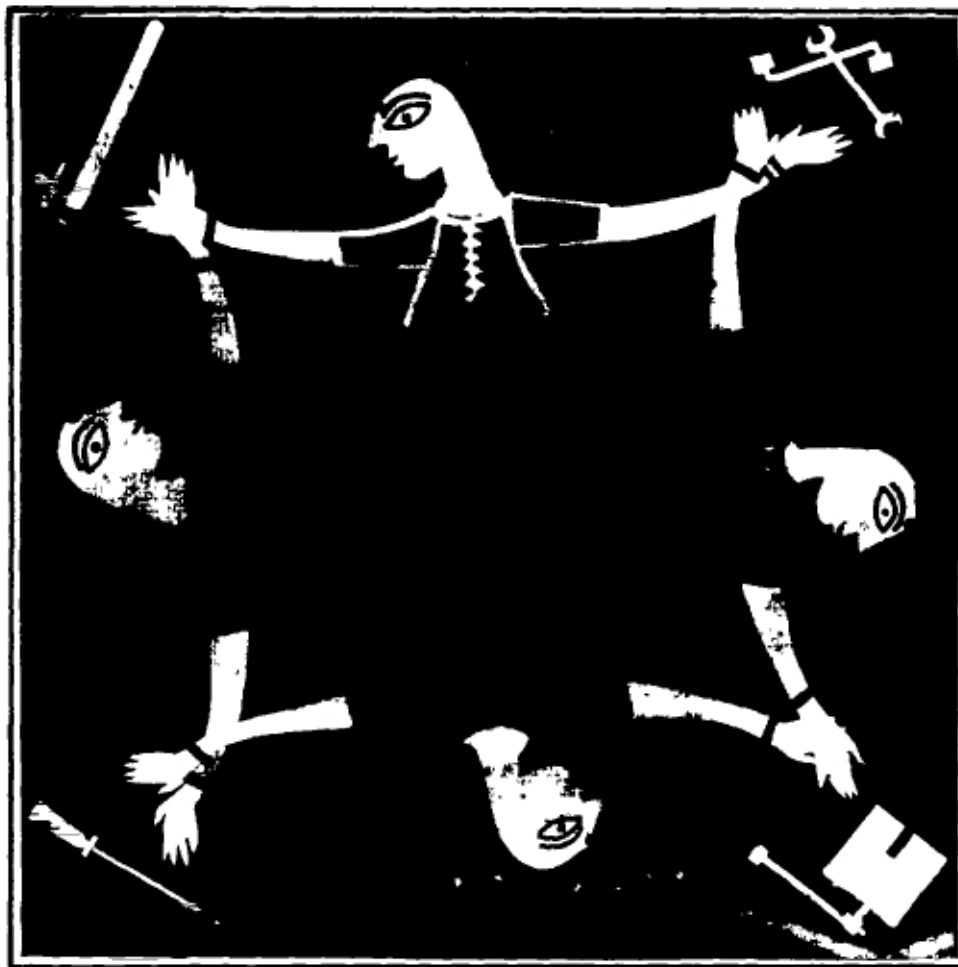


TRAINER'S GUIDE



**COMMUNITY BASED HANDPUMP MAINTENANCE
INDIA MARK II & INDIA MARK III (VLOM)
HOW TO CONDUCT MOTIVATIONAL CAMPAIGNS**

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COMMUNITY BASED HANDPUMP MAINTENANCE SYSTEM

TRAINER'S GUIDE

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7. TRAINING OF THE VILLAGE HANDPUMP MECHANIC

What is the objective of the training

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What is the training schedule

What is the session-wise subject content & methodology

1.

INTRODUCTION

The rural water supply programme has achieved significant progress in terms of coverage of rural population with safe water through the provision of handpumps. However, to ensure sustenance of the water supply system, communities need to be made aware of the health benefits from it and the linkages between safe water and diseases. Community ownership of the water supply facilities should be consciously operationalised at every stage starting from the request for installation of facilities, agreement about maintenance, participation in installation process and formal handing over of facilities to the user groups.

The community must therefore appreciate the need for a safe water supply system and take responsibility for its management. Hence, the community, especially the women, need to be mobilized to participate in all stages of the water supply system including site selection, installation, operation and maintenance of handpumps.

A WATSAN committee is the mechanism at the village level for planning, execution and maintenance of the water supply system. It is the formal council comprising of the village representatives that undertakes responsibility and accountability for the water supply facility on behalf of the village community.

2.

VILLAGE CONTACT DRIVE

Need for a village contact drive

Awareness and education is the foundation for participation and empowerment. These are crucial to ensure sustainability of the water supply system as also better operation and management.

The process of sensitizing the people in the community and collecting them for action is achieved through a motivational campaign or a village contact drive. The village contact drive is conducted to initiate the formation of the WATSAN committee.

A village contact drive comprises of planned series of activities at the village level directed towards creating awareness, stimulating enquiry about the water supply programme and initiating action from within the communities. It is directed to help create a demand for community-based management and maintenance of the water supply facilities. During the contact drive people are motivated to come together, take collective action and secure decisions in their own favor.

Objectives of a village contact drive

- * To create awareness among village community about safe water, handpump as a source of safe water, hygiene practices in water handling, importance of community participation in water supply and role of community in managing their water systems.
- * To collect baseline data on the village infrastructure.
- * To initiate contact between villagers and supporting agencies and develop participatory planning and implementation of activities in the village.
- * To create demand among rural people for a community-based maintenance system.
- * To initiate the formation of the village WATSAN committee for community-based maintenance.

How to plan for a village contact drive

- i. Select a team for conducting village contact drives.

Village contact drives require the diverse inputs in terms of organizational, technical and motivational skills to be effective. Hence it is recommended that functionaries with different capabilities are identified from within the implementing departments and non-governmental organizations to form a team. The team should include the following functionaries -

Functionaries	Inputs
PHED functionaries (AE/JE)	Technical and organizational inputs.
Functionaries from Non governmental organizations.	Motivational inputs through the grass root functionaries.
Functionaries from the Block development department	Organization and follow-up

ii. Orient and train the selected team

The identified team should be trained on different aspects of the village contact drive. During the training the team can also plan the logistics for launching drives in the field.

