WATER AND SANITATION
FOR HEALTH PROJECT

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SOCIAL MARKETING STRATEGIES FOR HYGIENE EDUCATION IN WATER AND SANITATION FOR RURAL ECUADOR

WASH FIELD REPORT NO. 245

DECEMBER 1988

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 USAID Mission to Ecuador
and the Ecuadorian Sanitary Works Institute
WASH Activity No. 446

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by

Marco Polo Torres, Ph.D.
and
Janice Jaeger Burns, MPH

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ACRONYMS

CHET	Community Hygiene Education Team
IEOS	Instituto Ecuatarino de Obras Sanitarias (Ecuadorian Sanitary Works Institute)
KAP	Knowledge, attitude, and practice survey
MPH	Ministry of Public Health
PREMI	Ecuadorian National Child Survival Campaign
USAID	U.S. Agency for International Development
WASH	Water and Sanitation for Health Project

DEFINITIONS

Junta	Committee
Minga	Working Party

EXECUTIVE SUMMARY

Since 1982 USAID has financed the construction of over 170 village-based rural water supply and sanitation systems mostly through the Ecuadorian Sanitary Works Institute (IEOS). More than 90 percent of systems constructed are still functioning and are totally managed and financed by the community. Nevertheless, infant and childhood morbidity and mortality remain high in the rural areas, and diarrhea and waterborne diseases are still a major problem. Water supply and sanitation facilities need now to be complemented with public health education and communications related to proper use of water supplies and human waste disposal facilities in order to change behavior for better health. Such communications programs, known as "social marketing," can be built upon existing social and institutional structures.

The USAID mission reached an agreement with IEOS in March 1988 to initiate a major social marketing and communications campaign for this purpose. Beginning in July 1987 for a five-week period, the Water and Sanitation for Health (WASH) Project provided a two-person team, Marco Polo Torres, Ph.D., a social marketing specialist, and Janice Jaeger Burns, M.P.H., a specialist in community health, program design, and training.

The primary activities of the Division of Promotion and Education are related to the training and supervision of promoters in the field. The current hygiene education program in Ecuador has been developed in response to the rapid expansion in recent years of water and sanitation services in rural areas. Publications have been designed for the formal training of promoters (12th grade education), system operators, and the personnel of the water and sanitation committee (6th grade education). Materials are inexpensive (black and white) with illustrations and diagrams to support the text. Most materials are technical in nature and not suitable for use in the home or community where literacy levels are low and the needs are related to behavioral change.

A baseline survey was designed to identify knowledge, attitudes, and practices (KAP) which could be contributing factors to the high prevalence of diarrhea and other waterborne diseases in children under five. Five hundred and fifty-two rural households were surveyed by 30 water and sanitation promoters in 60 communities located in five provinces. Based on frequency distributions, cross-tabulations, observations, and interviews with primary school teachers, mothers, and community leaders, 12 goals related to households and 5 goals related to schools were developed. The following is recommended:

1. Implement a social marketing program, including:

    a. A mass media campaign coordinated with "person-to-person" education at the community level for teaching hygiene behavior.

b. Institutionalize the social marketing approach at IEOS through training of executives to familiarize them with (a) the concept of social marketing, (b) managerial training for educators and supervisors, and (c) the training of community promoters.

c. Strengthen the 830 water and sanitation juntas (committees) at the national and local level for the development of common strategies, including the issues of maintenance and hygiene education; create a community hygiene education team (CHET) within each junta.

d. Promote incentives such as diplomas, prizes, and scholarships.

e. Encourage hygienic behavior through use of low cost commodities such as potties, brushes, brooms, and soap.

f. Strengthen hygiene education in primary schools through curriculum and materials development and coordination with IEOS.

2. Target groups are:

a. Mothers of toddlers (aged 1-3) and preschool children (aged 4-6) who will be taught to teach toilet training, hand washing, the protection of potable drinking water, and bathing.

b. Primary school children and members of indigenous communes, sporting clubs, farmers groups and others who will be taught hygienic practices.

3. Twelve behavioral change goals have been set in relation to water and sanitation practices. Rewards are to be given to communities when targets are met.

4. A "bottom up" approach will be encouraged for creating strategies to meet the 12 hygiene goals and for disseminating messages on proper hygiene practices. This means communities are involved from the beginning.

5. Based on literacy levels and school attendance, educational materials should be pictorial in nature, with few words.

6. Child health and child survival activities will be linked to hygiene behaviors related to water and sanitation practices and messages will be disseminated with the greatest reach and frequency possible.

7. An effective system will be established for measuring behavioral change in the communities and for evaluating the hygiene education program.

Chapter 1

INTRODUCTION

1.1 Background

Since 1982 USAID has financed the construction of over 170 village-based rural water supply and sanitation systems in Ecuador, mostly through the Ecuadorian Sanitary Works Institute (IEOS). This effort has been successfully implemented through a decentralized province-based model. More than 90 percent of systems constructed are still functioning and are totally managed and financed by the communities themselves.

A clean drinking water supply, increased amounts of domestic water and better methods of human excreta disposal (latrines or sewage) do not in themselves result in a more hygienic environment or reduction of disease. The consumers of new facilities must use them, use them properly, and adopt new behaviors that will maximize the health benefits.[1]

Morbidity and mortality rates for infants and children in rural Ecuador remain high, and diarrhea and waterborne diseases are still a major problem. There are three broad categories of water-related diseases: (1) waterborne (those diseases spread by contaminated drinking water, such as cholera, typhoid, and some diarrheas and dysenteries), (2) water-washed (those diseases of the intestinal tract and skin that could be prevented by more frequent washing, such as fecal-oral diarrheas and some skin disease), and (3) water-related diseases spread by insects that breed or bite near water (such as malaria, dengue and yellow fever).

Water supply and sanitation facilities in Ecuador now need to be complemented with public health education and communications related to the proper use of water supplies and human waste disposal facilities to encourage behavior change for better health. Such communications programs, known as "social marketing," can be built upon the existing social and institutional structures.

The USAID mission reached an agreement with IEOS in March 1988 to initiate a major social marketing and communications campaign for this purpose. In July 1987, the Water and Sanitation for Health (WASH) Project provided a two-person team. The team consisted of Marco Polo Torres, Ph.D., a social marketing specialist, and Janice Jaeger Burns, M.P.H., specialist in community health, program design, and training.

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[1] Simpson-Hebert, Mayling, and Yacoob, May. Guidelines for Designing a Hygiene Education Program in Water Supply and Sanitation for Regional/District Level Personnel, WASH Field Report No. 218, Washington, D.C., 1987, p. 1.

1.2 The Scope of Work

The scope of work for the consultancy was defined by the WASH staff in accordance with the requests received from IEOS and USAID/Ecuador.

Specific tasks were to:

1. Review health education activities completed by IEOS. Collaborate with government officials in identifying data requirements and use.

2. Design and conduct a simple baseline survey to evaluate the effectiveness of health education efforts in water and sanitation.

3. Review the results of the survey and identify information needs in knowledge and practices for behavioral change.

4. Develop a social marketing strategy outlining groups, types of materials, and means of communication.

5. Determine training needs, target populations, and trainers.

6. Develop a plan with IEOS for the implementation of training and a social marketing strategy.

7. Develop a report integrating health and hygiene education needs, a program strategy, and a training schedule.

A team of local officials worked together with the WASH consultants. The program team consisted of Mr. Eduardo Coral and Mr. Homero Morales of the Division of Promotion and Education, IEOS, with the support and participation of six provincial supervisors and 30 water and sanitation promoters. Mr. Adalid Arratia, project manager, USAID/IEOS, facilitated completion of project activities through material and professional support.

1.3 Child Survival and Environmental Health Education

In 1987 infant mortality in Ecuador was estimated at 51 deaths for every 1,000 live births, while the mortality of children under five is 73 per 1,000.[2] Twenty-two percent of these deaths are attributed to diarrheal disease. Other major causes of death are upper respiratory infections and immuno-preventable diseases which are frequently accompanied by malnutrition. The rural sierra (highlands) and coast present a special challenge as the populations are scattered and access to services is difficult.

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[2]Rutstein, Shea Oscar; Fermo, Aurura; Crespo, Antonio. Child Survival in Ecuador "Report for AID" November, 1987.

In the rural sierra, 82 children per 1,000 live births die in their first year of life, while 126/1,000 die between the ages of one and five. In the rural coastal areas 72/1,000 die before they reach their first birthday and 95/1,000 die before they qualify to enter school at age five.[3]

Low education levels of the mothers and the insufficient spacing of children are major characteristics of populations with high infant and childhood deaths in Ecuador.[4]

The low literacy rates in rural areas are a major consideration in the development of environmental health education programs. In the rural sierra 33.3 percent of the women and 19.2 percent of the men are illiterate. In the rural coastal areas 24 percent of the women and 21 percent of the men are illiterate.[5]

Of the total rural population, 26 percent have never attended school, 27 percent have attended grades one through three, 32 percent have attended grades four through six, and less than 6 percent go on to secondary school.[6]

Small children under five are seen as the target population and primary beneficiaries of a hygiene education program because they suffer the most from poor hygiene. Mothers and other caretakers are seen as the implementors of the behavioral changes needed to bring about a more hygienic environment and reduction of disease. Based on literacy levels and school attendance, teaching materials will have to be pictorial in nature with few words used for message support.

