRC, The Hague.

Partners for Progress. An approach to sustainable piped water supplies. (1991) TP 28.
Prepared by IRC, The Hague.

Lizette Burgers a.o., (1988), Hygiene education in water supply and sanitation programmes. Literature review with selected and annotated bibliography. TP 28.
IRC, The Hague.

Phil Evans & Brian Appleton (eds.) (1993), Community Management Today. The Role of Communities in the Management of Improved WAS Systems. OP 20.
IRC, The Hague.

Phil Evans, (1992), Paying the Piper. An overview of community financing of water and sanitation. OP 18.
IRC, The Hague.

Madelin Wegelin-Schuringa (1991, On-Site Sanitation : Building on Local Practice. OP 16.
IRC, The Hague.

Marieke Boot, (1984), Making the Links. Guidelines for hygiene education in community water supply and sanitation. OP 5.
IRC, The Hague.

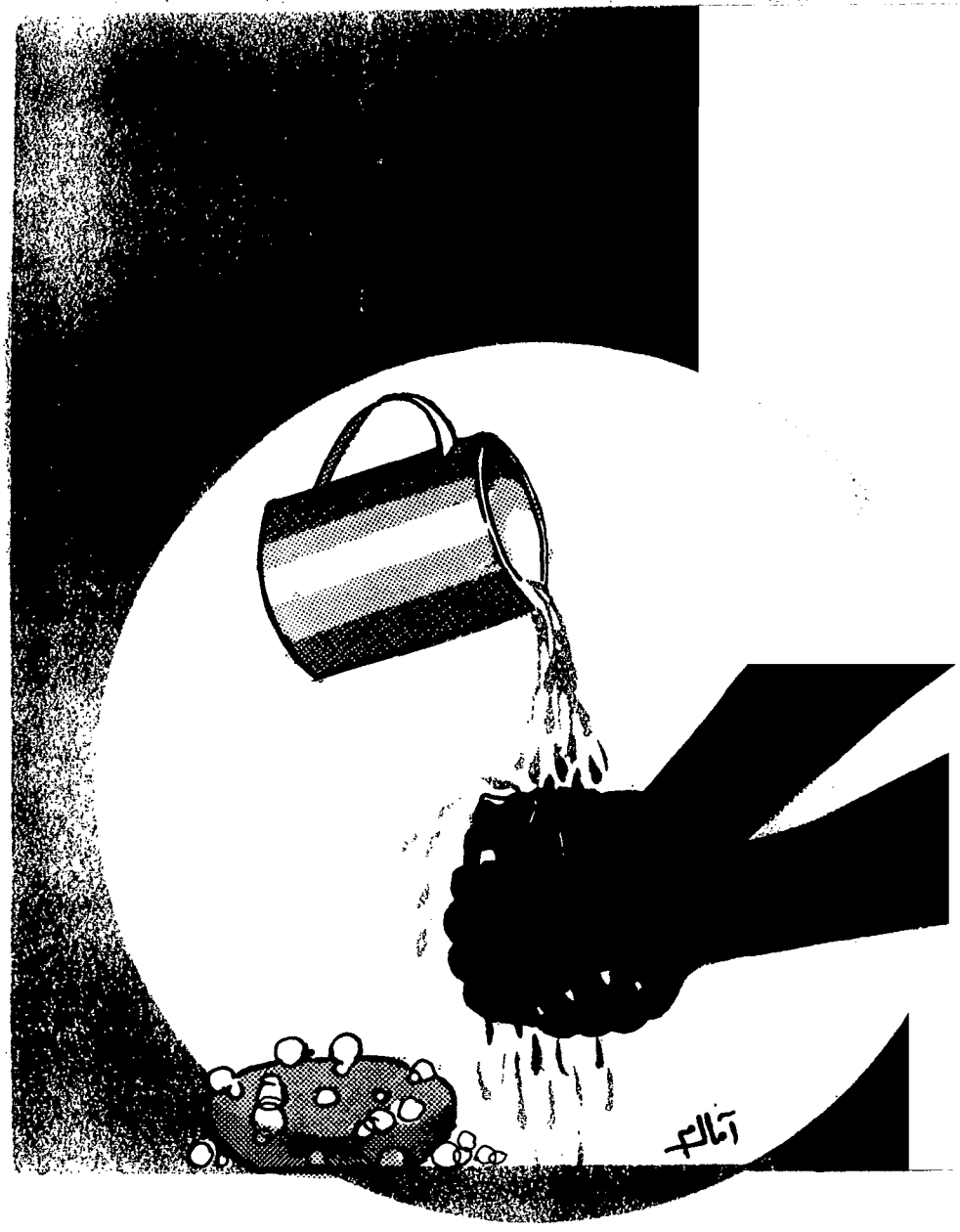
Taking Care of Your Water Supply. Training Series no. 10. (1993)
IRC, The Hague.

Woman, Water, Sanitation. Annual Abstract Journal. Vol.2 no. 3.
IRC, The Hague.

ANNEXE K

REFERENCES

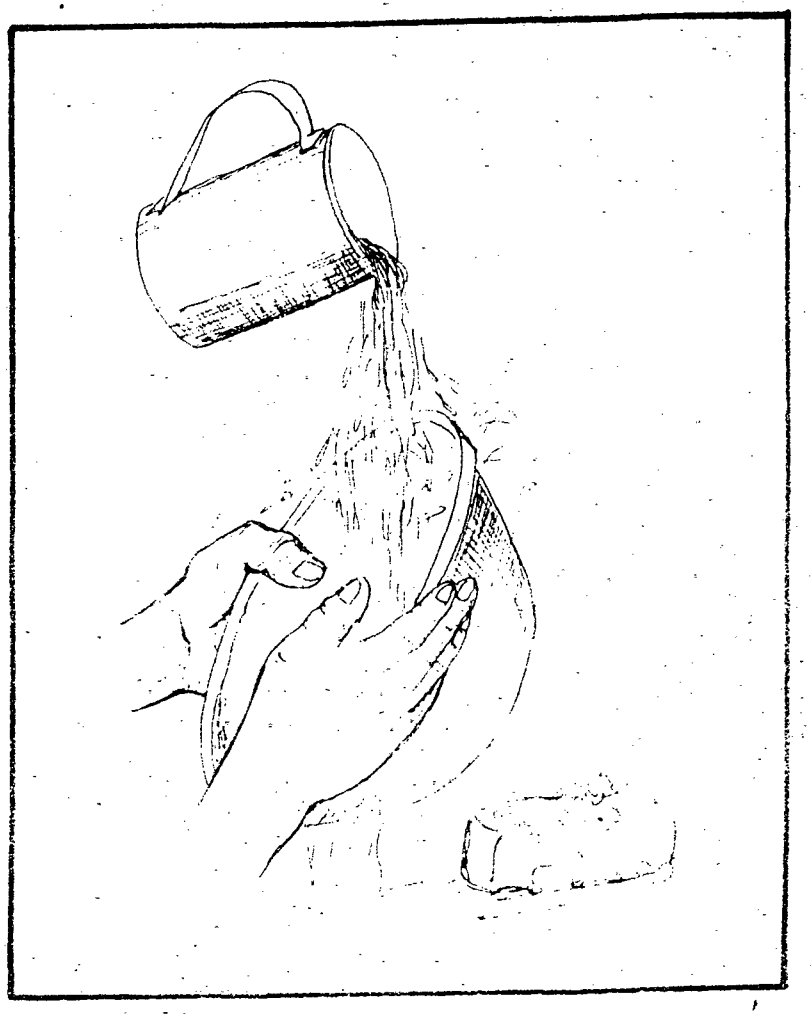
(To follow)



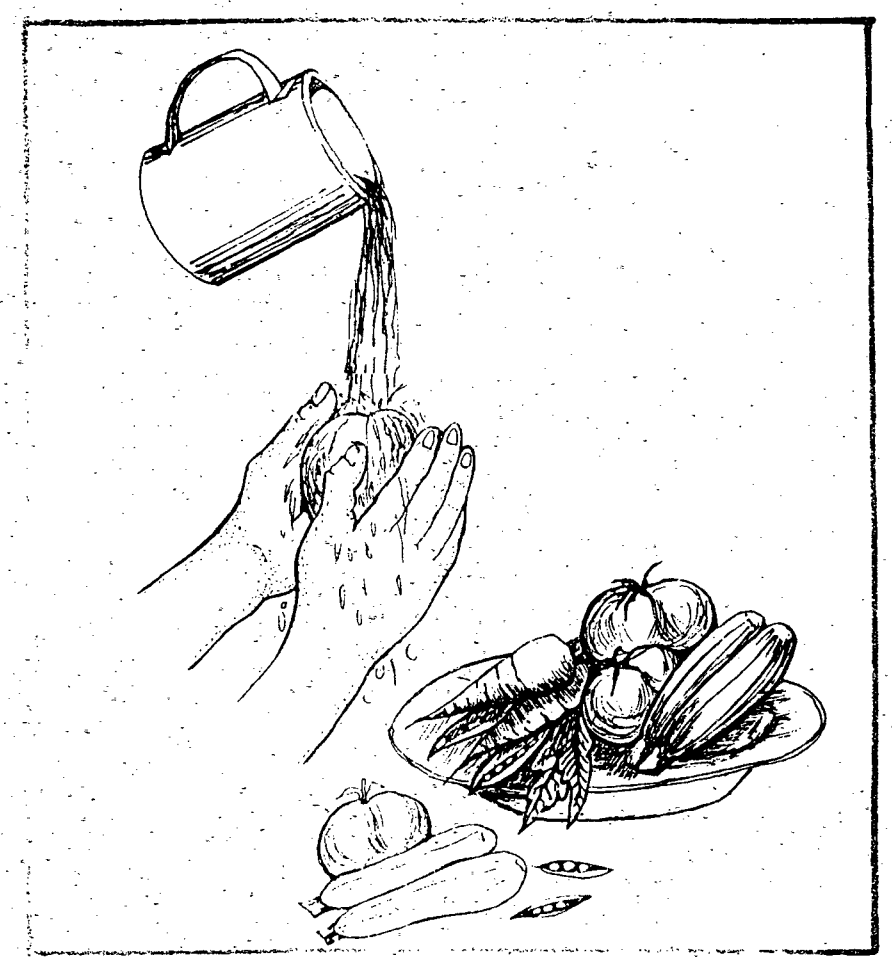
مركز البحوث الإجتماعية
الجامعة الأمريكية بالقاهرة

مشروع المرأة وإستخدام
المياه وصحة البيئة

- غسل الإناء قبل استعماله فى الطبخ .



- غسل الخضروات واحدة واحدة تحت مياه جارية من الحنفية أو الطلمبة للتخلص مما يكون قد علق بها من مبيدات حشرية .



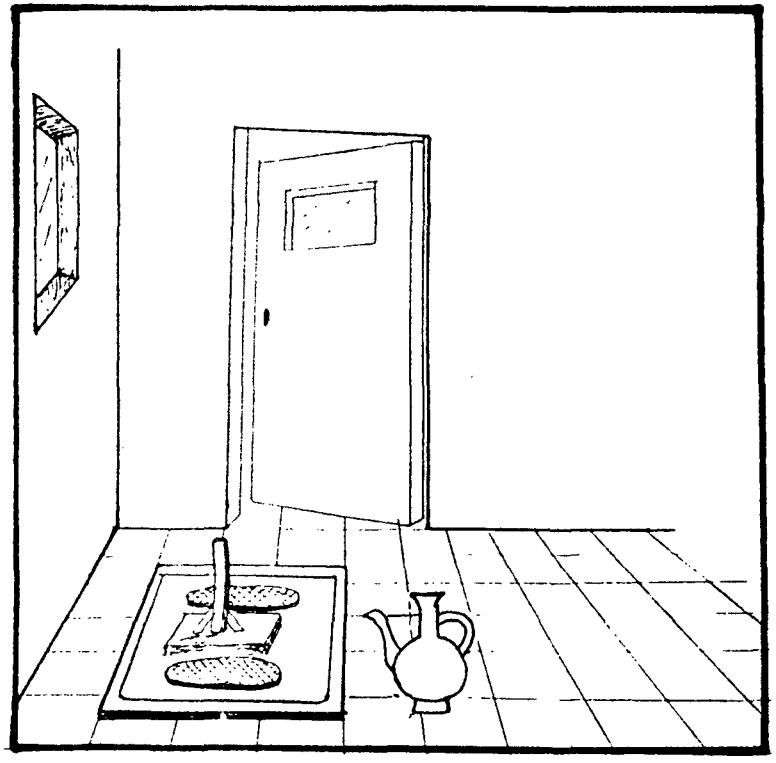
نظافة دورة المياه

العناية بنظافة دورة المياه من الأمـــور الهامة ،لأنها عامل أساسى فى انتشار بعـــض الأمراض مثل : التيفويد - الباراتيفويـــــد الدوسنتاريا - النزلات المعوية - شلل الأطفـال الالتهاب الكبدى الوبائى والكوليرا . لـــذلك يلزم :

- عمل باب لدورة المياه وغلقه باستمرار مـــع وجود فتحه للتهوية .
- تغطية فتحة المرحاض بغطاء بيد طويلـــة لسهولة رفعها وتغطيتها لكى :
- نمنع تسرب الميكروب الذى بهـــا

من الانتشار بالمـــنزل .

- نمنع الرائحة الكريهة .
- نمنع تجمع الصراصير والذباب .
- ضرورة وضع بعض الماء فى إناء داخل دورة المياه للتشطيف .



irc
international reference centre
for community water supply
and sanitation

who collaborating centre

cir
centre international de référence
pour l'approvisionnement
en eau collective et l'assainissement

centre collaborant de l'oms

Mary's

* * * Piped Supplies for Small Communities (PSSC) Project * * *

IDEAS ON HOW TO DEVELOP A MANUAL

Mary Boesveld, July 1989

(partly based on : Guidelines for developing a technical manual, by James H. French, UNDP (DTCP)).

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1. Why are country and project specific guidelines and manuals important ?

Usually there is a large gap between the more sophisticated reports on project organization and methodology turned out by project management and researchers and the practical information which technicians, extension workers and community members need for planning, implementation and management of water supply systems.
Guidelines and manuals can bridge this gap by stating as simply and clearly as possible all relevant issues, necessary steps and important points to be taken into account.

A well-designed manual can be an important tool in enhancing the skill and competence of field workers. It can supplement on-the-job training which can substantially reduce expensive training time. Field workers can be given the manual as required reading, to use it as a basic guide for their work and as a framework for evaluating results.
A manual which is designed for use by communities can help the communities to understand problems and develop self-supporting behaviour. It can be used to support and supplement the efforts of extension workers in introducing improvements.

In disseminating the project methodology in this way to particular, mainly local audiences, the development of guidelines and manuals will supplement other efforts to communicate project findings on a national and international levels.

2. How to organize the preparation and production of a manual ?

An early decision to be made in the preparation of a manual is to determine who will be in charge. This person we may call the "managing editor".

Her/his tasks will be :

- to define the roles and responsibilities of individuals involved in the various stages of manual preparation, e.g. the specialists who define the issues to be taken up in the manual; the text writer; the designer/illustrator; the person who is responsible for lay out and printing; the person who is responsible for distribution.

- to identify suitable assistants to do the jobs outlined above. Of course, sometimes several jobs may be taken up by the same person, e.g. the specialists may also write the text; the illustrator may be also responsible for lay out and printing.

- to prepare a budget for the production of the manual and to find the necessary funding.

- to supervise planning, preparation and production of the manual, to co-ordinate all the work and to exercise control to see that the job gets done properly and in time.

- to organise evaluation of the manual and, if necessary, the preparation and production of updated versions.

QUESTION : Which skills does the managing editor need to properly fulfill his/her tasks ?

3. Steps in preparing a manual

Brief outline of steps in preparing a manual

* **Identification of Target Group**
* **Defining the Objectives**
* **Determining the Content**
* **Writing**
* **Deciding on the form of presentation**
* **Pre-testing**
* **Editing**
* **Production**
* **Distribution**
* **Evaluation**

The quality of a manual is determined by the extent to which it meets the particular information needs of a particular target group at a particular point in time.
There is no "correct" format or style. There is, however, a decision-making sequence which generally has to be followed in preparing and producing a manual. The sequence is made up of ten steps, which are outlined below and illustrated with an example of a possible manual for the PSSC project.

It must be stressed that for each particular manual the outline of steps has to be reviewed and brought into agreement with the requirements of the target group and the objectives of the manual.

STEP ONE : Identification of the Target Group

Selecting a single priority target group is necessary to set clear objectives. It helps designers, writers and editors focus their creative energies on the task in hand. For this reason it is necessary to know some basic characteristics of the people who make up the target group :

- their general social and cultural background;
- their level of knowledge, skills and experiences;
- their age and sex may sometimes be important.

Once the priority target group has been identified, there may be several secondary audiences which can be included when the finished product is finally distributed.

In the case of the PSSC project, it might be considered necessary to produce a manual on basic methods for the promotion of community participation in an improvement of their water supply system.
The key target group would then be local development workers and health workers, who would be involved in promoting participation of the community in the improvement.
Secondary target groups which may benefit from the manual would include water engineers and other employees from the Water department, employees from the department for Community Services and the Ministry of Health, and training colleges for extension workers.

QUESTION : which key target group and secondary target groups could be selected when a manual is to be produced for the introduction of improved sanitation and sanitary habits ?

STEP TWO : Defining the Objectives

Once the primary target group has been identified, answers to the following questions are needed :

- What information does the target group want and need?
- Why is this information needed ?
- Where will the manual be used ?
- When will the manual be used ?
- How will those responsible for preparing and revising the manual be able to evaluate its effectiveness ?

