



Section - II  
Community Education, Training  
Health Organisation

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## COMMUNITY EDUCATION TRAINING AND HEALTH ORGANISATION

### 1. THE CETHO IEC CONCEPT

The Institute of Health Management Pachod (IHMP) has evolved an innovative Information, Education and Communication (IEC) strategy for the Safe Drinking Water Programme implemented in the Georai taluka, Beed District. It is based on the IHMP experience of the health programme being implemented since 1977.

The IEC concept encompasses a broad perspective to demonstrate changes in community behaviour. The IEC strategy aims at making individuals, and the community aware of the problems related to drinking water, and generating their participation in assessing interventions to overcome these problems.

Behaviour related to drinking water needs to change at both the individual and community levels. Individual practices such as water storage and management of water born diseases are relatively easier to change. Change in community behaviour, such as maintenance of hygenic source surroundings and waste water disposal, is difficult and requires a longer time period.

Community norms can only be established if every single individual in the community complies and makes a decision to change his or her practice. This process can be initiated and sustained only if the stimulus for change comes from within the community rather than being imposed by an external change agent.

Individual behaviour may be influenced by interpersonal communication but normative change in a community can occur only with effective group interaction which facilitates participation. A mechanism which generates peer pressure is required to ensure compliance and sustained normative change in the community.

The IEC strategy should emphasise decision making and ensure follow-up through a process of reinforcement, motivation and

mobilisation of community action. It should involve a clear mechanism whereby individuals make an informed choice. Hence, the strategy that evolves is situation, time and problem specific.

The IEC component of the Safe Drinking Water Programme which was initiated in Georai Taluka of Beed in 1988 has attempted to operationalise these concepts. The results of the CETHO programme in Georai are presented.

## 2. EVOLUTION OF THE PROGRAMME:

The first phase of the Safe Drinking Water (SDW) Programme which began in 1986-87, was oriented towards meeting the immediate drinking water needs of the people. The programme started with the reconstruction and reactivation of handpumps.

In the second phase the focus shifted to maintenance and of handpumps and community education and organisation.

CETHO activities were introduced in 1988. Initially a situational analysis was undertaken in the area. Water related practices were studied and interventions to create community awareness were planned. It was assumed that dissemination of health information in the community will finally lead to behavioural change. The CETHO team soon realised the inadequacy of this method. Change in community behaviour would require a dynamic process of interaction, problem identification and decision making at the community level.

The IHMP evolved an IEC strategy to foster community participation and facilitate normative changes in water related behaviours. This IEC strategy involved the conduction of women's awareness camps on water. The focus of these camps has been on women as they are the crucial elements in fulfilling the daily



water requirements of their family. 86% of contact with water sources is by women. So far 38 awareness camps have been conducted by the IHMP staff.

By the end of 1989 the CETHO team realised that covering the entire taluka would require a large manpower input. Apart from this the impact of the awareness camps could only be established through sustained contact. To ensure a replicable IEC strategy, IHMP decided to involve the government, ICDS infrastructure for implementing the IEC programme. Anganwadi workers, under IHMP supervision, have conducted 39 water camps in their respective villages.

The negotiations to obtain Govt. permission were started in Oct. 89. The approval for the involvement of ICDS workers was only obtained in March 1990.

Following government approval, a batch of 27 Anganwadi workers and 30 helpers were trained for conducting awareness camps. The results of awareness camps organised by the Anganwadi workers encouraged IHMP to train all the ICDS functionaries in Georai taluka. In Sept. and Oct. 1990, Mukhya Sevikas and another two batches of AWWs were trained.

To strengthen and support community monitoring of handpumps, CETHO conducted in-service field training of 1700 village level volunteers.

### 3. Objectives of CETHO

#### Broad Objective:

To bring about a change in the rural community's water related behaviour.

#### Specific Objectives:

- a) To increase the level of awareness in the community ( emphasis on women) about the concept of safe water; water borne diseases and their prevention and water storage methods.
- b) To organise the community members to maintain the cleanliness of their water source and its surroundings.
- c) To co-ordinate with the safe drinking water programme's technical team (BLM & MMU) to ensure the availability of safe drinking water to the community.
- d) To select and train community representatives (VLVs) to monitor their handpumps and maintain the cleanliness of its surroundings.
- e) To strengthen and support the community monitoring and maintenance of the cleanliness of handpump surroundings.
- f) To co-ordinate and involve the government infrastructure and train their workers to conduct IEC programmes related to water in their community.

#### 4. The CETHO STRATEGIES:

The IHMP has introduced three IEC strategies for increasing

awareness levels and changing individual and community water

related behaviour. These strategies have well defined mechanisms

for generating community participation and management of their

water resources.



The three Strategies are:

- A). Awareness Camps for women organised by IHMP staff and Government ICDS workers.
- B). Training and Involvement of community representatives in the management of their water resources.
- C). Health education and motivation of adults by school children, (Child Educators or Balsevak strategy).

5. AWARENESS CAMPS FOR WOMEN - (MAHILA MELAWAS) ON WATER:

DETHO has independently conducted 38 awareness camps within a period of two years. The IEC strategy involved in these camps is the timely identification of problems. The community women are led by a process of group dynamics to take collective decisions and participate in follow up action to overcome existing problems.

The Awareness Camp strategy is as follows :

- I. Preparatory Phase.
- II. Conducting the camp.
- III. Follow-up Phase.

I. PREPARATORY PHASE FOR THE CAMP:

a) Situational Analysis :

A situational analysis is done in every village prior to conduction of the melawa. This includes identification of water sources and studying their condition. Observing water related user habits such as storage methods, cleanliness of the drinking water source surrounding, activities like washing of

clothes, vessels, animals at the drinking water source, children defaecating at the water source; and personal hygienic habits. Apart from this information, women's concept of water, their knowledge of the relationship between water and various water borne diseases is collected.

b) Contact Opinion Leaders and Motivating Women to attend Camp:

Village opinion leaders are contacted and briefed on the camp objectives. Their support is sought for identification and use of traditional communication channels in the community (eg. dawandi etc.), motivation of women to attend the melawa, selection of camp site and fixing camp timings.

Apart from this the camp organiser contacts women living in the vicinity of each water source and informs them about the camp. These women are motivated and requested to bring their friends, relatives and neighbours.

c) Selection of Camp Site and Dates :

A suitable location for conducting the camp is selected. Dates are fixed in consultation with the community.

d) KAP pretest of women:

A pre-test is conducted for women to assess their knowledge, attitudes and practices, related to use of water. (The preparatory phase is completed one week prior to the actual camp).



## II. CONDUCTING THE CAMP:

- a. Registration of women and orientation to camp agenda and objectives.
- b. Role of women and their association with water.
- c. Game Session.
- d. Drawing Session.
- e. Discussion.
- f. Decision Making.

### a. Introduction:

The camp objectives and agenda are discussed and women are introduced to the IHMP's safe drinking water programme.

### b. Discussion on Role of Women And Their Association With Water:

The onus of running a home is on women. They manage daily household chores and take care of their children for which their association with water is obvious. 86% of all contacts with water sources are made by women. Therefore, women are key elements for bringing about any change in user habits and ensuring village level management of water sources. The community women are encouraged to perceive their close relationship with water.

### d. Game Session :

The camp starts with a few games played by the women. This session helps in creating a congenial atmosphere. It helps in creating an interest in the activities of the camp and a willingness to participate. The games are related to the health education topic. Token prizes are given to those who win in these games.

e. Drawing Session:

The women are divided into small groups and asked to draw pictures on topics related to water and various user habits. Each group provided with some paper and a bowl of water colours, is motivated to draw these topics with their fingers. Through these paintings the women express their concept and practices related to drinking water.

f. Discussion:

One member from each group explains their picture to the rest of the participants. The best painting gets a prize. In the process of selecting the best painting a dynamic process of discussion and group interaction is initiated among the participants.

After every presentation the camp organiser initiates a discussion on it. The organiser facilitates participation and channels the discussion in such a manner so as to reinforce the positive habits presented by the women in their drawings and substitute harmful ones with suitable alternatives. Additional information is given where required. By means of this strategy the women in the group who possess a high level of awareness are identified and their knowledge is used to educate the others through a process of sharing. The suggestions for change originate from the group itself rather than as an external stimulus from the organiser.

The camp organiser summarises the entire discussion with emphasis and reinforcement of relevant messages.



#### g. Decision Making:

The camp organiser leads the women into making decisions regarding changes in user habits related to their drinking water source, water storage and management of water borne illnesses.

They are encouraged to take up the management of their water source and monitor its maintenance. Decisions regarding water drainage and filling up stagnant water pools are encouraged.

The camp ends with prize distribution for those winning the game and for the best drawings. These are an incentive, further motivating the women to participate in the follow-up sessions. Finally a date for the follow-up session is fixed.

#### III. Follow-up phase:

The first follow up session is held within a week after the camp. During this session responsibilities are assigned and women undertake follow-up action on decisions taken during the camp. Committees or groups are formed for collective action. The camp organiser only provides the required technical know-how and supportive supervision. The organiser also assists in mobilising the material required for executing the decisions. The actual activities are undertaken by the community women.

During this follow-up session a post-test to assess the impact on the knowledge levels of women is conducted. Depending on the post-test results, reinforcement of certain messages is done through small group meetings. The next follow-up session is fixed and detailed action plan covering all the decisions finalised.

The camp organiser continues motivating the women and providing them the necessary guidance. The final objective of the awareness programme is to make the community participate in

the management of their water resources. Ensuring 'safe' drinking water ,to a large extent depends, on the users water related habits. The programme aims to bring about a change in harmful practices and substitute them with suitable alternatives. An attempt is made to solve problems related to water with community participation at the village level itself through this camp strategy.

#### 6. A - ASSESSMENT OF THE WOMEN'S AWARENESS CAMPS ON WATER - CONDUCTED BY CETHO

- 6.1. Introduction
- 6.2. Evaluation Objectives
- 6.3. Evaluation Methods
- 6.4. Results:
  - a. Storage of Drinking Water
  - b. Concept of Water
  - c. Water and Disease
  - d. Handpump Surroundings
- 6.5. Discussion
- 6.6. Problems Encountered
- 6.7. Conclusions and Implications.

#### 6.1. Introduction

A situational analysis of the water related practices in the Georai taluka indicated that primarily women, (86%) fetch water for the household. Practices related to water storage, cleaning storage vessels and cleanliness of water source surroundings determine the contamination of drinking water.

Women wash their clothes, vessels and animals at the water source. In some cases, small children are allowed to defaecate near the hand pump. Invariably there is accumulation of slush around the hand pump. Earth filling (murram) around the platform is usually eroded, leaving the platform edges undermined.



Seventy five percent of the households store drinking water in 'ranjans', which are large earthen ware pots 2.5 to 3 feet in height and 2 feet or more in diameter. Three fourths of the pot is buried in the ground in order to keep the water cool, hence the ranjans are difficult to clean.

These ranjans are covered with a basket or a piece of cloth. Any vessel is used for removing water from the Ranjan. The water source surroundings in most of the villages (89%) are unclean.

It was felt that interventions specifically targeted towards these user-practices, are necessary to bring about qualitative change in drinking water.

The Awareness Camp IEC strategy was used to educate women. The IHMP has independently conducted 38 womens awareness camps on safe drinking water.

Messages were disseminated in the following areas during awareness camps:

- Concept of safe water.
- How germs enter water and cause disease (transmission of water borne disease).
- Water borne diseases and their management (emphasis on diarrhoea and jaundice).
- Methods of preventing water borne diseases: hygienic storage habits, hygiene of water source and personal hygiene.
- Hygienic water storage: storage of drinking water in matkas (small earthenware pots), use of ranjan for storing water for other purposes, solid cover on storage vessel, use of a vargala (dipper with a handle) to remove water from matkas.
- Hygiene of water source: prevention of activities such as washing clothes, vessels and animals near the water source, prevention of children defecating at the water source, maintenance of clean platform conditions, regular cleaning of the drainage, regular murrum filling around water source. - Personal hygiene related to water habits.

## 6.2. Evaluation Objectives:

1. To assess the change in the knowledge of rural women regarding the concept of safe water, water borne diseases, water storage methods, cleanliness of water sources and waste water disposal.
2. To assess the change in the behaviour of rural women related to water storage methods and the water source.
3. To assess the effectiveness and replicability of the awareness camps strategy.

## 6.3. Evaluation Methods:

- a) Pre-tests conducted by the IHMP team compared with the post-tests conducted by external investigators.

The IHMP team randomly selected 8 villages and pre-tested the knowledge, attitudes and practices of 10 randomly selected community women per village.

In the post-test a random sample of 100 community women who attended camps, from these 8 villages, was drawn. A larger sample than that for the pre-test was drawn, since it was felt that several women would not be available, due to the sowing season.

Only 90 women were available for interviewing. The external investigators conducted the KAP tests on women a fortnight after the awareness camps were held. The interview schedules used for the evaluation are annexed (refer annexures A-I and A-II).

## 6.4. Results:

- 6.4.1. Profile of respondents: Even though the number of women pre and post-tested was marginally different, the general profile of these respondents was comparable. 62% of the respondents were in the age group of 20-40 years. Only 10% respondents were literate. The occupation of the respondents included agriculture (60%), landless labour (21.3%), house work (12.5%) and service



Table 1 : Storage of Drinking Water

Water Storage Practices	Pre test scores of 80 women. Conducted by CETHD	Post test scores of 90 women conducted by external Investigators
a) Storage vessel:		
Ranjan	60 (75%)	55 (61.1%)
Matka	16 (20%)	18 (20%)
Metal vessel	1 (1.2%)	16 (17.8%)
Other vessels	3 (3.8%)	1 (1.1%)
b) Covering storage vessel :		
Yes	69 (86.2%)	83 (92.2%)
No	11 (13.8%)	7 ( 7.8%)
c) Cover used:		
Wooden plank	31 (38.7%)	30 (33.3%)
Metal plate	10 (12.5%)	32 (35.6%)
Cloth	2 ( 2.5%)	1 (1.1%)
Basket	26 (32.5%)	20 (22.2%)
N.A.	11 (13.8%)	7 (7.8%)

#### 6.4.2. Storage of drinking water:

In the pretest 75% of the respondents stored their drinking water in ranjans. This proportion had reduced to 61.1% in the post-test. After the awareness camps 37.8% respondents were using a matka or a metal vessel for storing their drinking water as compared to 21.2% previously.