1.4 Activities of the Division of Promotion and Education

The primary responsibilities of the Division of Promotion and Education of IEOS are to train and supervise promoters in the field and to develop and publish education materials. The water and sanitation promoter is the primary vehicle for program initiation, implementation, and maintenance. The decentralized nature of the program, including a formalized program evaluation every six months, is largely responsible for the 90 percent success rate of systems still functioning and totally managed and financed by the community. There are 140 promoters in all of the 21 provinces. They are organized and supervised through a system of seven zones.

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[3] Ibid., p. 49.

[4] Ibid., p. 48.

[5] Molestina, Francisco; Ordoñez, José; Torres, Magdalena; and Bouge, Donald. Population and Socio-economic Development in Ecuador. Center for Population Studies and Responsible Parenthood, Quito, July 1985, p. 60.

[6] Ibid., p. 61.

The job description of the promoters is oriented to data collection and community organization with responsibility for the construction and maintenance of water and sanitation systems. Promoters are evaluated by provincial engineers and supervisors and the Division of Promotion and Education at the national level.

Educational materials have been developed in response to the rapid expansion in recent years of water and sanitation services in rural areas. Publications have been designed for the formal training of promoters (12th grade education level), system operators, and the personnel of the water and sanitation committee (6th grade education). Materials are inexpensive (black and white) with illustrations and diagrams to support the text. Most materials are technical in nature and not suitable for use in the home or community where literacy levels are low and the needs are related to behavioral change.

Although IEOS is part of the Ministry of Public Health, formalized relationships between the promoter and local health service delivery personnel have not been established.

Primary school children occasionally carry IEOS water and sanitation messages home for which parents are required to sign as an indication the message has been received. Institutional linkages for formal education and community outreach in hygiene have not as yet been developed.

There is now a need for institutionalization in IEOS of the social marketing approach at the national, provincial, and community level. The following steps are anticipated: collection of data for baseline information in knowledge, attitudes, and practices (KAP) in water-sanitation hygiene; setting goals; developing and delivering training in social marketing and promotion; developing hygiene education messages; implementing the program; and evaluating behavioral change in relation to goals at the community level through resurveys.

1.5 Establishment of Baseline Information (Planning Research)

1.5.1 Problem

Population coverage for rural water supply and sanitation systems is 29 percent and 21 percent, respectively.[7] More than 90 percent of the systems constructed are still functioning and totally managed and financed by the community. Nevertheless, infant and childhood mortality and morbidity remain high in rural areas and diarrhea and other waterborne diseases are still a major problem.

[7] AID action plan, 1988

1.5.2 Objective

The planning research was designed to identify knowledge, attitudes, and practices (KAP) which could be contributing factors to the high prevalence of diarrhea and other waterborne diseases in children under five.

1.5.3 The Methodology and Primary Investigative Method

The primary investigative method consisted of a baseline survey of 552 households in five provinces where knowledge, attitude, and practices were examined in relation to:

- Potable water supply
- Latrines
- Environmental cleanliness
- Bathroom training for small children
- IEOS as an institution
- system maintenance needs, etc.
- Community access to mass media
- Human resources for education and behavior change in the community

The provinces included in the questionnaire were:

- Azuay
- Imbabura
- Esmeraldas
- Chimborazo
- Los Rios

The questionnaire consisted of 101 questions. Twenty interviews were conducted over a period of two days by 30 rural water and sanitation promoters who were trained for a full day in the provincial capital.

The total population of the sample survey area is 3,279,603 or 73 percent of the total rural population of Ecuador.. The 552 households surveyed were located in 60 communities and represent approximately 1.7 percent of the total number of rural households. Of the total sample, 30 percent were among the rural coastal population and 70 percent among the rural sierra population.

Rural communities were selected as a representative sample of the geographic placement of towns, with medium and long range distance from the provincial capital and practical accessibility for this study. One household per block was selected in concentrated population areas. In scattered populations every fourth house was selected. The questionnaire was pretested by team members and provincial supervisors in 25 households located in five communities within two hours of Quito, the national capital.

1.5.4 The Secondary Investigative Method

The secondary investigative method was qualitative in nature and focused on discussions with individuals and small groups of mothers and community leaders. Topics discussed included the following:

Mothers

- The importance of potable water to the family
- Bathroom training for small children
- Garbage disposal
- How mothers can participate in health education activities
- Identification of individuals working in health for the benefit of mothers and children in the community

Leaders

- The community's understanding of potable water
- Identification of individuals in the community who work in or give information on health or development
- Health problems related to unsafe water and sanitation practices
- Problems encountered and resolved since IEOS has helped the community develop its water and sanitation system
- Opinions about whether potable water in the community has reduced the incidence of diarrhea and intestinal parasites

1.5.5 The Tertiary Investigative Method

The tertiary investigative method consisted of discussions with primary school teachers and community presidents and general observation of the community. Topics discussed included:

Teachers

- Water and sanitation facilities at school
- Who is responsible for keeping latrines clean and maintained?
- Have children been trained to use the latrine by the time they begin to attend school at age five?
- Is it the custom for children between the ages of 7 and 12 to use the latrine?
- Is there a hygiene corner in each classroom where good health habits are taught? (A hygiene corner in each classroom is a national mandate.)
- What health and education activities are carried out in the school?
- What health activities does the school carry out in the community?

Community President

- Confirmation of available demographic information
- Identification of development groups active in the community
- Listing of community needs
- Identification of actions taken by the community which contribute to development

Observations in communities and/or households included:

- Presence of household water connections
- Presence of soap
- Sewage and gray water disposal
- Presence of flies

- Verification of water and sanitation coverage
- Presence of animals in the home
- Condition of water treatment plants and discussion of purification process with systems operators.

Data were analyzed on the IEOS computer using the SPSS PLUS program. Findings are reflected in Chapter 2. The results of cross tabulations, observations, and interviews with mothers, primary school teachers, and community leaders are discussed in Chapter 4.

Chapter 2

SURVEY FINDINGS

2.1 Population Profile

The following is a profile based on the KAP survey and other complementary qualitative research. It should be pointed out that time constraints did not allow a more in-depth analysis of the data.

The primary respondents were mothers (66 percent). Other respondents included grandparents (22 percent), and other relatives (12 percent).

Children under five years and school aged children were found in 7.8 sample households out of 10. The total population of children under five years is 45.6 percent and school aged children 54.4 percent. Of this latter group 70 percent go to school. Ninety-five percent of the households have one or more persons who can read and write (literacy levels are unknown).

Within the target population 77.7 percent have a functioning radio, 41 percent a functioning television (37 percent in the sierra and 64 percent on the coast). Twenty-five percent stated they have received IEOS pamphlets, while 19 percent have received pamphlets from other health institutions (not specifically on water, latrines, or garbage). IEOS has reached 31 percent with films and conferences. It appears that 69 percent of the community have not received educational materials on health.

Other information from non-IEOS institutions reached the following percentages of the population:

Films	23%
Informal talks	40%
Other	9%

In brief, promotion and training by IEOS reaches 31 percent of the population through films and informal talks and 25 percent of the population through pamphlets.

Promotion through other institutions reaches segments of the population through:

Films	5.3%
Informal talks	9.3%
Pamphlets	4.9%
Other media	3.5%

The other institutions which offer health education information to the rural populations are:

	Respondents
Church	2.3%
Primary schools	5.7%
Health center	8.2%
Peasant social security	5.7%
Other	2.5%

The individuals who participate the most in education and promotion activities are:

	Respondents
Primary school teachers	27%
Priests	9%
Doctors	18%
Nurses	13%
Auxiliary nurses	9%
Midwives	6%

There seems to be a good possibility of collaboration with teachers.

2.2 Water

One hundred percent of the study population had drinking water in their households. The tap is generally outdoors (87.5 percent of households surveyed) and within 1 to 10 meters of the house (94.3 percent), the majority are within 2 or 3 meters.

The majority of faucets are standpipes (58.3 percent), while others are connected to a laundry tub (41.7 percent). Half of the latter have a water storage tank (19.27 percent).

The laundry and the water storage tank are close to the latrine (20 percent) or in close (2-3 meters) proximity to it (80 percent).

The water from the storage tank (19.27 percent) located next to the laundry tub is used:

	Respondents
To wash clothes	84%
To wash hands	75%
For personal hygiene	68%
For latrine	68%
To drink	54%
For cooking	53%
To bathe	64%
To wash dishes	57%

In instances when the water is kept in a water storage tank (19.27 percent of the total sample), a dipper is necessary and almost half of the households do not have one (40 percent). Forty-one percent of those with storage tanks do have a suitable long handled dipper.

The use of soap is said to be a general practice in 92 percent of the households. Ninety-seven percent of the population state they bathe at least once every eight days including: those who bathe every day (26.6 percent), every other day (17.7 percent), and once a week (53 percent). It should be pointed out that on the coast the majority bathe every day or every other day (92 percent), while in the sierra about 48 percent claim to do this.

On the coast children are bathed three times a week in nine out of ten households and six out of ten in the sierra. It seems that hygiene habits for children are better than those for adults, as only five adults out of ten bathed as frequently as children are bathed (49 percent).