In the case of a manual for the PSSC project on basic methods for community participation, the objectives might be described as follows:

What : A how-to-do-it package of information (steps to be taken) and recommendations on basic methods to promote community participation in an improvement of the community's water supply system, aimed at community development workers and health workers.

Why : To enable these workers to promote community participation in planning, implementation and management of a water supply system and provide practical support to communities in their efforts towards a sustainable improvement of their living conditions.

Where to use : As a text and reference manual for training and monitoring community development workers and health workers; as a basis for those workers to prepare their work with the communities and as a basis for developing and designing educational material for use with communities.

When to use : During training courses; during monitoring the work of community development workers and health workers; during work with the communities.

What to evaluate : Successful participation of the community in planning and implementing an improved water supply system and in managing and maintaining of the improvements on a long-term basis.

QUESTION : How would you define the objectives for a manual on the introduction of improved sanitation and sanitary habits ?

STEP THREE : Determining the content

The content of the manual depends on the needs and the background of the target group as well as the scope and complexity of the topic being presented.
The content should always be clearly structured, in logical or chronological sequences. Each issue or step should be clearly marked, special points to remember may be put in a box outline, etc.

In the example of the manual on community participation for the PSSC project, a team of resource persons and specialists from the fields of community development, health and water supply might be brought together in a meeting. They will draw up an outline of issues that should be discussed in the manual. After this a professional or experienced writer takes over, who works on the basis of instructions by the team and/or the managing editor. The writer might arrange the selected issues chronologically, that is to say according to the actual sequence of events which have to take place in the field to promote community participation in a water supply project.

For each step in this sequence a brief description may be given of action to be taken, clearly stating relevant issues, e.g. who does the work; what kind of material or technology is needed; who is responsible; who should benefit; what might go wrong; etc.
The result of this work will be a first draft of the manual, to be discussed once again with the team and with the managing editor.

QUESTION : Make a rough outline for a manual on the introduction of improved sanitation and sanitary habits, defining all necessary steps and relevant issues (keeping in mind the needs and background of the target group).

STEP FOUR : Writing

It is the writers' task to transform the rough outline for the manual into clear messages and simple recommendations so that the target audience will understand the essentials and will be able to work with them in the field.
Also, he/she has to organize the information into clear sections to outline the different components of the topic which are to be covered in the manual.

This is not an easy task and some guidelines on how to organize the information and how to simplify messages may be useful.

For the organization of information for a manual the following general division into sections might be considered :

- Introduction.
  State the purpose and scope of the topic to be covered. This includes some background information on the organization or institution that is producing the manual. Also the principal and possible secondary target groups should be mentioned.
  This section should not be more than one page.

- Basic Principles.
  Summarize basic principles which relate to the topic, and, if necessary, summarize some relevant research findings.
  Keep this as short as possible - not more than one page for most topics.

- Practical Guidelines.
  Prepare a chronological description of the steps involved in implementing the practice. A description of problems to be expected and possible ways to solve them should be included.

- Personnel, Supplies and Materials.
  Describe in summary the personnel, materials and supplies needed to implement the practice.

- Summary and Recommendations.
  Summarize the key points and additional recommendations, if any, which relate to problems or questions which may face the users of the manual.

- For Further Information.
  List bibliographic references as well as institutional and personal references which were used in compiling the information. Institutional references should include the services they can offer (free/charged).
  Limit the number of references to the most essential ones.

Some tips on good writing include the following :

- Write short sentences with only one idea in each sentence; otherwise information becomes indigestible.

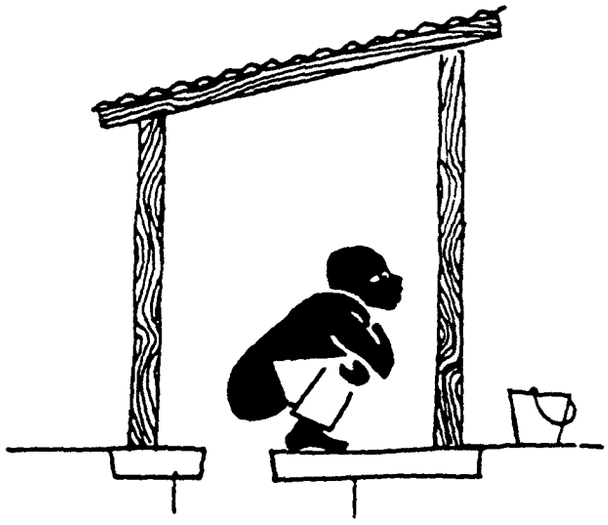
- For each statement give an explanation; you are an educator, not a dictator.

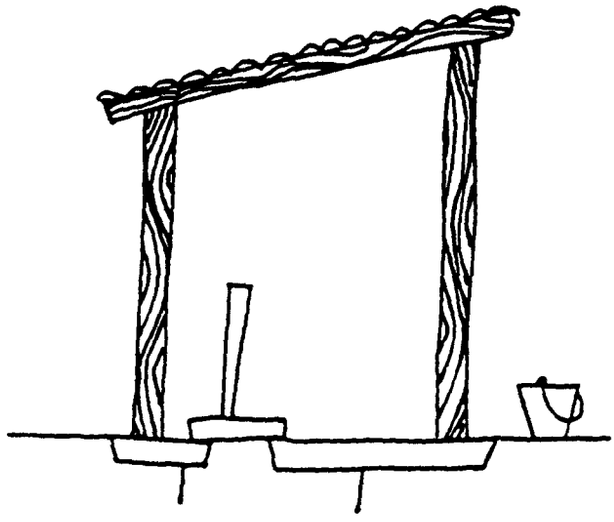
- Use vocabulary which is suitable for the target audience; if necessary, a glossary of difficult words may be helpful.

- Text and illustrations should complement each other and refer to each other.

QUESTION 1. : How would you organize the information for the manual of which you have made a rough outline before (see the Question for STEP THREE)

QUESTION 2. : Write a brief text (a few sentences are enough) to accompany the illustration below. This illustration would be included in a manual on improvement of sanitation and sanitary habits.





STEP FIVE : Deciding on the form of presentation

One of the most important measures of a manual's effectiveness is whether people pick it up and use it or not.
Most of us base our initial reactions on appearance rather than substance. It is, therefore, important that the manual looks practical and attractive. The following are some sugestions on how this might be achieved :

Layout

- People like pictures. Make ample use of illustrations. Especially if the target group is not much accustomed to reading use as many pictures and illustrations as possible to clarify the text.

- Simplicity communicates. Try not to squeeze too much information on a page.

- Maintain good margins. Blank spaces give the eye a rest.

- Use bold headings. The message should jump out at the reader, not wait to be dragged out.

- Think visually. A paste-up of early drafts helps set style and tone.

- Keep the size of the manual manageable. A very extensive topic may be broken down in two sections, to be covered in two seperate volumes. Of course this is only possible when the division is clear and does not create confusion.

Headings

- Headings should always be short and precise. Clear headings and sub-headings help the user find the specific topic or step he is interested in. When issues and steps are arranged in logical and/or chronological order, headings and sub-headings can be easily defined. These then may serve as a standard outline for writers and editors as well as for readers.

Printing details

- The size of the finished manual is governed by two factors, (1) convenience to the user, and (2) the

cost of publication. In general, a standard size paper is recommended to save on production costs. Also, standard paper is easier to photocopy and to file.

- The type face should be clear with straight margins. Different size type for headings and bold face type can also be used in emphasizing important points.

- For most topics, coloured illustrations are not necessary if good black and white pictures are available. Simplified line drawings are often more effective than photographs. A single additional colour sometimes helps "dress up" the first page or the cover. This is an inexpensive way to attract attention. Coloured paper can also be used to make certain sections stand out.

- A standard wire stitch binding is usually the cheapest way of holding a manual together. However, if the manual is expected to "grow" or to undergo continuous revisions or additions, a ring binder with indexed dividers can be useful. As long as a manual is still to be tested a ring binder is to be recommended. Then, when it is revised and reproduced for large scale distribution, stitch binding can be used.

- A clean offset printing job is not only pleasing to the eye but it can save money on the long run. With offset it is possible to print on both sides of the paper avoiding messy stencils. Also the type face and illustrations can be photographically reduced and enlarged as desired. Given the overall writing, editing, and paper costs, offset reproduction adds only slightly to the total expense.

- Good quality paper costs slightly more, but the effectiveness of the document can be greatly enhanced by creating the impression of a quality product.

QUESTION : Imagine you are the managing editor of a manual for improvement of sanitation and sanitary habits,
- how would you decide on layout and printing ?
- with whom would you consult ?
- how would you identify the specialists you may need on these matters ?

STEP SIX : Pre-testing

Before going ahead with full scale development of a manual, it is a good idea to prepare a "prototype", that is, a model to try out on the target audience.

The purpose of the pre-test is to see how the audience responds to the content, format and style of the manual. This means referring back to the stated objectives of the manual and testing a small sample of the target audience to see whether the objectives are being achieved.

The first step in conducting the pre-testing is to get together a team consisting of the writer, the editor and persons knowledgeable on layout and content. These may be the same people who worked as resource people and specialists on dertermining the content of the manual (see STEP THREE).
The team will develop checklists for use in evaluating the prototype, based on the following criteria :

- visual impact : is the message visually attractive ?

- comprehension : can the target audience understand the words, contents, illustrations ?

- social and cultural acceptability : will the message and form of presentation in any way create difficulties or offend the audience ? Does the message take seriously all existing knowledge and experience of the target audience ?

- economic acceptability : is the message economically viable for the target audience ?

- technical acceptability : is the message deemed technically feasible by the target audience, given their available labour, cash, supplies, and knowledge ?

- general usefulness : is the target group able to work with the manual in the intended way ?

The next step in pre-testing will be to confront a group of people from the target audience with the prototype document to get their reactions.
In the case of a PSSC manual on community participation in water supply, aimed at social development workers and health workers, pre-testing could be done in a workshop where a group of these workers discuss the manual and evaluate it, based on the above criteria.

Of course, the writer, editor, and perhaps other persons involved in preparing the manual should also participate in the workshop to listen and learn from the target groups' comments and behaviour.
It has been found that this method yields useful information which can immediately be incorporated in the document.

QUESTION : Make a rough plan on pre-testing of a manual on improvement of sanitation and sanitary practices.

STEP SEVEN : Editing

Editing the manual is a key activity since it is at this stage that the parts are merged into a cohesive whole. Findings from the pre-testing will be incorporated. Contents and illustrations will be properly matched. The complete text will be reviewed on consistency, clearness and appropriateness. Any errors in grammar and spelling will be corrected.

To transform the draft of a manual into a document with continuity, movement, and style requires skill and experience. The task has to be tackled carefully since writers tend to be sensitive about changes in the text they have worked so hard to produce.

As many organizations and particularly government institutions have no professional journalist who can devote full attention to the editing job, it might be profitable to hire a professional or experienced writer from outside. This person should then work under the guidance of the managing editor who is responsible for the total preparation and production of the manual (see Section 2 on "How to organize the preparation and production of a manual").
Another solution may be to hold an editing workshop with the team of persons involved in the preparation of the manual. This team then works under the guidance of the managing editor. However, the managing editor will always have to take the final responsibility on him/herself.

Finally, a last draft of the manual should be reviewed by a few outside specialists. In the case of a PSSC manual on community participation these persons may be chosen from :

- specialists on the topic of the manual. Their role is to check the accuracy and completeness of the information.

- communication specialists. Their role is to review the manual with emphasis on its visual impact and on the way it communicates the intended messages.

- training specialists. They review the manual as a training tool. They check whether the sequencing of information and the style of presentation is appropriate for the users of the manual.

On the basis of these reviews, the managing editor, together with the professional editor or the editing team, will make the last adjustments to the document.

QUESTION : Make a plan for editing the manual on improvement on sanitation and sanitary habits (see the QUESTIONS attached to previous STEPS).

STEP EIGHT : Production

As noted earlier, the visual impact of the document is extremely important. Many people will only start to read a publication if it looks attractive. Considering the large amount of effort and time expended in developing the manual, the printing cost is relatively small. It is important therefore not to cut on the cost of paper and printing. Good quality paper and a neat printing job gives the impression of a high quality product. Also, the document should be very well screened on errors and mistakes in text, paging, illustrations and general lay out.

It is also suggested that the document be printed in excess of the immediate requirements. There is always a large demand for a good product. Furthermore, printing in larger volume can save money in the long run. Making reprints is usually expensive and time consuming.

The managing editor will make a budget on the basis of estimations of costs from several printers, taking into account the required format, quality of paper, quality of print, number of pages and total volume required.

STEP NINE : Distribution

Until the manual is in the hands of the intended users the publication is really not complete. A policy needs to be adopted to ensure that the primary target group is given full access to the manual, and that there is a mechanism by which secondary target groups can obtain the manual easily.
Promotional activities could include :

- preparing a "flyer", stating the purpose and content of the manual, the price and an adress for obtaining copies; the flyer might be distributed to all institutions and persons whose work is related to the topic covered in the manual;

- having the manual reviewed in one or more newspapers or having it announced on television;

- sending a free copy to libraries and institutions which promote the use of such documents;

- organising a workshop for a group of people from the primary and secondary target audiences, in which the topic of the manual and the manual itself are discussed.

There need to be a policy regarding sale or free distribution of the manual. It is advisable not to give out too many free copies. Even though the price charged may be considerably below cost, people tend to value what they pay for more than what is handed out free of charge.
It may also be possible to market a particularly good manual through a commercial publishing house which considerably expands distribution outlets.

For a good manual there might be an interest outside the country where it is produced. Even if a manual is adapted to the particular social and cultural circumstances of one country, other countries might want to learn from the way the topic is treated or the way illustrations and text complement each other. It is always advisable to send a copy of the manual to an international institution which works in a related field. For example, a manual on topics related to water supply and sanitation should always be send to the International Water and Sanitation Centre in The Hague, The Netherlands. This Centre will put the manual in its library, where it may be used by specialists from various countries.

STEP TEN : Evaluation

The final step in the development of a manual is to organise follow-up in the field to see whether or not the target group is actually using it. If they are not using it, then an explanation has to be found as to why this is the case, and one needs to find what can be done about it.

Just as in the pre-testing phase, criteria for evaluation should be set up, based on the manual's objectives. These criteria may be the same as in pre-testing (see STEP SIX).
When the manual is used by the target group for educational or extension purposes, the people to whom the information is adressed have to be involved too in the evaluation. In the example of a manual for community development workers on how to promote community participation in improving the community's water supply, it is important to test the community's reactions on the efforts of the extension workers which are based on the manual. Special criteria for evaluating these reactions have to be included in the evaluation.

4. Recommendations

1. Apart from evaluating the manual itself, it is advisable to set up an evaluation of the process of preparing and producing the manual. Such an evaluation is very important as it might help to identify problems and to find better ways to prepare and produce manuals in the future.
General criteria for this evaluation might be based on the ten steps in preparing a manual as outlined above :

- How was the target group chosen ? Was it properly defined ?

- Were the objectives clearly stated ?

- Was the content of the manual well thought out ? What problems could be defined in structuring the content ?

- What problems could be identified in the process of writing ?

- How were decisions taken on the form of presentation and how adequate were they ?

- Was the pre-testing well organised ? How were the criteria chosen ? Have the results been properly incorporated in the final version of the manual ?

- What problems could be identified in the process of editing ?

- How were decisions taken on production and distribution, and how adequate were they ?

- Was the evaluation well organised ? How were the criteria for evaluating the manual chosen ? What has been done with the results ?

2. Provision also has to be made for periodic review of the content of the manual and for updating it based on new ideas or research findings or on changed circumstances. One way to organise such a review is to hold a workshop with some people from the primary and secondary target groups to discuss the topic concerned and the usefulness of the manual.
An updated version of the manual, as well as any new manual should be based on findings from evaluations of the manual itself and of the process of preparing and producing manuals.

* * * Piped Supplies for Small Communities (PSSC) Project * * *

SOME NOTES ON PRE-TESTING MANUALS AND GUIDELINES

Mary Boesveld, November 1990

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1. What is pre-testing ?

Pre-testing, within the context of preparing manuals and guidelines, means : testing communication materials before they are printed and distributed. By showing the materials to the audience they are meant for, and discussing with them the contents, we find out if they are understood and liked. We also find out if the message or idea is conveyed in the way it was intended.

Pre-testing may have to be done several times. If a manual has been tested, and there have been suggestions from the audience to make changes, the new version has to be tested as well. Each new version has to be tested, until we are sure that the audience understands and likes it.

Pre-testing is a kind of research. In general, it should be following the rules which apply to any proper social research. The most important of these rules are :

* the objectives of the pre-testing are precisely stated: what exactly do we want to know ?
* the respondents (the persons who will be interviewed) are systematically selected;
* the contents and the phrasing of the questions to be asked in the interviews, and the order in which they are asked, are carefully defined;
* observations to be made alongside the interviews are specified;
* the recording, summarizing and analysis of the findings are done in a structured way;
* interviewers and observers are trained how to investigate, to ensure sufficient and unbiased results.

Although these rules have to be followed in general to make the results of the pre-testing as valid and reliable as possible, the aim is definitely not to conduct a full-fledged, academic research.
Pre-testing of manuals and other communication materials is always done within the framework of a project or programme, to improve the development of the materials. It should be set up with the requirements of the project in mind, and the practical time- and money limits faced by most projects have to be taken into account.

2. Why is pre-testing necessary ?

Communication materials are most often developed by urban, educated, modern people, who are accustomed to use written and illustrated materials in their daily live. Communication materials which are developed for projects, however, are meant mostly for comparatively poor, rural, less well educated or even illiterate people, who have much less exposure to posters, books, manuals, etc.