Who trains? :

Functionaries of the implementing departments and non-governmental organizations.

How long is the training? :

Two days.

Where is the training held?

At the district/block headquarters.

What is the session-wise subject content of the training

Sno.	Session	Subject content
1.	Concept of a village contact drive	<ul style="list-style-type: none"> - Community based maintenance system - Need for a WATSAN committee - Need for a village contact drive - Objectives of a village contact drive - Activities in a village contact drive
2.	Baseline survey conducted during a village contact drive	<ul style="list-style-type: none"> - Need for a Base line survey - Format/questionnaire for a baseline survey - How to conduct a baseline survey during the drive
3.	Activities for awareness creation	<ul style="list-style-type: none"> - Different kinds of activities - Rallies - Wall paintings/slogans - Use of folk media - Village meetings - Selection of WATSAN committee members
4.	Participatory needs assessment	<ul style="list-style-type: none"> - Need for participatory needs assessment - Techniques - Village mapping for needs assessment
5.	Planning a village contact drive	<ul style="list-style-type: none"> - Planning awareness creation activities - Planning logistics - Practice for field launch
6.	Launch of a mock village contact drive	<ul style="list-style-type: none"> - Field launch
7.	Monitoring and follow-up	<ul style="list-style-type: none"> - Outcome of a village contact drive - Selection of WATSAN committee members - Reporting of a village contact drive

What are the activities in a village contact drive

During village contact drives the following activities are undertaken as part of social mobilization. These activities are directed to culminate in the formation of a village WATSAN committee for community based maintenance of the handpumps installed. The activities can be broadly categorized into three types.

i. Collection of baseline data

The formulation of the different water and sanitation components and subsequent planning of the strategies for implementation require socio-economic baseline data. To create this data base, a house to house survey (using a standard format) is conducted by some members of the village contact team during the village contact drive. To collect the relevant data the team members interview women and some influential leaders of the village. The village level functionaries are also interviewed. A sample of the format that can be used is attached in the appendix.

The data collected is used for -

- Identifying village infrastructure and developing strategies for its use.
- assisting programme formulation.
- providing a baseline for monitoring and evaluation of projects activities.

ii. Awareness Creation

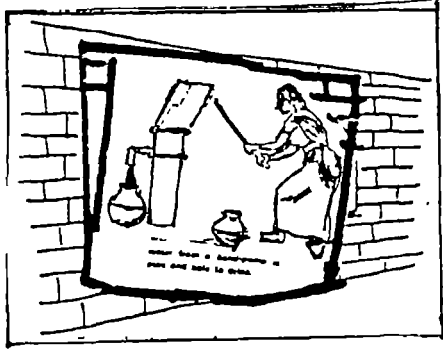
A village contact drive is intended to collect people and mobilize them for action. Awareness creation is hence the thrust of a motivational campaign. As a part of awareness creation the following activities are conducted.

Rallies through the village



Slogans related to messages on safe water and hygiene practices can be raised during the rally. Children should be drawn to participate in the rally.

Slogans/wall paintings



Messages related to safe water, sanitation and proper use of the handpump are written on the walls in the entire village as part of creating awareness. Educational posters are also pasted at vantage points in the village - at schools, post offices, cooperative shops, dispensaries, temples, anganwadi centers, public places, etc.

Village corner/mohalla meetings

Educational films and other visual aids explaining the link between sanitation, water and diseases are shown during these meetings. Discussions are initiated among the people to create a demand for community management of the water supply system. Village leaders and influential people of the village must be included in these discussions. A woman's perspective is critical and therefore women must be involved in these discussions.



Folk motivational aids



Dramas, puppetry shows, bhajan mandalis and other communication activities are organized with the involvement of local people to motivate the community. These are directed towards creating a demand for community based maintenance.

Identification of WATSAN committee members

After the community is motivated to undertake management of the water supply facilities meetings are held for formation of WATSAN committee ie. identification and selection of members proposed by the community.

iii. Participatory needs assessment

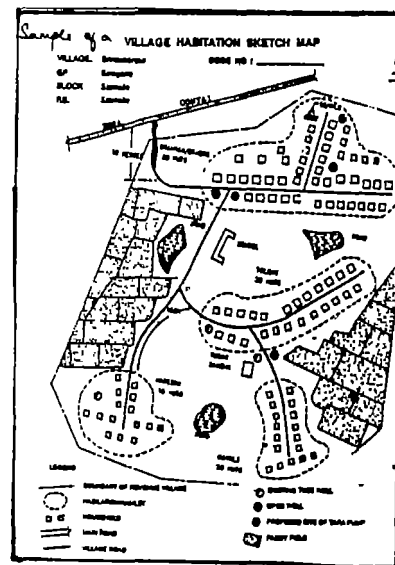
A major aspect of the village contact drive is the assessment of the needs of the community with regard to water supply and sanitation with their own participation. A systematic yet semi-structured activity is carried out in the village by the village contact team to estimate the needs of the people.

Participatory needs assessment is done using a method in which the people in the community are involved as investigators, analysts and consultants in the planning process. They present and share the data, do the analysis and own the outcome. The people themselves take part in the processes of setting priorities, planning and implementing developmental programmes. Participatory needs assessment helps the communities to mobilize their human and natural resources, to define problems, evaluate local institutional capacities, prioritise opportunities and prepare a site specific plan of action.

Involvement of the community right at this stage of the planning process is crucial for their taking responsibility for management and maintenance of the water supply system.

A typical exercise for needs assessment includes

- * an understanding of the history of the village - its layout and infrastructure available, patterns of livelihood, changing trends and lifestyles; and;
- * Village mapping where the villagers themselves identify and indicate on a map the general village layout, local resources and sanitation hazard point along with a SWOT (Strengths, weaknesses, opportunities and threats) analysis.



COMMUNITY BASED HANDPUMP MAINTENANCE

ORGANISATION PROCESS



Out come of a village contact drive

At the end of a village contact drive the community should have been mobilized to undertake management and maintenance of the water supply facility. To arrive at this stage the community organisation process includes -

3.