Stated knowledge of good habits (such as washing hands and fruit) and of waterborne diseases is very high (91.75 percent). It is confirmed by school teachers that this does not reflect the actual practice.

Regarding the quality and price of water, 84 percent of the population pay less than 250 sucres (US $0.50) per month, 90.6 percent say they like the taste, 93.4 percent say it's of good quality, 80 percent drink it directly from the faucet, and 32 percent think it should be free of charge. The sierra population is more confident of the quality of the drinking water than the tropical coastal population.

2.3 Latrines

In rural areas 47 percent of the population uses latrines (hole in ground for evacuation), 48 percent use "sanitario campesino" (latrines requiring a bucket of water for flushing), and 5 percent use ceramic water sealed toilets.

It should be kept in mind that 100 percent of the study population has drinking water in their households. The water is outdoors in 87.5 percent of the cases and within a distance of one to ten meters.

Seventy-two percent of the study population have a cement toilet, 5 percent a ceramic toilet, and 7 percent a Turkish type toilet. The majority of latrines are constructed of cinder block (75 percent), zinc roof (62 percent), or tile roof (19 percent). Half of the services are located outdoors and within one to four meters of the faucet (52 percent). Twenty-four percent of households surveyed store water in small containers, and the rest use the water directly from the faucet. Fifteen percent have water for flushing.

Observations of the hygienic conditions of the latrines revealed the following:

Clean	69%
Normal or lack of odor	83%
Flies present	46%
Toilet paper and lid	57%

With all factors considered, including the presence of flies, inappropriate disposal of paper, and evidence of excreta outside the latrine itself, cleanliness of latrines per se (69 percent) is reduced to 30 percent.

The floor was dirty in 12 percent of the latrines, the toilet was dirty in 12 percent, a brush or broom was used for cleaning the toilet in 65 percent, a rag or piece of cloth was used for cleaning in 14 percent. (It should be noted that it is difficult to clean the surface with a rag or cloth due to the roughness of cement.)

Fifteen percent of the latrines are abandoned. Twenty-three percent are underutilized and are sometimes used for other purposes, such as henhouses (7.3 percent) and store rooms (7.7 percent).

Sixty percent of households surveyed use the latrine correctly and the installations are in good condition.

There are children aged two to four in 75 percent to 78 percent of the study group households, but only 53 percent of households have a potty. Mothers say they have taught their children how to use them before the age of three (85 percent). In 14 percent of the households excreta was found outside the latrines. Interviews with primary school teachers indicate that children when entering school at age six rarely know how to use the latrine.

The relationship between the use of latrines and washing hands demonstrates that, from the 56 percent who are conscious of the need, this habit is practiced regularly by only 28.5 percent of the population and in addition 27.5 percent washed their hands "sometimes". Of the 44 percent who do not have the habit or do not know the need, 14.8 percent never wash their hands and 29.2 percent do it once in a while. In only 25 percent of the households were a faucet and soap for handwashing observed.

2.4 Refuse

Eighty-five percent of mothers sweep the house every other day, and 78 percent sweep the patio as well. More than half throw the refuse in the vegetable garden (54 percent), 31 percent burn it, and only 1.5 percent send it to the garbage collector.

Some questions were about the use of dung. The majority of respondents use dung in the vegetable garden as a fertilizer (76 percent). Only 48 percent work the dung into the soil, and others leave it uncovered which could explain why 90 percent of the houses have flies. In 46.3 percent of the households animal excreta can be seen in the patio.

About half of the sample surveyed related the presence of flies to excreta and to disease. It seems that the knowledge of contamination is not general, as 54.6 percent of the study group were unfamiliar with the concept of contamination.

This profile gives a general background from which goals and strategies for the marketing and education plan can be developed.

Chapter 3

THEORETICAL FRAMEWORK FOR PROJECT DESIGN

3.1 Communications Strategy

The purpose of a social marketing communications strategy is to effectively utilize available channels of communication (media) to promote changes in behavior, the sale of hygiene products, and access to services. To achieve this goal, well crafted messages and materials need to be developed and disseminated with the greatest reach and frequency possible.

Behavior change goals provide parameters for educational messages. Successful marketing campaigns have often made intensive use of mass media (radio, television, billboards, newspapers, etc.) to reach the intended population. Mass media are effective tools for health campaigns seeking to raise awareness of a problem or to position or encourage new behavior. The use of mass media alone usually has proven ineffective in changing health practices, but mass media has been used successfully in health projects together with parallel communication efforts carried out by promoters or community health workers locally (see Figure 1). Health promoters or community health workers themselves are viewed as a channel of communication. With appropriate training, promoters and community health workers can effectively transmit social marketing messages in rural communities.

Figure 1

Mass Media and Interpersonal Education in Social Marketing[8]

MASS MEDIA ALONE	• creates awareness • positions behavior • increases product sales • increases access to services
Mass media and interpersonal education (promoters & others)	Changes behavior

[8] Israel, Ronald C.; Dennis Foot; Janet Iognetti. Operational Guidelines for Social Marketing Projects in Public Health and Nutrition. United Nations Educational, Scientific and Cultural Organization. Division of Science Technical and Environmental Education, Paris 1987, p. 30.

3.2 Principles of a Campaign Strategy in Communities

The principles of a campaign strategy for the community are as follows:

- The focus is on the "person-to-person" teaching of hygiene behavior through use of water and sanitation promoters and a community hygiene education team (CHET) working in collaboration with the community water and sanitation junta.

- IEOS health education personnel and community leaders already working in community development will be used. What they are asked to do should fit in with each person's existing job description.

- The approach is to be consistent with the basic minimum needs concept whereby community water and sanitation juntas and community hygiene education teams are involved and responsible from the beginning. They survey and resurvey their own communities to measure progress in behavior change and analyze their own problems and suggest solutions and ways to meet goals.

- Hygiene targets for each community are set with rewards given to communities when targets are met.

- The focus is on women as change agents and the selection of women as community hygiene educators.

- Child survival messages should be reinforced and water supply and sanitation education linked with PREMI, the Ecuador child survival program, and other efforts in the community for the dissemination of messages with the greatest reach and frequency possible.

3.3 Development of Messages and Materials

For the development of messages and materials, social marketing often focuses on modern commercial advertising techniques. The use of technical and community focus groups to help design and pre-test messages and the advertising activities of copy writing and media production are all brought into play in successful marketing campaigns. This does not mean that what works in selling soap will work in promoting health. Social marketing messages require a degree of technical precision that is not always required in commercial advertising. In the rural sierra and coast areas, the project will be faced with the challenge of communicating to populations with limited literacy levels, together with limited proficiency in Spanish in the case of indigenous older women in the rural sierra. The design of effective messages and materials directed at behavioral change requires a blend of technical know-how, creative insight, and community participation together with a knowledge of local customs, behaviors, and language.

A campaign will often use a variety of messages over time, each complementary or building on previous messages.

3.4 Products and Services Marketing

In those cases where behavior change objectives are affected by products or services (e.g., latrines or immunization services delivery programs) social marketers need to be concerned with a wide range of traditional marketing issues ranging from product design to pricing policies. It is at this point that the four "Ps" of marketing need to be considered: product, price, place, and promotion.

- Product stands for the physical make-up of the good or service provided and the ability of that good or service to meet a specific consumer need. In the case of cement toilets, although less expensive initially than ceramic toilets, they are also less attractive and more difficult to clean than ceramic toilets and consequently may be used less. Consumers might best be served if they have the opportunity to "buy in" to the project at different levels (e.g., cement toilet vs. a ceramic water-sealed toilet). Also latrines could be constructed in such a way that they could be upgraded at various stages (e.g., ceramic tiles applied to interior cinder block walls).

- Price stands for either the amount of money customers have to pay to obtain the product or, given the availability of subsidized products and services, the cost in terms of behaviors or practices foregone.

- Place stands for the activities related to distribution of the product or services to the community. IEOS could present photos of latrine options together with prices, at markets, in communities at the time of project initiation, or in the plaza near the church on Sunday. Consumers could purchase what they can afford and what is most attractive for them.

- Promotion stands for activities which communicate the merits of the product or behavior and persuade the community to purchase and use it.

3.5 Prerequisite Infrastructure Preparation

The success of social marketing projects hinges on the ability to train those cadres of workers responsible for project implementation. Special training programs will be needed at the national level for administrative, political, and budgetary support in communities and provinces. This support will assist engineers, water and sanitation promoters, supervisors, community leaders, primary school teachers, health services personnel, and others implementing the program. The ability of project managers to organize and carry out timely and effective training activities is extremely important. A common mistake in many social marketing projects is to begin to disseminate messages before support personnel have been trained in how to deliver complementary face-to-face educational activities or before the service or product is available.

Chapter 4

A SOCIAL MARKETING STRATEGY

4.1 Introduction

The social marketing strategy takes into account the findings of the baseline survey (planning research). Twelve goals for behavioral change have been developed based on the results of the planning research. The strategy, including the media campaign, training, promotion, institutional strengthening, and evaluation are related to the 12 goals. The strategy is developed within a four-year time frame which can be coordinated with the new governmental cycle which began August 10, 1988. The first 15 months are an intensive period of community and institutional preparation including training, materials development, materials testing, promotion, and community education. Months 16-48 build on the experiences of the previous 15 months, with a focus on re-evaluation of community progress toward the 12 goals.