92.2% of the respondents were covering their storage vessel after the camp, 35.6% used a metal plate to cover their drinking water and protect it against contamination. The remaining 56.6% used inappropriate covering such as a cloth, wooden plank or basket. 7.8% women did not cover their storage water at all.

#### 6.4.3. Concept of water:

The proportion of women who stated that water could become unclean increased from 20% to 94.5%. Only 8% of the respondents could relate unclean water to germs. After the camp 85.6% women responded that water becomes unclean with the introduction of suspended material as compared to 18.8% in the pretest.

In the pretest 73.8% women felt that stored water could become unclean. This increased to 94.5% after the camp.

The proportion of respondents who believed that stored water can become unclean was higher in the pretest (73.8%), as compared to responses, that water at source can get contaminated (20%). The reason for this difference could be that the contamination in stored water is easily visible as a majority of the women have associated unclean stored water with suspended material.



Table 2 : Concept of Water

Concept of water	Pre test scores of 80 women. Conducted by CETHO	Post test scores of 90 women. Conducted externally
a) Can water become unclean		
Yes	16 (20%)	85 (94.5%)
No	63 (78.8%)	1 (1.1%)
Don't know	1 (1.2%)	4 (4.4%)
b) How does water become unclean		
Introduction of suspended material	15 (18.8%)	77 (85.6%)
Due to germs	1 (1.2%)	7 (7.8%)
Don't know	-	1 (1.1%)
N.A. as (a) was not ans. yes	64 (80%)	5 (5.5%)
c) Can stored water become unclean		
Yes	59 (73.8%)	85 (94.5%)
No	21 (26.2%)	5 (5.3%)
d) How does stored water become unclean		
Introduction of suspended material	54 (67.5%)	77 (85.6%)
Due to germs	3 (3.8%)	7 (8.9%)
If stored for many days	2 (2.4%)	-
N.A. as (c) was answered no	21 (26.3%)	5 (5.5%)

Table 3a.: Water and Disease

	Pre test	Post test
Concepts related to water borne diseases.	Conducted by Cetho team. scores out of 80	Conducted by Investigators Scores out of 90
a) Can water transmit disease?		
Yes	35 (43.8%)	88 (97.8%)
No	-	1 (1.1%)
Don't know	45 (56.2%)	1 (1.1%)
b) How does water cause illness		
Suspended material in the water	25 (31.3%)	30 (33.5%)
Due to germs	10 (12.5%)	58 (64.5%)
N.A. as (a) was not answered yes	45 (56.2%)	2 ( 2.2%)
c) Illness caused by water		
Water borne diseases	9 (11.2%)	69 (76.7%)
Don't know	71 (88.8%)	21 (23.3%)
d) Are water borne diseases preventable?		
Yes	8 (10%)	68 (75.6%)
No	1 (1.2%)	1 (1.1%)
Don't know	71 (88.8%)	21 (23.3 %)



#### 6.4.5. Water and Disease:

Respondents who perceived contaminated water as a cause of illness increased from 43.8% to 97.8%. The concept that germs in the contaminated water cause disease increased from 12.5% in the pretest to 64.5% in the post test. 33.5% of the women still related the suspended material in water as a cause of illness.

The result of question b, table-3, is not consistent with question b, table-2. This discrepancy may be because respondents misinterpreted the question "How does water become unclean?" This question could have read "How does water become unsafe?".

In the post test 76.7% of the respondents were able to cite specific water borne diseases as compared to only 11.2% in the pretest. 75.6% women in the post test responded that water borne disease were preventable as compared to 10% in the pretest.

**Table 3b.: Information on Diarrhoea**

	PreTest Score of 80 Women Conducted by CETHO	Post Test Score of 90 Women Conducted Externally
a) Association between diarrhoea and dehydration		
Yes	8 (10%)	40 (44.4%)
No	---	1 (1.1%)
Don't Know	72 (90%)	49 (54.5%)
b) Preparation of ORS		
Yes	10 (12.5%)	37 (41.1%)
No	70 (87.5%)	53 (59.9%)

The association between diarrhoea and dehydration was recognised by only 10% women in the pretest as compared to 44.4% in the post-test. Women who could describe the preparation of the oral rehydration solution increased from 12.5% to 41.4% during the post-test. (Refer Table 3b.)

Table 4a: Water Source Surroundings:

	PRE TEST Score out of 80 Conducted by CETHO team	POST TEST Score out of 90 Conducted by extern- al investi- gators
a) Does the presence of slush accumulated around your water source cause any problems/hazards		
Yes	32 (40%)	53 (58.9%)
No	4 ( 5%)	-
Don't know	44 (55%)	37 (41.4%)
b) Problems caused due to accumulated slush around the water source		
-Water becomes contaminated and causes illness	24 (30%)	49 (45.6%)
- Don't know	8 (10%)	4 ( 4.4%)
- N.A. as (a) was Not answered yes	48 (60%)	37 ( 41 %)
c) Observation of slush and dirt present around drinking water source:		
Present	46 (56.5%)	45 (38.9%)
Not Present	34 (42.5%)	55 (61.1%)



Table 4b:

Women's Responses Regarding Activities At The Water Source

ACTIVITIES	Pre test scores out of 80. Conducted by CETHO	Post test scores out of 90. Conducted externally
a) Women washing clothes		
Yes	53 (66.3%)	9 (10.0%)
No	27 (33.7%)	81 (90.0%)
b) If no, why not?		
Because the water becomes contaminated	10 (12.5%)	73 (81.1%)
Don't know	17 (21.25%)	8 ( 8.9%)
N A	53 (66.25%)	9 (10%)
c) Animals being bathed at the drinking water source		
Yes	56 (70%)	6 (6.7%)
No	24 (30%)	84 (93.3%)
d) If no, why not		
To prevent the water from getting contaminated	8 (10%)	67 (74.5%)
Don't know	16 (20%)	17 (18.8%)
N A	56 (70%)	6 (6.7%)
e) Children defaecating at the drinking water source		
Yes	41 (51.25%)	41 (45.6%)
No	39 (48.75%)	49 (54.4%)

#### 6.4.6. Handpump Surroundings:

40% of the respondents in the pre test felt that slush around the drinking water source causes problems while in the post test this proportion increased to 59%. However only 45.6% women in the post test stated that slush and dirt around the drinking water source contaminated the water and caused disease.

After the awareness camps, 90% of the women responded that they had stopped washing clothes and 93% said that they had stopped bathing animals at the drinking water source, but only 54.4% could prevent children from defaecating there.

On observing the condition of the drinking water sources in these villages, 42.5% were clean during the pretest. and 61.1% at the time of the post-test.

The results of this study indicate that, though awareness levels have increased substantially in most areas, some of the user habits have only marginally changed.

The post test also included a few questions related to the information given and decisions taken during the camp.

74.4% of the women recalled the complete information imparted at the camp while 20% had partial recall. Only 5.6% women did not remember anything.

68.9% of the respondents could state the various decisions taken during the camp.



#### 6.5. Discussion:

The results of this KAP study indicate that a substantial increase in knowledge levels was brought about by the awareness camps amongst rural women regarding the cleanliness of water (94%), water borne diseases (98%), their transmission (65%) and prevention (70%). A majority (85.4%) of the women related unclean water with the presence of suspended material. 64.5% women could relate water borne diseases to germs.

These results indicate that awareness levels can be readily improved for concepts which rural women can visualise and associate with their daily experiences. Concepts such as contamination of water due to the introduction of germs are difficult to comprehend without a practical demonstration and situation specific examples.

The women's awareness regarding water storage had improved after the camps, but the proportionate change in water related user habits was smaller. An example of this is the storage vessel which is used for drinking water. 13.9% of the rural women had stopped using ranjans to store their drinking water. These results clearly indicate that changing behaviour both at the individual and community level is a gradual process requiring sustained and periodic reinforcement and follow up.

The awareness of the need for maintaining clean water source surroundings had increased after the camp, but the causal association between the accumulated slush around the water source and water borne disease was perceived by only 45.6% of the women.

Women who use the handpump for drinking water feel that it is a closed protected structure drawing water from underground and hence contamination cannot occur. The possibility of surface water seepage is not considered. Surface water seepage unless visually demonstrated is a difficult concept to convey.

#### 6.6. Conclusions, Lessons learnt and Implications:

Availability of drinking water is a priority need of all communities. Organising and motivating community women to participate in issues related to drinking water is relatively easy. This study indicates that a well planned long term IEC strategy is required. The planning for an awareness camp and its follow-up, need to be based on the specific village situation. A convenient day, time and place is necessary. On the bazar day most rural women remain at home. It should be a logical choice for conducting a camp.

The awareness camp strategy has had a substantial impact on the knowledge levels of rural women. Changing water related behaviour is a gradual process requiring sustained reinforcement. Individual behavioural change is easier to sustain than changes in community behaviour. The IEC programme needs to be extended to all the groups in the community, but with emphasis on women.

New practices can be introduced in small groups, but change in norms requires active participation of the entire community and is possible only through sustained contact and follow up.

Initially, CETHO had planned to implement its IEC strategy using a small team of facilitators (camp organiser and assistant). However, it was soon realised that effective large scale implementation of the IEC programme would be possible only through a decentralised infrastructure. It would ensure cost effectiveness. Involvement of an existing government infrastructure, eg. ICDS workers, school teachers, health workers, etc. would also increase the potential for replication of such a programme at a district level.



Formal government permission and recognition of the involved infrastructure is necessary. To sustain the motivation and interest of the workers, an incentive for the best worker and best village needs to be introduced.

The IEC strategy should have a mechanism for identifying low response and non-compliant individuals and introduce intensive, more frequent contact with them. These individuals can be motivated through peer pressure and group interaction.

The IEC strategy, should be planned to ensure a progression from increased awareness to change in individual practices, to the establishment of new community norms and finally to collective action in the management of water resources.

Apart from these IEC inputs, it is important that changes in community behaviour are also promoted by the provision of alternative facilities ie. cattle troughs, a specific area at a permissible distance from water source for washing clothes, soakage pits for waste water management, etc. The need for appropriate technology to manage individual and community waste water is imperative.

Finally, a drinking water programme should be integrated with a sanitation programme for an effective overall impact on the community's health status.

As a prototype, or model for demonstration to policy makers, the IEC programme requires a strong research component, with field investigators, researchers and data processing facilities to study its impact. Only empirical evidence would promote an initiative for replication.

To summarize, any IEC programme needs to focus on the following aspects:

1. The outcome of an IEC programme should be behavioural change.
2. IEC should be issue, situation and time specific.
3. IEC strategy requires detailed micro-planning.
4. IEC strategy requires facilitators rather than educators as the need for change should be generated from within the community and not imposed by an external change agent.
5. Intensive training of change facilitators is required.
6. Provision of alternative facilities to sustain changed community norms.
7. Requirement of technological know how for waste water management (specifically for water related programmes).



## 7.B. Assessment of Women's Awareness Camps on Water Conducted By ICDS Workers

- 7.1. Introduction
- 7.2. Evaluation Objectives
- 7.3. Evaluation Methods
- 7.4. Results
- 7.5. Problems Encountered
- 7.6. Discussions and Conclusions

### 7.1 Introduction:

The first batch of 27 Anganwadi Workers (AWWs) trained in March 1990 have conducted 39 water awareness camps for women in their respective villages. These camps were evaluated in 1990.

### 7.2 Evaluation Objectives:

- a. To study the effectiveness of ICDS workers as communicators and facilitators of behavioural change in rural communities.
- b. To determine the potential for replication of the programme at the District level.

### 7.3 Evaluation Method:

The Community Education, Training and Health Organisation (CETHO) team evaluated 9 awareness camps conducted by ICDS Anganwadi Workers, using a pre-post study design.

The CETHO team conducted the pre-tests. They were instructed to study the knowledge, attitude and practices of randomly selected women. A semi-structured interview schedule was used.

(Refer annexure B I & II)

The AWWs were directed to ensure that the women whose KAP was done, attended the camp. The CETHO team interviewed the women who attended the camp, using the same questionnaire, 10-12 days later. In case the women who were administered the pre-test were not available during the post-test, others who had attended the camp were interviewed. A total of 184 women were interviewed.

#### 7.4. Results

##### 7.4.1. Profile of Respondents:

46% of respondents interviewed both in the pre and post tests were less than 30 years of age. In the pre-test 50.6% women were in the age groups 31-50 years and 3.8% were above 50 years whilst in the post-test 43.4% women belonged to the age group 31-50 years and 10.8% were above 50 years.

A majority of the women interviewed during the pre and post tests were illiterate (78% in the pre-test and 82% in post-test).



Table 1: Drinking Water Source used by respondents:

DRINKING WATER SOURCE	SCORES OUT OF 184	
	PRE-TEST	POST-TEST
Hand Pump	105 (57.1%)	128 (69.6%)
Well	36 (19.6%)	22 (12.0%)
Tap	19 (10.3%)	24 (13.0%)
River	12 ( 6.5%)	10 ( 5.4%)
Stream, Pond	12 ( 6.5%)	-

7.4.2. Drinking Water Source Used :

The various drinking water sources used by the respondents in the pre-test were handpumps (57.1%), wells (19.6%), tap system (10.3%), river stream and pond (13.0%). In the post-test the use of handpumps had increased to 69.6%, and the use of the tap system has marginally changed to 13.0%.

