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HEALTH EDUCATION IN
UNICEF-ASSISTED WATER SUPPLY AND
ENVIRONMENTAL SANITATION PROGRAMMES (1949-1986)

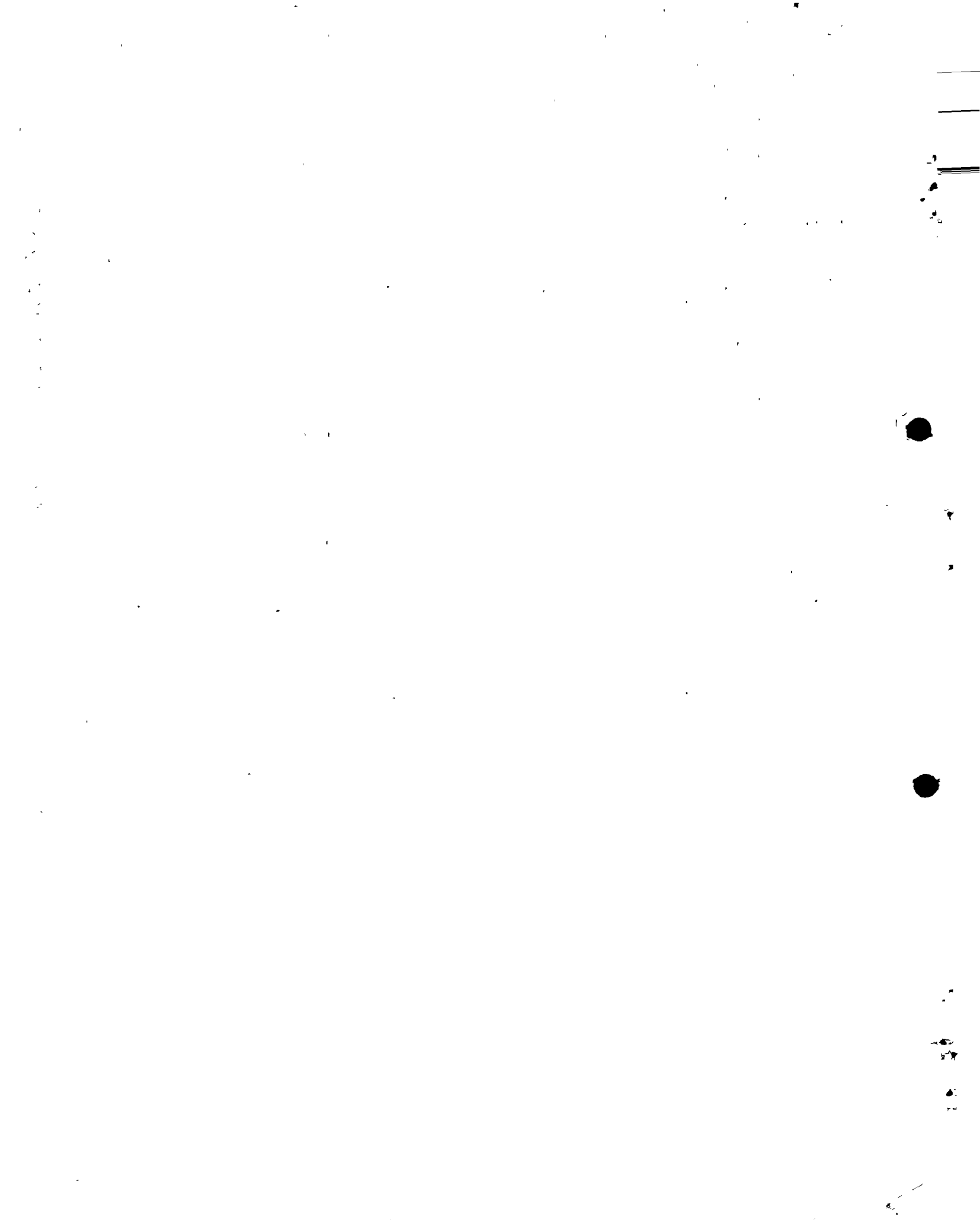
A review of main developments

by

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*This paper was prepared by Agatha Pratt while a member of the Water and Environmental Sanitation Team (WET), Programme Division, UNICEF, New York.

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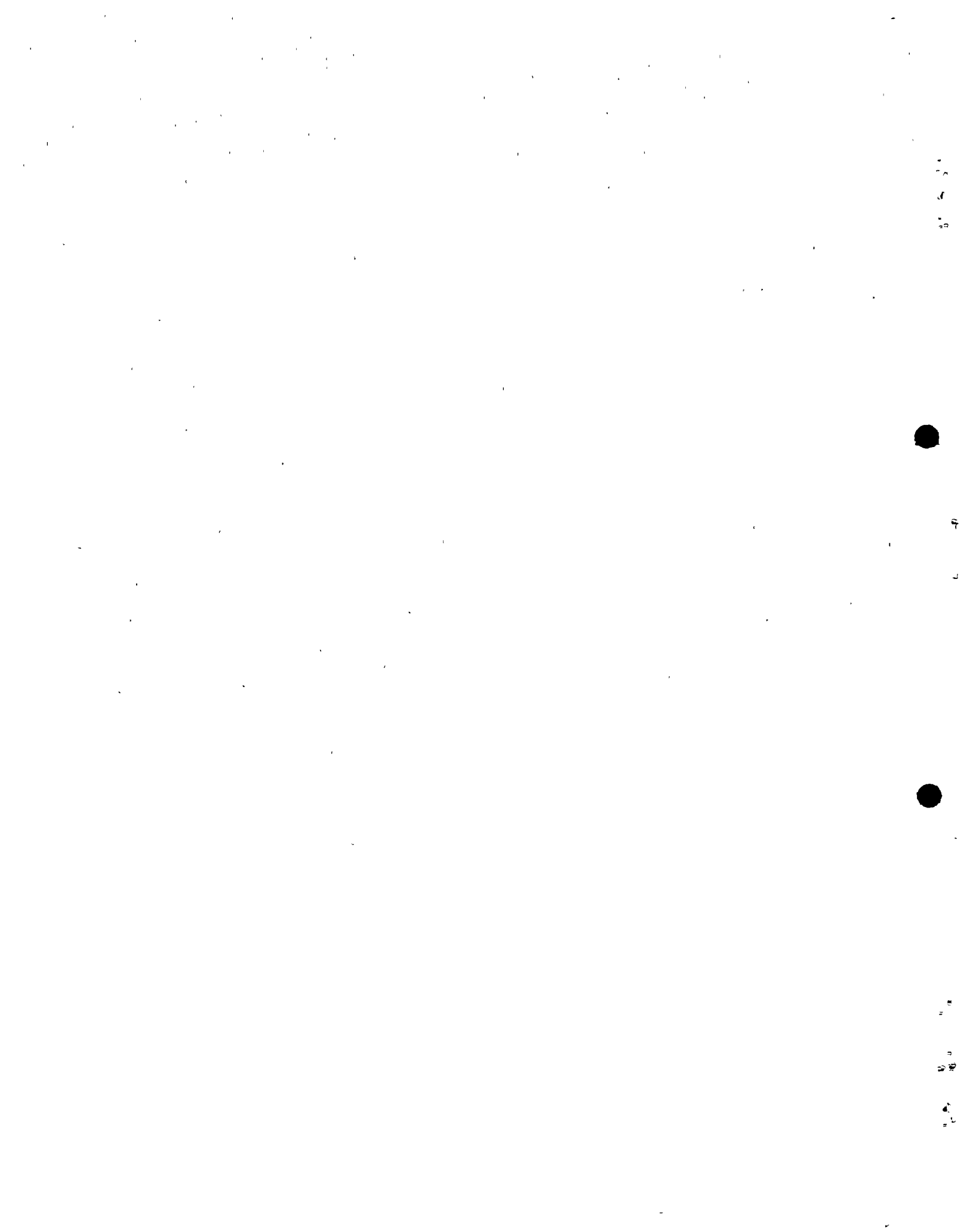
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Recommended Readings: Evaluation reports

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FOREWORD

Health education seems to be the stepchild of any health system. Health, sanitation and hygiene education in water supply and sanitation programmes was almost unborn or hardly even conceived when, around 1970, UNICEF embarked on the major expansion of its world-wide support to this component of Primary Health Care.

The first major impulse to do something about this situation came from the Joint Committee on Health Policies (JCHP) of the World Health Organization and UNICEF. In a study in 1979, the JCHP recommended action to introduce such educational activities into water and sanitation programmes with strong support from two international organizations.

The rest is history, albeit a very recent one. It is not only for this sake that I welcome the present study by my colleague of many years, Agatha Pratt, it serves well to record the - as yet - beginning efforts. I hope it will help in sustaining an idea and an activity that would require far more understanding and energetic support than we have as yet, from all international and other organizations concerned, including UNICEF itself.

The specific problems and approaches to spread the health and hygiene awareness to people in the developing countries also need to be introduced into the curricula of teaching institutions and in the fields of health, education and rural development. This pertains to the industrialized as well

as to the developing countries. After all, people all over basically have the same conceptions and there are pockets of poverty and lack of literacy even in some of the wealthier countries. Charity begins at home anywhere in the world.

For that sake, may this present brief section on this new part of UNICEF's history be read by those whom it should concern, and its subject matter taken at heart by decision-makers, implementers, trainers and students.

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1. INTRODUCTION

1.1 Scope

Writing the history of health education in all UNICEF-assisted programmes/projects of co-operation would, perhaps, have been more appropriate and useful at this time than to limit this vital part of UNICEF history to only water supply and environmental sanitation programmes. However, because of time constraints, it was decided that this paper should be a restricted one as a contribution to a larger undertaking.

It became evident in the early stages of my research that the active involvement of UNICEF in health education in water and sanitation actually picked up momentum in the late 1970s. As a result, the paper offers more substantive information for that period and into the 80s. I have drawn heavily on recommendations and policies of UNICEF's Board and those of the UNICEF-WHO Joint Committee on Health Policy (JCHP) in an attempt to put this activity in its proper perspective of evolution.

There have been several evaluation studies carried out since the late 1970s and I thought it would be useful to list some of them. These can be found at the end of the document under the heading "Suggested Readings".