The outcome of the planning research suggests the need for recurrent massive education in the concepts of clean and dirty, microbes, and the cycle of disease transmission especially in the most common health problems such as diarrhea and, on the coast, malaria. Daily habits in relation to water and latrine use and refuse disposal are to be targets within the twelve goals.

4.2 The Rationale

As the campaign develops people will understand that dirt and excrement are contaminated and potentially dangerous sources of bacteria. They will know what is clean and how to clean and will value cleanliness. The activities recommended will strengthen the social preparation of community members to accept hygienic practices by providing internal incentives or rewards. Three types of incentives are suggested:

- Economic: "You will spend less on health care and lose less time from work."
- Fashionable: "It is modern, private, and convenient to have a latrine and use it."
- Health: "You will have fewer diarrheal and parasitic infections and your children will grow healthier and suffer less."

Figure 2

TWELVE GOALS*

TWELVE GOALS FOR THE HOME			
LATRINES	WATER	WASTE	MAINTENANCE
1. In 90% of households with latrines they are cleaned daily with brush or broom (30%)	5. 80% of the population drink water directly from the tap (highlands)(58%) or 80% drink from tap or a clean covered storage container with a long handled dipper (coast) (46%)	8. 90% of the patios are swept daily (55%)	12. 90% of the population understand maintenance costs and pay their bill (36%)
2. 50% of children 1-3 years use the potty (28%)	6. 80% of the population wash their hands with soap before: • food preparation • eating • feeding children (20%)	9. 90% of refuse is buried (20%)	
3. 50% of children aged 4-5 are trained to use the latrine (37%)	7. 80% of the population wash hands with soap after: • cleaning children • latrine use (20%)	10. 80% of dung is worked into the soil (40%)	
4. 90% of children aged 6 are trained to use the latrine (50%)		11. 80% of population channel gray water to the garden (40%)	

FIVE GOALS FOR SCHOOLS BASED ON INITIAL QUALITATIVE ESTIMATES			
LATRINES	WATER	WASTE	MAINTENANCE
1. 100% of school latrines are cleaned daily with a broom or brush.	4. 100% of classrooms with a hygiene corner and have water and soap.		
2. 100% of school latrines are working	and		
3. 100% children 6-12 years use the latrine.	5. 100% of children wash their hands after latrine use and before lunch.		

*Percentages in parentheses are for existing conditions. Figures are based on frequency distribution and inferences drawn from cross-tabulations.

4.3 Target Groups

4.3.1 Primary Group

Mothers will become the target of the campaign due to their role in the daily activities related to water, excreta, and refuse disposal. Mothers have been the target population of many other health programs due to their roles within the families. It is important not to saturate the mother with a new range of activities and responsibilities and to search for a way to transfer some of her duties to the father.

There are many possible areas in which women could be educated to change practices to improve family health:

- Food preparation: washing fruit and vegetables and making juice with clean water; cleaning the kitchen and utensils; and preparing clean baby bottles and contents;
- Hygiene habits: bathing children; teaching children the importance of washing their hands and faces; doing the laundry;
- Refuse disposal: clean and sweep the house and patio; how to hygienically dispose of refuse;
- Latrine: cleaning; teaching children to use the potty and the latrine; and the importance of proper disposal of small children's feces.

Men's duties would include:

- Building the latrine or toilet;
- Helping maintain the water supply system;
- Paying the water bill;
- Bathing and washing his hands and using the toilet to reinforce habits of children through setting an example;
- Purchasing utensils, soap, toilet paper, and items related to washing.

4.3.2 Secondary Groups

- The secondary target groups would include the man of the house, because of his influence in household matters;
- The water committee in each population including the members of the committee;
- Teachers and educators from primary schools, and other community leaders.

4.3.3 Support Groups

Other groups and persons that are not target groups, but who play an important role in the development of the education and promotion activities include the rural doctors, nurses, auxiliaries, and other health personnel who can give health instruction because of the credibility they have among the population; promoters from other development agencies, private or public, working at the national or local level, and public opinion leaders such as newspaper editorial writers.

4.4 Channels of Communication

The KAP survey indicates that there are many ways of reaching the public. A multimedia strategy is to be used to attain the best results. It will mean that mass media and interpersonal media will be combined. The mass media approach and content are developed and disseminated as a national activity, and complementary person-to-person messages and education are local activities. For the interpersonal interventions, training is necessary at various levels.

For the campaign, an executive-level support group is essential for success. This group must have basic familiarization training in social marketing. (Group composition will be identified in Phase II.)

The multimedia vehicles for contact with the public are:

- Radio for knowledge
- Television for demonstrations and social pressure
- Informal talks to reinforce knowledge
- Contests and home visits to motivate
- Offers to promote use (brush, potty, dipper, toilet paper holder, etc.).

The primary messengers are:

- Radio and TV personalities
- IEOS promoters
- Community leaders
- Teachers through the primary school curriculum
- Teachers through extra curricular activities (conferences, courses, contests, etc.)
- Health workers
- Nurses and doctors.

4.5 Interventions

Program interventions in addition to the media and messages are:

- Install faucets closer to the houses;
- Offer better or various ways to install the "sanitarios campesinos";
- Develop or choose a better design for the toilet and change the material to ceramic;
- Offer easy access and incentives for the purchase of toddler training potties;
- Look for a more practical solution for the disposal of contaminated (gray) water;
- Promote the burying of refuse.

Offer education and training which:

- Explains the existence of aggressive microorganisms which are transmitted through water, environmental dust, contaminated containers, dirty hands, etc.
- Justifies the cleansing action of water and soap on hands, fruit, vegetables, the body, clothes, and kitchen utensils.
- Explains the relationship between excreta and diseases and promotes a dislike of dirtiness and a value of cleanliness.

- Justifies the need to wash after being in contact with excreta (one's own, one's child's or another child's), a toilet, garbage, rats, flies, dust, or animals or after working, etc.

- Define contamination and possible ways to avoid it.

Basic messages include:

- Wash hands properly before eating and after using the latrine.

- Have soap always handy.

- Clean kitchen every day.

- Clean toilet daily.

- Bury refuse.

- Take a bath regularly.

- Train children in early use of potty.

- Throw excrement into the toilet.

- Recognize that human and animal excreta is contaminated. Sweep the patio daily and and dispose of excreta.

- Teach children to use the latrine before school age.

- Reinforce mothers' pride in a clean latrine and kitchen.

- Channel gray water (from bathing and dishwashing) into the vegetable garden so that puddles do not accumulate around the house or patio area.

Chapter 5

GENERAL PLAN

The plan rests on five major activities:

1. Mass media campaigns
2. Formal education
3. Training of promoters at different levels.
4. Providing incentives
5. Developing positive image of the water committees.

It should be noted at the outset that the process takes some time and that it requires financing and national commitment. The objective is to transform the way of life of a high percentage of the population. This can be accomplished only through the joint effort of individuals, the media, product designers, and training activities.

It is necessary at this time to re-evaluate some realities which have changed about communicators at the local level. An example is the teacher and his/her leadership within the community. Nowadays the teacher does not live in the community. In many cases, contact is lost and the leadership role foregone. In the same way, the church has not played an active role in health and, to date, has not been a very reliable source of community development support. Even the doctors' commitment to the rural areas has been weakened because of one-year assignments.

Professional support does not always exist in rural areas, and the project is relying on trained promoters and community members to disseminate messages locally. The teacher in the primary schools has a major role to play in the hygiene education program.

Keeping the above caveats and limitations in mind, following is the social marketing plan in brief.

5.1 Activity 1 - National Mass Media (Radio and TV): Focus and Messages

1. Use of clean and safe water.
2. The gloomy world of bacteria in the home, a constant risk for every one. Mothers are the ones who can stop them with the help of the rest of the family.
3. War on and repulsion to filthiness. Soap and water can do it.

4. Whatever is in contact with the mouth has to be clean. Wash and decontaminate eating utensils.

5. Ideal habits for the mother related to the kitchen and latrines.

6. Everyone has to cooperate: bathe more frequently, refuse disposal, clean toilet or latrine.

7. A series of TV spots showing what should and should not be done.

5.2 Activity 2 - Primary School Education

1. Special educational package for primary schools with pictures and training material on water, latrines, and garbage.

2. Training of teachers.

3. Distribution and use of material.

4. Reinforce the need for water and latrines for all primary schools.

5. Promote and stimulate use of the hygiene corner.

6. Meeting with parents in school for a series of short talks.

7. Complement radio programs on a weekly basis with home visits and other activities.

5.3 Activity 3 - Training and Education of Promoters

1. Improve the technical skills of water systems operators.

2. Improve the promotional skills of promoters and provide proper educational support material.

3. Provide workshops for guiding and motivating doctors and health services personnel and have them take part in the activities and serve as speakers in each town.

4. Conduct seminars with journalists and leaders to point out the problems of water and sanitation systems in order to obtain their collaboration.

5.4 Activity 4 - Product Promotion

1. Subsidize the purchase of potties, brushes, soap, disinfectants, ceramic toilets, fly swatters, and other items for public use.