WATSAN COMMITTEE

Why a WATSAN committee

Community ownership

User responsibility and ownership are essential for sustenance of the water supply facilities at the village level. The WATSAN committee is the viable mechanism to operationalise this concept of community ownership. The WATSAN committee is the body at the village level that is accountable for management of the water supply facilities and responsible for collecting user contributions

Women's empowerment

Studies all over the world have shown that women are the water seekers and handlers in most societies and by virtue of their domestic functions are the managers of water at the household level. They are also the principle influencers of the family's sanitary habits. A women's perspective can, therefore, contribute a great deal to the better planning, functioning and utilization of the improved facilities, especially when they are made aware of the linkages existing between safe water and health and are provided with appropriate training and support.

Women are more than target groups. They are active agents who can contribute to decision making, generation of ideas, mobilizing labor, providing resources, and disseminating and implementing innovations. By involving women in the planning, operation and maintenance stages, the community water supply projects can be expected to be more effective in achieving their objective of sustaining availability of safe water for better health. Moreover, the active participation of women leads to improvement in their status in society as also generate appreciate for their role in development.

Women should play a major role in the functioning of the WATSAN committee. Women also have the potential to provide preventive maintenance and to repair any malfunctioning in the water supply facility, thus ensuring sustained water supply to the community.

Formation of the WATSAN committee

During the village contact drive the members of the WATSAN committee are identified. The committee comprises of 7-8 members from the village community. The committee must have at least 3-4 women members. The structure of the WATSAN committee is finalized through meetings with the village leaders and community members.

i. Selection of members

It is important to select the members of the WATSAN committee carefully. In the selection process, the village community should propose the names of the members. However, the government implementing department and the NGO functionaries should ensure, by participating in the selection process, that all the sections of the village community are represented. Certain criteria should be kept in mind while selecting the members to ensure that the WATSAN committee performs its roles and responsibilities seriously.

Selection criteria	
*	Has leadership qualities
*	Is willing to take the responsibility
*	Is able to read and write
*	Is willing to undergo training
*	Preferably is a woman from the user community
*	Is compassionate and inclined to serve the community voluntarily

ii. Registration of the committee

Once the structure of the committee has been finalized and the members selected, the committee should be registered with the panchayat and the block development office. A registration is crucial as it authorizes the committee to function as an organ of the panchayat. It can then collect money from the user groups on behalf of the panchayat.

It is recommended that the committee then opens an account in the local bank or post office for depositing contributions from handpump users. The money deposited can be used for paying the handpump mechanic for her services and procuring the handpump spares. As the funds in the account grow they can be used for other activities directed towards the promotion of water and sanitation in the village.

What is the role of the WATSAN committee

- * select the user representatives or handpump caretakers and village handpump mechanics for the installed handpump and coordinate their training with the implementing department.**
- * supervise, coordinate the repair works and pay for the services of the handpump mechanics based on the time taken for repair on monthly basis;**
- * collect contribution for maintenance of water system from users through the panchayat and pay the village handpump mechanic for the repair and maintenance service and keep record of income and expenditure on maintenance of the water system;**
- * procure spares and tools needed for the repair and maintenance of the water supply system from the implementing department's block level office, keep record of their use and pay for them through contributions from users.**
- * maintain a handpump repair and maintenance record.**
- * promote health and environmental sanitation activities in the villages through village meetings, organizing clean village drives and other motivational programmes in liaison with the government departments.**
- * organize periodic monitoring of the water quality of the water from the handpump and inform the block level official if the water quality is found unacceptable.**
- * undertake activities to maintain a clean environment around the handpump.**

4.

TRAINING OF THE WATSAN COMMITTEE MEMBERS

What is the objective of the training?

To orient the WATSAN committee members on different aspects of community based maintenance of the handpump based water supply system.

Who trains the WATSAN committee members?

Functionaries from the Public Health Engineering Department - Assistant Engineers, Junior Engineers; functionaries from the health and rural development departments - PHC doctor and BDOs; members of the mobile team for community based management and Non Governmental Organizations representatives involved in the programme.

What is the duration of the training?

The WATSAN committee members are given a one day training/orientation.

Who organizes the training?

The Public Health Engineering Department in consultation with the district and block authorities, local Non Governmental Organizations and WATSAN committees.

Where is the training held?

At the district/block headquarters.

What is the training methodology?

Lecture-cum-discussion sessions are held for the theoretical sessions. Group work /discussion sessions are held on the roles and responsibilities of WATSAN committee, village handpump mechanics and caretakers in the community based maintenance system. Handpump repair is demonstrated using handpump models.

What is the training schedule?

Duration of Training : 1 day

	Schedule
9.00 - 9.30 a.m.	Registration
9.30 - 10.00 a.m.	Introduction
10.00 - 10.30 a.m.	Inaugural
10.30 - 11.15 a.m.	Importance of Safe Water
11.15 - 11.45 p.m.	Handpump based water supply system
11.45 - 12.30 p.m.	Community based handpump maintenance system
12.30 - 1.30 p.m.	Role of WATSAN committee
1.30 - 2.30 p.m.	Lunch
2.30 - 3.15 p.m.	Role of handpump caretakers and mechanics. Criteria for their selection
3.15 - 4.00 p.m.	Monitoring handpump performance
4.00 - 4.30 p.m.	Water Quality Surveillance
4.30 - 5.00 p.m.	Sanitation in the village
5.00 - 5.30 p.m.	Evaluation of training programme and closing ceremony

What is the session-wise subject content and methodology ?