A stalwart in UNICEF and "the man behind the wheels" who has turned those wheels slowly but surely through the years in an attempt to integrate

the concept of health education linking it with community participation in water supply and sanitation projects has been no other than Martin Beyer, UNICEF Senior Specialist on Drinking Water and Sanitation. He has also been instrumental in the active recruitment of specialists in health education and has encouraged his technical staff to be actively involved in the promotion of health education in the programmes they are working. In this effort, he has been assisted by others in headquarters and the field. Because of his important contributions, it was most fitting and necessary that I get a brief account from him of how UNICEF attempted to combine the technology/"hardware" concept and the sociological/"software" one, making government and UNICEF staff aware of the problems and possible solutions to community motivation and participation.

Before reviewing the historical role of health education in UNICEF water supply and environmental sanitation programmes, it is perhaps most appropriate, at this juncture, to explore briefly its general concept and the need for it.

1.2 The concept of health education

Health education, as a profession, had its birth during and immediately following World War II. Of course, the concept of health promotion is as old as education itself. According to Sally Lucas Jean (1951), the term "health education" was officially adopted in 1918 to describe a new brand of education. This was championed by a newly established group, The Child Health Organization of America. However, health education did not emerge as a special field of study until the 1940s.¹

The report of the first WHO expert committee on health education, convened in 1953, stated that "a principal objective of health education is to help people achieve health by their own actions and efforts".²

Another theory offered by the WHO Expert Committee on Planning and Evaluation of Health Education Services states that:

"The focus of health education is on people and on action. In general, its aims are to encourage people to adopt and sustain healthful life practices, to use judiciously and wisely the health services available to them, and to make their own decisions, both individually and collectively, to improve their health status and environment."³

Still seeking clearer objectives, the WHO Scientific Group on Research in Health Education in a 1969 report suggested that an underlying objective of health education is "the development in people of (1) a sense of responsibility for their own health and for that of the community, and (2) the ability to participate in community life in a constructive and purposeful way. The possibility of such responsible participation being carried over into other spheres of life is great. Health education thus helps to promote on the one hand a sense of individual identity, dignity and responsibility, and on the other hand community solidarity and responsibility".⁴

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 by Lawrence Green, a well-known expert in health education theory and practice. According to Green (1980), health education is "any combination of learning experiences" which "facilitate voluntary adaptations of behaviour conducive to health."⁵

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.

The bottom line, therefore, taking into account the numerous "shades" of definition, is that people themselves decide to make the change that will affect their health positively or negatively.

1.3 Why health education in water and sanitation?

The title of an article in a UNDP magazine on the Promotion and Support for Women's Participation in the International Drinking Water Supply and Sanitation Decade perhaps describes it best: "Technical Response is not enough". Indeed, what for many years was considered to be the key to solving the problems of water and sanitation as they relate to health began to be questioned as projects failed to achieve an outcome in terms of better living. Experts, therefore, were beginning to search for answers. This so-called key was consistently being expressed in terms of technical or hardware response to the needs of the people. It meant simply drilling wells, installing pumps and constructing latrines and then sitting back waiting expectantly for the desired results.

In the late 1970s development planners of water and sanitation programmes began to grapple with reasons for the failure of their programmes. It soon became evident that the most obvious reasons for failure had to do with the lack of involvement of the community and the lack of understanding and acceptance of cultural perceptions and attitudes. The three acceptable

elements embodying behaviour - knowledge, attitudes and practices - were not seen as playing vital roles in achieving success. We now know, through numerous research, studies, and surveys that there are deepset attitudes towards water use and waste disposal.

A very good example of present day perception of water in rural India is that related by Ismail (1980):

"No Indian villager will dispute the vital importance of drinking water - but in the canal-irrigated districts of the north-western states, there are some decided differences of opinion about the relative 'vitality' of different kinds of water.

Well water, for example, is considered the sweetest of all. It takes some persuasion to convince the rural connoisseur that sweet water full of invisible little micro-organisms is more sinister than it looks or tastes.

Pond water - with all its wealth of pond life - is also considered better tasting than the clear, clean water from a hand-pump, and health education workers face an uphill task before the relative merits of the two can be established.

Stream water - well, how can running water be harmful? A running challenge for communicators to explain.

As for canal water, it comes as a life-line to many an arid corner of rural India, but it carries its question mark along with it too. When India's massive Bhakra Nangal dam and hydro-electric project was built, there was plenty of publicity in the northern countryside to tell the people of the increased power and irrigation facilities that would come to the villages. The power lines stretched out over the farmland, and the Bhakra canals and their tributaries carried much-needed water to the farmers. But the farmers were not ready to be fooled. "Yes, we have

heard about this water. It has come from the electric works - and all the electricity has been taken out of it. It has no life left in it at all!" And they called it "khoka pani" - empty lifeless water, and wouldn't believe that it could do much for either crops or livestock or people."⁶

Further examples of the influence of culture on behaviour have been gleaned by several researchers such as:

- storage jars used by people are sometimes sources of contamination - this knowledge is not available to their users;
- the people are accustomed to the taste of the polluted water they have used all their lives. "Taste" is a highly subjective factor and is conditioned over generations. A consideration here is that surface water may be closer and that there may not have been consultation with the community about the site of the water point;
- rivers/canals provide multiple social/domestic functions which new water systems overlook (gossip, a place where courting youngsters meet, clothes washing, etc.);
- there is the belief that the sun purifies the water; therefore, the pond or open surface water is pure;
- running water is always safe;
- children's excreta are not harmful;
- cattle do not pollute water;
- washing with cold water causes disease;
- using the bush as latrine is more hygienic;
- boiled water causes illness;

- the pond water is free (some communities do not wish or cannot afford to pay for water).

Observers have reported the phenomenon of people not recognizing, for instance, malaria, intestinal parasites, diarrhoea, and other chronic diseases and symptoms as conditions needing attention or conditions that could be prevented. Rather, they are an accepted part of life and death. This is, of course, natural in the cultural context.

However, we know more now than ever before of the relationship between diseases and water and excreta disposal.

The most important recent advance in understanding the relationships between water and health has been the development of a scheme by David Bradley (1972) in which diseases are classified according to the nature of their relationships to water. Water-borne diseases, such as cholera and infectious hepatitis, are the pathogenic organism. These diseases, it is believed, are combatted through water quality improvements and by the prevention of the causal ingestion of water from contaminated sources. Water-washed diseases, such as shigellosis and scabies, are prevalent where hygienic practices are poor. The incidence of these diseases declines when water becomes more available and increased quantities of water, irrespective of quality, are used for hygienic purposes. The pathogens transmitting water-based diseases such as schistosomiasis and guinea worm are dependent on aquatic organisms for completion of their life cycles. Water improvement strategies for combatting these diseases include improving the quality of the water and reducing the contact of the population with infected water sources. Diseases such as

sleeping sickness and malaria are transmitted by water-related insect vectors which breed or bite near water. Control strategies include improved surface and waste water management and reduction in time spent in the vicinity of breeding sites.

Esrey, Feachem and Hughes (1985) have analyzed the effectiveness of water supply and excreta disposal improvements for reducing diarrhoea rates in young children in developing countries. They have also examined the impact of water supply and excreta disposal on diarrhoea-related infections, nutritional status, and mortality. This analysis is useful in identifying knowledge, attitude and behaviour for health education intervention.

They hypothesize that water supply and/or excreta disposal improvements can reduce the ingestion by young children of pathogens (water-borne diseases) causing diarrhoea.

There is evidence, they wrote, to suggest that three types of water and excreta disposal improvements (improved water quality, increased water availability and quantity associated with better hygiene practices, and improved excreta disposal facilities) may reduce the ingestion of pathogens causing diarrhoea.⁷

However, in still many cultures, illness is considered the result of some moral transgression or the "hot" or "cold" nature of things. Presented without sensitivity, programmes "do not make sense".

Based on the foregoing knowledge one can assume, therefore, that the availability of adequate and safe quantities of water alone are not sufficient

to bring about the expected change among a target population. People must be assisted in changing the way they perceive water quality and quantity and consequently change their attitude, behaviour and usage of water.

Health education seeks to understand problems of the kind just described from the public's perspective and help people develop a felt need for improving their condition.

Health education is one of the balancing factors between the "hardware" and "software" components of water and sanitation projects that will yield some common ground for basic promotive and preventive felt needs and actions.

2. HEALTH EDUCATION IN UNICEF-ASSISTED WATER AND SANITATION PROJECTS: DEVELOPMENT THROUGH THE DECADES

2.1 The late 1940s and 1950s

As far back as 1949 the UNICEF-WHO Joint Committee on Health Policy (JCHP) recognized the unequalled opportunities which schools offer for health education and for children to experience living in a healthful environment. Schools (where they exist), one of the most obvious channels for health education, were not extensively used to educate for health. For instance, there were a number of instances where modern hand washing, drinking and excreta disposal methods had actually been planned in schools, but the poor or total lack of maintenance of these facilities reduced considerably the potential educational impact and use of the facilities.

In 1953 considerable interest was expressed by the UNICEF Executive Board in a study initiated by the Executive Director on the development of

simple methods of expanding UNICEF aid through schools for other-than-educational services to children. The possibility of simple aid in the fields of school food, school gardens, school water supply and latrines, and personal hygiene and health education were to be examined as ways of using schools as an institutional channel for reaching the 1-12 year age-group.

The thinking was that the best health education contacts are sanitarians and sanitary engineers, nurses and other health workers who are able to explain exactly what the improvements would be and what benefits might be expected. The necessity for such explanations did not seem to be fully appreciated in some areas by national and UNICEF staff, who seemed more concerned with the physical aspects of the improvements they advocated than with participation and intelligent use of the improvements by the population.

In its 1953 Board session, UNICEF endorsed the following two principles of the JCHP which called for the association of environmental sanitation with a programme for maternal and child health:

- 1) "The education of the public in hygiene is an essential part of any programme. This applies more particularly to safe excreta disposal, which is a much more difficult problem than provision of a safe water supply, and requires careful study of cultural and psychological aspects of community life if it is to be solved."
- 2) "Community participation should be obtained through all stages of the programme."⁸

UNICEF began acting upon these recommendations as soon as opportunities were created. Nicaragua was one of the first countries to benefit from the introduction of health education in its UNICEF-assisted project.

The project commenced in late 1955. It was a demonstration programme which included the provision of safe water supplies and the construction of latrines in the Department of Carozo, co-ordinated with a health education campaign.