**Table 2: Storage of Drinking Water:**

Water storage Practices	SCORES OUT OF 184	
	PRE-TEST	POST-TEST
a) Storage Vessel		
Ranjan	79 (42.9%)	67 (36.4%)
Matka	90 (48.9%)	105 (57.1%)
Metal Vessel	7 ( 3.8%)	11 ( 6.0%)
Other Vessel	8 ( 4.4%)	1 ( 0.5%)
b) Covering storage:		
Yes	180 (97.8%)	182 (98.8%)
No	4 ( 2.1%)	2 ( 1.1%)
c) Cover used:		
Wooden Plank	77 (41.8%)	59 (32.1%)
Metal Plate	60 (32.6%)	102 (55.4%)
Cloth	-	5 ( 2.7%)
Basket	43 (23.5%)	16 ( 8.7%)
No cover used	4 ( 2.1%)	2 ( 1.1%)
d) Cover why:		
To prevent water from becoming dirty	21 (11.4%)	150 (81.5%)
Don't know	159 (86.4%)	32 (17.4%)
N.A.	4 ( 2.2%)	2 ( 1.1%)

**7.4.3. Storage of Drinking Water:**

In the pre-test 42.9% of the community women stored their drinking water in ranjans as compared to 36.4% in the post-test. The use of matkas for storing drinking water increased from 50.0% to 57.1%, and metal vessels from 3.8% to 6.0%.

98.8% of the women were covering their storage vessels after the camp, 55.4% were using a metal plate cover. The remaining respondents were using a wooden plank (32.1%), basket (8.7%) or a cloth piece (2.7%) to cover their storage vessel. Only 1.1% of the respondents were not covering their storage vessel (Refer Table 2a,b and c). The perceived need for covering the storage vessel to prevent contamination, increased from 11.4% to 81.5%.



Concept of water	SCORES OUT OF 194	
	PRE-TEST	POST-TEST
a) Can water become Unclean		
Yes	68 (37.0%)	134 (72.8%)
No	55 (29.9%)	46 (25.0%)
Don't know	61 (33.1%)	4 (2.2%)
b) How does water become unclean		
- due to introd. of suspended material	45 (24.5%)	97 (52.7%)
- due to germs	11 (6.0%)	16 (8.7%)
- dont know	12 (6.5%)	21 (11.4%)
- N.A as (a) was not ans. yes	116 (63.0%)	50 (27.2%)
c) Concept of safe water		
- Has no germs	22 (12.5%)	28 (15.2%)
- Looks Clear/Transparent	142 (77.2%)	46 (25.0%)
- Don't know	20 (10.9%)	110 (59.8%)

#### 7.4.4. Concept of Safe and Clean Water:

The proportion of women who stated that water could become unclean increased from 37% in the pretest to 72.8% in the post test. After the awareness camp however, only 8.7% could associate unclean water with germs. A majority of the respondents believed that water became unclean due to the introduction of suspended material in it. The women's awareness regarding the concept of safe water marginally increased from 12.5% in the pretest to 15.2% in the post test. 25% of the women still perceived water which looks clear and transparent as safe.

Table 4 Water and Disease

Water and Disease	SCORES OUT OF 184	
	PRE-TEST	POST-TEST
a) Can water transmit disease		
Yes	88 (47.8%)	167 (90.8%)
No	72 (39.1%)	8 (4.3%)
Don't know	24 (13.0%)	9 (4.9%)
b) How does water transmit disease		
- due to introd. of suspended material	48 (26.1%)	102 (55.4%)
- due to germs	12 (6.5%)	20 (10.9%)
- don't know	28 (15.2%)	45 (24.5%)
- N.A as (a) was no and don't know.	96 (52.2%)	17 (9.2%)
c) Illness caused by water		
- Water borne diseases	78 (42.4%)	159 (86.4%)
- Don't know	106 (57.6%)	25 (13.6%)
d) Methods of preventing water borne		
- Boiling water	3 (1.6%)	27 (14.7%)
- Filtering water	3 (1.6%)	46 (25.0%)
- Chlorinating water	8 (4.3%)	28 (15.2%)
- Keeping the water source surrounding clean	6 (3.3%)	43 (23.4%)
- Hygienic storage of water	1 (0.5%)	6 (3.3%)
- Don't Know	104 (56.5%)	28 (15.2%)
- Water Borne Diseases Cannot Be Prevented	59 (32.2%)	6 (3.3%)

#### 7.4.5. Water and Disease:

In the post test, 90.8% of the respondents stated that water transmits disease as compared to only 47.8% in the pretest. The concept that germs in the water cause disease increased from 6.5% in the pretest to 10.9% in the post test. 55.4% of the women still related the suspended material present in the water as a cause of disease.



After the camp, 86.4% of the community women could list specific water borne diseases. 81.6% could also cite methods for their prevention. 14.7% of the respondents believed that boiling water could prevent these diseases. 25% said that water should be filtered, and 15.2% felt the need for chlorinating water to prevent water borne diseases.

23.4% of the women perceived the need to keep water source surroundings clean and 3.3% stated the use of hygienic storage methods to prevent the spread of such illnesses. 15.2% of the women in the post test did not know how to prevent water borne diseases and 3.3% of them believed that water borne diseases are not preventable.

Table 5a. Water Source Surroundings.

	SCORES OUT OF 184	
	PRE-TEST	POST-TEST
a) Does the presence of dirt & slush accum. around your drinking water source cause any problem.		
Yes	76 (41.3%)	124 (67.4%)
No	35 (19.0%)	22 (12.0%)
Don't Know	73 (39.7%)	38 (25.6%)
b) Prob. caused due to accuml. of slush & dirt around drk. water source		
-Water becomes cont. & causes illness	62 (33.7%)	119 (64.7%)
-Don't Know	14 ( 7.6%)	27 (14.7%)
-N.A as (a) was not ans. yes	108 (58.7%)	38 (20.6%)
c) Observation of water source surroundings		
-Slush & dirt prs.	116 (63.0%)	94 (51.1%)
-clean water source surroundings	68 (37.0%)	90 (48.9%)

Table 5b. Women's Response Regarding the Activities at the Drinking Water Source

Activities	SCORES OUT OF 184	
	PRE-TEST	POST-TEST
a) Women washing clothes		
Yes	94 (51.0%)	4 (2.2%)
No	90 (49.0%)	180 (97.8%)
b) If no why?		
- Because water becomes contam.	68 (37.0%)	178 (96.7%)
- Don't Know	22 (12.0%)	2 (1.1%)
- N.A.	94 (51.1%)	4 (2.2%)
c) Animals being washed at the water source		
Yes	97 (52.7%)	3 (1.6%)
No	87 (47.3%)	181 (98.4%)
d) If no, why?		
- Water becomes contaminated	76 (41.3%)	175 (95.1%)
- Don't know	11 (6.0%)	6 (3.3%)
- N.A.	97 (52.7%)	3 (1.6%)
e) Children defecating at the drinking water source		
Yes	61 (33.2%)	-----
No	123 (66.8%)	184 (100%)
f) If no, why?		
- Contamin. water	76 (41.3%)	176 (95.7%)
- Don't Know	47 (25.5%)	8 (4.3%)
- N.A.	61 (33.2%)	-----
g) Do you wash the platform of the drinking water source after use?		
Yes	37 (20.1%)	80 (44.6%)
No	147 (79.9%)	102 (55.4%)



#### 7.4.6. Water Source Surroundings:

A large number of the respondents (67.4%) in the post test recognised the problems caused by the accumulation of dirt and slush around the drinking water source. In the post test 64.7% of the women could also make a causal association between water borne diseases and unclean water source surroundings as compared to only 33.7% in the pretest.

After the awareness camp 97.8% women responded that washing of clothes at the drinking water source was undesirable, 98.4% stated that animals should not be bathed at the drinking water source and 100% respondents felt that children should be prevented from defaecating there. (Table 5b.)

Even though a majority of the women had knowledge regarding the activities which should be prevented at the drinking water source to keep the water clean, the scores in Table 5a. indicate that there is a gap between user practices and knowledge levels. On observing the drinking water sources in the villages during the post test 51.1% of them had clean surroundings. 48.9% of the drinking water sources still had dirt and slush accumulated around them.

The post test included a few questions on the information imparted during the camp and the decisions taken to improve the village water situation. 66.8% of the respondents could relate the complete information given to them during the camp. 30.4% had partial knowledge of this information and 2.7% could not recall any of this information.

88% women responded that decisions regarding hygienic water storage methods and maintenance of cleanliness of handpump surroundings were discussed at the camp. All the respondents

felt that decisions both at individual and community level would be followed up.

#### 7.5 Problems Encountered:

1. Several women who were pretested were not available in the village for the post test. Some of the pretested women had not attended the camp and hence could not be included in the sample.
2. Apart from the pre-post test design used for the evaluation, the CETHD team had wanted to observe the camps conducted by the AWWs. When a team member would attend a camp, the AWW would want them to conduct it as she felt that the impact of the camp would increase. Observation of AWWs was influenced by this.

#### 7.6 Discussions and Conclusions:

The KAP study undertaken by the IHMF indicates that camps conducted by the anganwadi workers have had a substantial impact on awareness levels of rural women. They have become more aware of the need for clean water, transmission and prevention of water borne diseases, and cleanliness of water source surroundings. This increase in knowledge may be an initial step towards behavioural change in water related user habits.

Findings of the study indicate that a few topics need to be repeatedly reinforced. The community women have not understood the concept of clean and safe water. Only 15.2% women have associated unsafe water with the presence of germs in it. 25% women believe clear and transparent water is safe whilst 59.8% of them have been unable to explain this concept at all. These women relate safe water to visual perception. Suspended material floating in the water is easily visible and hence associated with contamination. Unless microscopic organisms are shown to them the concept will not be understood and accepted.



Another observation made from this study is the gap between change in awareness levels and user habits. An excellent example is the awareness regarding activities which should be prevented at the water source. More than 95% of the women have responded against washing clothes, bathing animals and children defecating near the water source. In fact, these respondents have correctly associated all the above mentioned activities as a cause of contamination of water at the source. But on observation at the handpump sites some of these activities are still continuing. A strategy for establishing community norms needs to be developed.

Changing user habits of the community is a gradual process. The change agent needs to have a frequent contact with the community and should motivate and mobilise the members to identify the existing problems and adopt alternative choices. Decisions for change can only be sustained through repeated reinforcement of knowledge and skills.

It was found that ICDS workers reinforce health messages given at the camp during their house visits. This is done through inter-personal contact in the form of individual counselling. This could be used as a strategy of additional inputs for non-compliers and community members who resist the change.

A planned IEC strategy with well defined objectives, and mechanisms of monitoring and supervision can be effectively implemented by ICDS workers. It is imperative for the success of this strategy that suitable audio-visuals and other materials are provided to these workers. AWWs are good communicators and can motivate and influence the community to change.



The motivation of these workers needs to be sustained through special efforts which include community recognition of the workers and other incentives.

Finally it must be remembered that implementing this strategy on a large scale would result in some dilution of impact and it would take a longer time for demonstrating outcomes in behavioural change.

## 8. C. TRAINING OF ICDS WORKERS

- 8.1 Introduction
- 8.2 Objectives of the training programme
- 8.3 Training methodology
- 8.4 Evaluation of the training programme
- 8.5 Discussion
- 8.6 Problems Encountered
- 8.7 Conclusions
- 8.8 Lessons Learnt

### 8.1. Introduction

Community Education, Training and Health Organisation (CETHO) started implementing the IEC strategy for Safe Drinking Water in the Georai taluka, Beed District in October 1988. This IEC strategy which developed through a process of experimentation was established in 1989. By December 1989, IHMP had conducted 38 women's awareness camps and studied their outcome. The impact of the camps was favourable. A measurable change in the women's water related practices was observed.

By 1990, it was apparent that covering the entire taluka would require large manpower inputs. Besides, changes in community behaviour can be sustained only through continuous and frequent contact with the community. Hence a decision was taken to involve an existing government infrastructure, (ICDS workers) for the implementation of this IEC strategy.

The ICDS scheme primarily serves women and children. There is one Anganwadi per 1000 population. Water, sanitation and health education are included in their present job description.

It was observed that most of the anganwadi workers (AWWs) were interested in participating and assisting in the awareness camps conducted in Georai Taluka by the IHMP. Some AWWs had even conducted independent meetings on their own initiative.

These workers are local residents and have a close contact with the community especially with women. Most AWWs are highly respected and can influence the community.

Involving the ICDS infrastructure also ensured replicability of this IEC strategy.

In November 1989 the IHMP approached the CEO, ZP Beed for formal permission to involve the ICDS workers in the CETHO programme. In March 1990, on receiving formal permission, the first batch of 27 Anganwadi workers and 30 helpers was trained for conducting water awareness camps for women.

Subsequently, three more batches of AWWs were trained. A total 83 AWWs, 30 helpers and 16 Mukhya Sevikas from Georai and Paithan Talukas have been trained till now. The IHMP plans to train all 266 Anganwadi workers in Georai taluka.

#### ICDS Workers (Mukhya Sevikas & AWW) Training Objectives:

##### **Broad Objective:**

To enable ICDS workers (Mukhya Sevikas and Anganwadi Workers) to conduct an IEC programme for drinking water in rural communities.

##### **Specific Objectives:**

- a. To orient ICDS workers on health education and its methods.
- b. To impart cognitive and technical skills to ICDS workers for conducting a situational analysis and planning an awareness camp for women on water.
- c. To orient the ICDS workers with skills to conduct an awareness camp for rural women on water.



- d. To orient the ICDS workers with skills to organise the community women and to follow up on decisions taken during the camps.
- e. To orient the Mukhya Sevikas in the supervision and monitoring of awareness camps conducted by their AWWs.
- f. To impart information to the ICDS workers on the concept of preventive maintenance of hand pumps and the skills required for their monitoring.

### 8.3. Training Content and Methodology:

#### 8.3.1. Training of Mukhya Sevikas.

A 3-day residential training for Mukhya Sevikas was held at the IHMP. The areas covered in the Training Programme were as follows:

- a. Concept of clean and safe water.
- b. Water borne diseases.
- c. Concept of health education, conduction of women's awareness camps on water and sanitation.
- d. Roles and responsibilities of Mukhya Sevikas.
- e. Preventive maintenance of Handpump.
- f. Immunisation.
- g. Growth monitoring and nutrition education.
- h. Maternal and child health care.

