

731116
A-111111
1301-49196



WATER AND SANITATION
FOR HEALTH PROJECT

APPLICATION OF HEALTH EDUCATION TO WATER SUPPLY AND SANITATION PROJECTS IN AFRICA

Operated by
CDM and Associates

Sponsored by the U.S. Agency
for International Development

1611 N. Kent Street, Room 1002
Arlington, Virginia 22209 USA

Telephone: (703) 243-8200
Telex No. WUI 64532
Cable Address WASHAID

WASH TECHNICAL REPORT NO. 15

October 1982

The WASH Project is managed
by Camp Dresser & McKee
International Inc. Principal
cooperating institutions and
subcontractors are: Associates
in Rural Development Inc.
International Science and
Technology Institute Inc.
Research Triangle Institute
Training Resources Group
University of North Carolina
At Chapel Hill

Prepared for :
The Africa Bureau
U.S. Agency for International Development
Under C-Task 176

WASH TECHNICAL REPORT NO. 15

APPLICATION OF HEALTH EDUCATION TO WATER SUPPLY AND
SANITATION PROJECTS IN AFRICA

Prepared for the Africa Bureau of the Agency
for International Development under C-Task 176

Prepared by:

Raymond B. Isely, M.D., D.T.M., M.P.H.
and
Kathleen A. Parker, M.P.H.

October 1982

TABLE OF CONTENTS

Chapter	Page
EXECUTIVE SUMMARY.....	iii
1. INTRODUCTION.....	1
2. OVERVIEW OF THE STATUS OF HEALTH EDUCATION.....	4
3. HEALTH EDUCATION, COMMUNITY PARTICIPATION, AND WATER SUPPLY AND SANITATION....	6
3.1 The Social and Behavioral Dimensions of Development Assistance.....	6
3.2 The Concept of Health Education.....	6
3.3 The Concept of Community Participation.....	9
3.4 Application of Health Education to Domestic Water Supply and Sanitation Projects.....	10
4. TOWARD A STRATEGY FOR IMPROVING HEALTH EDUCATION PRACTICE IN WATER SUPPLY AND SANITATION PROJECTS IN AFRICA.....	15
4.1 Elements of a Strategy.....	15
4.2 Basic Principles of the Proposed Strategy....	15
4.3 Recommendations for Strategy Implementation..	16
4.3.1 Improving the Implementation of Current Health Education Projects or Project Components Funded by AID.....	16
4.3.2 Strengthening Indigenous African Capability in Health Education - Individual and Institutional.....	17
4.3.3 Developing a Health Education Capability within the Africa Bureau.....	18
5. RESOURCES AVAILABLE TO SUPPORT ACTIVITIES.....	20
5.1 Documentation.....	20

Chapter	Page
5.2 Organizations and Networks of Organizations..	22
5.3 Individual Expertise.....	22
5.4 Programs and Projects.....	22
REFERENCES.....	27
SELECTED BIBLIOGRAPHY.....	28

APPENDICES

A. Participation and Education in Community Water Supply and Sanitation Programmes: A Literature Review.....	29
B. <u>Materiel d'Education pour la Sante en Afrique, Repertoire I par Herve Delauture et Lionel Robineau, Etudes et Recherches No. 45-75, Septembre 1979, ENDA, Dakar.....</u>	62
C. Organizations and Networks of Organizations Active in Health Education/Community Participation in Africa.....	66
D. <u>Sources d'Information</u> , taken from <u>The Nurse and Community Health in Africa</u> by Jeanne F. Carriere, Susan H. Colgate, Miriam Jato and Damaris Mounlom, Editions Cle, 1979.....	72

TABLE

AID-Assisted Domestic Water and Sanitation Projects in Africa (as of November, 1981).....	24
---	----

EXECUTIVE SUMMARY

Health education has frequently been characterized as the dissemination of health and health-related information. The assumption is that if people are properly informed, they will behave in ways that will have a positive impact on their health. Unfortunately, health education programs which consist solely of information-giving activities do not themselves result in the desired behavioral change. Because they fail to effect change, the programs are seen to be of little or no value.

Defined as "any combination of learning experiences which facilitate voluntary adaptations of behavior conducive to health", health education embraces more than information-giving. It includes several activities which when systematically planned and implemented, attempt to influence voluntary behavioral change. These activities are of three types: organizational (community development, community organization, social action, organizational development); training (skill development, problem-solving, simulations, small-group discussions) and communications which includes the activities usually defined as health education, that is, mass media, audio-visual instruction, demonstrations, educational television and radio, and lecture-discussion.

Since health education provides the opportunity for voluntary choice of behavior patterns, it must include the active participation of the individual or group in the process of change. In this context, community participation, a health program component usually seen as associated with, but different from health education, is conceptually and operationally linked to health education. That is to say, community participation is the collective manifestation of voluntary participation in the determination of practices which have an impact on health. Health education necessarily includes or stimulates community participation.

Defining and linking health education and community participation are especially important in their application to water and sanitation projects. The goal of health education in these projects is to facilitate voluntary behavioral change relative to the acceptance, installation, use and maintenance of water and sanitation facilities in order to realize in turn the potential health benefits of such facilities. Because of the nature of the health problems resulting from poor water and sanitation and because new facilities are usually in the public as well as the private domain, the focus of health education programs must be on collective as well as individual behavior change.

As part of the development of a health strategy for the region, the Africa Bureau feels that promotion and application of better health education program planning, implementation and evaluation is warranted. Health education theory and practice must go beyond simple information dissemination. Since water and sanitation projects lend themselves well to health education strategies, the Africa Bureau proposes to use these projects as a means of initially addressing the major health education program issues.

Using the framework of existing water and sanitation projects in the Africa Region and exploiting the various resources which are available at present, including the WASH project, a three-pronged strategy is envisaged:

- Improvement of current health education projects or project components related to water and sanitation programs;
- Strengthening of institutional and individual capability in health education within Africa; and
- Development of a health education capability within the Africa Bureau of AID.

To ensure that effective action will be taken, these three strategic elements are based on several important operational principles:

- Maximum use of available resources is encouraged.
- Active, continuous consultation with field-based development workers in many sectors is to be undertaken.
- Flexibility of response to articulated needs with the possibility of providing varied kinds of assistance is built into the strategy.

To improve implementation performance of current health education projects or project components, it is recommended that a desk review of all projects be conducted and that selected projects representing a cross-section of different types of project be contacted to ascertain their interest in short-term assistance. Such assistance might include project redesign, identification of health education resource materials, participation in training programs, general on-site review with recommendations for change as appropriate.

Strengthening indigenous African capability in health education will involve identification of existing institutional and individual resources and networks of resources on the continent. A survey should be undertaken which would help AID determine what kind of assistance would be most beneficial. Special attention should be given to the existing training

programs in health education, both short-term as well as long-term. These programs as well as health education-related training in national and regional institutions should be examined in order to define how these activities might be strengthened and expanded.

To develop a basic health education capability within the Africa Bureau, a number of different activities might be undertaken:

- Formation of an ad hoc group on health education composed of representatives from offices such as agriculture, education, nutrition as well as health, to serve as an operational focus for implementation of this strategy within the Africa Bureau;
- Recruitment of health education specialists through the IDI program who have the necessary behavioral science training;
- Organization of special seminars and presentations on health education applications;
- Preparation of a paper on the implications for health education in Africa of the AID policy paper on Domestic Water Supply and Sanitation programs.
- Preparation of certain resource documents for use by AID and USAID program officer, project managers, etc.

In support of the implementation of this strategy, existing resources both within and outside of AID must be identified and exploited.

Chapter 1

INTRODUCTION

In early March 1982, the Africa Bureau of AID requested assistance from the Water and Sanitation for Health Project (WASH) in identifying ways to improve the application of health education theory and practice in water supply and sanitation projects in Africa. The central purpose was twofold: to contribute to the Bureau's overall health strategy and to call attention to the program aids available to AID personnel in the field.

The interest of the Africa Bureau in health education theory and practice has evolved from several different sources as follows:

- The Workshop on Primary Health Care in Lome, Togo, Organized by AID in November, 1981

Designed as a continuing education activity for AID health officers and their host country colleagues and counterparts, preparations for this conference included an assessment of USAID needs relative to the planning, implementation and evaluation of water supply and sanitation projects. Although neither health education nor community participation emerged as one of the three priority areas of concern, discussions before, during and after the conference indicated that much activity was occurring in these areas but that little exchange of information or experience was taking place. Further, an understanding of the concepts linking behavioral change, community participation, and health education was not evident.

- The January 1982 Conference on Community Water Supply Programs Organized by the AID Office of Evaluation at Marriottsville, Maryland

The conference working paper, entitled Community Water Supply: Evaluation Summary (Dworkin, 1982), reported that in the three countries (Tunisia, Peru and Korea) where health education was a component of water projects, there were "problems of implementation and the entire program had no discernible impact." They were "all poorly executed...treated as add-ons to a water project and were implemented only to meet requirements of the project paper..." The recommendation therefore was that "health and hygiene education projects should be designed and implemented separately from water projects." It is most unfortunate that these conclusions and recommendations were all based on the traditional, narrow and out-dated de-

definition of health education as information dissemination as evidenced in the use of words and phrases such as, "information delivered" and "sessions." Nowhere was health education linked to "community development" or the concept of community participation.

- The Preparation of a Strategy for Health Education in Africa

The Africa Bureau health staff has articulated the need to raise the level of awareness of the nature and scope of health education and to define the role which it should have in an overall strategy for health programming in the region. Since the concepts of health education and community participation merge operationally in water supply and sanitation projects, the Bureau feels that an appropriate place to initiate its efforts to improve health education is in its application to water supply and sanitation projects.

The report which follows is derived from a search conducted over a fifteen-day period using a variety of information sources: literature reviews, personal conversations with AFR/DR staff, AID contractors, WASH program staff, and AID documents. It has been prepared with five primary objectives in mind:

- to provide an overview of the present situation of health education and the events which led to the request for assistance from the Africa Bureau;
- to define health education and articulate the theoretical links between health education and community participation, the latter widely accepted as an essential component of water supply and sanitation programs;
- to describe the application of health education to water and sanitation projects in the framework of this definition;
- to propose a strategy and some options for action for improving health education practice; and
- to identify resources in support of the proposed activities.

The shortcomings of this type of exercise cannot be underestimated. In attempting a brief synthesis, it is easy to oversimplify, to omit important items, to be too theoretical and to be unrealistic both in terms of what the need in this area might be and what AID might do to address the need. In Africa the social and cultural diversity alone presents an enormous challenge to those wishing to improve the practice of health education on the continent.

It is hoped that this paper will stimulate a fresh look at health education theory and practice and will provoke discussion on ways to improve the planning, implementation and evaluation of health education programs generally, and, in particular, those which are part of domestic water supply and sanitation projects.

Chapter 2

OVERVIEW OF THE STATUS OF HEALTH EDUCATION

The image of health education as an applied social science discipline and an area of professional practice within the field of public health throughout the world has suffered over the years from the restricted, narrow definitions which have evolved from the equally narrow scope of its practice. One of the more significant misperceptions is that which characterizes health education as the dissemination of health and health-related information. The underlying rationale for this definition is that if people are properly informed, they will behave in ways that will have a positive effect on their health. Unfortunately, the evidence shows that information and education campaigns to promote the adoption of new practices do not by themselves result in individual or collective behavioral change. Because they fail to effect behavioral change, these "health education" efforts are considered to be failures. Health education consequently is seen to be of little or no value.

In recent years in the United States, the theory and practice of health education has become more scientific and systematic. The quality and quantity of health education research in community, clinic, hospital, school and other settings, have improved dramatically. The behavioral change goals of health education have been reaffirmed, and emphasis has been placed on carefully planned educational strategies and programs for achieving those goals. This more adequate concept of health education is also found with increasing frequency in the literature on health education theory and practice originating outside the United States.

In Africa at the present time the status of health education is rather encouraging. Through the efforts of WHO, two regional health education training centers--one for franco-phone, and one for anglophone countries--have been established within the last ten years. Many Africans have received MPH or PhD degrees in the United States and other developed country institutions, have adopted broader principles of health education practice and are currently serving in key health education positions in various African countries. The "health for all by the year 2000" movement seems to have generated renewed interest in health education in the context of community-based social change. Several development training institutes (e.g., Pan-African Institute for Development in Cameroon, Centre d'etudes economiques et sociales de l'Afrique occidentale in Upper-Volta) and medical service organizations (e.g., African Medical and Research Foundation in Kenya) are offering short courses in health education--defined as more than simple information dissemination. Governments, too, have

been making serious efforts to strengthen their health education capability by encouraging long- and short-term training and by introducing health education into health training institutions for all types of personnel.

It is against this backdrop--the poor reputation of health education, recent progress in making health education more credible, and efforts in Africa to improve health education--that the Africa Bureau wishes to develop and implement a strategy which will:

- improve the conceptual framework for health education programs; and
- enhance the quality of health education program design (i.e., planning, implementation and evaluation).

As a starting point for its strategy development, the Bureau has decided to focus on the application of health education to domestic water supply and sanitation programs, using the resources available through the WASH Project.

Chapter 3

HEALTH EDUCATION, COMMUNITY PARTICIPATION, AND WATER SUPPLY AND SANITATION

3.1 The Social and Behavioral Dimensions of Development Assistance

The basic task of development assistance is the process of social change, i.e., the process of helping people change the way they do things in order to improve their quality of life. Development assistance attempts to influence how people grow crops, how they educate their children, how they raise cattle, how they use water. This is done by introducing ("transferring") certain technologies for adaptation and adoption by the target population group. The technologies range from those involving only slight modifications of existing practices to those requiring a radical change in knowledge and skills.

To the extent that development assistance is a question of changing people's behavior, it must be concerned necessarily with identifying the socio-cultural and other determinants of that behavior in order to design appropriate intervention programs for change. This is the rationale for AID performing a social soundness analysis as part of the preparation of a Project Identification Document (PID) or a Project Paper (PP).

In what is traditionally regarded as the "health sector" of development assistance, the behavioral diagnosis and the design of an intervention plan are the responsibility of health education. In primary health care, expanded programs of immunization, water and sanitation, nutrition, chronic disease control and malaria control, it is a question of defining the social and behavioral dimensions of persons and groups targeted by these activities and then determining how to design a project so that change might be effected.

3.2 The Concept of Health Education

Perhaps the most useful operational definition of health education and one which has gained widespread acceptance among health education specialists in the U.S. and now increasingly in other countries is that put forward not long ago by Lawrence Green, a noted expert in health education theory and practice. According to Green (1980), health education is "any combination of learning experiences" which "facilitate voluntary adaptations of behavior conducive to health." This definition reflects a potentially broad scope of health education practice in that learning experiences can be conceived and organized in a variety of combinations; and

adaptations of behavior conducive to health can encompass any type of behavior, since all behavior directly or indirectly influences our health and well-being.

Green emphasizes that the distinguishing characteristic of health education is the voluntary participation of the consumer of services in determining his or her own health practices:

"This tenet is not merely philosophical. The evidence that the durability of cognitive and behavioral changes is proportional to the degree of active rather than passive participation of the learner is overwhelming."

The "learners" or the "target groups" of health education are of two types:

- people at risk of a health problem or problems (e.g., school children, pregnant women, farmers, chemotherapy patients, etc.)
- people whose control over resources affects those at risk (e.g., parents, health personnel, local agricultural development workers, village health committees, district administrators, central water authority staff, Minister of Health).

The "educators" can be any number of people health--education specialists, paramedical workers, water supply technicians, sanitarians, school teachers, agricultural and home economics extension workers, village health workers, and responsible members of households. It can be anyone who attempts through various strategies to effect voluntary behavior change aimed at improved health and well-being. In that sense, the "educator" may have other titles such as "trainer", "community development worker", or "facilitator". Further, "health education" may also be called "user education", "skill training", "training of trainers", or "community organization". The terms which are used in a given situation generally reflect the primary educational strategy that is being implemented in a program.

Thus the context of health education practice is a multi-sectoral one. The role of the health education specialist, usually operating from the "health sector" is one of providing technical guidance in health education program planning and implementation to the "educators" in the health and other sectors. The specialist also performs important coordination functions in an effort to overcome turf and territorial barriers to intersectoral cooperation.

A health education strategy refers to the "combination of learning experiences designed to facilitate voluntary behavioral change conducive to health." The educational activities

which can be used in health education are classified by Green into three major categories:

Organizational methods which include

- community development (or locality development)
- social action
- social planning
- organizational development

Training methods which include

- skills development
- simulation and games (socio-drama, role playing, case studies)
- inquiry learning (problem-solving, discovery approach)
- group discussion (also a "communications" method, see below)
- modeling
- behavior modification

Communications methods which include

- lecture-discussion
- individual counseling or instruction (home visits, self-instructional courses, correspondance courses)
- audio-visual aids
- educational television and radio
- programmed learning (teaching machines, computer-assisted instruction)
- mass media (electronic and print)

Selecting the appropriate strategy for a health education program will depend on a situational diagnosis and a subsequent determination of methods which are most likely to directly or indirectly influence behavioral change. Green (1978) suggests that four basic principles should guide the selection and coordination of the educational component of any program:

1. Health education seldom has an immediate, direct impact on behavior. It influences behavior primarily through changes in knowledge, attitudes, beliefs, values, perceptions, and social supports (relatives and significant others) and through changes in professional behavior towards participants, including referrals, communication and reinforcement. These are the intervening variables through which health education should be expected to influence health behavior, and which therefore should be considered in selecting and coordinating educational experiences.
2. No single educational input by itself should be expected to have significant lasting impact on health behavior unless it is supported by other educational inputs. Health education strategies must be cumulative and mutually supportive of the several factors facilitating a given behavior.
3. The best combination of educational methods, media and messages for some people, is not necessarily the best combination for others, or for the same people in other situations. Therefore, educational methods within a given program should vary according to audience characteristics and circumstances.
4. Health education cannot claim and should not be expected to accomplish more than behavior change, unless the medical or epidemiological evidence linking health or disease outcomes directly to the behavior is conclusive. The effectiveness of health education methods should be judged on the basis of behavior.

3.2 The Concept of Community Participation

The concept of community (or citizen or consumer) participation has always been part of the literature on social change. However, development specialists have come to recognize over the past two decades that the introduction of technologies alone bolstered by abundant capital resources, with little attention to the people who are to adopt and use them do not necessarily result in the desired changes in well-being. This realization has sparked renewed interest in and attention to community participation as an essential feature of planned social change. Involving the people who are the targets of change is the only way to insure that change will ultimately be lasting. For many, the concept is nothing new; for the vast majority of development workers, it is a question of translating the principle into practice.

"Involving the people" in the process of change may take one of several forms which have been described by Alastair White (1981). These range from consultation with community leaders

only to more comprehensive consultation with all sections of the community. They include contributions of labor and money to a project supported primarily by an external agency as well as complete community control over all project resources to the point of complete self-sufficiency. Indeed, community participation differs greatly between urban and rural areas.