Session	Objective	Subject content	Methodology
Registration	<p>To know the background of the trainees.</p> <p>To know the exact no. of participants.</p>	<p>Refer to the format for registration.</p> <p>Refer to the attendance register for trainees.</p>	<p>Filling of background information forms.</p> <p>Introduction to course coordinator.</p> <p>Informal welcome to the course.</p>

Session 1	Objective	Subject content	Methodology
Introduction	<p>To perform a formal introduction.</p> <p>To initiate the process of cohesive group formation.</p> <p>To create informality & familiarity.</p>	<p>Name, occupation, qualification, village, work place etc of the participants.</p> <p>Brief family background narrated by different participants.</p>	<p>Sub-divide into groups.</p> <p>Sub-divide according to a game.</p> <p>Allow some time for discussion and to familiarize one participant with the another's trainees introductory information.</p> <p>One trainee narrates/ introduces the other member of his/her group.</p>

Session 2	Objective	Subject content	Methodology
Inaugural	To inaugurate the training programme formally.	Status of the handpump installation in the Rural water supply programme.	Formal inaugural by a chairperson.
	To briefly outline the objectives of the training.	Problems/status of the central maintenance system.	Presentation/ address by the coordinator of the training programme on the objectives of the training.
	To introduce the trainees to their role in the handpump maintenance system.	Need for community based handpump maintenance.	
		Scope/objective of the training programme.	

Session 3	Objective	Subject content	Methodology
Importance of safe water	To highlight the importance of safe drinking water and the hazards of unsafe water.	Water borne diseases.	Film on the Disease transmission cycle followed by discussion.
	To inform about the sources of safe drinking water.	Link between unsafe water & diseases.	
	To highlight the importance of proper sanitation & hygienic practices.	Relationship between sanitation & diseases.	Flipchart and other visual aids to illustrate the importance of safe water and sanitation.
	To motivate trainees to be ideal users of tubewell water.	Sources of water.	
		Importance of safe sources of drinking water.	

Materials for the session 3 :

Films - Prescription for health or Pani Ki Kahani.

Visual-aids - Visual-aid calendar, modified photodisplay on sanitation, flipbook Saf pani aur safai.

Session 4	Objective	Subject content	Methodology
<p>Handpump based water supply system</p>	<p>To inform the trainees about the tubewell as a source of safe drinking water.</p> <p>To create an understanding about the functioning of handpumps to lift water.</p> <p>To illustrate the VLOM aspects of the handpumps installed in the area - TARA DA handpump/ IM III handpump - its maintainability at village level.</p>	<p>Importance of ground water as a resource for safe water supply.</p> <p>Basic aspects of construction of a tubewell to lift ground water.</p> <p>Types of handpumps - deepwell, suction, lift & direct action.</p> <p>Mechanism of the handpump installed in the area (TARA/IM III) and how it ensures protected water supply.</p> <p>VLOM aspects of the handpump - simplicity of design, maintainability etc.</p>	<p>Presentation, lecture using model of the handpump followed by discussions.</p>

Session 5	Objective	Subject content	Methodology
Community based handpump maintenance system	<p>To establish the need for a community based maintenance system.</p> <p>To create an understanding of the community based hand pump maintenance system and its structure.</p>	<p>Problems of centralized maintenance.</p> <p>Need for the community to take responsibility and accountability for maintenance.</p> <p>The key aspects of the Community based handpump maintenance system for TARA DA/ IM III handpumps.</p> <p>Community organization process and structure of the maintenance system.</p>	<p>Film show/ slide presentation/ discussion on social mobilization for installation and community based maintenance for handpumps followed by discussions.</p>

Session 6	Objective	Subject content	Methodology
Role of WATSAN Committee	<p>To create an understanding of the specific roles and responsibilities of the WATSAN committee members.</p>	<p>Specific roles & responsibilities of the WATSAN committee members -</p> <ul style="list-style-type: none"> * Site selection for pump installation. * Selection of handpump caretakers * Selection of handpump mechanics * Collection of user contributions. * Monitoring performance of handpumps. * Procurement of spare parts. 	<p>Discussion using overhead projections, flipcharts and posters.</p>

Session 7	Objective	Subject content	Methodology
Criteria for selection of village handpump caretakers	To create an understanding of the specific criteria for the selection of the village handpump caretakers.	Role and responsibilities of the village handpump caretaker. Specific selection criteria.	Discussion using blackboard, flipcharts and posters.

Session 8	Objective	Subject content	Methodology
Water Quality surveillance system in the village.	To inform the trainees about the need for water quality surveillance. To teach the trainees how to develop a viable system for water quality surveillance using some water testing field kits.	Importance of water quality surveillance. Types of water quality surveillance systems. Community based water quality surveillance system. Use of water testing field kits. Role of the WATSAN committee members in water quality surveillance.	Discussion using the available water testing field kits.

Session 9	Objective	Subject content	Methodology
Monitoring performance of handpumps in the village.	<p>To inform the trainees about the monitoring system.</p> <p>To emphasize the need for record keeping.</p> <p>To teach the trainee how to maintain records/monitoring formats.</p>	<p>Record keeping & its importance.</p> <p>Types of formats for monitoring pump performance.</p> <p>Method of filling records/monitoring formats.</p> <p>Role of the WATSAN committee members in record-keeping.</p>	<p>Discussion using the formats for monitoring performance of handpumps - TARA DA/ IM III.</p>

Session 10	Objective	Subject content	Methodology
Sanitation in the village	<p>To establish a need for sanitation in the village and specify the role of the WATSAN committee in the same.</p>	<p>Concept of sanitation.</p> <p>Alternative delivery systems for sanitation.</p> <p>Role of WATSAN committees in promoting sanitation in the village.</p>	<p>Film show on components of sanitation followed by discussion.</p> <p>Posters and flipcharts may also be used to initiate discussions.</p>

Session 11	Objective	Subject content	Methodology
<p>Evaluation of the training and closing ceremony.</p>	<p>To evaluate the implementation of the training programme.</p> <p>To assess the effectiveness of training materials.</p> <p>To assess the trainees' performance.</p> <p>To find out the strength and weaknesses of the training programme.</p> <p>To distribute materials that the trainees will need during their work in the field.</p> <p>To close the training programme formally.</p>	<p>A questionnaire framed to evaluate the following aspects.</p> <p>Contents of the training programme, the resource persons' treatment of the subject, the sequence of topics, the adequacy of time allotted for each topic, the training facilities available, the problems faced during the training programme and suggestions for improvement etc.</p> <p>Distribution of materials and closing of the training by some senior official or dignitary, if possible.</p>	<p>Initiate discussions to encourage trainees to put forth their views on the training programme.</p> <p>Note down the important suggestions and the criticism pointed out by the trainees.</p> <p>Wish the trainees and close the training programme.</p>

5.