This situation creates a communication gap : development workers and villagers or urban slum dwellers may see things differently. The ideas they have about themselves, about society, and about the world may be very different, based on differences in life-style, tradition and education. They may react in very different ways on the ideas and pictures presented in the manuals.
Also, villagers may have information on their traditions and on their use of resources which urban development workers do not have, but which may be crucial in determining the success of a development activity. This information should be included in communication materials, when and where it is appropriate.

Throughout the world there are many examples of information materials like manuals, posters etc., which were interpreted wrongly or not understood at all by the people they were meant to reach. Not only the money that has been spent on these materials has been wasted, also the people did not get the information they needed.

Pre-testing will help to prevent expensive mistakes. It is cost-effective : one, or even several, tests will cost less then 1000 copies of a useless manual, or, worse even, the failure of a development activity.

3. Steps in pre-testing

Brief outline of steps in pre-testing

* Identifying the interviewers
* Defining the questions
* Deciding on interview methods
* Determining recording methods
* Identifying an appropriate sample of respondents
* Conducting the interviews
* Summarizing and analyzing the findings

Here we presume that the materials (manuals) which have to be pre-tested are ready in draft form, with clearly stated objectives and a well-defined target group. *)
There are many ways to pre-test communication materials. There is, however, a decision-making sequence which generally has to be followed in preparing and conducting any fieldtest, including the summarizing and the analysis of the findings. The sequence is made up of seven steps, which are outlined below.

*) For a complete overview of steps in preparation and productions of manuals, see "Ideas On How To Develop A Manual", in which all steps preceding the pre-testing are outlined.

STEP ONE : IDENTIFYING THE INTERVIEWERS

In principle, anybody who is trained can carry out a pre-test. There are, however, some advantages and disadvantages for the different categories of people who normally would do this job. They need to be discussed here, because they may have an effect on the way the pre-testing is conducted and on the way the findings are analyzed. In recognizing the disadvantages we can try to avoid them as much as possible.

Researchers, in particular social scientists, are in many instances well qualified to pre-test. They know information gathering and information processing techniques. They also have theoretical knowledge about people's values and behaviour, which they can use in designing and executing the pre-testing.
A disadvantage may be, that researchers are sometimes quite academic and removed from the reality of project problems. They may want to make the pre-test into a thorough academic exercise which takes a long time to design and to carry out. Also, they may not have been involved in planning and developing the materials to be tested, and therefore they may not be familiar with the purpose and the context in which it will be used.

To overcome these difficulties, and to make good use of the skills of a researcher, a close co-operation between the planners and developers of the materials and the researcher will have to be established. The researcher has to understand that the pre-testing is done to facilitate and support the preparation and intended use of communication materials, within the context of a development project. This practical aim should be reflected in the design and the execution of the pre-testing.

Planners and implementers of development projects can be good pre-testers. They know the subject very well, they know how the materials should be used, and the intended effect. Therefore, they can formulate appropriate questions, and interpret the findings in a way directly benefitting the project.
However, in some cases project staff may feel so closely connected with their project that they are not able to look at it objectively and from the point of view of the villagers. In pre-testing this is a great disadvantage, because they may base, unknowingly, the formulation of questions and the interpretation of the answers on their own opinions and feelings.
It is very important that in preparing the test this issue is raised and the dangers of imposing the opinions of the project staff on those of the community is thoroughly discussed.

Artists and professional writers have, if possible, to be involved in pre-testing, because they can then learn directly from the audience how their work is perceived. If they are open for feedback and suggestions from the audience, they may considerably enhance their skills in designing useful and attractive communication materials.

A disadvantage of the participation of artists in pre-testing is, that they often are quite defensive about their work. They may view their products primarily as works of art rather than as tools in communication. For this reason, they may be reluctant to listen to villagers' opinion of their products. They may feel that it is the villagers' fault if they do not understand the information, and not due to any shortcoming in the materials they produced.

A way to overcome this difficulty is to give the artists a very clear idea of the purpose of the material, on how it will be used and what are the intended effects. If they are interested in the communicative aspects of their work, they may even become skilled testers of their own materials.

Although **men and women** can be equally skillful in interviewing for pre-testing, the sex of the interviewer is not wholly irrelevant. In many countries, particularly in rural areas, it is not considered proper for a man to visit a woman in her house or her yard and to speak to her when she is alone. Likewise, a woman alone may not be able to visit a man.
Another problem occurs where women are brought up to be very quiet and modest in the presence of men. They will feel shy to present their ideas and opinions freely when they are interviewed by men.

A good solution would be for a man and a woman interviewer to visit the respondents together. If this is not possible, it is advisable to have at least a woman interviewing female respondents because in many cases she will get better results then a man. In group interviews the interviewer should take into account a possible reluctance of women to speak up in the presence of men. Sometimes it may be necessary to hold separate group interviews with women and men.

In some projects **extension workers, teachers, or village leaders** have assisted in interviewing for pre-testing in the communities in which they live and work. Experience has shown that in most cases this is not a good idea. Even with a good training these people may easily get biased and invalid results. The main reason is, that they are authorities in their communities, or at least are regarded as such. In many countries common people will not freely express their own views in front of an authority.
Another disadvantage is that many extension workers and

teachers will carry their teaching habits into the interview. They will have a tendency towards testing the audience, rather than the materials. They will ask questions like "Do you understand this ?", suggesting that there are any right or wrong answers.

This is not to say that extension workers, teachers and village leaders can not contribute in an important way to the success of a pre-testing. They know the community very well, and because of their position and prestige they can facilitate the proceedings considerably.
Also, it should be made clear to them, and to all community members that everybody's opinions are valued and their views and suggestions taken seriously. It is the defined purpose of a pre-testing to get those opinions and suggestions, to use them to improve communication materials.

STEP TWO : DEFINING THE QUESTIONS

1. What questions to ask ?

Any list of questions for pre-testing a manual, or other communication materials, will be based on the following general criteria :

* **visual impact** : is the message visually attractive ?
* **comprehension** : can the audience understand the words, contents, illustrations ?
* **social and cultural acceptability** : will the message and form of presentation in any way create difficulties or offend the audience ? Does the message take seriously all existing knowledge and experience of the audience ?
* **economic acceptability** : is the message economically viable for the audience ?
* **technical acceptability** : is the message deemed technically feasible by the audience, given their available labour, cash, supplies, and knowledge ?
* **general usefulness** : is the target group able to work with the manual in the intended way ?

For each of the manuals which have to be tested, we can use this list as a guide to determine what we want to find out.

To give ourselves a clear idea of the **specific questions** we want to ask, we need to go back to the objectives of the manual as they were defined at the time it was designed :

* What exactly is the topic of the manual, or are there several topics ?
* Who will use the manual, and how is the audinece supposed to use the manual ?
* What kind of effect is the manual expected to have on the audience : is it supposed to inform people, instruct them in a skill, motivate them, or anything else ?
* Has any previous knowledge and experience of the audience on the topic of the manual been taken into account ?

Most manuals will be designed primarily for use by extension workers. He or she will explain the message to other people, e.g. villagers. In that case questions will have to be asked from the extension workers as well as from the villagers. Both groups have to understand and appreciate the topic and the general contents of the manual, and assess its usefulness.

2. How to phrase questions ?

Not only the content of the questions is important, also the way they are phrased may influence to a large extend the answers.

There are two main types of questions that are commonly asked in interviews : open-ended questions, and closed, or leading questions.

Open-ended questions are asked to get people to express what they think, without providing a lead or a clue as to what the answer might be.
Examples of open-ended questions are :

- What do you see in this picture ?
- How do you think a public standpost should be kept in good working order ?
- What could you add to the issues discussed in this manual on the maintenance of public standposts ?

Closed, or leading questions give, sometimes unintentionally, clues for answers. It is very common when asking for information to pose questions like "Do you like (or understand) this picture ?", "Do you see here a village ?" or "Do you think this is a good type of toilet ?"
The danger in asking such questions, is that the respondent will give an "appropriate" answer. She understands that she has to appreciate the picture, or has to see a village, and she will answer accordingly; she might give an opinion on the type of toilet, based on what she thinks is the opinion of the interviewer. The respondent has been led to give a certain answer, which might not reflect her own ideas.
This way of asking questions should be avoided. Most of the answers might not be valid, which will certainly lead to a faulty interpretation of the findings.

In some interviews respondents are asked to make a choice between two or more answers to one question. For example : "When you have a sick child, do you go to the traditional healer, to the nurse at the village health center, or to the doctor at the hospital ?" Sometimes a long list of possible answers is presented to the respondent, for instance a list of food items, to point out those which are commonly used. There is usually no opportunity for the respondent to introduce things which are not on the list, or name any choice which is not offered by the interviewer.

These types of closed questions will not be used in pre-testing. It is important that in pre-testing communication materials people are not inhibited in expressing freely their ideas and feelings. Questions should be phrased in such ways that they will be stimulated to do so.

3. Personal data of the respondents

Besides the opinions and suggestions of the respondents on the manuals or other communation materials we are testing, we need some personal data of the respondents. These data will allow us to analyse their answers within a relevant context.
Ideas of young people may differ considerable from those of older people. Women and men may have different opinions. Village leaders may make certain suggestions which are based on their position. These differences can influence the findings of the pre-testing, and we want to be aware of that influence.

It is therefore important to record for every interview the most relevant personal data of the respondent. These are :

* sex
* age
* level of education, or literacy/illiteracy
* position or occupation.

For pre-testing it is not always necessary to ask specific questions on age, education and occupation. Most of the time good estimates, based on observation, are sufficient.

STEP THREE : DECIDING ON INTERVIEW METHODS

There are basically two types of interviews : structured and unstructured.

In a **structured interview** a questionnaire is prepared with a number of fixed questions in a fixed order, and possible answers are worked out in advance. The interviewer reads the questions and codes the answers.
An example from such a questionnaire may be :

- Does your household have its own pit-latrine ?
  yes ..... no .....
- If yes : With how many people do you use it ?
  up to 5 persons ..... more than 5 persons .....
- If no : Did you ever consider to build a pit-latrine for your household ?
  no, never ..... yes, I sometimes think about it ....
  I don't know .....

A structured interview has the advantage that it is easy to record. The findings are easy to summarize and it is usually possible to make a statistical analysis.
A disadvantage is that it is not possible to go more deeply into opinions, ideas and feelings of the respondents. All questions are closed. There is usually no opportunity to discuss things or elaborate on a topic.

In pre-testing we particularly want to hear those opinions and ideas. For that purpose it is better to use an **unstructured interview**. In this type of interview the interviewer does not use a questionnaire, but only a checklist with open-ended questions. The interviewer can follow-up each question by asking further details, based on the answer the respondent gave. The checklist is only used as a guide, to remind the interviewer of which questions should be asked, and of the order in which they will be asked.
The following conversation could be an example from an unstructured interview :

- Question 1 : What do you see in this picture ?
- Answer : I think it could be a village. But the houses look very funny.
- Probing question : Why do you think they look funny ?
- Answer : The roofs look strange, and there are so many windows. Our houses here usually have only one window.
- Probing question : Yes. What do you think is this (points to a public standpost on the picture) ?
- etc.

In this example only the first question ("What do you see in this picture ?") has been included in the checklist. The second question is a reaction on the answer given, to ask further details. The third question goes deeper into certain relevant features of the picture. This technique of asking questions is called probing.

Unstructured interviews which include probing are particularly well suited for pre-testing manuals and other communication materials. They allow the respondents a maximum of free expression of opinions and feelings. However, they are more difficult to record than structured interviews, and it is more complicated to summarize and analyze the findings. Unstructured interviews generally require a skilled interviewer if they are to produce useful results.

All interviews, particularly unstructured interviews should be accompanied by some **observation**. Important points for observation are :

1. the attitude of the respondent
   All people disclose feelings of pleasure, disgust, shyness, etc. with movements of their hands, head or body. If a respondent answers "Yes, that's fine", but at the same time shows disgust, we know that we have to do some probing to find out what he really thinks.

2. The environment in which the interview takes place should be observed. What is the respondent doing while she is interviewed ? Does she listen and answers attentively, or is she continuously distracted by her children, by neighbours, etc. What other people are present ? How do they behave ?

3. age, position, level of literacy
   When it is not necessary to know exactly the age of respondents, or their position or income, as is the case for most pre-testing, we can make good estimates of these things through observation. When pre-testing manuals or other written materials, there is no necessity to ask questions about literacy or level of education when this can easily be observed.

It is important to record all observations made during an interview. They will complement the answers given by the respondent, and are valuable when we analyse the findings.

STEP FOUR : DETERMINING RECORDING METHODS

Having decided on unstructured interviews and open-ended questions for pre-testing, it is not possible to use the fixed, strictly defined ways of recording that structured interviews allow. However, certain arrangements for systematic recording can be made to facilitate summarizing and analysing the answers.

Here some suggestions are given :

* Use a fresh sheet of notepaper for each interview. Mark each interview clearly with its own identifying number. Number all pages of each particular interview (see the example on the next page). Keep each interview separate from the others.

* Record for each interview the place where it is held, the date, the time, and the name or initials of the interviewer (see the example on the next page).

* Leave a small margin on the left side of the notepaper, to indicate the number of the question for which a particular answer is given.
Leave a larger margin on the right side of the notepaper, to write any observations which are made during the interview, or special remarks (see the example on the next page).

* Make notes of everything that is said in the interview, and of all observations. Record also your "probing" questions.

* As much as possible take down the actual words, as they are spoken. Do not "translate" answers into your own words.

* Watch the reactions and the attitudes of your respondents very carefully (without embarassing them). Try to observe the respondents attitude towards specific questions, and changes in his/her behaviour during the interview. Record everything you see.

* Write down immediately the answers and observations. Do not rely on your memory.

* Group interviews are more difficult to conduct and to record than individual interviews. Unless you are very experienced, do group interviews never alone, but always together with a partner. You can then take turns in asking questions and taking notes.

* Make a rough sketch of the participants in the group interview, indicating their number, the way they are seated, and their sex. Take notes on who talks much, who speaks little, who is silent. Try to draw a communication network (see the example, next page).

EXAMPLES (Step four)

1. Interview notes

Int. no. : 1 page 1
Place : Kasungu, yard 12
Date : 7.12.1990
Time : 11.30 Interviewer : F.K.

Q.1	(What do you see on this picture ?) I see houses, and a tap, with some people.	woman age ± 40 3 children and neighb. present
Q	Could this be the tap in your community ? No, this tap is broken. We do not have a broken tap.	
...	etc.	illiterate

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2. Recording of group interview

Int. no. : 6 (Group) page 1
Place : Kasungu, Tap Committee, Tap 3
Date : 9.12.1990 Interviewers:
Time : 15.00 h J.M. & A.C.

Network : Present 7
3 m, 4

Q.1 (This manual is about your work as a Tap Committee. Does it show any situation which is familiar to you ?)

..... etc.

A & C : silent
D : dominating

STEP FIVE : IDENTIFYING AN APPROPRIATE SAMPLE OF RESPONDENTS

To get good and sufficient information about the impact, effectiveness and acceptability of communication materials it is not necessary to interview very many people. By sampling, or systematically selecting certain people for interviewing, it is possible to get a good and reliable idea of general opinions and feelings of the users about the materials.

There are many different methods of sampling which are used in academic research. For the purpose of pre-testing materials for development projects it is usually not necessary to go deeply into details of these methods. Here, some general rules are given which, when considered carefully and adapted in an appropriate way to the specific materials to be tested, will help to select the right group of respondents.

* For pre-testing usually a kind of **purposive sampling** is carried out. This means that for the purpose of testing a particular manual or poster, respondents are choosen among the target audience and other users, in the area where it is to be used.
Materials which are going to be used within the framework of a development project, should be tested with the people who are involved in that project.
Manuals which are designed primarily for extension workers, will have to be tested with them, and also with the villagers with whom the extension workers will discuss the contents of the manuals.

  Materials which are designed for use by specific groups, like schoolchildren, or mothers, or for an organisation or a committee, should be tested with those groups, and with ordinary community members who may be parents of schoolchildren or future members of a committee.

  When pre-testing is carried out in a community, usually some influential people like the village headman and other leaders have to be included in the selection of respondents. Otherwise they may object against the interviewing in their area, and influence negatively the proceedings.

  Thus, for testing a manual about operation and maintenance of public taps which are built for a particular project, respondents may be selected among
  - extension workers in the project area;
  - community leaders or other influential people in the area;
  - members of Tap Committees;

- community members, women and men in equal numbers.

* An important issue to consider is the **number of respondents to be included in the sample**. In pre-testing a simple manual or a poster it is usually right to start with a total number of 25 to 30 respondents. If the answers are consistent (i.e. most people interpret the pictures and the message in the same way) this number will give sufficient information to edit and redesign the manual or poster.
If the answers are very different, it is necessary to ask more people, until there are enough similar reactions to show a trend. Sometimes it is clear after a few interviews THAT there is a problem with the material, but it is not clear WHY there is this problem. In that case it is necessary to go on with more interviews until we have a good idea of what we need to change and how to change it.

Of course, the total number of respondents should include in a balanced way all groups from which they are selected. The required number in each group should be considered carefully. For example, for pre-testing the manual on operation and maintenance of public taps it was decided to interview :
- 5 extension workers;
- 5 Tap Committees;
- 3 village headmen;
- 10 community members (5 women and 5 men).

With the Tap Committees, consisting of 6 or 7 members each, group interviews were held. The Tap Committees would be the main users of the manual, and it was considered important that particularly their opinion would be sufficiently represented.