UNICEF assistance with supplies and equipment enabled the Government to fulfill its plans for a health education programme. Courses for active professional personnel (doctors, nurses, teachers, sanitary inspectors, health visitors) in the essentials of public health were begun. A second phase of the programme entailed the establishment of four mobile "health propoganda units" completely to cover the country. Each unit consisted of a chief, one operator, an assistant and a driver. The head of the unit was to be an experienced teacher with special training in health education methods. Each unit was equipped with a vehicle or launch, film projection equipment, loud speaker, films, and miscellaneous office equipment. All of the activities were to be closely geared in with the operating programmes of the Ministry of Public Health such as the feeding and insect control programmes being assisted by UNICEF.

The programme was under the direction of the Health Education Department of the Ministry of Public Health. The Government increased the budget of the Ministry for this purpose by 123,000 cordobas (approximately U.S. \$25,000)⁹.

Although not as aggressively pursued as we began to see in the late 70s there were, nevertheless, efforts to introduce health education in some programmes. New projects benefitted to some extent during this period. They included:

Kenya

UNICEF's sanitation work was integrated into the Health Centre system and there was recognition that its various steps could only be accomplished with the help of public understanding. A great deal of the purely manual work was achieved by the voluntary labour of the communities or families concerned. This involved a direct relationship with the Community Development movement, for the women's section of which UNICEF assistance was approved in March 1956 (E/ICEF/L.902) and in March 1959 (E/ICEF/R.634). The administrative responsibility for other parts of the labour lay with African District Councils. It followed from this that explanation and education was a necessary part of the campaign. Health entry staff were trained and experienced in this, as the reports of a visit by the WHO Medical Adviser to UNICEF Regional Office for Africa testified. The posters, information and display material were needed for the education of the public in environmental Education Unit for which further help was being requested.

In September 1959, UNICEF allocated \$54,500 to assist in a pilot demonstration project in environmental sanitation to be carried out during 1960/61 in three areas of Kenya. It involved, among others, the intensification of sanitary education. Health and sanitary education were important features of the plan and for this purpose posters, propaganda and display materials were made in the central workshop of the Health Education Unit.¹⁰

Brazil

The programme gave attention to all aspects of health education with particular reference to sanitation and hygiene. The staff of the health centres and sub-centres promoted this part of the programme. A rural education team (Missao Rural) of the National Campaign of Rural Education (Campanha Nacional de Educacion Rural) worked in the programme area to develop acceptance in all communities of the improved plan. This team comprised one doctor, one agricultural extension agent, one social worker, one nurse and one home economics expert. Other Federal and State agencies participated in this phase of the programme by providing films, posters and other audio-visual education material. Lectures and film shows were given in the schools, and in twelve mothers' clubs which were organized in the area of the programme. Also special courses were given to the school teachers in the rural areas so that they would be able to give lectures on health education. UNICEF provided twelve sewing machines for the mothers' clubs.

The programme for development of integrated rural health services in Rio Grande do Norte and the Fourteenth Health District in Mato Grosso included improvements in environmental sanitation and health education with particular reference to health and hygiene. The programmes commenced in late 1958 and 1959 respectively.¹¹

Chile

The objective of the programme was to strengthen rural health services in both Linares Province and the Departments of Ovalle and Copiapo and

included plans for improving water supply and excreta disposal facilities in rural communities. Health Education and training of a corps of sanitary inspectors were planned in each programme. In Linares, operations commenced in 1957 where UNICEF provided supplies for facilities provided to rural communities and the Government for the towns. In Ovalle/Copiapo the programme commenced in 1959.

The Government's intention during this period was to intensify health education throughout the area. A full-time trained health educator was appointed to the programme and devoted himself to the development and execution of this part of the programme under the technical direction of the Health Education Department of the National Health Service, which supplied printed health education material, printed by equipment provided earlier by UNICEF. Under the proposed apportionment UNICEF provided film strip projectors. One person was appointed at each health centre to work under his direction and to carry out the programme locally. Film strips prepared locally so as to conform to local customs and habits was shown.

Work at the "grass roots" level was carried out by the doctors, nurses and social workers. Lectures, film shows, and group discussions were arranged in health centres, mothers' clubs schools and other suitable places. The government had inaugurated the first Health Education Course for elementary school teachers, at the School of Public Health in Santiago. Teachers selected from the elementary schools from all over Chile were given lectures and training in the rudiments of public health practice with special emphasis on child hygiene and environmental sanitation. The first course had proved so successful that more extended courses were offered. Teachers in the Linares

who had taken or were taking the courses were used to carry out health education work in the schools.¹²

St. Vincent

While there was no formally organized health education programme in St. Vincent, there was a large volume of informal education carried out by sanitary inspectors, district nurses, health visitors and other personnel of the medical department as part of their regular duties. The most effective technique was that of the sanitary inspectors who made regular inspections of all premises and, when they found unsanitary conditions, advised the householder of the danger to his own and his neighbours' health and counsel him as to the best means of eliminating the hazard. During 1954, over 26,400 such inspections were carried out. In the course of their visits to schools, the sanitary inspectors, district nurses and health visitors also instructed the children on various aspects of health, with stress on infectious diseases, soil and water pollution and the importance of personal hygiene to health.

With technical approval from WHO, UNICEF provided pumps, tools, a vehicle, cement and other materials for a five-year project to improve environmental sanitation as an integral part of the island's health services. One of the aims of the project was to increase efforts at sanitary education and sanitary inspection.¹³

Training was another aspect that was seen as necessary if the objectives of health education were to be achieved.

In 1959 the JCHP stressed aid for training of more sanitarians (including supervisory staff) as well as more training of other health personnel in techniques of health education.

Later on, particularly in the 1980s more emphasis was put on training as this paper discussed in the section under "training".

During the period 1959-1968 about 80 countries received co-operation from UNICEF/WHO in programmes which concerned improvements of rural water supply and excreta disposal. These were demonstration projects, serving as catalysts for planning and implementing nationally supported countrywide rural environmental improvement programmes. Recognizing the need for health education for successful implementation of the projects, the JCHP in March 1960, stressed the urgent need for community participation and laid down as one of the criteria for UNICEF assistance "the organization of a well-planned and intensive health education programme to be carried out through every staff member in the programme".¹⁴ However, there was no systematic follow-up.

UNICEF and WHO assistance was provided to India during 1964-1969, with several activities directed toward health education of school-age children and youth. These included studies carried out by the staff of the School Health Education Division of the Central Health Education Bureau with the education authorities in four teacher-training institutions, and in primary schools in or near New Delhi where teacher-trainers practise. A method of assessing the current health education components of courses and new syllabi was devised and tested. Assistance was given also in organizing working conferences, seminars, and workshops on school health services, planning and implementation

of health education in schools and in-service courses for health service personnel, school administrators, teachers and supervisors. Several teaching guides and instructional materials were prepared and produced.

In 1968 an assessment was made of UNICEF/WHO-assisted environmental sanitation and rural water supply programmes. It was stated in the review that "education does accompany and give some measure of support to most of the UNICEF/WHO-assisted environmental health activities". Even with such earlier commitment there was recognition that health education coverage could be greatly improved. The poor results of the past, it was felt, were due in part to a lack of effort and support of the field of health education.

From the experiences gained recommendations emerged at every JCHP session.

In March 1969 the JCHP recommended that:

- ✓ (1) more field studies were required on ways and means of increasing the effectiveness of health education aspects of environmental sanitation and rural water supply programmes;
- (2) the maximum community participation at local levels should be encouraged at the planning, construction, and operational stages of environmental improvements to foster responsible involvement through health education of local people to ensure adoption, wise use, the maintenance of the facilities provided;
- (3) the introduction of health education should be encouraged in developing educational curricula for school-age children and youth, teaching staff, and others in order to enlist their active interest and support.¹⁵

As policies and recommendations continued to be formulated UNICEF moved gradually but systematically towards efforts to better integrate health education in water and sanitation projects. It no longer wished to pay what could be considered "lip service" to this most vital element in health related programmes/projects.

The late 1970s ushered in dramatic changes to meet the goals of health for all by the year 2000.

2.2 1970s - changing emphasis

By the late 1970s, a significant shift had occurred. UNICEF moved from an almost exclusive emphasis on technological aspects of water supply to more awareness of sociological factors. Informing and motivating the population in regard not only to installing and maintaining the water supply, but also of the interrelated factors of home and neighbourhood sanitation, were important elements here. This was seen as linking the water supply effort with broader concerns of health care, community development and the environment. It recognized that the full health impact of water supply and sanitation programmes depended on the situations in a number of complementary fields, including in particular.

- personal hygiene;
- supply of clean water in adequate quantity for drinking and household care;
- excreta disposal;
- refuse disposal; and
- cleanliness of the neighbourhood.

At this time also it was found that the factors which contributed to the achievement of these objectives among the UNICEF/WHO-assisted environmental programmes being undertaken in countries such as Guinea, Jamaica, Liberia, Tonga, and Venezuela included: commitment and degree of sustained government support of the projects in terms of policy, administration and finance, participation of the local communities and use made of health education to support the planning, construction and popular adoption of the improvements; provision for training of personnel; simplicity of systems design, plans adapted to the local situation; good liaison among various authorities within the country at national, provincial and local levels; and the existence of organizations to accommodate and maintain completed programmes.

One particularly successful water supply project within the programme was that of Jamaica which had a very effective health education component.

Around this time an important unit was created. This unit later became known as the Water and Sanitation Team (WET) headed by Martin Beyer. Others in the team included Henk Davelaar and, later, Paul Biron. The members of this unit became the force behind intensive efforts being made during this period towards fully integrating health education components linking them to community participation in water supply and sanitation projects.

By 1976 nearly all sectors of UNICEF co-operation were found to include important components of education: health education, nutrition education, education about safe water and sanitation, instruction about responsible

parenthood, the many kinds of programme aimed at improving the condition of women and girls, and project support communication (PSC)*.

In that year also Beyer's "From The UNICEF Waterfront"**) reported that reports and evaluations reaching headquarters indicated the need for health education everywhere. He summed the need up this way: "The nicest tubewell does not help when children and their elders go bathing in the nearest canal and still take a sip or two of it to relieve their thirst".¹⁷

2.3 1977 to present

1977 was an important year for concerned agencies as they assembled together to discuss collaborative efforts towards the improvement of water supply and environmental sanitation.