VILLAGE HANDPUMP CARETAKERS

How to select a village handpump caretaker

The selection of the village caretakers is done by the WATSAN committee. One or two women handpump caretakers are selected for each handpump in the village. The village community participates in the selection of the village handpump caretakers by proposing names of the caretakers. However, the government implementing department and the NGO functionaries should ensure, by participating in the selection process themselves and not leaving it entirely to the WATSAN committee, that the person selected is capable enough to undertake the role of a caretaker. Once the caretaker candidates have been identified, the final selection should be done by a team of officials from the implementing department as well as the WATSAN committee members. Certain criteria should be kept in mind while selecting the village handpump caretakers to ensure that the person performs her roles and responsibilities seriously.

It is crucial to focus on women as handpump caretakers for effective handpump maintenance as it is women who face extreme hardship wherever there is a problem of non availability of clean drinking water and frequent breakdown of handpumps. It has been observed that women who understand how crucial safe water is in their lives and in the lives of other villagers can be motivated easily to take up the role of caretaker cum mechanics.

Selection criteria

- * Preferably is a married woman
- * Is a resident of the village
- * Preferably is literate and has the motivation to undertake the activity.
- * Is willing to travel and maintain handpumps in a larger area.
- * Willing to make herself free from household responsibilities, and work even without financial compensation.
- * Is acceptable to the villagers

What is the role of handpump caretakers

- * Be an active member of the WATSAN committee.
- * Be responsible for the preventive maintenance of the handpump. Service all the handpumps in the village at least once a week.
- * Inform the WATSAN committee regarding the repair needs of the handpump in the village. Assist the WATSAN committee in reporting handpump breakdown to the village handpump[mechanic.
- * Educate the community on proper usage of the handpump and ensure the surroundings of the handpump and platform are clean.
- * Act as a motivator to promote health, hygiene practices and sanitation in the village.
- * Help the village handpump mechanic in repairing the handpump.

TRAINING OF THE CARETAKERS

What is the objective of the training?

To develop the skills of the women caretakers for undertaking preventive maintenance and minor repair of the handpumps installed in the village.

Who trains the WATSAN committee members?

Functionaries from the Public Health Engineering Department - Assistant Engineers, Junior Engineers, or Non Governmental Organization representatives involved in the programme.

What is the duration of the training?

The village handpump caretakers are given a two day training.

Who organizes the training?

The Public Health Engineering Department in consultation with the district and block authorities, local Non Governmental Organizations and WATSAN committee members.

Where is the training held?

At the district/block headquarters. Practical training on preventive maintenance and handpump repair is given in the field.

What is the training methodology?

Lecture-cum-discussion sessions are held for the theoretical sessions. Group work /discussion sessions are held on the roles and responsibilities of Watsan committee, village handpump mechanics and caretakers in the community based maintenance system. Handpump repair is demonstrated using handpump models.

What is the training schedule?

Day 1

9.00 - 9.30 a.m.	Registration
9.30 - 10.00 a.m.	Introduction
10.00 - 10.30 a.m.	Inaugural
10.30 - 11.30 a.m.	Importance of Safe Water
11.30 - 12.30 p.m.	Handpump based water supply system
12.30 - 1.30 p.m.	Anatomy of the India Mark III handpump and installation requirements
1.30 - 2.30 p.m.	Lunch
2.30 - 4.00 p.m.	Handpump maintenance - Present maintenance systems and community based handpump maintenance system
4.00 - 5.00 p.m.	Role of WATSAN committee members, village handpump mechanic and recommended tasks of the caretaker
5.00 - 5.30 p.m.	Planning next day's proceedings.

Day 2

9.00 - 9.30 a.m.	Review of previous day's sessions
9.30 - 11.00 a.m.	Steps In preventive maintenance of the India Mark III handpump
11.00 - 12.30 p.m.	Identification of defects and curative action for each defect.
12.30 - 1.30 p.m.	Recommended tasks for the proper usage of the handpump
1.30 - 2.30 p.m.	Lunch

2.30 - 3.30 p.m.	Promotion of safe water and sanitation in the village
3.30 - 4.30 p.m.	Game on recognizing the pump components, spare parts and tools for carrying out maintenance.
4.30 - 5.00 p.m.	Evaluation of the training. Post knowledge test.
4.30 - 5.30 p.m.	Closing ceremony & handing over of certificates.

What is the session-wise subject content and methodology ?

Day 1 :

Session	Objective	Subject content	Methodology
Registration	<p>To know the background of the trainees.</p> <p>To know the exact no. of participants.</p> <p>To maintain a record for follow-up of the training.</p>	<p>Refer to the format for registration.</p> <p>Refer to the attendance register for trainees.</p>	<p>Filling up of the background information forms.</p> <p>Informal introduction & welcome to the course.</p>

Session 1	Objective	Subject content	Methodology
Introduction	<p>To formally welcome the participants.</p> <p>To initiate the process of cohesive group formation.</p> <p>To create informality and familiarity among the trainees.</p>	<p>Name, occupation, qualifications, village, workplan, family background etc. of the participants narrated by different participants.</p>	<p>Sub-divide participants into groups.</p> <p>Allow time for discussions & familiarization among the trainees.</p> <p>Ask one trainee to introduce her group mate to the entire group.</p>

Session 2	Objective	Subject content	Methodology
Inaugural	<p>To formally inaugurate the training programme</p> <p>To briefly outline the objectives of the training.</p> <p>To inform the trainees about their role in the HP maintenance system.</p>	<p>Status of the handpump installation in the Rural Water supply programme.</p> <p>Problem/status of the centralized maintenance system.</p> <p>Need for community based handpump maintenance.</p> <p>Scope/objectives of the training programme.</p>	<p>Formal inaugural by a Chairperson.</p> <p>Presentation/ address by the training programme coordinator on the objectives of the training.</p>

Session 3	Objective	Subject content	Methodology
Importance of safe water	<p>To highlight the importance of safe drinking water and hazards of unsafe water.</p> <p>To inform about the sources of safe drinking water.</p> <p>To emphasize the importance of proper sanitation and hygienic practices.</p>	<p>Water borne diseases.</p> <p>Link between safe water. Unsafe water and diseases.</p> <p>Relationship between sanitation & diseases.</p> <p>Importance of a safe source of drinking water.</p>	<p>Discussion using the visual Modified Photodisplay set on sanitation and Flipcharts to illustrating the disease transmission cycle.</p>

Materials for the session 3 :

Films - Prescription for health or Pani Ki Kahani.