* Sometimes it may seem easier for the interviewers to choose as respondents mostly those people whom they already know well (and who probably might be already somewhat familiar with the messages in the materials to be tested). Or, there are so many community leaders to be interviewed that there is no time left to interview the required number of ordinary community members.
In these cases the sample is biassed, and this will make the results of the pre-testing unreliable. People who are already familiar with the subject of a manual will react differently from people who have not thought about it before. Community leaders may have not the same ideas as ordinary women and men.
Bias in sampling always spoils the findings of the pre-testing.

* Bias in sampling can be avoided by making **a random selection of respondents**. When a decision has been made on the different groups which have to be interviewed, and on the required number of respondents from each group, the actual respondents can be choosen in a random way. For example, from a list of all Tap Committees in an area, every fifth Committee is choosen. In a village or ward, every third or every fifth house is visited. Another way to make a random choice is to write names (i.e. of extension workers) on pieces of paper which are folded and put in a bowl. The required number is then drawn.

STEP SIX : CONDUCTING THE INTERVIEWS

Interviewing is not easy. The results of an interview depend to a large extend on the attitude of the interviewer, who must be friendly, polite, tactful, sensitive, patient, not too timid or forceful, or too talkative.
If possible, interviewers should have some practical training to become aware of their own attitudes, and to get familiar with all kind of difficult situations which can influence the interview.

Here some general rules for conducting good interviews are given :

* When approaching a respondent, exchange greetings and introduce yourself.

* Explain the purpose of your visit, without emphasizing too much the importance of your assignment. Rather emphasize the importance of the opinions and ideas of the respondent for the improvement of the materials.

* Indicate the approximate length of your visit, and ask the respondent if he or she can spend this time with you.

* Ask permission to take notes, or to use a taperecorder.

* Use the local language for interviewing and recording. If you can not speak the language well enough, you will need an interpreter, preferably somebody you know, who can translate the questions and answers in a reliable way.

* Give the respondents enough time to look at the manual or the poster and to make comments. Be patient, do not rush through the questions and put pressure on the respondents to answer quickly. It is better to do a few interviews well, than to have many but unreliable results at the end of the day.

* Let the respondents hold the manual and leaf through it, let them show it to others present, etc. Carry some extra copies for replacement of dirty ones.

* In very difficult situations, like for example respondents who are drunk, or a hostile village leader, make a quick decision to end the visit and select another respondent, another house or even another community for interviewing.

* If food and drink is offered within the limits of a normal short visit, it can be accepted. However, giving and accepting hospitality should not become a strain on respondents and interviewers. You should be able to say "no, thank you" gracefully, indicating other visits you still need to make that day.

* After the interview thank the respondents for their co-operation and their useful information.

* Some respondents might ask to see any results from the interview. You will create a lot of goodwill for the project if you can promise to send or bring them a revised copy of the manual or poster. In that case, take down the exact name and adress of the respondent, and make sure that the copy is send as soon as it has been produced.

In **pre-testing manuals with mainly written text**, or more written text than captions for illustrations only, it is necessary to send copies to the groups from which respondents will be selected some time before the interviews will take place. The people have to be informed of the purpose of the pre-testing and asked to read the manuals before your visit.
Of course this makes only sense for people who may be expected to be literate enough to read and understand the manuals. But even then you must take into account that some of them will not have read the material. In those cases the best approach is to allow enough time during the interview for the respondent to look through the manual and read certain parts which are important for the interview.

STEP SEVEN : SUMMARIZING AND ANALYZING THE FINDINGS

To summarize and analyse the findings of the pre-testing, all interviews have to be brought together in a systematic order. The easiest way to do this is to **summarize all answers for each question on a separate summary sheet**. This makes it possible to see general trends in the answers and to mark the main points most frequently mentioned (see example no. 1). If out of 23 respondents, 20 have made remarks on not understanding the chicken in a drawing, it is clear that these chicken should not be there.

To find and interpret the trends, it is necessary to go back to the criteria for pre-testing, which were used as a guide to what we wanted to find out :

* visual impact : did the repondents like the material ?
* comprehension : did the respondents understand the message, the illustrations ?
* social/cultural, economic and technical acceptability : is the message acceptable to the respondents ?
* usefulness : are the respondents able to use the material in the intended way ?

Answers to these general questions should be found in the opinions and ideas of the repondents, perhaps complemented with their suggestions on how to improve the manuals. It is important to reveal not only THAT something is wrong, or not understood, but also WHY it is not understood, or wrong.

A separate summary sheet should also be made to **summarize age, sex, education and position of the respondents**, and the places where the interviews were held. If possible, special observations and remarks could be included in this list (see example no. 2).
The answers of the respondents can then be analyzed in connection with their age, sex, level of education, and position. If only 4 out of 22 respondents have understood a certain part of the manual, and these 4 belong to a group of better educated people, that part of the manual has to be reviewed for simplicity and clarity.

As a general rule, group interviews are counted as one interview, but the members of the group are indicated separately for age, sex, etc. This is done to take into account possible differences in opinion among the members of the group. It is useful to indicate "group" next to the interview number.

For the presentation of the analyses **different kinds of tables** can be made (see example no. 3). It is advisable to make only those tables which give relevant information for the improvement of the materials which have been pre-tested. If a quick look at the interviews from three communities shows that the results are not very different, it is a waste of time to make separate tables for the three communities. In this case it is even much better to combine the results, because more answers will show clearer trends.

Where it is possible to make comparatively simple interpretations of information, such as general usufulness of a manual, or general comprehension of a drawing, **a tally method** for summarizing and presenting the answers can be used (see example no. 4).

Generally for pre-testing, the analysis of findings should not be done as an academic exercise, but with the objective of the pre-testing firmly in mind : which information can best contribute to the improvement of the materials.

Carolyn Hannan-Andersson 1988-09-06

Some points to consider in assessing the integration of women into water supply and sanitation improvement programmes

Involvement of women:

Were women as target groups considered (emphasized) in the original planning documents?

Is the involvement of women (and women's access to benefits) given adequate attention in programme "events" - quarterly meetings, sector reviews, evaluations?

Has a dialogue been established with women - either through ensuring that women are present at all meetings concenring the programme, or if necessary in special information meetings for women?

Do women participate in planning meetings at village level, in implementation, in evaluation?

Are women given equal access to human resources development - training programmes of all types?

Are women given positions of authority in the programme?
at what levels
involving what responsibility
are women given adequate preparation for new tasks
is new technology involved
how well do women manage the positions

Is the National Machinery for WID within the country (Women's Bureau, Ministry etc) involved in discussions and promotion within the programme?
at national level discussions
at district/regional level
at village level

Potential benefits for women

Have women been given access to and mastery of new technology?

Has women's educational level been raised through human resources development?

Has there been a reduction of the workload?

Have women increased capacity for organization/involvement in development programmes through involvement in the programme?

Is women's involvement in community development more accepted at community level as a result of their involvement in the programme?

Women's own perceptions

Do women utilize the improved sources? If not why not?

In what ways do women feel they have benefited?

Do women feel their involvement has been satisfactory?

Do women have any suggestions for positive changes in the programme?

Box 1. Indicators of Effective Utilization

E1. Optimal Use

a. Total number of users and their characteristics
b. Quantity of water used for all purposes
c. Time taken to use facilities
d. Water resource management

E2. Hygienic Use

a. Water quality from source to mouth
b. Sources of enroute contamination
c. Practices to improve water quality
d. Site and home hygiene
e. Personal hygiene including handling of child faeces

E3. Consistent Use.

a. Pattern of daily use
b. Pattern of seasonal use

Some gender aspects which should be included:

E1. Optimum use:

Who are the users in different contexts- men or women?
What do men/women use water for?
What time is used by men/women for water collection/use?
Who manages water as a resource?

E2. Hygienic use:

Who is responsible for carrying, storing, utilizing water in the home?
Who takes care of children, including waste disposal?
Who makes decisions about hygiene management? management of animals, rodent cont o
Who has control over income and its utilization- and thus over which type of utensils, equipment is available in the home?
Who is responsible for the management of animals and control of rodents and vectors?
What are the common personal hygiene practices of men and women?

E3. Consistent use.

Time budget information on collection, management and use of water by men and women, on a daily and seasonal basis.
What is the relation of this work to the other work-loads of men and women?

Box 2. **Indicators of Sustainability**

S1. **Installed and Functioning Systems**
- a. Community decisions in installation
- b. Water quality, quantity at source
- c. Operation and maintenance
- d. Cost recovery

S2. **Confident/Competent Individuals (Community and Agency)**
- a. Management abilities, decision-making and execution
- b. Knowledge and skills
- c. Confidence/self-concept

S3. **Strong Organization (Community and Agency)**
- a. Autonomy
- b. Supportive leadership
- c. Systems for learning and problem-solving

S4. **Environmental Conservation**
- a. water sources protection
- b. watershed conservation.

S5. **Interorganizational Collaboration**
- a. planning
- b. activities.

Some gender aspects which should be included:

S1. Installed and Functioning Systems:

Who makes decisions on management at community level? Women and men together?
Who is involved in installation?
Who is responsible for operation and maintenance? In what ways?
In what ways do women and men contribute to ensuring cost recovery?

S2. Confident/Competent Individuals (Community and Agency):

Who has access to the relevant skills/ or training to acquire them?
Have women and men the same management abilities, decision-making authority, relevant knowledge and skills, self-confidence?
Do women and men have equal access to HRD inputs, especially in relation to analytical skills and problem-solving capacity?
What roles and responsibilities do men and women have in water committees, etc?

S3. Strong Organization (Community and Agency):

Is there supportive leadership in the area of womens involvement?
Are systems for learning and problem-solving equally accessible for men and women?
Are women involved in leadership roles?

S4. Environmental Conservation:

What roles do women and men play in management and conservation of the environment?

S5. Interorganizational Collaboration:

Is gender on the agenda?

Box 3. Indicators of Replicability

		Stages
R1	**Proportion and role of specialized personnel**	
	a. High input of specialized personnel	Pilot
	b. Mostly regular staff, decline in specialists	Demonstration
	c. Existing staff, further decline in specialists	Replication
R2	Established Institutional Framework	
	a. Semi-autonomous organization	Pilot
	b. Decreased by-passing of existing organization and collaboration with other agencies	Demonstration
	c. No by-passing of existing organization and increased inter-agency collaboration	Replication
R3	**Budget size and sheltering**	
	a. Generous and sheltered	Pilot
	b. Medium and partially sheltered	Demonstration
	c. Average and regular budget item	Replication
R4	**Simple documented administrative/implementation procedures**	
	a. General guidelines for activities and strategies, emphasis on interactive planning and implementation	Pilot
	b. Emergence of standardized procedures for interactive project/programme management including monitoring/evaluation criteria and procedures	Demonstration
	c. Documented simplified procedures	Replication
R5	**Other special/unique conditions**	

Some gender aspects which should be included:

R1. Proportion and role of specialized personnel:

Are there personnel specialized in participation or gender?
Are there women among the specialized personnel- any categories?

R2. Established Institutional Framework:

Are steps taken to ensure that gender is taken on as an important issue?

R3. Budget size and sheltering:

Are inputs to promote involvement of women included in the regular budget?

R4. Simple documented administrative/implementation procedures:

Is gender incorporated into normal planning cycles?

R5. Other special/unique conditions:

Have women the potential to sustain the benefits achieved and to carry them over into other areas of their lives?

Does the inclusion of women alongside men have implications for other areas of

GI

Gender Issues
in Water Supply and Sanitation

Gender Issues Working Group of the Water Supply and Sanitation Collaborative Council

Gender Issues Sourcebook

7-10 September 1993

Working Group Coordinator
Ms Wendy Wakeman, UNDP/World Bank Water and Sanitation Program

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Criteria for Project Analysis and Selection

Below is a list of possible criteria for project selection which can be incorporated into country and/or sector strategies. This list represents a starting point for establishing criteria for project analysis. Each country/agency will find that they will need to refine and adjust the criteria to reflect their programming realities.

- Gender elements of the project reflect priorities identified in the Gender Strategy, within the country, and the sector strategy.

- Women are clearly and explicitly identified as participants and beneficiaries of the project. Alternately, a rationale for not including them is provided, based on factual data assumptions.

- Documentation and women and men in the project area have been consulted.

- The project has clear objectives for gender issues and these form a central part of the project (i.e., are not "add on's").

- The baseline situation is linked to achievement of project objectives:

  - Proposed activities should involve women and men in ways that reflect the division of labor in the project area. (For example, if women take care of livestock, then women are provided with veterinary extension services);

  - Women and men are given roles as agents of development (for example, as extension agents);

  - Barriers to men's and women's appropriate participation as agents or beneficiaries of project activities should be identified and strategies should be designed to overcome these barriers (economic incentives, gender issues training for counterparts, affirmative action programs, etc.).

- Women are represented in project planning structures (e.g., in project management, cooperatives, farmers' associations, etc.).

- Reporting and evaluation methodologies are gender-disaggregated.

Of course, no single mechanical process or criterion can replace **informed judgment** in the selection process. When deciding if a project has adequately addressed gender issues, the exercise of professional judgment is required.

Guidelines for the Project Process

These guidelines cover the various stages of the project cycle. Information is listed under the following subheadings: Preparation- data collection, planning; Design- hardware: technology choice, software: women's involvement/community involvement, software/hardware linkages; Implementation- terms of reference, training, meetings, construction, operation, administration; Monitoring and Evaluation- general issues, technology, maintenance, training, roles concerning water (transport/storage/use), user satisfaction, contributions, committees/women's groups, health/hygiene, and time/budget studies.

Preparation

Data Collection

A socio-cultural study is an important first step in the project planning process. An overview and detailed recommendations for this type of study can be found in "Methods for Gathering Socio-cultural Data for Water Supply and Sanitation Projects (Simpson-Hebert, TAG Technical Note No. 1, The World Bank, Washington, 1983). A sample questionnaire can be found in "Appropriate Technology for Water Supply and Sanitation, Sociocultural Aspects of Water Supply and Excreta Disposal" (Mary Elmendorf and Patricia Buckles, volume 5 in Appropriate Technology for Water Supply and Sanitation, The World Bank, Washington, 1980). The key guidelines for such a study are:

- Both women and men from the community should be interviewed. Women's inclusion is particularly important, as they often are the ones with more personal, day-to-day experience of family water use and hygiene habits.

- It may be crucial to hold interviews with women separately, as this enables them to discuss their views more freely. Women may be hesitant to discuss defecation and water use practices when men are present, and the men may begin to speak on behalf of the women instead of letting the women speak for themselves.

- In many instances it is advisable to have women interviewing women. In some cultural contexts men will not be able to meet with women, and even where they can women may feel more at ease speaking with other women.

- Individuals conducting surveys should live in the villages for several days and participate in the daily lives of the people. Because many activities concerning water and sanitation occur at dawn and/or dusk, villagers may feel more free to reveal their opinions to those who live with them for awhile.

- Participatory research methods enable community members to be directly involved in the

data collection process. Women and men of the village can participate in designing the survey instrument and in gathering and analyzing the data. This is an important first stage in the community participation process.

- Data should be gathered on a gender-disaggregated basis. For example, data collected on membership of community groups should indicate how many female and how many male members.

- Data can be collected concerning existing water supply and sanitation practices, including: the roles of women, men, and children in collecting, storing, and using water; transportation methods; time required for collection; seasonal variations in quantity of water available and water source(s) used; the various uses of water; types of latrines in use; current hygiene practices; and functioning and sustainability of existing water and sanitation facilities.

Planning

In addition to collecting basic data, the planning phase is the time to explore broad project parameters and priorities with the communities and agencies who are expected to be involved in the project. General project objectives can be determined and possible constraints to women's participation can be identified. The input of both women and men is essential at this point. If women or the community as a whole are left out now, chances are slim that they will be appropriately included later in the project. And their ideas and decisions concerning this initial phase will have been omitted.

- Community discussions can be held concerning issues such as what constitutes acceptable standards vis-a-vis quantity, quality, reliability, and accessibility of water; criteria used to select between multiple water sources based on what the water is to be used for; and perceptions (especially those of women) of appropriate management of excreta disposal, including the management of the feces of infants and small children. Depending on the cultural context, discussions may be held separately for men and women or jointly.

- Information from these talks can next be used to discuss with communities and agencies options concerning the citing of water sources, types of technologies, design criteria for type of latrine enclosure or for color of latrine, and whether separate latrines are needed for women, men and small children.

- Agencies and communities can investigate whether there are legal, economic, social or cultural barriers to women's and communities' participation in the planning or implementation of water and sanitation projects in the area.

- Men's and women's priorities concerning water and sanitation projects may differ and so should be stated and discussed separately.

- Based on the discussions mentioned above, project objectives can be determined. These objectives should explicitly relate to women's and men's needs, and the communities

should be involved in setting the objectives. Experiences with earlier projects in the area can be used to make objectives as precise and realistic as possible.

- The planning phase provides an opportunity for discussion between government ministries, NGOs, and other agencies who are involved in the sector or, in particular,

who will be involved in the project. The institutional capacity for implementing a gender sensitive project can be assessed, possibilities for inter-agency coordination explored, and experiences with similar projects reviewed.

Design

During the design phase attention should be given to gender issues relating to both hardware and software aspects. The linkages between these two aspects are also important, especially those relating to the effective timing of hardware and software activities so that they occur sequentially in a manner that is mutually reinforcing.