2.4 Mar del Plata

In 1977 a United Nations Water Conference was held in Mar del Plata. At that conference an Action Plan was developed which designated the years 1980-1990 as the "International Drinking Water Supply and Sanitation Decade.". National plans were to be made by each government for implementing the goals of HABITAT in Vancouver in 1976 to provide safe water to all of the world's inhabitants by 1990.

*This is discussed more fully in the section on "Community participation".
**) "From the UNICEF Waterfront" is an information series put out by Martin Beyer, UNICEF Senior Policy Specialist, Drinking Water and Sanitation, New York.

One of the recommendations emerging from this conference requested countries to: "carry out a programme of health education, parallel with the development of community water supply and sanitation, in order to heighten the people's awareness with respect to health". The international organizations and other supporting bodies, for their part, were "to take action to promote public health education".¹⁸

2.5 Alma Ata

In 1979 an international conference was held in Alma Ata which brought together WHO, UNICEF, and governments to promote the concept of Primary Health Care (PHC).

Water and sanitation were regarded as basic components of primary health care and provided a leading edge to community development. A policy emerged between WHO and UNICEF which included:

- emphasis on sanitation-excreta disposal, personal hygiene, food hygiene;
- the introduction of appropriate technology that can be maintained by low-income communities;
- the encouragement of community participation and information to users of facilities;
- the training of national manpower.

In the same year, the UNICEF Board noted that water and sanitation services entailed particular applications of the general principles of the Primary Health Care approach including the involvement of communities. It was necessary to ensure their understanding of and support for the improvement of water and sanitation, including the planning and management of these activities in their communities and the maintenance of facilities, and the strengthening of health education through appropriate channels.

Taking its cue from the Alma Ata Conference, the JCHP in 1979 was presented with a study on water and sanitation which reinforced the importance of health education. It was clear that the provision of water is only a first step with only a modest impact on health in low-income countries with low educational levels, until it is supplemented with a clean environment and education as to water use and storage, personal hygiene and food handling. A 1980 study in Bangladesh demonstrated how easy it is for water to be polluted between the well and its use (e.g. through dirty containers). This is becoming more important as the boiling of water is becoming less frequent because of shortage of wood and sticks and rising prices of kerosene.¹⁹

The JCHP's recommendations, which were approved by the UNICEF Board, contained an exhortation to governmental external aid agencies to supplement safe water supply with environmental sanitation and refuse disposal, and health education. In meetings between the Executive Director of UNICEF and the Director General of WHO in November 1980 it was agreed that UNICEF and WHO needed to increase their contribution to the health aspects of water supply and sanitation activities in the context of the International Drinking Water Supply and Sanitation Decade.

What has always been in the minds of those responsible in UNICEF is that 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. Thus, health education programme objectives for achieving this goal aim at:

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

In his statement to the General Assembly of the United Nations on the occasion of the inauguration of the International Drinking Water Supply and Sanitation Decade, November 1980, the Executive Director of UNICEF spoke of the commitment which he felt was reasonable on the part of all concerned. Concerning the need for health education he said:

".....But its achievement not only will require both increased national and international financial resources, but also, first, the redesign of many water programmes to reduce their per capita cost while expanding their coverage; and second, the much closer linkage of most water programmes with progress in other sectors, notably health education, to achieve the health goal. Far more effective linkage with health education is required in most countries if the health objectives are to be achieved in the decade and not delayed until far later."²⁰

Based on the premise that water supply and sanitation projects usually require the acceptance, utilization and continuous maintenance of new, perhaps unfamiliar, technologies by the entire community, UNICEF noted, that 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 behavioural change does not necessarily result in desired health outcomes. Collective behavioural change thus becomes the key to achieving measurable impact on both individual and community health status.

3. COMMUNITY PARTICIPATION, APPROACHES, CHANNELS OF COMMUNICATION

3.1 Community participation

Community participation for UNICEF was not to be isolated in the development and implementation of its programmes. In this regard, the organization sought ways of integrating it into programmes as best as it could.

One of the conclusions of the assessment at the 1979 session of UNICEF co-operation in water and sanitation was the need for greater involvement of communities. Community participation is relatively well developed in some areas, e.g., many South American communities, whereas much remains to be done in other countries. In an increasing number of programmes in which UNICEF co-operates, there are approaches to village-based systems for handpump maintenance through the selection and training of "handpump caretakers", e.g. Bangladesh, India and southern Sudan.

It was, however, recognized that involvement should go beyond the physical labour of digging wells, laying pipes or building pump platforms, and maintenance, to include understanding of benefits in health and convenience,

and participation in the decision-making process and in the design of the installations. As a first step, emphasis was laid on community participation and motivation in a series of regional workshops on water and sanitation held by UNICEF in co-ordination with WHO during 1980, with attendance of national water supply executives together with staff from UNICEF and other agencies.

Beyer (1985) offered a personal account of the efforts that were being made towards promoting community motivation and participation alongside health education.

"This was done through a series of regional workshops during the years 1980-81, coinciding with the beginning of the Decade. Such workshops with participants from several countries in each region were held in Arusha, Tanzania; Ougadougou, Cameroon; Beirut, Lebanon; Lima, Peru; and Udon, Thailand. This last workshop benefitted from the experiences of the previous ones. The result was a workshop report, the title of which indicates the aims: "Towards A Programmer's Guide". The Guide contains the first guidelines on community involvement in water and sanitation and is based on UNICEF experience.

A number of national country conferences and seminars, arranged jointly by UNDP and WHO with host governments on the subjects pertaining to the Decade, took place from 1980 onwards. The elements embracing social mobilization were emphasized from the start. What resulted from these meetings was the promotion of policies and better understanding between government agencies and sectors which later benefitted from the actual field work.

There was not only the need for strong advocacy but also a need to know what UNICEF was advocating in a more systematic way. There was also the need to follow up with active promotion and support UNICEF field offices which, in turn, would assist governments in educating and motivating the communities. Just about this time, the organization was

fortunate to secure the services of a senior adviser on community participation at UNICEF headquarters. Madame Ma Yansheng, one-time Chairperson of the All-China Federation of Women, was appointed in 1981 as Senior Consultant, Health Education in Water and Sanitation and became an integral part of the WET team and an indispensable member for rendering assistance to the field. She also assisted in the formulation of UNICEF policies and became an important liaison and alignment for the overall policies of the international scene as they pertained to community involvement and women's advancement in water and sanitation.

Health education/community motivation components were later introduced into individual country programmes. Health education had rarely been linked with the improvement or introduction of water supply and sanitation facilities in the communities. Yet, there had been the recommendations of the Joint Committee on Health Policy to provide health education to the communities with every installation provided for them.

In 1979 a senior specialist in health education - Margarita Cardenas - was assigned to one of the most difficult project areas from a socio-cultural point of view - Pakistan. It was difficult because the level of women's prestige and influence in the rural societies in most provinces was very low. The mention of faeces was also taboo in any conversation in these areas.

Margarita had a long and distinguished background as Chief of the Sanitation Education Section of the National Health Service in Paraguay. What may have been a long shot sending her around the world to a place strange to her and vice versa turned out to be a success. She not only adapted to her new environment and was fully accepted but she also got the opportunity to put into practice the concept of men and women as sanitation promoters for villages in Pakistan.

✓ This work was further strengthened through the employment of a male counterpart, Chit Chaiwong, Director of the Sanitation Department of the Thailand Ministry of Health. It was a good team whose later

introduction of the concept of rural sanitation gained success and proceeded on a large scale. The personality of the women who had been trained and sent out to work sites had a clear impact on the programme. The work was carried out successfully against all odds.

These health education efforts have now crept into other country programmes although they are still far from being as universal as would have been desirable. Examples of other countries with similar inputs with UNICEF project staff in place, are Nepal, India and Indonesia. In India, a large part of the pilot projects being carried out are done with the participation of local NGO's. The trend is to combine the health education activities of the water and sanitation programmes with the promotion of other health elements, notably in the CSDR and the immunization contexts.

In 1983 a post of Programme Officer (Health Education) was established in the WET section in headquarters and Muriel Glasgow from Guyana was appointed to that post. In this post until mid-1986, she proved to be the ideal person for helping establish a systematic approach to health education and to serve many field programmes in their work with governments introducing this element on a broad basis.

Considerable inputs were made in a few countries through UNICEF colleagues from the Project Support Communication group, prior to the more specialised health education efforts. With the guidance from the New York PSC unit initially under Björn Berndtsson, later under Revy Tuluhungwa, several PSC Officers in the field made important inroads. One of the first and very successful one was Anne Haaland (pronounced "Holarnd"), a journalist from Bodö on the Arctic Circle in Norway, who sparked life into the Nepali water, sanitation and health education scene with her support to Nepalese authors and illustrators of pamphlets and manuals. Many other colleagues helped in communities, such as Sampe Lalunghpa, our Tibetan PSC/Information man in Rangoon.

Although not a member of the WET Team, Mary Racelis, UNICEF Adviser for Family Welfare, contributed greatly to UNICEF's work on the role of women."²¹

3.2 Project Support Communications (PSC)*

In line with the various approaches being used to reach the community was the establishment of a new unit in UNICEF in 1966 in Bangkok. It was first known as the Human Resources and Mass Communication Unit, initially financed jointly by UNICEF, UNDP, and OPI, under the administrative responsibility of the Information Division in New York. The Unit was later renamed Development Support Communication Service (DSCS). Administrative responsibility in Bangkok was transferred to UNDP, which funded the unit's expansion, toward the end of 1969.

A year later, UNICEF appointed its first PSC field officers, and by the mid-seventies there were PSC posts in all regional offices and a small PSC unit in New York.

PSC refers to techniques for communication - either interpersonal or via the mass media - aiming at improving the operation of UNICEF-aided programme activities. Techniques have varied from traditional to ultra-modern. PSC is viewed as a total process involving communication planning around selected strategies, message production, dissemination, reception, and feedback - not just a one-way direct, communicator-to-passive-receiver activity. Above all, it demands an understanding of the audience and its needs and aspirations.

Does UNICEF sometimes use health education synonymously with PSC? Indeed, it does and for good reason. This approach, like health education,

*This unit is now known as the Programme Communications Unit.

does concern itself with reaching the minds of the villagers, motivating them for the changes brought about for their health, education, and welfare.