Within the past five years, the notion of community participation has evolved into somewhat of a fashionable "buzz" word. This evolution has occurred most notably in the context of the "health for all" movement where community participation has been defined as one of the essential elements of primary health care. With the advent of the International Drinking Water Supply and Sanitation Decade, community participation in water and sanitation projects has also emerged as a subject of popular discussion and debate. As a general rule, community participation in these two programs tends to be perceived as an appendage ("should we have it or should we leave it out") rather than as the basic underpinning of the processes of social and behavioral change.

It is in the context of the preceding concerns that the conceptual link between community participation and health education can be made. That is to say, community participation is simply the collective manifestation of what Green has referred to as the distinguishing characteristic of health education, i.e., the voluntary participation in the determination of one's own health practices. The assumption is that the individuals and groups whose behavior is to be influenced know themselves, their families, their communities, their own wants, needs, and aspirations in life; they have their own interpretations of health and its value (Steuart, 1969). Therefore, if their behavior is to change, they must be involved in the process on an active partnership basis. Individuals and groups must feel responsible for their behavior and its consequences.

A focus on community participation derives also from a concept of behavioral change which sees the need to change individual behavior within the context of the social group that sanctions such behavior. As the group changes what it considers to be acceptable, normal behavior, the individual will modify his ways so as to conform to the norms of the group (Ogionwo, 1973).

3.3 Application of Health Education to Domestic Water Supply and Sanitation Projects

The goal of health education in water supply and sanitation projects is to enable individuals and communities to realize the health benefits of these projects, i.e., to reduce the risks to their health from poor water and sanitation practices and thus improve the overall quality of life. Health education program objectives for achieving this goal are aimed at:

- the development of knowledge, values, beliefs, attitudes and skills which facilitate behavior changes; and
- the creation of an environment supportive of change.

Water supply and sanitation projects usually require the acceptance, utilization and continuous maintenance of new, perhaps unfamiliar, technologies by an entire community. However, in many cases the people often do not participate in the selection of these technologies. Further, the nature of the health problems resulting from poor water and sanitation practices is such that isolated individual behavioral change does not necessarily result in desired health outcomes. Collective behavioral change is required in order to achieve measurable impact on both individual and community health status.

Thus, health education program components must be concerned with "combinations of learning experiences" which will facilitate behavioral change through the development and maintenance of new social norms for specific behavior related to the following water and sanitation program elements:

- choice of technologies
- acceptance of technologies
- planning for facilities installation (siting, timing, etc.)
- installation of facilities (funds, labor, materials)
- repair and maintenance of facilities
- appropriate use of facilities

The importance of health education interventions in any of these elements will vary depending upon each community's situation. The goal, however, is to work in such a way that continuous maintenance is assured and thus appropriate use is facilitated.

The basic strategy is to establish new or reinforce existing social structures (e.g., community leadership committees, neighborhood discussion groups, mothers' clubs, etc.) for diffusing knowledge and skills and for providing social support capable of reinforcing the adoption of new behavior.

In this context, organizational methods--in the form of community organization, also referred to as community participation--emerge as potentially the most effective strategy for health education programs in water and sanitation

projects. A community-oriented strategy for health education works to secure health benefits from water and sanitation projects two ways:

- it reinforces the adoption of individual behavior relative to water and sanitation; and
- it enables communities to establish "ownership" of the new technologies such that they perceive it to be in their self-interest to use, maintain, and repair them appropriately.

The application of organizational methods of health education to domestic water supply and sanitation projects usually takes many different forms, depending on the existing organizational dynamics within a community and the desired behavioral changes. The feasibility and desirability of these methods in a large urban setting, for example, vary considerably.

A community organization approach to health education may involve efforts to assemble a group of people to discuss ways to eliminate their annual shortage of water during the dry season and how they might pursue them. It can also mean working with a locally elected water authority responsible for the physical and financial maintenance of a newly installed standpipe system. It includes efforts to coordinate water and sanitation activities with all relevant government and private agencies. Small group discussions on latrine maintenance involving neighborhood mothers; installation of a well at a local school, getting the village elders to encourage penning of animals; organization of community clean-up campaigns are all activities of a community organization approach.

Although the results of a community organization approach might vary from community to community in terms of decisions made, reality dictates that choices regarding all aspects of water supply and sanitation systems be made within certain parameters of standardization.

The application of training methods as a health education strategy is also critically important to water and sanitation projects. The audience for training can be either the persons at risk of health problems (e.g., selected community residents learn simple pump maintenance, school children learn the proper use of a latrine) or the persons whose control over resources affects those at risk (e.g., health personnel learn to plan and implement community health education; local development committee learns to manage funds collected from water users). Training of trainers (TOT) is also included in the latter category. Training is a strategy of health education in that it enables individuals and groups to acquire new knowledge, attitudes, values, beliefs and skills which in turn facilitate behavior change. Training in group settings promotes and reinforces behavior change of individuals within the group.

Communications, or the dissemination of information, is an important, legitimate activity of water and sanitation education programs. Information enables people to make informed choices related to water and sanitation practices, but it does not necessarily motivate them to act.

Examples of the application of this health education method would include the following:

- poster campaigns to encourage the construction of latrines;
- presentation by the district administrator to a community group on the capital costs of alternative water supply technologies;
- radio talks on the etiology and transmission of water and sanitation-related diseases;
- demonstration of the operation of a handpump;
- booklets describing the various types of excreta disposal systems and the criteria for choosing one; and
- popular theater and puppet shows to dramatize the relationships of water supply and sanitation to health status.

Two of the three criteria for investment outlined in the draft Domestic Water Supply and Sanitation Policy Paper of March 1982 which will guide AID's investment in water supply and sanitation have important implications for health education. The first criterion calls for not only evidence of need in terms of high prevalence of water and sanitation-related disease, but also evidence of demand for water and sanitation facilities as demonstrated by the willingness of consumers to support recurrent costs of projects as well as to cover at least portions of investment costs. If consumers are unable to make such commitments but "the absence of basic water and sanitation systems poses a public health hazard for the community at large, the government must demonstrate a commitment to shoulder a substantial portion of the investment costs, as well as those recurrent costs which the community cannot cover in the short run." Working with consumers and government officials to develop that "willingness" and "commitment", becomes a task of health education. The objective is to develop behavior conducive to realizing health benefits-- that is, behavior in support of functioning water supply and sanitation facilities.

The second criterion states that the "local and national institutions responsible for national domestic water supply and sanitation policy must have the responsibility, personnel and

budgetary resources to ensure the construction, expansion and continued operations and maintenance of the improved water and sanitation systems." The ability of institutions to carry out these tasks naturally has a direct impact on the realization of the potential health benefits of water supply and sanitation projects. If systems deteriorate, break down and become nonfunctional, then health benefits will likely not accrue to the population served. Thus, system maintenance, too, is an area of concern to health education in that appropriate training and institutional development will help create "an environment supportive of change." If people are to properly use facilities, the facilities must function properly.

In addition to the investment criteria, the policy paper also outlines the factors that will guide the design of AID-supported domestic water and sanitation projects. Many of these factors have education dimensions and thus would be in the purview of health education. For example, instruction of "users in proper water use and hygiene" must be provided for in project design.

The relevant behavioral objectives of this "user instruction or education" as defined in the paper may be summarized as follows:

- People will use the water and sanitation facilities.
- People will use them properly.
- People will transport water in clean containers.
- People will store household water so as to avoid microbial contamination and mosquito larval breeding.
- People will wash their hands after defecating, before eating or before preparing food.
- People will bathe properly.
- People will clean utensils with safe water.
- Women will breastfeed their children during the first six months of life.
- People will be able to prepare oral rehydration solutions, infant formula and weaning foods in a hygienic manner.

The role of the health education program components of water and sanitation projects is to diagnose the factors which influence these types of behaviors, determine which factors are amenable to educational interventions and then plan and implement an appropriate intervention program.

Chapter 4

TOWARD A STRATEGY FOR IMPROVING HEALTH EDUCATION PRACTICE IN WATER SUPPLY AND SANITATION PROJECTS IN AFRICA

4.1 Elements of a Strategy

Although developments in health education in Africa have been promising over the past few years, much of the activity which has occurred or is presently underway has not been recognized necessarily as health education. Further, among the present program efforts, goals and objectives for behavioral change have been poorly defined making results difficult to measure.

The Africa Bureau strategy is designed to stimulate a reexamination of the nature and scope of health education and to improve its application to domestic water supply and sanitation programs. The strategy is consistent with and supportive of the overall health strategy for the Africa Region and more specifically, with the draft water and sanitation strategy paper. Both of these documents emphasize the priority to be given to human resources development and institution building through the use of existing resources in Africa, AID and international organizations.

The strategy for health education in Africa has three complementary elements or themes:

- Improvement of current health education projects or project components related to water and sanitation programs;
- Strengthening of institutional and individual capability in health education within Africa; and
- Development of a health education capability within the Africa Bureau of AID.

4.2 Basic Principles of the Proposed Strategy

With a view toward effective implementation, this strategy is based on several important operational principles:

- Maximum use of available resources is encouraged. Given the ever shrinking base of funding within AID, it is imperative that all available resources be identified and exploited. These include at a minimum those available through existing bilateral, regional or centrally-funded AID projects, through the Tech

nical Cooperation among Developing Countries (TCDC) program of the United Nations and through other bilateral and multilateral donor agencies, both public and private.

- Active, continuous consultation with field-based development workers in key sectors such as health, education, engineering, agriculture and rural development and energy, host country officials, AID contractors, other private and public agencies is to be undertaken. If the goal is to change the traditional perception of health education and improve its application in development assistance programs, then those responsible for the programs must be actively involved in the development and implementation of a strategy.
- Flexibility of response to articulated needs with the possibility of providing varied kinds of assistance is built into the strategy. If the Bureau wants to stimulate interest in change, then it must be perceived as sensitive and responsive to needs as they are seen in the field.

4.3 Recommendations for Strategy Implementation

In pursuing the three strategic themes for improving health education practice in water supply and sanitation projects, the Africa Bureau can undertake three types of activities: technical assistance, training and preparation of materials and documentation. The following paragraphs present suggestions for implementing each major theme.

4.3.1 Improving the Implementation of Current Health Education Projects or Project Components Funded by AID

It is anticipated that there will be no new water supply and sanitation project starts during FY 1983 and subsequent years. With more than 25 projects or project components now underway, AID has made a significant investment, the return on which, in the form of installed, maintained and utilized facilities needs to be promoted by well-designed and implemented health education activities.

In order to act before it is too late, a desk review of the health education components of all existing water supply and sanitation projects should be undertaken. The review should include an assessment of how these components are functioning as well as guidelines for their evaluation. Once the review is completed, selected projects representing a cross-section of different types of projects should be contacted to ascertain their interest in short-term technical assistance in health education.

Such assistance might consist of the following activities:

- design or redesign of health education components;
- on-site assessment of health education activities with suggestions for improvement as appropriate;
- identification or preparation of health education resource materials and guidance for their adaptation and use; e.g., audio-visual aids; articles on health education theory and practice in Africa; case studies of successful health education projects or project components; training packages.

The feasibility and desirability of utilizing these projects for research and evaluation purposes should also be explored.

4.3.2 Strengthening Indigenous African Capability in Health Education - Individual and Institutional

A survey of existing institutional and individual resources for health education should be carried out as the first step toward reinforcing organized health education resource networks in Africa. Ideally, the survey should be carried out under the joint sponsorship of AID and the Africa Regional Health Education Training Centers in Ibadan and Cotonou. The survey would include information on current and planned programs and projects, research studies, training curricula, health education materials, as well as profiles of staff specialists in health education. Special attention should be given to graduates of African-based training programs.

Previous attempts have been made to establish an association of African health education specialists which would be linked to the International Union for Health Education, and a Pan-African conference on health education was held in Lagos in the summer of 1981. The organization and conduct of the suggested survey should build on these previous efforts.

Existing health education training programs in Africa should be strengthened and reinforced, with attention to pre- and in-service training programs, short courses as well as long-term training. At a minimum, the centers at Ibadan and Cotonou should be reviewed as well as the public health training centers in Lome and Lagos. Training opportunities for both health and non-health personnel at all levels should be explored. Assistance to these institutions might be offered in the following areas:

- faculty development (in-service workshops, on-site consultation, long-term advanced degree training)
- curricula and materials development

- faculty exchange programs
- organization of special short courses
- supervised field training in students' countries of origin
- student scholarships.

Similarly, training or training-related assistance in health education should be provided to the teaching staffs of health and other development-oriented training institutions at the national and regional levels, e.g., the CESSI's in Yaounde and Dakar, the Pan-African Institute for Development in Cameroon, Upper Volta, and Zambia, the CESA0 in Upper Volta, national nursing and midwifery schools, etc. Assistance to these institutions would be similar to that offered to the health education training schools.

4.3.3 Developing a Health Education Capability within the Africa Bureau

Improving the implementation of current health education efforts in water supply and sanitation projects and strengthening indigenous African capability in health education will both require the existence of a basic health education capability within AID. To achieve that objective the Africa Bureau Health and Nutrition Office might initiate any or all of the following activities:

- in-service training opportunities for existing staff in AID/W through special seminars and presentations on health education;
- recruitment of health education specialists through the IDI program who have appropriate behavioral science training;
- formation of an ad hoc group on health education, composed of representatives from offices such as agriculture, education, nutrition as well as health, to serve as an operational focus for implementation of a strategy within the Africa Bureau;
- preparation of a paper on the implications for health education in Africa of the AID policy paper on Domestic Water Supply and Sanitation programs.

In the field, in-service training could be provided to USAID project officers, host country colleagues and AID contractors. When in-country contractor teams include a health education specialist with behavioral science training, that person could be requested to assist with such training.

The preparation of useful resource documents for use by AID personnel should also be considered. In 1978, under a work order with Westinghouse Health Systems, a draft background paper was prepared for the Office of Health to provide guidance to project officers for the design of health education projects or project components. This document was never put in final form and distributed, but it should be reexamined and reworked as necessary. Many of the same ideas and approaches to health education planning appear in this present document.

Other useful documentation might include:

- information packet on health education resources in Africa, composed of items such as:
 - list/descriptions of health education training opportunities in Africa;
 - list/descriptions of AID projects in Africa with health education components;
 - list of available health education materials;
 - samples of training curricula and materials;
 - salient articles on health education.
- supplementary guidelines for social soundness analyses especially tailored for use in water supply and sanitation projects in order to ensure attention to the social and behavioral dimensions of proposed project designs;
- annotated bibliography on health education in Africa.

Development of a health education capability within AID can be defined not only in human resources terms, but also in terms of financial resources as well. The capability to fund or identify funding for all the suggested activities will be critical to progress in improving health education practice.

A review of existing AID projects in the health and non-health sectors should be conducted in order to identify possible funding for the initiatives suggested here. Special attention should be given to centrally-funded or regional projects. In addition to WASH, these would include the Primary Health Care Operations Research Project (PRICOR), the International Nutrition Communications Service (INCS), the Strengthening Health Delivery Systems Project (SHDS) and the Combatting Communicable Childhood Diseases Project (CCCD), the Project for International Training in Health (INTRAH) and the Family Health Initiatives Project.

Chapter 5

RESOURCES AVAILABLE TO SUPPORT PROPOSED ACTIVITIES

Resources related to health education theory and practice and health education applications in water and sanitation projects in Africa are relatively abundant. As with resources of any kind in any field, they can be used only if people know they exist and if they can be easily accessed. A strategy to improve health education practice in water and sanitation programs in Africa must necessarily include attention to maximizing the use of existing resources which fall into four categories:

- documentation
- organizations and networks of organizations
- individual expertise
- health education program components of existing projects.

5.1 Documentation

The potentially relevant "bodies of literature" constitute an endless list. To cite a few, these include:

- health education (general)
- health education (Africa)
- community organization
- social change
- behavioral change theory
- community participation (general)
- community participation in water and sanitation projects
- community water supply projects
- community participation in primary health care
- development communications
- non-formal education

- rural development (general)
- rural development (education and training)
- development anthropology
- applied social psychology

Among the basic publications on health education theory are the following: Health Education Planning, A Diagnostic Approach by Lawrence W. Green et al.; The Health Belief Model and Personal Health Behavior, Marshall Becker, et al.; Communication of Innovation: A Cross-Cultural Approach, Rogers and Shoemaker; and "Planning and Evaluation in Health Education" by Guy Steuart, International Journal of Health Education, Vol. XII/1969, No. 2.

As for health education applied to domestic water and sanitation projects the two major sources of documentation are:

- the International Reference Centre (IRC) for Community Water Supply and Sanitation in The Hague, Netherlands (see Annex A)
- the WASH Coordination and Information Center.

The WASH project in conjunction with the IRC is presently assembling a directory of organizations involved in health education and community participation activities in domestic water supply and sanitation projects. Further, WASH is also preparing a bibliography on the same topics which will include even more entries than the literature reviews prepared by IRC.

Under the heading of documentation would also come educational and audiovisual materials for use in Africa in health education components of water supply and sanitation projects. There are at least two major sources of information on existing materials, one for French-speaking and one for English-speaking Africa:

ENDA (Environnement et Developpement du Tiers Monde) (See Annex B)
 B. P. 3370
 Dakar, Senegal

and

Health Behavior and Education Department
 African Medical and Research Foundation (AMREF)
 P.O. Box 30125
 Nairobi, Kenya

In addition, the WASH project is preparing a directory of health education materials related to water supply and sanitation worldwide.

5.2 Organizations and Networks of Organizations

A significant number of organizations and networks of organizations active in health education and community participation in Africa do exist. Some are particularly involved in water supply and sanitation programs. Others are not. The tables in Appendix C list organizations which fall into several different categories:

- Multilateral assistance agencies
- Bilateral assistance agencies
- Africa regional organizations
- National (country) institutions in Africa
- Private voluntary organizations
- Universities

In each case the location of the organization (United States/Canada, Africa or Europe) is noted, along with key individuals within each organization. AID contractors or grantees such as those listed in the table below are an additional valuable resource.

5.3 Individual Expertise

In addition to those individuals listed as key contacts in specific institutions and organizations, there are many others with relevant expertise who either have no permanent institutional affiliation at this time or whose institution is not presently involved in health education or community participation activities as an institution. Many of these individuals can be identified through the WASH consultant registry.

5.4 Programs and Projects

There are at present 27 AID-funded water and sanitation projects operating throughout Africa. These projects constitute extremely valuable resources for examining and improving the application of health education in a variety of project settings.

In the table which follows the projects have been broken down into three categories:

- those that are primarily water and sanitation projects
- those that are components of larger primary health care efforts; and
- those that are components of other sector projects such as agriculture or rural development.

In each case, the contractor, if there is one, is identified.