Visual-aids - Visual-aid calendar, modified photodisplay on sanitation, flipbook
Saf pani aur safai.

Session 4	Objective	Subject content	Methodology
Handpump based water supply system	<p>To inform the trainees about the tubewell as a source of safe drinking water.</p> <p>To create an understanding about the functioning of handpumps to lift water.</p>	<p>Importance of ground water as a resource for safe water supply.</p> <p>Basic aspects of construction of a tubewell to lift ground water.</p> <p>Mechanism of the handpump and how it ensures protected water supply.</p>	<p>Presentation, lecture using model of the handpump followed by discussions.</p>

Session 5	Objective	Subject content	Methodology
Anatomy of the India Mark III handpump and Installation requirements	<p>To create and understanding of the different parts of the India Mark III (VLDM) handpump.</p> <p>To teach the trainees about the functioning mechanism and installation requirements of the IM III handpump.</p>	<p>Anatomy of the handpump -</p> <p>Above-ground components</p> <p>Below-ground components</p> <p>Operating principles.</p> <p>Installation requirements.</p>	<p>Discussions using posters, models and the blackboard.</p>

Session 6	Objective	Subject content	Methodology
<p>Handpump maintenance - Present systems and Community based handpump maintenance system</p>	<p>To introduce the trainees to the present handpump maintenance system prevalent in the area.</p> <p>To create an understanding of the community based handpump maintenance system.</p> <p>To emphasize the roles of functionaries in the community based handpump maintenance system.</p> <p>To create an understanding of the specific roles & responsibilities of the WATSAN committee.</p>	<p>Problems of a centralized maintenance system.</p> <p>Need for the community to take responsibility and accountability for community based maintenance system.</p> <p>Key aspects of community based handpump maintenance system.</p> <p>Role of the WATSAN committee, handpump mechanics and caretakers in the maintenance system.</p>	<p>Film show / slide presentation and discussions on the community based handpump maintenance system.</p> <p>Discussions on the role of the WATSAN committee.</p>

Session 7	Objective	Subject content	Methodology
Role of the handpump caretaker	<p>To inform about the various responsibilities of the handpump caretaker.</p> <p>To explain the duties of the caretaker.</p>	<p>Role & responsibilities of the caretaker.</p> <p>Preventive routine maintenance.</p> <p>Identification of defects.</p> <p>Motivation of the community for proper usage of the handpump, safe water & sanitation practices.</p>	Discussions using visual aids.

Day 2 :

Session 1	Objective	Subject content	Methodology
Preventive maintenance procedures.	<p>To train on different steps in the routine preventive maintenance of the handpumps installed.</p> <p>To teach the caretakers how to identify defects requiring malfunction repair.</p>	<p>Steps/procedures for preventive maintenance:</p> <ul style="list-style-type: none"> - Tightening of the nuts and bolts on the pump body. - Checking discharge - Checking pump body - Cleaning of pump surroundings. - Identifying defects that need repair/overhauling of the pump. 	Demonstration & hands-on training.

Session 2	Objective	Subject content	Methodology
Identification of defects in the handpumps.	To teach the trainees about how to identify defects needing repair or curative maintenance.	Identification of the defects - observations, investigation, and curative actions to be taken for the different problems.	Discussions using posters and models.

Session 3	Objective	Subject content	Methodology
Recommended tasks for proper usage of the handpump	Inform the trainees about the steps in proper operation and usage of the handpump. Identify/specify the role of the trainees in maintaining cleanliness around the handpump and imparting health education.	Procedures in proper operation of the India Mark III handpump. Proper usage of the handpump. Handling of drinking water. Sanitation in the home : - Sanitary latrine - Cleanliness	Discussions using film, flipchart, posters on the components of sanitation.

Session 4	Objective	Subject content	Methodology
Promotion of safe water and sanitation in the village.	<p>Inform the trainees about the importance of village & home sanitation.</p> <p>Identify/specify the role of the trainees in maintaining village sanitation and promotion of the use of safe water.</p> <p>To inform the trainees about the various methods to promote sanitation in the village.</p>	<p>Village sanitation.</p> <p>Sanitation in the home :</p> <ul style="list-style-type: none"> - Sanitary latrine - Cleanliness <p>Safe water handling practices.</p> <p>Activities for promotion of safe water usage and sanitation in the village.</p>	Discussions using flipchart.

Session 5	Objective	Subject content	Methodology
Identification of pump components and tools through games	<p>To help the trainees identify the components.</p> <p>To refresh the memory of the trainees on the functions, positions, of pump components and tools through games.</p> <p>To refresh the memory of the trainees in the causes of malfunction and repair requirements of the handpump.</p>	Identifying all components of the pump, tools & spares.	Write names of the pump components & tools/spares on slips of paper & put them in a box. Draw lots and ask each trainee to pick a paper & then identify the pump components spares and tools.

Session	Objective	Subject content	Methodology
<p>Evaluation of the training closing ceremony.</p>	<p>To evaluate the implementation of the training programme.</p> <p>To assess the effectiveness of training materials.</p> <p>To assess the trainees' performance.</p> <p>To find out the strength and weaknesses of the training programme.</p>	<p>A questionnaire is framed to evaluate the following aspects.</p> <p>Contents of the training programme, the resource persons' treatment of the subject, the sequence of topics, the adequacy of time allotted for each topic, the training facilities available, the problems faced during the training programme and suggestions for improvement etc.</p>	<p>Initiate discussions and encourage the trainees to put forth their views on the training programme.</p> <p>Note down the important suggestions and the criticism pointed out by the trainees.</p> <p>Do not prevent criticism on any aspect of the programme because the main purpose of this evaluation exercise is to get indicators as to how to improve future training programmes.</p>

<p>Distribution of materials and winding up of training programme</p>	<p>To distribute materials that the trainees will need during their work in the field.</p> <p>To discuss the results of the training programme.</p> <p>To close the training programme formally.</p>	<p>State the results of the evaluation and give a few words of encouragement to all the trainees.</p> <p>Advise the poor performers on how to improve their performance during the probation period.</p>	<p>If some senior official or dignitary is present request him to distribute the material and say a few words of encouragement to each trainee.</p> <p>Say good bye to trainee and close the training programme.</p>
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7.