To demonstrate the similarity with health education activities a few examples of PSC activities are given below.

In 1978, in South India, a PSC initiative in motivating and training villagers brought the earlier malfunction rate of 80% down to less than 20% in Tirunelveli district, Tamil Nadu state."²²

In 1981 basic training and production equipment supplies were provided to the Tanzania Health Education Unit to help it cope with PSC requirements in connection with MCH and environmental sanitation in the Ujamaa villages.

In 1984 KAP studies on diarrhoea and water and sanitation were carried out in Pakistan to facilitate the development of communication strategies and activities.

Support for a strong emphasis on community participation has evolved through the years. However, those concerned feel that the health education area of many health related programmes still needs stronger endorsement.

In response to this concern the Board in 1982 and 1983 emphasized the need for inclusion of health education as a component in all UNICEF-assisted programmes.

The number of water and sanitation projects increased during the beginning of the 1980s and so, too, did the efforts towards fully integrating health education components and community participation. A few examples include:

Bangladesh

One of the objectives of the programme was "to motivate the community to contribute to its maintenance by awakening their appreciation of the benefits, personal and in common, that accrue from a continuing safe water supply".

Participation of the community was interpreted in such a way that it consisted only of economic contributions to construction (50% of the labour costs of the construction of a tubewell would have to be met by the beneficiaries) and to the maintenance/spares would have to be paid by the consumers. The motivation of the community to participation was the responsibility of the Union Parishad Chairman and to some degree the sub-assistant engineer.

The participation of the community in construction was introduced in connection with phase two of the tubewell water supply programme, which was going at the time. It was, therefore, premature to fully evaluate the results of the new approach. There were cases which could have had a negative effect on the overall goal of the programme of supplying public water freely accessible to all members of the communities. Individuals (the more wealthy persons of the village) tried to get the advantage of having a public tubewell just outside their doorstep for the publicly subsidized price of approximately 400 Tk. (=

50% of the labour costs of the construction work) by having their family members' and friends' signature on the application forms. Should the same individuals pay for the tubewell to be sunk within their compounds as a private tubewell, the price would be around 4000 Tk. These individuals gained economically a lot against the small inconvenience of not having the tubewell inside but just outside their compounds. Being the only or major payers of the contribution to construction of the tubewell such individuals could well regard as their right to decide who could have access to the tubewell.

The motivation drive for participation in the maintenance had only been carried out in a limited number of unions.

Continued motivation was directed towards achieving an economic contribution from the beneficiaries, thereby expecting that if people pay for something, they will take a more keen interest in it.

It was felt that a motivation for participation effort would only be successful if people were able to realize the benefits which they obtained. The most readily measurable benefit of the tubewell water supply was an easy access to drinking water. An easy access to drinking water could be a fairly meagre basis for motivating the community to participate in the programme and its maintenance, especially so when alternative sources of water were often more easily accessible and when most efforts spent in motivation had been directed to the male part of the community, who traditionally does not have the responsibility of providing the water for the households.

It was further felt that a motivation for participation effort would have greater effect if efforts were made to include female participation of

the community and not limited to economic participation but include decision-making connected with a health education aimed at achieving an awareness of the relationship between the use of contaminated water and certain diseases to enable people to realize the benefits of tubewell water.²³

Sri Lanka

An assessment of UNICEF-assisted programme (1979-1983) was carried out by Marga Institute. Among the services assessed were those involving water and sanitation. The following relate their findings.

The objective of UNICEF's water and sanitation project was to find solutions to the health problems caused by unsafe water and poor environmental sanitation. Although 50 estates, each under the Sri Lanka State Plantations Corporation and the Janatha Estate Development Board, were selected, much time had been spent in identifying suitable water sources and developing low cost designs which would be more suited for mainly pipe water systems on the plantations. Existing sources were generally from streams and springs which are unprotected and polluted. The storage tanks and pipes had deteriorated and most of the water supply schemes were either abandoned or in a poor state of repair. Environmental sanitation is closely linked with the availability of water, and latrines on the basis of one privy per family are almost non-existent on the plantations.

Following investigations and surveys it was found that a single plantation would have as many as 15-20 separate water schemes and at the end

of 1983 UNICEF was assisting on 20 plantations covering almost 300 separate schemes. Water-seal latrines on the basis of one privy per family were constructed along with the provision of water.

Pilot projects on community participation were started where the resident community was educated to undertake self-supporting schemes and utilise available health/welfare facilities. These included activities on feeding programmes in creches improving their living environment, cutting of latrine pits and construction of drinking water wells on a self-help basis. The estate health welfare staff were trained on the implementation of the PHC approach, including infant and young child feeding, prevention and early treatment of diarrhoea in children using simple home remedies and the importance of breast feeding. Community involvement was very relevant in the water and sanitation projects so that as a consequence, problems of operation and maintenance were minimised.

Health education programmes took the form of distribution of leaflets, display of posters, meetings and home visiting, films and lectures in Group 'A' where the participation rate was 41% of workers. This participation was mainly attendance at a film show.

In Group 'B', the only programme was a film show and participation was 13%. Home visiting was only sporadic.

The impact of health education on the community was assessed by interviews with women and their husbands.

Included in areas selected for inquiry were the following:

- (1) Information on how to look after the health;
- (2) Importance of drinking good water.

The question posed was whether anyone had spoken to them regarding these aspects of health. In both Groups 'A' and 'B', the majority of them had heard of them but deeper probing revealed that the message had not been meaningfully received in relation to some of them.

The question was asked whether drinking water was boiled always. Some of them who said they did, did so only at times. The investigators' dialogues, however, revealed about 70% of those who said they boiled water, did not appear to realise the danger of contamination since they used containers into which children and even women themselves dipped unclean tins and mugs to take water and even dipped dirty hands into the water.

There appeared to be a serious gap in health education as evident also from the alleged misuse of toilets. The superintendents of over 50% of the estates felt that health education should be improved in their estates. Some of them did not have any consistent or practical programmes.

Group 'C' had a small proportion of only 9% who had heard about drinking pure water. They did not, however, boil their water. The husbands interviewed in Group 'C' regarding knowledge of ways to improve their family's health, replied that they had no knowledge and were not interested.

In Group 'B' only 37% of husbands were aware of these.

In the field of family planning only 44% practised in Group 'A' and 44% in Group 'B'. A fair proportion in each of the groups said they "did not know", "were afraid", or "did not like".²⁴

Pakistan

In 1981 small water supply schemes and latrines were planned for Azad Jammu and Kashmir with health and education as integral components of the programme. UNICEF's strategy of promotion included practical demonstration through community participation. The emphasis was on the supply of clean drinking water, latrine construction and motivation of the community. Motivational programmes in the villages were initiated by trained sanitation promoters. In terms of practical demonstration water seal latrines were constructed in all health and educational institutions in the programme area, as the means to encourage private households to undertake construction of similar facilities. A health education campaign was carried out by sanitation promoters, community volunteers, water and sanitation committees, local body councillors, union council secretaries, religious leaders and staff of the concerned departments. Promoters, in motivating the community towards hygiene, first emphasized the importance of human excreta disposal, animal waste disposal and waste water disposal in the village as a whole, and then from house to house.

Community participation: The programme was based on the concept that for demonstration facilities in public institutions 25% of the labour was to

be provided by the community. Trained local masons were paid by the government for their share of the labour. The labour for household latrines, on the other hand, was entirely provided by the community. Promoters provided technical assistance in design and construction.²⁵

Nigeria

Initial work began in Imo State in late 1981, and it was there that a basic model was developed based on the research and experience of Imo, the programme expanded to Gongola and Kwara States in 1983-84. In 1985, planning began in earnest for a national rural water policy that included both: a priority goal of improving child health and specific health education strategies in child survival areas. In Gongola a set of basic, locally produced, visual aids were recommended to integrate training with the VBWs community work and serve as a means of reminding villagers. Prominent, but simple reinforcing messages were displayed on billboards at each pumpsite.

Based on some premises, the programme communication staff from UNICEF and the Gongola project distilled seven basic water protection and health education messages from materials developed in Imo and work in Jada District of Gongola. The messages read:

- The handpump water is best for your good health.
- Keep the environment around the handpump clean.
- Always wash containers used to collect water.
- Keep drinking water in a raised, covered container in your home.
- Wash your hands and stay clean.
- Use different cups for getting water from the pot and for drinking.
- Listen to the Village Based Workers in your community - they are your link information on better health.

It was felt that while the messages themselves were simplistic steps to protect water from contamination once it was collected from the handpump, they also served well as starting points for a variety of basic health education topics which included:

- drinking water sources and source protection;
- environmental sanitation, community sanitation;
- home sanitation, food hygiene;
- personal hygiene, child hygiene, problems with childrens' excreta;
- water and sanitation related disease transmission — waterborne, water-washed and foodborne and
- the VBW as a communication link for other health improvements such as ORT, EPI, nutrition, etc.²⁶

3.3 The "avant", "pendant" and "apres" approach

Methods or approaches for successful health education have varied throughout the centuries. One approach that is becoming more and more essential for successful water and sanitation programmes is the "avant", "pendant" and "apres" methodology. This methodology, which is particularly common in West Africa, looks at what happens before the water comes to the village, during the drilling/construction activities and after the well is made functional. The activities for health education would normally include:

Before the water comes to the village/area:

- setting up of committees for caretaking/maintenance of area around the well/pump;
- talks given on better use of the new source in terms of health;
- talks given on people's role in maintaining the new source;
- talks given on sanitation, specifically excreta disposal.

During the drilling/construction activities:

- talks given again on germ theory - how disease spreads;
- water diseases that can affect people's health, etc;
- talks about behaviour at the well (people, animals).

Unfortunately, the after or "apres" activities do not always take place. Behaviour can, of course, be influenced when people actually begin to use the water from the new source or when deciding on excreta disposal facilities.

3.4 Women and health education

Most people will agree that it is impossible to discuss health education in water and sanitation programmes without looking closely at ways in which women can be more effectively involved in designing, implementing and evaluating programmes.

The education of women and girls, their literacy and their information about the aspects of water use and sanitation are important factors in the impact of water and sanitation services, as they are for other child-care services. Women must play larger roles in community decision in this field.