Hardware: Technology Choice

- The technology chosen for the project should be:
  - needed and wanted by local men and women
  - well made and easy to maintain
  - at a cost people are willing to pay for (or which necessitates only a small subsidy)
  - not too far advanced from technologies currently in use in the area
- The project should be designed so that the acceptability of the project is monitored at all stages of the project cycle and adjustments made as necessary
- Women and men should also be involved in the choices for related facilities for bathing, animal drinking, vegetable growing, and other activities.

Software: Women's Involvement/Community Involvement

- Software aspects of the project should be designed so that:
  - appropriate human, physical and financial resources are provided to achieve software objectives
  - verifiable indicators are included for measuring results of software activities
  - possible externalities are planned for as much as possible (factors beyond the control of the project team)

- objectives and outputs include women's involvement and mechanisms are designed to ensure this involvement

- constraints to men's and women's participation are taken into account, including time available for participation, location of meetings, preferences concerning types of participation (time, money, materials), the need for separate meetings of men and women, or female staff to meet with women

- suggested institutional changes are considered to enable the appropriate participation of women and men

- appropriate channels are found or created to disseminate information to women and men

Training should be designed so that:

- women and men are trained in the use of new technology

- training in operation and maintenance will be targeted at both women and men

- relevant training, technical and managerial agency personnel are trained in software issues, including gender issues

- possible constraints to women's participation in training are minimized (for example, any constraints concerning location, time, educational requirements, childcare arrangements and length of training program)

- a proportion of trainers are female, particularly in settings where male trainers cannot conduct training for women

- the content is relevant to women's and men's needs

- communications channels are found or created to inform women and men about training events

Software/Hardware Linkages

The project should be designed so that software and hardware activities are linked. This includes:

- joint planning exercises between hardware and software specialists during the design phase so that:

  1. Both are knowledgeable about software and hardware activities and

2. Timetables for software and hardware activities are merged. This is needed to ensure that hardware and software activities take place in an appropriate time sequence. For example, training of women and men in pump maintenance should take place before pump installation while training for community committees should occur before committees need to begin arranging for community contributions to the project.

- project management and monitoring systems that plan for regular meetings between software and hardware specialists. In this way, any changes in the project schedule can be discussed, and further adjustments made as needed. For example, if delays occur concerning the arrival of parts for the improved water supply system, the software personnel should be informed. This may give them more time for pre-installation training activities. Conversely, if software activities are delayed, hardware specialists should know in case they have to delay certain hardware activities.

Implementation

Many issues concerning implementation are covered in sections on planning, design and monitoring. However, a few key issues are highlighted below.

Terms of Reference

- Terms of reference (TORs) must state specific gender issues responsibilities. Project managers and relevant staff should have gender issues as part of their overall TORs. Gender Issues specialists and/or community development specialists should have TORs which include a delineation of gender issues tasks. These would involve the training of staff in gender issues, development and implementation of a gender strategy, regular field visits, monitoring and evaluation of levels of community participation in the project (disaggregated by gender), assessment of the impact of the project on women and men, evaluation of the extent to which gender goals of the project are achieved, and determining how and if a gender sensitive project design aided in the attainment of project goals.

Training

- Gender analysis training can be an effective tool for facilitating gender sensitive projects. Training can be given to project staff and to staff of related agencies.

- Constraints to women's participation in training should be identified and reduced or removed.

- User education should ensure that women are included. Materials for non-literates can be designed when required.

Meetings

- Regular meetings among project staff and with staff and villagers provide an opportunity to exchange ideas, needs, problems, and information concerning the status of project activities. This can be especially important for gender aspects of projects, ensuring that relevant staff and community members know what objectives are concerning gender issues, what strategies are being undertaken, and what has been achieved thus far. If there are cultural constraints on men and women meeting together in villages, separate meetings can be arranged and both male and female staff can go to the villages.

Construction

- To ensure that women and men are appropriately involved in construction activities, the following questions can be asked:

  - Do local women and men normally do construction work voluntarily or is pay expected?
  - How will voluntary labor requested add to the existing workloads of women and men?
  - How will the project ensure that men and women who provide free or inexpensive labor receive direct benefits from the project?
  - Whether labor is voluntary or paid, is it scheduled at convenient times?
  - Has adequate training been planned for those providing the labor?
  - Has construction been timed to follow preliminary software activities (such as training)?

Operation

- The design of a maintenance program must be specific to the community in which it will be implemented. Villagers must be aware of their responsibilities and have the tools and skills needed to maintain their systems.

- Village women and men must be informed where to report any damages or repairs needed.

- An effective, two-way communication system should be established between village men and women and project staff. Female staff may be needed to ensure that village women have access to this communication system.

Administration and Management

- Women as well as men have a strong role to play as project managers. To facilitate this role, managerial and technical training opportunities should be made available to both women and men.

- Both women and men should be given management roles in community committees as well as roles such as fee collector and pump caretaker. Separate women's committees may be required in some areas to enable women's participation in committee work.

Monitoring and Evaluation

General

Careful and concise monitoring and evaluation are integral elements of a gender sensitive project. Simple, measurable targets are needed to facilitate this process. These are best developed in the early stages of the project (during the preparation and design phases). The various roles women and men are playing should be identified. The project impact on men and women can be analyzed. If project objectives concerning gender issues are not being met and if unforseen negative impacts or barriers are noticed during monitoring, then adjustments can be made in project design. Participatory monitoring and evaluation exercises, in which community men and women participate, can yield valuable insights and facilitate community involvement in the project as a whole. To fully evaluate the impact of using a gender sensitive approach, studies are needed to compare the functioning and utilization of systems under gender sensitive projects with those where gender issues were not considered. A few general elements for monitoring and evaluation are listed below, along with issues concerning specific categories.

- What are the percentages of women's and what is the percentage of men's participation in the project and what roles do they play?

- Did women and men participate in the collection and analysis of data for the feasibility study or needs assessment?

- Were the men's and women's recommendations used?

- What are the sector activities, by gender, in the project area? Have roles/responsibilities changed because of the project? How?

- Were the number of women and men involved more or less than anticipated? Explain.

- Were possible negative impacts of the project realistically foreseen and planned for? Were barriers to women's participation foreseen and alternative approaches found?

- What have been the lessons learned about gender issues during the project?

Technology

- Were women and men involved in the choice of technology, the selection of well sites or pump sites? Were they consulted concerning additional facilities such as washing and bathing facilities or water points for animals?

- How were men and women involved in construction activities? What was the nature of their involvement? How does women's involvement compare to men's (paid/unpaid labor, skilled/unskilled, trained/untrained)? What was the percentage of women's labor input as compared to men's? Did women or men contribute in other ways (cash, materials, food)?

Maintenance

- What are women's and men's roles in maintenance activities (maintenance workers, caretakers, managers of facilities)? What percentage of women have been trained and what percentage are involved on an on-going basis?

Training

- How did men and women participate in the training aspects of the project? What did they receive training in and did this make the project more effective? What percentage of trainees were men and what percentage were women? Which socio-economic groups were included? Were training materials designed for non-literates when needed?

Roles Concerning Water Transport, Storage and Use

- What were women's and men's (and children's) roles concerning water transport, storage and use before the project? What were their roles during the project? If roles have changed, has this had a positive or negative impact on men, women and children? What do they think?

User Satisfaction

- Are village women, men and children satisfied with the new water/and or sanitation systems? Why or why not? Who is using the new systems? Are women and men satisfied with the way the project was implemented? What would they recommend be done differently next time?

Contributions

- What were the contributions (cash, material, labor, time) that men and women made to the project? What were the arrangements for these? Were they different for women and men? Did men and women think they were equitable? Would they recommend different arrangements for another project or similar ones?

Committees/Women's Groups

- If there are village water and/or sanitation committees, how many members are women and how many are men? What roles do women and men play- the same, different? Are women and men in managerial roles? Did men and women receive training necessary to fulfill their committee roles (as treasurer, for example)? Were separate women's committees formed if in the local cultural context men and women cannot meet together?

- Were existing women's groups approached to assist with information, motivation, reinforcement and/or training activities?

Health/Hygiene

- What was women's role in health/hygiene education and related activities? Did men play a role? If there was a training for health workers, what percentage were male and what percentage female? Was their any performance differential between males and females? Were the turn over rates different for the two groups?

Time/Budget Studies

- It is useful to conduct time/budget studies to assess whether the project resulted in additional free time for women (and/or men). If it did, the studies can determine what the additional free time was used for- leisure, household responsibilities such as cooking or childcare, income generation activities, agricultural activities, training activities, etc.

- What benefits did women (and/or men) receive from the free time? What do they conceive the benefits to be? Economic benefits? Health ones?

- Did the project result in increased burdens on women's or men's time through additional responsibilities such as maintenance, time at committee meetings, fee collection? If so, how do the women and men feel about this?

- Does the additional free time or the decrease in free time affect women differently depending on the season of the year? If so, how?

Training

To ensure that women and men in the project area will be included appropriately in training activities, the following should be considered:

- Provisions should be made so that a certain percentage of women are recruited for training.
- Special measures should be taken in regard to training hours, location and duration. Family responsibilities often prevent women attending educational activities for extended periods of time far from their home.
- Provisions should be made to ensure information on training opportunities will reach various socio-economic groups of women and men and that all qualified applicants have a reasonable chance to be selected.
- Training should take into account the current workloads of women and men.

As noted above, female and male project participants must be appropriately included in training activities in order to achieve gender sensitive programming. Training may also be needed for project staff to ensure that they understand gender issues and can implement their project responsibilities in a gender-sensitive manner. They need not become specialists in gender issues, but should have a basic knowledge of the topic, in particular in terms of how it relates to their everyday work. Otherwise the specialists in gender issues may have a difficult time carrying out their project duties, as the work environment may not be conducive to a gender-sensitive approach. Gender issues training for staff can be held separately or integrated into other staff trainings. When planning for this, the following should be considered:

- putting the training in context- what will be most useful to the staff members attending the training? what will relate most directly to their everyday work?
- setting goals- what are the objectives of the training? during the training, the participants can determine what goals they have for gender issues in their work.
- knowing the participants- what are their backgrounds? what roles do they play in the project? what do they want to learn about gender issues? What do they want to discuss?
- selecting trainers/facilitators- selecting an appropriate trainer/facilitator is crucial. A strong background is required in gender issues, development, and training/facilitation. Experience in the water and sanitation sector is also important. The trainer should have some familiarity with your organization and with the project.

- resource people- can assist the trainer/facilitator. They could be sector or country experts who can work with a trainer who does not have a strong background in the sector or the country. They could be training "apprentices", who can assist the trainer and acquire more experience in the process.

- the length of the workshop- must be based on the needs of the staff being trained: what time do they have available for a workshop and how much training do they need? Often a balance must be struck between these two variables.

- location of the workshop- depends on the staff involved. For field staff, a workshop in the field is often more sensible. For staff at headquarters, a workshop held at the office may be more practical, although to fully discuss gender issues in the sector, time in the field can be invaluable.

- to have a greater impact, training in gender issues should be experiential and participatory. It should involve interaction and mutual support among participants.

There are many resources that can be consulted for more information on training in gender issues. The **Resources** and **References** sections of the Sourcebook contain several possibilities. Examples of training activities can be found in the section entitled **Participatory Gender Analysis Tools for the Community and Agency Level**.

Future Research

Several important questions remain unanswered. Some of which appear critical for future research and for program planning and evaluation.

- How can local learning systems in which women play a key role be tapped so as to enhance the adoption of new water and sanitation technologies?

- What are the most cost-effective methods for changing women's/girls' and men's/boys' hygiene behaviors and measurably improving local hygiene conditions? How can mass media reinforce and support local efforts to change behavior?

  Many of the approaches suggested have been tested only with special pilot projects where careful and sometimes charismatic leadership or generous funding have been the rule, both of which are unlikely in ordinary circumstances. Concerted efforts at more general user education involving women and men need to be mounted and systematically evaluated.

- Can the participation of women in the repair and maintenance of water and sanitation installations be linked to opportunities for income generation? This research question has important implications for both off-farm employment and water and sanitation programs.

- The impact of water projects on the village economy needs to be quantitatively measured. Does an increased availability of water have an impact on food and crop production, beer brewing, production of building materials and other economic activities? If so, how does this economic impact affect women's income generating activities? How does it affect men's income generating activities?

- What are the differences in the results of evaluation, whether mid-term or at project completion, where gender sensitivity was a part of project design, as opposed to where it was overlooked? The response to this question has important policy implications not only for the design of meaningful evaluations but also for water and sanitation programs that can be influenced by evaluation results. Unless such questions are asked in the evaluation of a project, conclusions about the effect of such design cannot be drawn and policy and program changes will not be successful.

  Women's central and primary roles in water, sanitation, and hygiene as well as their overall roles in household management demand their recognition in future research design and program implementation. Also important are the roles of men and the ways women and men interact in the household and in the community to make decisions, share tasks and complement each other in a variety of ways.

CHECKLIST FOR THE PROJECT PROCESS

Planning Preparation Phase

Policy/Attitudes

- What is the policy and attitude of government, local leaders and project management towards gender sensitive programming?
- Do these parties explicitly view women's involvement both as a condition for the success of project improvements and as a prerequisite of genuine advancement of women's interests?
- Will the project systematically promote the sensibilization of local leaders and of its own staff in this respect?
- Will this be reflected in plans for staff training and staff composition?

Baseline

- Have existing water supply and sanitation practices been thoroughly investigated (including which types of technology and which water sources are used when and by whom)?
- Have findings been distinguished for different user categories: men and women, occupational and income groups?
- Have women and men been asked what they like about their current water and sanitation facilities and what they do not like?
- Have poor women been directly approached as informants on their own particular roles, needs, problems and possibilities?
- Has this been done appropriately, i.e. by female interviewers in a sufficiently informal setting, asking how things are actually done rather than who is officially in charge?
- Have the following points been investigated to arrive at a detailed picture of what is at stake for women in water and sanitation:
  - women's provision of family health in general;
  - their provision of family hygiene in particular;

- their educating role in health and hygiene;
- their tasks in collecting, storing and using water;
- the extent to which they are aided in collection, (for domestic and for agricultural use) and what are the means of transport;
- their tasks in sanitary arrangements;
- their problems in ensuring their own sanitary privacy;
- their traditional contribution to design, maintenance and management of facilities;
- their informal management role at community level;
- their access to provisions, relative to men and richer women;
- their household use of water;
- their role in the preservation of community environmental sanitation;
- their productive / profitable use of water and waste (vegetable gardening, fertilizer, fuel, building material);
- the competitive demands on women's time and energy in general;
- the share of time and energy devoted to water and sanitation;
- the negative impact of this workload on women's other tasks, such as childcare, vegetable gardening, weeding, harvesting, etc;
- the negative impact of this workload on women's opportunities to engage in new activities, such as income generation, community work and self-development; and
- has the baseline uncovered whether men play any of the roles noted above and if so, given a detailed picture of this?

Planning

- Are there legal, economic, social, or cultural barriers to women's participation in the planning or implementation of water and sanitation projects? If so, what plans have been made to reduce or eliminate these barriers?

- What roles do local women play in the community's social and economic infrastructure?

- Do women and men feel a need for the project? What are their respective priorities and expectations?

- Is the community (men and women) willing and able to participate fully in the project, including members of the community who are weaker socially or economically, such as women heads of households?

- Is the design acceptable for all women in terms of:

  - water quality, quantity and reliability;
  - adequate access;
  - appropriate technology and maintenance;
  - cultural acceptability.

- What needs and opportunities exist for increasing women's productivity and/or production?
- What needs and opportunities exist for increasing women's access to and control of resources?
- How do these needs and opportunities relate to the country's other general and sectoral development needs and opportunities?
- Have women been directly consulted in identifying such needs and opportunities?
- Are project objectives explicitly related to women's and men's needs?
- Have women and men participated in setting those objectives?
- Have there been any earlier efforts?
- How has the present proposal built on earlier activity?
- Might the project reduce women's access to or control of resources and benefits?
- Might it adversely affect women's situation in some other way?
- What will be the effects on women and men in the short and long run?

Design Phase

Project Impact on Women's and Men's Activities

- Which types of women's and men's activities (production, reproduction & maintenance, and socio-political) does the project affect?
- Is the planned component consistent with current gender roles in the sector?
- If it plans to change women's and men's performance of that activity, (i.e, locus of activity, remunerative mode, technology, mode of activity) is this feasible, and what positive or negative effects would it have?
- If it does not change it, is this a missed opportunity for changing men's and women's roles in the development process?
- How can the project design be adjusted to increase the above-mentioned positive effects, and reduce or eliminate the negative ones?

Project Impact on Women's and Men's Access and Control

- How will each of the project components affect women's and men's access to and control of the resources and benefits stemming from the production of goods and services? Will their relative amounts of access and control change? If so, how?

- How will each of the project components affect women's access to and control of the resources and benefits stemming from the reproduction and maintenance of human resources?

Further Preparation

- To what extent do the project objectives address the issues discovered during the baseline?

- Have women's desires for changes concerning these issues been identified?

- Has a system been developed to monitor project-induced changes in these issues? And does this system rest on continuous consultation of women and men?

- Are project targets sufficiently flexible to allow the development of systematic procedures for women's involvement?

Participation and Workload

- Does the project contribute to freeing women's time and energy for other tasks they already have and for new activities they want to undertake?

- Is there sufficient insight into the benefits that do or might accrue from this, to women directly and to households and the community as a result?

- Does the project sufficiently appeal to the community as a whole, taking care that women are not inordinately burdened?

- What measures are taken to overcome cultural/ practical obstacles to women's participation? Think of:

  - convenient times and places for meetings;
  - adequate seating arrangements;
  - female intermediaries/ project staff;
  - informal settings for women's groups;
  - sensibilization of local leaders.

- Will women be able to participate on the basis of all of their interests and key roles?

