Paper on importance Partnerships all levels

WOMEN, WATER, AND SANITATION:
COMMUNITY PARTICIPATION

Task Force Meeting
June 8-11, 1990

Rapporteur's Report

Prepared
by
Hanan Sabea

September, 1990

Women, Water, and Sanitation:
Community Participation

The Task Force Meeting
June 8-11, 1990

Introduction

The Women, Water, and Sanitation action-research project
sponsored the Task Force Meeting June 8 - 11, 1990. The theme of
the meeting was centered on community participation within a
holistic framework. The core group of participants included mem-
bers from different disciplines and governmental sectors con-
cerned with water, sanitation, and community development. (See
attached list of core group members.)

The meeting was considered an end-of project sharing of
results with individuals and institutions who work in similar
fields. More specifically, the objectives were identified as
follows:

* define the present stage of the Women, Water, and Sanitation
  project in relation to its set objectives;

* discuss the potential for its future developments in terms of
  implementation of action on a wider scale, dissemination of
  information, and further research needs; and

* share the experiences of this and other similar projects in the
  areas of water, sanitation, and community development.

To accomplish the set objectives, core group members were
divided into two working groups (see attached list of the working
groups' compositions) according to the disciplinary field and
specialization of each participant, so that each group comprised
members from different fields. The working groups met
individually and collectively to share the outcome of their
discussions. Two sessions were also devoted to meetings with
groups of village, national, and international agency repre-
sentatives during which results of the meetings and project
experiences were shared.

Based on the research and action components of the Women,
Water, and Sanitation project, three working papers were
prepared. These papers covered the experiences of the project
in relation to: improving village sanitary conditions, community

participation, and the health educational programs. The papers were to serve as:

* guides for discussions;

* documentation of the project's accomplishments; and

* the basis for raising a preliminary series of questions from which working group discussions could evolve.

As an outcome of the contributions of core group members and based on the insights gained from the Women, Water, and Sanitation project, a number of concepts were identified as bases for an analytical framework from which the conceptualization of this and other similar projects could proceed. These are:

* holistic framework;

* intersectoral approach;

* popular participation within the framework of partnership between village, government, and catalysts;

* empowerment, sustainability, and continuity; and

* information networking, dissemination, and utilization.

The following is a detailed account of the four-day meetings.

June 8, 1990
Preliminary Meeting with Consultants

The research team held a preliminary meeting with the following project and international consultants: Dr. Gilbert White, Dr. Quratal Ain Bakhteari, Mr. James Chauvin, Ms. Mary Asaad, and Ms. Aida Guindy. During this meeting, the objectives of the Task Force were solidified. Beside the objectives mentioned above, Mr. Chauvin suggested that the research team consider the possibility of organizing smaller working groups with planners and policy-makers engaged in detailed discussions based on the Task Force proceedings. So far, most of the attention of granting and research agencies operating within the framework of popular participation has been geared toward communities as their main target. However, the concerns, constraints, and potential of government officials and policy-makers have been neglected or taken as a given. It is important to consider both components (community members and the government) as on an equal footing, liable to research and action efforts. Furthermore, it is important to develop and strengthen the linkages among the different administrative sectors and levels. This entails developing information packages and

recommendations that are feasibile, cost effective, and which are based on research results in a way that planners can work from. The role of research agencies as catalysts between government representatives and villagers on the one hand, and between granting agencies and international concerns on the other, is of the utmost importance. At the same time, this necessitates coordination among the different projects and granting agencies. One step in that direction is holding similar Task Force meetings where members can share their experiences. Through these meetings, members can develop short- and long-term strategies for vertical and horizontal information networking.

In light of this, it has been recommended that the Task Force Meeting should address mainly those questions dealing with the above mentioned issues, taking the Women, Water, and Sanitation project as a case study. This entails first defining where the project stands in relation to its set objectives, the potential for sustainability of the initiated activities and programs, as well as prospects and needs for its future development.

First Core Group Meeting: General Introduction

The first meeting of the core group was devoted to introducing members to the objectives of the meetings, the composition, interests, and experiences of participants, as well as the two international consultants, Dr. Gilbert White and Dr. Quratal Ain Bakhteari.

Mr. James Chauvin, IDRC representative, also introduced participants to the new strategies of the institution in relation to water and sanitation. These changes reflect the recognition on the part of the international agencies of the need to rethink their approach to development; specifically, water and sanitation. The discipline-oriented structure which had characterized their activities has been dissolved in favor of an interdisciplinary approach that recognizes the intersectoral and holistic framework.