2. Sponsor contests with scholarships and other prizes to enhance the image of the latrine the and kitchen and the best maintained systems.

3. Identify IEOS staff members and determine budget for product promotion services.

4. Stimulate community activities—"mingas" (working parties)—in support of construction and maintenance.

5. Re-establish in-country production of chlorine. (Imported chlorine is expensive.)

5.5 Activity 5 - Image of the Water and Sanitation Committee

1. Improve the capacity of the presidents of the water and sanitation juntas.

2. Create a "community hygiene education team" (CHET) within the water and sanitation committee.

3. Form a working group of juntas. Plan a national-level congress to share problems and solutions.

4. Carry out a nationwide study of water treatment costs and produce a brochure on treatment costs for the use of the juntas in their meetings with the population.

5. Produce an easy and understandable cost accounting system for potable water systems for the use of presidents and treasurers of juntas.

6. Produce a pamphlet with the story of a village with poor water and health that did not pay the bills until there were many sick and unproductive people.

7. Improve community access to low-cost or at-cost chlorine.

Chapter 6

TRAINING

Training will be provided on two levels:

- for the educators from IEOS in order to institutionalize the social marketing strategy and to form an IEOS team responsible for social marketing program implementation (5 weeks).
- for promoters from IEOS and other institutions (see Section 6.2).

6.1 Social Marketing Training at IEOS

The rationale behind the training is the creation of a core group capable of supporting or conducting the field activities of social marketing.

At this moment expertise in social marketing does not exist in IEOS. It is expected that after the training IEOS will have a team which can plan, implement, and evaluate social marketing for water supply and sanitation.

The five weeks of "training of trainers" in social marketing will be sufficient to reach an acceptable level of technical knowledge.

Criteria are to be developed for the selection of trainers and participants before the training activities begin. Development of materials for training is estimated to take three weeks. The time for the organization, execution of the workshop, and supervision of practice is estimated to take three months.

6.1.1 Target Population

The training program will be provided for IEOS personnel who are responsible for education and promotion activities. The training program will focus on future roles in media production, training, and promotion. These individuals should have a background in marketing or communication and, even better, some pedagogy, sociology, or anthropology.

6.1.2 Training Objective

Social marketing should be integrated into IEOS activities in promotion, education, and services.

Social marketing has been successfully used in health programs related to control of diarrheal diseases, immunization promotion, population control, the fight against AIDS, and in the prevention of drug use, among others. Its application has precipitated a number of successes in the adoption of new behaviors within a short time and at low cost.

For this reason it is necessary for IEOS, which is responsible for water supplies, sanitation, and refuse disposal in the community, to have a team well trained in social marketing in order to improve media production, promotion, and education.

6.1.3 Transfer of Knowledge

Content of training for IEOS Staff should include:

1. Social marketing: Marketing theory in general and the specifics of social marketing will be studied.

2. Communication: Communication methodologies, media, and survey instruments generally applied in health projects will be studied.

3. Administration: Utilization of resources for implementation and marketing planning.

4. Research: Knowledge of qualitative and quantitative research as applied to the collection of baseline data.

5. Human Relations and Public Opinion: As part of promotion and feedback activity. The focus is on the strengthening of contact points with the user.

6. Training: Development of techniques and skills for training design and implementation and evaluation and follow-up, as well as the development of training materials.

7. Supervision and Evaluation: Development of minimal skills for evaluation and follow-up of social marketing projects in health to assure appropriate investment in training and media.

During Phase I of this training, the participants will develop and test materials and messages for the education campaign, and during Phase II they will apply the training methodologies to provincial training workshops.

With this preparation IEOS will have the capability to apply elementary marketing techniques which will serve to increase institutional efficiency in promotion and education. IEOS trainees in social marketing, upon completion of the training program, will assume responsibility for the implementation of the strategy developed by the WASH consultants.

6.1.4 Schedule of Activities

1. PREPARATION PERIOD (Four weeks total)

   a. Selection of trainers—Week One.

   b. Definition of place to work—Week One.

c. Interview and selection of participants—Week One.

d. Development of material to support the workshop—Weeks Two to Four.

2. WORKSHOP PERIOD (Five weeks total)

a. Marketing, administration, communication, and research —two weeks.

b. Human relations and projects design—one week.

c. Training, supervision, and evaluation—two weeks.

3. PRACTICE PERIOD (Four to eight weeks)

a. Practical production of media—four weeks.

b. Training of promoters—four weeks.

4. EVALUATION PERIOD (Three weeks)

a. Project evaluation (includes learning, materials, and training).

6.1.5 Resources Required

A team of experts will be required in the areas of communications, marketing, training, research, project design, and related areas.

Technical assistance will also be required during the period of development of materials and messages for the promotion and training strategies. Finally, technical assistance will be required for the evaluation.

Funds will be needed for the development of materials and the workshop itself, as well as activities in promotion, distribution, and evaluation.

A small support staff (two to three persons) will be required, as well as physical space, with the most elementary operative facilities where this group and the consultants can work.

6.1.6 Project Impact

Project impact is to be measured in relation to:

- The level of support provided the social marketing campaign by IEOS and MPH executives who have received familiarization training.

- Social marketing strategy capabilities of the IEOS implementation team.
- Community outreach and communication capabilities of promoters and community hygiene education team (CHET) members.

6.2 Training for Interpersonal Communication at the Community Level

The second major training activity is focused on promoters from IEOS and from other institutions willing to cooperate in this campaign.

Training is a technically specialized activity which has to be learned and practiced. It requires some basic knowledge of group dynamics and human relationships. The social marketing plan includes many training activities at different times and at different levels. All of them rest on the training of trainers and the preparation of support materials.

In order to have an integrated plan, it is assumed that the junta will be the clearing house of all the promoters and that all of them will coordinate their work with the junta.

The IEOS hygiene education infrastructure will be strengthened by appointing one promoter full time to coordinate education activities in each province. It is also possible to appoint a Peace Corps volunteer in each province in support of the hygiene education effort.

6.2.1 The Community Hygiene Education Team

The following people will be asked to be members of the community hygiene education team (CHET)

- President of the water and sanitation junta (coordinator)
- President of the community (deputy coordinator)
- Representatives from the mothers club
- Women who are mothers with good communication skills and with leadership potential
- Primary school teachers
- Water and sanitation promoter (facilitator)
- Priest or nun
- Community development agents
- Health services personnel resident in the community

- Village midwives who are good communicators with leadership potential, and who have received government training.

During the first meeting of the CHET the promoter will present the 12 goals set at the national and/or provincial level. The team will be headed by the president of the water and sanitation Junta. The water and sanitation promoter is responsible for training the team and coordinating the resurveys in relation to the 12 goals which will provide the necessary team focus. All persons on the team will be given a written scope of work to carry out. The community hygiene education team will be reaching out, using individual and small group approaches, to target groups in each community.

6.2.2 Target Groups

- Mothers of toddlers (aged one to three) and preschool children (aged four to six) to teach toilet training, handwashing, bathing, and protection of potable water sources.
- Indigenous communes, sporting clubs, development clubs, local government representatives, women's groups, youth groups, farmers' groups to teach basic hygiene practices.
- Primary school children.

6.2.3 A Training Workshop Outline for Promoters

The organization and content of the workshop are as follows:

PART I

1. Basic elements of training techniques and social marketing campaigns.
2. Results of the baseline survey (planning research)
   - knowledge, attitude, and practices
   - behavioral change objectives
   - the 12 goals and the materials produced are introduced.
3. New emphasis on hygiene education
   - target population
   - areas of emphasis based on 12 goals

- concept of child health and child survival is explained and the reasons for an emphasis on young children are presented.

4. Concept of strategy is explained

   - encourages community participation (bottom up) for meeting 12 goals;

   - consistent with basic minimum needs concept whereby community development committees are involved and responsible from the beginning;

   - concept of active versus passive methods of hygiene education is explained (in support of mass media).

PART II

1. The concept of the team approach with the community is presented. There will be many workers, each giving a few hygiene education messages. Some messages are different, some are the same. The program is complete if all team members are active and all target groups in the community are reached. The team weaves a net of messages and everyone in the community is caught. The reason for greater involvement of women is presented (i.e., their role as caretaker, change agents within the family, and teachers of their own children is examined).

2. The scope of work for members of the team are presented and discussed.

3. New teaching materials for hygiene education are discussed.

PART III

1. The twelve goals are presented. The reason for the high targets is explained: it is to reduce or eliminate the cycle of diarrheal disease and waterborne diseases.

2. Evaluation is based on community resurveys at specified intervals in relationship to the 12 goals. Data are to be compiled at the provincial and national levels.

3. The promoters' survey and reporting forms for the 12 goals are presented.

PART IV

The knowledge and experience of promoters as effective hygiene educators (communicators) is reinforced. This effort is also aimed at the CHET and will be based on material developed by the World Health Organization on individual and group communications (see Appendices B and C).

6.2.4 Orientation Workshop Outline for Community Hygiene Education Team

This workshop will follow the same general lines as the training for promoters but will be more like an orientation. There will be more emphasis on team work and individual responsibility. The strategy is to work through community leaders for the creation and implementation of CHET.