(The last three topics were included at the request of trainees)

The Mukhya Sevika's were imparted both cognitive and practical skills. The main emphasis was on the section on the role of supervisors which covered the planning, supervision and monitoring of awareness camps. Conduction of monthly inservice meeting for AWWs and regular reinforcement of health information related to water were also emphasised.

A major part of the training was done through lectures and discussions. Training aids such as audio-visuals, group exercises and case studies were used. The concept of germs was explained by demonstration through a microscope.

The IEC strategy of awareness camps for drinking water was demonstrated through a simulation exercise. (For details on the training curriculum, learning objectives and the methods used, refer Annexures).

### **8.3.2. Training of Anganwadi Workers.**

A 2-day residential training course was held for Anganwadi workers. The topics covered in the training were as follows:

- a. Concept of safe water.
- b. Water borne diseases.
- c. Health education and conduction of Mahila Melawas.
- d. Roles/responsibilities of the Anganwadis in conduction of Mahila Melawas.
- e. Preventive maintenance of Handpumps.

The emphasis of the training for Anganwadi workers was on practical skills required for the conduction of awareness camps.

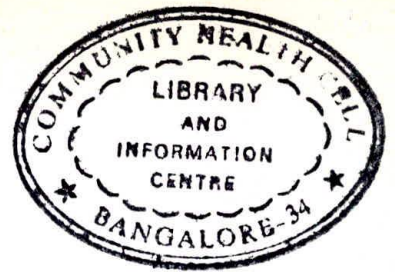
A simulation exercise on the Awareness Camp strategy illustrated the various steps to be followed. Through group discussions the objective and purpose of each of these steps was explained and clarified. Group exercises, case studies, and practicals were other methods used during the training. (For details, refer Annexures CI & CII).

## **8.4 Evaluation of the Training Programmes Conducted for the ICDS Workers.**

### **8.4.1 Objectives of Evaluation:**

- a. To study the effectiveness of the methodology used for training health change facilitators.
- b. To study the effectiveness of ICDS workers as communicators and facilitators of change in rural communities.
- c. To provide policy guidelines for the training of AWWs for conducting IEC programmes on Safe Drinking Water.





#### 8.4.2 Evaluation Methods

A pre-post test design was used to evaluate the training of ICDS workers. Standardised questionnaires were used for the pre-test. After the training the same questionnaire was filled by the trainees, within a time period of one and a half hours. (refer annexures C III & IV for details of Pre/Post Questionnaires).

The scoring system used for the pre/post tests was:

Each question was scored as: Wrong Answer = 0  
Partially Correct = 1  
Completely Correct = 2.

The questionnaire for the Mukhya Sevikas had 37 questions, the maximum possible individual score was 74. (Refer Table - 1).

The same scoring pattern was followed to present group scores for each topic. For the 14 Mukhya sevikas trained the maximum possible group score was 28 (14x2). (Refer table - 2).

The group scores for the two batches of AWWs are presented in the same manner. For 23 AWWs trained in the first batch, group scores for each topic are out of 46. In the second batch 27 AWWs were trained, therefore, group scores for each topic are out of 54. (Refer tables 3 and 4).

A combined average score to assess the performance of all the AWWs is presented in Table 4.

#### 8.4.3 Results

- A. Results of the Training Programme for Supervisors
- B. Results of the Training Programme for Anganwadi Workers

##### 8.4.3.1. A. The results of the 3-day training programme for Mukhya Sevikas

Table 1 presents the individual scores of the Mukhya Sevikas.

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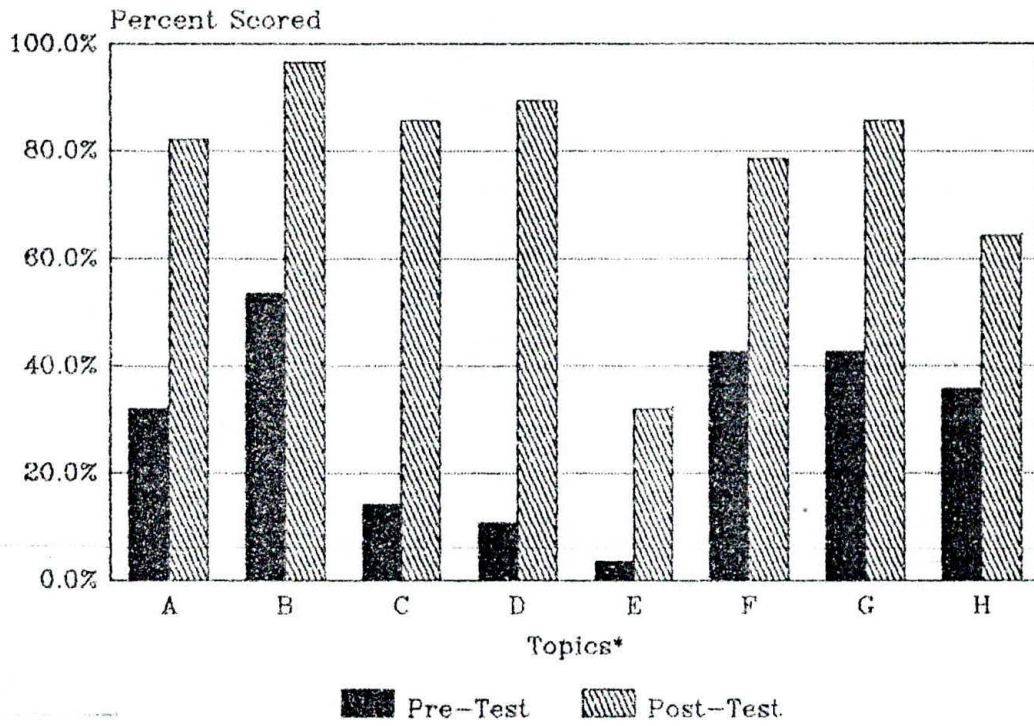


Table 1: Individual Scores of Mukhya Sevikas.

INDIVIDUAL	SCORES OUT OF 74			
	PRE-TEST		POST-TEST	
	Actual	%	Actual	%
1	18	24.3	46	66.2
2	29	39.2	67	90.5
3	27	36.4	59	79.7
4	27	36.4	59	79.7
5	18	24.3	46	62.2
6	21	28.3	57	77.0
7	37	50.0	57	77.0
8	16	21.6	53	71.6
9	18	24.3	59	79.7
10	19	25.6	58	78.3
11	23	31.1	58	78.3
12	20	27.0	48	64.8
13	15	20.2	51	68.9
14	24	32.4	59	79.7
* 15	7/74	36.4	-	Absent
* 16	Absent	-	35/74	47.2

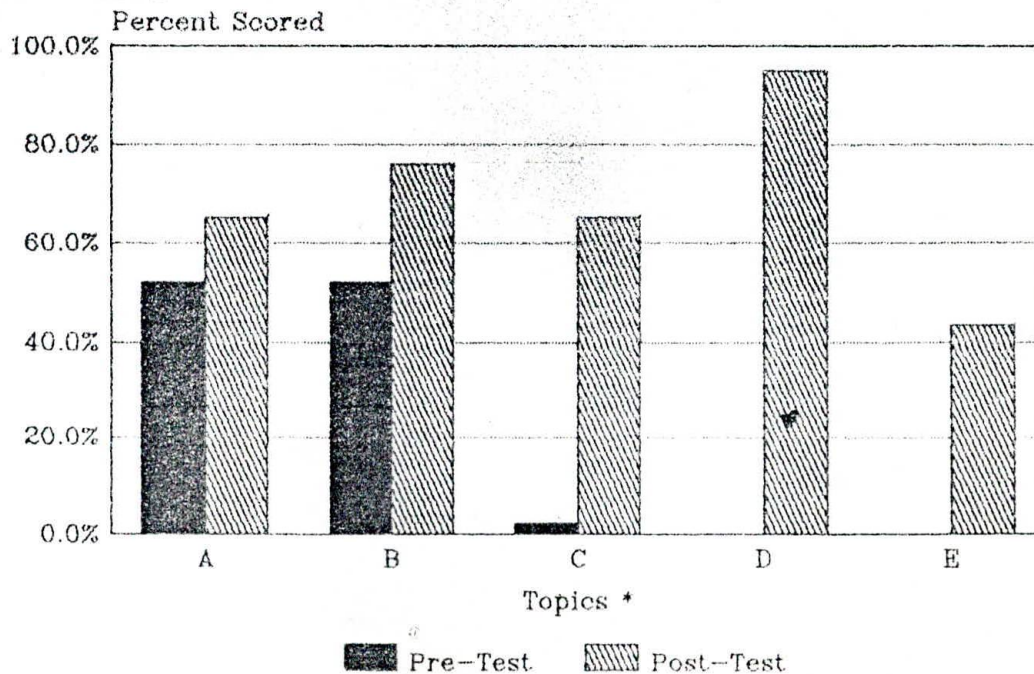
The individual scores of Mukhya Sevikas indicate that except for 5 trainees, the rest of them have scored above 75% in their post-tests. The scores of the remaining 5 trainees range from 62.2% to 71.6%.

Graph 1. Subject-Wise Group Scores



\* See Table 2 for Topic Listing

Graph 2. Scores of the Group of AWW-Teachers (Group 1)



\*See Table 3 for Topic Listings



8.4.3.2. Group scores of the Mukhya Sevikas for each topic are presented in table 2.

Table 2:

Group Scores of 14 Mukhya Sevikas for each Topic.

TOPIC	TOTAL SCORE OUT OF 28			
	Pretest		Posttest	
	Actual	%	Actual	%
A. Concept of water	9	32.1	23	82.1
B. Water borne disease	15	53.6	27	96.4
C. Health education and conduction of mahila melawas for water.	4	14.3	24	85.7
D. Role/responsibility of supervisors in the conduction of melawas.	3	10.7	25	89.3
E. Preventive maintenance of hand pumps	1	3.6	9	32.1
F. Immunisation	12	42.8	22	78.6
G. Growth Monitoring and nutrition education	12	42.8	24	85.7
H. Maternal & Child Care	10	35.7	18	64.3

Table 2 illustrates the group scores on the various topics covered in the training programme. A majority of the group scores are above 75%. The group has scored a low 32.1% on the preventive maintenance of handpumps. Another area with a comparatively low score is maternal and child health care.

#### B.4.4. B. Results of the Training Programme for Anganwadi Workers

50 AWWs have been trained in 2 batches. Group scores of the first batch of Anganwadi workers is presented in table -3.



Table 3:

Group Scores of 23 AWWs by Topic.

TOPIC	TOTAL SCORES OUT OF 46			
	Pretest		Posttest	
	Actual	%	Actual	%
A. Concept of safe water	24	52.1	30	65.2
B. Water borne diseases	24	52.1	35	76.0
C. Health education and conduction of Awareness Camps on water	1	2.17	30	65.2
D. Roles/Responsibilities of AWWs in conduction of Awareness Camps	0	-	44	95.0
E. Preventive maintenance of hand pumps	0	-	20	43.4

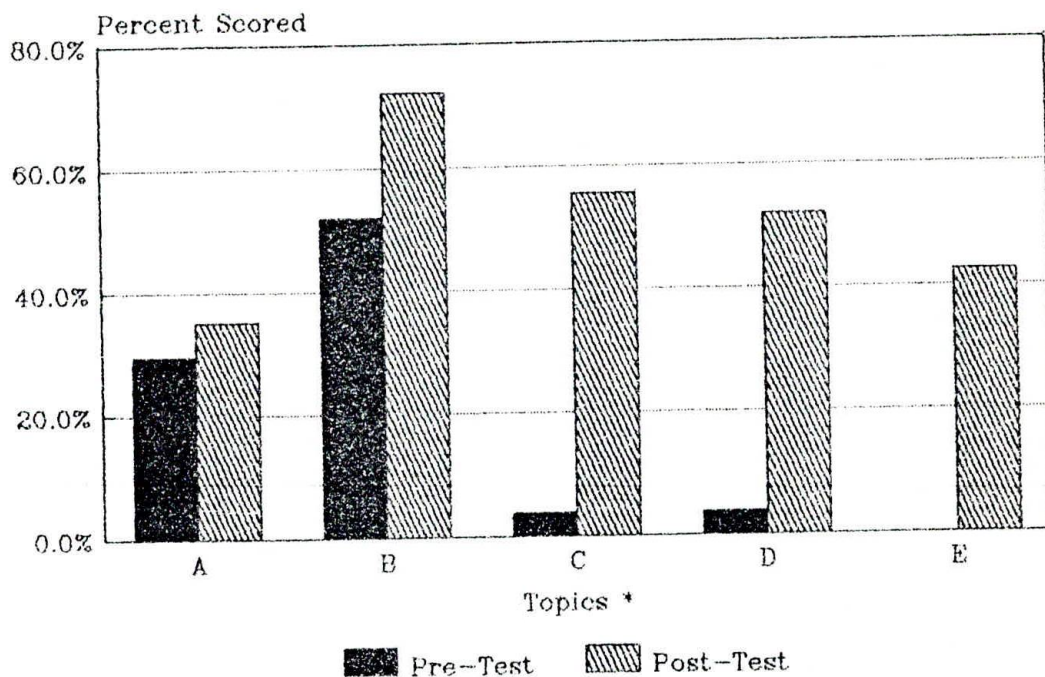
8.4.4.1.

The group scored highest (95%) in the area of roles and responsibilities of AWWs in the conduction of Awareness Camps followed by a score of 76.0% for water borne diseases. A similar score of 65.2% was obtained for the topics - concept of water and health education and conduction of Awareness Camps on water. The group scored a low percentage (43.3%) for the preventive maintenance of handpumps.

8.4.4.2.