The new IDRC divisions, in light of this policy shift, include:

1.) Health and Human Behavior;

2.) Health and Environment; and the

3.) Health Systems Program, which focuses on management and information.

The new focus moves away from research geared only to straight technological innovations to a broader interdisciplinary perspective that integrates behavior, technology, health, water, sanitation, village, and government.

The preliminary discussions of the day focused on the importance of raising questions relating to government potential in implementing projects. The limitations and constraints within which policy-makers and officials work should constitute one of the parameters of the discussions and recommendations. This raises the following questions:

* How to help government representatives incorporate research results into their policies?

* How to propose feasible and cost-effective methods of implementation?

* How to deal with policy-makers, both within the domain of control of each as well as how to coordinate and integrate the different sectors?

Another theme that was addressed is how to formulate local concerns to be compatible with global interests. This in its turn would help reactivate and reinforce the local, national, and international linkages. Hence, the importance of channeling and integrating the outcome of such task force meetings into the agendas of international conferences, e.g., the International Meeting on Water and Sanitation, which will be held in India, and the Environment Conference.

The first session ended with the election of Marie Asaad as chairperson for the second day. It was also decided that members go over the three working papers to come up with a series of concerns and questions - besides the ones contained in the papers - that would constitute the basis for the working groups' discussions.

June 9, 1990
Morning Session of the Core Group

Mrs. Samiha El-Katsha gave an overview of the Women, Water, and Sanitation project supported with slides. The presentation focused on the holistic approach to water, sanitation, and health adopted by the project. It also tackled the objectives of the project and the stages of its developments, starting with the anthropological research that preceded the action component and upon which the latter was based.

To decide upon the themes that would guide working group discussions, each member expressed an issue of concern. The topics raised included:

* the concept of the holistic approach and its rephrasing into an intersectoral framework

* the role of public service candidates in community organization and health education

page 4

* the role of summer clubs as a venue for spreading health education among children

* how to create and maintain linkages between planners' perspectives on development and villagers' needs

* how to maintain the dialogue between the hardware and software in order to establish a permanent partnership between the two

* how to create a partnership between the village, the government, and the university

* what patterns of social control networks are needed to sustain initiated actions

* how to present packages to planners and policy-makers in a way that is practical, feasible, and cost-effective

* what types of monitoring and evaluation processes are required at the different levels and by different actors (village, district, governorate, villagers, planners, and catalysts)

* what sort of awareness and information is needed to carry out the activities by the different actors within a partnership model between village, government, and catalysts

* the impact of new technologies on behavior, and the relation between changing the environment and changing household behavioral patterns

This range of themes provided the base for the working groups' discussions, with the general objective of defining the present stage of the Women, Water, and Sanitation project and its potential for future development, replicability on a larger scale, and/or further research needs. Serving as a case study, the analytical evaluation of the project can contribute to a deeper understanding of the above mentioned themes, especially the holistic approach, popular participation, and the new model of partnership.

First Session of Working Groups' Meetings

In defining the present stage of the Women, Water, and Sanitation project it was necessary to list the objectives of the project that guided its actions and which were to serve as the basis for this analytical evaluation. These were:

1.) identifying existing management systems of water and sanitation;

2.) working out with villagers and government officials alternative solutions to improve village sanitary conditions; and

3.) initiating water and sanitation educational programs.

Each of these objectives will be examined in light of the main concepts identified above.

Starting with the concept of a holistic approach, Working Paper #1 provided a preliminary list of what this concept entailed within the framework of the Women, Water, and Sanitation project (p.5). Among its salient components were:

a.) establishing effective channels of communication between villagers and officials at the different administrative levels;

b.) working out alternative solutions with villagers and officials; and

c.) examining and evaluating these proposals with the help of various technical consultants.

The process by which these components were established included identification of the structures relating to water and sanitation. Interview schedules with those responsible in the different administrative sectors as well as villagers were completed. In addition, efforts were extended to contact and strengthen the links between officials and villagers, especially through the village council.

However, the holistic approach presented by this project was limited to integrating the efforts of villagers and government officials by improving the channels of communication between both. The broader understanding of the holistic framework and the partnership model did not take full dimension where all partners involved (catalysts, government, and village) would take a complete and active role in the process. The testing of the compatibility of such a model did not constitute one of the project objectives; rather, it represents one of its outcomes and future goals.