AID-ASSISTED DOMESTIC WATER AND SANITATION PROJECTS IN AFRICA
(as of November, 1981)

I. Water and Sanitation Projects (14)

<u>Country</u>	<u>Project Title</u>	<u>Execution Agency/Contractor</u>
Botswana	Environmental Sanitation and Protection Project	New Transcentury Corporation
Cameroon	Margui/Wandala Water Project	CARE
Cape Verde Islands	Sal Desalinization	?
Lesotho	Rural Water Supply/Sanitation Project	Morrison and Mairele, Inc.
Liberia	Hand Dug Wells	CARE
Malawi	Rural Water Supply	Ministry of Lands, Evaluation and Water
Mali	Rural Water (Tambacara Wells)	CARE
Sierra Leone	Royina Water Supply	PVO
Somalia	Comprehensive Ground Water Development	Louis Berger International
Swaziland	Rural Water-Borne Disease Control Project	Academy for Educational Development
Tanzania	Kisongo Water Catchment	
Tanzania	Masai Village Water	

I. Water and Sanitation Projects (14) (cont.)

<u>Country</u>	<u>Project Title</u>	<u>Executing Agency</u>
Togo	Rural Water Supplies/Environmental Sanitation	PSCs Agma Prins and Sarah Fry (health education)
Upper Volta	Rural Water Supply	Medical Care Development (health education)

II. Health Projects with Water or Sanitation Components (7)

Mauritania	Rural Medical Assistance	Dimpex Associates
Niger	Rural Health Improvement	AFRICARE
Senegal	Sine Saloum Rural Health	
Somalia	Primary Health Care	Medical Services Consultants, Inc.
Tanzania	School Health Program	John Snow Public Health Group
Zaire	Basic Family Health	Church of Christ of Zaire
Zaire	Basic Rural Health	?

III. Agriculture and Rural Development and Refugee Projects (6)

<u>Country</u>	<u>Project Title</u>	<u>Executing Agency</u>
Cameroon	Mandara Mts Water Resources	Louis Berger International
Mauritania	Rural Land Reclamation	?
Sudan	Port Sudan Refugee Relief	CARE
Tanzania	Arusha Regional Planning	Development Alternatives, Inc.
Zaire	North Shaba Integrated Rural Development	Development Alternatives, Inc.
Zimbabwe	Intensive Rural Development Areas	?

REFERENCES

- Agency for International Development, Health Policy Series, Water Supply and Sanitation Programs (Draft), Washington, D.C., March 1982.
- Carriere, Jeanne F., Susan H. Colgate, Miriam Jato and Damaris Mounlom, The Nurse and Community Health in Africa, Yaounde, Cameroon, 1979.
- De Lauture, Herve, and Lionel Robineau, Materiel d'Education pour la Sante en Afrique, Repertoire 1, Etudes et Recherches No. 45-79, Environnement et Developpement du Tiers-Monde (ENDA), Septembre 1979.
- Dworkin, Daniel, Community Water Supply Evaluation Summary, Conference Working Paper, Office of Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C., January 1982.
- Green, Lawrence W., Marshall W. Kreuter, Sigrid G. Deeds and Kay B. Partridge, Health Education Planning, A Diagnostic Approach, Palo Alto, California, 1980.
- Green, Lawrence W., Virginia LiWang, Sigrid Deeds, Andrew Fisher, Richard Windsor, Anthony Bennett and Carla Rogers, "Guidelines for Health Education in Maternal and Child Health," International Journal of Health Education, Supplement to Vol. XXI, No. 3, July-September 1978.
- Hochbaum, Godfrey, Measurement of Effectiveness of Health Education Activities, International Journal of Health Education, XIV(2), April-June, 1971, 3-8.
- Ogionwo, W., "Health Education Techniques: An Experimental Study of Methods," Acta Medica Philippina, Vol. 9, No. 1, January-March 1973.
- Steuart, Guy W., "Planning and Evaluation in Health Education," International Journal of Health Education, Vol. XII, No. 2, 1969.
- Van Wijk-Sijbesma, Christine, Participation and Education in Community Water Supply and Sanitation Programmes A Literature Review, Technical Paper No. 12, International Reference Centre for Community Water Supply and Sanitation, The Hague, Netherlands, December 1981.
- White, Alastair, Community Participation in Water and Sanitation: Concepts, Strategies and Methods, Technical Paper No. 17, International Reference Centre for Community Water Supply and Sanitation, The Hague, Netherlands, June 1981.

SELECTED BIBLIOGRAPHY

- Ademuwagun, Z.A., A Review of the Health Education Activities and Future Needs in Africa: Implications for the African Regional Health Education Centre, African Regional Health Education Centre, University of Ibadan, Nigeria, March 1978.
- American Public Health Association, Community Participation in Primary Health Care Projects: An Emperical Review (Draft No. 3) Washington, D.C., November 1981.
- Becker, Marshall, ed., "The Health Belief Model and Personal Health Behavior," Health Education Monographs, Vol. 2, No. 4, Winter 1974.
- Deeds, Sigrid D., A Guidebook for Family Planning Education, Westinghouse Health Systems, Columbia, MD, June 1973.
- Durana, Ines, Teaching Strategies for Primary Health Care, A Syllabus, Rockefeller Foundation, New York.
- Isely, Raymond B., Lardja L. Sanwogou and Jean F. Martin, "Community Organization as an Approach to Health Education in Africa," International Journal of Health Education, Supplement to Vol. XXII, No. 3, July-September 1979.
- Isely, Raymond B., Facilitation of Community Organization: An Approach to Water and Sanitation Programs in Developing Countries, WASH Technical Report No. 7, Water and Sanitation for Health Project, Arlington, Virginia, 17 June 1981.
- Llewellyn, Charles E., Plan for a Health Education Component for the Health Sector II Bilateral Assistance Project in the Dominican Republic, WASH Field Report No. 21, Water and Sanitation for Health Project, Arlington, Virginia, July 1981.
- Mico, Paul, and Helen Ross, Health Education and Behavioral Science, Oakland, California, 1975.
- Perret. H., Social and Behavioral Aspects of Project Work in Water Supply and Waste Disposal, World Bank, Transportation, Water and Telecommunications Department, Public Utilities Note, PUN 52 T, Washington, D.C. February 1980.
- Pisharoti, K.A., Guide to the Integration of Health Education in Environmental Health Programs, WHO, Geneva, (1975).
- Scotney, N., Health Education: A Manual for Medical Assistants and Other Rural Health Workers, Rural Health Series No. 3, African Medical and Research Foundation, Nairobi, (1976b).

Steuart, Guy W., and Carla Rull, Training of Rural Community Workers in Health Education with Special Reference to Water Supply Protection and Use/Maintenance of Sanitation Facilities, WASH Technical Report No. 3, Water and Sanitation for Health Project, Arlington, Virginia, March 1981.

Tonon, Marilyn, "Concepts in Community Participation: A Case of Sanitary Change in a Guatemalan Village," International Journal of Health Education, Supplement to Vol. XXIII, No. 4, October-December 1980.

White, Anne U., "The Role of the Community in Water Supply and Sanitation Projects," in The Impact of Interventions in Water Supply and Sanitation in Developing Countries, Proceedings of a Seminar at the Pan American Health Organization, March 25-26, 1980, Washington, D.C., April 1981.

World Health Organization, Health Education: A Programme Review, WHO Offset Publication No. 7, Geneva 1974.

APPENDIX A
INTERNATIONAL REFERENCE CENTRE
FOR COMMUNITY WATER SUPPLY
AND SANITATION

PARTICIPATION AND EDUCATION
IN COMMUNITY WATER SUPPLY
AND SANITATION PROGRAMMES

A LITERATURE REVIEW

Prepared by
Christine van Wijk-Sijbesma

TECHNICAL PAPER No. 12

December 1981

J.C. van Markenlaan 5
2285 VJ Rijswijk
The Netherlands

Postal Address: P.O. Box 5500
2280 HM Rijswijk
The Netherlands

TABLE OF CONTENTS

	<u>Page</u>
FOREWORD	1
PREFACE	3
SUMMARY AND CONCLUSIONS	7
I <u>PLANNING FOR PARTICIPATION AND EDUCATION IN COMMUNITY</u>	
<u>WATER SUPPLY AND SANITATION PROGRAMMES</u>	15
1. A COMMUNITY WATER SUPPLY AND SANITATION POLICY	16
- Special Programmes for Rural and Urban Fringe Areas	16
- Programme Objectives	19
2. THE MEANING OF COMMUNITY PARTICIPATION	21
3. INTEGRATED PROGRAMME DEVELOPMENT	26
4. PROJECT ALLOCATION	29
- Allocation Strategies	29
- Selection Criteria	31
- Participation in Allocation	34
- Programme Information	38
II <u>INFORMATION ABOUT THE COMMUNITY</u>	41
1. GENERAL VILLAGE CHARACTERISTICS	42
- Delimitation of the Village Area	42
- Socio-demographic and Cultural Composition	43
- Village Leadership	43
- Village Power Structure	44
- Extension Workers	45
- Marginal Groups	45
2. ENVIRONMENTAL SANITATION CONDITIONS	46
- Water Supply Conditions and Practices	46
- Waste Disposal Conditions and Practices	50

3. PUBLIC HEALTH	51
- Existing Health Conditions	51
- Primary Health Care Organization	51
- Health Knowledge, Attitudes and Beliefs	52
- Perceived Health Benefits	53
4. ECONOMIC CONDITIONS	54
- Migration	54
- Ability to Contribute	55
- Vested Interests	56
- Perceived Socio-economic Impacts	57
- General Economic Conditions	58
5. ENVIRONMENTAL SANITATION PROGRAMME PERCEPTIONS	59
- Perceived Problems and Priorities	59
- Additional Perceived Benefits	60
- Constraints to Improvements	61
- Underlying Value Systems	63
6. COMMUNICATION PATTERNS AND ADOPTION OF INNOVATIONS	63
- Communication Channels	63
- Decision Making Patterns	64
- Intra- and Inter-Village Rivalries	65
- Adoption and Cooperation History	65
III <u>INFORMATION FOR THE COMMUNITY</u>	67
1. THE NEED FOR ENVIRONMENTAL SANITATION PROGRAMMES	67
- Environmental Health Conditions and Disease Transmission	67
- Links with Socio-economic Development	68
2. THE CHOICE OF THE SYSTEM	68
- The Presentation of Potential Solutions	68
- Consequences for the Community	69
3. AGENCY EXPECTATIONS OF COMMUNITY ROLES	72
- Conditions for Implementation	72
- Participation in the Planning and Execution of the Installation	72
- Participation in Operation, Maintenance and Administration	73
- Public and Private Sanitary Behaviour	75
4. ANSWERING COMMUNITY QUESTIONS ABOUT THE PROGRAMME	77

IV	<u>OPERATIONALIZATION FOR PROGRAMME DEVELOPMENT</u>	79
	1. METHODOLOGY	79
	- Observation	81
	- Conversation	81
	- Community Self-Survey	84
	- Tests and Measurements	85
	- Records and Documents	86
	2. MANPOWER	87
	- Multidisciplinary Teams of Experts	87
	- Special Services	88
	- Environmental Health Personnel	90
	- Existing Village Services	91
	- Members of the Community	92
	3. INTERIM EVALUATION	93
V	<u>THE ESTABLISHMENT OF THE ENVIRONMENTAL SANITATION FACILITIES</u>	95
	1. LOCAL ADAPTATION OF THE CHOSEN DESIGN	95
	2. SITING OF THE FACILITIES	98
	3. VILLAGE CONTRIBUTIONS	100
	4. LIMITATIONS TO SELF-HELP	101
	5. DIVISION OF RESPONSIBILITIES	106
	6. INAUGURATION CEREMONY	109
VI	<u>THE PLANNING AND IMPLEMENTATION OF THE SANITATION EDUCATION PROGRAMME</u>	111
	1. LOCAL OBJECTIVES AND TARGET GROUPS	112
	- A Family Oriented Approach	113
	- School Health Education	114
	- The Role of the Local Leaders	115
	2. THE MASS MEDIA	116
	- Advantages and limitations	116
	- Possible functions in drinking water supply and sanitation	118

3. INTERPERSONAL CONTACT	119
- Small Group Meetings	120.
- House Visits	121
- Extension and Inequity	122
4. EDUCATION AIDS	123
VII <u>PLANNING FOR CONTINUITY</u>	127
1. OPERATION AND MAINTENANCE	127
2. USER EDUCATION	131
3. VILLAGE LEVEL ADMINISTRATION	132
- Local Specialists and Leaders	133
- Existing Community Organizations	133
- New Village Institutions	134
- User Associations	135
- A Combined Approach	136
- Subcontractors	137
- Private and Group Ownership	138
- Public Ownership	140
4. INTEGRATED ADMINISTRATION	140
5. DELEGATION OF AUTHORITY AND WATER RATES	142
VIII <u>EVALUATION AND COMMUNITY PARTICIPATION</u>	145
1. EVALUATION OF PARTICIPATION	145
- A growing need as a result of other evaluations	145
- Evaluation as part of the regular programme	151
- Evaluations comparing types of participation and education	152
- Process Evaluation	156
2. PARTICIPATION IN EVALUATION	157

IX	<u>HIGHER LEVEL SUPPORT</u>	163
	1. ORGANIZATIONAL STRUCTURE	163
	2. ADMINISTRATION, COORDINATION AND LINES OF RESPONSIBILITY	164
	- Links between the Organizations	164
	- Links within the Organizations	166
	- Continued Liaison with the Community	167
	3. TRAINING	170
	ANNEXES	
I	List of References	175
II	Participation and Education in Drinking Water Supply and Sanitation Programmes: A Simplified Model	205
III	Educational Inputs in Participatory Drinking Water Supply and Sanitation Programme	207
IV	Manpower for Community Participation and Education: Existing Choices in Rural Water Supply Programmes	209
V	Possible Negative Consequences of Drinking Water Supply and Sanitation Projects: A Checklist	211
VI	Country Index	215
VII	Subject Index	219
VIII	Social Aspects of Community Water Supply and Sanitation Programmes: A Flow Diagram	222

ANNEX I: LIST OF REFERENCES

- AARONS, A. et al, Child-to-Child, London, MacMillan Press, 1979
- ABBOTT, E., Report on Work in the Field of Sanitary Engineering, Social and Technical Assistance, Barpali Village Service (AFSC, Orissa/Philadelphia (November 1955)
- ADEMUWAGUN, Z.A., "The role of school health education in developing countries", the Health Education Journal, 29, 4, (1970), pp. 111-120
- ADEMUWAGUN, Z.A., The Ibadan Comfort Stations, an Experiment in Environmental Sanitation Health Education, African Regional Health Education Centre, Dept. of Preventive and Social Medicine, Faculty of Medicine, University of Ibadan, Ibadan, Nigeria, (October 1975)
- ADEMUWAGUN, Z.A., "The challenge of interview techniques to health education", Journal of the Society of Health in Nigeria, (January, 1976), p. 10
- ADENIYI, J.D., "Cholera control: problems of beliefs and attitudes", International Journal of Health Education, 15 (1972), pp. 238-245
- ADENIYI, J.D., "Human waste disposal programmes, the place of health education", International Journal of Health Education, 16, 3, (1973), pp. 206-213
- A.F.S.C. Latrine for Village Use, Barpali Village Service/American Friends Service Committee, Orissa, India, (December 1959)
- AGUA DEL PUEBLO, The Quiche Rural Potable Water and Latrine Program, Agua del Pueblo, St. Louis, n.d.
- AGUA DEL PUEBLO, Manual Docente, Agua del Pueblo, Chimaltenango, Guatemala, June, 1980
- AKINTOLA, F.O., et al, "A survey of people's perceptions as a method of establishing standards for water supply improvement schemes in Nigeria", Water Supply and Management, 3 (1979), pp. 267-273
- AKHAURI, N., "Socio-cultural barriers to rural change in an East Bihar community", Eastern Anthropologist, 11, (1957/58), pp. 212-219
- ALLEN, D., "Kosovo, an end and a beginning", Unicef News, 94, 4, (1977), pp. 18-23
- ALLEN SCOTT, J., Barlow, C.H., "Limitations to the control of helminth parasites in Egypt by means of treatment and sanitation", the American Journal of Hygiene, 27 (1938), pp. 619-649
- ALLES, J., RATNAIKE, J., Learning components in 'Safe Water for Drinking' programmes, Unesco, Unit for Cooperation with Unicef and WFP, Series Notes, Comments, No. 9, Paris, (April 1976)

- ALNY, S.W., MBITHI, P.M., Local Involvement in the Special Rural Development Programme, an overall evaluation of the Special Rural Development Programme, Institute for Development Studies, University of Nairobi, 1972
- AMELSVOORT, V. VAN, "Teaching of better water supplies to medical auxiliaries", in D. Warner (ed.), Rural Water Supply in East Africa, Proceedings of a Workshop at the University College, Dar es Salaam 17-19 December, 1969, BRALUP research paper 11
- ANSYARI, F., KATAMSI, E., "The status of health knowledge and patterns of seeking health advice in rural East Java", International Journal of Health Education, 21, 1, (1978) pp. 34-40
- A.P.H.A. The State of the Art of Delivering Low-Cost Health Services in Developing Countries, A Summary Study of 180 Health Projects, Public Health Association, Washington, (January 1977)
- ARANGO, J.B., "An approach to planning and implementing development programs", Peace Corps Program and Training Journal, 1(1973), pp. 15-20
- ARGENTINA, REP. OF, Plan Nacional de Agua Potable, Buenos Aires, Secretario de Recursos Hidricos, Servicio Nacional de Agua Potable, n.d., (ca. 1971)
- ARGENTINA, REP. OF, Evaluacion de la Ier Etapa del Plan Nacional de Agua Potable Rural, Ministerio de Obras y Servicios Publicos, Subsecretaria de Recursos Hidricos, Servicio Nacional de Agua Potable, Buenos Aires, Enero 1972
- ARGENTINA, REP. OF, Guia para Organizacion y Administracion de Cooperativas y de Sistemas de Abastecimiento de Agua, Ministerio de Obras y Servicios Publicos, Subsecretaria de Recursos Hidricos, Servicio Nacional de Agua Potable, Buenos Aires, 1971
- ARIYADASA, K.D., Schools and Primary Health Care, Unesco, Unit for Cooperation with Unicef and WFP, Series Notes, Comments, No. 19, Paris, (December 1979)
- ARIYARATNE, A.T., Sarvodaya and Development, Sarvodaya Shramadana Movement, Moratuwa, Sri Lanka, (Februari 1979)
- AROLE, R.S., AROLE, M., "Comprehensive rural health project, Jamkhed", Journal of the Christian Medical Association of India, 74, 4, (1972), pp. 177-180
- ASCROFT, J., "A conspiracy of courtesy", International Development Review (Focus), 16, 1, (1974), pp. 8-11
- BACKHEUSER, M.P., KAMPEL, M.M., PEREIRA DA COSTA, A., "Um programa de educaco comunitria para sade", Boletim de Sanitaria Panamericana, 84, 3, (1978), pp. 255-261
- BANTJE, H., Sociological Aspects of Improved Water Supply in the Coast Region, BRALUP, University of Dar-es-Salaam, June 1978

