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LIST OF ABBREVIATIONS

DWSC District Water and Sanitation Committee

GP Gram Panchayat

KOL Key Opinion Leader

SSA Sarva Shiksha Abhiyan

UN United Nations

UNICEF United Nations Children's Fund (erstwhile United Nations International

Children's Emergency Fund)

ULB Urban Local Body

VWSC Village Water and Sanitation Committee

WaSH Water, Sanitation and Hygiene



HOW TO USE THIS TOOLKIT?

About the Toolkit

The toolkit is a step-by-step approach for field-level functionaries, practitioners, GP officials, officials at the Urban Local Bodies. The above-mentioned stakeholders are required to facilitate its implementation using the requisite tools, aids, techniques and templates in order to ensure that the program is well implemented on ground.

With the above objective in mind, Safe Water Network has attempted to develop this toolkit keeping in mind the importance of having good practices in WaSH. It clearly states the contents to be covered under the education program and the various activities required for engaging the audience, creating awareness, dialogue and promoting behavioral change in the lives of the community.

Target Audience

The toolkit caters to the following categories of users:

- School (Students and Teachers)
- Asha Didis
- Anganwadi Workers
- Gram Panchayat functionaries, government agencies, Village Water and Sanitation Committee members
- Officials and functionaries of the Urban Local Bodies
- Agencies and Individuals involved in practices around WaSH

Overview

The toolkit for WaSH contains three chapters:

- 1. Purpose of the Document
 - This chapter provides background, need and scope of the toolkit and outlines the challenges, and implementation plan.
- 2. Program Phases
 - This chapter explains the phase wise implementation plan, starting from the preparatory phase to monitoring and evaluation.
- 3. Training Modules: This chapter covers four modules:-
 - Module I: Human Body & Importance of Water
 - Module II: Basics of Water availability + Keeping water source safe + Local water security
 - Module III: Water Quality
 - Module IV: Hand Washing and Hygiene
 - Module V: Consumer Activation



PURPOSE OF THE DOCUMENT

Background and Need

Over 1.5 million children under five die each year as a result of diarrhea¹. It is one of the most common causes of child deaths worldwide. In a resolution passed in 2010 at the UN General Assembly, safe drinking water and sanitation was recognized as a basic human right. Further to this, the Government of India's flagship program Sarva Shiksha Abhiyan(SSA), launched in 2000-2001 recognizes for a variety of interventions including provisions of safe drinking water in school and improved WaSH services. These resolutions call for unanimous need to improve the Water, Hygiene and Sanitation facilities.

Safe water supply and improved sanitation facilities for people living in both rural as well as urban areas has been one of the major concerns of our Government in the recent past. It is evidently obvious that in the absence of such facilities, health and livelihoods of the most vulnerable communities especially children are worst affected.

Total Population: 1,365,497,432

(UN data, 2019)

Total Number of people with improved drinking source of water: Urban 97%; Rural: 90%

Total Number of people with improved sanitation facilities: Urban: 58%; Rural: 23%

(UNICEF Report on WaSH, 2012)

Water, Sanitation and Hygiene commonly abbreviated, as WaSH becomes an important sector of focus to see any change or improvement in the lives of the community. Every component in WaSH is an extremely powerful tool to realize the dream of achieving the dream of total Water, Hygiene and Sanitation services leading to visible impact and improvement in the health and hygiene behavior of families and communities (especially children).

WaSH education being a low priority area in a formal education set up makes it imperative therefore to impart training, skills, knowledge and build capacity at all levels for better understanding and management in the sector. The current WaSH situation in our country needs advocacy and policy efforts at education as well as implementation level which can be realized only if it is promoted through adequate communication strategies.

This toolkit is therefore an attempt to provide an exhaustive framework of necessary aids, techniques and templates to be used by different stakeholders such as key opinion leaders, schools, officials and functionaries at urban local bodies who play an important role in facilitating and providing improved water, sanitation and hygiene services.

Scope of the Toolkit

The toolkit is designed such that there is direct impact on the health by fostering knowledge and training and reducing the incidences of WaSH related diseases that arise. It is therefore an important tool to initiate ground level initiatives keeping the local context in mind and by involving community and people at large.

The major focus of the toolkit will be development of skills, mobilization and involvement of important stakeholders in the sector who shall work together and play an important role in improving the existing conditions in the sector.

An efficient and effective WaSH program in a habitation will lead to better understanding of people on important topics of:

- Human Body and Importance of Water
- Basics of Water availability, keeping water source safe, local water security
- Water Quality
- Hand washing and Hygiene

¹ UNICEF Report (2012), WaSH for School Children: South East Asia Report



The approach of the implementation is completely people driven in which one of the member or stakeholder will be chosen as the WaSH ambassador to further help in outreach to wider communities or people.

Challenges

One of the main challenges of the sector is extremely poor operation and maintenance of WaSH services and its sustained coverage. 47% of schools in rural areas have toilets, which are not usable². This can be attributed to a number of factors like absence water supply, absence of soap and so on. Resources needed for successful WaSH implementation are often inadequate. There is lack of monitoring around quality indicators, local evidence and capacities. Most of the times there are limited capacities within the implementers to deal with issues and necessary IEC materials are often missing or absent.

Another major challenge in the sector is ensuring sustained change and improvement in behavior around improved Water, Sanitation and Hygiene practices. Ensuring that there are adequate communication strategies available at all times for sustained toilet use, hand washing, drinking water, water storage and handling at home will create a lasting impact towards behavior change. The entire processes of evaluating the services that are made available, needs to be strengthened in order create more evidence of impact. The toolkit aims at proving such aids and guidelines that will ensure its sustenance in the future and smooth implementation, operation and maintenance of WaSH facilities.

WaSH Planning

The toolkit for WaSH education sets guidelines for the implementation of improved services and behavioral changes around WaSH to set an agenda to achieve the Millennium Development Goals on WaSH globally. Keeping in mind the local context, its needs and situations, the toolkit aims:

- To foster the acquisition and transfer of knowledge, skills and affective attributes of WaSH education and the key benefits of having improved services and promote good governance around WaSH through institutional bodies.
- To reach out to students and teachers in school, key opinion leaders and other important stakeholders engaging in WaSH activities and instilling in them the importance of good practices around water
- To promote dialogue, awareness and good practices around water, hygiene and sanitation behavior to be channelized through important agents of social change (Key opinion leaders, Teachers etc.)
- The ultimate aim is hoping for behavioral change, leading to complete change in day to day habits around water and hygiene practices
- To measure the impact that WaSH education would be creating in the lives of the
 people especially children or students in terms less sick days and more efficiency and
 attentiveness in school. Further, also measure the reduction in the expenditure of
 doctor's fees due to improved WaSH services in the community.

Framework for WaSH Education Implementation

The toolkit provides guidelines and procedures for implementation of WaSH education across different stakeholders in a rural as well as an urban set up. It has been designed keeping in mind the local needs, challenges, conditions and issues that may arise.

The education program will be implemented on the basis of an approach oriented through training activities. The program will be initiated through training of the trainers (key opinion leaders, teachers, urban local bodies, etc.) on the various topics relevant under WaSH education. The trainers will be then responsible in imparting the knowledge to their audience

² Annual Status of Education Report, 2010



(students, community etc.) with help of adequate communication strategies, aids and materials and by creating dialogue or awareness on the same.

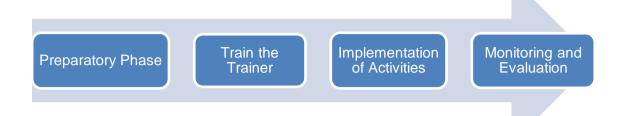
The education program will be implemented through the support of school administrations/ Gram Panchayat or Urban Local Bodies wherever necessary. Technical support and training will be facilitated for smooth implementation of the program. Support Organizations already working in the WaSH sector will also be consulted for its implementation.

The core idea of the toolkit is to train and therefore groom professionals and various functionaries involved in the sector. It also focuses on sector players who are directly involved in the managing and implementing WaSH programs on ground.



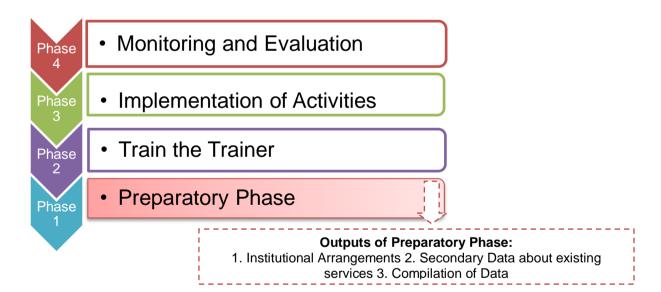
PROGRAM PHASES

The toolkit for Wash Education is planned for implementation in respective habitations through the following four phases as mentioned below:



It becomes important that in order to implement the education program effectively, all the phases and its relevant activities are clearly understood by the trainers for further implementation on ground. While each of the above mentioned phases will have its own outputs and targets, monitoring and evaluation as a step becomes vital for the success of the program and as well as understanding the gaps in existing knowledge, systems and procedures and how to bridge those gaps for future modifications and changes.

I. Preparatory Phase

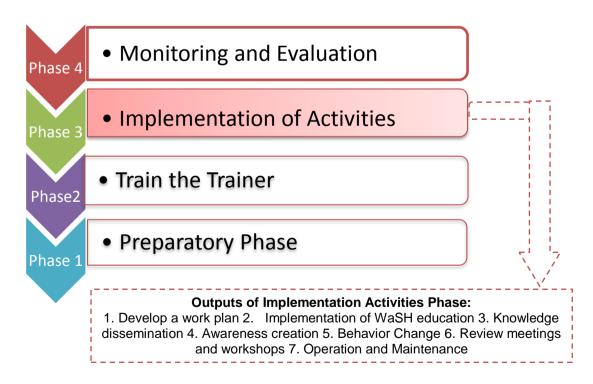




II. Capacity Building Phase: Train the Trainer

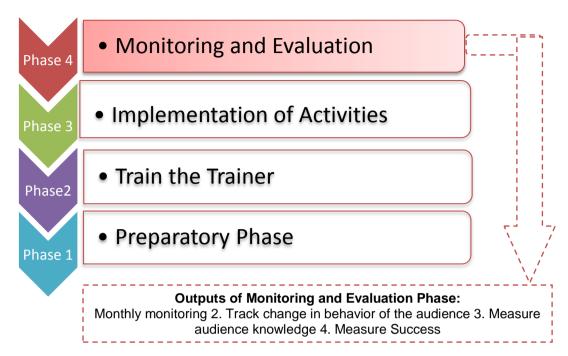
Monitoring and Evaluation
 Implementation of Activities
 Train the Trainer
 Phase 1
 Preparatory Phase
 1. Mobilization and Resolution for participation 2. Consensus on gaps and analysis 3. Strengthening of local bodies through participation, mobilization and involvement 4. Training of the WaSH ambassadors 5. Activities to be undertaken by trainers through ground Work and meeting to understand gaps

III. Implementation Activities





IV. Monitoring and Evaluation



In order to achieve program outputs and for its successful implementation a logical approach with phase details and outcomes that are expected becomes necessary to be followed. The approach will help determine the detailed outcomes of each phase. Additionally, the activities conducted will further help in understanding various performance indicators and appropriate gaps that can arise over its period of implementation, operation and maintenance of the provisions or facilities and shall therefore help in analyzing the gaps for future implementation. This will prove to be a boon in achieving the desired objective and measure success within the timeline that is allotted and the budget allocated to the each of the phases.