The same village-oriented approach finds expression in many projects. Most of the focus has been directed on villagers and their needs to the neglect of an equal stress on the potentialities, constraints, and processes that concern government personnel.

A similar approach is adopted by participatory research and development, in which "people", i.e., villagers, define their own needs with the implications of the villagers' empowerment. The usual outcome is a condition of conflict, not only between the villagers and government representatives but also among the different political factions within the village.

The challenge that the new model presents is how to guarantee an equal involvement of all partners in the process of

needs identification and problem solving. This entails moving toward a better understanding and, subsequently, involvement of government personnel in processes of action and research. Such a model moves development projects from their usual romanticism of standing on the side of the "weak", i.e., the villagers. The proposed model is built on a different nature of the relationship between the actors involved, which entails mutual understanding and partnership, rather than rivalry.

Among the objectives of the project was the identification of management systems. Understanding and working with and through existing leadership structures was important. The village council acted in this regard as an important institutional set-up that had to be targeted in its own right. However, working with village councils has its own problems that have to be considered, especially in trying to identify village leadership. The latter is an important angle in action-research as a venue for initiating action and sustaining it after the withdrawal of catalysts, i.e., the research team.

In this regard, the Women, Water, and Sanitation project has been successful in identifying leadership structures, but not processes of the management system of water and sanitation. It worked with government officials and was able to establish some linkages between them and villagers. However, there is no guarantee that initiated actions would be sustained in the long run. If the research team moves out, some of the activities will stop. This varies from one case to the other and is contingent upon the nature of the problem, its urgency, context, and the political process involved. For instance, the case of the standpipe in Babil reflects an urgent need, a common problem that has been agreed upon, no complex administrative structure, and active local leadership that has been able to address to problem without resorting to complex administrative structures. On the other hand, the canal presented the opposite situation. Villagers and officials could not agree on the existence of a problem, let alone its urgency or solution. The administrative structure that had to be activated was too complex to override the other two constraints. The case of the feasibility study in Kafr Shanawan offered an urgent problem and an agreed upon solution, but policial factionalism halted the process.

In sum, with respect to the leadership question the project was only able to identify the structure and to work along the broad lines of the leadership network. Identification of the management structure, however, should not be confused with the potential for action sustainability both by villagers and government officials. This necessitates a better understanding of the processes of decision-making at all levels and by all actors (i.e., villagers, government officials, planners, and catalysts). Horizontal, vertical, and intersectoral information networking and awareness is a must in testing the compatibility of the partnership model.

Meeting of the Two Working Groups and Reflections on the Day's Activities

Ms. Aida Guindy presented her reflections on the day's meetings with special focus on how they fit within the international context. One illustration of worldly concerns is contained in the PROWESS 1990 pamphlet. The latter's objectives highlight the main concepts that have been identified as basic by core group members.

First, the necessity of adopting a holistic and intersectoral approach that goes beyond women, water, and sanitation to include housing environment, hardware, public works, etc. Furthermore, the holistic approach entails working at three different levels: 1.) the village level; 2.) the intersectoral, administrative level; and 3.) the policy-making and managerial level. The latter has been the least examined and hence needs more substance and content.

The day's discussions also highlighted how it is crucial to coordinate the hardware (e.g. engineering) and software (e.g. social sciences). The proposed partnership model is built on a better understanding by and of each of these two groups, something which will render teamwork a more productive endeavor. This indicates the importance of interdisciplinary training needs at all levels and to all actors involved in the process.

Empowerment' was also raised during the discussions. The challenge at the moment is to move this and 'the popular participation concept from conventional romanticism.

The combination of research and action constitute one of the strengths of the Women, Water, and Sanitation project which brought about important and tangible results that can be replicated. The question that poses itself is how to proceed from the insights gained into a process of information dissemination, replication, expansion, and/or further research.

Third Day, June 10, 1990
Working Groups' Meeting: Second Session

Mr. Chauvin introduced members to the concept of information systems proposed by IDRC. Recently it has been realized that the process of information flow has been oriented toward the donor agency to the effect that very little information is delivered to the village or kept with the research team. Most of the collected information has never been disseminated with the idea of replication and utilization. Even with popular participation being the key concept in many projects, most people have no access to the information and it is irrelevant to them.

To overcome these problems, the IDRC, in collaboration with

page 8

UNDP, is proposing the development of information systems to be used at all levels, starting with community, project members, and national and international agents. This entails identification of the information needs of each group, type of information and its purpose and agent, information generation, and the processes of linking information between the different groups.