6.2.5 Scopes of Work for Community Promotion Team

1. PROMOTER

   a. Collaborates with CHET in establishing approaches to meeting goals;

   b. Provides active support to coordinators and to outreach activities of committee members;

   c. Supervises and collaborates in village surveys and resurveys on the 12 goals;

   d. Reports findings to community team and to IEOS;

   e. Speaks to community schools regarding advantages of good hygienic practices—economic, fashionable, and healthy;

   f. Coordinates distribution and use of educational materials and curriculum by the community.

2. PRESIDENT OF WATER-SANITATION JUNTA

   a. Serves as chairman of the CHET;

   b. Encourages other team members and participants in outreach activities;

   c. Works closely with other team members to achieve 12 goals;

   d. Conducts surveys on the 12 goals of a hygienic community. Reports finding to CHET and to IEOS through the promoter;

e. Speaks to community groups using WHO guidelines on:

- importance of handwashing after bathroom use and before cooking,
- importance of using clean water for drinking and cooking,
- importance of always using the latrine.

f. Encourages members of youth groups to assist in hygiene education work.

3. PRESIDENT OF COMMUNITY ASSOCIATION

a. Serves as deputy head of community health education team (CHET);

b. Encourages other team members and participants in outreach activities;

c. Works closely with other team members to achieve goals;

d. Conducts surveys on the 12 goals of a hygienic community. Reports findings to CHET and to IEOS through the promoter.

e. Speaks to target groups using WHO guidelines on:

- importance of handwashing after bathroom use and before cooking
- importance of using clean water for drinking and cooking
- importance of always using the latrine.

4. REPRESENTATIVES OF WOMEN CLUBS—WOMEN FROM THE COMMUNITY AND/OR HYGIENE VOLUNTEERS.

Messages should be directed to specific households for which the volunteer is responsible.

a. Teach toddlers (aged one to three) to use the potty and older children to always use the latrine;

b. Teach children to wash their hands after using the latrine and before eating;

c. Always use clean water for drinking or cooking;

d. Clean the latrine every day;

e. Have a long-handled dipper for use in water storage container (especially on the coast);

f. Keep water storage container clean and covered;

g. Wash hands before feeding babies or cooking;

h. Use clean water to prepare food for babies and children, and heat food before feeding them;

i. Communicate concept of "child health" or "child survival": oral rehydration for diarrhea, immunization, nutritional weaning foods.

5. PRIEST/NUN

a. Teach community in Sunday sermon about responsible parenthood in areas of water, sanitation, immunization, and oral rehydration;

b. Distribute education materials toward the end of mass;

c. Work through evening groups at the church in hygiene education and child survival;

d. Work with the poor to help them to gain access to potable drinking water supplies and latrines;

e. Assist CHET in the management and distribution of hygiene education materials and in meeting the 12 goals;

f. Be a guest speaker at schools in hygiene education and child survival;

g. Place education insert into Sunday bulletin.

6. TRADITIONAL BIRTH ATTENDANT WITH GOVERNMENT TRAINING AND LEADERSHIP POTENTIAL.

Teach mothers with babies and preschool children to:

a. Teach toddlers (aged one to three) to use the potty;

b. Teach mothers that the toddler's feces are dirty and should be flushed down the latrine;

c. Teach hand washing with soap to toddlers;

d. Bathe children daily and wash their clothes often to prevent skin diseases;

e. Wash hands before cooking and before feeding babies and children;

f. Use clean water to prepare food for babies and children and heat food before feeding them;

g. Teach the concept of "child health" or "child survival" including oral rehydration for diarrhea, immunization, nutrition, and weaning practices.

7. HEALTH SERVICES PERSONNEL

a. Validate through practice or counseling the messages that are being promoted and the behavior changes which are being sought;

b. Accurately transmit project messages and utilize campaign material;

c. Support community outreach through referrals;

d. Assist the CHET in meeting the 12 goals.

8. COMMUNITY DEVELOPMENT AGENT

a. Organize a youth group to assist the promoter and other members of CHET in the hygiene education program.

b. Promote 12 goals in daily work with committees and in the general community. Emphasize that the proper use of latrines and potable water is modern and fashionable (be specific).

9. SCHOOL TEACHERS

a. Invite promoter, president of the junta, president of the community, the priest, and others to come to the school and talk about hygienic practices.

b. Help children to develop hygiene education posters for the community. Post them in every part of the community and change them often.

c. Borrow flipcharts, curriculum, texts, and other materials from the promoter for use in the hygiene education of the children.

d. Deputize children with "official" armbands to conduct hygiene education efforts in the community. Children can visit three to four households once a week. Children should visit in pairs. Plan with the children on a map (loaned by the promoter or junta) where they should visit. Children should be accompanied by a teacher or parent.

6.2.6 Preparation and Testing of Teaching Materials*

1. A bright-colored latrine sticker (pictures only) that appeals to small children, utilizing a popular cartoon figure. The subject should be how to use the latrine and how to be clean.

2. Flipcharts for promoters, primary school teachers, and the church.

3. A picture book utilizing a cartoon figure for teaching toddlers (aged 2 to 4) to use the latrine. Suggested title: "Carliman learns to use the latrine."

4. Strengthen social preparation of communities by providing pretested messages with more internal incentives or rewards:

   Economic: "You will spend less money on health care and lose less time from work because hygienic behavior brings about better health."

   Fashionable: "It is modern, private, and convenient to own a latrine and to use it."

   Healthy: "You will have less diarrheal and parasitic infections and your children will grow healthier and suffer less." Include child survival messages.

5. Develop primary school curriculum on hygiene education together with text (this can be passed out by the promoter).

6. Review the curriculum of medical, nursing, auxiliary nursing, and community health worker programs and develop supplementary hygiene education materials as necessary.

7. Develop a water and sanitation survey form based on findings and planning targets.

8. Design a "certificate of achievement" to be given to households and schools which meet all appropriate targets.

9. Design an "official" armband to be worn by school children who bring hygiene messages from the school to the community.

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*Note: All materials should be easily transportable on motorbikes which are the vehicles used by water and sanitation promoters.

10. Design a flag to be flown by villages which have met all hygiene education targets.

11. Design a 2 x 4 foot piece of cloth with brightly colored messages on water consumption and food preparation to be used by volunteer promoters in the community. Mothers could also hang it in their kitchens.

12. Design lapel pins in recognition of those who have given major assistance to program success.

6.2.7 Evaluation

Evaluation is based on community resurveys in relation to the 12 goals. Data can be compiled at the provincial and national levels with national coordination through IEOS.

6.2.8 Trainers

Trainers for provincial and community training efforts should have knowledge and experience in several of the following areas:

- Social marketing
- Projects
- Training at the community level
- Public health
- Behavior modification

Chapter 7

BUDGET

1.	Training in Social Marketing	$ 11,674.00
	Materials Faculty Participants Per Diem Travel	
2.	Promotion/Education Materials	241,050.00
	Certificate of merit Pamphlets for homes and public relations Soap opera on water and sanitation for radio & TV Flipcharts for schools Didactic guidelines Posters Manuals for water and sanitation committees Fliers Manual for promoter Form for evaluation and reporting	
3.	Radio and TV Spots and Transmission	154,197.00
	4 spots on contamination 4 spots on decontamination 20 micro-spots on "Please don't do ___" Promote toddler's potty, brushes, brooms	
	Radio jingles on promoting campaign theme Cassette course on water and sanitation hygiene for radio Transmission - distribution of messages	
4.	Training in Promotion	171,208.00
	Workshops for promoters Workshops for presidents of water and sanitation committees Workshop with treasurers of water and sanitation committees National Congress of Water and Sanitation Committees Workshop for Ministry of Health and Education Workshops for primary school teachers Workshops for systems operators Workshops with health service personnel Workshop with journalists	

5.	Promotion of Products	115,400.00
	Brushes and brooms Toddler training potties Disinfectants Ceramic toilets Scholarships for school children of mothers who pass water and sanitation course and whose households who meet water and sanitation goals	
6.	Research	19,640.00
	KAP survey No. 2 KAP survey No. 3 Focus groups Data analysis	
7.	Administration	27,480.00
	Support Supplies Computers	
	Photocopy, video rental, cassettes, camera rental, film, etc.	
	TOTAL	$740,649.00 or 370,324,500/S

Budget:

AID 31%,
IEOS 26%
Other donors through ministry of finance 43%

500 sucres = US $1

APPENDIX A

Baseline Investigation

House No. ☐☐☐

Appendix A

BASE LINE INVESTIGATION

August 1988- Ecuador

ECUADORIAN INSTITUTE OF WATER AND SANITATION (IEOS)

PROJECT: HEALTH EDUCATION

1. GENERAL DATA:

Province: Esmeraldas [1] Imbabura [2] Azuay [3] Chimborazo [4] Los Ríos [5] ☐

Canton: _____

Parish: _____

Recinto o Caserio: (name) _____

2. CONTROL DATA:

Intervier/Coder: _____

Printer: _____

Critical Analyst: _____

OBSERVATIONS: _____

_____

_____

0. INSTRUCTIONS FOR PROMOTER:

(INTRODUCTION: We are from the Ministry of Health and IEOS. We want to talk with the mother of the family or any adult).