In the Pakistan Integrated Water and Sanitation Programmes of 1981-1986 in Azad Jammu and Kashmir, one component was to train sanitation promoters whose duty is to motivate and help promote latrine building in the villages. Since segregation between men and women is practiced in the villages, the government officials are convinced that special efforts need to be made to train female sanitation promoters together with men. This was the first time the local Government and the Rural Development Department had tried to recruit women. It was reported that to begin with, out of 44 sanitation promoters trained during 1982, 8 were women. An evaluation of the project carried out in 1984 showed that considering the social environmental and organizational difficulties, the female promoters were doing a remarkable job.

It was felt that the most important lesson learned here was that in order to reach the women, the men had to be involved. Accompanied by community development workers, union council secretaries or sanitary engineers, the women sanitation promoters first organize water and sanitation committee for men. Once they have won the trust and support of the men, they proceed to organize water and sanitation committees for women. The interviewer relates the following story of a woman sanitation promoter:

"I first organized men's committees, then I organized a women's committee of five women and trained the committee members to keep their houses clean, burn the garbage and motivate them to build latrines. When these committee members were motivated and trained to keep their houses clean, other village women followed them. Women motivate other women as well as members of their families. This is how the message of sanitation and health can soon reach every household in the village and the village itself can become much cleaner."²⁷

Providing water supply systems without sanitation and a support programme of health/hygiene education is not enough to bring about health impact. In integrating this support component, therefore, it must be remembered that this is an area where women's involvement could have potential impact.

With an increasing number of women repairing and maintaining pumps it has become necessary for UNICEF to try to ensure that women receive the necessary skills to perform these tasks.

UNICEF also began employing women project officers for the sanitation, personal hygiene and motivation aspects of water programmes.²⁸

Other channels for health education have included the use of health workers, religious leaders, women's organizations, local organizations and others.

In predominantly muslim communities the teachings of the Holy Quran is used as a guide for water, sanitation and hygiene practices.

3.5 Training

In keeping with the earlier recommendations of the JCHP one of UNICEF's important achievements in the 1980s in the field of sector training was the conversion of most, if not all, of the approximately 140 water and sanitation Project Officers in the field to the virtues of sector "software" (e.g. sanitation and health education and community participation, as compared to the "hardware" of drilling rigs, pipes, etc.). Most of these officers are "hardware" technicians by training and experience but, through a series of workshops, seminars, visits to other countries' projects, etc., many of the officers are now ardent promoters of the "software" elements.

Almost everywhere, training courses for village-level workers, e.g. hand-pump caretakers, have been used to provide additional motivation and training for the promotion of simple health practices.

4. WORKING GROUP/INTENSIVE SESSIONS/WORKSHOPS

With the start of the 80s intensive efforts were being made towards the integration of health education into water and sanitation projects. Ways were

being sought of how best to pull together available resources and get as many people motivated and involved both from within UNICEF and from government and other concerned individuals/agencies. UNICEF did so through various means, e.g. a working group, intensive sessions and workshops.

A working group was set up in 1981 within the UNICEF secretariat to formulate operational policies and co-ordinate field activities which were expected to be intensified over the years.

On 22 and 23 April 1981 the first intensive session was held in New York. Participants included staff from UNICEF New York as well as from selected field offices and a few outside specialists with a wide experience in the field of health education. At the session, the groundwork was laid for an attempt at establishing a basis for operational guidelines for improving the impact of water and sanitation projects on infant and child mortality and morbidity, through strengthening linkages with community health education and motivation in the PHC context.

The session was the first stage in a process leading to the identification of issues and formulation of questions for further examination at the regional and country levels.

The outcome of this session resulted in a somewhat closer clarification of the objectives of UNICEF's activities in these fields as well as some initial ideas about the strategies and approaches to better integrate the water and sanitation components with the efforts in Primary Health Care and with health education or "hygiene extension" as one of the salient tools to

bring about better understanding and participation from the side of the people in the countries being served.

Participants at the session felt that there was a lack of health education components in most existing water projects. The development of water projects depends very much on technologies and availability of water resources. Together with sanitation, they are closely linked with social change and its corresponding dynamics. The workshop therefore recommended that: health education/sanitation components be developed for inclusion in all project proposals and action plans; and that country specific approach to programming be adopted for health education/sanitation which would entail a detailed analysis of problems in a given area and specific recommendations for actions.²⁹

Another workshop was held in 1985 at which participants came up with the following recommendations:

1. That the scope of health education be expanded to include any combination of activities designed to facilitate the voluntary adaptation of behaviour conducive to health, within the larger social, economic, political, cultural and organizational context.
2. That someone in UNICEF, and at both planning and village levels in the countries with which UNICEF works, be clearly designated as responsible for ensuring that health education components are planned, implemented, monitored and evaluated.
3. That "software" and "hardware" components be programmed and funded as a package, and that donors be identified either as already supportive of this kind of packaging, or as in need of sensitization

to the value of this packaging to safeguard results of their investment.

4. That priority consideration in funding be given to water and sanitation programmes that have improvement of health practices as a central part of programme proposals.
5. That the health education post in New York be retained and strengthened to support the momentum generated in linking health education in water and sanitation to other health initiatives. (This post was abolished in 1986).
6. That "doers" be trained in both the content and process of new approaches in health education, including community and women's involvement, and that "reinforcers" and "facilitators" be oriented to it: in UNICEF, at the policy, programme and project management, and village levels in countries; in universities and institutions that provide professional and continuing education to health educators.
7. That studies for planning or for monitoring and evaluating go beyond knowledge-attitude-practice surveys to include observation and understanding of the health behaviour of the people who use (or do not use) services, and of the social, cultural, economic, and political context that influence their behaviour. This means that studies must be qualitative as well as quantitative, and may be tied to intermediate indicators of outcomes.
8. That community involvement is essential to the process of health education, and may require innovative approaches to support funding at many levels, from community-based compensation of village workers to a fund within UNICEF for flexible response to community initiatives, as well as changes in rewards and reporting systems.
9. That guidelines for health education in water and sanitation programmes be cooperatively developed by Water and Environmental

Sanitation Team (WET), other advisers in the Programme Development and Planning Division and the Division of Programme Field Support, and issued as a PRO (programme directive).³⁰

Great inroads have been made over the years. But, it is still recognized that there is room for improvement. A recent survey in Bangladesh showed that the provision of safe water from tubewells has, to some extent, lessened the frequency of diarrhoea, but the effect has not been as dramatic as expected. One reason for this is the lack of adequate excreta disposal facilities. Another is the lack of health education and monitoring of hygienic practice, especially among children.

The same survey indicated that the drop in the incidence of diarrhoea is least noticeable among children under ten years of age. If the children were taught not to drink the canal and river waters in which they bathe and swim, but keep to the tubewells, this would lead to better health. The use and clean upkeep of sanitary latrines, personal and food hygiene are measures of equal importance which the women in the family are the most apt persons to uphold and teach.

5. FIELD VISITS AND EVALUATIONS

Other ways for keeping up the momentum with regard to health education activities have included field visits and evaluations of officers involved in water and sanitation projects. These have increased over the years and have helped bridge the gap between "hardware" and "software" components. A few examples of such field visits and evaluations are given below.

A review carried out in 1984 by Joseph Christmas of the WET Section, UNICEF Headquarters and Ragnar Schonborg of UNICEF, Bhutan placed health education and community participation high on the list of activities. The following is an extract of the report in relation to health education and community participation:

"As many of the water-borne diseases in Bhutan are of faecal origin, a good sanitation programme to complement the water supply programme can have a great impact. But the sanitation programme to be launched in 1984 is defined in very limited terms to focus mainly on excreta disposal facilities (latrines). The latrine programme will only have a significant effect if the community understands about flies and faecal contamination, among others.

Thus, the sanitation programme should balance the latrine-construction aspect with a strong hygiene and health education component to raise awareness by showing the link between flies and faecal contamination, the need for food preservation and protection, and for the washing of hands at certain critical times of the day, among other things."³¹

In 1985, Christmas visited the Lagos office which was in the process of preparing its new five-year programme for submission to the Board in 1986. He assisted the field office with the programming of the water and sanitation aspects. The following were some of his recommendations for improving the software components of the programme.

"Health education bill-boards: The health education bill-boards, conspicuously erected at the sites of virtually all boreholes with handpumps, and written in a local language, are a very positive and refreshing feature. However, as the written health messages relate only to water and sanitation, it can be considered a vast improvement if the bill-boards were re-designed in order to display joint messages on

WATSAN, ORT and EPI. The site of the waterpoint is a very important meeting place and full advantage should be taken of this fact and use it to disseminate information. It might be also advantageous, where the bill-board space permits, to write the message in both English and the local language since English is the official language. Thus, the bill-boards will assist with language teaching and information dissemination.

Use of handpumps: User education with respect to handpump use should be promoted on a large scale. Field visits to hanpump sites in Gongola State clearly showed te need for such education. Both children and adults were seen pumping water by means of rapid, short strokes of the pump handle. The users appeared to be amused by this mode of pumping. But by so doing damages to the pump can result. In pumping, the handle should be operated in such a manner that a full stroke is completed by the upward/downward movement of the handle. (The India Mark II is the pump-type used).

Water Containers: Greater emphasis should be placed on educating users concerning the necessity, and the mode, of keeping the uncontaminated borehole water free from contamination between the tap (handpump) and the home. There is a tendency in some areas of Gongola State to use very large enamelled basins to fetch water at the handpumps. These basins are spread in the area around the handpump while small cans are used to fill the basins. Thus, the basins remain on the ground for very long periods of time while other community members move between and about the basin containers. It is obvious that the borehole water which emits from the pump as safe and unpolluted, is contaminated at the borehole site by this means of water fetching. At the home, many families try to keep the water in covered jars in a protected area (which is quite an achievement). But if the water is made unsafe at the borehole site, as a result of the mode of fetching it, the safety measures introduced at the home are therefore nullified. Health education via the VBWs can play a great role in remedying the situation".³²

In 1984, Muriel Glasgow, Programme Officer for Health Education, UNICEF, Headquarters, visited several countries with a view to strengthening health education in water and sanitation projects. The following is a brief report of her work.