This information system framework complements the partnership model that has been proposed. The former can be tested as an integral part of the partnership components.

The type of information needed will vary by purpose (e.g., monitoring, planning, evaluation), agent (government officials, villagers, research team), and the process of its generation.. In the model of information systems, information is both general and specific.

Another dimension in the process is developing an international information support system, which is a very sophisticated database that draws on the information and feedback generated at lower levels, starting with the community. UNDP is contributing to the process by developing quantitative methods for evaluation and monitoring of the model. Emphasis has also been directed toward strengthening the methods of qualitative evaluation and developing required audio-visual training programs to enable the different groups to generate, monitor, and evaluate information. Soon the different methodologies will be ready for field testing.

Following this brief presentation of the information systems model by Mr. Chauvin, working group members resumed the evaluation of the Women, Water, and Sanitation project. Having completed the first issue of identifying the leadership structure, the discussions then proceeded to the second objective of improving village sanitary conditions. The latter contains two components. On the one hand, villagers' involvement in the process - as agreed upon by the research team and government representatives - was accomplished to a certain extent depending on the nature of the problem. However, actual changes in the sanitary conditions in both villages was ranked low due to a number of factors, such as the complexity of administrative set-up, urgency of the problem, and political factionalism.

The water and sanitation educational programs which constitute the third objective of the project were successfully carried out by nurses at the clinics, public service candidates, and teachers at the summer clubs for primary school children. The success of the educational programs was primarily the dissemination of hygienic information to women and children, which resulted in some changes in unhygienic behavioral patterns among household members.

Having identified where the project stands in relation to its set objectives, the second main component in the analytical

evaluation of accomplishments is the degree of sustainability. This component has been divided into four major points:

* empowerment of people
* continuity in action
* integration of hardware and software
* information process, planning, monitoring, and evaluation

Based on the documentation of activities in the three working papers, and the observations of the research team and government representatives, it was agreed that the process of empowering the people has only just begun. This in its turn signifies the beginning of a process of information sharing which can also lead to continuation in action.

The ability to sustain initiated actions is not the same in all programs or activities. Rather, the programs that the research team are proposing for expansion on a larger scale are the ones that signaled the potential for continuation. Thus in evaluating the degree of sustainability, the statement has to be qualified to refer only to those with the potential for maintenance and continuation. The same applies to the awareness of information flow which is also activity-dependent. As to the integration of software and hardware, although the process was initiated in some activities, it was carried out on an ad hoc basis, and a full integration has not been achieved.

In summing up the evaluation of the present stage of the Women, Water, and Sanitation project, it becomes evident that the project was able to touch upon all the major parameters that constitute the angles of the proposed partnership 'model. However, due to its experimental nature, time constraints, and the lack of answers for some questions, a number of the initiated activities and programs cannot sustain themselves after the withdrawal of the research team (see attached chart of project evaluation). This necessitates a rethinking of the future plan of action which will have as its major objective the testing of the partnership model. Discussions as to future plans will be resumed after meetings with representatives from both study villages.

Meeting with Village Representatives

Before meeting with representatives from the study villages (see list of participants), it was stressed that their participation in the meetings arose from the recognition of their role in the research and action processes, which equals in importance that of government representatives and the research team. The aims of this meeting were to:

* share results of core group discussions with villagers
* learn from villagers what their involvement with the project had meant to them
* discuss with villagers the potentialities and constraints for

continuation of action and future developments

After introducing themselves, each of the village representatives briefly described his/her involvement with the project. The school headmaster recounted the summer club experiences at the Kafr Shanawan school. One of the public service candidates, who was involved in the summer clubs as well as the health education outreach program for women, commented that it is more effective to provide health education combined with a service. For instance, children at schools can be offered curriculum reinforcement sessions along with the health and recreational components at the summer clubs. Offering such a service would enhance the attraction of health information and would motivate parents to send their children to the clubs. In addition, this could be a venue for raising some funds to cover the expenses of the program, instead of halting the entire program due to lack of finances. The same principle applies to women as well. If the public service candidates can provide some service to the women while delivering health information, the effectiveness of the outreach program can be enhanced. Such services can include literacy education, weighing of infants, delivering dehydration solutions, etc. Quratal Ain Bakhteari gave examples from Pakistan to the same effect. This service-oriented health education can ensure continuity of action and increased acceptance of the messages delivered.

In addition, it was stressed that an effective health education program has to be coupled with improvements in village sanitary conditions. Often women are willing to change their unhygienic behavioral practices; but due to unsanitary conditions within their environments, which are outside their domain of control, their unhygienic practices are sustained.