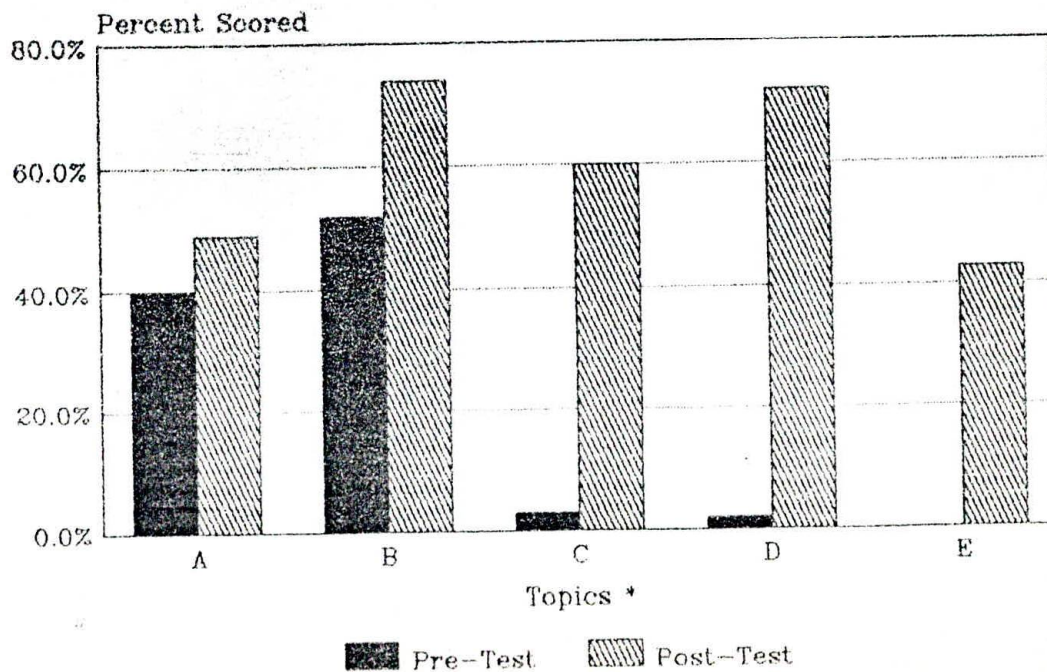
The post-test results of the second batch of AWWs is relatively lower than the first. The group's scores varied from 35.2% for the topic concept of safe water, to 42.6% for the topic preventive maintenance of handpumps, 51.6% for the role and responsibilities of the AWW and 55.6% for the topic on concept of health education and conduction of Awareness Camps on water.

Graph 3. Scores of the Group of AWW-Teachers (Group 2)



\* See Table 4 for Topic Listings

Graph 4. Combined Average Scores of the 2 Groups of AWW Trained



\* See Table 5 for Topic Listings



The group scored 72.2% for the topic of water borne diseases. The group score of the second batch of Anganwadi workers is presented in table 4.

Table 4:

Group Scores of 27 AWWs by Topic.

TOPIC	TOTAL SCORES OUT OF 54			
	Pretest		Posttest	
	Actual	%	Actual	%
A. Concept of water	16	29.6	19	35.2
B. Water borne diseases	28	51.9	39	72.2
C. Health education and conduction of mahila melawas on water	2	3.7	30	55.6
D. Roles/Responsibilities of AWW in conduction of mahila melawas.	2	3.7	28	51.9
E. Preventive maintenance of hand pumps.	0	-	23	42.6

B.4.4.3.

The Combined group scores for 50 Anganwadi workers trained in two batches is presented in table 5. The combined group score is low for the two topics, concept of safe water (49%) and preventive maintenance of handpumps (43%). The anganwadi workers scored 60% and above in the remaining 3 topics. (refer Table - 5 for combined group scores)



Table 5:

Combined Average Group Scores of 50 AWWs by Topic.

TOPIC	TOTAL SCORES OUT OF 100			
	Pretest		Posttest	
	Actual	%	Actual	%
A. Concept of safe water	40	4.0	49	49.0
B. Water borne diseases	52	52.0	74	74.0
C. Health education and conduction of mahila melawas on water	3	3.0	60	60.0
D. Roles/Responsibilities of AWW in conduction of mahila melawas.	2	2.0	72	72.0
E. Preventive maintenance of hand pumps.	0	-	43	43.0

#### 8.5. Discussion:

The pre/post test results of the training programme indicate that certain topics need reinforcement. The Mukhya Sevikas need reorientation in the preventive maintenance of handpumps. This concept is difficult to understand and requires reinforcement. Field training for explaining the concept is necessary. Apart from this the 4 Mukhya Sevikas with a general low score need to be separately reoriented during their monthly inservice meetings.

The Anganwadi workers need to be regularly reoriented during the circle meetings. The Mukhya Sevikas should reinforce all the topics covered in the training programme. Apart from imparting cognitive skills Mukhya Sevikas should focus on the communication skills of the AWWs during the monthly inservice training.

The circle meetings provide a good opportunity to plan and discuss the Awareness Camps to be conducted by the AWWs. Mukhya

Sevikas should provide supportive supervision and resolve field level problems, during these meetings.

The training period for AWWs should be increased to 3 days. This will facilitate reinforcement of the more difficult concepts enable a general summary session and more time will be available for trainees' evaluation.

The training methodology requires certain modifications. In addition to classroom sessions, field exercises should be included for imparting skills to make a situational analysis, to conduct pretesting of community women, monitoring of Hand pump performance etc.

The IEC concept developed by the IHMP discourages the presentation of only factual information to rural audiences. It advocates an active process of problem identification and decision making through group interaction. The camp organiser (ie.the AWW) has to facilitate discussions and decisions related to use of water, so that informed choices can be made by rural women. The trainers need to impart effective communication skills to the camp organisers. This is only possible through field exercises.

#### 8.6. Problems Encountered:

A period of about 5 months was spent in negotiating with the government and obtaining sanction for the involvement of the ICDS workers . Even now an agreement for involving the ICDS infrastructure has not been formalised.

Time constraints for conducting the training courses has been another problem.



The CPDO not being directly involved with this programme, some of the Anganwadi workers will not be motivated to actively participate in the programme.

#### 8.7. Conclusions:

There are no clear guidelines or strategies for implementing IEC programmes at the District level. The IEC infrastructure at the block and District levels has not been able to evolve an effective methodology for imparting health education and bringing about a change in community behaviour.

The broad objective of the CETHO programme was to evolve and establish an IEC strategy replicable within the government infrastructure. This study has provided substantial evidence regarding the replicability of this strategy.

Several trained AWWs (95%) have actively participated in conducting women's Awareness Camps on water and initiated behavioural change in the community. A large proportion of women in these villages have become aware of the concept of safe water, water borne diseases, their prevention and management, etc. Changes in individual and community behaviour have been effectively demonstrated. In several villages Anganwadi workers have been successful in generating collective action by women leading to their participation in the management of community water resources.

To sustain the motivation of the AWWs, a prize incentive should be introduced for those AWW's who demonstrate a change in community behaviour in their villages.

There is need for better coordination with the Dy. Engineer GSDA, for the effective implementation of this strategy.



The provision of audio-visual material, and effective supportive supervision and monitoring of workers will increase the impact of this IEC programme.

**8.8. Lessons Learned:**

To replicate this IEC strategy on a large scale the following aspects are imperative:

- Requirement of an unequivocal government directive.
- Involvement of the entire ICDS infrastructure including the CDPO is necessary to sustain motivation of workers.
- There is need for a regular review by the CEO of the district and recognition of the inputs of the Mukhya Sevikas and Anganwadi workers.
- Require a formal link between the ICDS workers and the G.S.D.A. (intersectoral co-ordination).
- Require some incentive to sustain the motivation of the ICDS workers - this could be a prize for the best performance.
- Require parameters for evaluating the IEC strategy and participatory evaluation techniques for selecting the best performers.
- Require a budget for: a. Training b. Audio-visual aids c. Monitoring system for the IEC programme implemented by the Anganwadis. d. Evaluation of the IEC strategy.

## 9 D. VILLAGE LEVEL VOLUNTEERS

- 9.1 Introduction
- 9.2 Training of Village Level Volunteers
  - 9.2.1 Training Objectives
  - 9.2.2 Training Methodology
  - 9.2.3 Areas Covered During Field Training of VLVs
- 9.3 Evaluation of the Training of VLVs - A KAP Study
  - 9.3.1 Evaluation Objectives
  - 9.3.2 Evaluation Methodology
- 9.4 Results
  - 9.4.1 Profile of the Respondents
  - 9.4.2 Handpump Monitoring
  - 9.4.3 Role of VLVs in Case of Breakdown
  - 9.4.4 Water and Disease
  - 9.4.5 Maintenance of handpump surroundings
- 9.5 Discussion
- 9.6 Problems Encountered
- 9.7 Conclusions and Implications

### 9.1 Introduction:

The village level volunteers (VLVs) are community members who monitor the functional status and maintain the cleanliness of the handpumps in their villages. These VLVs are selected from households located near the handpump. Each pump has 5 VLVs - a woman, an adult, a leader and 2 students.

Presently the IHMP, Safe Drinking Water (SDW) programme has 1795 VLVs taking care of 359 hand pumps in 180 villages of the Georai taluka in Beed district.

## 9.2. Training of VLVs:

### 9.2.1. Training Objectives:

#### Broad objective

To train VLVs to strengthen and support the community management of hand pumps.

#### Specific Objectives:

1). To increase the levels of knowledge of VLVs regarding the concept of safe water, water borne diseases and their prevention.

2). To orient VLVs in the maintenance of cleanliness of hand pump surroundings.

3). To impart necessary skills to the VLVs to regularly monitor their hand pumps.

4). Provide skills to the VLVs to involve community members to maintain the cleanliness of their handpump surroundings.

### 9.2.2. Training Methodology:

The Community Education, Training and Health Organisation (CETHO) team trained the VLVs to support and strengthen the community monitoring of handpumps and maintain the cleanliness of their surroundings.

This training was conducted because a large number of the initially selected VLVs (70%) had been replaced over a period of two years. The new VLVs were not very clear about their roles and needed to be oriented. A total of 1700 VLVs were trained by the CETHO team in June and July 1990.

### 9.2.3. Areas covered during the field training of VLVs:

- 1) Concept of clean and safe water
- 2) Water borne diseases - transmission and prevention
- 3) Maintenance of the cleanliness water source and its surroundings
- 4) Monitoring of hand pumps on a daily basis
- 5) Responsibilities of the VLV.



The training of VLVs was conducted at the handpump site. Information related to the transmission of water borne diseases and their prevention and maintenance of cleanliness of the water source and its surroundings was imparted with a.v. aids.

The responsibilities of the VLV were discussed in details. The importance of handpump monitoring was emphasised, the HP card and its use was explained.

Subsequent to this training the Block Level Mechanic (BLM) has been training the VLVs during his routine monthly visits to the villages. He reinforces the water related health information and motivates the VLVs to regularly monitor the hand pump and clean its surroundings. This orientation is done at the pump site.

### **9.3. Evaluation of the Training of VLVs - A KAP Study**

The VLVs trained by the CETHO team were evaluated in August 1990.

#### **9.3.1. Evaluation Objectives:**

- a) To study the effectiveness of VLVs for the community monitoring of hand pumps.
- b) To assess the awareness levels of the VLVs regarding the concept of clean and safe water, water borne diseases and their prevention.
- c) To study the effectiveness of VLVs in maintaining the cleanliness of the hand pump and its surroundings.
- d) To study the effectiveness of the methodology used for training VLVs.

#### **9.3.2. Evaluation Methods:**

The VLVs were evaluated by external investigators. A pre post KAP study was done on a sample of 70 randomly selected VLVs. A semi-structured interview schedule was used. (refer annexure DI).

The VLVs were pre-tested before their training and their post test was conducted one week after the training programme.

Information regarding monitoring was obtained from VLV cards and external investigators made observations of the handpump sites, for cleanliness of the handpump surroundings.

#### 9.4. Results

The findings of the KAP tests administered to 70 randomly selected VLVs are presented below.

##### 9.4.1. Profile of the Respondents:

67.1 % VLVs interviewed were males while 32.9% were females. These VLVs varied in their age distribution. 47.2% were below 20 years, 44.6% were in the age group of 21 to 40 years and only 10% were above 40 years. 82.9% of the VLVs were Hindus while the rest of them were Muslims (5.7%), Lamani (8.6%) and Vanjaris (2.8%). The literacy rate amongst the VLVs was high 75.7% .

These VLVs have different occupations, 27.1% were farmers, 15.7% were daily wage labourers, 5.7% had their own business and 4.4% were employed in service. 27.1% of the VLVs were students, whilst 20% were housewives. 52.8% of the respondents had been working as VLVs for more than a year 28.6% had worked for over 9 months and the rest of them had been working for a period of 3 to 8 months (18.6%).

9.4.2. Responsibilities of VLVs:

Table 1.

Responsibilities of VLVs	Pre test	Post test
1. Monitoring of HPs, reporting HP breakdown and maintaining the HP surrounding clean	51 (72.8%)	63 (90%)
2. Not sure / Dont know	19 (27.2%)	7 (10%)
Total	70 (100%)	70 (100%)

In the Pre-test 72.8% of the respondents could state their responsibilities in monitoring functional status of hand pumps and maintenance of cleanliness of its surroundings. In the post-test 90% VLVs stated these roles and responsibilities.

9.4.3. Hand Pump Monitoring:

Table 2a: Hand pump Monitoring - Cards.

Hand Pump Cards	PRE-TEST Scores out of 70	POST-TEST Scores out of 70
a) Do you have a Card :Yes	58 (82.8%)	67 (95.7%)
No	12 (17.2%)	3 ( 4.3%)
b) Use of card :Check functionality of HP & report breakdown	29 (41.4%)	50 (71.4%)
Don't know	41 (58.6%)	20 (28.6%)
c) Filling of HP card :Everyday	39 (55.8%)	63 (90.0%)
Irregular	31 (44.2%)	7 (10.0%)



In the post test the respondents who were able to state the use of hand pump cards for checking the functional status of the hand pumps and reporting breakdown had increased from 41.4 % to 71.4 % . The number of VLVs actually filling their cards had increased to 90%. This indicated that 18.6% of the VLVs were filling their HP cards without knowing its use.