In Uganda a package of health education materials in water and sanitation was developed with the Health Education Unit, Ministry of Health. People were identified in the Health Education Unit with whom UNICEF could continue planning and developing communication materials. In Indonesia the Office received her assistance in developing a communications/educational strategy for child survival and development. In Guyana a strategy was outlined for developing the health education/sanitation component of the water programme. In Burundi a plan of action was developed to be incorporated into the health education/sanitation in 3 provinces in the ongoing water programme. In Central African Republic a plan of action was developed for animation/hygiene education in the water project.³³

By 1985 health and hygiene education elements continued to be introduced or reinforced wherever possible or necessary in ongoing programmes, although it was felt that still more needed to be done. In some countries, health and hygiene education is introduced within the framework of PHC.

By 1986 UNICEF had begun incorporating this element in all new water and sanitation programmes, often co-operating with other agencies, notably WHO. As health and hygiene education relates to behavioural changes among communities, studies to provide baseline data and other insights for the education components were carried in some countries.

Almost everywhere, training courses for village-level workers, e.g. hand-pump caretakers, were used to provide additional motivation and training for the promotion of simple health practices.

Full community participation remains UNICEF's goal. The importance of stimulating the awareness and engagement of the communities by using motivated promoters is well illustrated in Nepal where three out of four villages have accepted latrines largely as a result of effective communications among local technicians. An interesting by-product of this work has led to the incipient village-level production of soap for better health and hygiene.³⁴

6. COOPERATION WITH OTHER AGENCIES

UNICEF's major partner in health education is WHO. UNICEF also works closely with UNDP, the World Bank, UNESCO and other organizations under the aegis of the Decade's Steering Committee.

In 1980, UNICEF had begun exploring the possibilities of systematizing approaches to education with UNESCO as it pertained to water and hygiene. This was being done through the UNESCO Liaison Officer with UNICEF in Paris and the UNESCO Adviser in New York.

During the UNICEF-WHO JCHP meeting in February 1983 included in activities proposed for future cooperation by agencies were:

- Health education: Development and field testing of materials and methodologies aimed at the encouragement of improved practices of personal and domestic hygiene; and

- Community involvement: Development of systems and procedures whereby higher levels of individual and community involvement in the management and (possibly) financing of rural water supply and sanitation can be achieved; promotion of increased involvement of women's organizations in water and sanitation activities.³⁵

Non-governmental Organizations (NGO's) and bi-lateral agencies also co-operate with UNICEF. An example of such a co-operation with bi-lateral agencies is that with the Swedish International Development Assistance (SIDA) which, in 1985, was making plans to channel most of its funds to the Water Sector in India through UNICEF to complement what the Agency has been trying to achieve in the field of integrating health education into water supply and sanitation activities. Some of the countries mentioned by the agency that it claims to be also making headway in this regard are: Tanzania, Kenya, Ethiopia and Botswana.

7. CONCLUSIONS

The effects of health education on the successful conduct of the assistance programme are more difficult to assess, but in general it would appear that the better understanding the users have of the purpose of sanitary improvements the better and more intelligently are these used.

In theory, it could be proved that if all villagers were to be instructed in the nature of disease transmission, and were to adjust their habits of defecation and personal hygiene accordingly, many diseases - in particular, diarrhoea - would quickly be brought under control. In actual practice, it is doubtful whether any one person could be persuaded to alter his normal pattern of behaviour through health education alone.

However, health education, when coupled with example and with the obvious benefits derived from such measures as a convenient and plentiful water supply, can be a powerful instrument in raising the standard of domestic and personal cleanliness and, hence, health.

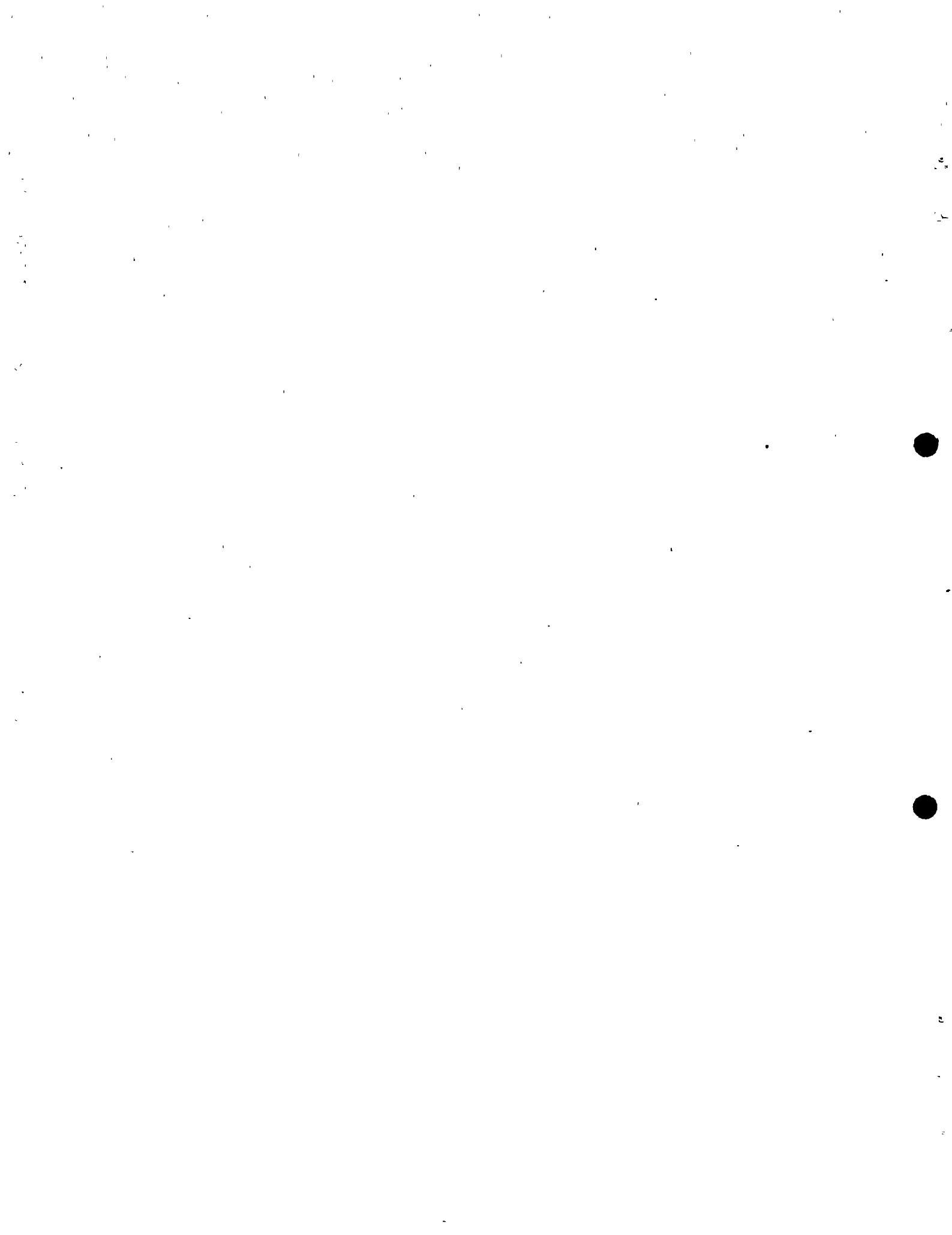
In other words, health education cannot be successful in a vacuum; it is no good promoting cleanliness in the absence of the means of keeping clean, nor the dangers of casual defecation when no sanitary latrines exist. Health education linked to water supply and sanitary improvements must be conducted simultaneously.

Evaluation studies continue to be the means through which the Organization can identify why a particular practice or programme works so that others can replicate it, as well as whether or not a programme or activity has achieved what it set out to do. Relevant indicators also need to be identified that take into consideration process variables along with impact on changes in perception or action.

Closely linked to the above is the need for the strengthening and improving the planning and programming in water supply and sanitation. In an effort to link water supply with sanitation and health education in the context of primary health care, Christmas (1985) introduced a checklist for guiding the preparation and development of major water and sanitation projects.³⁶

It could be generally agreed that no one method of health education is "the right one" because too many factors are at play, some of which this paper

has attempted to discuss. But the future promises success if there is willingness to learn from the past. To borrow from Sheps (1975), writing about contemporary trends in public health, states the concept in more forward-looking terms: "In today walks tomorrow."³⁷



References

1. Jean, Sally Lucas. (1951) "Stars to Steer By." American journal of public health: 963-970.
2. World Health Organization. (1954) Technical Report Series:89:4.
3. World Health Organization. (1969) Technical Report Series:409:8.
4. World Health Organization. (1969) Technical Report Series:432:7.
5. Green, Lawrence W., and Marshall W. Kreuter. (1980) Health Education Planning: A Diagnostic Approach. Palo Alto, Ca: Mayfield Publishing Co.
6. Ismail, Razia. Powerless Water. (1980) Project Support Communications Newsletter, Information Division, UNICEF, New York, 4:11).
7. Esrey, S.A., R.G. Feachem, and J.M. Hughes. (1985) "Interventions for the control of Diarrhoeal diseases among young children: improving water supplies and excreta disposal facilities." Bulletin of the World Health Organization, 63(4). 757-772.
8. UNICEF-WHO Joint Committee on Health Policy (JCHP) Report. (1953) Sixth session. (E/ICEF/228).

9. UNICEF Programme Committee. (1954) "Nicaragua: Recommendation of the Executive Director for an Apportionment for a Programme of Environmental Sanitation" (I/ICEF/L.631).
10. UNICEF Programme Committee. (1959) "Recommendation of the Executive Director for an Allocation. Kenya. Basic Maternal and Child Welfare Services: Environmental Sanitation." (E/ICEF/R.790).
11. UNICEF Programme Committee. (1959) "Recommendation of the Executive Director for an Allocation. Brazil: Basic Maternal and Child Welfare Services: Environmental Sanitation (E/ICEF/R.649).
12. UNICEF Programme Committee. (1955) "Recommendation of the Executive Director for an Allocation. Chile. (Linares) Basic Maternal and Child Welfare Services: Environmental Sanitation" (E/ICEF/L.729).
13. UNICEF Programme Committee (1958) "Recommendation of the Executive Director, St. Vincent." (E/ICEF/L.1206).
14. UNICEF. (1960) "Report of the Executive Board": 12. In: Economic and Social Council Official Records: Twenty-ninth session, Supplement No.2A (ICEF/398), New York, United Nations.
15. UNICEF/WHO Joint Committee on Health Policy. (1969) "Report on the sixteenth session." Official Records World Health Organization, 178: 16
16. UNICEF. (1970) "Report of the Executive Board" (E/ICEF/L.1386 and Add. 1).