House No. ☐☐☐

1. Who is going to answer the questionarie:
   Mother [0] Adult [1] ☐
2. (Ask an adult) How are you related to the head of household? Father [1] Mother [2] Brother [3] Sister [4] Uncle [5] Aunt [6] Son [7] Daugther [8] Other [9] ☐
3. Are there any children Under five living in the house? ☐
4. How many children between five and 12 years are living in this house? ☐
5. How many children are attending the school? ☐
6. What is the occupation of the head of household? Farmer [1] Laborer [2] Artisan [3] Professional [4] Other [5] ☐
7. Do you own a radio? No [0] Yes [1] ☐
8. What time do you listen the radio? Early Morning [1] Morning [2] Noon Time [3] Afternoon [4] Night [5] All Day [6] ☐
9. Which station do you listen to? _____
   _____
10. Do you have a T.V. in the house? No [0] Yes [1] ☐
11. What time do you watch T.V.? Morning [1] Noon Time [2] Afternoon [3] Night [4] All Day [5] ☐
12. Which chanels do you prefer? _____
    _____
13. How mnay people can read and write in this house? ☐

SECTION 1. WATER

14. How many faucets are located outside of the house? ☐
15. How many faucets are located inside the house? ☐
16. May I see the faucet? No [0] Yes [1] ☐

House No. ☐☐☐

(NOTE: Examing the faucets and record the findings. If necessary ask the following questions);

17. Distance in metres from the house to the faucet ☐☐☐

18. The faucet is alone [0] Is part of the laundry [1] ☐

19. The laundry has a storage tank? No [0] Yes [1] ☐

20. The storage tank is close to the letrine? No [0] Yes [1] ☐

21. Do you have soap in the laundry? No [0] Yes [1] ☐

22. The water in the laundry storage tank is use to:

Wash Clothes	No	[0]	Yes	[1]	-------- ☐
Wash Hands	No	[0]	Yes	[1]	-------- ☐
Clean Generally	No	[0]	Yes	[1]	-------- ☐
Wash after the letrine	No	[0]	Yes	[1]	-------- ☐
Drink	No	[0]	Yes	[1]	-------- ☐
Cook	No	[0]	Yes	[1]	-------- ☐
Shower	No	[0]	Yes	[1]	-------- ☐
Wash Dishes	No	[0]	Yes	[1]	-------- ☐

23. Observe If there is any receptical to scoop water, what knid of material is it. Does not exist [0] Plastic [1] Wood [2] Metal [3] Clay [4] ☐

24. This recipient has a long handle [1] Short handle [2] There is no handle [0] ☐

25. Is there mud at the base of the faucet? No [0] Yes [1] ☐

26. Used the water is discharged from the tank by a drain pipe [0] A small ditch [1] Irrigation [2] Sewer [3] Other [4] ☐

House No. ☐☐☐

27. Does the water that comes from the faucet have a good flavour? No [0] Yes [1] ☐

28. Do you consider the water to be of good quality? No [0] Yes [1] ☐

29. Do you think that the water can be drunk directly from the faucet? No [0] Yes [1] ☐

30. When do you boil water? _____

_____

31. For what do you use the soap?

Wash Clothes No [0] Yes [1] ---------- ☐

Take shower No [0] Yes [1] ---------- ☐

Wash Dishes No [0] Yes [1] ---------- ☐

32. How often do you bathe? ☐

33. How often do you bathe your children? ☐

34. For what reazons does a person bathe? What do you think

_____

35. Do you know If you can get any sickness from unclean water? No [0] Yes [1] ☐

36. Which sickness? _____

_____

37. What causes diarrhoea? Explain _____

_____

38. How does one acquire inestinal paracites? _____

_____

39. Do you know that each time you clean your baby you should wash your hands? No [0] Yes [1] ☐

House No. ☐☐☐

40. It is necessary to wash fruits and vegetables before eating them? No [0] Yes [1] ☐

Why? _____

41. It is necessary to wash your hands after you use the letrine? ☐

No [0] Yes [1]

42. Do you think that clean water should be given free to everybody? ☐

No [0] Yes [1]

Why? _____

43. Do you pay the water bill. Monthly [1] Three times per year [2] Twice a year [3] Annually [4] ☐

44. How much do you pay? ☐☐☐

45. Do you think the bills you pay for water are: Cheap [0] ☐

Expensive [1] Fair [2]

46. Do you know how potable water is treated? Explain _____

_____

47. Waht is the diference between clean (potable) water and the water of a river or estero? _____

_____

48. The milk or baby bottle is cooked [1] Boiled [2] Nothing [0] ☐

SECTION 2. LETRINES

49. Do you have a letrine only [0] Letrine with water [1] Toilet [2] ☐

(Interviewer: Please note exactely what you observe)

50. Is the service inside the house? No [0] Yes [1] ☐

51. The service is __ metres from the house? ☐☐

52. The seat does not exist(turk) [0] Is cement [1] Is ceramic [2] Is wood [3] ☐

House No. ☐☐☐

53. The seat has a cover? No [0] Yes [1] ☐

54. The walls of the letrine are made of cane [0] Wood [1] Cinder block [2] ☐

55. The roof is of eternit [0] titles [1] Paja/Hojas [2] Zinc [3] ☐

CAMPESINO SANITATION

56. Is there a direct water connection to the letrine? ☐

No [0] Yes [1]

57. To flush the letrine water is stored outside [0] Next to the letrine (but outside) [1] Inside [2] There is no water stored for the letrine and water from the tap is used for flushing [3] ☐

58. The faucet is _____ metres from the letrine? ☐☐

59. What do you utilize to clean the seat? Nothing [0] Broom [1] Brush [2] Rag [3] ☐

60. A place to wash hands does not exist [0] Is outside but near the letrine [1] Is inside the letrine [2] ☐

STATE OF CLEANLINESS OF THE LETRINE

61. Does excrement exist on the floor [1] On the walls [2] In the toilet [3] On the cover [4] Does not exist [0] ☐

62. The odor is strong [1] It is the same as the general area [2] Excessively strong [3] There is no odor [0] ☐

House No. ☐☐☐

63. Are flys on the cover [1] In the walls [2] In the general area [3] There are no flys [0] ☐

64. The toilet paper is: In a recipetical with no cover [1] Repetical with a cover [2] On the floor [3] ☐

65. In the letrine there exists no paper [0] Newspaper [1] Toilet paper [2] ☐

IMMEDIATE SURROUNDING OF THE LETRINE AND OTHER

66. Is there human excreta near the letrine? No [0] Yes [1] ☐

67. Is there animal excreta near the letrines and patio? No [0] Yes [1] ☐

68. Is the service used as safe keeping for chickens at night [0] For other animals [1] ☐

69. Does the letrine seem un-used for a long time [0] Sorth time [1] ☐

70. Is the letrine in good condition [0] Deteriorating [1] Unserviceable [2] ☐

IN THE CASE OF CHILDREN UNDER FIVE YEARS

71. Do you have a small pot (poty) for the small chil? No [0] Yes [1] ☐

72. At what age do you teach small child to use the potty? ☐

73. WHen should the hands of a small child be washed?_____

_____

74. At what age do you teach the young child to use the letrine? ☐☐

House No. ☐☐☐

75. The children wash their hands after they use the letrine [0] ☐

Always [1] Sometimes [2] Rarely [3]

76. When your child begins school at ages does he know to use the ☐

letrine? No [0] Yes [1]

SECTION 3 IEOS AND OTHER COMMUNITY RESOURCES

77. Do you know what IEOS is ? No [0] Yes [1] ☐

Explain _____

78. Do you know that IEOS provides materials to build letrines? ☐

No [0] Yes [1]

What _____

80. When you had contact with IEOS were they courteious? No [0] ☐

Yes [1] Fair [2] No contact [3]

81. What is IEOS doing in your community? _____

_____

82. Have received educational pamphlets from IEOS? No [0] ☐

Yes [1]

83. Have you attended educational programs in sponsored by IEOS, ☐

such as a film or short talk? No [0] Yes [1]

84. Insted of IEOS, are there other institution that have offered ☐

you health information? No [0] Yes [1]

85. What was the Institution:

Church No [0] Yes [1] ---------- ☐

School No [0] Yes [1] ---------- ☐

Health Center No [0] Yes [1] ---------- ☐

Social Security Campesino No [0] Yes [1] ---------- ☐

Other No [0] Yes [1] ---------

86. What did they offer?

Pamphlets No [0] Yes [1] ---------

Films No [0] Yes [1] ---------

Lectures No [0] Yes [1] ---------

Other No [0] Yes [1] ---------

87. Do you think that president of the community is concerned with the problems of water and sanitation? No [0] Yes [1]

How? _____

88. Which are the following persons in the community have given education or support in water, letrines and health?

The teacher No [0] Yes [1] --------

The Prist No [0] Yes [1] --------

Doctor No [0] Yes [1] --------

Nurse No [0] Yes [1] --------

Auxilliary No [0] Yes [1] --------

Traditional Midwife No [0] Yes [1] --------

Other No [0] Yes [1] --------

SECTION 4. GARBAGE

89. How often do you sweep? Everyday [1] very two days [2] Every week [3] Other [0]

90. Do you sweep the patio? Everyday [1] Every two days [2] Every week [3] Other [0]

91. What do you do with the sweepings and other garbage from the house burry it [1] Burn it [2] Throw it into the woods [3] Throw it in the street [4] Give it to the garbage truck [5] Throw it in the gorge [5]

House No. ☐☐☐

92. Do you have flies? Many [1] Few [2] None [3] ☐

93. Which uo you think is the relation between flys and disease?

_____

94. What do you do with the dung of your animals? Store it [1] ☐
Sell it [2] Use it in the garden [3] Nothing [0]

95. How do you store the dung before use? _____

_____

96. When you fertalize the land with dung do you work it into the soil (And thus cover the dung with soil) No [0] Yes [1] ☐

97. Have you heard the word contamination? No [0] Yes [1] ☐

98. Can you explain in your own words what contamination means?

_____

_____

99. Do you know what diseases are transmited by flys and excreta? ☐
No [0] Yes [1]

100. What produces an increase in the number of rats? _____

_____

101. What produces an increase in the number of flies? _____

_____

(NOTE: Thank the mother and other persons who have help you. Please be sure to complete the questionarie identification information in page 1.