The condition of the hand pump card was also observed during the pre-post tests. In the pretest 19.7 % of the respondents had lost the cards and 4.2% had torn or damaged ones. This reduced to 10 % in the post-test.

#### 9.4.4. Role of VLVs in case of HP breakdown:

Table 2b: Hand pump monitoring.

Role of VLV in case of HP break down	PRE-TEST Scores out of 70	POST-TEST Scores out of 70
a) Mark a cross on the card	6 (8.6%)	18 (25.8%)
b) Send an application for HP repair.	31 (44.2%)	47 (67.1%)
c) Personally inform the Gadi office or BLM	3 ( 4.3%)	5 ( 7.1%)
d) Don't know	30 (42.9%)	-

In the pre-test 40 VLVs (57.1%) could perceive their role in case of hand pump breakdown. 6 VLVs (8.6%) stated that they mark a cross on the card, 31 (44.2%) send an application for repair and 3 VLVs (4.3%) personally inform the Maintenance team or the BLM.

In the post-test all the respondents (100%) were aware of their role, 25.8% of the VLVs had responded that they would mark a cross on the card, 67.1% would send an application for repair and 7.1% would personally inform the office or BLM for the repair of their hand pump. 77.2% VLVs indicated they would send a reminder in case no action is taken after sending the first information.

#### 9.4.5. Water and Disease:

Table 3. Water and Disease

	PRE TEST Scores out of 70	POST TEST Scores out of 70
a) Can water cause illness :		
Yes	49 (70.0%)	60 (85.7%)
No	21 (30.0%)	10 (14.3%)
b) How does water cause illness :		
Germs	14 (20.7%)	42 (60.0%)
Don't know	56 (80.0%)	28 (40.0%)
c) Illness caused by water:		
Water borne Diseases	33 (47.1%)	55 (78.6%)
Don't know	37 (52.9%)	15 (21.4%)
d) Prevention of water borne diseases		
1. Boiling water	11 (15.7%)	25 (35.7%)
2. Keeping HP surroundings clean	5 ( 7.1%)	18 (25.7%)
3. Adequate storage technique of water	1 ( 1.4%)	2 ( 2.9%)
4. Filtering water	10 (14.3%)	12 (17.1%)
5. Don't know	43 (61.4%)	30 (18.6%)

The proportion of VLVs who perceived that contaminated water can cause illness ranged from 70% in the pre test to 85.7% in the post test. The concept that germs in the contaminated water cause disease increased from 20 % to 60 %.

In the pre-test 47.1% of the VLVs could name water borne diseases as compared to 78.6% after the training.

Awareness regarding the prevention of water borne diseases increased to 81.4% after the training as compared to 38.6% in the pre test (refer table 3).

#### 9.4.6. Hand Pump Surrounding

Table 4a) Hand Pump Surroundings:

	PRE TEST Scores out of 70	POST TEST Scores out of 70
a) Is there a need to keep HP surroundings clean		
Yes	64 (91.4%)	69 (98.6%)
Don't know	6 (8.6%)	1 (1.4%)
b) Reason for keeping HP surroundings clean		
1. Prevent water from becoming contaminated & causing illness	21 (30.0%)	33 (47.1%)
2. Don't know	43 (61.4%)	36 (51.1%)
3. N A	6 (8.6%)	1 (1.4%)
c) Method of preventing accumulation of slush around HP		
1. Regular cleaning of drain & Murrum filling	44 (62.9%)	52 (74.3%)
2. Don't know	26 (37.1%)	18 (25.7%)



Table 4b: Role of VLVs in the maintenance of the cleanliness of their hand pumps.

	PRE TEST Score out of 70	POST TEST Score out of 70
a) To prevent washing of clothes, vessels, animals at the HP & prevent children from defecating near it	13 (18.6%)	30 (42.9%)
b) Regular murrum filling and cleaning of drain	25 (35.7%)	27 (38.6%)
c) Both (a) & (b)	2 (2.8%)	8 (11.4%)
d) Don't know	30 (42.9%)	5 (7.1%)

The need to keep handpump surroundings clean was recognised by 91.4% VLVs in the post test as compared to 90.1% in the pre-test. Only 47.1 % stated that unclean hand pump surroundings contaminate the water. 51.1 % VLVs were not able to associate the accumulation of slush and dirt around hand pumps with the spread of disease.

The high percentage of respondents (98.6%) stating the need to keep hand pump surroundings clean, may have associated this requirement only with convenience.

After the training 52 VLVs (74.3%) felt the necessity of murrum filling and regular cleaning of the drain compared to 44 (62.9%) VLVs in the pre test.

In the pre test only 57.1% respondents could recognise their role in maintaining cleanliness of hand pump surroundings. This proportion increased to 92.9% in the post test. 42.9% VLVs stated that washing of clothes, vessels, bathing animals and defecation at the pump site should be prevented, 38.6%

emphasized their role in regular murrum filling and cleaning of drains. 11.4% felt that their role included all these responsibilities.

#### 9.5. Discussion:

The study indicates a substantial increase in their level of awareness of water borne diseases and their prevention, and in the role of VLVs in monitoring of handpumps. 78.6% of the VLVs listed water borne diseases and 81.4% stated preventive methods. The responsibilities of the VLVs in monitoring the functionality of hand pumps was identified by 90% respondents. After the training the proportion of VLVs monitoring handpumps regularly had increased. Likewise the percentage of VLVs filling cards completely increased from 55.8% to 90%.

However 18% of these VLVs did not know the purpose for filling the monitoring cards. The BLM during the reorientation training should focus on these VLVs emphasising the importance of cards for HP monitoring. Unless VLVs to know the purpose of filling cards or else it may be difficult to sustain their interest.

40% VLVs have not understood the concept of clean and safe water. That visually clear water can be contaminated with germs is a concept the VLVs cannot relate to their daily experience. Unless germs are shown to them, and the association with illness explained in a rational way, acceptance of this concept will be limited and change in practices may be difficult to sustain.

VLVs were not clear about their roles in maintaining clean handpump surroundings. They need to be reoriented on these topics. Field demonstration and training are necessary for the practical application of this knowledge.

#### 9.6. Problems encountered:

The main problem encountered in the training of VLVs was that all the 5 VLVs for each hand pump could not be trained together. A large number of VLVs would leave early for work and were not available when the CETHO team visited their village. Occasionally only one or two VLVs for a hand pump could be trained per visit.

On several occasions discussions had to be limited, as the VLVs would be in a hurry to leave for their work.

#### 9.7. Conclusions and Implications:

The community monitoring system introduced by the IHMF in Georai Taluka, aimed to increase the effectiveness of hand pump maintenance. Village Level Volunteers appointed for this purpose were also involved in maintaining the cleanliness of their hand pump surroundings.

For monitoring of hand pumps VLVs need an initial training followed by periodic reinforcement of skills. The present monthly in-service training provided by the BLM is sufficient for this purpose. Their interest can be sustained with community recognition of their services.

VLVs are expected to ensure the cleanliness of hand pump surroundings. In future it is felt that they can also be involved in the primary maintenance of hand pumps. For these functions a brief monthly contact with the BLM will not be sufficient. VLVs will require a constant and intense contact with the health educator, and special training in primary maintenance .



VLVs can only initiate behavioural change in the community but the establishment of norms requires a strong support system. Their efforts need to be linked with the network of other change agents such as ICDS workers, school teachers, and children to change community behaviour. A planned IEC strategy is required for this purpose.

## 10. E. THE PACHOD BALSEVAK EXPERIMENT

- 10.1 Introduction
- 10.2 The Balsevak Concept
- 10.3 The Balsevak Strategy
  - 10.3.1 Training of School Teachers
  - 10.3.2 Selection and Training of Balsevaks
  - 10.3.3 Dissemination of Health Information
  - 10.3.4 Bal-Melawas and Arogya Dindi
- 10.5 Case Study

### 10.1. Introduction:

The Institute of Health Management, Pachod, has started an innovative IEC initiative involving school children who are trained to educate rural adults on hygiene, water and sanitation. This "Balsevak" (child health educators) strategy is being experimented in 25 villages of the Pachod project area in Maharashtra.

### 10.2. The Balsevak Concept:

The Balsevak concept evolved from the experience of having children as a major part of the active audience at village meetings.

The formative years of children can be easily influenced towards behaviours conducive to health. A positive attitudinal change in children, not only has sustained benefits extending into adult life, but also influences their peers and elders.

This vast human resource can be effectively involved in creating health awareness in the community, leading to a gradual change in health related behaviours.

### 10.3. The Balsevak Strategy:

The Balsevak experiment was started in January 1989, with a group of 10 motivated school teachers. The teachers decided to start an IEC programme on personal hygiene and environmental sanitation by involving school children. This subject was selected by the teachers as they felt that unhygienic conditions prevailing in villages were the major cause of ill health in the community. The teachers decided to train school children as health educators and chose to call them 'Balsevaks'.

#### 10.3.1. The Training of School Teachers:

The school teachers underwent a 2 day training at Pachod. They were oriented to the objectives of the programme and the various steps involved in the strategy. The training imparted communication and management skills.

#### 10.3.2. Selection and Training of Balsevaks:

The teachers selected school children to be trained as Balsevaks. The main criteria for selection included the ability of the children to communicate and their interest and readiness to disseminate health information to the community. The Balsevaks were trained at Pachod. Their training programme focussed on imparting both cognitive and communication skills, for eg. making home visits, use of audio-visual aids for disseminating health information etc.

Balevaks were also oriented to the objectives of the programme and their role as change initiators in the community.



### 10.3.3. Dissemination of Health Information through Homevisits:

Balsevaks work in pairs. The older Balsevak (10-12 years) gives verbal messages and the younger Balsevak (8-10 years) wears a head band and two placards with health messages. They make fortnightly home visits, each pair visiting 100 households. During their home visits the Balsevaks disseminate messages related to personal hygiene, water and sanitation. The initial focus was on changing existing defecation related practices. The Balsevaks continue the same message until a measurable, behavioural change is observed in the community. The process requires continuous contact and reinforcement.

### 10.3.4. Bal-melawas and Arogya Dindis:

Apart from these home visits during which information is given primarily to the woman in the family, the strategy includes Bal-melawas for both school going and non school children (child to child education), followed by village 'Dindis' (procession with slogans) and a 'shramdaan' (voluntary community service).

The school teacher along with his Balsevaks organises a Bal-melawa in the village once in 3 months. The Bal-melawas begin with a recreational activity such as a game or a street play introducing the topic of hygiene and health. The children are then divided into groups. They paint pictures related to personal hygiene and sanitation. Through their paintings the children share their concepts of sanitation.

This is followed by discussions initiated through the presentation of paintings by the children to the entire group. The teacher identifies children who already have the required knowledge and facilitates sharing with the rest of the group.

The teacher further helps the children to identify the sanitary problems existing in their community. Alternatives to overcome these problems are discussed. The process of change is thereby initiated through interaction between the children instead of being imposed by the teacher. Solutions to the identified problems are selected from several available choices. Decisions regarding choice of messages for the village 'dindi' procession, and collective action during the 'shramdaan' are also taken at the Bal Melawa.

The children march through the village shouting slogans related to personal hygiene and sanitation. After the 'dindi' the children undertake Shramadaan to clean their village. Children have made mud heaps at the defeacation sites, cleaned their school surroundings, filled murram and cleaned water source surroundings, filled waste water pits with earth, made gutters, planted trees, etc, during the shramadaan.

The adults have usually assisted the children during this process. In several cases following the Shramadaan, the community has voluntarily taken further action to improve the sanitation and water conditions of their village.

#### 10.4. Case Study:

The Balsewak strategy is illustrated with a case study of a village where the experiment is being conducted since 1989.

Rahatgaon is a small village in the Pachod Project area with 365 households. 87% people belong to the Hindu community 12% are Neo-Budhists (schedule castes) and 11% are Muslims. 50% of the families are daily wage agricultural labourers.



The village has a primary school with a total staff of 6 teachers. In Rahatgaon, there are 265 children in the age group of 5-14 years, out of which 154 are enrolled in the primary school. The remaining children look after their younger siblings, assist in household chores, graze animals or work in the fields.

The Balsevak programme started in Rahatgaon village in January 1989 when Golande Guruji showed keen interest in disseminating health information to the community through his students. He believed that, simultaneously, a strong attitudinal base towards health and hygiene, would be established in the children themselves.

He attended a 2 day workshop in Pachod and participated in developing a strategy for implementing this programme. A situational analysis of the sanitary condition in the village was done by the teacher. He identified three defecation sites which were within the village and close to the water source. The drainage system of village was choked and there were large accumulations of waste water. People were defecating in the open, not covering their faeces with earth and few were using soap for washing hands.

One Balsevak pair was selected and sent to the IHMP, Pachod for training. Kachru aged 11 years and Kanu aged 10 years were trained with the first batch of 30 children. The Balsevak concept, strategy, and programme objectives were explained to the children. At the end of the training, each pair of Balsevaks adopted 30 households for giving health education.

The routine monthly inservice meetings encouraged the sharing of field experiences which had an apparent impact on increasing the confidence in the Balsevaks. Their acceptance by the community increased rapidly.



They made regular home visits and started motivating women to adopt the necessary practices for better hygiene and health. Their health messages focussed on defecation behaviour and the spread of diseases due to poor sanitary conditions.

Within a period of 2 months the awareness levels of the women in thirty households increased from 33% to 82%. But Kachru and Kanu were not satisfied. They felt that, even though, the awareness levels had increased the defecation related behaviours had changed only marginally.

After 3 months of programme initiation the school teacher conducted 2 Balmelawas for school and non-school children. During these melawas about 200 children took a decision to take out a 'dindi' or health procession, followed by a shramadaan. They selected a convenient defecation site for their 30 households and made mud heaps to be used as earth cover after defecation.