- Is women's local expertise being utilized to identify suitable locations for and to ensure convenient design of facilities?

- Is this done with sufficient attention to social factors, such as ease of access for all, and respect for privacy?

- Are women consulted to find suitable training candidates for local maintenance and management: people with sufficient time, commitment, trustworthiness and skill?

- Is women's familiarity with traditional learning systems used as a basis for effective health education and project communication as a whole?

- Are the potential users (women and men) participating in decisions on citing of facilities; additional provisions for washing and bathing; community contributions in cash, labor, time, or materials; operating hours?

- Have target categories been identified on the basis of felt needs, with special alertness to the needs of poor women?

- Does the project provide enough information on the technical, managerial, health and workload implications of various options to enable users to make responsible choices?

Construction, Maintenance, Management and Use

- Can women assist in low-cost construction of facilities without being disproportionately burdened?

- What specific skills and insights can they contribute, what voluntary labor can they do, what can they contribute financially themselves and what community funds can they raise? What contributions can men make?

- How can women's and men's traditional maintenance tasks be extended to the project situation?

- Is their training adequate, is there sufficient compensation for workload increases, is there sufficient back-up service for larger repair and does a substantial share in the overall management ensure that women can actually control maintenance? What should men's role be?

- Is the project designed to keep close track of actual and adequate use of new facilities?

- Will users have reasonable alternatives for safe water supply and excreta disposal when facilities are out of order?

Training

- Will women be trained in the actual construction, operation and long-term maintenance of the system? What will men's role in training be?
- Will a system for potable water be complemented with training for men and women on health education, so as to maximize the benefits of clean water?
- Will women and men be informed of the supplies required and the names of suppliers of parts and equipment?
- Will women receive instruction on legal matters such as water use rights or land rights related to water, if applicable?

Implementation Phase

Personnel

- Are project personnel sufficiently aware of and sympathetic toward women's needs?
- Are there female staff to deliver the goods or services to women beneficiaries?
- Do personnel have the necessary skills to provide any special inputs required by women?
- What training techniques will be used to develop delivery systems?
- Are there appropriate opportunities for women to participate in project management positions?

Organizational Structures

- Do organizational structures enhance women's access to resources?
- Does the implementing agency have adequate power to obtain resources needed by women from other organizations?
- Does the agency have the institutional capability to support and protect women during the change process?

Operations and Logistics

- Are the agency's delivery channels accessible to women in terms of personnel, location and timing?

- Do control procedures exist to ensure dependable delivery of the goods and services?

- Are there mechanisms to ensure that the project resources or benefits are not usurped by males?

Finances

- Do funding mechanisms exist to ensure program continuity?

- Are funding levels adequate for proposed tasks?

- Is it preferential access to resources by males avoided?

- Is it possible to trace funds for women from allocation to delivery with a fair degree of accuracy?

Flexibility

- Does the project have a management information system which will allow it to detect any differential impacts on women and men?

- Does the agency have enough flexibility to adapt its structures and operations to meet the changing situation of women?

Information Network

- Have women's groups been approached to assist with information, motivation, reinforcement, and/or maintenance activities?

- Is women's and men's access to project information sufficient? Does the choice of channels through which information is disseminated inadvertently exclude or bypass women?

Monitoring and Evaluation Phases

Data Requirements

- Does the project's monitoring and evaluation system explicitly measure the project's separate effects on women and men?

- Is data collected to assess changes in women and men's involvement in the project and their access and control over management and resources?

- Are women and men involved in designating the data requirements?

Data Collection and Analysis

- Are the data collected with sufficient frequency so that necessary project adjustments can be made during the project?
- Are the data fed back to project personnel and beneficiaries in an understandable form and on a timely basis to allow project adjustments?
- Are women and men involved in the collection and interpretation of data?
- Are data analyzed so as to provide guidance to the design of other projects?
- Are key areas for gender research identified?

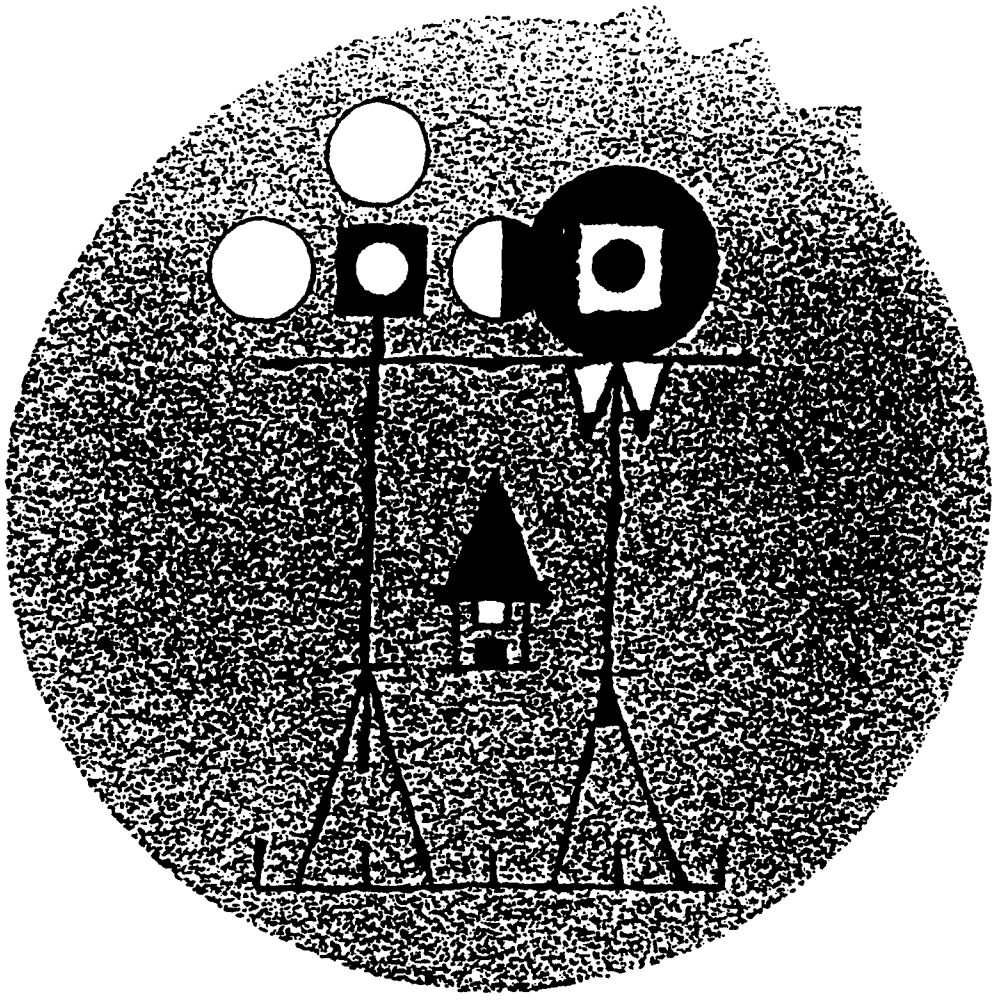
Monitoring and Evaluation

- Are there women on existing village water committees? If so, what is the percentage of women and what role do they play?
- Are women consulted on the choice of technology, the selection of well sites or pump sites? Are they consulted on additional facilities such as washing, or bathing facilities? Are men consulted?
- Are women given training in maintenance of water supply schemes? If so, what is the percentage of women trained as preventive maintenance workers/caretakers/managers of the facilities? What is the percentage of men trained in these roles?
- Are women trained as health/hygiene educators? If so, what is the percentage of women trained? What is the performance of male versus female educators? What are the turn-over rates for men and women?
- Do women derive economic benefits from saved time? Do women use the saved time for income-generating activities such as: sewing, handicrafts, vegetable growing, for greater involvement in the local market system, for education and training, or learning new skills?
- Do they use saved time for other activities? If so, what activities and why?
- Have women, and in particular, poor women, participated in the design and execution of project activities?
- Do they have easy access to relevant health education?
- Can women participate in line with their own wishes and potential, without harm to present tasks and new opportunities?

- Do women and men have individual or organized influence on the operation, maintenance and management of water and sanitation services? What roles do women and men play in these areas?

GENDER ASSESSMENT STUDY

A GUIDE FOR POLICY STAFF



Special Programme Women and Development
Directorate General for International Co-operation
Netherlands Ministry of Foreign Affairs

February 1994

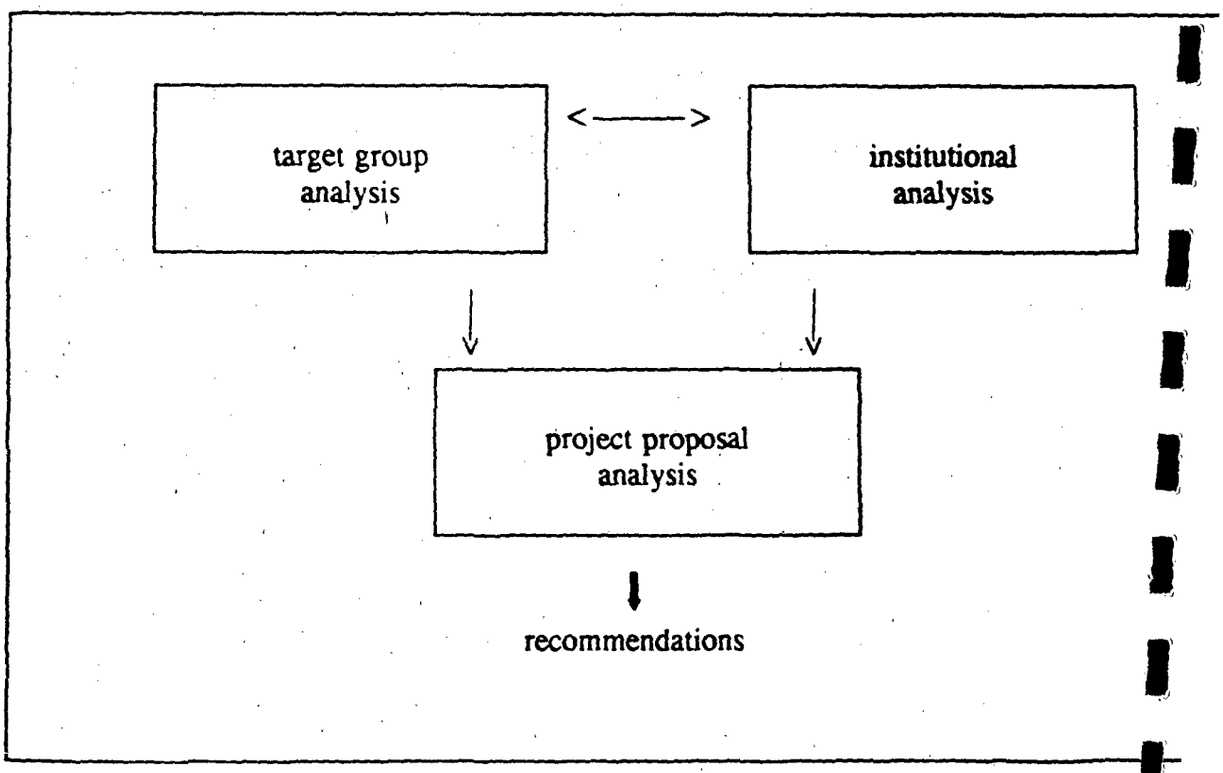
4.2 The analytical framework

The analytical framework for the Gender Assessment Study consists of three interrelated components:

1. analysis of the target group, in particular the gender relations in the project area;
2. analysis of the implementing institutions from the gender perspective;
3. analysis of the project idea or proposal in the light of the different position of women and men.

For each component a set of key questions has been formulated which are related to the GAS objectives. The three components are interlinked and in the overall analysis attention should be paid to the linkages between the different components. Thus, since gender relations are studied as far as these are relevant for the project planning, such an analysis can only be made after a preliminary examination of the project proposal. Also the findings of the field study on gender relations should be cross-checked with the findings of the institutional analysis and vice-versa. The final project analysis will be done in the light of the data collected on both the gender relations and the gender capacity of the institutions.
Together, the components will provide a sufficient basis for formulating recommendations on how the project should be designed in order to have a maximum positive effect on women. The following diagram presents the main parts of the analytical framework of a GAS. In the next paragraphs the framework will be described further.

Table 3. Analytical framework for the Gender Assessment Study



4.3 Analysis of the target group

4.3.1 Key questions

The objective of the analysis of the target group is to get an insight into the gender relations in the communities and in the opinions of especially the women regarding the project intervention that is proposed. Before dealing with the key questions to be asked in such an analysis some general remarks will be made on the concepts 'target group' and 'gender relations'.

The term 'target group' is used here in a broad sense including all groups directly affected by the project. The special focus is on the female part of the target group.
Women in a project area usually do not form a homogeneous group. The gender-based labour division, access to and control over resources and therefore their needs and interests may differ substantially, according to socio-economic class, age or ethnic affiliation. Throughout the analysis of the target group this fact should be kept in mind. A first step in this analysis is therefore the identification of different categories of women. Possible categories may be: target group/ non target group; female headed households/other households; different ethnic groups; different socio-economic groups e.g. according to land ownership; age groups etc. Although it will not be possible to capture all the existing variation, main categories of women relevant for project planning can usually be identified. For example, in the pilot study in Burkina Faso the two main ethnic groups living in the project area were identified as major population groups. Three villages were studied per ethnic group while within the villages, further differentiation was made between different wealth categories of respondents. It was noticed, though, that in the given period not full insight could be gained in sub-categories of women: old and young, smaller ethnic groups, first wife and other wives, etc. Such differentiation and detail is, however, usually not required in this stage of project planning. More detailed information relevant for planning at micro level can better be collected at a later stage, namely at the start of activities in a specific village or urban location.

Gender relations do not only vary from culture to culture, and from community to community, they also change over time. Development projects can contribute to the transformation of unequal gender relations. To identify the potential for changes in the subordinate position of women it is important that insight is gained into the dynamics of the gender relations and into the factors that affect them.

The key questions to be asked in a GAS in the analysis of the target group are:

1. *What are the main characteristics of the position of (different categories of) women, in relation to men, in terms of (a) gender division of labour, (b) gender-related access to and control over resources, (c) socio-political dimension of women's position, and (d) influencing factors?*
2. *What are the views and expectations of women with regard to the proposed project interventions?*

ad. 1 Position of women in terms of (a) gender division of labour, (b) gender-related access to and control over resources, (c) socio-political dimension of the position of women, and (d) influencing factors

The starting-point of gender-specific planning of projects is the collection of data on the **gender division of labour (a)** in the project area. Both men and women work to maintain households and communities, but their work tends to differ in nature and value. Often women's work in a society remains (partly) invisible. Since the gender division of labour is specific to each particular culture and time, collection of data on this issue should always be part of a gender assessment study.
A description of the gender division of labour in the project area includes an overview on what activities women do, what activities men do and if relevant, also what boys and girls do. A distinction can be made between three main categories of work: productive, reproductive and community work[2]. Productive work involves the production of goods and services for consumption and trade, whereas reproductive work involves the care and maintenance of the household and its members (bearing and caring for children, food preparation, water and fuel collection, shopping, housekeeping, family health care, etc.). Community work involves the collective organization of social events and services: ceremonies and celebrations, community improvement activities, participation in local groups and organizations, collective agricultural activities and so on.
A useful and practical guide for identifying and ordering information about the gender division of labour in a community is the so-called **Activity Profile**, which is part of the "Harvard Framework for Gender Analysis" (see Table 4). This profile can be specified according to the nature of the project. An example of an adjusted activity profile can be found in Annex 1.
In addition women's total daily workload resulting from all these activities and the seasonal variation in workload should be analyzed.

A second issue that is essential in the data collection for the planning of gender-sound projects is the gender-related **access to and control over resources (b)**. Lack of information on access to and control over resources has led to many incorrect assumptions about women's likely participation in and benefits from a mainstream project.
A distinction should be made between the **use of resources and services** and the **benefits** derived from their use. Resources and services can include: means of production, i.e.land/capital/labour, knowledge and skills, employment or income earning opportunities, equipment, health, control over fertility and nutrition. The study should focus on those resources that are needed to make efficient use of the support offered by the project concerned. Benefits can include: income in cash and kind (food, etc.) and the ownership of assets.
It is also essential to differentiate between access (the opportunity to make use of something) and control (the ability to define its use), because access does not necessarily imply that an individual controls that resource or the benefits from its utilization. For example, women may earn an income from productive activities, but

[2] This set of categories was originally developed by Caroline Moser in Moser and Levy (1986).

have no control over how it can be spent. Table 5 illustrates how this information can be usefully summarized.

Furthermore special attention should be given to the **socio-political dimension of women's position (c)**, since these may form constraints or opportunities for women to participate in the project. The following aspects are of particular relevance: women's participation in decision-making in the household, community and society at large, women's (self-)image and organizational capacity. Self-image refers to the way women see and value themselves, their position and roles. Image refers to the way a society considers and values women and the extent to which stereotype-image forming on gender takes place. Organizational capacity refers to the ability of women in a community to organize themselves into groups or organizations to address (some of) their needs. Table 6 gives an example of how this information can be summarized in a socio-political profile. All socio-political aspects need to be made operational according to the specific circumstances.

> *In the pilot study in India the researchers have translated the concept of self-image of women in issues such as ability to articulate, self-confidence, perception of work, knowledge, skills and aspirations and have asked women their opinion on these issues. Women in Andhra Pradesh remarked: "Women lack self-confidence. This was created by the society, and in particular by men. They promote beliefs that women lack intelligence, and that their memory is weak. They do not give any importance or recognition to her thinking or plans."*

It has to be noticed that a GAS will not always be able to provide adequate information on these complicated issues. To arrive at a deep understanding of issues like decision-making within the household long-term anthropological research has to be undertaken.