APPENDIX B

How to Make Individual and Household Contacts Effective and Positive

Appendix B

HOW TO MAKE INDIVIDUAL AND HOUSEHOLD CONTACTS EFFECTIVE AND POSITIVE

Home visits and individual or family contacts require careful planning and implementation. Such visits could be for the collection of information about the village or the family, for providing information, motivation and education, for giving reassurance or psychological support, or for building up relationships. Whatever the purpose may be, attention to the following essential features will contribute to the effectiveness of the visits.

Planning for the visit

1. Study the records of the household or consult with friends to learn as much as possible about the individual or family before the visit.

2. Make notes or be prepared in advance on probable problems to be discussed during the visit.

3. Know the community resources and facilities available so that referral, if needed, can be made to the proper agency on problems in which the family is interested.

4. Check the scientific information necessary for the purpose of the visit.

5. Fix the time and date of the interview with the respondents or at least give them advance notice so that they expect you.

Approach to the individual or family

1. Introduce yourself and greet according to local custom.

2. Try to establish rapport with the individual or family. Rapport-building is an essential first step in gaining your acceptance, especially when approaching persons whom you do not know. Such rapport-building will be facilitated by revealing your knowledge of the family, talking about things they are interested in, revealing a willingness to serve, praising the interviewee for his accomplishments, and participating in some common activity.

3. Judge your length of stay by existing conditions. If the situation is convenient, avail yourself of it fully; if not, arrange a further visit.

During the interview

1. Be conscious of the social and emotional forces at work within the interview situation and capitalize on them if they are in your favor.

2. Lead people to do the talking and cultivate the ability to be a good listener.

3. Accept that your role is not to make decisions for the sake of others. Try instead to create situations and opportunities by which the interviewee will be helped to arrive at decisions on his own.

4. Be sure about the basic ego needs of the individual, the satisfaction of which could help you to lead him to discuss your ideas and come to the most appropriate decisions.

5. Remember that communication takes place through nonverbal channels as well as through speech. One should be conscious of these other channels and adept in interpreting them with respect to the interview situation.

6. Refrain from sermonizing, moralizing, or rendering judgments before the full facts of the situation are understood.

7. Listen to the family's problems; gain confidence by showing a sincere interest in these problems and by helping to solve them to the maximum extent possible.

8. Commend family members for carrying out suggested measures or for other good practices concerning family health.

9. Try not to make too many suggestions during one visit.

10. Talk in simple language and give clear and correct information.

11. Use terms people understand.

12. Demonstrate whenever required.

13. Explain any literature you may give to the family.

14. Avoid clashes or arguments during contact. There are many ways in which one can express ideas contrary to those held by interviewees without offending their feelings.

15. Have faith in people and their ability to solve many of their problems.

16. Never make a promise that you know is not within your power to keep.

17. Help the interviewee to feel at ease and ready to talk.

18. Do not terminate the visit prematurely. In public health problems repeat visits are often necessary. Make plans for the next visit before leaving.

Follow-up

During the interview certain decisions might have been taken that require follow-up action on your part. Attention to these is essential before you approach the person for the next contact.

Source: K. A. Pisharoti. Guide to the Integration of Health Education in Environmental Health Programmes. Geneva: World Health Organization, 1975.

APPENDIX C

How to Make Small Group Discussions Effective

Appendix C

HOW TO MAKE SMALL GROUP DISCUSSIONS EFFECTIVE

1. Contact should be made with as many members of the group as possible, individually and prior to the meeting, to interest them in the problem proposed for discussion.

2. It is preferable to limit the membership to about 15-20 for group thinking. Care should be taken to include some leaders, innovators, and satisfied adopters in the group.

3. The date, time, and place of the meeting should be so fixed as to make it convenient for most members to attend.

4. Before the meeting starts, an effort should be made to ensure that everyone is comfortable so that the group will be relaxed and able to direct its thoughts to the topic being discussed. Introducing the members to each other is essential.

5. For a discussion it is best to seat people in a circle so that everyone can see the face and expression of every other person in the meeting.

6. At the outset of the meeting the group should select the leader, and recorder and decide on a schedule and procedures.

7. A good way to start a meeting is for the group leader to explain the problem for discussion.

8. All members of the group should be encouraged to participate by being recognized and praised for the part they play.

9. Speeches should be discouraged. The objective should be to elicit the views of as many individuals as possible.

10. The group may need pertinent information on the problem it is trying to solve. The educator should find out if someone in the group can provide the information needed. If necessary she or he may bring in resource persons from outside. The resource person should not make a speech but should simply impart the information that the group wants for its decision-making.

11. The discussions should be kept focused on the problem. There is bound to be a certain amount of digression occasionally, and a good leader will permit this, though not to the extent that people lose track of the main purpose of the discussion.

12. The discussion should be summarized occasionally to enable the group to focus on the subject and develop it further.

13. The leader should listen well and patiently and be careful not to impose a decision on the group. He should often make his contribution in the form of questions.

14. Members of the group are likely to express divergent opinions, but these should be integrated and conflicts resolved by pointed and humorous attitudes.

15. Group members should be willing to compromise, to admit their errors, and, on occasion, to yield ground so that the group can make progress toward solving the problem.

16. A group needs a recorder to produce summaries of the discussion and decisions. These summaries enable the group to see what it has accomplished from time to time.

17. Leadership functions need not always be performed by one person in the group. Allowing others to function as group leader will enhance their status.

18. Occasional evaluation by the group of its own progress toward achieving its goals enables it to identify any deficiencies, to remedy them, and to make better progress. The presence of an objective observer who can report back to the group has been found useful. The observer is concerned with such problems as:

    a. Are the objectives of the group clear and well laid out?

    b. What is the motivation of the group?

    c. Is the group too leader-centered?

    d. Are the leadership functions properly discharged?

    e. How hard is the group trying?

    f. Are the interests of members sustained?

    g. Is the group cohesive?

    h. Is communication open within the group?

    i. Does the group have the information it needs to solve problems?

    j. What progress is being made in solving the problem undertaken?

Source: K. A. Pisharoti. Guide to the Integration of Health Education in Environmental Health Programmes. Geneva: World Health Organization, 1975.

APPENDIX D

Individuals Contacted

APPENDIX D

Individuals Contacted

SUPERVISORS OF THE DIVISION OF PROMOTION AND EDUCATION WHO TOOK PART IN THE KAP SURVEY

1.	Lcdo. Homero Morales	-	Chief of the Promotion and Education Division
2.	Lcdo. César H. Morales	-	Supervisor
3.	Dr. Galo Cuasapaz Cadena	-	Supervisor
4.	Lcdo. José Jiménez	-	Supervisor
5.	Lcdo. Manuel Riera	-	Supervisor
6.	Sr. Magno Pérez	-	Supervisor
7.	Sr. Guillermo Bedoya	-	Supervisor
8.	Sr. Clemente Bone Cosierra	-	Supervisor

IEOS PROVINCIAL CHIEFS OF THE PROVINCES IN WHICH THE SURVEY TOOK PLACE

1.	Ing. Fernando Mendoza Morán	-	IEOS Provincial Chief of Chimborazo
2.	Ing. Gonzalo Pizarro	-	IEOS Provincial Chief of Imbabura
3.	Ing. Augusto Dau	-	IEOS Provincial Chief of Los Rios
4.	Ing. Francisco Toral	-	IEOS Provincial Chief of Azuay
5.	Ing. Medardo Urbina	-	IEOS Provincial Chief of Esmeraldas

LIST OF COLLABORATORS

1.	Dr. Plutarco Naranjo	Minister of Public Health
2.	Dr. Enrique Granizo	Subsecretary of Public Health
3.	Dr. Nelson Dávila	General Director of Health
4.	Ing. Miguel Arias	Executive Director of IEOS
5.	Ing. Marcelo Piedra	IEOS National Planification Director
6.	Lcdo. Eduardo Coral O.	IEOS General Coordinator
7.	Frank Almaguer	AID Mission Chief
8.	Ing. Adalid Arratia	AID Project Manager
9.	Dr. Bill Goldman	USAID Director of the Family and Health Division
10.	Dr. Kate Jones Patron	USAID Health Division


WASH