Kachru and Kanu along with a few children collected money from the villagers and bought soap for their 30 households. They felt that if the use of soap was initiated in their 30 houses people would continue this practise there after.

There was a greater acceptance of the Balsevaks after the dindi and shramadaan. All the member from their 30 households started using defecation sites far away from the village and 61% had bought soap for washing hands after defecation. 80.3% of the household members were covering their faeces with earth cover.

This initial success motivated the Balsevaks. They felt that unless the sanitary condition of the entire village was changed, improvement in the community's health status would not occur. The children wanted to extend the programme through out the village.

The teacher selected 3 more pairs and sent them for training to Pachod. Each Balsevak pair now adopted 100 households.

Two more Bal-melawas followed by dindis and shramdaan have been held in Rahatgaon since then. During the last shramadaan children cleaned drains and filled basalt around their drinking water source. They were assisted by the entire community. The Gram Panchayat members also participated in this activity.

The Balsevaks, along with village children, have become a large force of change initiators. The awareness levels of the entire community regarding environmental sanitation have increased from 34 % to a 86%. A gradual but apparent behavioural change related to defeacation habits is being observed.

Most of the villagers are convinced that only latrines can solve the problems related to the sanitary conditions of the village. A demand has been created for the construction of a community latrine. The Gram Panchayat is willing to undertake responsibility for maintaining it.

Rahatgaon represents a peoples movement initiated in 25 villages with the help of school children. The strategy has had an impact at all levels of the community.

Balsevaks have been effective in communicating health messages and persuading the community to adopt conducive sanitary behaviour. Even though compliance has been gradual, the peer pressure on other children and moral pressure on the elders of the community is resulting in change.

The impact of this experiment on children is encouraging. They are aware of the hazards of unhygienic sanitary conditions and are influencing the village elders by demonstrating a change in their own practices.

The Balsevaks represent an entire generation moving towards a healthier life with improved norms in personal hygiene and environmental sanitation.



ANNEXURES

ANNEXURE A - I

Institute of Health Management Pachod  
Safe Drinking Water Programme  
IHMP Awareness Camp Pretest

1. Name of Respondent
2. Village
3. Age of Respondent:            < 20 yrs.                      40 - 50 years  
   20 - 30 yrs.                      50 - 60 years  
   30 - 40 yrs.                      > 60 years
4. Education of Respondent:      Literate      Illiterate
5. Caste of Respondent:          Hindu (specify)  
   Muslim  
   Budh  
   Others
6. Where do you fetch your drinking water from?  
Handpump  
Well  
River  
Tap  
Others (specify)
7. What do you store your drinking water in?  
Ranjan  
Matka  
Metal Vessel  
Others (specify)
8. How do you clean your storage vessel?
9. How many times do you fill your drinking water?  
Once a day  
~~Once in two days~~  
~~Once in three days~~  
Others (specify)
10. Do you cover your storage vessel?      Yes      No
11. If yes, what cover is used?
12. If yes, why do you cover your storage vessel?
13. How do you remove water from your storage vessel?
14. What is the difference between clean and unclean water?
15. Can water become unclean?      Yes      No      Don't Know
16. If yes, how does water become unclean?
17. Can water cause illness?      Yes      No      Don't Know



18. If yes, how does water cause illness?
19. State 4 water borne diseases.
20. Can we prevent water borne diseases? Yes No Don't Know
21. If yes, how can we prevent water borne diseases?
22. Is there an association between diarrhoea and dehydration?  
Yes No Don't Know
23. If yes, what is this association?
24. What can you do at home to prevent dehydration in a child suffering from diarrhoea?
25. How do you prepare Oral Rehydration Solution (ORS)?
26. Are your handpump surroundings clean?  
Yes No
27. Does the dirt and slush accumulated around your water source cause any problems/hazards?  
Yes No Don't Know
28. If yes, what are the hazards caused?
29. What should you do to keep your handpump and its surroundings clean?
30. Should you wash clothes at your drinking water source?  
Yes No Don't Know
31. If no, why?
32. Should you wash animals or let them drink at the drinking water source?  
Yes No Don't Know
33. If no, why?
34. Should children be allowed to defecate at the drinking water source?  
Yes No Don't Know
35. Do you clean the handpump platform after filling water?  
Yes No

Observation of the Drinking Water Source by the Investigator:

- Condition of the drinking water source: Good Bad
- Presence of slush and dirt around source: Yes No
- Indications of community misuse of drinking water source:  
Yes No

Name of Investigator:

Date:

ANNEXURE A - II

Institute of Health Management Pachod  
Safe Drinking Water Programme  
IHMP Awareness Camp Post Test

1. Name of Respondent
2. Village
3. Age of Respondent:            < 20 yrs.                      40 - 50 years  
   20 - 30 yrs.                      50 - 60 years  
   30 - 40 yrs.                      > 60 years
4. Education of Respondent:      Literate            Illiterate
5. Caste of Respondent:          Hindu (specify)  
   Muslim  
   Budh  
   Others
6. Who conducted the awareness camp in your village?
7. Were you present for the entire camp?            Yes            No
8. If no, for how long did you attend the camp?
9. What information was given to your in the awareness camp?
10. Where do you fetch your drinking water from?  
    Handpump  
    Well  
    River  
    Tap  
    Others (specify)
11. What do you store your drinking water in?  
    Ranjan  
    Matka  
    Metal Vessel  
    Others (specify)
12. How do you clean your storage vessel?
13. How many times do you fill your drinking water?  
    Once a day  
    Once in two days  
    Once in three days  
    Others (specify)
14. Do you cover your storage vessel?            Yes            No
15. If yes, what cover is used?
16. If yes, why do you cover your storage vessel?
17. How do you remove water from your storage vessel?



18. What is the difference between clean and unclean water?
19. Can water become unclean?      Yes      No      Don't Know
20. If yes, how does water become unclean?
21. Can water cause illness?      Yes      No      Don't Know
22. If yes, how does water cause illness?
24. State 4 water borne diseases.
25. Can we prevent water borne diseases?    Yes    No    Don't Know
26. If yes, how can we prevent water borne diseases?
27. Is there an association between diarrhoea and dehydration?  
Yes      No      Don't Know
28. If yes, what is this association?
29. What can you do at home to prevent dehydration in a child suffering from diarrhoea?
30. How do you prepare Oral Rehydration Solution (ORS)?
31. Are your handpump surroundings clean?  
Yes      No
32. Does the dirt and slush accumulated around your water source cause any problems/hazards?  
Yes      No      Don't Know
33. If yes, what are the hazards caused?
34. What should you do to keep your handpump and its surroundings clean?
35. Should you wash clothes at your drinking water source?  
Yes      No      Don't Know
36. If no, why?
37. Should you wash animals or let them drink at the drinking water source?  
Yes      No      Don't Know
38. If no, why?
39. Should children be allowed to defecate at the drinking water source?  
Yes      No      Don't Know
40. Do you clean the handpump platform after filling water?  
Yes      No
41. Were there any decisions taken at the awareness camp?  
Yes      No      Don't Know



42. What were these decisions?

Individual?

Community Level?

Observation of the Drinking Water Source by the Investigator:

- Condition of the drinking water source:      Good              Bad

- Presence of slush and dirt around source:    Yes              No

- Indications of community misuse of drinking water source:

Yes              No

Name of Investigator:

Date:

ANNEXURES-B

ANNEXURE B I

Institute of Health Management Pachod  
Safe Drinking Water Programme  
Awareness Camp Pre-Test  
(ICDS Workers)

1. Name of Respondent
2. Village
3. Age of Respondent:            < 20 yrs.                      40 - 50 years  
   20 - 30 yrs.                      50 - 60 years  
   30 - 40 yrs.                      > 60 years
4. Education of Respondent:      Literate      Illiterate
5. Caste of Respondent:          Hindu (specify)  
   Muslim  
   Budh  
   Others
6. Where do you fetch your drinking water from?  
Handpump  
Well  
River  
Tap  
Others (specify)
7. What do you store your drinking water in?  
Ranjan  
Matka  
Metal Vessel  
Others (specify)
8. How many times do you fill your drinking water?  
Once a day  
Once in two days  
Once in three days  
Others (specify)
9. How do you clean your storage vessel?
10. Do you cover your storage vessel?      Yes      No
11. If yes, what cover is used?
12. If yes, why do you cover your storage vessel?
13. How do you remove water from your storage vessel?
14. What is the difference between clean and safe water?
15. Can water become unclean?      Yes      No      Don't Know
16. If yes, how does water become unclean?
17. Can water cause illness?      Yes      No      Don't Know

18. If yes, how does water cause illness?
19. Can water which looks clear and transparent cause illness?  
 Yes                      No                      Dont know
20. If yes, how?
21. State 4 water borne diseases.
22. What are the methods of preventing of water borne diseases?
23. Is accumulated waste water harmful to health?    Yes            No
31. What can you do to prevent waste water from accumulating?
32. Is there dirt and slush accumulated around your drinking water source?    Yes            No
33. Does this affect the water?    Yes            No            Don't Know
34. If yes, how?
35. What should you do to keep your drinking water source and its surroundings clean?
36. Should you wash clothes at your drinking water source?  
 Yes                      No                      Don't Know
37. If no, why?
38. Should you wash animals or let them drink at the drinking water source?  
 Yes                      No                      Don't Know
39. If no, why?
40. Should children be allowed to defaecate at the drinking water source?  
 Yes                      No                      Don't Know
41. Do you clean the handpump platform after filling water?  
 Yes                      No

Observation of the Drinking Water Source by the Investigator:

- Condition of the drinking water source:    Good            Bad
- Presence of slush and dirt around source:    Yes            No
- Indications of community misuse of drinking water source:  
 Yes                      No

Name of Investigator:

Date:



ANNEXURE B II

Institute of Health Management Pachod  
Safe Drinking Water Programme  
Awareness Camp Post Test  
(ICDS Workers)

1. Name of Respondent
2. Village
3. Age of Respondent:            < 20 yrs.            40 - 50 years  
   20 - 30 yrs.            50 - 60 years  
   30 - 40 yrs.            > 60 years
4. Education of Respondent:    Literate    Illiterate
5. Caste of Respondent:        Hindu (specify)  
   Muslim  
   Budh  
   Others
6. Who conducted the awareness camp in your village?
7. Were you present for the entire camp?        Yes        No
8. If no, for how long did you attend the camp?
9. What information was given to your in the awareness camp?
10. Where do you fetch your drinking water from?  
      Handpump  
      Well  
      River  
      Tap  
      Others (specify)
11. What do you store your drinking water in?  
      Ranjaan  
      Matka  
      Metal Vessel  
      Others (specify)
12. Did you change your drinking water storage vessel after the camp?  
      Yes        No
13. If yes, what vessel did you use previously?
14. If yes, why did you change your storage vessel?
15. Do you cover your storage vessel?        Yes        No
16. If yes, why?
17. If yes, what cover is used?

18. Were you covering your storage vessel before the camp?  
Yes            No
19. If yes, with what?
20. How do you remove water from your storage vessel?
21. After the camp, did you change this method?  
Yes            No
22. If yes, how did you previously remove water from your storage vessel?
23. Can water become unclean?    Yes            No            Don't Know
24. If yes, how does water become unclean?
25. What is the difference between clean and safe water?
26. Can water cause illness?        Yes            No            Don't Know
27. If yes, how does water cause illness?
28. Can water which looks clear and transparent cause illness?  
Yes            No            Don't Know
29. If yes, how?
30. State 4 water borne diseases.
31. How can we prevent water borne diseases?
32. Is accumulated waste water harmful to health?  
Yes            No            Don't Know
33. If yes, how?
34. Is there dirt and slush around your drinking water source?  
Yes            No
35. Does the dirt and slush accumulated around your water source affect the drinking water?  
Yes            No            Don't Know
36. If yes, how?
37. What should you do to keep your drinking water source surroundings clean?
38. Should you wash clothes at your drinking water source?  
Yes            No            Don't Know
39. If no, why?
40. Should you wash animals or let them drink at the drinking water source?  
Yes            No            Don't Know
41. If no, why?

42. Should children be allowed to defaecate at the drinking water source?

Yes                      No                      Don't Know

43. Do you allow your children to defaecate near the drinking water source?

Yes                      No

44. Do you clean the handpump platform after filling water?

Yes                      No

45. Were there any decisions taken at the awareness camp?

Yes                      No                      Don't Know

46. What were these decisions?

Individual?

Community Level?

47. Of these decisions discussed at the camp, which ones have you followed up on?

Individual?

Community Level?