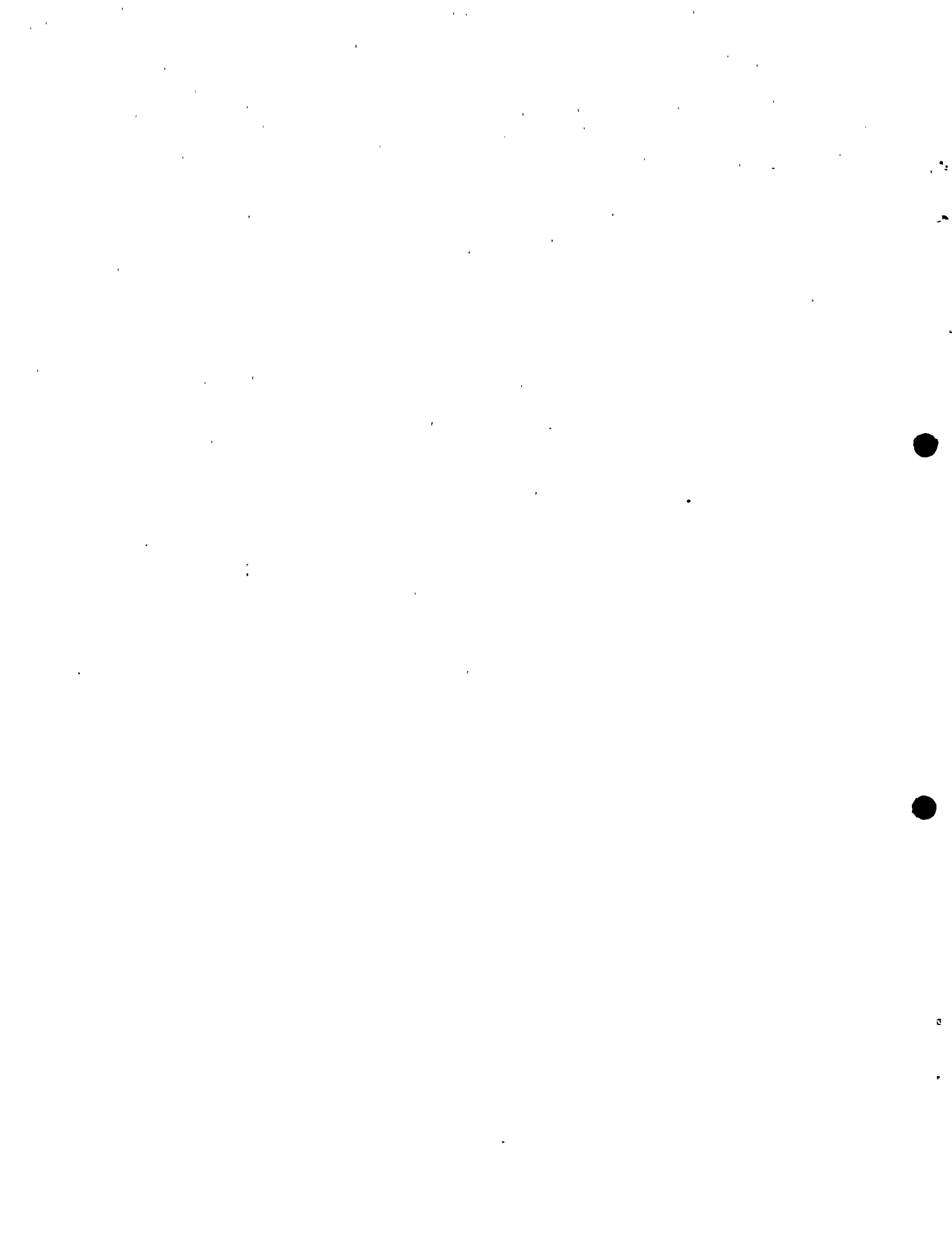
17. Beyer, Martin G. (1976) "From The UNICEF Waterfront":10, WS/321/76.
18. Report of the United Nations Water Conference. (1977) Mar del Plata: 15-16.
19. UNICEF Executive Board. (1983) (E/ICEF/698):25.
20. UNICEF Executive Board (1980) "General Progress Report of the Executive Director" (E/ICEF/(Part II)/Add.3).
21. Beyer, Martin G. (1985) "History Project: Water and Sanitation". UNICEF, New York.
22. Highlights of PSC Activities in 1978. (1979) PSC Newsletter, Information Division, UNICEF, New York: 379.
23. DANIDA. (1979) "Drinking Water to Rural Areas in Bangladesh - An Evaluation of the Rural Tubewell Water Supply Project."
24. Marga Institute Sr. Lanka Centre for Development Studies. "Evaluation of the UNICEF-assisted Programme in the Estate Sector 1979-1983."
25. Clarke, Lorna E. (1984) "Knowledge, Attitudes and Practices related to water and sanitation. Result of a study in six villages of North-west Frontier Province of Pakistan", UNICEF, New York.

26. UNICEF, Nigeria. "Forging A Missing Link: Drilling Teams and Health Educators Join Forces to Communicate Water Protection Messages in Nigeria's Drinking Water and Sanitation Programmes"
27. UNICEF-assisted Integrated Water and Sanitation Programme in Azad Jammu and Kashmir, Pakistan Government-UNICEF Evaluation Report. (1983) Islamabad.
28. UNICEF Executive Board. (1980) "General Progress Report of the Executive Director" (E/ICEF/672(Part 1)).
29. UNICEF. (1981) Internal Memorandum from the Executive Director to UNICEF Regional Directors and UNICEF Field Offices. Water, Sanitation and Health Education: Clearer Focus on Objectives and Strategies as part of Primary Health Care, UNICEF, New York.
30. UNICEF. (1985) "Promoting Health Behaviour in Water and Sanitation Programmes." Report of a Working Group, New York.
31. Christmas, Joseph and Ragnar Schonborg. (1984) "A Review of the UNICEF-assisted rural water and sanitation programme in Bhutan".
32. Christmas, Joseph. (1985) "A review of the UNICEF-assisted water and sanitation project in Nigeria: Internal Report." UNICEF, New York.
33. G'low, Muriel. (1985) "Review of field activities." Interoffice Memorandum. UNICEF, New York.

34. UNICEF Executive Board. "Report of the Executive Director" (E/ICEF/1985/2).
35. UNICEF-WHO Joint Committee on Health Policy. (1983) "Water Supply and Sanitation Components of Primary Health Care". Twenty-fourth session, Geneva.
36. Christmas, Joseph. (1984) "Screening Process for Water and Sanitation Programmes/ Projects." Interoffice Correspondence, UNICEF, New York.
37. Sheps, C.G. (1974) "The University of North Carolina, School of Public Health." Schools of Public Health: Present and Future. Report of a Macy Conference, edited by John S. Bowers and Elizabeth F. Purcell. Josiah Macy, Jr., Foundation, New York.

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- Mr. Martin Beyer, Senior Policy Specialist, Drinking Water and Sanitation
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- Mr. Joseph Christmas, Senior Programme Officer, Water & Sanitation
- Mr. Per Engebak, Senior Programme Officer, Water & Sanitation
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- Ms Ma Yansheng, Senior Consultant, Health Education in Water & Sanitation



Recommended Readings: Evaluation reports

Skoda, J, J.B. Mendis and M. Chia. (1977) "A Survey in Rural Bangladesh on diarrhoeal morbidity, water usage and related factors: First report". UNICEF-WHO, Dacca, Bangladesh.

Kebebe, Hanna. (1978) "Improving Village Water Supplies in Ethiopia: a case study of the socio-economic implications". United Nations, ECA.

Johst, P. and G. Kramer. (1979) "Drinking Water to rural areas in Bangladesh: An evaluation of the rural tubewell water supply project", Denmark.

Russel, Annemarie. (1979) "Report on the Situation of women in the target villages of the UNICEF Domestic Water Supply Project in Bahr el Ghazal Province, Sudan", UNICEF, Khartoum.

Drucker, David." (1980) ".....Greater than the Hole". Some pictorial Observations on Social Aspects of the Rural Water Supply Project. UNICEF, Rangoon.

Sclafani, Joseph A. (1981) "Popular Participation and the Bahr-el-Ghazal Domestic Water Supply Project: Lessons and Implications for UNICEF Policy", UNICEF, Kartoum.

Awal, A. and M.A. Maglipon. (1982) "UNICEF-assisted rural water supply project in the outlying barangays of Surigao City: Interim Progress/Appraisal Report". UNICEF, Manila, September 1982.

Pincetich, John. (1983) "IMO State rural drinking water and sanitation project. an interim report". Imo State, Nigeria.

Micro Industries Development Assistance Society (MIDAS). (1984) "Handpump caretaker survey". UNICEF, Bangladesh.

DANIDA. (1984) "Health Awareness Study". UNICEF, Dhaka.

Anse Rouge Institute: SNEP. (1984) "Evaluation of existing water supply system". UNICEF, Port-au-Prince.

Bareth, S.D. (1984) "Field-testing of eight posters on water and sanitation". UNICEF, New Delhi.

Ministry of Local Government & Lands. (1985) "Kweneng District sanitation baseline survey". UNICEF, Botswana.

Haile, Reason. (1985) "Programme communications for water and sanitation in Burma".

UNICEF, Abidjan. (1985) "Evaluation of school latrines/environmental sanitation."

Integral System for the Development of Family. (1985) "Inter-institutional evaluation of water and basic services project in Chiapas". UNICEF, Mexico.

UNICEF. (1985) "Rural Sanitation for Mosques". Morocco.

Nausherwani, Farida. (1985) "Women's view about water in experimental clusters in Baluchistan". UNICEF, Islamabad.

Ministry of Health (Environmental Sanitation Services). (1985) "Evaluation of CPC 1 (Environmental Sanitation Projects)". UNICEF, Manila.

Ministry of Education. (1985) "National Seminar on environmental sanitation, personal hygiene and nutrition education in primary schools." Hanoi.

UNICEF. (1986) "Imo State rural water and sanitation project, Nigeria".