Below is the table showing the Phases and their Expected Outcomes:

#	Phases	Expected Outcomes	
Pha	ase 1: Preparatory Phase		
1.	Institutional arrangement for WaSH Implementation	Institutional arrangement at block level covering the District Water and Sanitation Committee/ Public Health & Education Department/ Urban Local Bodies or line person responsible for putting the implementation of WaSH at place.	
2.	Obtaining Secondary Data about existing services in WaSH in the habitations, their operation and maintenance details and understand gaps	To seek approval of the District Water and Sanitation Committee/ Urban Local Bodies for identification of gaps and other details as obtained.	
3.	Data to be compiled in officers/ facilitators		
Pha	Phase 2: Train the Trainer		
1.	Mobilization of Gram Panchayat and Gram Sabha, implementers at the Urban Local Bodies	Resolution for participation of members for capacity building/ training	



2.	Habitation Level meetings to be held	To reach consensus on participation, develop a list members/officers who agree to undergo training
3.	Strengthening of the Village Water and Sanitation Committee / Pani Samiti / District Water and Sanitation Committee	Initiate the formation of a strong VWSC at a village level and DWSC at an urban level Active participation of members would be required for successful implementation at all levels.
		One of the members to be elected and chosen as the WaSH ambassadors (teachers, PRIs, Sarpanch, key opinion leaders, officials at ULBs or PHDs) and to be trained for successful implementation of WaSH education and to be provided necessary support
4.	Training the WaSH ambassadors	 Impart training to the selected ambassadors of WaSH implementation program on various aspect topics and activities that need to be covered during the course of the program Provide them with the necessary modules required for its successful implementation Trainer to further educate and impart knowledge through various modules, aids and activities by participation from community/people and other target groups
5.	In case of villages/ rural areas Trainer to conduct a Participatory Rural Appraisal in villages to initiate dialogue and discussions	 To develop Social map (to understand population, socioeconomic statuses of households and services that are being already made available) Resource Availability map (clean drinking water, availability of hand washing provisions) Timeline and season ability (availability of water and diseases) Community led participation and development of a WaSH implementation plan in the habitation
6.	For villages/ rural areas as well as urban areas : School Level Implementation through imparting knowledge covered under the Modules	 WaSH teacher/ ambassador to impart knowledge topic wise according to the modules. Create awareness about gaps in available WaSH provisions Develop an action plan for WaSH provision and implementation in school
7.	For villages/ rural areas: Key opinion Leaders like Sarpanch, ASHA didis, Anganwadi workers to meet Women, adolescent girls, children other community members meeting through imparting knowledge covered under the Modules	 Creating of awareness and taking their inputs on WaSH services available. Understand and Analyze gaps Impart knowledge on the various topics to be covered under the WaSH program through different aids and activities
8.	For urban area implementation Workshop – Development of WaSH Implementation Plan at the Urban Local Bodies/ PHDs, City Makers and Planners and impart knowledge on various topics covered in the Modules	Identify gaps in WaSH services and provisions and consolidate a list of findings from the same. Present a concrete WaSH plan and educate on various themes and topics under the same to the target audience with the help of various activities and aids for successful WaSH implementation and planning



Pha	Phase 3: Implementation of Activities			
1.	Stakeholder meeting Work Plan including details of work and timeline developed	Project components together along with timelines and within the budget allocated		
2.	Selection and implementation by WaSH ambassadors at respective habitations through knowledge dissemination of the respective Modules developed Mode of Implementation: Developing of aids required for communication strategies	 Through various activities and knowledge dissemination to implement and educate a group at least 50-100 members of the target audience at the initial stage followed by a larger target group in the following stages. Implement WaSH provisions and services in the habitation and continuously monitor the availability, quality and progress. Create enough awareness on behavior changes around WaSH through close interactions and dialogue and initiate changes in the behavior pattern 		
3.	Joint review/ meeting and workshops	Share the impact, progress created through the education with the target audience and also concerned authorities		
4.	Operation and Maintenance of services	 Number of people impacted through noting behavior changes and trends Availability of safe water and other WaSH related services at all times and cleanliness of the surrounding areas. 		
Pha	Phase 4: Monitoring and Evaluation			
1.	Monthly monitoring	Availability and Status: Provision of safe water, quality of drinking water and improved WaSH provisions and facilities, availability of these provisions at all times and reporting the same		
2.	Track the change in behavior	Increase in the number of people who are now educated on WaSH services and implementation and show a change in their behavior towards these services when compared to baseline data		
3.	Measure audience knowledge	Clear understanding on good practices around WaSH and practicing in their day to day life		
4.	Measure Success	Through success stories and knowledge dissemination at local, regional and national level.		

Monitoring & Evaluation: Performance Assessment as per WaSH Indicators







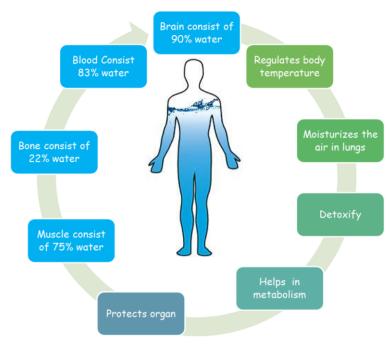


Water Indicators	Definitions
Access to Drinking Water	number or % of the target households using basic drinking water services
Number of People per Water Point	number or % of supported communities not exceeding the maximum recommended number of people per water point
Water Quantity	% of households with at least 15 liters of safe water for drinking, cooking and personal hygiene per person per day
Drinking Water Quality (residual chlorine)	% of [select: targeted water points / household water samples] with free residual chlorine between 0.2 and 0.5 mg/l
Water Affordability	% of households capable of purchasing the safe water they need
WASH Promoters' Knowledge and Skills	% of WASH promoters that passed both theoretical and practical test
Water Access Safety	% of girls and women stating that they feel safe when accessing water
Hygiene Indicators	Definitions
Hand Washing Knowledge	% of respondents who know at least 3 out of 5 key moments for
	hand washing
WASH Promoters' Knowledge and Skills	
	hand washing % of WASH promoters that passed both theoretical and practical
Knowledge and Skills Acquired Knowledge Behavior Change Communication Indicators	hand washing % of WASH promoters that passed both theoretical and practical test number or % of [specify] who passed the provided test (learning
Knowledge and Skills Acquired Knowledge Behavior Change	hand washing % of WASH promoters that passed both theoretical and practical test number or % of [specify] who passed the provided test (learning benefits of any knowledge and skills-transfer activities)
Knowledge and Skills Acquired Knowledge Behavior Change Communication Indicators Recall of the Promoted	hand washing % of WASH promoters that passed both theoretical and practical test number or % of [specify] who passed the provided test (learning benefits of any knowledge and skills-transfer activities) Definitions % of [specify the target group] who recall hearing or seeing at least



TRAINING MODULES

Module I: Human Body and Importance of Water



Purpose of the Module

The module aims at creating awareness and understanding around the practice of using safe water. For an effective WaSH education and training, it becomes important for people or communities to understand that safe water is a precondition to good health and development. The module aims to generate an understanding about the link between human body and importance of water.

Access to clean drinking water is a basic human right. Though India is fast moving in providing access, most of the times the water that is provided is heavily contaminated³. It therefore becomes imperative and extremely important to ensure that in addition to access, there has to be quality water to be provided to the people.

Additionally, it also becomes important that people understand the benefits of drinking safe water which can be only ensured when they understand various important facts around water for example, the water composition of various important organs in their body and how water is essential for human health and body functioning. It is further imperative that various mineral contaminants and how they adversely affect the human body is known and understood. The need of the hour is to create dialogue and impart knowledge about water and health so that there are more people having access to good quality and safe drinking water.

The module, therefore, aims to generate a framework listing out learning objectives as a guideline to the WaSH ambassadors, implementers or trainers for creating dialogue and generating awareness and stimulating discussions around the importance of drinking safe water.

³ UNICEF Report, 2008



DESIRED OUTCOME OF CHANGE			
Topic	Delivery Mechanism	Timeline	
Human Body and Importance of Water	Through puppet shows, field visits and leaflets or flip charts/ visual depictions	Training of the audience: 3-4 months Evaluate through knowledge gained and behavior change by tracking number of people changing their access to a safer source of drinking water for the next six months from the date of implementation.	

Audience

This module is aimed at the following target groups:

Trainer	Audience to be trained
Teacher	Students and immediate circle of influence (parents)
ASHA Didis	Expecting mothers, Mothers with new borne babies, adolescent girls
Anganwadi Workers	Children under the age of six, mothers, expecting mothers
Public Health Department Officials	Other officials of the department, wider community
District Water and Sanitation Committee	Wider Community, District officials
Pani Samiti (VWSC)	Community at large
Sarpanch / GP Members	Community at large

Learning Objectives of this module

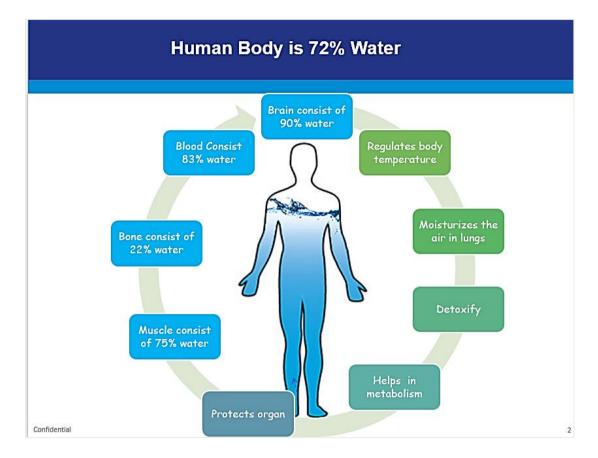
Topics such as understanding the importance of water and human body, need to rely on water from a safe source, avoid drinking water from open or unprotected sources, various contaminants of water and how they affect the human health must be imparted through the module. The various aspects will be covered by presentations to be delivered to the target audience through requisite evaluation at the end of the program to track change in behavioral pattern of the people and the knowledge gained.