TRAINING OF THE VILLAGE HANDPUMP MECHANIC

Village handpump mechanics

In areas where the India Mark III (VLOM) handpump is installed, one handpump mechanic is selected for each handpump in the village. The government implementing department and the NGO functionaries along with the WATSAN committee members participate in the selection of the handpump mechanics. The criteria for selection of the village handpump mechanic are the same as those for the selection of the handpump caretaker cum mechanics.

It is crucial to focus on women as handpump mechanics for better utilization and functioning of the handpumps as it is women who face extreme hardship wherever there is a problem of non availability of clean drinking water due to breakdown of handpumps. Women, as they are most concerned with water, would deliver better as handpump mechanics.

What is the role of village handpump mechanics

- * Collect the tools and spares required for the repair from the village WATSAN committee on receiving information of a handpump breakdown and carry out handpump repairs with help from the caretaker, WATSAN committee members and the community.
- * Account to the WATSAN committee for the spares used and time spent on the repair.
- * Receive payment for the services from the WATSAN committee on a monthly basis.
- * Maintain a record of the handpump repair with the help of the WATSAN committee.
- * Act as a motivator to promote health and hygiene practices, proper use of the handpump and sanitation in the village.

Training of village handpump mechanics

What is the objective of the training?

To develop the skills of the women handpump mechanics for undertaking repair of the handpumps for effective execution of the community based handpump maintenance projects.

Who trains the WATSAN committee members?

Functionaries from the Public Health Engineering Department - Assistant Engineers, Junior Engineers, or Non Governmental Organization representatives involved in the programme.

What is the duration of the training?

The village handpump mechanics are given a two weeks "hands-on" training.

Who organizes the training?

The Public Health Engineering Department in consultation with the district and block authorities, local Non Governmental Organizations and WATSAN committee members.

Where is the training held?

At the district/block headquarters. Practical training on handpump repair is given in the field.

What is the training methodology?

Lecture-cum-discussion sessions are held for the theoretical sessions. Group work /discussion sessions are held on the roles and responsibilities of the village handpump mechanics in the community based handpump maintenance system. Handpump repair is demonstrated using handpump models. Practical "hands-on" training is given on the different aspects of handpump repair in the villages. The handpump mechanics are specially trained in the conversion of handpumps, which they undertake for their own village as a part of the training programme.

What is the session-wise subject content and methodology ?

Day 1 :

Session	Objective	Methodology
Registration and Introduction	<p>To know the background of the trainees and the exact no. of participants.</p> <p>To maintain a record for follow-up of the training.</p> <p>To formally welcome the participants.</p> <p>To create informality and familiarity among the trainees and initiate the process of cohesive group formation.</p>	<p>Filling up of the background information forms by the trainees.</p> <p>Informal introduction & welcome to the course.</p> <p>Sub-division of participants into groups on the basis of a game.</p> <p>Allow time for discussions & familiarization among the trainees.</p> <p>Ask one trainee to introduce her group mate to the entire group.</p> <p>Name, occupation, qualifications, village, workplan, family background etc. of the participants narrated by different participants.</p>

What is the training schedule?

Duration : Twelve working days or two weeks.

Day 1

9.00 - 9.45 a.m.	Registration and Introduction
9.45 - 10.15 a.m.	Inaugural
10.15 - 11.15 a.m.	Importance of Safe Water
11.15 - 12.15 p.m.	Handpump based water supply
12.15 - 1.15 p.m.	Anatomy of the handpump
1.15 - 2.15 p.m.	Lunch
2.15 - 2.45 p.m.	Handpump maintenance systems
2.45 - 3.45 p.m.	Role of the WATSAN committee, caretakers and handpump mechanics in maintenance.
3.45 - 4.45 p.m.	Tools and spare parts needed for repair
4.45 - 5.30 p.m.	Planning for the field work sessions

Day 2 - Day 11

9.00 - 10.00 a.m.	Review of previous day's sessions
10.00 - 5.00 p.m.	Practical demonstration and training on handpump repair and conversion of IM II to IM III.
5.00 - 5.30 p.m.	Planning for next day's sessions

Day 12

9.00 - 10.00 a.m.	Review of the training programme
10.00 - 11.30 p.m.	Monitoring & record keeping.
11.30 - 1.00 p.m	Village & home sanitation.
1.00 - 2.00 p.m.	Lunch
2.00 - 3.30 p.m	Game on recognizing the pump components, spare parts and tools for carrying out maintenance.
3.30 - 4.30 p.m.	Evaluation of the training. Post knowledge test.
4.30 - 5.30 p.m.	Closing ceremony & handing over of certificates.

Session	Objective	Subject content	Methodology
Inaugural	<p>To formally inaugurate the training programme</p> <p>To briefly outline the objectives of the training.</p> <p>To inform the trainees about their role in the HP maintenance system.</p>	<p>Status of the handpump installation in the Rural Water supply programme.</p> <p>Problem/status of the centralized maintenance system.</p> <p>Need for community based handpump maintenance.</p> <p>Scope/objectives of the training programme.</p>	<p>Formal inaugural by a Chairperson.</p> <p>Presentation/ address by the training programme coordinator on the objectives of the training.</p>

Session	Objective	Subject content	Methodology
Importance of safe water and hygiene practices.	<p>To highlight the importance of safe drinking water and hazards of unsafe water.</p> <p>To inform about the sources of safe drinking water.</p> <p>To emphasize the importance of proper sanitation and hygienic practices.</p>	<p>Water borne diseases.</p> <p>Link between unsafe water and diseases.</p> <p>Relationship between sanitation & diseases.</p> <p>Importance of a safe source of drinking water.</p>	<p>Discussion using the visual Modified Photodisplay set on sanitation and Flipcharts to illustrating the disease transmission cycle.</p>

Materials for the session 3 :

Films - Prescription for health or Pani Ki Kahani.