Moving to efforts aimed at improving village sanitary conditions, villagers' comments confirmed the conclusions drawn during the working groups' meetings. The urgency of the problem, the complexity of the administrative set-up that has to deal with the problem, the conflict among villagers, the lack of funds, and the routine of bureaucracy are all factors that affect the processes of actual improvement of sanitary conditions.

Stressed further was the problem of access to information, both vertically and horizontally; who controls what type of information is a major constraint facing not only villagers, but officials in the different administrative sectors. The lack of awareness of channels through which information flows and lack of knowledge about the procedures that have to be followed characterized the comments raised, especially by village council representatives. This in its turn affects their relationship with villagers, with higher administrative structures, as well as their attempts to plan and manage projects.

After the formal meeting, representatives from Kafr Shanawan and Shanawan met informally with Dr. Fadel and Mr. Gaballah to

discuss further the potential for activating the project to lower the ground water table in both villages. It was agreed upon that people in Kafr Shanawan will start with fund raising, a condition specified by the Development Department for the latter to contribute the rest of the expenses. Dr. Fadel will make some changes in the feasibility study to match the recent conditions.

Working Groups' Meeting: Third Session

The meeting with village representatives helped working group members crystallize their ideas about future plans and issues. In general, the partnership model between government, village, and catalysts constitutes the broad umbrella and the overriding goal of any future efforts. Prior to initiating any activities in that regard, a critical analysis has to be completed. It should include an analytical documentation of the entire process, in addition to an examination of the areas where gaps are prevailing and need to be filled.

In the short run, five major issues have been outlined as basic for immediate future plans that either need further research and/or action.

1.) Management Capability

The project was able to identify the management structure of water and sanitation. However, the workings of the system of decision-making from the village up to higher governmental sectors and from top down has not been deeply studied. What needs further research is the process of decision-making horizontally and vertically.

2.) Environmental Awareness

Moving away from a conventional approach to health and the environment became clear as a means to raise people's awareness. Environment is not only limited to the physical surroundings but also includes social and health dimensions. Similarly, offering health education cannot be sustained nor effective focusing solely on health. The latter has to be integrated with other issues of concern. On the other hand, health and environment cannot be divorced. Changes in unhygienic behavioral practices are contingent upon improvements in village environment.

From the experiences of this project it became evident that nurses, public service candidates, and teachers can play a crucial role in raising environmental awareness among people. Yet, further action-research is needed to determine how the sustainability of their actions can be maintained.

3.) Program Development and Policy Impact

This relates to the management process, with special focus on policy-making and its impact on action and vice versa. Some

questions that need to be answered are:

* how does the government deal with issues and projects, both at the governorate and village levels?

* how does the government perceive itself as a working system among its different sectors?

* how does this perception relate to its policies and their impact on villagers?

* how does the integration of the different sectors proceed?

* if there is no integration of the different sectors, why is this so?

* does the government - at the different administrative levels - have the potential for sustaining initiated programs?

4.) Information Sharing and Networking

One aspect of this process entails the sharing of experiences among participants in different projects, as well as among villagers and government personnel in the different sectors and administrative levels. Various communication methods can be adopted to enhance such horizontal networking of experiences and information, such as seminars, field visits, audio-visuals, etc.

At the same time, information networking should also flow vertically to expand access to information by all those concerned. Channels of communication between the different administrative sectors and levels, and between them and villagers ought to be enhanced. The role of the research team members as catalysts and analysts in that regard is of the utmost importance. A deeper analysis and understanding of communication patterns, their channels, constraints, and potential is needed. The target of such study and action is not only government officials and villagers, but also the software and hardware working in the different fields and projects. The proposed holistic intersectoral approach which characterizes the partnership model is built on such integration and networking. If the IDRC model of information systems presents the ultimate model for accessibility and sharing of knowledge, then improved channels of communication for information flow can achieve viable results in a short time.

5.) Information Dissemination and Utilization

The process of information networking is a first step in the direction of dissemination of information with the viability of its utilization. IDRC at present is attempting to move away from conventional approaches to sharing results, which more often than not is on paper and project guarded. The challenge is how to render research results utilizable and beneficial to others.

There is a need to spread these results among professionals, government personnel, villagers, and other target groups, in innovative and practical ways. This task force meeting represented one such vehicle for dissemination of information, especially since participants were not limited to professionals, but included government and village representatives.