- BARRA-ROWLAND, F.L. DE LA, Analysis of Experiences of Self-Help and Public Participation in Rural Water Supplies: The Case of Mexico, OECD Development Centre, Experiences in Rural Development, Occasional Paper No. 6, Paris, (June 1978)
- BELCHER, J.C., VAZQUEZ-CALCERRADA, P.B., Cross-Cultural Aspects of Sanitation Norms, Paper prepared for the Seminar 'Community Development in a Sociological Perspective; 3rd World Congress of Rural Sociology, Baton Rouge, Louisiana, August 23-24, 1972
- BELLONCLE, G., Total Participation in Health Programs: Some Reflections on the Niger Experience, Institut de Recherches et d'Applications des Méthodes de Développement, Paris, 1973/74
- BENNELL, T., Planning and Design of Rural Drinking Water Projects: Results from Pilot Runs, OECD Development Centre, Occasional Papers on Experience in Rural Development, 8, March 1979
- BENNETT, F.J., SERWADDA, D., JELLIFFE, D.B., "Kiganda concepts of diarrhoeal disease", East African Medical Journal, 41, 5, (1964)
- BEYENE, A., Planning Considerations for Rural Water Supply in Developing Countries, Ethiopian Water Resources Authority, Addis Ababa, (May 1978)
- BHARIER, J., "Improving rural water supply in Malawi", Finance and Development 15, (September 1978), pp. 34-36
- BHATNAGAR, G.S., "Monomorphic and polymorphic leadership in some North Indian villages", Eastern Anthropologist, 25, (1972), pp. 235-240
- BLACKMORE, M.D., BOYDELL, R.A., MBERE, E.N., Botswana Low Cost Sanitation Project, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/Ross Institute of Tropical Hygiene, Oxford, 5-9 July, 1977
- BLACKWELL, J.E., "Fundamental education and village development in Nepal", Community Development Journal, 4, (1969), pp. 178-185
- BRIDGER, G., SOISSONS, M. DE, Famine in Retreat?, London, Dent and Sons, 1970
- BRISCOE, J., The Role of Water Supply in Improving Health in Poor Countries (with special reference to Bangladesh), Paper presented to the U.S. National Academy of Science Workshop on 'Effective Interventions to Reduce Infection in Malnourished Populations', Haiti, June 13-16, 1977
- BRISCOE, J., The Organization of Labour and the Use of Human and Other Organic Resources in Rural Areas of the Indian Subcontinent, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/Ross Institute of Tropical Hygiene, Oxford, 5-9 July, 1977b
- BRISCOE, H., AHMED, S., CHAKRABORTY, M., "Domestic water use in a village in Bangladesh, I: A methodology and a preliminary analysis of use patterns during the 'Cholera Season'", Progress in Water Technology, 11, 1/2, (1978), pp. 131-141

- BROWNE, D.G., Dangore Water Supply: a Study of a NWRC Rural Well, National Water Resources Commission, Addis Ababa, (1974)
- BRYANT, J., Health and the Developing World, Cornell University Press, Ithaca/London 1969
- BUCKLES, P.K., The Introduction of Potable Water and Latrines. A Case Study of Two Communities in Guatemala, World Bank, New York, (May 1978)
- BUCKLES, P.K., KARP, A.W., CLEMENS, B.W., The Training and Utilization of Rural Water Technicians in Guatemala, background paper for the 22nd JCHP Study on Water Supply and Sanitation Components of Primary Health Care, Geneva, (1978)
- BURGEAP, La Construction des Puits en Afrique Tropicale et l'Investissement Human, Séries Techniques Rurales en Afrique BURGEAP Ministère de la Coopération, Paris, 4, (1974)
- BURTON, J., "Enteric diseases and health education", International Journal of Health Education, 7, (1964), pp. 57-67
- CAIRNCROSS, S., CURTIS, D., FEACHEM, R., Some Aspects of Village Participation in Rural Water Programmes, Paper presented at the Symposium on Community Water Supply in Development Cooperation, Amsterdam, Royal Tropical Institute, 7-10 February, 1977
- CAIRNCROSS, S., et al, Evaluation for Village Water Supply Planning, WHO International Reference Centre for Community Water Supply, Technical Paper Series, 15, The Hague, February 1980
- CAMERON, S., Local Participation in Bank-Supported Urban Development Projects, World Bank, March 1978 (Unpubl. paper)
- CARDENAS, M., Community Participation and Sanitation Education in Water Supply and Sanitation Programmes in Rural Areas of Paraguay, Paper presented at the meeting of temporary consultants on the Study of Water Supply and Sanitation Components of Primary Health Care for the Unicef/ WHO Joint Committee on Health Policies, Geneva, 20-27 June, 1978
- CARDENAS, M., "Rural water supply and sanitation education in Paraguay", Assignment Children, 45/46 (Spring 1979), pp. 109-120
- CARRUTHERS, I., Impact and Economics of Community Water Supply, a Study of Rural Water Investment in Kenya, Agrarian Development Unit, Wye College, University of London, (1973)
- CARRUTHERS, I., BROWNE, D., "The economics of community water supply", in R. Feachem, M. McGarry, D. Mara (eds.), Water, Wastes and Health in Hot Climates, London, Wiley and Sons, (1977), pp. 130-161
- CELESTIN, H.N., "La educacion para la salud: funcion que desempeña en un programa de lucha contra la esquistosomiasis", Boletin de Sanitaria Panamericana, 82, 6, (1977), pp. 520-530

- CHAMBERS, R., BELSHAW, D., Managing Rural Development: Lessons and Methods from Eastern Africa, Institute for Development Studies, discussion paper no. 15, University of Sussex, Brighton, (1973)
- CHANDRA, P., "Communication of some new ideas in a Mahya Pradesh village: a sociology study conducted in a mixed village", Eastern Anthropologist, 17, 3, (1964), pp. 183-214
- C.H.E.B., Health Education Strategy for the Slow Sand Filtration Project Phase II in India, Paper presented at the International Meeting on Extension and Community Participation in the SSF Project, WHO International Reference Centre for Community Water Supply, The Hague, May 29-June 2, 1978
- C.H.E.B., Report on Orientation Training Programme for Health and Community Development Workers and Local Leaders of Village Borujwada, SSF Project Phase II, Central Health Education Bureau, New Delhi, June 1978
- CHEGE, F.W., RÖLING, N. et al, Small Farmers on the Move: Results of a Panel Study in Rural Kenya, Paper for the fourth World Congress of Rural Sociology, Torun, Poland, 9-15 August, 1976
- CHEN, P.C.Y., "The water seal latrine in a rural Malay community", Far East Med. Journal, 4, December 1968, pp. 386-389
- CHEN, P.C.Y., "The method of disposal of human excreta used by 177 rural Malay households", The Medical Journal of Malaya, 23, 3, (1969), pp. 159-168
- CHEN, P.C.Y., "Indigenous concepts of causation and methods of prevention of childhood diseases in a rural Malay community", Journal of Tropical Paediatrics, 16, (1970), pp. 33-42
- CHEN, P.C.Y., "Socio-cultural aspects of a cholera epidemic in Trengganu, Malaysia", Tropical Geographical Medicine, 23, (1971), pp. 296-303
- CHESHAM, M., "Community development trust fund of Tanzania, village water wells programme", in D. Warner, (ed.) Rural Water Supply in East Africa, proceedings of a Workshop held at the University College, Dar-es-Salaam, 17-19 December, 1969, BRALUP Research Paper no. 11, pp. 157-159
- CHOWDHURY, Z., "The paramedics of Savar: an experiment in community health in Bangladesh", Development Dialogue, 1, (1978), pp. 41-50
- CLINARD, M.B., Slums and Community Development: Experiments in Self-Help, New York/London, The Free Press/Collier-McMillan, (1966)
- COCHRANE, G., "The administration of Wagina resettlement scheme", Human Organization, 29, (1970), pp. 123-132
- COLLIER, D., Squatters and Oligarchs: Authoritarian Rule and Political Change in Peru, Johns Hopkins University Press, Baltimore/London, 1976
- COLCMBIA, REP. OF, Programa Nacional de Saneamiento Basico Rural, Instituto Nacional Para Programas Especiales de Salud, Division de Saneamiento Basico Rural, n.d.

- COLOMBIA, REP. OF, La Participación Comunitaria en el Plan Nacional de Agua Potable y Alcantarillado Rural en Peru, INAS, Division de Saneamiento Básico Rural, Sección de Promoción, SBRP 0011, Bogotá, n.d.
- COLOMBIA, REP. OF, La Participación Comunitaria en el Plan Nacional de Agua Potable Rural de la Argentina, División de Saneamiento Básico Rural, Sección de Promoción, SBRD 0014, INPES, Bogotá, n.d.
- COLOMBIA, REP. OF, Programa Nacional de Saneamiento Básico Rural, Ministerio de Salud, Instituto Nacional de Salud, Bogotá, 1973
- COLOMBIA, REP. OF, Manual de Educación Sanitaria, INPES, División de Saneamiento Básico, Sección de Promoción, Agosto de 1974
- COLOMBIA, REP. OF, Manual de Procedimientos en Promoción Comunitaria para el Programa Nacional de Saneamiento Básico Rural, Instituto Nacional Para Programas Especiales de Salud, Division de Saneamiento Básico Rural, Sección de Promoción, SBR No. 0062, Bogotá, Enero de 1975
- COLOMBIA, REP. OF, Programa de Capacitación de Juntas Administradoras de Acueductos y Alcantarillados Rurales, Instituto Nacional de Salud, Division de Saneamiento Básico Rural, Sección de Promoción Comunitaria, Bogotá, Noviembre de 1980.
- COSTA, R.L., Groupe de travail sur l'approvisionnement en eau et services sanitaires des zones rurales, Réunion Inter-Etatique des Responsables Gouvernementaux de l'Approvisionnement en Eaux et de l'Assainissement en Milieu Rural, Ouagadougou, Haute Volta, 6-10 Decembre, 1976, Institut de Génie de l'Environnement, Ecole Polytechnique Fédérale, Lausanne, Suisse, Avril, 1977, pp. 190-196
- COURTEJOIE, J., ROTSART DE HERTAING, I., NZUGU, C, Helminthiaseis, creating awareness of the problem along young people, supplement to International Journal of Health Education, 21, 2, (1978)
- COURTEJOIE, J., HERMAN, F., "Une expérience d'éducation sanitaire en Afrique Centrale", Revue Médicale de Liège, 21, (1966), pp. 265-267
- CURTIS, D., Socio-Economic Studies in Phase II of the Slow Sand Filtration Project: a Practical Guide, Birmingham University, (1977a)
- CURTIS, D., The 'Social Factor' in Sanitation Programmes, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/ Ross Institute of Tropical Hygiene, Oxford, 5-9 July, 1977, (1977b)
- DAVE, P.N., Developing Relevance Based Learning Materials: a Record of Experiences with Exemplar Learning Materials, Unesco, Unit for Cooperation with Unicef and WFP, Series Notes, Comments, No. 12, Paris, November 19, 1979
- DAVELLAAR, H., Notice in: From the Unicef Waterfront, 19, (August, 1978), pp. 6
- DEGOMA, E.S., OUANO, E.A.R., POLPRASERT, C., "The need for integrated planning in rural health services", Progress in Water Technology, II, 1/2, (1978), pp. 97-107

- DEOM, J., Water Resources Development and Health, a Selected Bibliography, WHO, M.P.D. 76.6, Geneva, (1976)
- DERRYBERRY, M., "Health education aspects of sanitation programmes in rural areas and small communities", World Health Organization, 10, (1954), pp. 145-154
- DOBYNS, H.F., "Thirsty Indians, introduction of wells among people of an arid region", Human Organization, 9, (1952), pp. 33-36
- DODD, S.C., A Controlled Experiment on Rural Hygiene in Syria, American University of Beirut/American Press, Social Science Series No. 7, Beirut, 1934
- DOMMEN, A.J., "The bamboo tube well: a note on an example of indigenous technology", Economic Development and Cultural Change, 23, (1975), pp. 483-489
- DONALDSON, D., "Rural water supply in Latin America: organizational and financial aspects", Carnets de l'Enfance, 34, (1976), pp. 46-55
- DONALDSON, D., "Health issues in developing country projects", in C.G. Gunnerson, J.M. Kalbermatten (eds.) Environmental Impacts of International Civil Engineering Projects and Practices, American Society of Civil Engineers, New York, 1978, pp. 134-157
- DOUGLAS, M., Purity and Danger, an Analysis of Concepts of Pollution and Taboo, London, Routledge and Kegan Paul, 1966
- DRENCKHAHN, V., "Training sanitarians in the Pacific", International Journal of Health Education, 8, (1965), pp. 95-99
- DUBE, S.C., "Cultural factors in rural community development", Journal of Asian Studies, 16, (1956), pp. 19-30
- DUBE, S.C., India's Changing Villages, London, Routledge and Kegan Paul, (1958)
- DUBE, S.C., "Communication innovation and planned change in India", in D. Lerner, W. Schramm (eds.), Communication and Change in the Developing Countries, East West Centre Press, Honolulu, (1967), pp. 129-167
- DUBEY, K.C., "A note on water divining in the tribal district of Jhabua, M.P.", Eastern Anthropologist, 21, (1968), pp. 79-82
- DWIVEDI, K.N., TIWARI, I.C., MARWAH, S.M., "India, innovations in health education in rural schools", International Journal of Health Education, 16, 2, (1973), pp. 100-108
- E.E.C., Sectorial Evaluation (Ex-Post) of Urban and Village Water Supply Projects, Vol. I, II, Commission of the European Communities, Directorate-General for Development, Brussels, August 1978
- EHLAN, D.B., "Mana, a health education game", International Journal of Health Education, 21, 1, (1978), pp. 66-67

- ENDA, Amélioration de l'Eau et l'Assainissement d'un Quartier, Propositions pratiques, African Environment, Séries Relais Technologique, RT 2F, ENDA, Dakar, (July, 1977)
- ELMENDORF, M., Appropriate Technology for Water Supply and Waste Disposal, a Behavioral Case Study: the Artibonite Valley and Port-au-Prince, Haiti, World Bank, Energy, Water and Telecommunications Department, n.d.
- ELMENDORF, M., "Public participation and acceptance", in C.G. Gunnerson, J.M. Kalbermatten, (eds.), Environmental Impacts of International Civil Engineering Projects and Practices, American Society of Civil Engineers, New York, 1978. pp. 184-201
- ELMENDORF, M., Women, Water and Waste: Beyond Access, a Discussion Paper for the Equity Policy Centre Mid-Decade Workshop, 'Women, Water and Waste, Mid-Decade Forum', World Conference of the UN Decade for Women, Copenhagen, July 1980
- ELMENDORF, M., MCGARRY, M., Appropriate Technology for Water Supply and Waste Disposal, a Behavioral Case Study: Chan Kom, Mexico, World Bank, Energy, Water and Telecommunications Department, February 1978
- ETHERTON, D., Water and Sanitation in Slums and Shanty Towns, Unicef, New York, May 1980
- ETHIOPIA, REP. OF, Findings and Recommendations from the 1979 Review of Rural Water in Hararqhe Region, Report of a Workshop held at Dire Dawa, Gov. of Ethiopia/SIDA/VIK, November 8-13, 1979
- FANAMANU, J., VAIPULU, T., "Working through the community leaders: an experience in Tonga", International Journal of Health Education, 9, 3, (1966), pp. 130-137
- FATHI, A., "Leadership and resistance to change: a case from an under-developed area", Rural Sociology, 30, 2, (1965), pp. 204-212
- FEACHEM, R.G., "Appropriate Sanitation", New Scientist, 8, (January, 1976)
- FEACHEM, R.G., Public Health Studies in Phase II of the Slow Sand Filtration Project, Ross Institute of Tropical Hygiene, London School of Hygiene and Tropical Medicine, prepared for the WHO International Reference Centre for Community Water Supply, London/The Hague, 1977, (1977a).
- FEACHEM, R.G., "Water supplies for low income communities: resource allocation, planning and design for a crisis situation", in R. Feachem, M. McGarry, D. Mara (eds.), Water, Wastes and Health in Hot Climates, London, Wiley and Sons, 1977, (1977b), pp. 75-95
- FEACHEM, R.G. et al, Water, Health and Development, an Interdisciplinary Evaluation, London, TriMed Books Ltd., (1978)
- FELICIANO, G.M., FLAVIER, J.M., "Strategy of change in the barrio: a case of rural waste disposal", in D. Lerner, W. Schramm (eds.), Communication and Change in the Developing Countries, East West Centre Press, Honolulu, (1967), pp. 179-288

- FENWICK, K.W.H., A Progress Report on the Zaina Environmental Sanitation Scheme, a Pilot Project in Rural Africa, n.d. (ca. 1967)
- FOSTER, G.M., "Relationships between theoretical and applied anthropology: a public health program analysis", Human Organization, 11, 3, (1952), pp. 5-16
- FOSTER, G.M., Traditional Cultures and the Impact of Technological Change, New York, Harper and Row, (1962); reprinted as Traditional Societies and Technological Change, New York, Harper and Row, (1973)
- FRANKEL, R.J., YOOME, S., A Contest of Spirits: the River versus the 'Pra Pa', unpublished paper, Asian Institute of Technology, Bangkok, (1973)
- FREIRE, P., Pedagogy of the Oppressed, New York, Herder and Herder, (1971)
- FUGLESANG, A., Applied Communication in Developing Countries: Ideas and Observations, Dag Hammarskjöld Foundation, Uppsala, (1973)
- FUNCK, J.C., "L'introduction d'un programme d'eau potable à Belhassenat", Carnets de l'Enfance, 34, (1976), pp. 71-78
- GACHUKIA, E., "Women's self-help efforts for water supply in Kenya", Assignment Children, 45/46, (Spring 1979), pp. 167-174
- GHANDHIGRAM RURAL INSTITUTE, Research Activities 1964-1976: Major Findings and Implications, Bulletin of the Gandhigram Institute of Rural Health and Family Planning, 1977
- GLENNIE, C., The Rural Piped Water Programme in Malawi, A Case Study in Community Participation, University of London, Dept. of Civil Engineering, Imperial College of Science and Technology, September 1979
- GOULDS, H.A., "Modern Medicine and Folk Cognition in Rural India", Human Organization, 24, 3, (1965)
- GOYDER, C., Sanitation in the Health and Social Development Projects Supported by Oxfam, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/Ross Institute of Tropical Hygiene, Oxford, 5-9 July, 1977
- GRIMES, O.F., Housing for Low-Income Urban Families, Economics and Policy in the Developing World, World Bank Research Publ., Johns Hopkins University Press, 1976
- GRONDIN, M., Comunidad Andina: Explotación Calculada, Secretaria de Estado de Agricultura, Santo Domingo, R. Dominicana (1978)
- GUGGENHEIM, H., FANALE, R., "Water storage through shared technology, four projects among the Dogon in Mali", Assignment Children, 45/46, (Spring 1979), pp. 151-166
- GUMPERZ, J.J., "Religion and social communication in village North India", Journal of Asian Studies, 23, (1964), pp. 89-97

GUNARATNE, V.T.H., Inaugural Address, at the Research Study Group Meeting on Appropriate Technology for Improvement of Environmental Health at the Village Level, SEARO, 16-20 October, 1978

GUPTA, S.C., "Some observations on the practice of social and preventive medicine in ancient India", Social Science and Medicine, 4, 1, (1970), pp. 65-74

GUZMAN, I. DE, "Health educational aspects of community development including community organization in the Philippines", in S. Karsunuma, N. Maruchi, M. Togo (eds.), Health Aspects of Community Development in South East Asia, proceedings of the 4th SEAMIC Seminar, Tokyo, South East Asian Medical Information Centre, (1977), pp. 247-252

HALL, B.L., Wakahi wa Furaha, an Evaluation of a Radio Study Group Campaign, Uppsala, Scandinavian Institute of African Studies, 1973

HALL, B.L., "Revolution in rural education: health education in Tanzania", Community Development Journal, 9, 2, (1974), pp. 133-139

HALL, B.L., Mtu ni Afya: Tanzania's Health Campaign, Clearing House on Development Communication, Information Bulletin 9, Washington D.C., (June 1978)

HALL, B.L., Creating Knowledge: Breaking the Monopoly; Research Methods, Participation and Development, Research Project working paper 1, International Extension College, I.E.C. Broadsheets on Distance Learning no. 6, Cambridge, (1978b)

HALL, B.L., MERRIMAN, D.O., Recommendations on Upper Region Water Project, January 1977 (Unpubl. doc.)

HALL, E.T., The Silent Language, Fawcett, New York, (1964)

HAQUE, W. et al, "Towards a theory of rural development", Development Dialogue, 2, (1977), pp. 133-137

HARDERWIJK, W. VAN, Een Technies Project als Ontwikkelingssamenwerking; Een Studie: Hoezo Samen? (A Technical Project as Development Cooperation; A Study: What Cooperation?), Werkgroep Waterbeheer, Amsterdam/Delft, April 1980 (unpubl. doc.)

HARLAUT, A., "Problems encountered in the planning of rural water supplies in Eastern and Southern Africa", Proceedings Second World Congress IWRA, New Delhi, India, December 1975, Vol. II, pp. 563-570

HARLAUT, A., A Practical Method of Evaluating Alternative Water Supply Systems for the Development of Rural Areas, Paper prepared for the Third World Congress, IWRA, Sao Paulo, Brazil, 1978, SWECO, Stockholm, Special Report no. 01:77.1, August 1977

HARLAUT, A., HANSEN, L., Botswana Rural Water Supply: Evaluation of Existing Rural Water Supply Schemes and Preparation of Guidelines for Nitrate Reduction of Contaminated Boreholes, Final Report, SIDA/SWECO, Stockholm, August 1978

- HAUK, H.M. et al, Aspects of Health Sanitation and Nutritional Status in a Siamese Rice Village, Cornell-Thailand Project, Interim Reports, No. 2, Ithica, New York, September 1956
- HEIJNEN, J.D., CONYERS, D., "Impact studies of rural water supply", in G. Tschannerl, (ed.), Water Supply, proceedings of the Conference on Rural Water Supply in East Africa, BRALUP University of Dar-es-Salaam, research paper no. 20, (5-8 April 1971), pp. 53-65
- HERZOG, W. et al, Patterns of Diffusion in Rural Brazil, East Lansing, Michigan State University, Department of Communication, Report (1968)
- HIMA, G., "Hydraulique villageoise et investissement humain au Niger", Carnets de l'Enfance, 34, (1976), pp. 77-88
- HOFF, W., "Overcoming barriers to sanitary improvements", Salubritas, 3, 4, (October 1979), pp. 3-6
- HOLLSTEINER, M.R., "The unwashed urban multitudes", Assignment Children, 45/46, (Spring 1979), pp. 79-92
- HOLMBERG, A.R., "The wells that failed: an attempt to establish a stable water supply in Viru Valley, Peru", in E.H. Spicer, Human Problems in Technological Change, a Casebook, New York, Russell Sage Foundation (1952), pp. 113-126
- HOLMES, A.C., Health Education in Developing Countries, London, Thomas Nelson and Sons, (1964)
- HOPPER, G., "The environmental aspects of the planning of community health services in Malawi", Malawi Medical Bulletin, 1, (1967), pp. 1-17
- HOWELL, A.M., "Self-help or cooperative involvement: approaches to effective development in rural settlements", Habitat International, 4, 1/2, (1979), pp. 207-213
- HOWELL, A.M., From Self-Help to Cooperative Involvement in Rural Water Supply Programmes of Developing Countries, M.A. Thesis, University of Toronto, Dep. of Geography (1977)
- HUIZER, G., Peasant Unrest in Latin America, Ph.D. Thesis, University of Amsterdam, (1970)
- INTERNATIONAL AGRICULTURAL CENTRE, De Kleine Boer en de Ontwikkelings-samenwerking, Eindrapport van het vooronderzoek, Wageningen, I.A.C., (1976)
- I.E.O.S., Sistemas de Agua Potable en el Area Rural y Participación Comunitaria, Instituto Ecuatoriano de Obras Sanitarias, Dirección Nacional de Planificación, División de Tecnología, Departamento de Promoción y Educación Sanitaria, Quito, Ecuador, Julio 1980
- IMBODEN, N., Planning and Design of Rural Drinking Water Projects, A Research Framework to Analyse Experiences with Rural Drinking Water Schemes, OECD Development Centre, Experiences in Rural Development, Occasional Paper No. 2, September 1977

INSTITUT DU GENIE DE L'ENVIRONNEMENT, Réunion Inter-Etatique des Responsables Gouvernementaux de l'Approvisionnement en Eau et de l'Assainissement en Milieu Rural, Ouagadougou, Haute Volta, 6-10 décembre 1976, Institut de Génie de l'Environnement, Ecole Polytechnique Fédérale de Lausanne, Suisse, avril 1977

ISLAM, N. et al, "Water and sanitation in Bangladesh", Assignment Children, 45/46, (Spring 1979), pp. 131-143

ISELY, R.B., "A community organisation approach to clean water and waste disposal in Cameroonian villages", Progress in Water Technology, II, 1/2, (1978), pp. 109-116

ISELY, R.B., "Reflections on an experience in community participation in Cameroon", Annales de la Société Belge de la Médecine Tropicale, 59 (suppl.), 1979, pp. 103-115

ISELY, R.B., MARTIN, J.F., "The village health committee: starting point for rural development", WHO Chronicle, 31, (1977), pp. 307-315

ISELY, R.B., SANWOGOU, L.L., MARTIN, J.F., Community Organisation as an Approach to Health Education in Rural Africa, International Journal of Health Education, 22, 3 (suppl.), (September 1979)

JACKSON, I.C., Advance in Africa, a Study of Community Development in Eastern Nigeria, Oxford University Press, London, (1956)

JACKSON, T., "Rural sanitation technology, lessons from participatory research", Assignment Children, 45/46, (Spring 1979), pp. 51-74

JAHN, S. AL AZHARIA, "Traditional practices of handling drinking water in tropical developing countries", Aqua, 9/10, (1980), pp. 14-15

JAIN, N.C., Some Social Psychological Factors Related to the Effectiveness of Radio Forums, East Lansing, Michigan State University, Department of Communication, Diffusion of Innovations, Technical Report No. 11, (1969)

JAIN, N.C., The Influence of Group Radio Listening, Discussion, Decision and Commitment on Attitude Change in Radio Forums, Paper presented at the Association for Education in Journalism, Berkely, (1969)

JAKOBSEN, B., ASCROFT, J., PADFIELD, H., "The Case for Rural Water in Kenya", in M.E. Kempe, L.D. Smith (eds.), Strategies for Improving Social Welfare, Proceedings of a Workshop held at the Institute for Development Studies, University of Nairobi, May 31-June 3, 1971, I.D.S., University of Nairobi, Occasional Paper 4, (1971), pp. 412-450

KANUNGO, S.C., A Report on the Use of Latrines, Social and Technical Assistance, Barpali Village Service/AFSC Barpali, Orissa/Philadelphia, July 1957

KAR, S.B., "A model for persuading resistants for planned change", International Journal of Health Education, 12, 3, (1969), pp. 106-117

- KAR, S.B., "Communication research in health and family planning programmes in India", International Journal of Health Education, 13, 3, (1970), pp. 94-102
- KATES, R.W., Experience in User-Choice from Kenya and Tanzania, Working Paper No. 5 presented at the International Development Research Centre Seminar on Rural Water Supply and Sanitation, Lausanne, 29 May-1 June 1973
- KAWATA, K., "Of typhoid fever and telephone poles, deceptive data on the effect of water supply and privies on health in tropical countries", Progress in Water Technology II, 1/2, (1978), pp. 37-43
- KEBEDE, H., Improving Village Water Supplies in Ethiopia: A Case Study of the Socio-Economic Implications, United Nations Economic Commission for Africa, ECA/Unicef, Training and Research Centre for Women, Addis Ababa, (1978)
- KETCHAM, D.L., "Digging wells in Madagascar, an achievement of combined effort", Community Development Journal, 5, (1970), pp. 197-203
- KHARE, R.S., "Ritual purity and pollution in relation to domestic sanitation", Eastern Anthropologist, 15, 2, (1962), pp. 125-139
- KHARE, R.S., "A study of social resistance to sanitation programmes in rural India", Eastern Anthropologist, 17, 2, (1964), pp. 86-94
- KIDD, R., BYRAM, M., Popular Theatre and Development: A Botswana Case Study, Popular Theatre Committee, University College of Botswana, Institute of Adult Education, Gaborone, January 1978
- KINCAID, D.L., et al, Mothers' Clubs and Family Planning in Rural Korea: the Case of Orvu Li, Case Study no. 2, East West Communications Institute, Honolulu, undated (ca. 1975)
- KIVLIN, J.E., ROY, P., Communication in India: Experiments in Introducing Change, National Institute of Community Development, Hyderabad, Research Report no. 15, (1968)
- KIPUYO, M.A.O., "Mass treatment of urinary schistosomiasis with Ambilhar among the Wambugwe of Hanang District, Northern Tanzania", in D. Warner (ed.), Rural Water Supply in East Africa, Proceedings of a Workshop held at the University College, Dar-es-Salaam, 17-19 December 1969, BRALUP Research Paper No. 11, pp. 116-121
- KLONGLAN, G.E., Radio Listening Groups in Malawi, Africa, Ames, State University, Rural Sociology Report no. 70, (1967)
- KOCHAR, V., et al, "Human factors in regulation of parasitic infections: cultural ecology of hookworm populations in rural West Bengal", in F.X. Grollip, H.B. Haley, (eds.), Medical Anthropology, The Hague, Mouton, (1976), pp. 287-312
- KOCHAR, V., Intrinsic Regulators of Man-Parasite Interactions: Culture Patterns and Human Behaviour Relevant to Hygiene, Sanitation and Disposal of Excreta in a Rural West Bengal Region, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/Ross Institute of Tropical Hygiene, Oxford, (5-9 July 1977)

- KREYSLER, J., "Total coli counts: method to determine biological contamination of rural water supplies, the Ismani example", in D. Warner (ed.), Rural Water Supply in East Africa, Proceedings of the Workshop on Rural Water Supply, University College of Dar-es-Salaam, BRALUP, Research Paper no. 11, (17-19 December 1969), pp. 82-87
- KREYSLER, J., "Uhuru na maji: health, water supply and self-reliance in Mayo village", Journal of Tropical Pediatrics, 16, (1970), pp. 116-123
- KRISHNA, K., Induced Change in Health Behaviour, Planning, Research and Action Institute, Lucknow, India, (1967)
- LAAK, F. VAN DER, "The Ndoleleji water development scheme", in D. Warner (ed.), Rural Water Supply in East Africa, Proceedings of the Workshop on Rural Water Supply, University College of Dar-es-Salaam, BRALUP, Research Paper no. 11, (17-19 December, 1969), pp. 165-170
- LEES, S.H., "Socio-Political Aspects of Canal Irrigation in the Valley of Caxaca, Volume 2", in K.V. Plannery (ed.), Prehistory and Human Ecology of the Valley of Oaxaca, Memoirs of the Museum of Anthropology, University of Michigan, Ann Arbor, 6, (1973)
- LELE, U., The Design of Rural Development, World Bank, Johns Hopkins University Press, Baltimore, (1975)
- LEST, J.C.C. VAN DER, Community Self Survey: Purpose and Significance; Directions for Application, Working Party on Rural Sociological Problems, Ministry of Social Work, The Netherlands, The Hague/FAO, Rome, (1962)
- LETLHAKU, L.L.M., "Towards integrated health education activities", International Journal of Health Education, 7, (1964), pp. 188-198
- LEVINE, R.J., et al, "Failure of sanitary wells to protect against cholera and other diarrhoeas in Bangladesh", The Lancet, (July, 1976), pp. 86-89
- LIN, N., BURT, R.S., Roles of Differential Information Channels in the Process of Innovation Diffusion, Monograph 001, International Centre for Social Research, Department of Sociology, State University of New York, Albany, (1973)
- LINDEN, J.J. VAN DER, The Bastis of Karachi, Types and Dynamics, Ph.D. Thesis, Free University of Amsterdam, April 1977
- LINDENBAUM, S., "Santé et maladie au Pakistan Oriental", Etudes Rurales, 32, (1968), pp. 94-103
- LOCKETZ, L., "Health education in rural Surinam: use of video tape in a national campaign against schistosomiasis", PAHO Bulletin, 10, 3, (1976), pp. 219-226, also published in Boletín de Sanitaria Panamericana, 81, (1976)
- LOGAN, H.H., "Humoral medicine in Guatemala and peasant acceptance of modern medicine", Human Organization, 32, (1973), pp. 385-395

- LOPEZ OROZCO, O., Capacitación Continuada en Desarrollo de la Comunidad para Promotores de Saneamiento Basico Rural, Instituto Nacional de Salud, Division de Saneamiento Basico Rural, Sección de Promoción, Bogotá, Colombia, (enero de 1976)
- LORING, W.C., "Environmental health education, a different orientation", International Journal of Health Education, 20, 1, (1977), p. 51-56
- LOVEL, R., Planning and Evaluation of a Community Extension Programme: Health Extension in Phase 2 of the Slow Sand Filtration Programme, Institute of Development Studies, University of Sussex/WHO International Reference Centre for Community Water Supply, Brighton/The Hague, unpublished document, (1978)
- LOZOFF, B., KAMATH, K.R., FELDMAN, R.A., "Infection and disease in South Indian families: beliefs about childhood diarrhoea", Human Organization, 34, (1975), pp. 353-358
- MAITRA, M.S., "Sanitation for the poor in Calcutta", in A. Pacey (ed.), Sanitation in Developing Countries, Wiley, Chichester, 1978
- MALAWI, REP OF, Rural Piped Water Projects Handbook, A Handbook for Field Engineers, 1977
- MALAWI, REP OF, Piped Water for the Villagers, The Overseas Film and Television Centre Ltd., London, n.d.
- MALAWI, REP. OF, "Syllabus for course of instruction in handpump maintenance", Assignment Children, 45/46, (Spring 1979), p. 144
- MANN, R.S., "Concepts of disease and change in a Delhi village", Indian Journal of Social Work, 27, 4, (1967), pp. 353-360
- MARSHALL, C.L., "Some exercises in social ecology: health, disease and modernization in the Ryukyu Islands", in M.T. Farvar, J.P. Milton, (eds.), The Careless Technology, Ecology and International Development, New York, Natural History Press, 1972, pp. 5-18
- MARTENS, E.G., "Culture and communications: training Indians and Eskimos as community health workers", Canadian Journal of Public Health, 57, (1966), pp. 495-503
- MASCARENHAS, A., HOWELL, A., Water Supply and Sanitation Components of Primary Health Care, UNICEF/WHO JCHP, Conference Room Document no. 1, Geneva, 29-31 January, 1979
- MATANGO, R.R., MAYERLE, D., "Maji na maendeleo vijijini: the experience with rural self help water scheme in Lushoto district", in G. Tschannerl (ed.), Water Supply, Proceedings of the Conference on Rural Water Supply in East Africa, 5-8 April, 1971, BRALUP, University of Dar-es-Salaam, Research Paper 20, pp. 229-239
- MBITHI, P., Rural Sociology and Rural Development, its Application in Kenya, Nairobi, East African Literature Bureau, 1974

MCCULLOUGH, F.S., et al, "Water resources and bilharziasis transmission in the Misungwi area, Mwanza district, North-West Tanzania", East African Medical Journal, 45, 5; also published in D. Warner (ed.), Rural Water Supply in East Africa, proceedings of a Workshop held at the University College, Dar-es-Salaam, 17-19 December 1969, BRALUP Research Paper 11, pp. 97-112

MCGARRY, M.G., "Institutional development for sanitation and water supply", in R. Feachem, M. McGarry, D. Mara (eds.), Water, Wastes and Health in Hot Climates, Wiley and Sons, London, (1977), pp. 195-212

MCMICHAEL, J.K., Health in the Third World, Studies from Vietnam, Bertrand Russell Peace Foundation, Nottingham, 1976

MEDIS, L.P., FERNANDO, P.A., "Health education in emergency situations: a cholera outbreak in Sri Lanka", International Journal of Health Education, 20, 3, (1977), pp. 200-204

MERTON, R.K., Social Theory and Social Structure, New York, The Free Press of Glencoe, (1957)

MESSING, S.D., "Some human factors, problems and possibilities in developing Ethiopia", Human Factors, 10, 6, (1968), pp. 559-564

MESSING, S.D., "Social problems related to the development of health in Ethiopia", Social Science and Medicine, 3, (1970), pp. 331-337

MESSING, S.D., "Emics and ethics of health problems in Ethiopia", in F.X. Grollis, H.B. Haley (eds.), Medical Anthropology, Mouton, The Hague, (1976), pp. 429-435

MESSING, S.D., PRINCE, J., "Health Practices in Ethiopian pre-urban communities", Journal of Health and Human Behaviour, 7, (1966), pp. 272-276; also published in S.D. Messing, The Target of Health in Ethiopia, M.S.S. Information Cooperation, New York, (1972), pp. 217-227

MESSING, S.D., et al, "Health culture research in a developing country", The American Behavioural Scientist, (April 1964), pp. 29-30; also published in S.D. Messing, The Target of Health in Ethiopia, M.S.S. Information Cooperation, New York, (1972), pp. 162-164

MESSING, S.D., et al, "A method of health culture research in an African country", Journal of Health and Human Behaviour, 6, (1965), pp. 261-263; also published in S.D. Messing, The Target of Health in Ethiopia, M.S.S. Information Cooperation, New York, (1972), pp. 166-171

MICKELWAIT, D.R., et al, Women in Rural Development, Westview Press, Boulder, 1976

MILLAN, A.R., BAQUERO, C.A., Proyecto de 'Manual de Procedimientos Administrativos y Contables para Promotores de Saneamiento Básico Rural', Ministerio de Salud Pública, Instituto Nacional para Programas Especiales de Salud, División de Saneamiento Básico Rural, Sección de Supervisión y Asistencia Técnica, Bogotá, (Septiembre 1972)

MILLER, D.C., A Self-Help Paradigm for Rural Water Systems, OECD, Experiences in Rural Development Occasional Paper No. 9, Paris (March 1978)

NIGER, REP. OF, Etablissement d'un Programme d'Hydraulique au Niger: Construction de Puits, Ministère des Travaux Publics, des Mines et de l'Urbanisme/CEE/NEDECO, 1965

NIHON SUIDO CONSULTANTS, Immediate Programme for Sanitation for Kampung Improvement Programme of Jakarta, in Jakarta Sewerage and Sanitation Project, A Report Prepared for the Government of Indonesia/WHO/UNDP, Vol. VII, (draft), 1977

NIKOLIC, A., NIKILIC, L., TOMIC, B., "The health programme in Ivanjica, Yugoslavia", in V. Djuknanovic, E.P. Mach (eds.), Alternative Approaches to Meeting Basic Health Needs in Developing Countries, WHO, Geneva, (1975), pp. 67-77

NORWOOD, I.A., HUGHES, R.C., Evaluation: Ghana Rural Water Supplies, CIDA, (1979)

OSBERG, K., RIOS, J.A., "A community improvement project in Brazil", in B.D. Paul (ed.), Health, Culture and Community, Russell Sage Foundation, New York, (1955), pp. 349-377

OBIBUAKU, L.O., "Socio-economic problems in the adoption process: introduction of a hydraulic palm oil press", Rural Sociology, 32, 4, (1967), pp. 464-468

O.E.C.D., Community Aspects of Rural Water Supply and Sanitation Programmes at Village Level, Research Study Group Meeting on the Development of Appropriate Technology for Improvement of Environmental Health at Village Level, WHO/SEAEI New Delhi, (10-16 October, 1978)

OGIONWO, W., "Socio-psychological factors in health behaviour: an experimental study on methods and attitude change", International Journal of Health Education, 26, 2, (1973), pp. 1-16

ORLEANS, L.A., SUTTHEIER, R.P., "The Mao ethic and environmental quality", Science, 170, (1970), pp. 1173-1176

OYUGI, W.O., "Participation in development planning at the local level", in D.K. Leonard, Rural Administration in Kenya, Management and Administration Series no. 2, East African Literature Bureau/Dag Hammarskjöld Foundation, Nairobi, (1973), pp. 53-75

OSWAL, M.G., Health Education in Slum Areas, Central Health Education Bureau, New Delhi, n.d.

PACEY, A. (ed.), Water for the Thousand Millions, Intermediate Technology Development Group, Water Panel, Oxford, Pergamon Press, (1977); also published as "Technology is not enough: the provision and maintenance of appropriate water supplies", Intermediate Technology Development Group, Water Supply and Management (Aqua), 1, 1-2, (1977), pp. 1-58

- PADFIELD, H., Issues in Development Research: the Case of Water in Kenya, Paper contributed to the Workshop on Strategies for Improving Rural Welfare, May 31 - June 3, 1971, Nairobi, Institute of Development Studies, University of Nairobi, Discussion Paper no. 107, (May, 1971); also published in M.E. Kempe, L.D. Smith (eds.), Strategies for Improving Rural Welfare, Proceedings of a Workshop held at the Institute for Development Studies, University of Nairobi, May 31 - June 3, 1971, 4, (1971), pp. 451-472
- PANAMA, REP. OF, Programa de Agua Potable y de Construcción de Letrinas, 1977-1980, Ministerio de Salud, Dirección General de Salud, Dirección de Salud Ambiental, (Julio 1977)
- PANCHAYATI RAJ, Guide to the Selection and Training of Village Hand-pump Caretakers, Dept. of Panchayati Raj, Andhra Pradesh/Unicef, 1979
- PATNAIK, N., "Digging wells in Barpali Orissa, an experience in rural reconstruction", Man in India, 41, (1961), pp. 83-99
- PERRETT, H., Social and Behavioral Aspects of Project Work in Water Supply and Waste Disposal, World Bank, Transportation, Water and Telecommunications Department, Public Utilities Note, PUN 52 T, Washington, February 1980
- PERU, REP. OF, Manual de Promoción de Comunidades, Ministerio de Salud, Plan Nacional de Agua Potable Rural, Lima, (1977)
- PERU, REP. OF, Principales Funciones de los Auxiliares de Promoción de Comunidades, Plan Nacional de Agua Potable Rural, III Etapa, Ministerio de Salud, Dirección de Ingeniería Sanitaria, División de Obras, Departamento de Promoción de Comunidades, (1977)
- PHILLIPS, T., Popular Participation in Development: The Samaeul Movement in Korea, (Draft), World Bank, Washington, November 1978
- PHILIPPINES, REP. OF THE, Barangay Water Project, Project Paper, Dep. of Local Government and Community Development, April 1977
- PHILIPPINES, REP. OF THE, Training and Organization, Barangay Water Program, Booklet No. 7, Dep. of Local Government and Community Development, September 1977
- PHILIPPINES, REP. OF THE, Barangay Water Program, Administrative Procedures, Booklet No. 8, Local Government, Planning and Requirements Handbook, Dept. of Local Government and Community Development, October 1977
- PINEO, C.S., Story of a Successful National Rural Community Water Supply Program in the Dominican Republic: PLANAR, Pan American Sanitary Bureau, Dominican Republic 2200, (1973)
- PINEO, C.S., Dominican Republic, History of the Rural Water Supply and Sanitation, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, 1976a

PINEO, C.S., Banladesh, History of the Rural Water Supply and Sanitation Programs, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, 1976b

PINEO, C.S., Peru, History of the Rural Water Supply and Sanitation Program, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, Washington DC, 1976c

PINEO, C.S., Columbia, History of Rural Water Supply and Sanitation Program, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, Washington DC, 1976d

PINEO, C.S., Korea, History of Rural Water Supply and Sanitation Program, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, Washington DC, 1976e

PINEO, C.S., Upper Volta, History of Rural Water Supply and Sanitation Programs, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries (Draft), World Bank Documents, 1976-1977, World Bank, Washington, 1977

PINEO, C.S., Malaysia, History of the Rural Water Supply and Sanitation Program, Observations of the Rural Water Supply and Sanitation Programmes in 8 Developing Countries, World Bank, Energy, Water and Telecommunications Department, P.U. Report No. PUN 42, September 1978

PINEO, C.S., SUBRAHMANYAM, D.V., Community Water Supply and Excreta Disposal Situation in the Developing Countries: a Commentary, WHO, Geneva, (1975)

PISHAROTI, K.A., Guide to the Integration of Health Education in Environmental Health Programmes, WHO, Geneva, (1975)

PISHAROTI, R.A., UNICEF Waterfront, 18, (June 1978)

PLATT, L.V., Barpali After Ten Years, Observations Made in Revisiting Earpali, AFSC, Philadelphia, November 1973

PLOEG, J.D. VAN DER, A Activacao Social dentro do Quadro do Abastecimento de Agua Rural do Projecto de Agua em Buba e Tombali, Direcção Internacional de Ajuda Técnica e o Commissariado de Estado de Recursos Naturais, Guiné-Bissau, 1979

PLOEG, J.D. VAN DER, Verslag van de Eerste Experimentele Evaluatie Ronde, Voorlichtingssektie PHRR/Buba/Tombali, (Report of the first experimental evaluation), Comisariado de Estado de Recursos Naturais/ DTTH, Bissau/The Hague, January 1980

PLOEG, J.D. VAN DER, WIJK-SIJBESMA, C.A. VAN, "Community participation in the rural well construction programme of Guinea-Bissau", Aqua, 9/10, (1980), pp. 21-23

- P.R.A.I., Experiments on Latrines for Rural Homes, Planning, Research and Action Institute, Lucknow, India, (1958)
- P.R.A.I., Induced Change in Health Behaviour: A Study of a Pilot Environmental Sanitation Project in Uttar Pradesh, Planning, Research and Action Institute, Publication no. 356, Lucknow, India, (July, 1968)
- P.R.A.I., Developing Effective Fly Control Programme for Rural Areas, Report of an Action Research Study, Planning, Research and Action Institute, Lucknow, India, (July 1970)
- PRICE, H.B., Rural Reconstruction and Development, A Manual for Field Workers, International Institute of Rural Reconstruction, Silang, Cavite, (1967)
- P.R.R.M., "Environmental education and immunization", in H.B. Price (ed.), Rural Reconstruction and Development, A Manual for Fieldworkers, International Institute of Rural Reconstruction/Philippine Rural Reconstruction Movement, Silang, Cavite, 1967, pp. 296-316
- PUROHIT, J.N., Improving Sanitary Conditions of Village Surroundings: Human Excreta, National Council of Educational Research and Training, Comprehensive Access to Primary Education Group, (November 1980)
- QUESADA, G.M., MCCARTY, R.H., BRENNER, D.J., Project Report on a Model for Improving Access to and Utilization of Regional Health Facilities through Health Education-Communication Programmes, Texas Technical University, School of Medicine, Health Communication Department, Lubbock, Texas, (1975)
- RAMAN, V.S., "Water supply programme under Singur rural health unit", Swasth Hind, (April, 1962), pp. 99-104
- RAMAN, V.S., "Health education in relation to water supply and sanitation in rural areas", Journal of the Indian Water Works Association, 9, (1977)
- RAMOS, E., Client-Change Agent Relationships in Three Colombian Villages, M.A. Thesis, East Lansing, Michigan State University, (1966)
- REW, A., "Water dependency and urban poverty", Assignment Children, 45/46, (Spring 1979), pp. 93-105
- ROBERTS, G.O., Cultural and Social Differentials in Acceptance of Health and Sanitation Practices in Bo, Sierra Leone, Ph.D. thesis, The Catholic University of America, Washington DC, (1961)
- ROBERTS, M.E.S., Notes, Comments, Unesco, September 1968
- RODRIGUEZ, R.I., A Rural Health System as the Basic Component of Rural Development in Villarica, Colombia, World Bank, Washington, (March 1978)
- ROGERS, E.M., Diffusion of Innovations, Free Press, New York, (1962)
- ROGERS, E.M., Communication in Development: Modification in the Classical Diffusion Model for Family Planning, Paper presented at the 3rd World Congress for Rural Sociology, Baton Rouge, (22-27 August, 1972)

- ROGERS, E.M., Where We Are in Understanding the Diffusion of Innovations, Paper presented at the East West Communication Institute Conference on Communication and Change: Ten Years After, (January 12-17, 1975)
- ROGERS, E.M., "Communication and development, the passing of the dominant paradigm", Communication Research, 3, 2, (1976), pp. 213-240
- ROGERS, E.M., ASCROFT, J.R., RÖLING, N.G., Cross-Cultural Generalizations about the Diffusion of Innovations: Research in Brazil, Nigeria and India, Paper presented at the International Sociological Association's 7th Congress of Sociology, Working Group 7, on Modernization, Diffusion and Resistance to Change, Varna, Bulgaria, (14-19 September, 1970)
- ROGERS, E.M., ASCROFT, J.R., RÖLING, N.G., Diffusion of Innovations in Brazil, Nigeria and India, Diffusion of Innovations Research Report no. 14, Department of Communication, Michigan State University, East Lansing, (1970b)
- ROGERS, E.M., SHOEMAKER, F.F., Communication of Innovations, A Cross-Cultural Approach, Free Press, Glencoe, (1971)
- RÖLING, N.G., ASCROFT, J., CHEGE, F. WA, "The diffusion of innovations and the issue of equity in rural development", Communication Research, 3, (1976), pp. 155-170
- ROSENHALL, L., HANSEN, L., "Evaluation of rural water supplies in Eastern and Southern Africa", Progress in Water Technology, II, 1/2, (1978), pp 25-30
- ROTSART DE HERTAING, J., et al, L'Education de la Santé dans l'Enseignement Primaire et Secondaire, Bureau d'Etudes et de Recherches pour la Promotion de la Santé, Zaire, n.d.
- ROY, P., "Correlates of health innovations in 8 Indian villages", in P. Roy, J. Kivlin, Health Innovation and Family Planning, A Study in Eight Indian Villages, Report 21, National Institute of Community Development, Hyderabad, (May 1968)
- SAINT, W.S., COWARD, E.W., "Agriculture and behavioural science: emerging orientations", Science, 197, (1977), pp. 733-737
- SALINAS, B., CACERAS, R., Research Report: A Case Study in Guatemala, San Pedro de la Laguna, (Draft), World Bank, Washington, January 1978
- SANDBACH, F.R., "Preventing schistosomiasis: a critical assessment of present policy", Social Science and Medicine, 9, (1975), pp. 517-527
- SANDHU, S.K., et al, "Adoption of modern health and family planning practices in a rural community of India", International Journal of Health Education, 20, 4, (1977), pp. 240-247
- SANDHU, S.K., SINHA, K.S., BAWA, P.S., Health Education Service Project, SSF Project Phase II, 1978-1981, Central Health Education Bureau, New Delhi, 1978

SAUNDERS, R.J., WARFORD, J.J., Village Water Supply: Economics and Policy in the Developing World, World Bank/Johns Hopkins University Press, Baltimore/London, (1976)

SCOTT, M., "Self-help in rural Mexico: Santa Maria's well", Community Development Journal, 12, 2, (1977), pp. 116-121

SCOTNEY, N., Rural Water Supply Evaluation: Report on Some Relevant Social Factors Based on a Survey of Three RWS Schemes, Ministry of Water Development, Nairobi, (1976); also published in Evaluation of the Rural Water Supply Programme, Ministry of Water Development, Nairobi, (February 1977)

SCOTNEY, N., Health Education, A Manual for Medical Assistants and Other Rural Health Workers, Rural Health Series no. 3, African Medical and Research Foundation, Nairobi, (1976b)

SCOTNEY, N., "Water and rural development", in J.B. Castelino, C.P.M. Khamala, (eds.), The Role of Water Resources in Development, Proceedings of the 13th Annual Symposium of the East African Academy, September 1977, Nairobi (1979), pp. 269-272

SCOTNEY, N., Developing Health Education Component for the Unicef Water and Sanitation Programme in Sudan, African Medical and Research Foundation, Nairobi, June 1980

SEGAAR, T.J., Sociological Activities in Rural Water Supply, Report No. 23, Rural Water Supply West Java, Min. of Public Health/DITH/IWACO, Jakarta/The Hague/Rotterdam, February 1979

SHANAWANY, H., Demonstration Projects in Low-Cost Water Supply and Sanitation. Report on Mission to the Kingdom of Lesotho, United Nations Development Programme Global Projects GLO/78/006, November 1980

SHIFFMAN, M.A., et al, "Field studies on water, sanitation and health education in relation to health status in Central America", Progress in Water Technology, II, 1/2, (1978), pp. 143-150

SHIFFMAN, M.A., et al, "Guatemala study", E.S.E. Notes, 15, 2, (March 1979), pp. 1-6

SHINGI, P.M., MODY, B., "The communication effects gap: a field experiment on television and agricultural ignorance in India", Communication Research, 3, (1976), pp. 171-190

SIMMONS, J., PHILLIPS, T., Towards a Typology of Popular Participation, World Bank, Policy Planning and Program Review Department, Washington, (May 1978)

SINGH, T.R., "Some aspects of ritual purity and pollution", Eastern Anthropologist, 19, (1966), pp. 131-142

SINHA, K.S., BAWA, P.S., Involvement of Community in Health Programmes, An Operational Guide for Health Workers, Central Health Education Bureau, New Delhi, 1978

- SKODA, J.D., MENDIS, J. BERTRAND, CHIA, M., A Survey in Rural Bangladesh on Diarrhoeal Morbidity, Water Usage and Related Factors, Unicef/WHO, Geneva, (June 1977)
- SPECTOR, P., et al, "Communication media and motivation in the adoption of new practices: an experiment in rural Ecuador", Human Organization, 30, (1971), pp. 39-46
- SPRUYT, D., et al, "Demonstration and evaluation project Ethiopian health centre program, its impact on community health in three towns", Ethiopian Medical Journal, Conference Supplement, (July 1967)
- SRIVASTARA, P.K., "Acceptance of sanitary composting in rural areas", Indian Journal of Public Health, 13, 1, (1969), pp. 30-35
- STEUART, G.W., "Planning and evaluation in health education", International Journal of Health Education, 13, 1, (1969), pp. 65-76
- STEUART, G.W., et al, "Sanitation changes in an African community, a study of primary group education, Part I, Part II", The Health Education Journal, 20, 3, (1962), pp. 133-140 and 20, 4, (1962), pp. 198-205
- STREEFLAND, P.H., The Social Organization of Nightsoil Collectors in Selected Asian Cities, Paper presented at the conference 'Sanitation in Developing Countries Today', OXFAM/Ross Institute of Tropical Hygiene, Oxford, 5-9 July, 1977
- STREEFLAND, P.H., STREEFKERK, H., Brackish Water and Poor People, Royal Tropical Institute/University of Amsterdam, 1980
- STROMBERG, J.S., Community Participation in Water Supply and Sanitation Programs: Suggestions for Priority Research Areas and Strategies, Paper contributed to the Research Study Group Meeting on Appropriate Technology for Improvement of Environmental Health at Village level, New Delhi, 16-20 October, 1978, WHO/SEAR, (10 October, 1978)
- SUBRAHMANIAN, R., et al, "Local caretakers for handpumps in Tamil Nadu, India", Assignment Children, 45/46, (Spring 1979), pp. 145-149
- SUBBURAMAN, G.R., MUTHIAH, A., Health and Sanitary Conditions in Athoor Block, India, (Draft Paper), Gandhigram Institute of Rural Health and Family Planning, May 1976
- TAEN, T.F.M., SPECKMANN, J.D., "Improvement of rural water supply and priority ranking", Proceedings of the Second World Congress, I.W.R.A., New Delhi, December 1975, Vol. II, pp. 549-561
- TALBOT, L.M., "Ecological consequences of rangeland development in Masailand, East Africa", in M.T. Farvar, J.P. Milton, (eds.), The Careless Technology, Ecology and International Development, New York, Natural History Press, 1972, pp. 694-711
- TENTORI, F.V., "Their needs and knowledge", International Journal of Health Education, 5, (1962), pp. 10-17

THAILAND, GOV. OF, UNICEF, A Communication Strategy for a Rural Water Supply Project in Thailand, Guidelines for Participatory Workshops for Local Government Officials, Dept. of Health/Unicef, April 1979

THORAT, S.S., "Influence of traditional and non-traditional status on the adoption of health practices", Behavioural Sciences and Community Development, 3, (1969), pp. 38-50

TICHENOR, P.J., et al, "Mass media flow and differential growth in knowledge", Public Opinion Quarterly, 34, (1970), pp. 159-170

TIGLAO, T.V., A Re-Evaluation of Health Practices in a Philippine Rural Community, Ph.D. thesis, Columbia University, (1963)

TINKER, J., AGARWAL, A., Water and Sanitation for All?, Earthscan Press Briefing Document No. 22, London, (November 1980)

TOMIC B., NIKOLIC, A., et al, "Ivanjica: a community conquers health", supplement to The International Journal of Health Education, 20, 2, (1977)

TSCHANNERL, G., Rural Water Supply in Tanzania: is 'Politics' or 'Technique' in Command?, Paper no. 52, Annual Social Science Conference of the East African Universities, Dar-es-Salaam, (1973)

TWUMASI, P.A., YANGYORU, Y., BANUAKU, F., A Sociological Study of Rural Water Use, Project Report for Ghana Water and Sewerage Corporation, Rural Water Supply and Environmental Health, Legon, (1977)

U.N.E.P, Rain and Stormwater Harvesting for Additional Water Supply in Rural Areas, UNEP Expert Group Meeting, Nairobi, 30 October-2 November 1979

UNESCO, An African Experiment in Radio Forums for Rural Development: Ghana 1964/65, UNESCO, Paris

UNESCO, Basic Services for Children: a Continuing Search for Learning Priorities, Experiments and Innovations in Education 36/37, Unesco/ Unicef Cooperative Programme, Paris, (1978)

UNICEF/WHO JOINT COMMITTEE ON HEALTH POLICY, Community Involvement in Primary Health Care: A Study of the Process of Community Motivation and Continued Participation, Final Draft, Geneva, (1977a)

UNICEF/WHO JOINT COMMITTEE ON HEALTH POLICY, Water Supply and Sanitation Components of Primary Health Care, Draft Proposal for the next Unicef/ WHO JCHP Study, 1979, Geneva, (1977b)

UNICEF/WHO JOINT COMMITTEE ON HEALTH POLICY, Unicef/WHO Joint Study on Water Supply and Sanitation Components of Primary Health Care, Unicef-WHO JCHP 22nd Session, Geneva, 29-31 January 1979

USAID, Education in Health, USAID Peace Corps, Division of Volunteer Support, Washington DC, undated (ca. 1964)

USAID., Practical Training in Health Education, Project Paper Cameroon, USAID, Bureau for Africa, Washington, March 1977

- VARMA, R., et al, Action Research and the Production of Communication Media, Report of the All India Field Workshop on Action Research in Agricultural Information, Udaipur, 10-20 September, 1973, University of Reading, (1973)
- VERSTEEG, J.H.F., Motivation and Local Involvement, Paper contributed to the Symposium on Community Water Supply in Development Cooperation, Royal Tropical Institute, Amsterdam, (7-10 February, 1977)
- VERTINSKY, P, VERTINSKY, I., ZALTMAN, G. Health innovation diffusion: an integrated model, 15, 1, (1972), pp. 1-24
- VERVOORN, J.D., Tropische Gezondheidszorg in Ontwikkeling, (Tropical Health Care in Development), Van Gorkum, Assen, (1972)
- VIERSTRA, G.A., Towards a Fuller Appreciation of Community Involvement, Paper presented at the International Training Seminar on Community Water Supply in Developing Countries, Royal Tropical Institute, Amsterdam, (6-10 September, 1976); also published in WHO/IRC Bulletin Series No. 10, The Hague, (November, 1977), pp. 147-158
- VIJAYENDRA, T., "Latrines for the urban poor", Health for the Millions, 5, 6, (December 1979), p. 8-10
- VIJAYENDRA, T., Sulabh Shauchalava Sansthan. A Socially Relevant Small Scale Industry, Public Enterprises Centre for Continuing Education, New Delhi, 1980 (unpubl. paper)
- VINCENT, L.J., ALGIE, W.E., MARAIS, G.V.R., "A system of sanitation for low-cost, high-density housing", Symposium on Hygiene and Sanitation in Relation to Housing, CCTA/WHO, Niger, Publ. No. 84, 1961, pp. 135-173
- WAGNER, E.G., LANOIX, J.N., Excreta Disposal for Rural Areas and Small Communities, Geneva, WHO Monograph Series No. 39, (1958)
- WARFORD, J.J., ROSENFELD, P., "Public utility pricing and pollution control", in C.G. Gunnerson, J.M. Kalbermatten, (eds.), Environmental Impacts of International Engineering Projects and Practices, American Society of Civil Engineers, (1978), pp. 158-172
- WARNER, D., "A summary of the Tanzania rural water supply impact study", in D. Warner (ed.), Rural Water Supply in East Africa. Proceedings of a Workshop held at the University College, Dar-es-Salaam, BRALUP Research Paper 11, (17-19 December, 1969), pp. 165-170
- WARNER, D., "Evaluation of the benefits of rural water supply projects in Tanzanian villages", Journal American Water Works Association, (June, 1975), pp. 318-321
- WELLIN, E., "Water boiling in a Peruvian town: evaluating the results of a rural hygiene project", in I. Brady, B. Isaac (eds.), A Reader in Culture Change, vol. 2, Wiley, New York, (1975), pp. 231-259; also published in B.D. Paul (ed.), Health, Culture and Community, New York, Russell Sage Foundation, (1955), pp. 71-103

- W.H.O., Environmental Health and Diarrhoeal Disease Prevention, Report of a Scientific Working Group, Kuala Lumpur, Malaysia, 3-6 July 1979, WHO, Diarrhoeal Diseases Control Programme, (1980)
- W.H.O./I.R.C., Water Dispensing Devices and Methods for Public Water Supply in Developing Countries, Interim Report, WHO International Reference Centre for Community Water Supply, The Hague, the Netherlands, (February 1975)
- W.H.O./I.R.C., Community Education and Participation in the Slow Sand Filtration Project, Report of an International Meeting held in Voorburg /The Hague), The Netherlands, 29 May - 2 June, 1978, WHO International Reference Centre for Community Water Supply, Bulletin 14, The Netherlands, July 1979
- W.H.O./I.R.C., Slow Sand Filtration for Community Water Supply in Developing Countries, Report of an International Appraisal meeting held in Nagpur, India, September 15-19, 1980, WHO/IRC for Community Water Supply and Sanitation, Bulletin 16, The Netherlands, March, 1981.
- W.H.O./I.R.C., Slow Sand Filtration in Community Water Supply in Developing Countries, Training Manual for Operation and Maintenance, WHO/IRC for Community Water Supply and Sanitation, Technical Paper 19, The Netherlands, Spring 1982
- WHYTE, A.V.T., "Towards a user-choice philosophy in rural water programmes", Carnets de l'Enfance, 34, (1976), pp. 28-45
- WHYTE, A.V.T., Guidelines for Field Studies in Environmental Perception, UNESCO/SCOPE, MAB Technical Notes, 5, Paris, (1977)
- WHYTE, A.V.T., BURTON, I., "Water supply and community choice", in R. Feachem, M. McGarry, D. Mara (eds.), Water, Wastes and Health in Hot Climates, London, Wiley and Sons, (1977), pp. 113-129
- WIDSTRAND, C.G., "Rural participation in planning", in D. Pitt (ed.), Development from Below, The Hague, Mouton Publ. (1976), pp. 139-144
- WIDSTRAND, C.G., Some Social and Cultural Aspects of Diarrhoeal Disease Prevention, Paper presented at the WHO Scientific Group on Environmental Health and Diarrhoeal Disease Prevention, Kuala Lumpur, July 3-9, 1979
- WIGNOT, R., A Report on the Conditions of Unicef-Assisted Demonstration Rural Water Supplies in Kenya, Unicef, Nairobi, (1974) Paper contributed to Evaluation of the Rural Water Supply Programme, Ministry of Water Development, Nairobi, (February 1977)
- WILSON, J.L., The Theory and Practice of Small Farmer Development, Ph.D. Thesis, American University, Washington, (1977)
- WINTER, E.R. DE, Health Services of a District Hospital in Malawi, Van Gorkum, Assen, (1972)

- WOODS, J.L., Communication: an Integral Element of Administrating Development Programmes, Paper presented at the Asian Centre for Development Administration Workshop on Administrative Support Planning for Development Projects, uncleared Draft (1977)
- WORLD BANK, Jamaica Sites and Services Project, World Bank, Washington, (1974)
- WORLD BANK, Lusaka Squatter Upgrading and Site and Services Project, World Bank, Washington, (1974)
- WORLD BANK, Kenya Sites and Services Project, World Bank, Washington, (1975)
- WORLD BANK, Manila Urban Development Project, World Bank, Washington, (1976a)
- WORLD BANK, Colombia Urban Development Project, World Bank, Washington, (1977)
- WORLD BANK, El Salvador Sites and Services Project, World Bank, Washington, (1977)
- WORLD BANK, Village Water Supply, World Bank, Washington DC, (March, 1976b)
- WORLD BANK, Socio-Cultural Aspects of Water Supply and Excreta Disposal, Paper prepared for the World Bank Research Project 'Appropriate Technology for Water Supply and Waste Disposal in Developing Countries', PU Report no. RES 15, World Bank, Washington DC, (September, 1978)
- WRIGHT, A.M., OWUSU, S.E., HANDA, V.K., Rural Latrines in Ghana, Paper presented at the Conference 'Sanitation in Developing Countries Today', OXFAM/ Ross Institute of Tropical Hygiene, Oxford, (5-9 July, 1977)
- YEBOAH, J.O., "Small scale community self-help projects: shallow wells", in Community Involvement in Primary Health Care, Report of a Workshop held in Kintampo, Ghana, 3-14 July 1978, WHO, Geneva, (1979), pp. 48-50
- YEBOAH, J.O., "Sanitation", in Community Involvement in Primary Health Care, Report of a Workshop held in Kintampo, Ghana, 3-14 July 1978, WHO, Geneva (1979), pp. 50-52
- YOUL-MO-DONG, "Integrated rural development in Korea", in G. Singh, J.H. de Goede (eds.), Proceedings of the International Conference on Rural Development Technology, An Integrated Approach, Bangkok, Asian Institute of Technology, June 1977, pp. 725-732
- ZUNIGA, J.M., Planificación y Programación de un Proyecto de Saneamiento Ambiental Rural, XI Seminario de Ingenieria de Centro America y Panama, Tegucigalpa, Honduras, (Noviembre 13-18, 1977)

III. PRODUCTEURS PAR PAYS

BENIN

- BE. 1 - a. C.A.V. (Centre Audio-Visuel)
b. BP. 714 - Cotonou
c. Père Gérard SAGNOL
d. 31-40-94
- BE. 2 - a. CENTRE FEMININ
b. BP. 56 Bohicon
- BE. 3 - a. CENTRE HORTICOLE ET NUTRITIONNEL DU QUANDO
b. BP. 13 Porto-Novo
c. Mr. Léonard ADOUANSOU
- BE. 4 - a. DIRECTION DE L'EDUCATION POUR LA SANTE
b. Ministère de la Santé
Cotonou
c. Docteur Y. AGBOTON
- BE. 5 - a. DIRECTION DE L'ENSEIGNEMENT MATERNEL ET DE BASE
b. BP. 24 Porto-Novo
c. Camarade Michel GOMEZ
- BE. 6 - a. EQUIPE DIOCESAINE D'ANIMATION RURALE
b. BP. 19 Allada
c. Sœur Marie Cyprienne QUENUM (Responsable)
Sœur C. SANTINI (Secrétaire : BP. 9102 Cotonou)
- BE. 7 - a. I.N.F.R.E.SERVICE II (ex. IPN - CRAP)
b. BP. 200 Porto-Novo
c. Camarade Colette S. HOUEYO
- BE. 8 - a. SERVICE D'ECONOMIE FAMILIALE
b. Direction de l'Agriculture
Ministère du Développement Rural et de l'Action
Coopérative
BP. 58 Porto-Novo
c. Camarade Nacirou ASHIATA
- BE. 9 - a. SERVICE POUR LE DEVELOPPEMENT
b. BP. 519 Cotonou
- BE.10 - a. VOLONTAIRES ALLEMANDS DE DOGBO
b. BP. 394 Cotonou

BURUNDI

- BU. 1 - a. ATELIER DE MATERIEL DIDACTIQUE BUSIGA
b. BP. 18 Ngozi
c. Sœur B.D. PERKINS

- BU. 2 - a. CARITAS BURUNDI
b. BP. 1118 Bujumbura

- BU. 3 - a. INADES (Institut Africain pour le Développement
Economique et Social)
c. BP. 2520 - Bujumbura

CAMEROUN

- CA. 1 - a. AMA (Atelier de Matériel pour l'Animation)
b. BP. 267
Yaoundé-Mvolyé
c. Père Daniel DESMET
- CA. 2 - a. BUREAU DE PRODUCTION DE MATERIEL EDUCATIF
b. Service d'Education Sanitaire
Direction de la médecine Préventive et de l'Hy-
giène Publique
Yaoundé
c. Mad. Irène Maria GANDJI
- CA. 3 - a. DEPT. OF HEALTH EDU. AND BEHAVIOURAL SCIENCES
b. C.U.S.S. YAOUNDE
c. Prof. Dan. LANTUM
Mme. JATD (assistante) SATO
- CA. 4 - a. DEPARTEMENT SANTE USAID
b. BP. 817 Yaoundé
c. Mr. THORNTON
- CA. 5 - a. OCEAC
b. BP. 288 Yaoundé
- CA. 6 - a. PROJET DE FORMATION PRATIQUE EN EDUCATION POUR
LA SANTE
b. Projet P. T. H. E. (Practical Training in Health
Education)
BP. 817 Yaoundé
c. Dr. M'BAKOB (Directeur)
Dr. Darryl CANDY (Conseillère Technique)
- CA. 7 - a. SERVICE DE NUTRITION ET D'ANIMATION FEMININE DE
l'IPD
b. IPD.
BP. 4078 Douala
c. Mme. Hélène DOS SANTOS
- CA. 8 - a. VULGARISATION AGRICOLE INADES
b. BP. 5 Douala

CENTRAFRIQUE

- CE. 1 - a. CORPS DE LA PAIX
b. Bangui

Matériel d'Education pour la Santé en Afrique, Répertoire I
 par Hervé Delautre et Lionel Robineau, Etudes et Recherches
 No. 45-75, Septembre 1979, ENDA, Dakar.

- CE. 2 - a. PROJET DE DEVELOPPEMENT COMMUNAUTAIRE
b. BP. 872 Bangui

- CE. 3 - a. SERVICE NATIONAL D'HYGIENE ET D'EDUCATION
SANITAIRE
b. BP. 711 Bangui
c. Mr. Gaston GRESENGUET

CONGO

- CO. 1 - a. DIRECTION DE LA FORMATION CONTINUE ET DE
L'ALPHATETISATION
b. BP. 661 Brazzaville
c. Mr. Marcel SITA

- CO. 2 - a. DIVISION DE L'EDUCATION POUR LA SANTE
b. BP. 78 Brazzaville
c. Mad. Céline DIAFOUKA

- CO. 3 - a. SERVICE DE L'INFORMATION ET DE L'EDUCATION
SANITAIRE
b. DMS BP. 6 Brazzaville
c. Mr. Thiam Bouba NDIAYE & Mr. BEN AZIZA

COTE D'IVOIRE

- CI. 1 - a. CENTRE CULTUREL FRANCAIS

- CI. 2 - a. CENTRE DE FORMATION RURALE DE TROKPADROU
b. BP. 384, Man

- CI. 3 - a. CRAU
b. Ministère de la Recherche Scientifique
Convention AVB/PNUD
Université d'Abidjan

- CI. 4 - a. EDUCATION EXTRA-SCOLAIRE TELEVISUELLE
b. Ministère de l'Education Nationale, Abidjan

- CI. 5 - a. FEDERATION DES VILLAGEOIS DE BOUAKE
b. s/c ONPR BP. 20225 ABIDJAN

- CI. 6 - a. INADES-FORMATION (Institut Africain pour le
Développement Economique et Social)
b. 08 BP. 8 Abidjan 08
c. Mad. A. GIPARD (département Santé)

- CI. 7 - a. I.N.S.P. (Institut National de la Santé Publique)
b. BP. V47 Abidjan
c. Mr. GARNIER (Service Educ. par la Santé.)

- CI. 8 - a. I.S.C.A. (Institut du Sacré Coeur d'Adjamé)
b. BP. 3244 Abidjan

- CI. 9 - a. U.N.P.R. (Office National de la Promotion Rurale)
b. BP. 20225 Abidjan
c. Monsieur O. DIARRA
S.D.R.A.P.

- CI.10 - a. S.DRAP (Sous direction de la Recherche et de
l'Animation Pédagogique.)
b. 08 BP. 890 Abidjan 08
c. Mr. DAUFFY (Section de Biologie)

- CI.11 - a. SPORTS (Ministère de la Jeunesse et des Sports)
b. Abidjan

- CI.12 - a. UNICEF-WARD
b. BP. 4443 Abidjan
c. Mad. Marie NGOM

EGYPTE

- EG. 1 - a. EDITIONS ET PUBLICATIONS DES PERES JESUITES
b. 1, rue Boustou El Maksi, Faggala, le Caire Boustan
c. H. DE LEUSSE

GABON

- GA. 1 - a. BUREAU NATIONAL D'EDUCATION SANITAIRE
b. BP. 940 Libreville
c. Mr. Léon BEKA BENGUI

- GA. 2 - a. DIRECTION DE L'EDUCATION POPULAIRE
b. BP. 1560 - Libreville
c. Mr. Pierre ANGWE-MENGUILA
d. 72-20-24

- GA. 3 - a. SERVICE SOCIAL DU CENTRE HOSPITALIER DE
LIBREVILLE
b. BP. 261 Libreville
c. Soeur T. CHEVALIER

GUINEE

- GI. 1 - a. SERVICE NATIONAL DE PREVENTION ET DES BRIGADES
SANITAIRES
b. Ministère de la Santé
Conakry
c. Mr. Gabriel SULTAN

- GI. 2 - a. SERVICE DE SANTE MATERNELLE ET INFANTILE SERVICE
D'HYGIENE
b. Institut Pédagogique National Conakry

HAUTE-VOLTA

- HV. 1 - a. CESAO (Centre d'Etudes Economiques et Sociales de l'Afrique Occidentale)
b. BP. 305 Bobo-Dioulasso
Tél. : 904-91
c. Mr. Piet BUIJSROGGE (Directeur)
Mr. Georges COIGNARD (Audio-visuel)
- HV. 2 - a. GRAAP (Groupe pour l'Animation et l'Auto promotion Paysanne)
b. BP. 305, Bobo-Dioulasso
c. Père HUSSON
- HV. 3 - a. UNICEF, COORDINATION ACTIONS SECHERESSE SAHEL
b. BP. 363 Ouagadougou

MALI

- ML. 1 - a. SERVICE DE NUTRITION
Ministère de la Santé
b. Bamako
- ML. 2 - a. SERVICE NATIONAL D'EDUCATION POUR LA SANTE
Ministère de la Santé
b. Bamako
c. Monsieur ROUAMBA

MAURICE

- MC. 1 - a. HEALTH EDUCATION DIVISION
b. M.O.H. Ministère de la Santé
Port-Louis

NIGER

- NI. 1 - a. ALPHABETISATION DES ADULTES
b. Ministère de l'Education Nationale - Niamey
- NI. 2 - a. CORPS DE LA PAIX
b. Niamey
- NI. 3 - a. SAHEL HEBDO
b. Journal "Le Sahel"
Niamey

ILE DE LA REUNION

- RE. 1 - a. ARESSE (Association Réunionnaise d'Education Sanitaire et Sociale)
b. BP. 1031; 97481 Saint-Denis Cédex.
c. Dr. TURQUET

- RE. 2 - a. CENTRE UNIVERSITAIRE DE LA REUNION
b. BP. 5, Ste. Clotilde de la Réunion
c. Professeur T. CADET

RWANDA

- RW. 1 - a. URG (Université Radiophonique de Gitarama)
b. B. P. 13 Gitarama
c. Association : Responsable du Secteur Intéressé
Jean GRIET

SENEGAL

- SN. 1 - a. BANAS
b. Ministère de la Santé Publique
Dakar
c. Docteur T. NDOYE
- SN. 2 - a. BUREAU DE L'EDUCATION SANITAIRE
b. Ministère de la Santé Publique
Building Administratif Dakar
c. Monsieur I. BEYE
- SN. 3 - a. CENTRE D'ECHANGES CULTURELS DE LANGUE FRANCAISE
b 96, Rue Blanchot Dakar
- SN. 4 - a. CLINIQUE DE SANTE PUBLIQUE ET DE MEDECINE
PEDIATRIE
b. Faculté de Médecine Dakar-Fann
c. Professeur H. de LAUTURE
- SN. 5 - a. ENDA - T.M.
b. BP. 3370, Dakar
c. Docteur Lionel ROBINEAU (Santé et Environnement)
- SN. 6 - a. "FAMILLE ET DEVELOPPEMENT"
b. 66, bd de la République
BP. 11007 CD, Annexe Dakar
c. Monsieur P. PRADERVAND
- SN. 7 - a. INSTITUT DE PEDIATRIE SOCIALE
b. Faculté de Médecine Dakar-Fann
c. Professeur G. SENHOR
- SN. 8 - a. Laboratoires CIBA
b. 76, rue Carnot
BP. 275 - Dakar
c. Monsieur J. OUATTARA.

- SN. 9 - a. Docteur Franck SILLONVILLE
b. BP. 2238, Hôpital Principal Dakar
- TCHAD
- TC. 1 - a. INSTITUT NATIONAL DES SCIENCES DE L'EDUCATION
b. Ministère de l'Education Nationale, de la Culture,
de la Jeunesse et des Sports
BP 473, Ndjamena
- TC. 2 - a. JAC-JAD J.AC. JAD
b. BP. 857, Ndjamena
- TOGO
- TG. 1 - a. A.T.B.E.F. (Association Togolaise pour le Bien
Etre Familial)
b. BP. 4056 Lomé
c. Mr. E. HOUMEY
d. 40-56
- TG. 2 - a. INSTITUT PEDAGOGIQUE NATIONAL
b. BP. 1306, Lomé
c.
d. 3894
- TG. 3 - a. SERVICE DE PMI
b. BP. 336 Lomé
c. Dr. Dovi PLACCA
- TG. 4 - a. SERVICE NATIONAL D'EDUCATION SANITAIRE
b. BP. 2021 Lomé
c. Mr. Dogbevi EHLAN
- TG. 5 - a. VOISINS MONDIAUX
b. BP. 3035, Lomé
c. Mr. James RUGH
- TUNISIE
- TN. 1 - a. A. S. D. E. A. R. (Association pour le Dévelop-
pement et l'Animation Rurale)
b. 10, rue Eve Nohelle, Tunis.
c. Madame GALLALI
- ZAIRE
- ZI. 1 - a. BERPS (Bureau d'Etudes et de Recherche pour la
Promotion de la Santé
b. BP. 1977 Kangu-Mayombé, Bas Zaïre
c. Docteur J. COURTE JOIE
- ZI. 2 - a. BUREAU DES OEUVRE MEDICALES DU BEC
b. BP. 3258 Kinshasa - Gombe
c. Soeur Suzanne LEURS

- ZI. 3 - a. CEPAS (Centre d'Etudes pour l'Action Sociale)
b. BP. 5717 Kinshasa Gombe
c. Section Santé et Audio-Visuel : père Didier de
FAILLY
- ZI. 4 - a. CENTRE DE KASONDO
b. BP. 24, Kayna, Kivu
c. Soeur Maria GERVALLO
- ZI. 5 - a. DEVELOPPEMENT COMMUNAUTAIRE, IBO
b. BP. 800 Luluabourg
- ZI. 6 - a. E.C.Z. (Eglise du Christ au Zaïre)
b. Service médical
Kinshasa-Gombe
c. Citoyen NLABA-NSONA
- ZI. 7 - a. HOPITAL DE VANGA
b. c/o CBZO, BP 4728, Kinshasa II
c. Dr. Frankin BAER
Dr. FOUNTAIN
- ZI. 8 - a. HOPITAL MAMA YEMO, Kinshasa
Service de Médecine Interne
b. BP. 7245 Kinshasa I
c. Dr. M. de CLERCK
- ZI. 9 - a. MISSION DE KYONDO
b. BP. 160, Butembo, Kivu
- ZI.10 - a. OEUVRE POUR LA PROTECTION DE L'ENFANCE AU KIVU
b. 6008 Bwkavu, Kivu
c. Citoyen MUTIMA
- ZI.11 - a. PROJET SOJA
ETSÀ TSHIBASHI
b. BP. 110; Kanauga (Kasaï Occidental)
ou BP. 70
c. Père VANUESTE DO et A D'HEER
- ZI.12 - a. S.I.C.A. SERVICE D'IMAGES CATHOLIQUES AFRICAINES
b. BP. 936 Kinshasa I
c. Père F. BOM
- ZI.13 - a. SERVICE NATIONAL DE PLANIFICATION DE NUTRITION
HUMAINE
b. BP. 3088 Kinshasa - Gombe
- ZI.14 - a. St-PAUL LIBRAIRIE
b. BP. 8505, Kinshasa
- ZI.15 - a. SPECIA KINSHASA
b. BP. 7097 Kinshasa I
d. 243-44

X

X X

ORGANIZATIONS AND NETWORKS OF ORGANIZATIONS
ACTIVE IN HEALTH EDUCATION/COMMUNITY PARTICIPATION IN AFRICA

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S./ CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>AFRICA REGIONAL</u>						
Institut Africain pour le Developpement Economique et Social (INADES)		IVORY COAST			x	A. Girard
Centre d Etudes Economiques et Sociales de l'Afrique Occidentale (CESAO)		UPPER VOLTA			x	
Pan-African Institute for Development (PAID)		CAMEROON ZAMBIA U.VOLTA			x	Mattieu Gracia
Environnement et Developpement du Tiers Monde (ENDA)		SENEGAL			x	L. Robineau
Centre de Formation en Sante Publique (WHO)		TOGO			x	Ben Lamine
Regional Training Centre for Public Health (WHO)		NIGERIA (Lagos)			x	H. El Neil
Centre Regional de Developpement Sanitaire (Universite Nationale du Benin)		BENIN			x	Lardja Sanwougou
African Regional Health Education Centre (University of Ibadan)		NIGERIA (Ibadan)			x	Joshua Adeniyi Wm. Brieger

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S. / CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>AFRICAN NATIONAL</u>						
Federal Ministry of Health		NIGERIA		x		J. Laoye
Division de la Medecine Rurale, Ministry of Health		IVORY COAST		x		
Health Education Office, Ministry of Health		MALI		x		Y. Rouamba
Health Education Office, Ministry of Health		TOGO		x		R.D. Ehlan
National Health Education Unit, Ministry of Health		KENYA		x		D.N. Nbai
National Health Education Unit, Ministry of Health		TANZANIA		x		N.I. Mbagha
Department of Non-Formal Education		BOTSWANA		x		Robert Waller
Ecole Nationale d'Economie Appliquee		SENEGAL		x		C. Tidiane Sy
National Health Education Service Ministry of Public Health		CAMEROON		x		Elias Joe
Service National D'Education Sanitaire Ministere de la Sante		SENEGAL		x		Ibrahim Beye

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S. / CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>PRIVATE VOLUNTARY ORGANIZATIONS / PROFESSIONAL ORGANIZATIONS</u>						
AMREF	NEW YORK	KENYA				Norman Scotney Lucas Omondi
Christian Medical Commission			GENEVA			Stuart Kingma
CARE	NEW YORK	CONGO				Nancy Minett
APHA	WASHINGTON					S. Kessler B. Karlin
International Union for Health Education		NIGERIA	PARIS			J. Laoye
Bureau d'Etudes et de Recherche pour la Promotion de la Sante		ZAIRE				J. Courtejoie
ASAFED (Famille et Developpement)		SENEGAL				
Blair Research Institute		ZIMBABWE				P. Morgan
International Development Research Centre	OTTAWA					
World Neighbors	OKLAHOMA					Stanley Reynold
World Education	NEW YORK					Jean McCormack
ARHTAG			LONDON		x	K. Elliott
Institute for Child Health Teaching Aids at Low Cost (TALC) Child-to-Child Program			LONDON		x	David Morley Duncan Guthrie
The Hesperian Foundation	CALIFORNIA					David Werner

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S. / CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>UNIVERSITIES</u>						
University of North Carolina	Chapel Hill NC	CAMEROON		x		G. Steuart D. Candy E. Eng Alan Steckler J. Hatch
Center for International Education University of Massachusetts	Amherst Mass.			x		Richard Ulin
Institute for International Studies in Education, Michigan State University	East Lansing MI.			x		
Institute of Behavioral Sciences University of Colorado	Boulder CO.			x		Anne & Gilbert White
Institute of Environmental Studies University of Toronto	Toronto Ontario			x		Anne Wyte
Rural Development Committee Cornell University	Ithaca NY.			x		Norman Uphoff
Center for Health Promotion Research and Development, University of Texas Medical Center	Houston TX.			x		Lawrence Green
Department of Community Health University of Nairobi		KENYA		x		Margaret Isabyre
International Rural Reconstruction Reconstruction Movement	New York	GHANA			x	Juan Flavier

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S. / CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>MULTILATERAL ASSISTANCE AGENCIES</u>						
WHO - Division of Health Education - Division of Environmental Health		x	x	x		
UNICEF	x			x		Muriel Glasgow Susan Cole-King Mary Holnsteiner
UNDP/INTER. DWS & S DECADE	x			x		Hilda Paqui
WORLD BANK	x					Michel Jancloes
ACCT (Agence de Cooperation Culturelle et Technique)		x	x		x	
IRC			x			Alastair White Christine van Wijk

INSTITUTION	LOCATION			TYPE		KEY CONTACT
	U.S. / CANADA	AFRICA	EUROPE	PUBLIC	PRIVATE	
<u>BILATERAL ASSISTANCE AGENCIES</u>						
AID	WASHINGTON			x		E. McJunkin
SIDA			STOCKHOLM	x		U. Winblad
CIDA	OTTAWA			x		
Peace Corps	WASHINGTON			x		Jim Bell Claudette Kaba

APPENDIX D

From: The Nurse and Community Health in Africa by Jeanne F. Carrière, Susan H. Colgate, Miriam Jato and Damaris Mounlom, Editions Clé, 1979

Annexe C :

SOURCES D'INFORMATION

Sous cette rubrique nous dresserons une liste que le lecteur pourra utiliser pour obtenir des renseignements ou de la documentation écrite (gratuite ou payante).

Cette liste n'a pas la prétention d'être complète mais veut uniquement faciliter, au lecteur, l'obtention de renseignements supplémentaires, dans l'éventualité où il désirerait enrichir ses connaissances ou obtenir du matériel pour illustrer son enseignement.

A : Associations et Organismes internationaux.

African Medical and Research Foundation
P.O. Box 30125
Nairobi, Kenya

Bureau International du Travail (B. I. T./I. L. O.)
CH-1211
Genève, 22
Suisse

Centre de Recherches pour le Développement International
B. P. 8500
Ottawa K1G 3H9
Ottawa, Canada

Centre for Educational Development Overseas
Tourstock Home
North Southampton Row
London W. C. 1, England

Centre International de l'Enfance
Château de Longchamp
Bois de Boulogne
75016 Paris, France

Conseil International des Infirmières
B. P. 42
Genève, Suisse

Fonds des Nations Unies pour l'Enfance (UNICEF)
Bureau pour l'Afrique Centrale
B. P. 2110
Brazzaville
République Populaire du Congo

Institut Africain pour le Développement Economique et Social (INADES)
B. P. 8008
Abidjan
Côte d'Ivoire

Institut d'Elevage et de Médecine Vétérinaire des Pays Tropicaux (I.E.M.V.T.)
10 rue Pierre-Curie
94700 Maisons - Alfort
France

Institute of Child Health
30 Guilford Street
London, WC1N 1EH, England

Institut National de la Santé et de la Recherche Médicale (INSERM),
Information Médicale Automatisée (IMA)
Hôpital de Bicêtre
78, rue du Général Leclerc
94270 Le Kremlin Bicêtre
France
(N. B. - S'adresser au Centre de Documentation pour l'accès au réseau international d'information bio-médicale, «Medline»)

Institut Pan-Africain de Développement
B. P. 4078
Douala, République Unie du Cameroun

Institut Pasteur de Paris
25/28 rue du Dr Roux
75015 Paris, France

International Confederation of Midwives
47 Victoria Street
London SW1H0EQ
England

International Council of Nurses
P. O. Box 42
1211 Genève 20
Suisse

International Planned Parenthood Federation (IPPF)
18-20 Lower Regent Street
London, SW1Y4PW
England

ou : IPPF – Regional Office
P. O. Box 30234
Nairobi, Kenya

ou : IPPF Regional Sub-Office
P. O. Box 7699
Accra North
Ghana

National Food and Nutrition Commission
P. O. Box 2669
Lusaka
Zambia

Office National de la Recherche Scientifique et Technique
(ONAREST)
B.P. 1457
Yaoundé, République Unie du Cameroun

Organisation de la Lutte Contre les Endémies en Afrique Centrale (OCEAC)
B. P. 288
Yaoundé, République Unie du Cameroun

Organisation des Nations Unies pour l'Alimentation et l'Agriculture
(OAA/FAO)
Via delle Terme di Caracalla
00100 Rome, Italie

Organisation Mondiale de la Santé
Bureau Régional d'AFRO
B. P. 6
Brazzaville, République Populaire du Congo

Organisation Mondiale de la Santé
rue Appia
Genève, Suisse

Pathfinder Fund
30, avenue des Arpillières
1224 Chêne-Bougeries
Genève, Suisse

The Pathfinder Fund
International House
1st Floor Room Nos. 18 & 19
Mama Ngina Street
Nairobi, Kenya

UNESCO Regional Office for Education in Africa
P. O. Box 3311
Dakar, Senegal

UNESCO Regional Office for Science & Technology for Africa
P. O. Box 30592
Nairobi, Kenya

World Neighbors
5116 North Portland Ave.
Oklahoma City, Oklahoma, 73112
U. S. A.

**B. Principales librairies où l'on peut obtenir de
la documentation écrite en matière de santé**

AMA à Mvaa
B. P. 33
Okola, République Unie du Cameroun

Animation Rurale
B. P. 855
Bangui, Empire Centre-africain

Atelier Scolaire de Busiga
B. P. 18
Ngozi, Burundi

Bureau d'Etudes et de Recherches pour la Promotion de la Santé
Kangu-Mayombe, République du Zaïre

Caritas-Rwanda
B. P. 124
Kigali, Rwanda

CEDI
B. P. 11398 Kinshasa 1
209 Av. Kalemie
Kinshasa, République du Zaïre

Centre d'Entraide et de Développement
B. P. 1118
Bujumbura, Burundi

The Caxton Press Ltd.
Gathani House
Homa Bay Road
P. O. Box 41742
Nairobi, Kenya

Diffusion de la Presse
B. P. 505
Kisangani, République du Zaïre

East African Literature Bureau :
P. O. Box 3002, Nairobi, Kenya
P. O. Box 1408, Dar es Salaam, Tanzania
P. O. Box 1317, Kampala, Uganda

Editions La Porte
281 Avenue Mohammed V
Rabat, Maroc

ENI Communication Centre
P. O. Box 2361
Addis Ababa
Ethiopia

ESNAC
11, rue Brialmont
Bruxelles, Belgique

Foundation for Teaching Aids at Low Cost (TALC)
30 Guilford Street
London, WC1N1EH
England

Health Education Unit
Senior Health Superintendent
P. M. B. 5262
Eleiyele, Ibadan
Nigeria

INLD
Caixa Postal 4030
Maputo
Mozambique

Lesotho Distance Teaching Centre
P. O. Box 781
Maseru
Lesotho

Librairie Evangélique (LECO)
B. P. 77 à Brazzaville
République Populaire du Congo

Librairie Les Volcans
22/5 Ave. Président Mobutu
B. P. 400 Goma (Kivu)
République du Zaïre

Librairie Populaire
13, rue du cours Nolivas
B. P. 41
97101 Basse Terre, Guadeloupe

Librairie Presses Universitaires Zaïroises
B. P. 1682 Kinshasa
République du Zaïre

Librairie Salutiste
B. P. 8905 Kinshasa
Av. du Plateau, 246
République du Zaïre

Librairie St. Paul
B. P. 763
Yaoundé, République Unie du Cameroun

Librairie St.-Paul
B.P. 8505 Kinshasa
ou
B.P. 2447 Lubumbashi
République du Zaïre

Libreza
B. P. 190 Bukavu
République du Zaïre

Liproka
B. P. 900 Kananga
République du Zaïre

Nabaa El Fikr Bookshop
55 Saad Zaghloul Street
Alexandrie, Egypte

Procure Scolaire
B. P. 70 Kananga
République du Zaïre

Société Nationale d'Édition et de Diffusion
3 bd Zirout Youcef
Alger, Algérie

Société Tunisienne de Diffusion
5 Avenue de Carthage
Tunis, Tunisie

University Bookshop Nigeria Ltd.
University of Ibadan
Ibadan, Nigeria

C. Revues

Agripromo
INADES – formation
B. P. 8008
Abidjan, Côte d'Ivoire

Contact (publication du Christian Medical Commission du Conseil
Œcuménique)
150 Route de Ferney
1211 Genève, 20 Suisse

Développement et Santé
1 Rue de Savoie
75006 Paris, France

L'Enfant en Milieu Tropical
Centre International de l'Enfance
Château de Longchamp
Bois de Boulogne
75016 Paris, France

Famille et Développement
66, Bld. de la République
B. P. 11007, CD Annexe
Dakar, Sénégal

Infirmiers
Société SOPEPHARM
10, rue Ampère
77100 Meaux
France

International Nursing Review
c/o International Council of Nurses -
P. O. Box 42
CH - 1211 Genève 20, Suisse

Population Reports
Population Information Program, Department
of Medical and Public Affairs
The George Washington University Medical Center
2001 S. Street N.W.
Washington, D.C. 20009
U.S.A.

Revue Internationale d'Education pour la Santé
3 Rue Viollier
1207 Genève, Suisse

Les Revues de l'OMS :

Cahiers de Santé Publique
Cahiers Techniques
Chronique OMS
Rapports Techniques
Santé du Monde

} Organisation Mondiale de la Santé
Service de Distribution et de Vente
1211 Genève 27, Suisse

Sages Femmes
Société SOPEPHARM
10, rue Ampère
77100 Meaux, France

Salubritas
American Public Health Association
International Health Programs
1015 Eighteenth Street N. W.
Washington, D. C. 20036
U. S. A.

Tropical Doctor
Royal Society of Medicine
1 Wimpole Street,
London W 1 M 8AE
England