The fourth issue that needs to be analyzed is **the broader socio-cultural, economic, demographic, political, legal and ecological context, in particular the factors influencing gender relations (d)**. Gender relations can only be understood in their context. Socio-economic and demographic processess at micro, meso and macro level are affecting gender relations, whereas the political, legal and ecological context also determines to a certain extent what access and control individuals will have over resources. Factors that influence gender relations are numerous, e.g. migration, agricultural policy, commercialisation, legal structures and economic conditions. In a Gender Assessment Study key influencing factors need to be identified that might enhance or impede the achievement of the project objectives in respect of gender (see Table 7). For example, the pilot study in Bolivia identified 'the integration in the market economy' as an important factor influencing the gender division of labour. It appeared that as villages became more integrated in the market economy, the men gradually took over women's traditional productive tasks in agriculture.

ad 2. Views and expectations of women with regard to the proposed project

Women and men from the target group should be directly consulted about the project proposal. In the selected villages/urban locations group discussions can be held with

women and men separately to get insight into their views and expectations with regar to the project. Also representatives of (different groups of) women can be asked to express their opinion on the project proposal.
In the pilot study in India a successful effort was made to consult women about th project proposal. Women from the study villages were invited to participate in the final workshop where the research findings were presented and discussed. Thes women were able to comment on the project design and made very usefu recommendations on how the design should be changed in order to be of benefit to them.

4.3.2 Suggestions for methods

For the gender analysis of the target group in a Gender Assessment Study use can be mad of a mix of Rapid/Participatory Rural Appraisal research methods. RRA/PRA methods th can be applied are amongst others:

- review of secondary sources
- interviews with key persons
- semi-structured interviews with individuals or small groups
- group discussions
- social and resource mapping
- transect
- time line (to get an idea of the historical perspective of for example changes n cropping patterns, food habits and division of labour)
- seasonal calendar and daily activity profile (to get insight into the gender division of labour, women's workload and time constraints)
- Venn diagram (to get an insight into the access that women and men have to vario s institutions)
- observation (to collect information on gender division of work, decision-maki g within the family, the functioning of a women's group, etc.)

Above-mentioned methods are further described in annex 1. Annex 1 also provides gene al information on the RRA methodology and points out the strong and weak points of the methodology when used in a GAS.
Quite a number of the methods involve activities with groups. Efforts should be made t work separately with women and men in homogeneous groups belonging to the same ethni or socio-economic background. If women and men cannot be separated or if the group tu n out not to be homogeneous, the researchers should be alert for different perceptions n opinions within the group and register these differences.

4.4 Analysis of the institutions

4.4.1 Key question

A key factor in the implementation of gender-responsive projects is the extent to whic th implementing institutions are capable of analyzing gender differences and of applying gende specific approaches. To assess whether a project will be successful in strengthening t

position of women the 'gender capacity' of the institutions (to be) involved in the project should be investigated. The key question for the institutional analysis is:

1. *What is the gender capacity of the institutions which will be involved in the project and are there alternatives with respect to the institutional set-up of the project?*

The first step in this analysis is to ascertain from project documents or from oral information which institutions are most likely to be involved in the project. A distinction can be made between governmental, non-governmental organisations (NGO's) and private firms.
The next step is the analysis of the gender capacity of the individual institutions. The analysis should focus on the following issues:

- type of organisation, major areas of intervention and general capacity to plan and implement projects
- policy with regard to women and development
- activities and experiences with regard to women and development
- organisational structure for women and development (location and number of W&D staff, their function, etc.)
- level of emancipation within the organization itself. This can be measured by parameters like the ratio of male-female staff; the levels and specific occupations in which men and women predominate; facilities and support systems provided for women staff.
- training capacity in the field of gender
- perceptions of staff at different levels in the organisation (headquarters versus field staff) on gender issues and how these affect their work
- constraints and driving forces within the organisation in dealing with gender issues
- if there are several agencies involved: the expected cooperation between the different implementing organisations in respect to gender

Table 8 provides an example of how the collected data can be summarized in an institutional profile.

Table 8 Institutional Profile

Gender Capacity	Major Organizations involved			
	A	B	C	D
W&D policy				
activities and experiences on gender				
staff for gender/W&D				
level of emancipation				
perceptions of staff on gender issues				
gender training capacity				
institutional constraints for gender				
driving forces in organ. for gender				
expected cooperation between organ. ABCD on gender				

If the analysis of the identified organizations shows that the proposed organisational structure does not have sufficient capacity to deal effectively with gender concerns, the third step is to investigate the gender capacity of other organisations in the region to find out whether a supportive or alternative institutional structure can be suggested for the project.
Finally, information is needed on the national/regional W&D policy to determine how far the policy context limits or provides opportunities for adopting a progressive gender policy in the project.

4.4.2 Suggestions for methods

The following research methods are suggested for the institutional analysis:

- workshops with staff of the organizations to assess constraints and driving forces in dealing with gender issues. In these workshops techniques can be used like the problem tree method and the Forcefield analysis. See Annex 2 for a short explanation;
- individual interviews and meetings with different levels of the organization;
- interviews with key persons outside the organizations;
- involvement of staff in field work as a tool to gain insight into attitudes and perspectives;
- review of secondary material, e.g. analysis of policy papers.

4.5 Analysis of project idea or proposal

4.5.1 Key questions

The remainder of the analytical framework consists of examining the project, especially in the light of the data collected in the other two components of the framework. The key questions concerning the analysis of the project idea or proposal are:

1. *Are gender issues correctly and systematically incorporated in the existing project idea or proposal?*
2. *In what way and to what extent will the target group in general, and women in particular, be able to participate in the different stages of the project?*
3. *What likely positive or negative effects will the project have on the autonomy of (different categories of) women?*

ad 1. Incorporation of gender issues

To assess whether gender issues have been well incorporated in the project design the following things should be checked:

- the incorporation of gender in all the different parts of a project design, i.e. objectives, definition of target groups, strategy/approach, activities, personnel, budget, other inputs, institutional arrangements, planned outputs and monitoring indicators. For example, are the project objectives gender-specific? are women explicitly mentioned as specific target group(s)? are the project strategy and activities appropriate to meet the needs of women?

- the correctness and feasibility of the design with respect to gender. Given the findings of the target group and institutional analyses, are the proposed objectives, inputs etc. correct and feasible? Check also the existence of implicit assumptions concerning gender relations in the project documentation. Are these assumptions correct?
- the internal consistency of the design, e.g. are there objectives regarding women and have these objectives been translated into the various parts of the project design such as the strategy, activities and budget?

ad 2. Participation of target group, in particular of women
More specifically, an assessment should be made of the likely participation of local women and men in the different phases of the project cycle. It is important to focus on opportunities and constraints for participation. For example, has the project identified constraints and taken measures to overcome them? The information pertaining to women's expected participation in the project, as provided by staff of the institutions and in the project documents, should be cross-checked with the opinions of different groups of women.

ad 3. Effects on the autonomy of women
Part of the project analysis is the assessment of how the project will affect gender relations and women's autonomy. It should be noted though that a GAS will only be able to formulate hypotheses with regard to the expected effects on the position of women. The main purpose of the (hypothetical) assessment is to highlight how the project has different effects for women and men and to identify possible negative effects. If negative effects on women (and men) are identified, suggestions should be given on how these can be prevented or corrected.

4.5.2 Suggestions for methods

In the analysis of the project documents (identification memorandum, project proposal, mission reports, etc.) use can be made of:
- the DAC/WID criteria (see page 3)
- checklists to analyze the integration of gender issues in the project cycle such as the checklist "Questions to ask" in: Two Halves Make a Whole (Canadian Council for International Co-operation, 1991) which can be found in Annex 3.
- the Logical Framework or Planning Matrix. This planning tool may help to summarize the main elements of the project proposal and to visualize their gender sensitivity.
- sector papers published by DGIS on women and agriculture, women and water and sanitation, women and health and women and energy, forestry and environment.

4.6 Formulation of recommendations

The final step in the analytical framework is the formulation of recommendations on the basis of the conclusions drawn with respect to the three components of the framework. The following key questions can be asked:

1. *How should the project be designed to ensure that it will optimally strengthen the autonomy of women? Which recommendations can be made to the donor and (non)governmental organizations in this respect?*
2. *Which indicators can be suggested to monitor women's participation and the gender specific effects of the project?*

If the outcome of the assessment of the project design from the gender perspective is not completely positive, suggestions should be made as to how the design can be improved. Recommendations may involve one or more aspects of the project design (project strategy, institutional setting, human resources development, budget, etc.) and may imply an elaboration or adjustment of the original design or a partly alternative design.
The collected data in the study can be used for the definition of monitoring indicators, either in the context of a GAS or in a later stage of project planning or implementation.

4.7 Summary of key questions

KEY QUESTIONS

Analysis of target group:
- What are the main characteristics of the position of (different categories of) women, in relation to men, in terms of (a) gender division of labour, (b) gender-related access to and control over resources, (c) social- political dimension of the position of women, and (d) [illegible] factors?
- What are the views and expectations of women (and men) with respect to [illegible] project interventions?

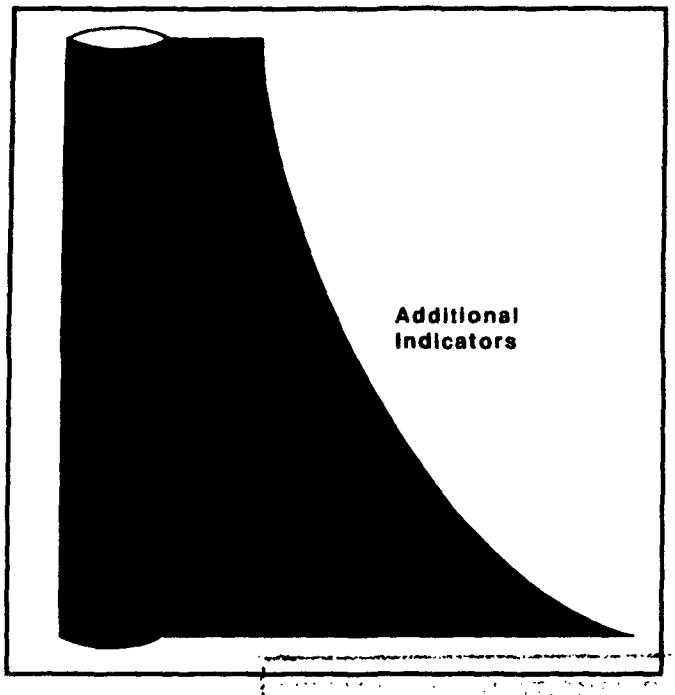
Analysis of institutional setting:
- What is the gender capacity of the institutions (to be) involved in the project, and what are alternatives with respect to the institutional set-up of the project?

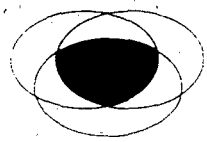
Analysis of project idea/proposal:
- Are gender issues correctly and systematically incorporated in the existing project idea or proposal?
- In what way and to what extent will the target group in general, and women in particular, be able to participate in the different stages of the project?
- What likely positive or negative effects will the project have on the autonomy of (different categories of) women?

Recommendations:
- How should the project be designed to ensure that it will optimally [illegible] autonomy of women? Which recommendations can be made to the donor and [illegible] organizations in this respect?
- Which monitoring indicators can be suggested to monitor women's participation and the gender specific effects of the project?

WORKSHOP
ON
GOALS AND INDICATORS
FOR
MONITORING AND EVALUATION
FOR
WATER SUPPLY AND SANITATION

25-29 June 1990, Geneva





4. COMMUNITY-LEVEL MONITORING AND EVALUATION

Principles of community management

Development agencies learned many lessons during the International Drinking Water Supply and Sanitation Decade. Among the most widely recognized has been the benefit of involving the intended users of water and sanitation services in the planning, provision and maintenance of those services. The term community management has become popular towards the end of the Decade, as a way of distinguishing projects in which communities have real power and responsibility for their own services from those where they simply contribute labour and materials to projects controlled by the government.

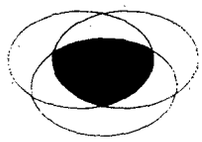
Growing experience is enabling sector specialists to identify the key aspects of successful community management. A popular way of expressing the changed approach is that government's role should change from that of provider of water and sanitation services to that of promoter and facilitator. The idea is one of partnership, in which government helps to establish the financial and institutional mechanisms by which communities can own and control their water and sanitation systems, while having access to technical support and services when needed. The partnership should also provide for use of special skills and services available from non-governmental organizations and through private enterprise.

Early involvement of the community in project planning and development is crucial, as is the flexibility for projects to be adjusted as lessons are learned. Rigid timetables for achieving a fixed number of operating facilities are inappropriate. Often, the development of organizational skills within the community will be a far more important indicator of sustainable progress than achievement of production targets.

On water and sanitation projects, the extent to which women are able to influence policy decisions can have a significant impact on the sustainability and the effectiveness of the services. That may mean special project components, or linked programmes, which empower women to take positions of responsibility, not just at community level, but as part of the decision-making teams in sector agencies. As Carolyn Hannan-Andersson emphasizes in her paper *The Challenge of Measuring Gender Issues in Water and Sanitation*, the aim must be to integrate

Table 1 Efforts made to involve women in water and sanitation programmes

Project phases	Previous conventional approaches to involving women	Possible future approaches
Initiation and Preparation	Information collected on women (sometimes collected from the women themselves) – usually late in the process	Information collected from women on women, and from men on men – as part of baseline data from the beginning of the project
	Women present at meetings when they know about them and have time	Information directly to women and stimulation of more active roles at village meetings (support mechanisms)
	Sometimes women present on Village Water Committees (usually through a quota system) – but participation normally very passive	Development of more active roles for women on Village Water Committees especially in the area of management (support mechanisms)
Human Resources Development	Women trained as: Village Health Workers (quota); Caretakers; and in some cases more qualified maintenance officers (pump or well attendants)	Efforts to involve more women alongside men in all these areas, but especially in the more "technical" areas and in management (support mechanisms)
	Many competent interested women do not participate because of timing, location, etc.	Adapt training to realities of women in terms of timing, location, qualification requirements, etc.
Implementation	Labour inputs are expected of women and women contribute with supplies of local materials	Required labour inputs of men and women are assessed according to the total work situation in given seasonal contexts. Women may already be overworked at that time. Contributions should be on the same terms as men, especially with regard to payment
Operation and maintenance	In many cases, women's involvement is limited to an extension of their reproductive roles – in a "caretaker" capacity	Efforts to involve more women as pump attendants on the same conditions as men (support mechanisms)
	Fewer women are involved in technical areas as pump attendants to carry out simple repairs	
	Women sometimes involved with different conditions from those of men, even when doing the same work; e.g. men are paid and women expected to work as volunteers	Ensure that women and men doing the same work get the same conditions
	Women involved on Village Water Committees play a passive role and have few real responsibilities	Promote the inclusion of women in areas of responsibility such as financial control, store-keeping, etc.
Monitoring and evaluation	Women are not involved in monitoring and evaluation exercises and do not get access to information from such exercises (same situation for men)	Efforts to develop participatory methodology and train communities (men and women) to utilize them



women alongside men into the mainstream of project/programme planning. In the gender approach, the roles of men and women are considered together, with men's involvement in family welfare stimulated as well as women's involvement in technological and management aspects. Table 1, taken from Ms Hannan-Andersson's paper highlights the changes in emphasis which can encourage fuller integration of women in water and sanitation programmes.

To implement water and sanitation programmes based on community management, agencies need to devolve operational responsibilities, including the authority to collect and disburse funds. That will often mean strengthening of regional and district level offices, and introduction of improved information management and communication systems. Effective links are important if community views are to be taken into account in overall sector planning and policy formulation. Training and career development programmes need to cover a broad range of issues beyond technical skill development, and participation should be open to men and women.

Achieving optimum health benefits from investments in improved water and sanitation services depends on behavioural changes among the users. Public awareness campaigns and hygiene education programmes are therefore important.

It was not a task of the Workshop to prescribe implementation models for community management. The accepted principles are however important in determining ways of monitoring and evaluating such projects. It is also logical to conclude that if communities are to have a decision-making role in the management of water and sanitation systems, they should also be involved in elaborating the framework, and in collecting and analyzing the data on which those decisions will be based. And that is the basis of Participatory Evaluation.

Participatory evaluation

Evaluations of development projects tend to be carried out on behalf of donor agencies or government sector agencies. Generally, external consultants assess project achievements by comparing outputs with initial objectives. Almost invariably, the indicators represent production targets. The data on which evaluations are based are collected by the consultants themselves or by agency staff.

This approach evolved as a type of performance audit for financing agencies, and the results can have an important bearing on future investment policy and sectoral allocations. For community-managed projects, however, it is at best incomplete and often highly misleading in its judgment of project achievements. No account is taken of the vital capacity-building role of such projects – even though many development agencies identify capacity building as an objective of development assistance. The conventional strategy also suffers from being a lengthy process conducted at a late stage in project implementation. Response to the findings must necessarily be too late to affect the evaluated project, and can only influence future programmes.

The most serious drawback of conventional evaluations, however, is that they do not involve the users themselves in either data collection or analysis. They thus miss an opportunity to contribute to capacity building both in the agency and in the community, and to benefit from user views and new initiatives.

In the water and sanitation sector, problems in project evaluation methods were highlighted and alternatives presented in 1983 with the publication by WHO of the Minimum Evaluation Procedure for Water

Kibwezi evaluation brings rapid results

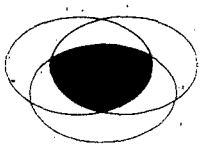
In the Kibwezi Water Project in Kenya, described to the Workshop by Melvin Woodhouse, a community Wells Committee initiated an evaluation of a water programme which had been under way for about six years. Because the community had been closely involved with the project from the start, they were able to devise their own ways of identifying problems and combating them.

With help from the African Medical and Research Foundation, the Wells Committee undertook a sanitary survey of wells and also tested the quality of water in people's homes. Committee members quickly learned how to use bacterial dipslides to test for water pollution. The visual evidence – bacteria growing on the dipslides are visible to the naked eye – made a lasting impression on householders, and greatly helped their understanding of disease transmission.

Photographs also played a big part in the project evaluation, helping to identify pollution sources and prompting rapid corrective actions by community members.

A very high degree of interest was stimulated by the evaluation surveys, and by the Committee regularly reporting results back to users. The Committee's plan of action included repairing well linings, education of community members, increased chlorination, and further examination of the condition, colour and translucency of jerry cans.

Significantly, the user interest was converted into individual and collective efforts to replicate the water supply systems, by building extra wells.



Supply and Sanitation Projects (MEP). MEP emphasized rapid assessment methods and gave equal weight to the "functioning" and "utilization" of facilities. It also brought the process closer to the community, by recommending indicators which could be measured and evaluated by community workers, and which could lead to timely corrective action when necessary.

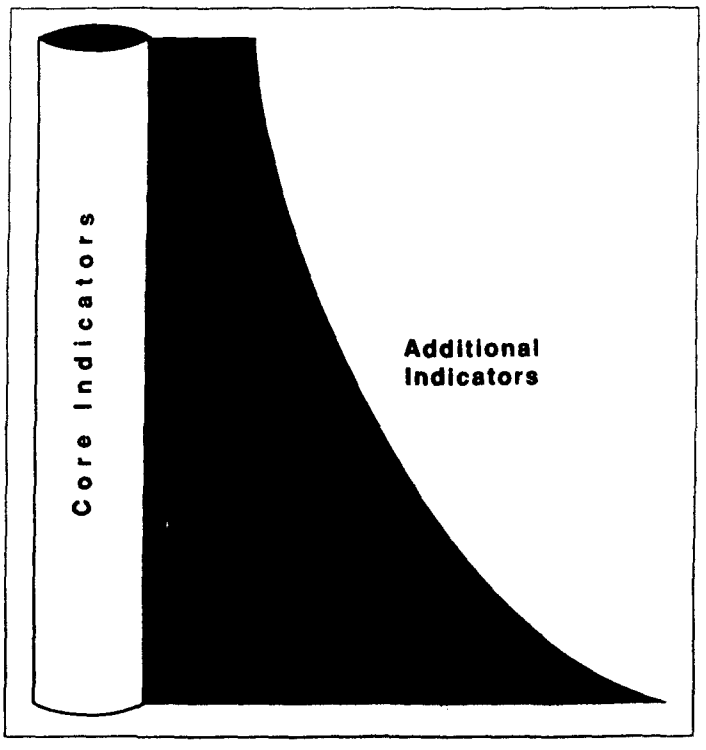
Participatory evaluation extends the concepts of MEP, encompassing the principles of community management. The aim is to make the community the centre of the monitoring and evaluation process. Community members and agency project staff together collect and interpret data and can initiate some corrective action spontaneously. By involving the users in an organized way in project assessment and decision making, participatory evaluation itself contributes to capacity building in the community. It also provides an effective way of bringing women's special water and sanitation expertise into play.

The participatory evaluation approach has been used by a number of agencies, both in the water and sanitation sector and in other development activities. Individual experiences have been positive, but prior to the Geneva meeting there had been no opportunity for proponents to compare notes and seek to develop practical guidelines. Also, experience is generally limited to application of participatory evaluation techniques on individual projects. There are few practical examples of data being used at higher levels to influence future programmes in other areas. In that sense, the Workshop was attempting to break new ground, in suggesting links between community-centred evaluations and other programme monitoring exercises, right up to the global level.

Choice of indicators

The indicators needed to evaluate progress towards the agreed goals fall into two categories. First, a broad range of indicators may be needed to assist with local management and operation of a project, and to guide community members and local agency staff in assessing whether any corrective action is needed. Community management, and particularly participatory evaluation, is based on community members carrying out a self evaluation and taking their own decisions. Because of this dependence on local initiatives and responses, precise indicators will need to be selected on a community-specific basis. With this in mind, the Workshop focused on key issues, or conditions, for which indicators

are needed, translating these into individual indicators only where it was clear that these would be universally applicable.



Second, higher levels of management in the agency require regular checks on the achievement of project goals, to help in overall planning and project management, and for aggregation with data from other projects. In most cases, the indicators needed at the higher levels will be a subset of the community-level indicators. More specific guidance can be given on requirements at the higher levels for information which has to be collected at the community level. It was these "core indicators" which were the main focus of the Workshop discussions. The resulting recommendations, listed in Table 2, are seen by Workshop participants as a supplement to those included in the PROWWESS document *Participatory Evaluation* not as replacements.

The first step in identifying the types of data which should be collected in community-centred surveys is to agree on the overall goals of the project or programme concerned. While individual goals may be specified for any particular project, the Workshop agreed that the goals listed in the background document – **Sustainability, Effective Use**, and **Replicability** – encompass current thinking on the desirable objectives of water supply and sanitation development. In endorsing these goals, Workshop participants drew a distinction between the interpretation of *replicability* at the community level, where the aim should be to develop activities which can be extended in a self-sustaining way as demands increase, and *replicability* in the eyes of the sector agency, which will wish to transfer elements of successful technologies and approaches to other projects.

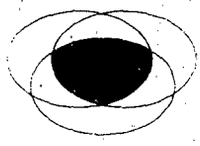


Table 2 Key indicators at the community and project/programme level

Condition to be monitored	*Organizational indicators*	*Technical indicators*
Sustainability		
Functioning of facilities	Availability of spare parts	**Percent of facilities in working order**
	No. of trained mechanics/caretakers, by gender	**Average downtime**
		Types of breakdown
Community capabilities and decision-making	Definition of O&M roles (community M/F, agency, private sector, NGOs)	
	No. served by systems managed by: govt; private sector; NGOs; community	
	Communication channels available for technical support	
	Are skills and knowledge shared within the community? How?	
	Existence/membership (M/F) of Water Committee	
Training provision	**Frequency of training covering technical, financial, management topics?**	
	Nos. of trainees by gender	
Cost sharing/willingness to pay	Collection and management system for O&M funds	**Total investments (capital & recurrent costs)**
	Community choice of technology/service levels	**Community contributions (capital and O&M)**
	Benefits perceived by users (M/F)	
Effectiveness		
Access	Protection of water source	**No. of users/design population**
		Characteristics (gender) of users
		Average distance to water source
		Water quantity (seasonal)
		Water quality at source and in homes
		Time taken to use facilities
Hygienic use	Home hygiene practices	Form of wastewater disposal
	Availability of cleansing materials	Provision for latrine emptying
	Cleanliness of facilities	**Household water protection/treatment**
	Community views (M/F) of facilities	**Proportion of water used for personal hygiene**
Replicability		
Extension	**New activities initiated by the community (WSS and other development). How?**	Nos. of external specialized staff involved in scheme operation
	Local financing mechanisms (revolving funds)	
	Community ranking of priorities/constraints	
Transfer	Regular budget covering training, salaries, overheads in agency	
	Integrated institutional framework	
	Documentation of accumulated experience	
	Communication channels	

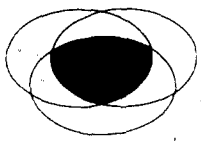
Under the heading of **Sustainability**, the four key conditions to be monitored are:

- Are facilities *functioning* properly? A high proportion of handpumps, standposts or latrines out of order, or long downtimes when breakdowns do occur, suggest inadequacies in operation and maintenance arrangements, which may be technical, financial or organizational. Full diagnosis requires information on the types of breakdown, the availability of local skills and spare parts, and the attitudes of users, particularly women.

- Is the community *equipped and empowered* to manage the facilities? This is a critical long-term test of sustainability. In successful projects, the responsibilities and commitments of community members, non-governmental organizations, private sector enterprises, and local and national agency staff are defined and accepted. Within the community this is reflected in functioning water committees with appropriate male/female representation, established communication channels for technical support when needed, organized sharing of knowledge and skills among community members, and an active private industry providing supplementary skills and materials.

- Is *training* provided? The continuity and the quality of training are important. New projects often include initial instruction of community members in technical, financial and management skills. Fewer provide for refresher courses and future training of replacements. Accessibility of training courses for women may require special timing and other arrangements. A gender count on trainees can indicate whether women are being given the scope to influence management decisions.

- Are *financial arrangements* sustainable? The willingness of users to contribute towards the costs of water and sanitation services is an important element in assuring that installed facilities will be reliably maintained. Cost sharing and willingness to pay are affected by the extent to which users are able to influence the choice of technology and service levels, users' perceptions of the benefits (gender analysis is revealing here), and the transparency and effectiveness of collection systems and use of collected funds.



The extent to which capital and recurrent costs are covered by community contributions is a key indicator of both sustainability and replicability. Cross subsidies are used effectively in some situations, and may require their own indicators to evaluate long-term sustainability.

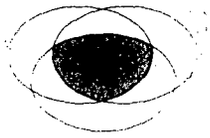
To evaluate the **effective use** of water and sanitation facilities, managers need information on user behaviour, as well as more technical data about accessibility of services. The two prime conditions to be monitored are therefore:

- Do all potential users have *convenient access* to installed facilities? This question extends the conventional indicator of service *coverage* (number of users in relation to the design population). If water supply facilities are to be effective, users must be able to obtain *enough* water of acceptable *quality* and at a reasonable *distance*. The service should be available throughout the day and in all seasons. Use of sanitation facilities needs to be measured separately for men, women and children, to help gauge the effectiveness of educational campaigns. Latrines must be appropriate for users of both sexes and all ages, and should provide effective and environmentally acceptable disposal of excreta and access to suitable cleansing materials. There must be provisions for protecting water sources from contamination, and specific measures or hygiene awareness campaigns to safeguard water quality between collection and consumption. The amount of water used for different purposes (drinking, cooking, bathing, washing, home cleanliness, . .) indicates the effectiveness of health messages, and hence how likely it is that full health impacts will be achieved. Data on water quantity are also important in terms of effective water management and conservation of water resources. Avoidance of waste and effective disposal of wastewater have both economic and health implications.
- Are available facilities being *used* in the most effective way? To obtain optimum benefits from water and sanitation services, users must be aware of key health messages, appreciate the microbe theory of disease transmittal, and behave in a health-promoting way in the home and village environment. Visual indicators of

effective use include the cleanliness of water and sanitation facilities and their surroundings, and the presence of cleansing materials. Within homes, safe storage of drinking water, and protection of food and water from flies and animals are positive indicators. Equally important are the perceptions of community members (male, female and children) about the use of facilities and the need for hygienic behaviour.

As already noted, the conditions for achieving **replicability** cover *extension* of services within the community, and *transfer* of experience and approaches to other agency projects in other communities. The questions to be addressed are:

- Can the community initiate and manage programmes to *extend* the water and sanitation services as demand grows, and convert the WSS experience into new initiatives in other forms of development? The issues are principally financial and organizational. One key indicator will be the trends in involvement of external specialized staff. Less external support indicates increasing self sufficiency and a greater chance of community-initiated replication. New activities should be recorded, together with the reasons and mechanisms which brought them into being. Changes in the community's views on future priorities and/or constraints may indicate a growing capacity for self-help. Existence of financial management systems, including revolving credit facilities available to women-led households, provides clear evidence of the institutional capacity needed to develop further.
- Can the project experience be *transferred* to other agency projects? Though the answer to this question depends principally on institutional arrangements within the sector agency (discussed in the next section), data from community-level surveys will be important evidence. In particular, there will need to be adequate documentation of project experience, with established procedures for communicating data to local/district offices. Opportunities for trained village workers to progress within the agency, and other institutional integration, supported by adequate budget lines for training, career development and information exchange all support replication of successful approaches. Gradual development and



application of standard specifications and procedures can be expected, as confidence is gained.

Further analysis of the conditions identified under each of the main goals led to the listing of organizational and technical indicators in Table 2.

Local interpretation

Though the second and third columns of Table 2 are headed *Organizational indicators* and *Technical indicators* respectively, many require further amplification before they can be used on individual projects. Other indicators will also usually need to be added to meet local community management needs.

Take for example the Technical indicator for effective use listed as "Water quality at source and in homes". The purpose of such an indicator, is to enable community members and project agency staff to assess whether users have real access to safe water, and whether the water remains safe after it is transported home and stored. In combination with other data on protection measures and hygiene practice, it will help to judge the effectiveness of community hygiene campaigns, as well as the appropriateness of water sources and collection measures.

A prime requirement of evaluation indicators is that they should indicate progress, positive or negative, between studies. They therefore

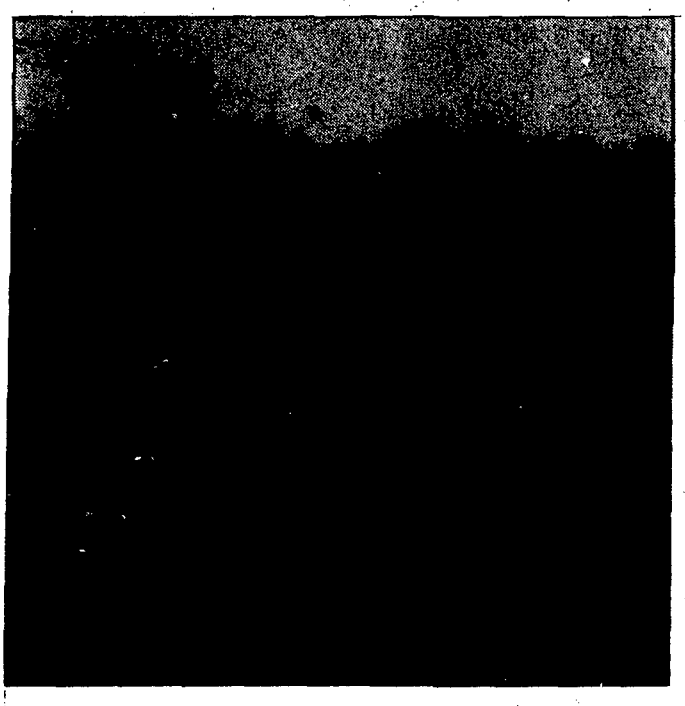
Members of the Kibwezi Wells Committee found bacterial dipslides easy to use, and a useful way of demonstrating disease risks to householders.

need to be stated in ways which make them comparable. "Is the water clean or dirty?" does not yield a very suitable indicator; "Do bacteria grow on a dipslide which has been immersed in the water?" may do, if the testers have been shown what to look for and how to use the simple dipslides (see Kibwezi example on page 21). Aggregation of such data helps to evaluate progress, while the actual carrying out of the test can itself promote immediate corrective measures by individual householders or pump attendants.

This Workshop was not directly concerned with the processes by which monitoring and evaluation data may be collected. It did though emphasize the critical importance of gender issues and socio-cultural factors in the data collection and subsequent analysis. As well as ensuring that progress indicators reflect the importance of women in decision-making and management, participatory evaluation seeks to involve both men and women in the collection and analysis of data and the resulting corrective actions to improve performance. It follows that all sections of the community should also be involved in the initial determination of indicators to be monitored, on a project-by-project basis.

Techniques for gathering data, and the indicators themselves, need to be tailored to community capabilities and wishes. Illiteracy need not prevent men or women from participating in project evaluations. There are many examples of community studies in which the most important information comes from group interviews or pictorial voting

This "pocket chart" voting method , developed by Lyra Srinivasan of PROWWESS, provided water user groups in West Timor, Indonesia, with an effective means of expressing their views on the decision-making processes in their community. The pictures over each row of pockets represent different decision makers (an ordinary woman, an ordinary man, a female leader, a male leader, the water users group, and a water and sanitation field worker). Votes are cast one row at a time, to indicate who the voter believes makes decisions on such issues as: "Who decides the size of monthly contributions?" or "Who selects the group leaders?" or "Who decides where the taps, tanks or pumps should be located?"



Do fleas have moustaches? This intriguing question, captured the attention of three communities in Costa Rica, where national NGO FUNDATEC began a programme to improve water supply and sanitation conditions. When microscopes provided the answer ("yes, they do"), lessons extended to demonstrate the presence of microorganisms in water. FUNDATEC reports immediate and lasting modifications to hygiene practices, when people realized that even clean looking water could contain disease-carrying microbes. Consumers developed their own indicators for evaluating benefits of water and sanitation improvements, including incidence of diarrhoea in children and back pains in women.

"games". These may be either tests of knowledge of basic health concepts, or expressions of user preferences or opinions.

One non-traditional technique seen as extremely useful in participatory evaluation is photography. Periodic photographs of handpump installations, latrines, and household storage facilities can be highly effective in prompting corrective actions when they highlight deterioration. Pictorial records are also helpful in transferring knowledge and experience from one project to another, and for education and training purposes throughout the agency.

In its simplest form, participatory evaluation remains a community-based operation. Achievements and problems are recorded and corrective action taken, and the project benefits. This in itself is a major contribution towards building self-reliance. However, it is apparent that the data collected in community surveys can be of great importance in directing sector policy. For that to happen, there has to be some standardization in the collection and presentation of data, and mechanisms for conveying information to higher levels.