Meeting of the Two Working Groups: Sharing of Results

The two working groups met to share the outcome of their discussions and to plan for the meeting with national and international agency representatives.

Mr. Chauvin gave a briefing as to the results of Group A discussions (see chart for summary of results presented above). Ms. Aida Guinda presented the outcome of Group B. The discussions in Group B followed more or less the same broad guidelines as Group A. However, while the latter were more concerned with developing a model and a framework for action, Group B devoted most of its discussions to practical considerations for action in the future.

Starting with the notion of the holistic approach, it was defined in reference to the community, as it is considered a holistic unit. At the same time, this holistic framework entails an intersectoral approach that necessitates operating at three different levels; the village level, the national policy-making level, and the international level.

Offering practical solutions for action, it was recommended that a steering committee be established at the governorate level which would be in charge of giving directions and support for actions as well as ensuring a continuous flow of information vertically and horizontally. The intersectoral approach manifests itself in having the different sectors and departments, e.g., health, education, social works, etc., contribute to the operations of the committee. In order to ensure villagers' involvement in the process, members from the village level should sit on that committee. At the same time, given the importance of that markaz level in the administrative hierarchy, a representative from that level should also participate.

From another perspective, Group B focused on the health educational programs and the potential it had in enforcing hygienic practices among women and children. The problem that these programs face are unsanitary environmental conditions, which mitigate women's responses to the messages and their willingness to change unhygienic practices.

The integration of software and hardware was also considered basic for any efforts to work within a holistic framework. This requires training for interdisciplinary teamwork. The development of manuals and audio-visual materials can be fruitful in that regard.

Information networking and exchange of experiences among the different projects, administrative sectors and levels, and villagers is of utmost importance. Innovative communication skills are needed to enhance cooperation and partnerships among those concerned.

Finally, core group members discussed what is to be expected from the meeting with national and international agency representatives. The aim of the meeting was to:

* present a model of information sharing among individuals and institutions working in similar fields;

* share the experiences of the Women, Water, and Sanitation project with a wider audience; and

* share the outcome of core group discussions.

It was decided that Aida Guindy would chair the meeting and Dr. Fadel would present the outcome of the core group meetings. His selection was meant as proof of the importance of the integration of software and hardware.

June 11, 1990

Before the meeting with international and national agency representatives, Dr. Quratal Ain Bakhteari gave an overview of the home schools and latrine project in Pakistan, which offered another example of popular participation within a holistic framework.

The meeting started with an overview of the Women, Water, and Sanitation project and the Task Force Meeting. Dr. Fadel then gave a briefing of the outcome of core group discussions supported by a chart covering the major issues discussed under the umbrella of a partnership model.

The floor was then opened to comments, concerns, and questions by national and international agency representatives. Some of the participants asked for further clarification on the summer club and the public service candidates' programs.

One general concern expressed the need for a model that incorporates the different projects. Developing such a model can also enhance the process of information sharing among professionals in the various disciplinary fields, as well as achieve the integration of software and hardware activities. Such integration and information networking exemplifies the significance of adopting a holistic approach to development projects. Simultaneously, it can move development projects' orientation toward popular participation and from a mere sharing of money to a real partnership between research agents, villagers, and government.

The importance of accessibility to information is also a factor in the process of empowerment of people. The need at present is to provide this knowledge in such a way so it is feasible, practical, and utilizable by villagers, government officials, and researchers working in similar fields. Continuous feedback between information and action can set the base for many projects to be initiated by any of these three groups. It was proposed that database information centers be established at the governorate level to provide all those concerned with up-to-date information. Another alternative is establishing such centers at the different ministries based on the nature and relevance of projects. Such proposals can be considered first steps in the direction of the IDRC proposed Information Systems Model.

High ground water tables and alternative waste and sullage disposal systems constitute major sanitary problems in many villages. In this regard a number of issues were raised. They included the following:

* cost and feasibility of such disposal/sewerage systems;

* importance of coordination and cooperation between engineers and social scientists to guarantee a holistic, intersectoral approach to popular participation in solving village sanitary problems;

* the importance of interactions between village and government at different levels to avoid the drawbacks of standardization and uniformity of national master-planning;

* a need for contextualizing environmental and health problems;

* the crucial aspects of research in planning, monitoring, and evaluating projects; and

* the role of research agents as catalysts in the partnership model between village and government.

Finally, all members agreed on the need to periodically hold similar task force meetings so the colloboration between different groups can enhance the process of development.