Visual-aids - Visual-aid calendar, modified photodisplay on sanitation, flipbook
Saf pani aur safai.

Session	Objective	Subject content	Methodology
Handpump based water supply system	<p>To emphasise the importance of the ground water resource.</p> <p>To create an understanding about the functioning of handpumps to lift water.</p>	<p>Importance of ground water as a resource for safe water supply.</p> <p>Basic aspects of construction of a tubewell to lift ground water.</p> <p>Mechanism of the handpump and how it ensures protected water supply.</p> <p>Different types of handpumps.</p>	Film show / slide presentation and discussions.

Session	Objective	Subject content	Methodology
Anatomy of the handpump	<p>To illustrate the VLOM aspects of the handpump and its maintainability at village level.</p> <p>To create and understanding of the different parts of the handpump.</p>	<p>VLOM aspects of the handpump - simple design, maintainability etc.</p> <p>Anatomy of the handpump -</p> <p>Above-ground components</p> <p>Below-ground components</p> <p>Operating principles.</p>	Discussions using posters, model of the handpump and wall charts on the anatomy of the handpump.

Session	Objective	Subject content	Methodology
Handpump maintenance systems	<p>To highlight the need and create an understanding of the community based handpump maintenance system.</p> <p>To explain the structure and functioning of the community based handpump maintenance system.</p>	<p>Prevalant handpump maintenance systems.</p> <p>Need for the community to take responsibility and accountability for handpump maintenance.</p> <p>Key aspects of the community based handpump maintenance system.</p> <p>Structure and functioning of the system.</p>	Discussions using posters, films and wall charts.

Session	Objective	Subject content	Methodology
Role of the WATSAN committee, handpump caretakers and mechanics	<p>To inform about the various responsibilities of the WATSAN committee and handpump caretakers.</p> <p>To explain the duties of the handpump mechanics.</p>	<p>Role & responsibilities of the village WATSAN committee, recommended tasks of the caretaker and</p> <p>Role of the handpump mechanic in the community based maintenance system.</p>	Discussions

Session	Objective	Subject content	Methodology
<p>Tools and spares needed for repair.</p>	<p>To help the trainees differentiate between preventive maintenance and repairs due to malfunction.</p> <p>To teach the trainees about how to identify defects for repair curative maintenance.</p> <p>To create an understanding of the different spares and tools needed for repair of the handpumps.</p>	<p>Different between preventive maintenance and repair.</p> <p>Identification of the tools and spares for repair of the handpump.</p> <p>Steps in identification of the defects through observations, investigation, and curative actions to be taken for the different problems.</p>	<p>Discussions using posters and models.</p>

Day 2 - Day 11 :

Session	Objective	Subject content	Methodology
Practical demonstration and training on handpump repair.	To train on the steps involved in dismantling and reassembling of the piston assembly and foot valve of the handpump.	Steps in dismantling and reassembling of the handpump. Steps in the repair of the pump piston assembly and foot valve assembly.	Demonstration and practical "hands-on" training in the field. The trainees may also be involved in the conversion of India Mark II to India Mark III handpumps in their villages.

Day 12 :

Session	Objective	Subject content	Methodology
Monitoring pump performance	To inform the trainees about the monitoring system. To emphasize the need for record keeping. To teach the trainee how to maintain records/monitoring formats.	Record keeping & its importance. Types of formats for monitoring pump performance. Method of filling records/monitoring formats.	Discussion. Actual practice in filling records.

Session	Objective	Subject content	Methodology
Village and home sanitation	<p>Inform the trainees about the importance of village & home sanitation.</p> <p>Identify/specify the role of the trainees in maintaining village sanitation.</p>	<p>Village sanitation.</p> <p>Alternative delivery systems.</p> <p>Sanitation in the home :</p> <ul style="list-style-type: none"> - Sanitary latrine - Cleanliness 	

Session	Objective	Subject content	Methodology
Identification of pump components, tools and spares through games.	<p>To help the trainees identify the pump components, spares and tools.</p> <p>To refresh the memory of the trainees on the functions, positions, of pump components, spares and tools through games.</p> <p>To refresh the memory of the trainees in the causes of malfunction and repair requirements of the handpump.</p>	Identifying all components of the pump, tools & spares.	Write names of the pump components & tools/spares on slips of paper & put them in a box. Draw lots and ask each trainee to pick a paper & then identify the pump components spares and tools.

Session	Objective	Subject content	Methodology
<p>Evaluation of the training closing ceremony.</p>	<p>To evaluate the implementation of the training programme.</p> <p>To assess the effectiveness of training materials.</p> <p>To assess the trainees' performance.</p> <p>To find out the strength and weaknesses of the training programme.</p>	<p>A questionnaire is framed to evaluate the following aspects.</p> <p>Contents of the training programme, the resource persons' treatment of the subject, the sequence of topics, the adequacy of time allotted for each topic, the training facilities available, the problems faced during the training programme and suggestions for improvement etc.</p>	<p>Initiate discussions and encourage the trainees to put forth their views on the training programme.</p> <p>Note down the important suggestions and the criticism pointed out by the trainees.</p> <p>Do not prevent criticism on any aspect of the programme because the main purpose of this evaluation exercise is to get indicators as to how to improve future training programmes.</p>

<p>Distribution of materials and winding up of training programme</p>	<p>To distribute materials that the trainees will need during their work in the field.</p> <p>To discuss the results of the training programme.</p> <p>To close the training programme formally.</p>	<p>State the results of the evaluation and give a few words of encouragement to all the trainees.</p> <p>Advise the poor performers on how to improve their performance during the probation period.</p>	<p>If some senior official or dignitary is present request him to distribute the material and say a few words of encouragement to each trainee.</p> <p>Say good bye to trainee and close the training programme.</p>
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