Topics to be covered:

- 1. Human Body and Importance of Water
- 2. Various existing sources of water
- 3. Water and various Contaminants
- 4. Water and health
- 5. Monitoring and evaluating the change in behavior and knowledge gained



1. Human Body and Importance of Water



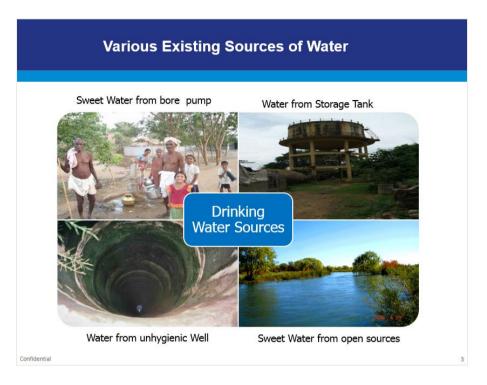
The first step for the trainer in the module is to set a context or a background on how the human body is dependent on water. Knowledge on the human and composition of water needs to be imparted. This topic can be covered using a puppet show for children or through flip charts. Important facts on human body and percentage of water, various organs and their water composition must be imparted to the audience. Important facts such as:

- Human Body is made of 72% water
- Lungs consist of 90% water
- Blood consists of 82% water
- Skin consist of 80% water
- Muscle consists of 75% water
- · Brain consists of 70% water
- Bones consist of 22% water must be covered under this module.

Adequate communication strategies need to be developed such as puppet shows for children in schools for easy understanding of the concept and leaflets or flip charts/visual depictions for other target audience.



2. Various Existing Sources of Water



After the background is set about water and its link with human body, it will be interesting to understand the existing sources of water that the audience depends on. This can be done by field visits to the sites and understanding the various sources of drinking water. With the help of Field test kits water from these sources can be tested on site on important parameters such as TDS, Nitrate, pH, etc. for fostering the knowledge about how it is unsafe to rely on these sources.

For students, such field visits become even more important to drill in a sense of understanding about the various unprotected sources of water and how for a healthy body and mind it is important to drink safe water from a reliable source.

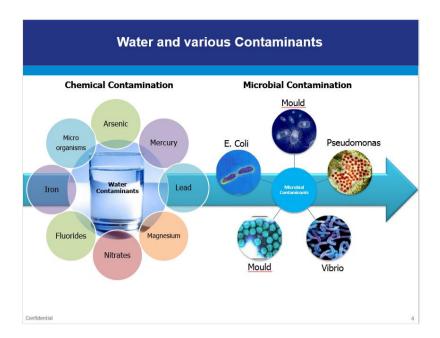
This topic must aim to create enough understanding around the need to drink safe water amongst the audience through requisite field and exposure visits.

3. Water and various Contaminants

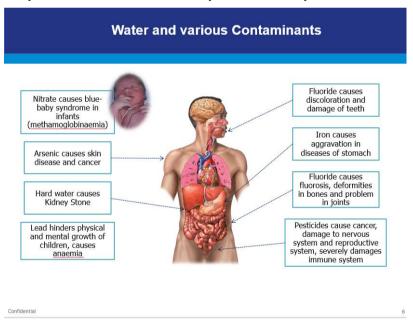
The topic aims to generate knowledge on water and its various contaminants. Communication strategies such as visual depiction through flip charts and presentations make it easier to communicate the purpose of the topic.

The Trainer must begin with introducing the major contaminants of water that adversely affect the human health and body to the target audience. It is also important to make them understand that drinking water from unsafe and unreliable sources increases the presence of these contaminations in water.





Additionally, it is important to link the topic to the fact that drinking safe water will reduce the chances of such contaminants to be present in the water. Therefore, for a healthy body it becomes essential to rely and drink only safe water.

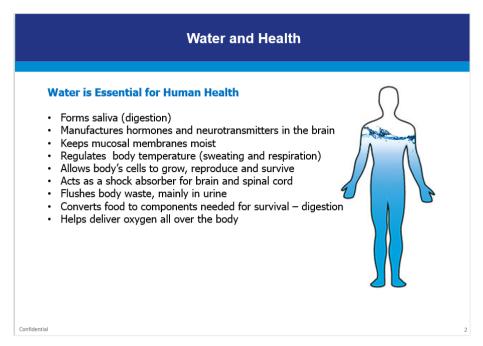


The trainer, through such visual depictions with help of presentations, charts or flip charts must also impart knowledge on the various major Mineral Contaminants in Water and their Impact on Health such as:

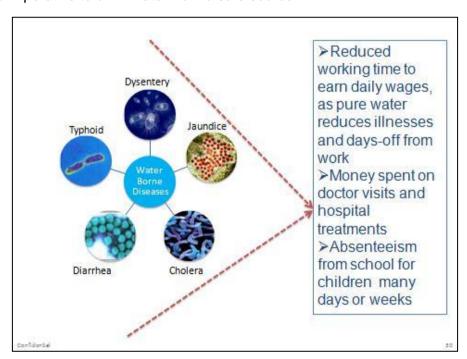
- Nitrate causes Blue Baby syndrome in infants (methemoglobinemia)
- Fluoride causes discoloration and damage of teeth
- Arsenic causes skin disease and cancer
- Iron causes aggravation in diseases of stomach
- Hard water causes Kidney Stone
- Fluoride causes fluorosis, deformities in bones and problem in joints
- Lead hinders physical and mental growth of children, causes anemia
- Pesticides cause cancer, damage to nervous system and reproductive system, severely damages immune system



4. Water and Health



This topic briefly discusses how water is essential for human health. At this juncture, it is essential to let the audience understand about the important functions of water in the human body. Trainer must also link it to the fact that for smooth functioning of our body parts and for all the important functioned as depicted in the chart or presentation it is imperative to drink water from a safe source.



Additionally, it is also important for the audience to understand through this topic that water performs so many important functions and for the body to remain healthy it is extremely essential to create awareness within the community or circle of influence to drink water which is safe and which will in turn ensure the smooth functioning of our body parts.



Impart adequate understanding on that fact that drinking safe water will not only keep the body healthy but will also ensure

- More working time to earn daily wages, as pure water reduces illnesses and days-off from work
- More school time for children
- Money saved on doctor visits and hospital treatments

Communication strategies such visual depictions or charts/ leaflets can be developed to foster the understanding and knowledge. The topic must clearly be able to create discussions amongst the audience on the importance of safe water and its impact on health

5. Monitoring and evaluating the change in behavior and knowledge gained

Indicator Type	Purpose of Indicator	Measuring the Indicator	Timeline to measure
Content or Topics covered under the program	Did the audience internalize the content?	Water Quiz for children Survey on the knowledge gained through simple questionnaires given to the audience Day to day observation	Immediately following up
Behavioral Changes	Is the module illustrating the desired behavior change?	Direct Observation on number people changing their access to a better and safer source of drinking water – Maintain records monthly	< 6 month from implementation>
Knowledge dissemination	Is audience being trained disseminating the knowledge gained to circle of influence, family, community so on?	Maintaining records monthly of profiles of people (other than the audience trained) who have shown change in behavior or gained knowledge through peer support/motivation or encouragement	< 6 month from implementation >

Training of the target audience does not limit the role of the WaSH ambassador. He or she is further responsible for tracking behavior change-related outputs through components or topics delivered by the trainers.

Trainers deliver this topic to target audiences through interpersonal communications (presentations or handing over of the required modules), developing communication strategies for its effective implementation. Therefore, a direct audience contact program such as these needs to be monitored and evaluated not only to measure the success but also to analyze and understand the existing gaps. This analysis will then help necessary modification in the module.

Monitoring and evaluating the program will additionally help in understanding whether the activities are being implemented as planned. Outputs can be further tracked through measuring the number of audience reached through the program and the frequency in which the audience was exposed to the messaging.

Maintaining records on a monthly basis will help in maintaining of records to track the progress against the desired outcome.

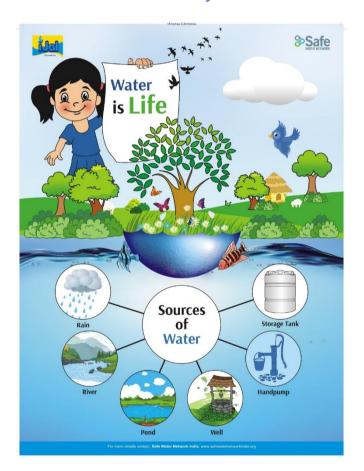


This module specifically also requires lot of observation through tracking change in behavior by maintaining records of number people changing their access to a safer option of drinking water on completion of the module.

Materials / Aids required for the module:

- Puppet shows for school students to introduce the topic.
- Leaflets/ Flip Charts and Visual Depictions of Human Body and various other concepts to target audience.
- Requisite field visits for children and other target to drill in a sense of understanding about the various unprotected sources of water and how for a healthy body and mind it is important to drink safe water from a reliable source.





Water is available from various sources for drinking purpose but it is very important that the source be safe. In order to keep the available source safe, the users should take the responsibility of keeping it clean. Without proper awareness about the importance of drinking potable water, this cannot be achieved. Hence, it is very essential to impart knowledge to the communities for keeping the available water source clean. Apart from keeping the water source clean it is also important to keep track that, the source does not dry due to excessive usage. Methods of Identification of water sources and creating dialogue through group discussions can help in disseminating this information to the audience to be trained.



DESIRED OUTCOME OF CHANGE		
Topic	Delivery Mechanism	Timeline
Keeping your water source safe and local water security	Through field visits, live demonstrations, audiovisuals and presentations, hands on training	Training of the audience: 3-4 months Evaluate through behavioral change for the next six months from the date of implementation.

Audience

This module is aimed at the following target groups:

Trainer	Audience to be trained
Teacher	Students and immediate circle of influence (parents)
ASHA Didi	Expecting mothers, mothers with new born babies, adolescent girls
Anganwadi Worker	Mothers, expecting mothers
Public Health Department Officials	Other officials of the department, wider community
District Water and Sanitation Committee	Wider Community, District officials
Pani Samiti (VWSC)	Community
Sarpanch/ GP Members	Community

Learning Objectives of this module

Understanding the need of keeping the source sustainable, clean & potable and develop a change in behavior at the completion of the module. The various aspects will be covered by field visits, live demonstrations, presentations to be delivered to the target audience followed by requisite evaluation at the end of the program to track change in behavioral pattern of the people.

Discussions with target audience can include the following questions:

- Where do you collect water?
- Various Sources of Water used in your households?
- How often do any of your family members fall sick? (Frequent vomiting, stomachache, diarrhea, typhoid, etc.)
- How many believe that it's important to drink safe water?
- How many believe that unsafe water is the reason behind them falling sick frequently?
- This dialogue will help them to reflect upon the various sources of water and how these sources are not often safe for drinking purpose. Instill in them the understanding of drinking safe water.

For school children it is imperative to:

- Impart knowledge on the benefits of using water from a safe and reliable source and to avoid assuming that open sources of water are safe to drink.
- Educate children on the various contaminants of water and how it affects their health.
- Must also ensure that the water source in school is safe or help in creating provision for safe water and washing facilities in school.



a. Keeping your water source safe

It is essential that the source of drinking water be clean and free from all microbes. The main source of drinking water in rural as well as urban areas is water from dug well & bore well. Various precautionary measures are to be taken to keep the source water safe for drinking purposes.

Target communities must have the knowledge of the following:

- To drink water from a safe source (source can be marked safe/unsafe by paint)
- Use can/containers with narrow opening to avoid hand dipping and which will help in pouring the water into vessels
- Ensure that the area surrounding the water source is kept clean
- Vessel cleaning to be done regularly in which drinking water is store and keep it covered at all times
- Create awareness within the neighborhood and community at large to follow the same for keeping their source water safe and away from contamination

The source should always be kept clean as mentioned and the major contaminant that should be checked are distance from sere lines and drains.

Topics to be covered:

- 1. Sources and pathways for fecal contamination: point sources & piped systems
- 2. Sanitary Inspection Forms for: Bore well & Dug well

1. Sources and Pathways for the fecal contamination of water sources:

Point Sources:

- Tube wells, dug wells and springs
- Latrines or open defecation, septic tanks, cattle grazing, abandoned dug wells, garbage pits, etc. close to the source
- Latrines or open defecation, septic tanks, cattle grazing, abandoned dug wells, garbage pits, etc. uphill of the source
- Standing water at or near the source due to poor drainage
- Poorly constructed or maintained head works (concrete apron and drain, headwall, pump seal) and below-ground sanitary sealing
- Irregular maintenance and cleaning of apron and source surrounding
- Animals with access to source (fencing missing or broken) in rural areas
- The minimum safe distance (MSD) between contamination sources and water sources should be at least 10 meters.
- *Adapted from UNICEF



2. Sanitary Inspection Forms: Borewell and Dugwell

Piped Systems

- Water source inadequately protected from contamination
- Treatment plant
 - non-operational, operates intermittently (e.g. broken equipment, no treatment chemicals)
 - Inadequately maintained and supervised (e.g., process control tests not carried out regularly, record keeping inadequate, poorly trained operators, etc.)
- · Cracked storage tanks and reservoirs
- Tank access covers or vents improperly sealed
- Infrequent cleaning of storage tanks and reservoirs
- Broken or leaking pipes, exposed pipes due to erosion or poor construction
- Service interruptions causing pressure loss and thus potentially allowing the entry of contaminated surface and groundwater into system via pipes and fittings
- Standing water, open defecation around tap stands
- *Adapted from UNICEF

Sanitary Inspection Form for the source of Borewell			
I. Type of Facility: Borewell			
1.	General Information:	Zone:	Location:
2.	Code Number:		
3.	Date of Visit:		
4.	Water sample taken?	Sample No FC/100)ml
II. Spe	ecific Diagnostic Information	for Assessment Risk	
1.	Is there a latrine within 10m of	of the borehole? Y/N	
2.	Is there a latrine uphill of the	borehole? Y/N	
3.	The time of time of the time of the time of the time of time of the time of time of time of the time of ti		
_	Y/N (e.g. animal breed		
4.	Is the drainage faulty allowing	g ponding within 2 m of the	e borehole?
_	Y/N		O . V / N I
5.			
6. 7.	is the removement of readily and the removement of the removement		
	8. Does spilt water collect in the apron area? Y/N		
_	9. Is the apron cracked or damaged? Y/N		
	10. Is the handpump loose at the point of attachment to apron? Y/N		
	Total Score of Risks/10		
	Risk score: 9-10 = Very high; 6-8 = High; 3-5 = Medium; 0-3 = Low		
3 , 1 3 , 1 3 , 1 1 1 1 1 1 1 1 1 1 1 1			
III. Results and Recommendations:			
The following important points of risk were noted: (list nos. 1-10)			
Signature of surveyor:			
Comments:			



Sanitary Inspection Form for the source of Dugwell

I. Type of Facility: Dugwell /Ringwell

- 1. General Information: Zone: Location:
- 2. Code Number:
- 3. Date of Visit:
- 4. Water sample taken? Sample No. FC/100ml

II. Specific Diagnostic Information for Assessment Risk

- 1. Is there a latrine or sewer within 30m of the dugwell? Y/N.......
- 2. Is the wall of the well-lined properly and the well covered adequately? Y/N.....
- 3. Does open defecation is prevalent or cattle-dung is found within 50 m of the ring well? Y/N.......
- 4. Does the well have raised concrete/cemented platform around its fence? Y/N----
- 5. Is there any water drainage facility available around platform of the well and does the drainage facility leads to water stagnation within 30 m of the wall? Y/N.......
- 6. Does the well have fixed stainless steel/aluminium buckets with chain pulley around its fence for drawing water? Y/N......
- 7. Is the well deep? Y/N.....
- 8. Does the water of the well appears visibly clean? Y/N.....
- 9. Is there any other source of pollution within 10 m of the well? (e.g. animal breeding, cultivation, roads, industry etc) Y/N.......
- 10. Was the well chlorinated during last 7 days Y/N......

 Total Score of Risks /
 Risk score: 9-10 = Very high; 6-8 = High; 3-5 = Medium; 0-3 = Low

III. Results and Recommendations:

The following important points of risk were noted: (list nos. 1-10) Signature of surveyor:

Comments:

b. Local Water Security

Water being a depleting resource hence it is important to use it sparingly. To protect the water source various methods of Water resource management can be adopted for planning, developing, distributing managing the optimum use of water resource. One such method that can easily be adopted by rural as well as urban households is Rooftop rainwater harvesting, which would help the communities to understand the importance of water. The communities can be trained to utilize the rainwater for households. The other method that can be adopted by the community is



collecting surface runoff in underground tanks or wells. Roof top rainwater harvesting can be adopted in schools too.

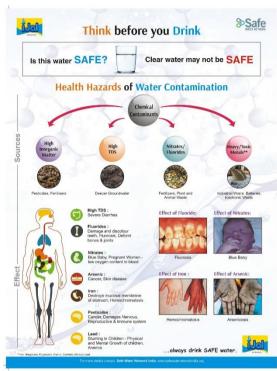


Module III: Water Quality and Water Conservation

Water Quality

Water quality defines the chemical, physical, biological, and radiological characteristics of water. It is very important to balance all these characteristics to have clean and safe drinking water. To maintain a check on water quality, frequent tests should be conducted.





Water Conservation

India is facing a fresh water crisis. India has just 4% of the world's fresh water — but 16% of the global population. The total potential area to be brought under the micro irrigation (drip and sprinkler) in India is 42.2 million hectare of land; however, only 3.9 million hectare of land or 9.2% of the potential is currently under micro irrigation⁴.

Water conservation is critical so that we use our limited water supply wisely and care for it properly.





⁴ K. Palanisami and S. Raman, 2012. "Potential and Challenges of Upscaling Micro Irrigation in India



Key Definitions:

Coagulation: It is the process of adding chemicals like alum and rapidly mixing the chemical in untreated water to distribute it evenly. The untreated water produces positive charges to neutralize the negative charges on the particles. The particles then stick together to form larger particles, which can be easily removed.

Sedimentation: A water treatment process uses gravity to remove suspended solids from water. This can be done by using still settling chambers where the solids settle and clean water flows out into the filtration units.

Filtration: It is the process where water is passed through a filter medium like sand, gravel, etc. to remove impurities from water.

Disinfection: It is the process of removal or killing of pathogenic microorganisms present in water.

Storage: The purified water is then collected into clean tanks for drinking purpose.

DESIRED OUTCOME OF CHANGE		
Topic	Delivery Mechanism	Timeline
Water Quality	Through field visits, live demonstrations; e.g. with field test kits, audio- visuals and presentations, hands on training	Training of the audience: 3 -4 months Evaluate through behavioral change for the next six months from the date of implementation.

Audience

This module is aimed at the following target groups:

Trainer	Audience to be trained
Teacher	Students and immediate circle of influence (parents)
ASHA Didis	Expecting mothers, mothers with new born babies, adolescent girls
Anganwadi Workers	Mothers, expecting mothers
Public Health Department Officials	Other officials of the department, wider community
District Water and Sanitation Committee	Wider Community, District officials
Pani Samiti (VWSC)	Community
Sarpanch / GP Members	Community

Learning Objectives of this module

Understanding the importance of clean drinking water and its quality maintenance and developing a change in behavior at the completion of the module. The various aspects will be covered by field visits, live demonstrations, hands on training, presentations to be delivered to the target audience followed by requisite evaluation at the end of the program to track change in behavioral pattern of the people.

Training on Water Quality:





To measure the quality of water certain standards are followed. In India, we follow the Bureau of India Standards BIS: 10500 to maintain water quality to check the quality of drinking water. Given below is the India Water Quality Standards BIS: 10500 (2012 version):

S. No.	Key Water Quality Parameters	Unit	Acceptable Limit	Permissible Limit in the			
Physic	Physical/ Organoleptic						
	Colour	Hazen Unit	5	15			
	Turbidity	NTU	1				
	cal / Inorganic	1410	<u>'</u>	<u> </u>			
	pH		6.5 - 8.5	6.5 - 8.5			
	Electrical Conductivity	μS/cm ⁻¹	-	0.0 0.0			
	Total Dissolved Solids	mg/L	500	2000			
	Total Hardness	mg/L	200	600			
	Ammonia	mg/L	0.5				
	Free residual Chlorine	mg/L	0.2	1			
	Non Carbonate Hardness	mg/L	-	-			
	Calcium Hardness (CaCO3)	mg/L	-	-			
	Alkalinity to Phenolphthalein	mg/L	-	-			
	Total Alkalinity to Methyl Orange	mg/L	300	300			
	Calcium	mg/L	75				
	Magnesium	mg/L	30				
	Sodium	mg/L	-	-			
	Potassium	mg/L	-	-			
17	Chloride	mg/L	250	1000			
18	Sulphate	mg/L	200	400			
19	Nitrate	mg/L	45	45			
20	Selenium	mg/L	0.01	0.01			
21	Zinc	mg/L	5	15			
22	Mercury	mg/L	0.001	0.001			
23	Lead	mg/L	0.01	0.01			
24	Cyanide	mg/L	0.05	0.05			
25	Copper	mg/L	0.05	1.5			
26	Chromium	mg/L	0.05	0.05			
27	Nickel	mg/L	0.02	0.02			
28	Cadmium	mg/L	0.003	0.003			
29	Nitrite	mg/L	0.02	0.02			
30	Fluoride	mg/L	1	1.5			
31	Iron	mg/L	0.3	0.3			
32	Silica	mg/L	-	-			
33	Arsenic	mg/L	0.01	0.05			
Microb	iological	•					
34	E. Coli	per 100 ml	Absent	Absent			
35	Faecal Coliforms	per 100 ml	Absent	Absent			
36	Total Coliforms	per 100 ml	Absent	Absent			

Water Quality Tests

To maintain standard quality of water fit for drinking it is essential that the water and the source be tested frequently. Given below are the methods used for testing water quality on field.



a. How to use pH meter?

Calibration of the pH meter

- All pH meters need to be calibrated periodically. If your pH electrode is new
 or has not been used for a while. Calibrate it, proceed with conditioning of
 your pH electrode prior to use (store overnight into HI 70300L buffer storage
 solution).
- Dip pH electrode into HI 7007L pH 7.01 buffer first. Wait for the reading to stabilize and adjust the pH meter to read 7.01 on the display.
- Rinse the pH electrode with distilled or tap water.
- Dip the pH electrode into HI 7004L pH 4.01 or HI 7010L pH 10.01 buffer and wait for the reading to stabilize.
- Then adjust to read accordingly. Calibration is done and your meter is ready to use.

How to use the pH meter?

- Remove the protective cap and turn on the pH meter.
- Immerse it in the water to the maximum immersion level.
- Stir gently and wait for the display to stabilise.
- · Record the reading.
- Rinse the electrode with distilled / mineral water after use.
- Cap it and store.



b. How to use the TDS meter?

- Switch on the TDS meter.
- Shake: Always make sure to shake excess water off the meter before dipping it into a water sample, even if it's the same water.
- Stir/tap: After dipping the meter in the water, always lightly tap it against the side and stir the meter to remove any lingering air bubbles or electrical charges.
- Positioning: When taking the reading, always make sure to hold the meter straight up without it touching the sides or bottom of the glass/beaker/cup. The probes should be suspended as close to the center of the water sample as possible.
- Time: The longer the meter is in the water, the more accurate the reading will be. Hold for about 1 minute /till the reading stabilises on the display screen
- Temperature: 25 degrees Celsius is the ideal temperature for measuring TDS, conductivity readings.
- Precaution Rinse: If switching between very low and very high ppm water, always rinse the probes with distilled water to avoid any build-up.
- Do not use the cap as a receptacle for testing water TDS?
 The cap is for storage and protection only. For best results, use a larger beaker, cup, glass, etc., so there is a larger volume of water that will be tested. Additionally, to ensure a long lifespan of your product, the TDS/EC sensors should be stored dry.





c. How to use Global Positioning System (GPS)?

Step 1: Check if the batteries are properly installed (pre-installed).

Step 2: Turn on the device by pressing button on right hand lower side of the device (on the side where 'light' is written).

Step 3: After the device is turned on, it begins to acquire the satellite signals. The device may need a clear view of the sky to acquire satellite signals.

Step 4: You can save the waypoint / location through 'Mark Waypoint' option on the screen. Go on the option and click done.

Step 5: Device can be controlled by the joystick built on the upper right hand side

Step 6: Data can be shared stored on the device with any other compatible device wirelessly or with USB cable in the kit.

Step 7: Register the device on https://my.garmin.com (join the GPS device to your system)

- Click on 'Create one' below the account sign in details
- Enter your Name, Email address and create a password
- After logging in, under the Home tab click on the register button to register the device
- Follow the instructions and download the communicator if required (it will ask automatically)

Field Test Kits (FTKs) to Assess Water Quality

Multiparameter Water Quality FTKs can be used for testing the water quality. The method to use the test kits have been explained below.

Topics to be covered:

- H2S microbial test kit
- Iron
- Nitrate
- Fluoride
- Arsenic

a. How to use H2S Test Kit for microbial contamination?

Each box contains 10 vials.

Storage:

Hygroscopic: Keep the vial tightly closed and away from light.

Control vial: Add bottled / package water into the vial up to the arrow mark and incubate it. After 24 hours it appears blue. Use this to compare results from samples.

Directions of Use

- Fill vial with sample water to be tested, up to the arrow level.
- Swirl to dissolve the powder completely.
- Close the cap and incubate it by storing at 35-37 degree for 24 -48 hours.
- The next day observe the turbidity with or without the change of the water solution.
 - If the medium shows turbidity with blue / purplish colour it is not fit for drinking.
 - Black colour with turbidity indicates Salmonella or Citrobacter bacteria
 - Blue colour indicates E. Coli
 - o Bluish purple colour indicates Vibrio
 - Dark purple colour indicates Klebsiella
- Add a few drops of Dettol / phenyl to the bottle before discarding it.



b. How to use Iron Test Kit?

- Each box contains:
 - 2 Reagent bottles: 010A (Reagent bottle for solid reagent); 010B (Reagent bottle for solid reagent)
 - Marked glass test jar with spoon
 - Color chart

Directions of Use

- Take 5ml water sample in agua check. Test jar provided.
- Add one spoonful reagent 010A & one spoonful of reagent 010B.
- Mix contents thoroughly by swirling. Allow to stand for 5min.
- Match the correct colour and read the mg/L(ppm) Iron from the colour chart.

c. How to use Nitrate Test Kit?

- Each box contains:
 - 3 Reagent bottles: 013A (Reagent bottle for solid reagent),013B (Reagent bottle with dropper), 013C (Reagent bottle for solid reagent)
 - Marked glass test jar with spoon
 - Comparator color chart
 - o syringe.

Directions of Use

- Take 1.0ml of water sample in aqua test jar provided.
- Now add one spoonful (~0.2G) of reagent 013A shake well.
- Add 5 drops of reagent 013B.
- Add 1 spoonful (~0.35g) reagent 013C.
- Shake well. Allow to develop the color for 5 minutes.
- Make the volume of solution up to 10ml mark with Distilled water.
- Match the correct color and read the mg/L (ppm) Nitrate-N from the color chart.

d. How to use Fluoride Test Kit?

- Each box contains:
 - 2 Reagent bottles: 012A (Reagent bottle with dropper), 012B (Reagent bottle with dropper)
 - Marked glass test jar
 - Comparator color chart

Directions of Use

- Fill the agua check test jar with 10ml sample.
- Add 3 drops of reagent 012A. Mix the contents well.
- Now add 8 drops of reagent 012B. Mix the contents and allow to stand for 4-5 minutes.
- Match the developed color with color chart provided and read the level of Fluoride, mg/l (ppm).



e. How to use Arsenic Test Kit?

- Each box contains:
 - o 2 Reagent bottles: AS-01, AS-02
 - o Arsenic (As) Test Strips
 - Reaction Glass bottle with cap
 - Plastic syringe
- Each test field on test stick contains mercury (II) bromide. Toxic by contact with skin. Store the kit below 30°C in dry place.

Directions of Use

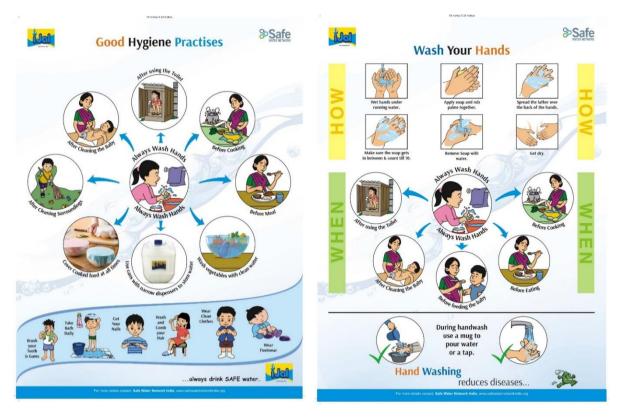
- Use syringe to add 5ml sample solution into the reaction vessel.
- Add 1 measuring spoon reagent AS/01 and swirl reaction vessel gently for 1 min.
- Add 1 measuring spoon reagent AS/2.
- Remove only as many test sticks as are required, and reseal the container immediately after use. Do not touch the test paper zone.
- Insert test strip with test field 2cm into reaction vessel and clamp it with lid.
- During 12 minutes' reaction time swirl gently the reaction vessel. The test field should not get in contact with the sample.
- After 12 minutes remove test strip from reaction vessel, dip it for 2 seconds with the test field into water, shake off excess liquid.
- Compare test field to color scale.

Module IV: Hand Washing and Hygiene

Purpose of the Module

This module explores the option of effective WaSH implementation through improved behavior around the practice of hand washing. The feasibility of the module and its applicability is viable only when there are appropriate hand washing provisions made available especially in schools. Hand washing as an activity becomes imperative to be implemented at schools because studies suggest that lack of hand washing practices lead to increased rates of diseases such as Cholera, Typhoid, and Dysentery in addition to diarrhea and frequent vomiting. The module aims at providing the requisite provisions of Hand washing, its importance and the infrastructure required for successful behavioral change. With better water, sanitation and hygiene facilities comes improved functioning within people, more attentive students at school, more protection from illness and decreased rate of absenteeism. Improved hand washing provisions is a pathway that will lead to reduced expenditure on doctor's fees thereby ensuring savings as well a healthy family.





The module lists out the various learning objectives and aims at generating a framework to be used as a guide by WaSH ambassadors/ implementers/ facilitators or trainers for stimulating discussions through awareness creation, initiating interventions, for capacity building and training to realize the dream of behavioral change around hand washing.

DESIRED OUTCOME OF CHANGE				
Topic	Delivery Mechanism	Timeline		
Hand Washing and Hygiene	Through audio-visuals / live demonstrations and presentations	Training of the audience: 3 -4 months Evaluate through behavioral change for the next six months from the date of implementation		

Audience

This module is aimed at the following target groups:

Trainer	Audience to be trained
Teacher	Students and immediate circle of influence (parents)
ASHA Didis	Expecting mothers, mothers with new born babies, adolescent girls
Anganwadi Workers	Children under the age of six, mothers, expecting mothers
Public Health Department Officials	Other officials of the department, wider community



Learning Objectives of this module

Understanding the need, steps and moments of hand washing with soap and develop a change in behavior at the completion of the module. The various aspects will be covered by presentations to be delivered to the target audience through requisite evaluation at the end of the program to track change in behavioral pattern of the people.

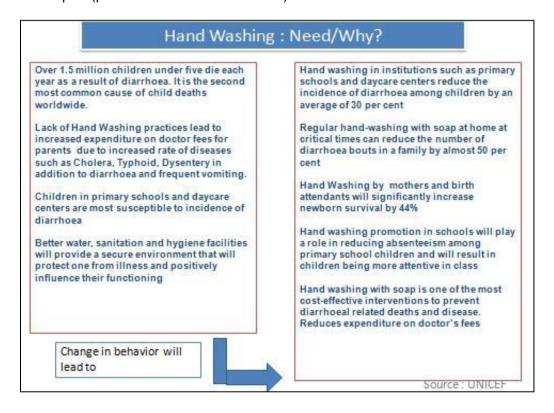
Topics to be covered:

- 1. Need of Hand Washing
- 2. Steps of Hand Washing
- 3. Moments of Hand Washing
- 4. Create an enabling environment for hand washing
- 5. Monitoring and Evaluating the change in behavior

1. Need of Hand Washing

The most important part of the module is to lay a concrete foundation for the effective implementation and behavioral change. Trainer must begin with understanding basic information around the prevalent hand washing practices followed by the audience. It becomes imperative to then understand the factors that will influence the change in behavior. This can be done by asking them to answer simple questions as if how often do they hand wash. Do they always hand wash before eating? Is soap and water always available during hand wash?

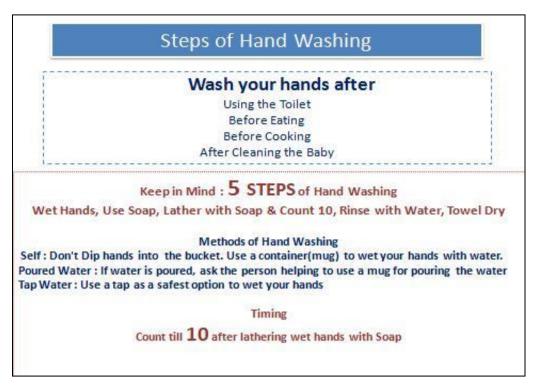
Based on the above information collected, she or he must try to understand the various misconceptions associated with Hand washing amongst your audience (like hand washing without soap, hand washing before critical moments takes a lot of time, forgetting to hand wash, hand washing is not linked to any diseases). Based on this, audience must know about the importance and need of hand washing through various communication strategies developed (presentation or audio-visuals).





Through appropriate communication strategies, it is important that the audience first understands and acknowledges the need for hand washing with soap.

2. Steps of Hand Washing



If hand washing can lead to so many changes and save children from diseases, it becomes important that through live demonstrations, the steps for hand washing are clearly communicated. Live demonstration will make it easier for the audience to follow. Additionally, also point to the various methods of hand washing and the common mistakes during hand wash.

It is very important to hand wash using an appropriate container such as mug / vessel so on and not dip hands. Dipping hands lead to further contamination and does not serve the purpose.

Timing: Important especially for children to remember the timing in mind. Through live demonstrations, make children count till 10 after lathering wet hands with soap followed by rinsing.

Live demonstrations with children will further help them to remember the steps and the timing accurately for future. These activities will help impart necessary skills especially to children in order to realize behavior change at a large scale.



3. Moments of Hand Washing

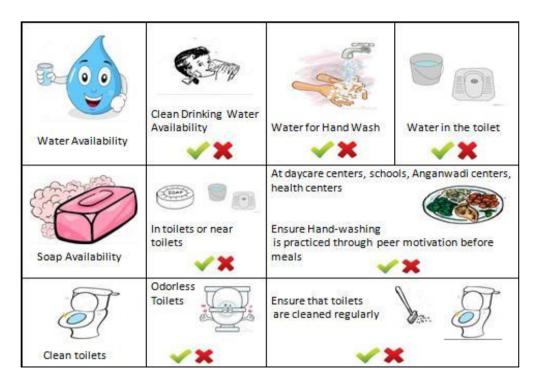


It discusses the application of the program in everyday life for the audience. The implementation would require that the moments or times at which handwashing practices is clearly understood. For reducing the bouts of diseases especially in children moments of hand washing such as before eating, before cooking, after using latrine, after cleaning the baby. All these times are critical for hand washing as the risk of contamination pre or post these events in maximum.

Communication Strategies such as audio-visuals can be developed for clarity and for target audience to keep these critical moments in mind for future.

The above visual representation can also be used as an aid to be provided or demonstrated at important places like Schools, Anganwadi Centers, Health care centers or wherever it is felt necessary by the WaSH ambassador/ trainer or facilitator.





4. Create an enabling environment for hand washing

For large-scale behavior change and ensuring long term sustainability of the program there is a need for an environment that will help in enabling good practices in the sector. For people to start practicing hand washing with soap, infrastructure must be developed to ensure that these provisions are made available on a regular basis.

The topic must cover the importance of provisions such as clean drinking water availability (so that this provision is used solely for the purpose of drinking and not activities such as hand washing), water availability for hand washing and continuous supply of water in the toilet. In addition to this, soap availability in toilets or near toilets, at important places such as Anganwadi centers, health care centers must be ensured so that hand washing with soap is practices regularly. The additional advantage of having these provisions at these centers is peer motivation to regularly practice hand washing which becomes instrumental in successful implementation and long term behavioral change.

There is also stronger need of evidence to achieve the change and measure impact. The above depiction or WaSH chart can also be used as an aid to ensure the presence of these provisions at the required places. For example, in schools. The trainer/ WaSH ambassador (teacher in this case) can form a group 5 student appointed as the Water and Sanitation Committee who will be responsible in ensuring the availability of the provisions or services in school. In case of absence on any day, they must report to the WaSH teacher who can then take necessary steps to ensure these services.

Similarly, in case of Anganwadi Centers or Health Care centers the WaSH ambassador or trainer can ensure the same.



5. Monitoring and Evaluating the change in behavior

Indicator Type	Purpose of Indicator	Measuring the Indicator	Timeline to measure
Content or Topics covered under the program	Did the audience internalize the content?	Quiz Verbal Role Play Day to Day Observation	Immediately following up
Behavioral Changes	Is the module illustrating the desired behavior change?	Direct Observation Maintenance of WaSH infrastructure in school	< 6 month from implementation>
Operation and Maintenance of WaSH infrastructure	Are the programs being implemented in the desired places properly?	Direct Observations on provisions (maintenance and operation) WaSH ambassador monthly reporting of increase in number of people practicing hand washing, number of people trained in the topic, success stories, knowledge gained and its dissemination	< 6 month from implementation>

In this module, the aim is to track most importantly the behavior change-related outputs through components or topics delivered by the trainers. Trainers deliver these topics to target audiences through interpersonal communications (presentations or handing over of the required modules), developing communication strategies for its effective implementation.

Therefore, a direct audience contact program such as these needs to be monitored and evaluated not only to measure the success but also to analyze and understand the existing gaps. This analysis will then help necessary modification in the module.

Monitoring and evaluating the program will additionally help in understanding whether the activities are being implemented as planned. Outputs can be further tracked through measuring the number of audience reached through the program and the frequency in which the audience was exposed to the messaging.

Monthly reporting will help in maintaining of records to track the progress against the desired outcome.

This module specifically also requires lot of observation whether of the practice or presence of necessary infrastructure for its successful implementation.

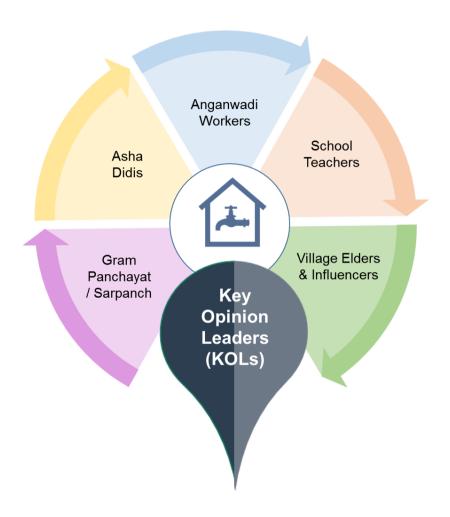
Material/ Aids required for the module:

- Audio-Visuals developed around Hand washing practice
- Leaflets for the depiction of Hand Washing steps which can be distributed to the audience or through wall paintings at appropriate places (especially in schools)
- For ensuring an enabling environment, distribution of the WaSH chart in case of a group of students or maintaining the chart to ensure the availability of various provisions at health care centers, day cares or Anganwadi centers etc.



Module V: Consumer Activation

DIY Consumer Activation



Purpose of the Module

Consumer Activation is the key to promoting safe water adoption by the communities and involves a series of activities for behaviour change to pay for safe water and not consume water from untreated sources like hand pumps, bore well etc. The set of activities included in this module are:

- Audio-visual recording in local language on tablets messaging adoption of safe water
- Mohalla meeting organize by Key Opinion leaders and propagate the use of iJal
- Electrolyser tests to show consumers the quality of water source
- Organizing school level competition.
- Door to door household campaign



Audience

This module is aimed at the following target groups:

Trainer	Audience to be trained
Teacher	Students and immediate circle of influence (parents)
ASHA Didis	Expecting mothers, Mothers with new borne babies, adolescent girls
Anganwadi Workers	Children under the age of six, mothers, expecting mothers
Public Health Department Officials	Other officials of the department, wider community
District Water and Sanitation Committee	Wider Community, District officials
Pani Samiti (VWSC)	Community at large
Sarpanch / GP Members	Community at large

Learning Objectives of this module

The objectives of the consumer activation programme is to bring change in behavioural pattern of the community. The activation activities as part of the program have helped in improving consumer attitudes towards health and hygiene, among community, which in turn has led to consumption of iJal. It will further reduce drudgery of women, water borne disease, school absenteeism.

Spiels for the Key Opinion Leaders (KOLs)

1. Spiel for the Sarpanch

Sarpanchji...we are inspired by you and your guidance in starting this great work.

You have always considered the interest of your villagers first. We are motivated to serve the village along with you.

We too wish to transform this into a healthy village like you do.

Like you Sarpanchji... other village councils and Sarpanchs have rendered their support for us. We have been successful in making many villages across India, disease free, with their support. Let us hear from our neighboring Sarpanch, what he has to share about his experience.

Greetings! I am Omprakash. I have seen many problems since the time I have been sarpanch from 2006. After consulting with this organization, we have installed a Safe Water Station in a village close by. Mr. Suleman Gori has donated land in this village to install a similar water station. Presently we are transporting water by auto rickshaws to quite a number of villages nearby.

Who does not know the importance of water in our lives? We can do nothing without water, can we?



The slightest of impurities in water endangers our life, do they not? Unhygienic water has become a way of life. This must change.

Drinking such water makes us unhealthy. We lose our immunity, become prone to disease, and visit hospitals. What about the expenses? Obviously unbearable!

Some sample of tap water from your home will help us show you what we mean. This instrument Sarpanchii is an electrolyser.

It tests the quality of water we use.

What you just saw Sarpanchji, proves what we have been saying. Can anyone remain healthy after taking this water for long?

This impure water affects our lives in more ways than you can think.

When this project is completed during your term in office, you will have made a great contribution to the lives of these villagers and to the village as a whole, for which you will always be revered.

Everyone will be grateful to you for adding such value to their lives. Taking good care of your health is as important as making progress in life.

Together – your support and our advanced technology will transform this into a dream village. This technology ensures safe and clean water for all villagers.

Horrible diseases, stained teeth, back pain...will disappear with safe water to drink. Jaundice, typhoid and cholera will be a thing of the past.

All shall be happy and cheerful and the village will ring with the jolly laughter of its healthy children. This is possible with the scientifically treated water iJal, which we bring to you. It makes us very happy that you will take on this project to maintain your health. On behalf of Safe Water Network family, we congratulate you!

2. Spiel for the Community

I am a representative of the Safe Network family. This is my friend; together we shall help you.

It makes us happy to be here. Your culture, people and lifestyle has made a profound impact on us. You can make your village an ideal place to live in. Our organization has some suggestions to offer you to affect this change. Health is your prime concern, isn't it? The issue can be taken care of right away. Why do you think the people here are suffering from poor health conditions?

Mothers, sisters and brothers! Health is wealth! Unless you are healthy you cannot enjoy the benefits of development. You have to be in good health, free from diseases so that you can fulfill your dreams. Our organization shows you the way to maintaining robust health.



This organization provides safe drinking water at a very affordable price in every village. Gorikothapally is one such village. Their Sarpanch wishes to share his experiences with you. Greetings! I am Om Prakash. Our village had a lot of issues with safe water. People were falling ill. After consulting with Safe Water Network, we had a water station installed in the neighboring village. In this village, Mr. Suleman Gori has donated land to install a safe water supply station. Now we are also transporting safe water to other villages using auto rickshaws.

Mothers, sisters and brothers! After working very hard for years, we have now successfully formed a scheme by which the entire village can become disease-free.

The root cause of several diseases is unhygienic water. There are mainly two types of effects. The first type is instant reactions like fever, diarrhea, etc...the second is latent and takes time to manifest.

Drinking unsafe water leads to unhealthy and painful bone structure. It also discolors your teeth which turn yellow. All these effects start at childhood. Therefore supply of safe drinking water for children is very important.

Now, walking with a stick, painful spine, dental problems can all be things of the past. Mothers, sisters and my dear brothers! It is definitely possible.

We have proved this all across the country not just in neighboring villages!

Due to our success, we are working across many nations in such a short span of time.

When you get a supply of scientifically treated water, everyone in the village will become healthy. You will enjoy robust health when you start drinking this safe and pure water.

Your quality of life will improve manifold. You may ask, 'Is the water I have been drinking so impure?' 'Has it been of no use?'

"Nothing happened to our forefathers who have also lived on this water; why should we be affected?"

Those days are no more, my friends! In those days one did not have to dig deep to get water. Now the ground water level has gone deeper. The deeper it is the more poisonous and impure the substances are. These are toxic and harmful. The quality of ground water has deteriorated tremendously and has become absolutely unsuitable for consumption. The answer to all these doubts and questions we will conduct an unbiased testing of water. Just take some tap water.

This scientific instrument will tell us whether the tap water is safe or not.

Sisters and brothers! This is an electrolyser test which is used to test the purity of water and is used all over the world.

It is going to be used in your village now, for the first time. It will clarify all your doubts. Here is the result! Did you see? Come, see for yourselves!



Look at the condition of the water that you use!

Imagine... you drink this impure water every day too!

Now you know why you are in such poor health and how much your health has been adversely affected by this water.

Slowly, every day, yours and your family members' health is harmed by this water.

By simply drinking this water, you have invited life-threatening diseases into your body. You know that you suffer from diarrhea, typhoid and jaundice. That's the proof!

More proof... aging before time, mottled teeth, using a walking stick...

There is an intelligent and simple solution to all these problems and we have it. Only scientifically treated water that is pure; it will safeguard your health for life. You can have this pure water too. All we need is your sanction and support.

A single affirmation will save the present and future of this village.

Come. Let us pledge to make this village a better place to live in; turn it to a healthy prosperous place and progress towards a promising future for us all, with Safe Water Network.

We at Safe Water Network, wish you and your family great health and a better future.

3. Spiel for the Anganwadi Worker

We have a common mission...to build a healthy future...a healthy generation of children from this village. May every child have a sound body and mind. Children must enjoy good health at all times. Just like you, we too want a dream village...of healthy people, happy people. We represent Safe Water Network - a world class self-help group.

Our mission is to provide clean and safe drinking water to villages like yours using scientific methods. In our experience, millions of lives have changed because of this project.

Water causes many diseases that affect mothers and children. They suffer from dental and bone related problems apart from diarrhea, nausea, cholera, typhoid and jaundice that cripple their immune system. Children often miss school too! iJal is safe and pure...drinking iJal will help your children to become healthy. Healthy children are attentive so they will do better. Consequently, all families and your village's life condition will improve rapidly.

Your village Sarpanch and respected elders have rendered their support. If you join hands, your family benefits. Your burden will reduce when you have a healthy family.

Throughout the country, there are Asha Didis who help us. Our Asha Didi, here, wishes to share her thoughts with you today.

I am Sunitha, an Anganwadi worker. Children between 0-6 years, women and expectant mothers benefit from our services. We inform you about the adverse effects of water borne diseases caused by unsafe water and the benefits of drinking iJal.



We are trying to help you become healthy by providing clean, pure and safe drinking water for all. We believe that every child has the right to be healthy. Being short does not mean that the toddler needs less water! All our body's functions depend on water. Active children need water frequently. Water maintains our body temperature, greases our joints and promotes muscular functions.

Are you aware that 75% of brain development takes place by the time the child is 5 years of age? If a child learns at this tender age, that drinking safe water is good for their health, they will make it their habit. They will become strong enough to fight diseases.

A newborn is 80% water. Growth and development of the baby is dependent on the intake of safe water along with breast milk, which provides all the nourishment. As the baby grows, this has to be supplemented with pure and safe water. When you give safe drinking water to your child, he or she becomes healthy and develops immunity to fight diseases. A small change can make a big difference. A healthy child will lead the village towards progress. Don't you think it is very important to inculcate this habit of drinking iJal, which is safe and pure, since early childhood?

Children learn through imitation – you should set examples by drinking iJal. Water that is safe, plays a crucial role in development of healthy body and mind...so our future can be free of diseases. Will this project not help your village to be a healthy and happy one? Help us to help you, your children and family members. Let us create a strong bond and make this project a success so that you reap and enjoy the benefits. The mothers and children of this village should understand, learn, and talk about iJal after analyzing. Let us build a better, healthy and wholesome life for all in this village.

The village air must thunder with the booming laughter and happiness of our children.

4. Spiel for the Asha Didi

Let us change the lives of the people in this village with your help. Change for the better. Forever, Change the lives of these people...with safe drinking water.

Think of an expectant mother. The change starts from her....with the beginning of a new life. We all know the importance of good nutritious food, especially when one is expecting. Taking folic acid, iron and calcium is not enough unless she gets clean and pure water that is safe to drink. Unhygienic water is sure to affect her health.

Almost 75% of the baby's development takes place before birth – in the mother's womb. For proper growth and development during this time, drinking safe water is very critical.

The infant is dependent on breast milk after birth. Breast milk alone gives the infant the strength to fight diseases and builds immunity.



The unborn baby gets all the nutrition from the mother; 90% of breast milk comprises water and the rest is sourced through other nutritious elements in food.

iJal is your solution to safe drinking water. When the expectant mother takes iJal, she bears a healthy baby. When all such women start drinking safe iJal, all families benefit, your entire village will make remarkable progress.

iJal is scientifically treated water from Safe Water Network, which keeps both mother and child free from water borne diseases. Only when a family is healthy, can it develop and progress. When one family progress, others will follow and so will your village. Together we can build a healthy, strong and prosperous nation.

Your village Sarpanch and elders have placed their trust and supported iJal. Now we must pledge to contribute our bit and turn this village into an ideal one.

You do wish that the mother is healthy and happy, so that she can take better care of her child, don't you? Every mother wants her child to be healthy.

Polio – the killer disease – has been eradicated because of timely vaccination and your sincere effort. We are very close to doing the same with diarrhea, cholera, typhoid and jaundice; all shall be free of these life-threatening diseases.

Every day more and more children fall prey to diarrhea, jaundice, dental problems and bone diseases. People use walking sticks; look much older than what they are – joint problems have become a way of life! Surely, you would want to help them.

Let us pledge to change this village. All these diseases can be prevented if we make a small change today. As the saying goes 'Health is wealth' – a healthy village will flourish and thrive. Together we can change for the better. Let us start now.

5. Spiel for the Registered Medical Practitioner

We, with your support will change the life of all who live in this village for good! We will change your lives with safe drinking water.

Dear Doctor – we are delighted to see you work so hard to make this village a disease free one. Whenever someone is ill, he or she first thinks of you. You are the one who is called to help.

For their sake you have given up every other concern in your life – you have dedicated your life for their well-being! Who knows better than you do how important water is for our lives. We are completely dependent on water to live. The slightest impurity in water affects us tremendously.

Pollution and increase in population have imposed a heavy burden on our water resources, as you know. We need to dig deeper as the ground water level has reduced. Moreover, the



water has become highly toxic with impurities like fluoride and so on. The villagers who are ignorant about this continue to consume the same unhygienic water.

This polluted and impure water is the cause behind so many diseases that your people suffer from – typhoid, cholera, mottled teeth, sickness, weak bones and poor skeletal structure.

Drinking this water leads to numerous health problems in villagers. Now you can be assured that such problems will not occur in the village.

Doctor, you are an extraordinary person! You have dedicated yourself to the service of others. The villagers place their complete trust in you – you are God to them. If anyone in this village is worthy of such respect, it is you – you are the most learned and wise member of this village. We will appreciate and welcome your support in imbibing in the villagers that good habit of drinking safe water.

Like you, it is also our mission to change this to an ideal and healthy village. Dear doctor, just as you are here to support our cause, many other doctors have also helped us. Together we will fulfill the dream of a disease free healthy village.

Let us try this test – please give us some water. Dear doctor, this is an instrument – electrolyser – it tests the quality of water.

Dear doctor, you have just witnessed how this instrument proved what we have been saying. Can anyone in this village be healthy after drinking this polluted water?

This village's status can change completely with your support and our technique.

Just as sound medical treatment requires right medication, likewise, new technology is needed to treat impure water. This modern technology will enable the villagers to get safe drinking water.

There will be no more pain of bent back, weak bones or mottled teeth when this safe water supply comes to your village.

All those life-threatening diseases will disappear as well! We can do much more by getting iJal to this village.

Safe Water Network family extends deepest gratitude to you for taking the initiative of making your village a healthy and happy place for all.

Meeting the Sarpanch:

- The representative to reach the selected village and meet the Sarpanch / Ex Sarpanch and a few influence leaders (Village Leader)
 - Safe Water Network team to identify and share the details of the key stakeholders
- The Safe Water Network representative meets the village leader and takes him through the communication with the help of the tablet
 - The representative will keep it interactive with questions and discussion



- during the communication
- The representative will throw at him an open water challenge and take him through the water demo
- He will then highlight the long term health problems that it can lead to in case of regular consumption of this water
- o He closes his discussion with his acceptance and support for the cause
- He then requests him to introduce him to the other KOL (Asha Didi, Anganwadi, RMP, etc.) of the village for their support as well

Meeting other Key Opinion Leaders (KOLs):

- The Safe Water Network representative meets the KOL with the help of the Village leader
- He takes them through the communication along with the demo in the similar way
 - o The communication for KOL is different from the Village leader
- Once he has taken the KOL through the communication, he seeks their support in spreading their message to the community at large

Consumer Mobilization

• With the help of the KOL the representative will arrange for a gathering of around 20-30 people at one location. Hold 9 such meetings in each village.



- The location can be central (under a tree) for men and children
- o The location can be one of the KOL house in case of women and children
- The representative needs to do at least 2-3 locations to spread the message to the larger audience and reach out to different section of the village



He will go door to door to invite the audience saying

"Namaste! Hum Safe Water Network naamak samajsevi sanstha se aaye hain. Hamara kaam har gaon mein swachh pay-jal uplabdh karwana hai. aap jis paani ko saaf samajhkar pitey hain, asal mein wo ashudhh aur swaasth ke liye hanikarak hai. Aapki zindgi si judi kayee beemariyon ka karan yeh ashuddh paani hai. Agar aapko lagta hai ki aapka paani saaf aur swachh hai to hamare paas apna paani kee jaanch ke laaiye aur asliyat khud apni aankhon se hee dekh lijiye."

- The representative will conduct the session at these location with the help of KOL
- The KOL to be used to introduce the Safe Water Network team to the villagers
 - This would add to the credibility of Safe Water Network as KOL enjoy the respect and trust of the village community
- Once the introduction is over the rep will start his session with his introduction again followed by some interactive questions to break the ice
 - o How many HHs in this village
 - Key occupation of villagers
 - How many children going to school
 - Key source of water, etc.
 - Dreams for family and kids
 - Water sources in the village
 - Health condition of the community
- Post the ice breaking he will start his communication with the help of flipchart and audio tape
 - The communication needs to be engaging and interactive with questions to the audience in between
 - o The rep should take relevant pause and put in local example, etc.
 - The rep should challenge the audience (before the demo)
 - Ask some kids to collect water from local source and get , he needs to make sure it is not an RO or filtered water but direct from source
 - While the kids are getting the water he should introduce the Electrolyser Test to the audience
 - Once the kids get the water he puts it in the glass tumbler from the demo kit and places it in front of them along with iJal tumbler



Demo: Neeru Agniparikshan



Safe Water Network India technician displays the impurities in ground water at Neeru Agniparikshan (Water Test) camp at Mecharajpally village in Telangana

Pre-launch Can Sale Program

Once the plant is ready, we would need a strong village wide movement to drive enrollments for the program. At this stage, we will mobilize the stakeholders we had touched before and address any fresh queries or reservations they may have and then facilitate a mass movement to drive awareness and participation. We begin the can sale program and enroll a minimum of 200 households.





Launch

Creating buzz about the opening of the iJal Station in the village and make them experience the station and make them feel welcomed. Also, establish the station as the center of health excellence.

Approach: Ensure maximum participation for the launch to signify a community movement and mass participation. The first step to this will be ensuring presence of all KOLs for the launch by giving them important roles for the opening of the station and address the assembled community. Also to get participation from all villagers all caste and groups, we need to ensure we have a camp which will not be a sufficient reason for them to come but also establishes ourselves as the torch bearers of health.



Coconut-breaking ceremony, Speeches, Plant Process, Can Sale Program

Sustenance

To ensure that we achieve 100% adoption and block any lapses

Approach

- Village Mapping / Tracking the Safe Water Network representative will map the entire village households and track their usage
- House to house contact a team will contact all households and based on their status, give a spiel on iJal
- Mohalla meeting the rep is association with the KOL, should organize a mohalla meeting every month and propagate the use of iJal.
- Communication for current user the rep should greet the current user and communicate on other usage of iJal like for cooking
- Communication & strategy for non-users should handle the objections raised by non- users and try to invite them to the plant and give a tour of the facility and the process of purification
- Barriers identification & solutions



Some Activation tools

At the site – we will place a site board announcing the arrival of the plant and place the pledge board that the villagers had signed in our earlier interaction with the community. The pledge board with showcase the whole community's involvement and participation to this movement, which in turn will help us drive 100% participation from all, parts of the village right from the R1 to R4.

In the village – directional signage will be placed in all village clusters to announce and create anticipation for the iJal station. The placing of this directional signage will also signify that the iJal plant is for anyone and everyone





School Contact Program:

- Water challenge demo
- Drawing Competition





Freedom from waterborne diseases

- iJal Slogan Lyrics
- Slogan Competition
- Race Competition



Stencil Competition

- Ab na hoga Ulti, Dast ya Haija ka vaar, Jab le aayenga hum iJal apne dwar.
- Subah ho ya Shaam, iJal peekar rakho sehat ka dhyan.
- iJal piyo, swasth raho.
- Daant aur haddi ki pareshayion ko dur bhagao, iJal ko ghar mein lao







USER GRID

S. No	Topic	User	Aid Required
1	Human Body and Importance of Water	Teacher, Asha didis, Anganwadi Workers, Public Health Departments, DWSC, VWSC/ Pani Samiti/ Sarpanch or GP members	Puppet shows for school students to introduce the topic Leaflets/ Flip Charts and Visual Depictions of Human Body and various other concepts to target audience Requisite field visits for children and other target to drill in a sense of understanding about the various unprotected sources of water and how for a healthy body and mind it is important to drink safe water from a reliable source
2	Basics of Water availability, keeping water source safe, local water security	Teacher, Asha didis, Anganwadi Workers, Public Health Departments, DWSC, VWSC/ Pani Samiti/ Sarpanch or GP members	Field visits required showing the structures for safekeeping of the drinking water source and water resource management structures
3	Water Quality	Teacher, Asha didis, Anganwadi Workers, Public Health Departments, DWSC, VWSC/ Pani Samiti/ Sarpanch or GP members	Field Test Kits required for demonstrations and hands on training
4	Hand washing and Hygiene	School, Asha didis, Anganwadi Workers, Public Health Departments, DWSC, Pani Samiti/ VWSC, Sarpanch/ GP members	Audio-Visuals developed around Hand washing practice Leaflets for the depiction of Hand Washing steps which can be distributed to the audience or through wall paintings at appropriate places (especially in schools) For ensuring an enabling environment, distribution of the WaSH chart in case of a group of students or maintaining the chart to ensure the availability of various provisions at health care centers, day cares or Anganwadi centers, etc.



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ABOUT SAFE WATER NETWORK INDIA

Safe Water Network, a New York based not for profit, has been working alongside communities in Ghana and India since 2009 to establish decentralized and locally-owned community water purification systems that provide affordable, reliable and safe off-grid drinking water.

Safe Water Network India is a non-profit registered Trust in India since 2009. It has 12A, 80G and FCRA approvals and also a licensing agreement with Safe Water Network. Over the past ten years Safe Water Network India, has established more than 300 safe water stations called 'iJal stations' in the Indian states of Maharashtra, Telangana, and Uttar Pradesh providing access of safe water to over one million beneficiaries. We work along with local governments (Panchayati Raj Institutions) and enable self —help group, local communities / entrepreneurs by providing training, tools and support to enable financially sustainable iJal stations. Working with government and other stakeholders, our priority is to document the success of this approach and, working with other entities, reach millions in need of safe water through its broad-scale replication. We publish the India Sector Review, share best practices in the sector through our field insights and spotlights that are disseminated nationally through our 'Beyond the Pipe' forum and internationally at the Stockholm World Water Week, We work with urban local bodies for city water delivery assessments and are the key resource center of Ministry of Jal Shakti, Department of Drinking Water and Sanitation.

For more information on Safe Water Network please visit www.safewaternetwork.org



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