Observation of the Drinking Water Source by the Investigator:

- Condition of the drinking water source:      Good                      Bad

- Presence of slush and dirt around source:      Yes                      No

- Indications of community misuse of drinking water source:

Yes                      No

Name of Investigator:

Date:



Annexure C-I

3 - DAY MUKHYA SEVIKAS TRAINING PROGRAMME ON AWARENESS CAMPS ON WATER

Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day - 1	What is safe water?	State the underlying cause of contamination of water	Lecture cum Discussion	Handout	Pre-post test
	Concept of germs	Describe germs, how they are detected and their role in disease causation	Demonstration of germs - Observe germs under microscope	Microscope	
	Water borne (disease & their transmission)	List the water borne diseases. Describe their transmission through water, food & auto. List agents transmitting water borne diseases.	Lecture cum Discussion	Handouts Overhead projector transparencies	Pre-Post test
	Jaundice	List the signs & symptoms of jaundice. State the high risk groups in the community.	Lecture cum Discussion	-do-	-do-
	Prevention (of water borne diseases)	State the preventive measures to be taken - Individual action - Community action			
	Health Education	State the importance of Health Education. State the terminal impact of health education in terms of behavioural outcomes. State relationship of behavioural outcome to health outcome. Write behavioural and health outcomes for health education in water and sanitation.	-do-	-do-	-do-
	Conduction of awareness camps	List the steps in conduction of awareness camps. Simulate the conduction of a camp	Group exercise		
			Role play	Situational analysis game colour paper	Pre-Post test

Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day - 2	Pre-camp (Phase or Preparatory)	State the purpose and use of a situational analysis. To make a community map.	Lecture cum Discussion	Handout	Pre-post test
	Camp (Phase of Camp)	State the purpose and use of a pretest (Demonstrate the method of pretesting). How to make community contacts and skills required for it. List criteria for selection of time and place for camp conduction. To make an educational diagnosis based on the situational analysis & decision making.	Exercise and Discussion	Case study	
	Camp Conduction	State the purpose of an ice breaker.	Lecture cum Discussion		Pre-post test
	Ice breaker	State advantage of making women draw.			
	Drawing (Decision making and Follow up Phase)	State the 4 areas on which drawing is taken. State communication skills required to conduct the camp. To state appropriate messages which need to be given with the drawing. To be able to facilitate discussion based on drawing. To use audio-visual aids appropriately. To identify what decisions should be taken. State problems areas for follow up and how to overcome them.			
	Awareness camps	To be able to state the follow up required for the decisions taken and their importance. List the types of follow up. Describe how to motivate women to take follow up action. State how to mobilize women - individual and group level, for follow up action. State frequency of follow up and how to sustain follow up action.	Lecture cum Discussion		Pre-Post test



Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day-2 (Contd...)	Handpump and its Maintenance	Describe a handpump. List causes of nonfunctional handpump. Describe concept of preventive maintenance. Describe the importance of functional monitoring as compared to break down monitoring. Demonstrate physically (HP) the monitoring of discharge. Demonstrate filling the monthly cards.	Lecture cum Discussion Demonstration Exercise		Pre-post test
	Role of Supervisors	State definition of supervision. List tasks to be performed in supervision of camps.	Exercise-cum discussion		Pre-post test
Day -3	(These topics were included on the request of the Muthya Sevikas)				
	Immunisation	State the importance of immunisation. Describe immunisation schedule. State how to plan, implement and assess an immunisation programme.	Lecture cum discussion. Group Exercises		Pre-post test
	Growth Monitoring & Nutrition Education	State the importance of growth monitoring. Describe the planning, implementation and supervision of the Growth Monitoring programme. State the importance of nutrition education. Describe nutrition education to be given upto preschool stage.	Lecture cum Discussion Group Exercises		Pre-post test
	Maternal care	State purpose and importance of maternal care. State the antenatal, natal & post-natal services given to the mother and neonate.	Lecture cum Discussion		Pre-post test



Annexure C-II

2 - DAY ANGANWADI WORKERS TRAINING PROGRAMME ON AWARENESS CAMPS ON WATER

Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day - 1	What is safe water	State the underlying cause of contamination of water	Lecture cum Discussion	Handout	Pre-post test
	Concept of germs	Describe germs, how they are detected and their role in disease causation	Demonstration of germs - Observe germs under microscope	Microscope	
	Water borne disease & their transmission	List the water borne diseases. Describe their transmission through water, food & ants. List agents transmitting water borne diseases.	Lecture cum Discussion	Handouts Overhead projector (transparencies)	Pre-Post test
	Saundice	List the signs & symptoms of jaundice. State the high risk groups in the community.	Lecture cum Discussion	-do-	-do-
	Prevention of water borne diseases	State the preventive measures to be taken - Individual action - Community action			
	Health Education	State the importance of Health Education. State the terminal impact of health education in terms of behavioural outcomes. State relationship of behavioural outcome to health outcome. Write behavioural and health outcomes for health education in water and sanitation.	-do-  Group exercise	-do-	-do-
	Conduction of awareness camps	List the steps in conduction of awareness camps. Simulate the conduction of a camp	Role play	Situational analysis game - colour paper	Pre-Post test

Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day - 2	Pre-camp	State the purpose and use of a situational analysis.	Lecture cum Discussion	Handout	Pre-post test
	(Preparatory)	To make a community map.			
	(Phase of camp)	State the purpose and use of a protest (Demonstrate the method of protesting). How to make community contacts and skills required for it.	Exercise and Discussion	Case study	
		List criteria for selection of time and place for camp/conduction	Lecture cum Discussion		Pre-post test
		To make an educational diagnosis based on the situational analysis & decision making.			
	(Camp conduction)	State the purpose of an ice breaker.	Lecture cum Discussion		Pre-post test
	(Ice breaker)	State advantage of making women draw.			
	(Drawing)	State the 4 areas on which drawing is taken.			
	(Decision making and Follow up)	State communication skills required to conduct the camp.			
	(Phase)	To state appropriate messages which need to be given with the drawing.			
		To be able to facilitate discussion based on drawing.			
		To use audio-visual aids appropriately.			
		To identify what decisions should be taken.			
		State problems areas for follow up and how to overcome them.			
	Awareness camps		To be able to state the follow up required for the decisions taken and their importance.	Lecture cum Discussion	
		List the types of follow up.			
		Describe how to motivate women to take follow up action.			
		State how to mobilize women - individual and group level, for follow up action.			
		State frequency of follow up and how to sustain follow up action.			



Day	Topic	Learning Objectives	Class Room Methods	Aids	Assessment
Day-2	Handpump	Describe a handpump. List causes of nonfunctional handpump.	Lecture cum Discussion		Pre-post test
(Contd...)	Maintenance	Describe concept of preventive maintenance. Describe the importance of functional monitoring as compared to break down monitoring. Demonstrate physically (RPI) the monitoring of discharge. Demonstrate filling the monthly cards.	Demonstration Exercise		
	Role of Aganwadi workers	State the roles and responsibilities of AKNs. List the tasks involved in deep production.	Exercise-cum discussion		Pre-post test



Annexure C-III

Institute of Health Management  
Safe Drinking Water Programme  
Mukhya Sevika Evaluation Questionnaire

Name : Shrimati.

Name of Village :

Date :

- Q. 1 Difference between clean and unclean water ?
- Q. 2 What is meant by safe water ?
- Q. 3 List four water borne diseases .
- |    |    |
|----|----|
| 1. | 2. |
| 3. | 4. |
- Q. 4 How are water borne diseases transmitted ?
- Q. 5 State the methods of preventing water born diseases ?
- Q. 6 What is the purpose of Health Education ?
- Q. 7 What are objectives of the women's awareness camps on water ?
- Q. 8 What are the steps followed during the awarness camps ?
- Q. 9 What are the preparations involved in the pre camp phase ?
- Q.10 What observations are necessary to study the community's water situation ?
- Q.11 Why is it necessary to do a situational analysis ?
- Q.12 What are the factors to be considered when deciding on the time and place for conducting an awareness camp ?

- Q. 13 State the relationship between the situational analysis of the village and the decisions taken in the camps ?
- Q. 14 What is the purpose of playing a game in the awareness camps ?
- Q. 15 State the four topics given to the women for drawing ?
- Q. 16 State the three main messages given in the awareness camps ?
- Q. 17 Decision making is an important step of the awareness camps. Why ?
- Q. 18 State any three decisions which need to be taken to change the women's water storage behaviour ?
- Q. 19 State any three decisions which need to be taken to maintain and keep the drinking water source surroundings clean ?
- Q. 20 State the relationship between the follow up action and the decisions taken during the camp ?
- Q. 21 What are the types of follow ups which can be done to improve the condition of the community's drinking water ?
- Q. 22 When and how many times should a follow up be done after the camp conduction ?
- Q. 23 What are the follow ups which should be done regularly ?
- Q. 24 State any five responsibilities of the Aaganwadi workers in the conduction of awareness camps ?
- Q. 25 What is your role in the regular maintenance and monitoring of hand pumps ?
- Q. 26 Explain the concept preventive maintenance of hand pumps ?

- Q. 27 State the discharge of an optimally functioning hand pump ?
- Q. 28 What is the importance of immunisation ?
- Q. 29 State the diseases which can be prevented by immunisation? What is the immunisation schedule to be followed for this purpose ?
- Q. 30 What is the importance of the Cold Chain ?
- Q. 31 State importance of Growth Monitoring ?
- Q. 32 State the various degrees of malnutrition ?
- Q. 33 Why is it important to feed a new born colostrum ?
- Q. 34 When should a infant be weaned ? What are the weaning foods which can be introduced ?
- Q. 35 Why is it important to provide maternal health care ?
- Q. 36 State any three services to be provided during antenatal care ?
- Q. 37 State any three services to be provided during postnatal care ?



ANNEXURE- C-IV

Institute of Health Management  
Safe Drinking Water Programme  
Aaganwadi workers Evaluation Questionnaire

Name : Shrimati.

Name of Village :

Date :

- Q. 1 Difference between clean and unclean water ?
- Q. 2 What is meant by safe water ?
- Q. 3 List four water borne diseases .
- |    |    |
|----|----|
| 1. | 2. |
| 3. | 4. |
- Q. 4 How are water borne diseases transmitted ?
- Q. 5 State the methods of preventing water born diseases ?
- Q. 6 What is the purpose of Health Education ?
- Q. 7 What are the objectives of the women's awareness camps on water ?
- Q. 8 What are the steps followed during the awareness camps ?
- Q. 9 What are the preparations involved in the pre camp phase ?
- Q.10 What observations are necessary to study the community's water situation ?
- Q.11 Why is it necessary to do a situational analysis ?
- Q.12 What are the factors to be considered when deciding on the time and place for conducting an awareness camp ?

- Q. 13 State the relationship between the situational analysis of the village and the decisions taken in the camps ?
- Q. 14 What is the purpose of playing a game in the awareness camps ?
- Q. 15 State the four topics given to the women for drawing ?
- Q. 16 State the three main messages given in the awareness camps ?
- Q. 17 Decision making is an important step of the awareness camps. Why ?
- Q. 18 State any three decisions which need to be taken to change the women's water storage behaviour ?
- Q. 19 State any three decisions which need to be taken to maintain and keep the drinking water source surroundings clean ?
- Q. 20 State the relationship between the follow up action and the decisions taken during the camp ?
- Q. 21 What are the types of follow ups which can be done to improve the condition of the community's drinking water ?
- Q. 22 When and how many times should a follow up be done after the camp conduction ?
- Q. 23 What are the follow ups which should be done regularly ?
- Q. 24 State any five responsibilities of the Aaganwadi workers in the conduction of awareness camps ?
- Q. 25 What is your role in the regular maintenance and monitoring of hand pumps ?
- Q. 26 Explain the concept preventive maintenance of hand pumps ?
- Q. 27 State the discharge of an optimally functioning hand pump ?



ANNEXURE D - I

Institute of Health Management Pachod  
Safe Drinking Water Project  
VLV Training Questionnaire

1. Name of VLV
2. Village
3. Sex of Respondent VLV -      Female      Male
4. Age of VLV:              < 10 yrs.              41 - 50 yrs.  
                                 11 - 20 yrs.              51 - 60 yrs.  
                                 21 - 30 yrs.              > 60 yrs.  
                                 31 - 40 yrs.
5. Caste of VLV:              Hindu (specify)  
                                 Muslim  
                                 Lamani  
                                 Vanjari
6. Education of VLV:              Literate              Illiterate
7. Occupation of VLV:              Agriculture              Labour  
                                 Housework              Business  
                                 Service              Student  
                                 Unemployed
8. For how many months have you been a VLV?  
                                 < 1 month              12 - 18 months  
                                 1 - 3 months              18 - 24 months  
                                 3 - 6 months              > 24 months  
                                 6 - 9 months              Don't Know  
                                 9 - 12 months
9. What are your functions as a VLV?
10. Do you have a card?              Yes              No
11. Have you received a card this month?      Yes      No
12. What is the use of this card?
13. How often do you fill the card?
14. Where do you keep your card in the house?



15. How often do you receive this card?

16. How often is the card collected from you?

17. Who collects the card?

18. Where is your card collected from - does the ELM come to your house or do you go to the handpump site to submit it?

19. What information is given to you when your card is collected?

20. What should you do when your handpump breaks down?

21. How will you follow up in case nobody comes for repairs of the handpump even after information is sent?

22. Did you send information for the handpump's repair the last time it broke down?

Yes            No            Don't Remember

23. If no, why not?

24. If yes, how was this information sent?

25. If yes, after how many days was your handpump repaired?

26. Were you present at the pump site when the handpump was being repaired?

Yes            No

27. Is it necessary to keep your handpump surroundings clean?

Yes            No            Don't Know

28. If yes, why is it necessary to keep the handpump surroundings clean?

29. If yes, how will you ensure the cleanliness of your handpump surroundings?

30. What precautions/care will you take to prevent your handpump platform from breaking?

31. How will you prevent dirt and slush from accumulating around the handpump surroundings?
32. What is the condition of your handpump and its surroundings?  
Good                      Bad
33. Is your handpump water clean?  
Yes              No              Don't Know
34. If yes, why do you think its clean?
35. Can handpump water become contaminated?  
Yes              No              Don't Know
36. If yes, how?
37. If no, why not?
38. Can water cause illness?  
Yes              No              Don't Know
39. If yes, how does water cause illness?
40. List water borne diseases.
41. How can we prevent water borne diseases?
42. Has there been a change in your water availability since you have become a VLV?  
Yes              No              Don't Know
43. If yes, what was this change?
44. If yes, why has this change occurred?

Observations to be made by the investigators:

A. Observations of the handpump card

1. Does the VLV have a card?      Yes              No              Card Lost
2. Place card kept in the house
3. Condition of card:      Torn/Damaged              Good
4. Is the card filled?  
            Completely filled              Partially filled              Not at all filled

B. Observations of the handpump

1. Condition of handpump platform:  
            Cracked/Broken              Intact              No Platform at All
2. Condition of handpump rim  
            Cracked/Broken              Intact              No Rim
3. Handpump Surroundings:      Clean              Unclean
4. Can the handpump body be shaken?      Yes              No
5. Is there a drain?              Yes              No
6. Drainage Condition:      Clean              Choked              No Drain Present
7. Murrain Filling:              Present              Absent

Name of Investigator:

Date: