# **ODF SUSTAINABILITY**

Notes and Readings for the Trainers & Field Functionaries

Draft Version 1.0

Compiled by

R Ramesh P SivaRam

Centre for Rural Infrastructure (CRI)
National Institute of Rural Development & Panchayati Raj
Rajendranagar, Hyderabad – 500 030
www.nird.org.in

## **Preface**

India's sanitation story - achieved through the Swachh Bharat Mission – has made the developing nations all over the world to look up to India for lessons and inspiration. It's reported that over 97% of rural households today (December, 2018) have access to toilet, where as it was hardly 37% when we started this sanitation mission in 2014. It's over 60% progress made in about 50 months' time. That's remarkable, indeed. The world looks at it, as an amazing story – going by the size of the country India is.

Sustainable sanitation for all is our goal. However, studies conducted (NARSS, 2017-18) on the use and maintenance reveal that by and large about 10% of the toilets constructed are not in use. Therefore, action must be initiated on sustaining the ODF status of villages so as to narrate our ODF Story completely satisfactorily. There are difficult terrains, and water stressed areas; and there are people in remote rural pockets who think 'it's okay to do it in the open, or that toilets are either for women or for people in the city who do not find any place for open defectation. This is a challenge – not new though - that the sanitation professionals / *Swachhagrahis* confront with, today.

The Ministry of Drinking Water and Sanitation (MDWS) has been drawing the attention of the State Governments time and again (through Guidelines and Advisories), on the need to focus on sustainable outcomes through SBM-G, rather than paying excessive attention on the outputs, per se. The ODF status of villages reported in the MIS of the Ministry's website, should be an indisputable reflection of what is witnessed on the ground in Indian villages. In order to achieve this, post-ODF interventions that offer continuous engagement with ODF communities are pivotal.

The notes, guidelines and advisories issued by the MDWS provide a road map for ODF Sustainability. This document in your hand puts together all those notes and guidelines in order to set out the actions, actors and resources needed to ensure ODF-Sustainability and the benefits of SBM interventions to sustain for long. In this handbook, except Units 2, 5, & 10, which are original contributions of the authors, the rest are all compilation of materials mainly from the MDWS, besides other sources. It is compiled and brought out as a source of reference for the trainers and field functionaries to draw ideas from.

R Ramesh P SivaRam

Hyderabad December, 2018

## **CONTENTS**

## **UNIT - 1: MISSION: CLEAN INDIA**

- It's Entirely a Different Narrative Now
- What SBM-G Envisages Achieving?
- F Diagram
- Ten Reasons
- Distinguishing Features of SBM-G
- Mission Priorities
- Balance in Focus

## UNIT - 2: ODF - STORY WITH A GAP

- ODF Definition & Meaning
- Objectives of ODF-S
- Story with a Gap: Working Sheet
- Key Initiatives for ODF S
- Principles of ODF-S
- Framework for ODF, ODF+ and ODF++

### **UNIT – 3: SANITATION INFRASTRUCTURE**

- Technical Sustainability
- Inappropriate Technology & Defective Toilets
- Retrofitting: Toilet Repair and Maintenance

## **UNIT – 4: INSTITUTIONAL ARRANGEMENTS**

- Institutions at various levels
- Role of States in ODF-S
- Role of Districts / Blocks
- Role of Gram Panchayats & Local Committees
- Role of Swachhagrahis
- Financial Incentives for Swachhagrahis

## **UNIT – 5: BEHAVIOUR CHANGE COMMUNICATION (BCC)**

- Communication Challenges
- Influencing Behaviours
- One Initiative Two Perceptions
- Understanding Resistance
- Breaking the Resistance to Change
- BCC Tools for Sanitation Professionals
- What do we do with the Laggards the damp match sticks?

## **UNIT – 6: TOILET MAINTENANCE AND CLEANLINESS**

- Toilet Maintenance & Cleanliness
- Maintenance of Community Toilets / Common Toilets
- Hand washing: Why? How? Exercise

## UNIT – 7: PIT EMPTYING AND FAECAL SLUDGE MANAGEMENT

- Pit Emptying
- Faecal Sludge Management (FSM)
- Treatment and Disposal
- Expected Outcomes of FSM
- For Exposure Visits

### **UNIT – 8: PROGRAMMING FOR ODF-S**

- Annual Implementation Plan (AIP)
- Approaches to ODF Verification
- Three Dimensions of ODF Sustainability
- Key Programme Elements
- Formulating an ODF-S Plan (State-wide / District-wide plans)
- Continual Engagement Post-ODF
- ODF Sustainability Activities
- How did they do it?
- Monitoring, Evaluation & Reporting

## **UNIT – 9: FINANCING FOR ODF SUSTAINABILITY**

- Elements to include in Budgeting
- Activities Prioritised
- Source of Funding for ODF Sustainability

## **UNIT – 10: ODF+ and ODF++ Villages**

- The Next Big Step Post-ODF
- Solid Waste Management (SWM)
- Subsidiarity Principle
- Setting up SWM Units in Gram Panchayats

### **ANNEXURE**

- 1. Glossary
- 2. ODF Verification Guidelines

# **Abbreviations**

AIP : Annual Implementation Plan

AWC : Anganwadi Centre (Child Care Centre)

BCC : Behaviour Change Communication

CCDU : Communication & Capacity Development Unit

DWSC : District Water and Sanitation Committee

FSM : Faecal Sludge Management

GP : Gram Panchayat

HH : Household

IEC : Information, Education and Communication

IHHL : Individual Household Latrine

IPC : Inter-Personal Communication

MDWS : Ministry of Drinking Water and Sanitation

MLALAD : MLA Local Area Development (Fund)

MPLAD : MP Local Area Development (Fund)

NRDWP : National Rural Drinking Water Programme

ODEP : Open Defecation Elimination Plan

ODF : Open Defecation Free

ODF-S : Sustainability of Open Defecation Free Status

PHC : Primary Health Centre

RWS : Rural Water Supply

SBM-G : Swachh Bharat Mission-Gramin

SLRM : Solid and Liquid Resource Management

SLWM : Solid and Liquid Waste Management

VWSC : Village Water and Sanitation Committee

ZP : Zilla Parishad

# Unit - 1

# **Mission: Clean India**

### It's a Different Narrative Now

Sanitation coverage is rapidly growing and the country is fast moving towards becoming Open Defecation Free (ODF). India was notoriously called the World's Capital of Open Defecation. It was extremely shameful and absolutely unacceptable. The rapid progress we have made in ensuring every household has a toilet, (and use them) put forward completely a different narrative now. While in as many as 90 countries progress towards basic sanitation is too slow, India is demonstrating to the world that it's possible to eliminate the practice of Open Defecation with concerted efforts at all levels. India's Swachh Bharat Mission-G has become a reservoir of ideas for many developing countries to draw not only ideas, but also confidence and inspiration.

Over 97% of the Indian rural households have got access to toilets (Dec. 2018). More than 500 million Indians in rural areas have stopped defecating in the open since 2014. A pilot study conducted by the Bill and Melinda Gates Foundation in selected open defecation free (ODF) and non-ODF districts showed that households in ODF districts had 'significantly better health indicators'. The WHO (2018) states that 300,000 diarrhoeal deaths will have been avoided since 2014 when India becomes completely open defecation free in 2019. The UNICEF estimates that households in an ODF village in India saves Rs.50,000/- per year on an average. Thus, there are several reasons why sanitation is an important social development indicator. The prime of them, of course, is that it prevents spread of diseases such as cholera or typhoid.

## What SBM-G envisages achieving?

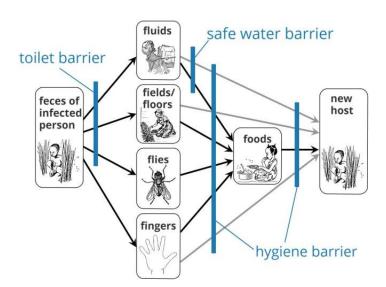
- 1. Every household must own an individual household toilet
- 2. Everyone must use the toilet for defecation, and no one should defecate in the open. It applies to the children and the aged persons in the family too.
- 3. Toilet must be kept clean. Water and soap must be available inside the toilet or very near to the toilet.
- 4. Everyone in the family must wash hands with soap after using the toilet.
- 5. Household waste should be disposed of responsibly, as arranged by Panchayat.

There is still a small percentage (about 4%) of rural people who do not have access to toilets. The surveys conducted by the National Sample Survey Organisation (NSSO, 2016) and Quality Council of India (QCI, 2017) on usage of toilets by the individuals who have access to toilets reported more than 90% of individuals are using toilets in 2016 and 2017. The other side of the story indicates that about 10% of the rural dwellers, despite having access to toilets, are not willing to use them due to reasons such as habits and poor installation etc. Enabling those families that do not have a toilet to own one; and nudging those few individuals, who have toilet, yet continue to defecate in open must be persuaded to use toilets. This shall help us write our ODF-Story in its complete form in a satisfactory tone of voice. This is what 'ODF-Sustainability Phase' is all about.

This demands us to open up the F-Diagram once again, before we can fold and donate it to other countries that may need it.

## F-Diagram

The **F-diagram** (of disease transmission and control) can be used to show how proper sanitation – particularly toilet-use, hygiene, hand washing - can act as an effective barrier to stop transmission of diseases via faecal—oral pathways. The F-diagram shows the different faecal-oral transmission routes, and possible barriers to prevent excreta-related pathogens from finding a new host.



The movement of pathogens from the faeces of a sick person to where they are ingested by somebody else can take many pathways, some direct and some indirect. Use of latrine, and

hand-washing with soap (hygienic practice) can serve as a barrier against this spread. Therefore, safe disposal of human excreta, including those of children, are strongly advocated world over. This diagram illustrates the main pathways. They are easily memorized as they all begin with the letter 'f': fluids (drinking water) food, flies, fields (crops and soil), floors, fingers and floods (and surface water generally).

## Ten Reasons why OD must be Stopped

- 1. **A National shame:** India, because of the sheer size of the country, even 15% of the households defecate in the open means about 20 million doing it in the open (WHO/UNICEF, 2015). People living in countries that have per capita income much less than India, have access to toilet.
- 2. Diarrhoeal deaths: OD is a main cause of diarrhoea. In India, diarrhoea causes one in ten deaths of all children under five. Annually 2,12,000 children die due to diarrhoea (liu et al., 2000), which is largely avoidable if everyone started using safe technologies for disposal of human excreta.
- 3. **Loss of Dignity:** defecating in the open leads to loss of privacy and dignity among women, men and children
- 4. **Environmental Enteropathy:** a sub –clinical condition leading to inflammation of the small intestine through repeated ingestion of faecal pathogens. The inflammation reduces the intestine's capacity to absorb nutrients which results in malnutrition and stunting. It also has knock-on effects on cognitive development. (Petri ,2012)
- 5. **Malnutrition:** one-third of all malnourished children in the world live in India (UNICEF, 2017). Research studies indicate (EPW, 2013) that the puzzle of persistent under-nutrition in India is largely due to (i) open defecation, (ii) population density, and (iii) lack of sanitation and hygiene.
- 6. **Stunting:** About 39 per cent of children under five in 2014 were stunted (save the children, 2017). Research studies (EPW, 2013) have come out with positive correlation between OD Practice and the prevalence of malnutrition and stunting.
- **7. Low-birth weight:** poor environmental sanitation has repeatedly been suggested has repeatedly been suggested to be a contributor to low-birth weight, which can lead to cognitive defects.
- **8. Epilepsy:** In many people, epilepsy is caused by infection with the pork tapeworm which is due to a lack of improved sanitation (Garcia et al., 2003)

- **9. Economic loss:** In India, according to a study by WSP in 2006, OD results in economic loss of about 6.4 per cent of the GDP (WSP, 2006)
- 10. Social Development Indicator: Sanitation is an important indicator of social development.

## **Distinguishing Features of SBM-G**

SBM-G is a People's Movement: SBM-G is not another toilet construction programme. It has been initiated as a 'people's movement' to achieve clean India by 2019, when the nation shall celebrate Mahatma's 150<sup>th</sup> birth anniversary. Every Indian shall pay tribute to Mahatma Gandhi on his 150<sup>th</sup> birth day by being a 'swachh citizen'. Therefore, SBM-G is a people's movement supported by the Government of India, and the state governments. Every Indian has taken a pledge and is reminding himself/herself of this the pledge on every 2<sup>nd</sup> Octoberthat I shall not litter; I shall not let others litter. [Ref: Swachha Bharat Mission Pledge]. The following could be listed out as distinguishing features of the Mission, and the Mission Priorities.

- SBM-G is Prime Minister's Flagship Programme + a People's Movement
- Behaviour Change at the heart of SBM-G strategy (IEC & BCC)
- Focus on outcome from Toilet Construction to achieve ODF
- Use of Innovative techniques, technologies and partnerships
- Children and Women act as agents of change
- Trained grassroots level workers (*swachhagrahis*) have been engaged in villages
- Flexibility and autonomy to states
- Results based approach award and incentivize the good performers
- Renewed focus on Solid and Liquid Waste Management (SLWM)

## Other Features include:

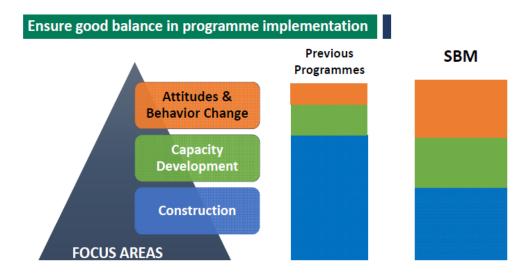
- Districts have been identified as the key units of implementation of the SBM-G.
- The District Magistrates / District Collectors have been identified as the lead persons to coordinate the activities with the aim of making the district ODF.
- Baseline Survey to identify the number of households without toilets / with dysfunctional toilets / with dry latrines etc.

- Identify total number of eligible households without toilets agree on a timeframe (map available days)
- Set Target ODF Backward Planning Design
- Prepare 'Open Defecation Elimination Plan (ODEP)'

### The SBM-G Mission Priorities are:

- Converting insanitary latrines to sanitary latrines
- Geo-gagging of all SBM-G toilets
- Verification of all ODF declared villages
- Dysfunctional toilets made functional
- 100% entry of coverage data for ODF declared villages
- Marking villages with 100% coverage as ODF in the MIS

### **Balance in Focus Areas**



- Attitude and Behaviour Change: How to change the traditional practice / customary practice of people. How to make them change OD habit, and start using a toilet.
- Capacity Development: Capacity to help organize materials for construction;
   Capacity for community mobilization; Capacity to communicate and change behaviours.
- **Construction:** Having enough number of trained masons to construct and involve in retrofitting.

# Unit - 2

# **ODF** - Story with a Gap

'Story with a Gap' is a simple exercise, but very much impactful to make communities think about ODF story in its entirety. This exercise helps identify the gap in ODF Story narrated by a Gram Panchayat. In other words, there might be missing elements in the 'ODF story', which the GP has ignored and self-declared as ODF. This/these 'missing element(s)' might be a vital indicator for a village to be called ODF in the real sense of the expression. Identifying that gap and taking action in order to fill in that gap is the purpose of Story with a Gap exercise. Before we get to know how to do this exercise, let us take a look at the definition of: ODF and ODF-Sustainability.

**ODF:** No visible faces found in the environment / village; every household uses safe technology options for the disposal of faeces.

**ODF Sustainability:** Safe disposal of human excreta is sustained post the attainment of ODF status.

## **Objectives of ODF Sustainability**

- a) Maintain the ODF status of the villages, Gram Panchayats, Blocks and Districts and States over a continued period of time
- b)Ensure that people continuously use the toilets built and practice safe and hygienic behaviours
- c) The assets created under SBM continue to remain functional and there is a decentralised operation and maintenance arrangement for upkeep and maintenance of assets.

Good sanitation practice can help address malnutrition, stunting, wasting and so on. Therefore, the focus under SBM-G is on establishing ODF communities rather than just toilet coverage.

## Story with a Gap

To carry out this [Story with a Gap] exercise, a 'definitional ODF picture' is depicted in the table at page -12. It has three columns. However, when we begin this exercise in a Gram

Panchayat (Gram Sabha) we'd better open up a discussion asking the people a searching question in a humble way. *Is our claim of 'ODF status' an honest reflection of what exists here, or... we have hastened up a little declaring ourselves ODF, when we are yet to reach 'the complete ODF stage'?* In other words, how honest are we, in calling ourselves an 'ODF village'? Do you think there are some gaps in our ODF Story, which we mute and leave unstated?

This will serve as the key question that open up discussions on the gaps – bit by bit. The procedure to carry out this exercise goes like this.

- 1. The third column is preset with vital ODF indicators. Please see the table at page 12.
- 2. The trainer asks the community to fill in the first column that puts across the 'Existing State' of the village with regard to OD/ODF status. This is done for each indicator at every row of column-3, and the response recorded in Column-1.
- 3. If the community members feel that the existing state is exactly in line with the ODF state, they give a tick mark under YES. Repeat it for every indicator in column-3 one indicator at a time.
- 4. Where YES is ticked, that particular ODF-indicator has been fulfilled at the village in question. Where 'NO' is ticked, the community members have to discuss and fill in Column-2, what action needs to be taken so as to fulfil the requisites of this particular indicator.
- 5. That means in order to narrate the 'ODF Story' of that village as a completed story, what action needs to be taken. This decision is made during the exercise. The (i) action to be taken, (ii) date by which action is to be taken, and (iii) the person incharge of completing and reporting to the PRI are resolved and passed as resolution.
- 6. Thus, at the end of this exercise, Column-2 stands as a list of action to be taken so as to become eligible to truly declare ODF status.

This exercise unveils and exposes the gap in the ODF Story narrated by a Gram Panchayat. Then it prods action to be taken in order to tell the ODF story with a sense of completion and accomplishment. This also serves as a kind of ODF status verification exercise, or reverification exercise.

## Story with a Gap: Working Sheet

<b>Existing State</b>		Fill in here actions to be taken to move from Existing State to ODF state	ODF State
(1)		(2)	(3)
Yes	No	(2)	(3)
	- 1.0		
			Every household has IHHL toilet /
			or access to community toilet.
			100% of the toilets constructed are
			used (including community toilet)
			100% of the people use toilet. No
			one defecate in open
			Child feces are disposed into the
			toilet only.
			Fly-proofing of toilet. There is
			proper water seal in all the toilets
			All the toilets are twin pit toilets
			only with proper leach pits.
			Safe septage disposal is possible, by households that use septic tank
			Hand-washing before meals
			Trand-washing before means
			Hand-washing after using a toilet
			Availability of soap and water in or
			near the toilet
			No visible faeces found in the
			village / environment
			Functional school toilets with water
			(separate for boys & girls)
			Proper use of Anganwadi toilet
			Proper use and maintenance of
			community toilet /common toilet

## **Key Initiatives for ODF Sustainability**

- ODF Verification at two levels first one within 3 months of a village declaring itself ODF and a second verification within 6 months of the first verification.
- Continued IEC in villages to ensure households do not revert to open defecation
- Funds allocation for fixing dysfunctional toilets
- Incentive grants for community-managed piped water supply scheme in ODF villages
- Technical cells being established in all states by ODF-S activities and for taking up Solid and Liquid Resource Management

• Special initiatives for GOBAR-DHAN for managing cattle dung, farm waste and other organic waste.

## **Principles of ODF Sustainability**

Following principles will inform the work on ODF Sustainability:

- State Annual implementation Plan(AIP) to have an ODF-S Sub-Component detailing activities, outputs and resources needed for sustaining the SBM outcomes
- Provisions for repeated and concurrent engagement and intervention with ODF communities to be built in
- Continued investment on awareness, behaviour change, capacity building and community mobilization for collective action to maintain the ODF status
- Dedicated human resources and budget for continuous engagement with community and development of appropriate media products and vehicles on sustaining ODF status.
- Bolstering support to the States for sustainability related work through financing the performance incentive grant window of SBM-G;
- Sustainability monitoring through an independent and credible verification system on implemented together with the states.
- Financing of ODF-S activities mainly through IEC and SLWM Funds

## Framework for "ODF, ODF + and ODF ++ villages"

	Elimination of ID practices	Access to toilets	Conveyance and treatment of faecal waste	
ODF village	<ul> <li>Not a single person found defecating in the open</li> <li>No traces of faeces are visible in the village at any time of the day.</li> </ul>	<ul> <li>All the households in the village have access to either own toilet or functional community/public toilet.</li> <li>Floating population in the village has an access to sufficient and functional public toilets</li> </ul>	<ul> <li>All the toilets in the village have twin leach-pit.</li> <li>All toilets are connected to a harmless disposal system.</li> </ul>	
ODF+ village	<ul> <li>Not a single person found defecating in the open</li> <li>No traces of faeces are visible in the village at any time of the day.</li> </ul>	<ul> <li>At least 80% of residential houses in the village have access to own toilets.</li> <li>Remaining households and floating population in the village have access to functional community/ public toilets.</li> </ul>	<ul> <li>Toilets are connected to one of the twinpits at any given point in time.</li> <li>Regular and safe collection, conveyance and treatment of all the faecal matter.</li> </ul>	

ODF++ village	Not a single person found defecating in the open	• At least 95% of residential houses in the village have access to own toilets.	All toilets are connected to safe disposal system.
	No traces of faeces are visible in the village at any time of the day.	<ul> <li>Remaining households, public places and floating population in the village have access to functional community/ public toilets.</li> </ul>	<ul> <li>Regular safe collection, conveyance and treatment of all faecal matter and waste water including septic tank effluent and gray water.</li> <li>There is proper system in place for regular collection of solid waste, proper segregation and scientific disposal.</li> </ul>

# Unit - 3

# **Sanitation Infrastructure Issues**

## **Technical Sustainability**

This is basically about technical sustainability; appropriateness of the toilet technology put to use in a given area; and about defective / dysfunctional toilets. The SBM-G recommends, and has extensively promoted the twin-pit toilets with honey comb (brickwork) leach pits model toilets. However, in reality, some households have gone for single pit toilets with deep holding tanks; some have gone for cement rings in place of 'brickwork leach-pits'; some have gone for precast superstructures, while others have constructed with cement blocks or bricks.

Twin-pit toilet design comes with a junction box that has provision for diverting faecal matter into one leach pit for a period of 3-4 years. This means, by design, the pipeline carrying the faecal matter to one of the leach pits remains closed while the other is in use. This is to provide for alternate use. It's possible due to incorrect construction, both the pits may be getting filled simultaneously; or the slope at the junction box does not serve the purpose it is supposed to; the pit may have been closed below the ground level, allowing rain water to easily enter the pits etc. Such works might cause toilets to become dysfunctional soon. They must be attended to, so as to enable households to use toilets 100% of the time.

Ensuring conversion of household's dysfunctional toilet to functional toilet is important work under ODF-S. It involves:

- Repair of broken pan
- Leakage in pipelines
- Chocked pipelines
- Blocked drains
- Broken doors / cracked Walls
- Broken / Leaky Roof
- Addition of a second pit to a single pit toilet
- Construction of soak pit with septic tank
- Pit emptying

The same holds good for shared-toilets and institutional toilets too. In other words, facilitating ODF sustainability activities in schools, PHCs, sanitary complexes, anganwadi

centres, marketplaces, bus stops etc must be part of ODF-S activity. A simple work not attended to on time, might render a toilet fall under disuse after sometime. Constant monitoring is required to attend to repairs, and to ensure technical installations are intact and functional.

- Sanitation Infrastructure Issues
- Inappropriate Technology & Defective Toilets
- Retrofitting
- Training for Retrofitting

Sl.	Technical Issue	Suggestion
1.	Beneficiaries express space constraint as a reason for not constructing a toilet.	<ul> <li>Design options which require minimum space need to be explored.</li> <li>In places where IHHL is not possible, options of community toilets (toilet shared by 2 – 3 households) can be explored.</li> <li>In places where there is space for IHHL block but no space for septic tanks, group septic tanks (larger septic tanks connected to multiple toilets as per technical requirements) can be explored.</li> </ul>
2.	Beneficiaries express lack of money to invest in toilet as a reason for not constructing toilet	<ul> <li>Options for household level sanitation loans may be arranged through SHGs/MFIs, which can be repaid after the beneficiaries get the incentive amount credited to his/her account.</li> <li>The GP can also arrange for Rural Sanitary Marts or private materials suppliers to provide materials on loan.</li> </ul>
3.	Quality of construction is hampered when toilets are built at cheaper rates through contractors	<ul> <li>As far as possible, IHHL construction should be beneficiary-led. Let the beneficiaries construction their own toilets         <ul> <li>the way they want, with bathroom, water storage tank etc.</li> </ul> </li> <li>Appropriate designs and norms for toilets and septic tanks need to be shared with beneficiaries /contractors to avoid substandard quality of construction.</li> <li>The use of precast toilets, at scale should be discouraged. Mostly it is this that brings quality related issues.</li> </ul>
4.	Issues associated with Community toilets.	Community (shared) toilets should be opted only when IHHL are not possible at all due to space constraints.

5.	Toilet remaining not used stating 'water scarcity' as a reason	<ul> <li>Do people have water for everything else (cooking, washing, vessel washing, bathing etc)? If yes, this is to do with mindset. Resolve it accordingly.</li> <li>If water scarcity is really genuine, see if the problem can be addressed through NRDWP / RWS Department.</li> </ul>
6.	Toilet remaining not used stating some	
0.	minor problem technical issue	
	Toilet remaining not used due to	
7.	genuine technical reasons, which	
	might involve masons, and money.	
	Single pit toilets have been	
8.	constructed. There is fear that it might	
	get filled. What should be done about	
	constructing a second pit?	

**Source:** adopted from 'Asian Institute of Urban Affairs'.

# **Repair & Maintaining of Toilets**

In the case of community / school toilets, it is good to have the responsibilities scheduled as presented below.

Task	Who is responsible?	Frequency of cleaning	Materials and spare parts needed	Tools & Equipments needed
Repair doors, if they do not lock				
properly				
If vent pipe is blocked pour				
water down through it to remove				
spider webs				
Check the condition of the				
superstructure for cracks on the				
walls and floors				
Repair the cracks in the walls				
and floor				
Check the condition of the roof				
Repair the roof, if required				
Check that the vent pipe and fly				
screen are intact				
Repair the vent pipe and fly				
screen /mesh				
Check for any loose soil around				
the foundation of the latrine –				
refill and compact the soil.				
Check whether latrine pit is full				
De-sludge of latrines / empty the				
pits				

# Unit-4

# **Institutional Arrangement**

## **Institutions at Various Levels**

The ODF Sustainability Guidelines of the MDWS recommends that states / districts continue engagement with villages post-ODF. The following are the institutions involved

Level	Officer / Person In-charge	Supported by
State	tate Principal Secretary in-charge of	
	sanitation / Mission Director	IEC / HRD Consultant
District	District Collector / CEO(ZP)/ DDO/	District Coordinator, DWSC,
	DRDA/ equivalent senior most officer	IEC Consultant,
	in the district in-charge of	Zilla Swachhata Parerak
	implementing SBM-G.	
Block	Block Development Officer	Block Coordinator, Local
		NGOs
Village	GP functionary / Secretary / Village	Swachhagrahis /
	Development Officer	Local NGOs

The work at Post-ODF phase may most probably, involve 10 - 15% infrastructure-related / retrofitting-related and 85 - 90% to do with IEC and BCC-related. Infrastructure-related issues have already been dealt with in Unit - 3. And source of funds to resolve issues related to infrastructure and retrofitting are dealt with in Unit - 9. The job of institutions at various levels - during the Post-ODF Phase - is squarely on robust planning of IEC / BCC activities, and systematic execution for being able to witness the change in behaviour in favour of sanitation. IEC strategies, planning and their effective implementation is the key to the success of ODF-S.

#### **Role of States**

- The states shall prepare Annual Implementation Plan (AIP), where Annual Communication Plan shall be an integral part. Every district shall prepare a District Swachhata Plan. Guidance is available (at Form no B-09 on the SBM-G MIS).
- The States are expected to lead the IEC/BCC Plans and be responsible of BCC interventions across the states.
- The States shall ensure that planning and budgeting exercise for IEC/BCC activities has been done for all the districts.

- The States shall engage relevant agencies and form partnerships to effectively implement the ODF-S related IEC/BCC activities.
- The IEC/BCC activities should be carried out in the post-ODF phase in order to
  continue focus on issues such as cleaning and maintenance of toilets, emptying of
  toilet pits by the household, continuation of usage, developing Panchayat level
  mechanism to ensure sustainability, ensuring water for sanitation purposes, and
  SLWM activities.

#### **Role of Districts**

Districts are required to:

- Develop detailed IEC Plans for the district (fill relevant section of the District Swachata Plan Form B09 of the IMIS)
- Develop an Annual Calendar of Activities focussing ODF-S
- Ensure enrolment of one or more IEC Consultants at district level
- Enlist the services of the Zila Swachh Bharat Prerak in scaling up IEC activities in the district focussing on ODF-S
- District level social media engagement: Active use of platforms like Facebook, Twitter and WhatsApp for spreading the message.
- The District / Block shall ensure that there is at least 1 Swachhagrahi in each village.

### **Role of Gram Panchayats**

At the Gram Panchayat level *Swachhagrahis* are the foot soldiers of the SBM-G. They are the motivators for bringing about behaviour change with respect to key sanitation practices. The GP functionaries must consider that the role of *Swachhagrahis* is one of the key factors in achieving ODF status and sustaining it through post-ODF activities. *Swachhagrahis* shall work closely with the Gram Panchayats, and Nigrani committee. Swachhagrahis themselves are to work like institutions in themselves so as to achieve and sustain ODF status.

### Box – 4.1 Who are Swachhagrahis?

A Swachhagrahi is a volunteer who come from any background, including a local NGO worker, ASHA worker, ANM, anganwadi worker, waterline man, pump operator, hand-pump mechanic, youth club member, SHG member, or from the general public living in the village. S/he can be resident of the same or neighbouring GP; must have access to a toilet and should not be practising OD; and should possess

good socialising and communication skills in local language. Some state governments have issued detailed government orders for engagement of *Swachhagrahis* (previously known as *Swachhata Doots*). This is a voluntary position, and not envisaged to be permanent in nature. However, the *Swachhagrahis* must be paid appropriate incentive for their contribution to the Mission. The general practice recommended is *Swachhagrahis* are engaged by the District Water and Sanitation Committee (DWSC) on recommendation of the GP concerned. The DWSC may consider giving them a cap, a T-Shirt (men) / Apron (Female) with SBM-G branding. They may also get resource materials on community mobilization techniques; appropriate sanitation technologies; and ODF-S etc. They shall undergo 5-day training on community mobilization / triggering / and on programming for ODF-S.

### Role of Swachhagrahis in ODF-S

In a nutshell *Swachhagrahis* are expected to support ODF sustainability in (a) retrofitting and improvisation of assets; and (b) reinforcing improved sanitation behaviour at GP level. They shall:

- 1. Assist in construction / retro-fitting of defunct or poorly built individual toilets / institutional toilets in the villages. Facilitate self-construction of toilets by any new families / households post-ODF declaration of the village.
- Communicate about financing options for use, for the up-gradation of sanitation and hygiene facilities in homes so that households can develop better facilities – better quality facilities.
- 3. Participate in and support the Gram Panchayat (GP) in the preparation of a time-bound village level action plan to eliminate open defecation practice. Participate / facilitate conducting 'Story with a Gap' exercise in order to make the households and the GP functionaries realise *that honestly there is a gap in our ODF-narrative, and that gap must be plugged*.
- 4. Conduct ODF verification of the village: first verification, second verification and subsequent sustainability verifications.
- 5. Assist GPs towards continuous engagement through organising functions / events to celebrate ODF status during Republic Day, Independence Day, 2<sup>nd</sup> October etc.
- 6. Ensure continued functioning of the village Nigrani Samiti, conducting village meetings, organisation of *ratri chaupals* (night meetings) etc. on issues of cleanliness.
- 7. Ensure institutionalisation of ODF practice in the village through putting up boards such as 'Welcome to such & such ODF Gram Panchayat'; and influence passing a resolution in Gram Sabhas on making toilet use as a universal norm for that GP.

- 8. Assist GP take action in order to ensure water supply to toilets so that scarcity of water does not force people to go for OD.
- 9. Canvass for the construction and create awareness on sustainable operation and maintenance of institutional toilets such as toilets in schools, anganwadis, health centres, and at marketplaces etc. This includes organising awareness programmes in schools /AWCs on hand-washing practice, and menstrual hygiene practice for girls.
- 10. Involve in developing a plan for setting up a Solid and Liquid Resource Management System in Gram Panchayat. Guide the GP implement the plan, and connecting the GP to resource institutions that might have the expertise in waste management.

## Financial Incentives for Swachhagrahis

Sl.	Activities	Allowable payment of Incentive from IEC funds		
1.	Geo-tagging of each toilet in the village	Up to Rs.5/- toilet		
2.	First verification of each household in the village (within 3 months of ODF declaration of the village) along with IPC /IEC activity to ensure community awareness and participation leading to ODF-S sustenance.	Up to Rs.10/- per household (verification and IPC)		
3.	Second verification / subsequent sustainability verification of each household (within 9 months of ODF declaration of the village along with IPC/IEC activity to ensure community awareness and participation leading to ODF-Sustainability	Up to Rs.15 per household (verification and IPC)		
4.	Ensuring conversion of households' dysfunctional toilet to functional toilet. For example:  Repair of broken pan  Chocked Pipes Blocked drains Broken doors/walls / roofs etc.			
5.	Ensuring retrofitting of previously constructed toilets (as per safe technology)  • Addition of a second pit to a single pit toilet  • Construction of soak pit with septic tank  • Construction of separate pits for in situ toilets etc.	Rs.25/- toilet		
6.	Ensuring following SLWM activities in the village and creating public awareness on the operation and maintenance of the assets created  Construction of <i>pucca</i> and covered drains (onetime)  Construction of community soak pits (onetime)	Rs.200 per village (assuming the village will comprise of 50 – 100 households) per activity		

	• Construction of community compost pits (onetime)	
	Construction of community biogas plants	
	Ensuring activities for visual cleanliness in the village	Rs.200 per village (assuming
	<ul> <li>Maintenance of drains (monthly)</li> </ul>	the village comprises of 50 –
	<ul> <li>Maintenance of bio-gas plants (monthly)</li> </ul>	100 households) per activity
	• Cleaning of ponds, drains, streets, local markets etc.	
7.	fortnightly.	
	• Early morning / evening <i>Nigrani</i> , along with the	
	other <i>Nigrani</i> Committee members – weekly	
	• Organising <i>Ratri chaupals</i> / village meetings on the	
	issue of Swachhata / ODF Sustainability – monthly.	
	Facilitating ODF Sustainability activities	Rs.200/- per village
	• Repair and cleanliness of toilets in institutions –	(assuming the village
	schools, PHCs, community toilets and sanitary	comprises of 50 – 100
	complexes, AWCs on monthly basis.	households) per activity.
	• Observance of days of national importance viz.	
	Independence Day, Republic Day as well as ODF-	
	Day / Swachhata Day to celebrate the ODF status of	
	the village.	
	• Construction (onetime) and maintenance (monthly)	
8.	of Model Toilets at GP level / GP Office.	
	• ODF branding in the village wall writings, erection	
	of display boards / plaque announcing the ODF	
	status of the village	
	<ul> <li>Passing of resolution in the Gram Sabha for the</li> </ul>	
	following:	
	<ul> <li>ODF declaration of the village</li> </ul>	
	<ul> <li>ODF verification of the village</li> </ul>	
	<ul> <li>Post-ODF declaration, any new families /</li> </ul>	
	HHs to self-construct their toilets.	
9.	Facilitating self-construction of toilets by any new	Rs.25/ toilet.
/.	families / HH post-ODF declaration of the village	

# **Unit** – **5**

# **Social & Behaviour Change Communication**

## **Communication Challenges**

Have you ever noticed tourists trying to speak to a restaurant waiter, who doesn't understand Hindi or English? The more they are misunderstood, the louder they shout the same thing. If what you're doing doesn't work – try something different (Astrid French, 1996). This is the first lesson in Behaviour Change Communication. If you only rely on the same one or two ways you will only be successful at dealing with a few people. In other words, you won't win many chess games if you always play the pieces in exactly the same way.

SBM-G emphasizes on intense social & behaviour change campaigns (SBCC) including inter-personal communication (IPC) for achieving sustainable sanitation outcomes. Despite concerted efforts by the Mission staff, there are myths and customary practices that are deep seated in the mindset of people. They require unseating for new behaviours to get imbibed. The myths include: (i) children faeces are harmless; (ii) toilet is for women, and the youth; (iii) aged people can be let free to follow their traditional practice of doing it in the open so that they feel comfortable, and so on.

Behaviour change is about persuading, convincing and influencing for common good. It's not about pleading, begging, cajoling for short-term changes in behaviour. It's not about sweet-talk, which people might forget once you are gone. Behaviour Change Communication (BCC) aims at bringing about lasting change in one's behaviour. It's about impacting on the mind-set in order to alter one's thinking towards self-regulation, even when no one is noticing him/her. In the end it is to reach improved quality of life for individuals and society.

## **Influencing Behaviour**

We typically want to influence target population to do one of the following things:

	What behaviour influence we try?	Sanitation Behaviour (For example)
1	Accept a new behaviour	Accept that children and aged people should also use toilet, and it is not enough if only women in the family use toilet.

2	Reject a potentially undesirable	Reject throwing household /kitchen wastes in
	behaviour	streets corners.
3	Modify a current behaviour	Keep the toilets at home clean. Leave the public
		toilets clean for the next user.
4	Abandon an old undesirable	Abandon completely defecating on the streets; in
	behaviour	railway tracks; and in open fields. Use toilets.
5	Continue a desired behaviour	Continue to train every child in the family to use
		toilets, and demonstrate how to keep clean
6	We want people to switch a	Switch to hand-washing with soap after using a
	behaviour	toilet, and before touching food items.
		Switch to using an improved sanitary latrines, from
		unimproved ones

(From a generic one found in Nancy R Lee & Philip Kotler, 2012. 'Social Marketing: Influencing Behaviours for Good', adapted for sanitation marketing)

## One Initiative; Two Perceptions

Perceptual difference (between the rural people and the change agent) is one of the important reasons, why people resist change. Mental orientation or (one's world view) comes from the content of communication one has been exposed to and the thoughts s/he has entertained. Often, poverty can also affect a person's perception and the way s/he communicates. In the following box (see Box - 5.1) perceptions of rural people are culled from a study on rural sanitation published in Waterlines Journal (Webster, 2013), and the perceptions of change agents are from the author's own experiences in rural sanitation initiatives.

	Box – 5.1: Rural Sanitation: O	ne I	nitiative - Two Perceptions		
	Perceptions of Change Agents		Perceptions of Rural People		
•	Open defecation is the most cited reason	•	Time changed our food habits. We eat		
	for the ill-health of rural people.		foods that are toxic, that's why we are		
•	Sanitary latrines solve the problem of		stunted and are getting all these diseases.		
	unsafe disposal of human excreta.	•	Toilet is a hilarious idea for the type of		
•	Faeces are faeces - no matter if they are		house we live in. I shall construct toilet if		
	children's or adults'. All of them are		I ever manage to construct a livable		
	disease-causing.		house.		
•	Cost-effective toilet designs are there.	•	Only children and men defecate in the		
	The poor can afford.		bushes. We, women use toilets.		
•	Moreover, there is a subsidy support from	•	The latrines are there but they are not		
	the government.		goodwhen you enter, the smell engulfs		
•	Keep the toilets clean. The water seal in		you which might cause diseases.		
	the toilet pan is meant not to let smell get	•	Having a good toilet may help because I		
	out, and to prevent flies from accessing		don't want to feel that smell from poor		
	faeces. Using toilet can help save the		toilets that would cause diseases. But		
	money, you otherwise spend on getting		good toilets are for the rich to construct.		
	cured of diseases.	•	Flies and mosquitoes are there all over.		
•	Children can be trained in using toilets		How can we eradicate (or wipe them out)		
	properly, and to keep clean.		completely.		
•	Everyone in a house must cultivate the	•	Allow children and older people to use		

- habit of using toilets. It makes no sense some in the family use toilet, some don't.
- Isn't Swachh Bharat an excellent dream?
   Defecating in the open is no good culture.
   It is disease-causing, and it is an indication of cultural poverty.
- There are honey-comb brick structures that make the faucal matter decompose, which can even be touched and used as manure.
- toilets? Oh! They mess up.
- The children always mess up the latrines. I don't want to use such a toilet; I better go to the bushes where I usually go.
- I have been like this since my childhood, and everybody does it in the bushes.
- I am not the only one to feel ashamed of or feel shy about.
- Oh, when you have to clean up the septic tank, it smells the entire village. Who shall clear it; where and how to dispose it

### **Resistance to Change**

Many communication challenges arise because of differing perceptions. Your perception of things is different from theirs. Your mental orientation is different from theirs. They have been socialized in a different environment - in an environment where defecating in the open is 'usual or customary'. The challenge is about how to bring about a perceptual alignment.

'Perception checking' is a tool to help us understand others accurately instead of assuming that our first interpretation is correct. Perception checking is a cooperative approach to communication. Sometimes directly understandable, and at times, it is less directly understandable. Building empathy is one way of understanding the other person. (e.g. why toilet is not in his priority? How it feels to live in a leaky house and someone suggests you to have a toilet?)

Another way of understanding this phenomenon is, that there are several 'negative autosuggestions' that are recorded in his subconscious mind (*i.e.* I don't need; I have been doing it in the open for years, what's the need to change now? etc.). We need to 'outweigh and overshadow these negative autosuggestions with our reasoning and positive autosuggestions'. S/he must find credibility in your reasoning; and apparentness in your rationale. Your reasons must be sound, believable, convincing, realistic, true to life, deeply reflective and profound.

With your power-packed reasons you can positively influence him to a new way of thinking where s/he internally appreciates sanitation culture. It becomes compelling for him never to slip back, and s/he adopts sanitation as a way of life. Your earthly reasons must call off his subconscious mind from trying to discover new justifications in favour of open defecation. As a health and sanitation worker, do you have such compelling reasons? Or do you just

reproduce what you read on the surface of some training manual; or you reproduce in your talk what remains on the surface of your mind from an interesting lecture you heard your senior colleague delivered in a training hall.

## **Breaking the Resistance to Change**

If your reasons are locally-grounded, your message will get grounded. For example, street theatres with locally-grounded contents have proved to be very useful trigger in favour of sanitation action. But generic theatricals or non-specific theatricality as IEC tool do not work. They serve the purpose of short-time entertainment, and people forget once the drama is over. Similarly, mere facts and figures presented as series of lectures or through IEC materials do not work. They fail to connect.

We need to understand personal stories, cultural narratives, and peoples' perceptions; how the brain, mind and language work. We need to apply that knowledge effectively to make truths meaningful and to give truths the power to change the way people understand and perceive matters related to sanitation. Personal stories and cultural narratives help connect and change the way people think.

A third way of influencing one's thinking is, feeding people's mental databank with more positive autosuggestions convincingly. Then you are sure to shine as a successful sanitation professional. This demands doing a lot of homework before you get down to communicating with people. Adequacy of your preparation matters. Are you fully prepared to credibly answer their questions? It matters because if you don't succeed, they shall remain unchanged with the negative autosuggestions that flow from their subconscious mind constantly; they shall punch holes at the feeble reasons you put before them. Beware, rural people never ever tell you that they are not convinced with your reasoning. They take your unconvincing answer to reinforce their mental script of whatever negative impressions they already have about government programmes in general.

Understand that until you develop certain degree of trust – and demonstrate that you are different - it's playing see-saw only. Be consistently effective. Self-monitor your communication, and how it is received. Hold your patience to impact on the subconscious mind. In rural development practice, there is no one right way of doing anything. Use your own best judgment at all occasions (Chambers, 1996).

We have slightly touched upon the contours of human behaviour and how we try to understand resistance to a change process. Now, let us see some of the BCC theories, and tools and how they can be useful for the facilitators of Swachh Bharat Mission. Here again we have attempted to present, as lucidly as possible, various theories and tools that can be applied in the context of sanitation promotion. Nevertheless, *instruments as such do not produce excellent music. It depends on whose hands these instruments are.* It is in the competence, inventiveness and commitment of the facilitators that can spell success.

## **Behavioural Change Communication Tools**

## 1.Mental Reframing

Your brain is a story telling machine. There is a non-stop soundtrack going on in your mind, which is called 'self-talk' or auto-suggestions. It's always telling you a story – even when you are listening to a health educator talk to you about how we suffer from preventable diseases such as typhoid and diarrhea; and how toilet-use can prevent you from falling ill etc. Your mind will tell you either a Positive Story or a Negative Story - always. The self-talk could be like this.

- This small (200 250 gram?) pile is not going to make the entire India dirty.
- It doesn't matter. Most people in my village do it in open
- But I have been 'doing it in the open' for years,
- Most of us don't use toilet, are we all in the hospital, day in and day out, week after week?
- Shame... everybody does that.. I'm not the only one doing it. What shame are you talking about?
- There's not enough water available to drink, where do I find water for toilet use.
- You are right, but I DON'T WANT.
- I am habituated to doing it in open. I can't change now at this age. Let our women use your toilet.
- 'Toilets are for women'... men ...??? We don't need them.

These are often stereotypes – a widely held but fixed and oversimplified image or idea of something such as toilet-use. What we can try is 'remove the existing frame and reframe with a new one'. Reframing with songs and slogans – is a way to change the self-talk and

stereotypes. Reframing is possible through IPC – Inter-Personal Communication also. In reframing, songs on swachhata, cultural stories, street theatres, and slogans can be used as nudging tools. They slowly pervade, gradually persuade, and unsuspectingly convince. However, it's not as easy as it is said. But, the first thing is to understand what prevents them from appreciating the idea of toilet-use. What is the mental block, after all? Is it poverty? Is it habit? Is it sheer laziness? Then we can plan how to remove the existing frame in a given community. We need to design our communication messages (songs or stories or slogans or cultural stories) to remove that frame, and replace it with a positive mental frame. Besides songs and slogans, IPC can do well in removing mental frames, and creating a new one. IPC is required, where a sanitation motivator has to move 'from being at *social zone* to get at *personal zone*' to be able to strike a chord.

## 2. Pushing from Reflective to Automatic

- Our thoughts lead to actions. Actions lead to habits and habit formation. And habits form behaviour. Most of our behaviour is habitual. Habits become part of your natural-self or character. This makes you say: 'I feel free, and comfortable only when I defecate in open'. This small room is suffocating.
- Habits are a lot stronger than logic and reasoning. Your mind is so conditioned that you are almost deaf or you are not ready to listen at all. Your reflective mind (conscious mind) may, for a moment, ask you to consider using a toilet. But, immediately your automatic-self (subconscious mind, which holds a world view for you) brings in a justification why you don't need to change. That which comes from your automated self is faster, and it's a deep-seated ready-reference. It becomes habituated. How to change one's habits? The answer lies in exposing a person long enough to a new habit.
- Expose a person long enough so that inclinations become strong enough to move from reflective-self to automatic-self. Thus, behaviour change is not one-time triggering.
   Making it a habit enabling to become 'habituated' takes time and continuous monitoring and persuading through a variety of communication channels. Provide him the facility and make sure s/he uses it regularly until the habit sticks to his behavior.

## 3. Mental Availability

This is about making the message mentally available all over, until it reaches deep down into the sub-conscious mental system. It's about providing visibility and keeping mentally reminding in all possible ways. The visibility and the mental orientation that the logo of SBM-G has rendered all over India can be one good example of this. Wherever we find Mahatma's spectacle, it tells us about swachhata. No words required. Similarly, many state governments have attempted providing visibility e.g. Government of Tamil Nadu's posters on 'Doctor: *chi chi Chellappa*'. Wherever this doctor's poster is seen with '*chi chi chellappa*', it fills in your mind that defecating in open disgusting, and highly undesirable in the opinion of doctors.

### 4. Reason Vs Emotion

That open defecation causes several different diseases is well-known. People have heard about it over and over again – over a million times. They have heard it so repeatedly that such pieces of information do not make sense to them. Most probably, they shall believe if someone defecated in open in the morning, and so s/he had to be admitted in the hospital the same evening - due to cholera or jaundice. It is as if those who smoke a cigarette in the morning be diagnosed with severe symptoms of cancer the same evening. Then people will believe your reasoning. Instantaneity - 'looking for instant results is the order of the day'. This explains why 'our scientific reasoning and pure logic' does not convince them.

Although your reasons are backed with scientific facts, and your arguments are quite logical, your message falls flat. People, perhaps, hear it like a gramophone record stuck in a scratched groove, playing the same tired refrain over and over again. So, the way to get the record unstuck is to give the needle a nudge or pick it up and put in somewhere else. One good way of doing this is 'Stop talking to the head, and start talking to the heart', meaning stop reasoning out; instead, start striking at the 'emotional side of a person'. When it comes to sanitation, it is more about shaming. Exposure is the essence of shaming, and a feeling of exposure is also one of shame's (the emotion) most distinct ingredients and intimately links shame to self-image, self-respect and reputation. This is what CLTS and CAS successfully used. For instance, it's like giving a medicine to a patient with a condition: 'Never think about the black monkey when you open this medicine bottle. If you did, the medicine will not work'. Every time the patient thought about taking that medicine, the black money comes in

his mind's eye. In CAS, you introduce 'shit' and detail it out - in how many different ways shit reaches your mouth, because of open defecation. Then conclude saying: *It's your village, your shit. I am no one to advice you not to eat your own or your neighbour's shit.* This message makes every time a rural person sits in front of food, s/he feels disgusting for s/he gets reminded about the shit story – the idea of knowingly ingesting shit.

## 5.Ask 'One Influential Question'

A question – so well-known to them – but nobody ever put it so profoundly that it makes them thoughtful and deeply reflective. One ingredient of such question is that it must reintroduce some values they already know, and believe in - by tricking them. So, do not lecture. Ask them a question – definitely not in a challenging tone. Your question should sound simple but reveal a profound point. Communicating is not akin to verbal boxing, where you should win the community groups. You need not rollout your arguments one after the other aggressively – often we do it out of impatience. Remember 'The superior fighter succeeds without violence'. This is intelligent non-aggressiveness.

Don't tell them or teach them. Just ask one influential question, such as this one a Sanitation Professional asked a village woman. A village woman, whose husband is a labourer in one of the gulf countries, said: 'Let my husband come during his next vacation. Then he will decide about constructing a toilet'. The Sanitation Professional asked her one influential question: Would your husband – one his return from foreign country - feel immensely pleased if you tell him that you were showing your rear (seat) to whoever passed by, doing it in the open? Wouldn't your husband feel happy if you tell him that in his absence you decided to construct a toilet because you did not venture out to doing open defecation – behind the bush and late in the evenings? This question can be profoundly influential. It has an emotional touch. It has certain values obviously every woman recognises. It has an element of shame. It exposes the reputation of herself, and her husband. She will have no response. She can only become deeply reflective.

## **6.Creating Social Norms**

Norms are established standards of social behaviour which individuals in a group are expected to follow. They are simply rules of conduct that prescribe how one should behave so

that the society approves of it. What the society approves / disapproves, and considers important.

Social norms have been recognized to influence open defecation. Social norms are the rules that govern how individuals in a group or society behave. Any behaviour outside these norms is considered strange or uncharacteristic to those belonging to that community / clan. Put simply: *If everyone is doing it, then why can't I? Conversely, if no one is doing it, can I?* (Jacqueline Devine, 2009). There are several ways of giving shape to such social control mechanisms. Creating new social norms to operate in favour of sanitation and cleanliness can be one good way of breaking the resistance to change. There are several illustrations, from the experiences of practitioners, to prove the power of social norms. We shall refer to some of them in a short while.

A better understanding of the dynamics of social norms, and more particularly of empirical and normative expectations of a community, would greatly enhance the process of understanding how to sustain the normative expectations of a society. Some people identify social norms with observable, recurrent patterns of behaviour (such as OD). But, norms cannot be identified with observable behaviour alone as social norms also express social approval or disapproval of such behaviours. *Norms are conditional. You have to comply with it.* Social norms tell us how we should behave or how the society expects us to behave. The puzzle about Indian society is that it does not expect anyone to do it in the open, nor does it disapprove if anyone is found doing it in the open. In Indian villages, there is no social norm about open defecation practice. What we notice is empirical practice (you can call it empirical norm). So, wherever OD is practised, it is not a social norm. It can be viewed as a traditional practice or it is customary.

Social norms are things that you believe you should do, because you know everyone in your reference network expect you to do it. Do people in your society expect you to go for OD? Do people in your society expect you to use a toilet? No. Neither. Traditionally people have been doing it in the open, and so they continue to do so. There is no social expectation about it. The need of the hour is creating a social expectation that everyone should use toilet. This is creating a new social norm. Creating a new social norm involves creating a new expectation. For instance, I ask for your mobile number without asking you in the first place if you have a

mobile phone, at all. The reason is that everyone in your reference network has a mobile phone. If you don't have a mobile phone you are looked at as a strange person.

Similarly, how to make universal toilet use in rural India, a social norm? If anyone is going out, s/he must be viewed like a deviant, violating a general social norm. Social norms can be enforced formally (e.g. through sanctions in Gram Sabha meetings / Community Associations), or informally (e.g. through body language and non-verbal cues). That which starts as an enforced norm, shall slowly become a social norm, like 'you tend to keep silence in a library' – no matter there is or not, a signage asking you to keep silence. The following are some of the social norms introduced in some ODF villages.

- Whistle when you find someone is going for OD (creating a social **disapproval**)
- Vanarsena teasing and disturbing those who practice OD (creating a social disapproval)
- Garland people when they come from OD. **Disapproval**
- Walk of Pride with people who have/use toilet. (Creating a **social recognition and approval** that toilet use is the social norm/ social expectation)

How to revise and rewrite the undesirable social norms? A community may adopt norms through a variety of ways. A Panchayat can withhold or deliver services in response to members' adherence to the officially approved norms, and operant conditioning. This is explicitly outlining and enforcing behavioural expectations for social good. Once firmly established, a norm becomes part of the community's operational structure. Changing the behaviour of individuals and communities in favour of a sanitation culture, and making it part of a larger social norm.

'If I defecate in open or behind a bush, my society looks down upon me as being uncivilized'. 'I must own and use and toilet - that's the social norm here'. Let's install new habits, new norms - universal toilet use in India as a social norm.

### Box – 5.3: When will behaviour change rapidly?

Behaviour will change occur more rapidly if using a toilet is perceived as being better than previous options (relative advantage) and consistent with the existing values, experiences and needs of potential adopters (compatibility), if they are easy to understand (complexity), testable via limited trials (trialability) and their results are visible (observability). Different information exchange relationships (communication channels) have specific impacts. We need to highlight the different roles 'mass media (IEC)' and 'interpersonal' channels (IPC-BCC) can play to enhance the rapidity of adoption to toilet use. IEC can be useful for creating awareness amongst potential adopters. BCC and IPC can really take it to the next level by being effective in terms of persuading actual adoption (practically). Thus, close interpersonal communications play a key role.

**Source (adapted from):** Everett M Rogers, (1983). Diffusion of Innovations, The Free Press, London.

### Five things to remember in order to achieve Behaviour Change (Pavarala, 2014)

- 1. It is not only about the factual issue, but also about the stakeholders' PERCEPTIONS on the issue;
- 2. It is not as much about WHAT is happening, but rather WHY it is happening (key role of research in every step of the process is required)
- 3. Process observation and interaction with adopters, on-lookers, and non-adopters should be held constantly.
- 4. There must be periodical internal discussion taking place amongst the health educators on the mental blocks they identified in the community, and how they are trying to make a break through etc.
- 5. People as dynamic actors, should be made to actively participate in the process of social change rather than people perceived as passive receivers of information.

#### Narrative Patterns that Work

To achieve development goals, communicators have to use a variety of narrative patterns for different aims. It can include story telling too. They can be summarized as below.

Box – 5.4: Narrative Patterns for Different Aims				
If your objective is:	You will need a story that:	In telling it, you will need to:	Your story will inspire such responses as:	
Sparking action	Describe how a	Avoid excessive detail	"Just imagine"	
	successful change	that will take the	"What if"	
	was implemented in	participant groups'		
	the past, but allows	minds off its own		

	listeners to imagine how it might work in their situation.	challenge.	
Transmitting Values	Feels familiar to the participant groups and will prompt discussion about the issues raised by the value being promoted.	Use believable (possibly real-life) characters and situations, and never forget that the story must be consistent with your own actions.	"That's so right! "Why don't we do that all the time?"
Fostering Collaboration	Movingly recounts a situation that listeners have also experienced and that prompts them to share their own stories about the topic.	Ensure that a set agenda doesn't squelch this swapping of stories – and that you have an action plan ready to tap the energy unleashed by this narrative chain reaction.	"That reminds me of the time that I" "Hey, I've got a story like that".
Taming the rumours /grapevine	Highlights, often through the use of gentle humour that reveals it to be untrue or unlikely.	Avoid the temptation to be mean-spirited, and be sure that the rumour is indeed false.	"No kidding!" "I'd never thought about it like that before"
Sharing knowledge	Focuses on mistakes made and shows in some detail how they were corrected, with an explanation of why the solution worked.	Solicit alternative - and possibly better solutions.	"There but for the grace of God" "Wow! We'd better watch that from now on".
Leading people into the future	Evokes the future you want to create without providing excessive detail that will only turn out to be wrong.	Be sure of your story- telling skills. (Otherwise, use a story in which the past can serve as springboard to the future.)	"When do we start?" "let's do it".

**Source:** Jay A. Conger, 2013. On communication: The necessary art of persuasion, Harvard Business review's 10 Must Reads, HBR Press, Boston.

## **Principles of BCC**

- 1. Use grounded-research, not assumptions to drive your programme / programme strategies. (This helps provide clarity on the social context).
- 2. Segment the target population & focus
- 3. Use behavior theories and models to guide decisions
- 4. Involve partners and communities throughout

- 5. Beware what can be achieved through BCC and what cannot be achieved through BCC
- 6. Do self-critical monitoring of process adopted and the outcome.

## How do we construct messages?

- Can we target beliefs or behaviours?
- Clearly define behaviour to target
- Identify the belief that leads to this behaviour
- Construct a simple, strong message highlighting benefits of changing behavious.

## Looking beyond "big" media to local media

- Use means and messages that are familiar to the stakeholder group
- Draw from their context—the language and the form of delivery must be "local"
- Think of "entertainment-education"

### **Using Theatre in Education**

- Collecting stories—draw from everyday lives of people (can use participatory methods)
- Use clearly identifiable roles (not individuals)
- Include:
  - o Humour (if possible)
  - o Conflict
  - Specificity
  - o Find ways to involve the audience: as actors, or in follow up discussion

The use of the word 'audience' must be avoided in development communication, for it clearly brings in the ideas of *someone lending ears, and passivity*. Instead, try using 'participants' or 'participant groups' or 'stakeholders'. The word stakeholder comes from the word 'stake', which means 'participating and offering support or active holding of something'. Consider this example: *you can put up a tent, only if the stakes are properly grounded and strong enough*. Your message must be grounded, and locally supported with evidence to be able make an impact.

### What do we do with the laggards –the damp match sticks?

We persuade and convince people to change behaviours. We also put to use social control mechanisms to influence those who do not pay heed or listen to patient explanations. It's possible some people choose to ignore even the changing social norms in their own village. They remain unconcerned / undisturbed. The GP can resolve to take strict action against such families to the extent of refusing all service delivery - drinking water, ration commodities etc. Is this not being 'coercive' – one may ask. No. This is only speaking in the language they understand. You are only a BCC specialist. You are no psychiatrist to cure psychiatric illness of people.

## Unit - 6

## **Toilet Maintenance and Cleanliness**

### **Toilet Cleanliness**

Toilet is a perfect place for germs and bacteria to breed, if it is not kept clean. A wide range of transmissible pathogens like bacteria (e.g e-coli, and salmonella) as well as viruses (e.g. rotavirus and hepatitis A and E) can spread through poorly maintained toilets. Bacteria and viruses can be found not only in toilet bowl, but also in the floor around. Bacteria in the toilet absorb organic waste and releases gases which is the reason why we get a foul smell in the toilets. Hence toilet hygiene is very important. This applies to all types of toilets:

- Individual Household Latrines
- Share Toilets
- Community Toilets
- School and Anganwadi Toilets

### **Cleaning the Twin-pit Toilets**

- Wet the toilet pan with half mug of water. This will help easy flushing after use.
- Toilets must be cleaned after every use, and every day. For cleaning the toilet pan and the floor area, a pinch of detergent (soap) power may be used.
- It is recommended not to use chemicals such as phenol or acid in cleaning the twin-pit toilets. Acidic liquids tend to kill the microbes in the soil that otherwise help digest the harmful bacteria in the faecal matter. It prevents faecal matter from becoming compost.
- Over-use of water for cleaning can cause the pit gets filled sooner than planned.
   Therefore, it is advised to use water judiciously.
- Children must be toilet trained. Child faeces must be disposed of in the toilet pan, and flushed.
- Solid waste (used sanitary napkins, diapers, kitchen waste, sweepings etc.) should not be thrown into the toilet pan, as this would cause clogging of the pour-flush pan.

- Remember to clean the toilet brush which can spread bacteria if not cleaned after every use. Wash toilet brush with disinfecting detergents. Toilet brush should be changed at least once in every six months.
- Toilet must be kept open for ventilation and for the sun light to enter at least for one or two hours daily especially after cleaning the toilet. Sunlight is an excellent disinfectant. Mop the floor, and allow it to dry.
- Wash your hands thoroughly with soap every time you come in contact with toilet.

The tips provided above for cleaning of toilets, are applicable to all types of toilets.

### **Maintenance of Shared Toilets / School Toilets**

Community toilets / shared toilets and toilets in schools as well as in the marketplaces / bus stands are constructed to the requirements of users. However, often, there is no proper arrangement for regular cleaning of such toilets. This is more so, when it comes to public/community toilets. Schools without proper compound walls, often, face the problem of locals messing up the toilets. To prevent school toilets (and shared toilets) from being messed up by local miscreants, compound walls are necessary. As far as shared toilets are concerned, users on rotation-basis can clean the toilets they all share and use or they must put in place a system that is acceptable to all of them. However, for public toilets and community toilets pay-and-use arrangements work the best. The point is public toilets and community toilets must generate its own income to be able to maintain it clean. Contracting it out seems to be the best option. Where these types of toilets are let open to public use for free, the chance of their falling to disuse is very high. Institutions such as Sub-Health Centres / Primary Health Centres, Panchayat Office, and *Anganwadis* must employ sanitation workers to keep clean.

### **Hand-washing Practice**

Hand-washing with soap at critical (key) times has proved to be effective and highly cost effective means of reducing the incidence of diarrhoea, and other infectious diseases. Hand-washing is important especially 'after using a toilet, and before touching food'. The impact of washing hands with soap has wider implications, as hands are vectors that can transport disease agents from humans to humans, directly and indirectly. Furthermore, hand-washing habit contributes to maintaining health, hygiene, and safety. Unfortunately, the global rates of hand-washing with soap, however, are very low particularly among the poor, who also

face the greatest threat from infectious diseases. Thus, there is a need for hand-washing stations, and wash-basins close to the toilets. Soap and running water must be made available - be it individual household toilets, or school toilets or toilets in institutions.

### **Demo: Hand-washing**

People generally think washing hands with water after using toilet shall help them keep their hands clean. Unfortunately it is not so. You can demonstrate it through some fun-filled exercises. We present below, a demonstration that can help people understand why wash hands with soap after using a toilet.

*Materials Required:* Fifty gram pocket of red chilli powder (*mirchi* powder)

Activity: Step -1: Ask one of the community members to volunteer to help you in doing a simple exercise. Let one or two persons come forward.

**Step – 2:** Hand him/her the red chilli powder, and a glass of water. Ask him to mix it like a paste, using his left hand.

Step -3: Once the paste is ready. Give two, three glasses of water and ask him to wash his hand very clean, until he is satisfied that his hands are truly clean. But do not give soap.

**Step – 4:** Ask him to 'rub his left eye' with the hand that he used for mixing the red chilli powder. (The volunteer would start feeling a burning sensation in the eye. Let him talk, now).

**Step** – **5:** Ask the community members / participants, why is he feeling the burning sensation despite the fact that he washed his hands with water to his entire satisfaction. Discuss.

**Step – 6:** Give the volunteer soap or hand-wash liquid and ask him to wash hands clean. (You can use this opportunity to practically show how to wash hands clean, with soap)

**Step – 7:** After washing with soap, ask the volunteer to rub his right eye. Let him say if he feels burning sensation in his right eye. He would say: No. Ask the people: why.

**Step – 8:** This is the time to explain that washing hands merely with water after using a toilet shall not help us keep our hands clean. We need to inculcate the habit of washing hands with soap after using a toilet so that there is no trace of faecal matter remaining in the hands.

A Variant: A variant of this demo can be done using 'egg' also. Ask the participants to break an egg, and mix it in a bowl using his hands (for making omelette). Ask him to wash his hands clean to his full satisfaction – but only with water. Now, ask him (and others around) to smell the hand he used for mixing the egg. It smells egg. Why? Use this opportunity to

explain the importance of hand-washing with soap after using a toilet, and before touching food. You can also explain the importance of sneezing / coughing into a hand-kerchief.

Remind people of the F Diagram that human hand can be one of the ways to transmit bacteria found in human faeces. While shaking hands, we may transmit such bacteria to each other.

### **Demo: How clean is your hand?**

This exercise is called: 'Nimbu Pani' or lemon water. This is another funny exercise that makes everyone understand how clean / unclean one's hand is, at any given point in time.

Materials Needed: Water - safe to drink and two glass tumblers (or glass bowls)

**Step – 1:** Take a glass of water. Call a volunteer (who thinks his/her hands are clean) to participate in this game.

**Step -2:** Ask him / her to drink a few sips of water from the glass. She drinks a sip of water. (Ask her: Happy? She nods in agreement or says: yes. Happy.)

**Step -3:** Ask her if her hands are clean. She says: 'yes'.

**Step – 4:** Ask her to wash her hands into a second glass, using the water from the glass where she sipped water, a little while ago. That means 'hand-washed water' is captured in the second glass. [You shall notice the colour of the water has turned like lemon water (*nimbu pani*).

**Step** – **5:** Now, ask the same person to drink that water (which looks like lemon water). [She refuses to drink, smiles and walks away].

**Step – 6:** Ask her, what happened? [Discuss: It's the same water you sipped a little while ago. And you said your hands were clean. Water flew through your clean hands only. But 'how did the colour change'?]. Explain how clean our hands are. How our hands come in contact with door knob, handle, bike handle, on tables, on chairs etc. and collect dirt/ dust. These could be the same door knob, chair, table etc. that hundreds of people touched unsuspectingly. Therefore, handwashing with soap is important.

There are good videos available on these subjects. You can play.

(Play a good video on 'how to wash hands' clean and germ-free) (Play a good video on 'proper way of sneezing and coughing')

# **Unit** – **7**

# Pit Emptying & Faecal Sludge Management

### Pit Emptying

The twin-leach pit toilet technology has been extensively promoted under SBM-G. This type of toilets comprise of two pits, each measuring 3.5 feet deep and one metre in diameter; and the distance between them being one metre. When twin pit toilets are used, faecal matter will be allowed to pass and settle in one pit only. When that pit is filled in about three to four years, the channel to the first pit is closed, and the second one is opened for the faecal matter to pass into.

The excreta in the sealed pit decompose by anaerobic digestion. After nearly two-years of resting period, the content of the first pit decomposes and converts itself into manure. It can be removed and used as manure for plants. The same procedure is followed when the second pit gets filled. Emptying a filled pit after a resting period of two years is simple. When you open you shall find in the leach pit fully decomposed manure in hard form. It can be removed and used as humus along with soil for plants to grow. After removing the compost, your first pit is once again ready for use for three more years to come.

One of the taboos associated with toilet among rural people is that who will empty the pit if one of the pits in the twin pit toilet gets filled. This requires addressing as part of BCC plans. Pit emptying means removing the compost from the pit of a household latrine. Pit emptying must be demonstrated to the community, showing them through action how easy and harmless the act was. Play videos of pit emptying carried out in reality. By doing this, we can break the myth many people have about twin pit toilets. This can help most people to cast aside their doubts and they shall come forward to have twin pit toilets constructed in their homes. In a twin-pit toilet, what happens over time is the solids are sufficiently dewatered and can be manually removed with a shovel and reused, much like compost, to improve the soil fertility and fertilise crops.

The real problem is only where people have constructed septic tanks, or holding tanks. In such models, faecal matter remains fresh and smelly. There must be proper de-sludging done, which require trained people, and equipments, and gears for clearing. After clearing, the

problem is about ensuring that the contents are transported to a faecal sludge treatment plant. There is great risk in letting it open in or near water bodies.

### **Faecal Sludge Management (FSM)**

The SBM-G extensively suggests construction of twin-pit latrines, except in places where twin leach pit technology is unlikely to work due to reasons of soil conditions, and low water table. The reason behind this suggestion is that it is easier to empty the contents of a leach pit, once they turn into manure, and use the alternate pit until that time. Nevertheless, it happens that households when they construct their own toilets, sometimes, prefer septic tank toilets or large holding tanks in place of leach pits. Then there is a need to empty the septic tank / holding tank using appropriate protocol given in the National Policy on Faecal Sludge & Septage Management (FSSM) 2017.

**Box – 7.1** The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 bans the 'hazardous cleaning' in relation to sewers and septic tanks. The law provides that manual cleaning of sewers and septic tanks, if necessary, may be carried out only in highly controlled situations, with adequate safety precautions, and in accordance with specific rules and protocols for the purpose.

If sanitation is to be managed safely, it is important to go beyond the toilet and examine containment, emptying, transport, treatment and reuse or disposal of faecal waste. FSM is central to achieving the vision of an 'Open Defecation Free' India. Developing solutions to the challenges of FSM therefore has an important place in the ODF story of the country. Efforts focus on large and dense villages (with populations of more than 4000 people and density greater than 400 people per sq.km) and census towns (these are not formally notified as urban bodies; they are administered as rural areas). There are more than 5000 census towns in India.

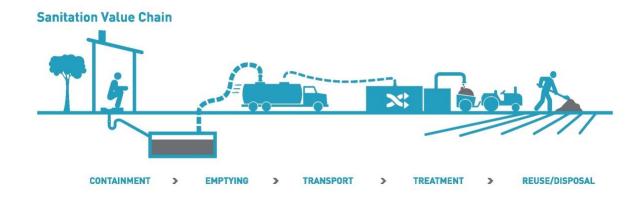
### Safe disposal of human excreta entails:

- Promoting proper functioning of 'faecal sludge and septage management systems' and ensuring proper collection and disposal of the faecal sludge;
- Promoting recycle and reuse of treated sewage for non-potable applications wherever possible

- Promoting proper design and construction of On-site sanitation and FSSM facilities with a focus on ease of Operation and Maintenance; O&M costs; and tariff structure.
- Generating awareness about faecal sludge and Septage management and its linkages with public and environmental health amongst communities.

When a holding tank is full, it can no longer be used. The time it takes to fill the pit depends on the size of the pit, and the number of users. Until the pit (holding tank / septic tank) is emptied, the latrine cannot be used. The emptying of a pit can either be done manually with shovels and buckets, with a manually powered pump or with a motorised pump mounted on a truck that carries a tank to transport the sludge. For the faecal sludge to be pumpable, usually water needs to be added to the pit and the content needs to be stirred up. There are many licensed private companies / service providers, who transport by road to a sewage (faecal sludge) treatment facility. The use of ICT for GPS tracking of trucks and mobile application (apps) to centrally coordinate service providers are in practice.

To reduce the volume of faeces in the tank, and to reduce odour and fly problems in the latrine, a range of commercial products are available. These pit-additives are composed of micro-organisms that trigger chemical reactions and speed up a decomposition process. Cheap and effective alternatives are wood ash and sawdust that are added to the sludge regularly.



Source: ..... FSSM Value Chain

### Treatment and Disposal of Faecal Sludge

The main purpose of treating faecal sludge is to sanitize faecal sludge for safe discharge into environment, or to produce bio-solids, which may be safely used for beneficial purposes such as for agricultural purposes.

Open disposal of fresh sludge into water or onto land is undesirable as it is an environmental and health hazard. The recommended practice is to bury sludge in pits where it cannot come into contact with humans or animals, and will not contaminate groundwater sources. Alternatively sludge can be mixed along with wastes at a nearby sewage works or compost it with organic waste. Septage can be treated by using any or a combination of these methods: waste stabilization ponds, unplanted sludge drying beds, reed-planted drying beds, constructed wetlands and composting.

### **Funds**

The Government of India provides funds to state governments to set-up and carryout O & M.

- Funds are transferred directly from the Ministry of Finance to Gram Panchayats for works related to sanitation, solid and liquid waste management (SLWM) etc.
- The SLWM is funded under SBM(G) all Gram Panchayats can take up funds, with financial assistance capped on the basis of the number of households, to enable them to implement sustainable SLWM projects.

### FSM Action for Key Stakeholders

### **District Administration**

- Introduce FSM in census towns and rural areas with core team or resource group for technical experts and master trainers and mentors for FSM activities within the district
- Encourage all players within state to introduce FSM to all households through respective channels
- Sensitise and train teams on FSM as a viable option for sustainable ODF, ODF-S goals
- Train Master Trainers and Community Mobilizers on the concept of proper on-site sanitation technologies such as construction of septic tanks and twin pit toilets
- Build a platform for cross-learning and knowledge sharing
- Encourage districts to allocate and spend on IEC for FSM

### **Gram Panchayats / Local Bodies**

- Develop a database with the full address and family information of all those involved in emptying pits / septic tanks (both manually and mechanised)
- Issue ID cards to all such companies / workers (with with proper instructions on prevention of Manual Scavenging and training on safety precautions, protective gears and so on). Insist on availability of proper protective gears and facilities before giving ID cards.
- Develop mechanisms for establishing service recipients responsibility for
   Occupational Health and safety to the sanitation workers involved in emptying.
- Implement mechanisms monitoring the use of personal protection equipment and discharge of sludge in approved FSTP locations only.
- Ensure availability of free health care service for emptier and their family members at clinic / hospitals
- Introduce insurance policies for emptier to safeguard against any workplace accident, injury and death.

### Sanitation Workers Engaged in Collection and Transport

- Analyse Occupational Health and Safety (OHS) risks during a pre-operation visit to the emptying site
- Wear appropriate clothing, including personal protection equipments
- Examine suitability of equipment to be used for emptying and transportation
- Check the leaking points of pipe, if any
- Ensure sufficient lighting
- Arrange a first-aid kit
- Arrange water bottles
- Avoid drinking alcohol
- Ensure the use of personal equipment during emptying and transportation
- Ensure that the vehicle used for transportation is suitable and does not leak

### **Expected Outcomes**

When FSSM Policy is implemented across the country, it is expected to yield significant benefits in terms of improved public health indicators, reduced pollution of water bodies and groundwater from human waste, and resource recovery leading to reuse of treated waste and other end products. Some key projected outcomes are:

- Containment of all human waste in 100% of the villages wherever septic tanks / holding tanks have been constructed in place of twin leach pit toilets.
- Safe collection and conveyance of human waste to treatment and disposal sites.
- Cost effective solution for management of human waste through integrated network sewerage, small bore sewerage, and faecal sludge and Septage management
- Clarity among different stakeholders on identifying and implementing best and economically viable sanitation solutions.
- Technical capability among the local bodies to effectively implement FSSM
- Scheduled emptying of septic tanks or other containment systems at an interval of 2 –
   3 years.
- Safe disposal of all collected faecal sludge and septage at designated sites (sewage treatment plants, faecal sludge treatment facilities for safe and scientific disposal)
- Preventing contamination of water bodies and groundwater from human waste.
- Maximum reuse of treated sludge as fertilizer in farmlands, parks, gardens and other such areas.
- Significant reduction in the incidence of disease due to safe FSSM services.

### **For Exposure Visits**

- Devanalli, Bangalore
- Warangal City, Telengana
- Jhansi, Faecal Sludge Treatment Plant (UP)
- Leh, FSTP (J & K)
- Periyanaickenpalayam FSTP, Coimbatore, Tamil Nadu
- Karunguzhi FSTP, Kancheepuram, Tamil Nadu

### **Resource Institutions**

- Bill and Melinda Gates Foundation, New Delhi
- National Faecal Sludge and Septage Management Alliance, New Delhi
- Indian Institute of Technology (IIT), New Delhi
- CDD Society, Bangalore
- Blue Water Technologies Pvt. Ltd, Gachibowli, Hyderabad
- Performance Assessment System (PAS), Ahmedabad, Gujarat

# Unit - 8

# **Programming for ODF Sustainability**

### **Annual Implementation Plan**

The MDWS proposes that each State will develop an ODF sustainability component under the SBM program and provide details of their plan, activities and funds needed to MDWS as part of the Annual Implementation Plan (AIP). Some states have prepared 'State level ODF Sustainability Strategy' papers. They may use this opportunity to firm it up, and ground those plans / strategies.

The State Governments together with the Districts would develop an ODF sustainability plan. The primary planning unit for ODF-S would be Gram Panchayats and would be supported to develop their ODF-S Plan. The Districts would compile the ODF plans of each GP in their District and would develop the District ODF-S Plan. The State would compile the ODF Plan of all the Districts in the State and would develop the ODF-S Plan for the State.

The State would report on the essential elements of their ODF-S Plan to MDWS through the AIP and during the AIP planning and discussion exercise. The MDWS has suitably modified the AIP format so as to capture the ODF-S Plan of the States. The MDWS requests the States to submit their ODF-S Plan in the modified ODF Template.

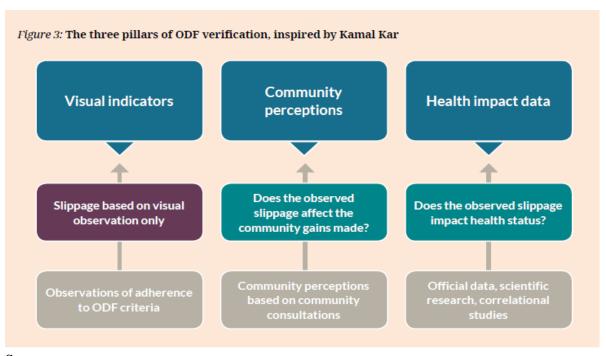
The financing for ODF-S would include budget for:

- a) Human Resources at State District, Sub District and Village level
- b) IEC activities to be undertaken for ODF-S
- c) Training and capacity building activities for ODF-S
- d) Coordination and convergence with Line Ministries, Departments and Development Partners
- e) State-wide / District-wide Post-ODF Sustainability Strategy and Rollout Plan

### **Questions on the Way to Achieving ODF**

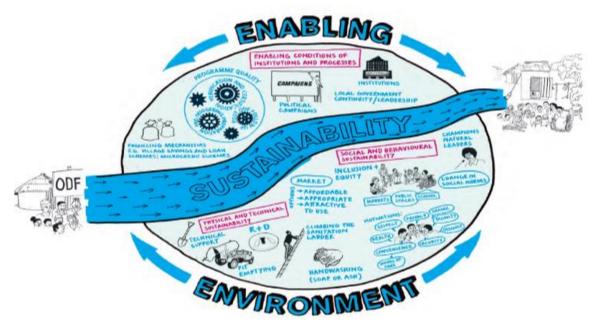
- How to make that last household also to construct a toilet and use so that no one is left behind?
- How to assure sustained changes in social norms and collective behaviour?
- When, how, and in what conditions to phase in sanitation marketing?
- How to achieve sustainability in difficult terrains, water scarce areas, rocky or other.
- How to adapt and apply BCC in large communities which are diverse and / or conflicted?

### **Approaches to ODF Verification**



Source:

### Three Dimensions of ODF Sustainability



Source: CLTS Knowledge Hub

### 1. Enabling Conditions

- Political Priority & campaigns
- Institutions and processes
- Programme quality
- Inclusiveness and intensity
- Post-ODF follow-up

### 2. Physical and Technical Sustainability

- Quality of construction & functionality / Physical condition of toilets
- Technology appropriateness for the terrain? social acceptability of the toilet technology used?
- Moving up from insanitary latrines to complete sanitary latrines
- Improved Toilet or Unimproved Toilet
- The market (e.g. masons / entrepreneurs / RSM)
- Sanitation services (Pit emptying / Fecal sludge management)

### 3. Social and Behavioural Sustainability

- Sustainable change in social and behavioural norms (avoiding slippage)
- Embedding new social norms

- Motivations and preferences for ODF
- Dynamics within communities and cultures
- Equity and inclusion (Are the poor being neglected?)
- Meeting the varied needs of people
- Identifying and using 'Natural Leaders'

### **Key Program Elements**

The ODF-S Component of the program entails working on the following:

### a) IEC for ODF sustainability:

The States and Districts need to continue to engage with communities on sustaining the ODF outcomes using innovative and inclusive IEC interventions. They should retain the human resources involved in IEC planning and delivery at State, District and village levels and paid as per the Guidelines of State Government SBM-G. The *Swachhagrahis* too need to be retained to undertake and support the above activities of the communities. *Swachhagrahis* can be paid for ODF-S activities as per the SBM-G Guidelines.

The indicative list of activities that could be prioritised during the ODF-S component are given below:

- Special Gram Sabhas for Sustainability monitoring and reporting
- Special days in a month for monitoring continued usage and availability of any faecal matter in the open
- Special cleanliness drives for upgrading the sanitation status of their villages
- OD audits to ascertain continued usage of toilets

### b) Capacity Building for ODF Sustainability

The capacity building interventions will have to continue for the personnel and stakeholders engaged in the ODF-S component of the program. The capacity building for ODF-S should focus on:

• Implementing catalytic events like National Days, local events of strategic importance, cultural and religious occasions for sustaining community approaches in ODF locations

- Training on maintenance of technological options used for rural sanitation at both the household and community levels,
- Training on Solid and Liquid Waste Management
- Setting up decentralised arrangements for preventive and corrective maintenance of SBM-G assets in every GP
- Organising conjoint programming with other departments for sustainability

# c) Strengthening community/ social structures to monitor ODF outcomes/Sustainability

States must support Districts and Blocks to assist Villages set up local Nigrani arrangements so that the ODF status is monitored and reinforced. Adequate incentives must be built in for *Nigrani Samitis* to continue their vigilance and support work during the ODF-S phase of the program.

States should promote Officials at the District and Block level adopting villages and making regular contact with the community in those villages. They should make visits to these villages to motivate them to continue the practice of not defecating in the open.

Village institutions like School, Anganwadi, places of worship should keep a watch on the ODF status of the village and should intervene if they see a slippage in ODF status and use their presence in the village to reinforce the hygienic behaviours.

Consider creating one time awards for villages that retain their ODF status for a stipulated period of time-say one year. This cash award could then become the corpus of the village to meet their Operation and maintenance requirements.

### d) Systems for preventive and corrective maintenance

The SBM-G assets created would need preventive and corrective maintenance arrangements. These arrangements need to be set up at the local level using:

Trained masons who can attend to the defects and defaults in SBM assets

- Supporting Sanitary Marts/Production Centres to respond to corrective maintenance requirements of SBM-G assets
- Work with private sector to arrange for emptying of pit, septic tanks and its safe disposal

Community toilets / public toilets must have maintenance systems that reduce the down time of a toilet to less than 24 hours so that no one is forced to defecate in the open on account of maintenance requirements of a toilet.

### e) Prioritising ODF villages for other development programs

State Governments should prioritise villages that have attained ODF status for other development interventions and programs. Ministry has already taken a policy decision to prioritise ODF villages for piped water supply schemes. States and Districts accordingly could consider ODF villages on priority for implementing other development programmes.

### f) Undertaking Solid and Liquid Waste Management activities

States must initiate implementation of Solid and Liquid waste management programs in ODF villages. This would ensure sustained engagement of functionaries with villages and people. MDWS has provided details of SLWM work that could be implemented in the SBM-G guidelines and other technical notes shared from time to time.

### Formulating an ODF-S Plan

States are advised to consider the following while formulating and finalising their ODF-S Plan

- i. Continuity of the program beyond ODF Declaration Stage: The interventions under SBM-G are designed to continue beyond attaining the ODF status by a village/GP/Block/District and State. Attainment of ODF status is an important milestone in the journey of the SBM-G program but is not the end of programming for sanitation and hygiene benefits. The villages, GPs, Blocks and Districts need to continue to work on sustaining the ODF status much beyond the attainment date of ODF.
- ii. **Retaining Human resources** deployed at State, District, Block and Village level for undertaking ODF-S activities and if required retraining them for SLWM activities.

- iii. **Financing for capacity building activities**: Key areas for capacity building during sustainability phase could include:
  - o Training on operation and maintenance of toilets at household and community level
  - o Retrofitting of toilets, where needed to make them sustainable
  - o BCC, IPC & IEC activities aimed at ODF-S
  - o Undertaking solid and liquid waste management activities
  - Any other areas that could promote sustainability of interventions
- iv. **Enabling provisions:** States should develop enabling policy guidelines that support Gram Panchayats to own, operate and manage the programme through increased funds, functions and functionaries to work on sustainability aspects.
- v. **Efficiency gains through coordinated and convergent action:** Exploit efficiency gains through improved integration of SBM components with other development interventions and programs happening in the State. Many States have successfully used MGNREGS, 14th Finance Commission Funds, SBM-G funds under SLWM, own source revenues etc. for sustaining the benefits and investments under SBM-G
- vi. **Sanitation Marketing:** Develop and test innovative social and sanitation marketing techniques to promote the use of commodities and services that have a direct bearing on access to sanitation services and sustainability e.g. pit emptying in rural areas etc.
- vii. **Improved engagement strategy with line ministries:** Sustainability of SBM outcomes could be made a feature in engagement strategies with relevant line ministries, multilateral organisations, development partners to ensure that SBM sustainability indicators are embedded in their programming and reporting systems
- viii. **Mobilize private investment for sustainability:** States should innovate ways to overcome market and non-market barriers to mobilise private investment in SBM and to leverage private sector expertise in sustaining services.

### **Continual engagement – Post-ODF**

- ODF + Activities (in convergence mode, where possible)
- Water supply facility
- Cleanliness of water sources and public water bodies.
- Decentralized solid and liquid waste management
- 3 Rs (Reduce, Recycle, and Reuse)
- Drainage Cleaning (proper waste water disposal)
- Maintenance of school and *anganwadi* toilets
- Hand-washing and personal hygiene campaigns targeted at community members
- Hand-washing in schools & anganwadis (before mid-day meal)
- Awareness and training on pit emptying and faecal sludge management.

### **ODF Sustainability Activities**

The following are some of the suggestive activities for continuous engagement and ODF-S.

- On achievement of ODF, a 'walk of pride' is organised by the village.
- Clean Village No one goes in the open. Promote it as a socio-cultural achievement.
- Gram Sabha can decide on Dos and Don'ts such as imposition of fines on defaulters.
- ODF + as an item in the agenda of Gram Sabha meetings.
- Any new house construction must be approved only with toilets.
- Any public toilet required near bus stop or other important public place in the village must be considered.
- Identify those who are likely to revert to old habits, and educate them continually.
- The erstwhile places of open defecation may be developed for planting trees, including trees considered as sacred, so as to dissuade people from defecating there.
- Some states have the practice of postponement of incentive payment for a few months to confirm usage.
- Follow up continually at least for a period of one year. On first year anniversary celebration of ODF status, ensure the GP is really 100% ODF.
- Swachhata is a Janandolan. The idea of keeping the village clean must be promoted as a People's Movement.
- Sustain the Campaign with local branding e.g. Nirmal Bangla Suchitwa Mission
- Document success stories, and the process adopted provide visibility to the village.

- Use all occasions and Festivals to mention about the success of Swachhata
- Organise ODF Olympics ODF Marathon in order to sustain the mental availability.
- Publicly announce Empirical norm to confirm the status, and slowly move that into a social norm of the village.

### **How Did They Do it?**

Some Panchayats have taken up to end open defecation, by putting to use social control mechanisms systematically. They say the end justifies the means. What they did? How they did it?

- 1. **Demonstration of Love & Respect for Your Village:** Respecting the arrangement / system planned for waste disposal by the Village Panchayat is vital for general cleanliness. Not littering public places / street corners, and endeavoring to keep one's village clean are signs of responsible well-being. Goodness always breads goodness. Goodness is contagious. Keeping the village clean is a demonstration of the love and respect one has for the village one was born in. This is the minimum payback we can offer to the village we were born in, and to the country we live in. It is an expression of care, pride and patriotism at the barest minimum level. This is communicated during Gram Sabha meeting loud and clear.
- 2. Sweep the Dust off Your Heart: Keeping clean is not just about removing dirt. It's an ascetic practice to cultivate the mind, believe the Buddhist monks. Cleaning up the external space is possible, when the mindset is clean or made clean. The Swachh Bharat campaign is an initiative aimed at clearing all the dirt and rubbish that one sees around us in neighbourhoods, streets, markets, offices and public places. We do need to promote good sanitation. However, we also need to look deeper at the mindset that creates rubbish and allows it to remain that way. All the dirt outside is a reflection of a stained human soul. Clean off dust. It helps remove the grime. A clean mind and heart is a dwelling space for godliness. A clean space is a kind of order, harmony and sanctity that facilitates healthy, creative and constructive activity. Cleanliness is connected to the original pure state of being of all human souls. This message must be strongly communicated during Gram Sabha meetings.

- 3. **Band Music Troop:** With the assistance of IEC funds, a band of music instrument players were hired, whose job was to walk around playing the instruments in common places generally used as area for open defecation by local people. They start playing at 5.00 am and go on until 7.30 am. They did it continuously for about a week. In the evenings, they go for Inter personal communication (IPC) at door steps to convince households to fill in application to construct a toilet, or help them rectify the problem in the toilet, if they already have. Even trained local school boys can also be used to play such instruments. They know the places where local people generally go for open defecation. This was reported in Economic and Political Weekly (May 17, 2014).
- 4. **Dubba Intelligence Bureau:** A team of school children (volunteers) were appointed by GP in order to keep watch on people who go for open defecation, despite having access to a toilet. This team was known as Dubba Intelligence Bureau. The GP takes up their report in order to take action against open defecators. The action can be persuasive or coercive depending on the number of warnings such persons have been given earlier.
- 5. **Promote Rural Cricket and Football:** The Panchayat cleared up the bushes in the areas that are commonly used as open defecation area, and encouraged the local youth to use it as cricket ground or football ground. The boys found that people to a considerable extent stopped using that place for open defecation. They used the place for playing cricket. But, still a few unconcerned miscreants did not stop using the place for their 'dirty purpose'. The boys on rotation two, three every morning from 5.00 am to 7.00 am, went and sat there in plastic chairs chatting with a camera in hand. They had sent across a message in the Panchayat notice board that they are going to click pictures of those people 'while they are dirtying' and affix the picture in public places like ration shops, and bus stops.
- 6. **Fencing the Common Land:** This is a technique for progressively reducing the area that people use as open defecation spots. The Panchayat land, temple land etc. were fenced so that no one is able to enter. One Panchayat President resolved that the GP shall not tolerate any public place including roadsides be used for open defecation. However, permitted anybody's private land can be used for open defecation, if they so desire. His point was no one would dirty one's own land; similarly, no one would

allow anybody to use their land for dirtying. One Panchayat President, in fact, said that the GP is the trustee of common land. Therefore, fencing and protecting is necessary.

- 7. **Turn OD Place as Village Park:** The GP can make use of MGNREGS funds, and turn OD places as village parks (Public Gardens) with trees, walkways, and cement benches for people to sit and talk; and for children to play. The funds from the Ministry of Youth Affairs and Sports can be used for providing play equipments and materials. Once the village park is fully set up, and people are accustomed to visiting it regularly in the evenings, it can be contracted out for local youth to operate and maintain it.
- 8. **Rangli Competition:** The GP Office as part of ODF Anniversary Celebrations every year announced *rangli* competition in all the wards of the Gram Panchayat. This is celebrated during *Shankranti* in some places. There are three prizes announced as first, second and third overall for the GP. In addition, there is one assured prize for one house in every street. The bigger the *rangoli*, better the chances of winning the prizes. This makes every household willingly and excitedly to clean up their surroundings as expansively as possible so that the *rangoli* becomes presentable and is attractive in the eyes of the juries. Every street becomes clean and nice-looking voluntarily done.
- 9. **Levy a fine:** There are Panchayats that declare in Gram Sabha meeting that after a given date, those who do not use a toilet, if they were found going for open defecation, they shall be levied a fine of up to Rs.100 per day per person. In the event of their not paying the fine amount, the Panchayat Office shall send a letter to the Civil Supplies Thalisdhar requesting to suspend provision of essential commodities to such Ration Card holders until the time they get a No Objection Certificate from the Panchayat Office.

This is done gradually, i.e. important dates have to be clearly and strictly announced, such as date before which construction of toilets must be completed; date on which list of deviants shall be declared in the Panchayat notice board; and the last date that the Panchayat Office shall send letter to Civil Supplies Department for suspending

supply of essential commodities. At every step, it must be clear that the purpose is not suspending the Ration Cards, but construction and use of toilet.

This may be viewed as being coercive. But, it must be done in the interest of common good. Even if one person does it in the open, everybody in the village is at risk of being infected. There are GPs that have refused issuing any certificate required by such families that do not own / use a toilet. They may also be denied other services such as drinking water supply, and solid waste collection at door steps.

10. A nod for a wise man: It is true no one is free until everyone is free. Even if ten families do not use toilets, everyone else in the village is in danger of susceptibility to contamination / disease, and shame. They say: a nod for a wise man, and a rod for a fool. It is easy to work with *early-adopters* of any change process; it is slightly demanding to work with *slow-adopters*; and it is very difficult to work with *non-adopters*. We may try to put to use social control mechanisms to persuade those who do not pay heed or listen to patient explanations; and those who choose to ignore even the changing social norms in their own village must be brought to fall in line only through coercive action such as refusing service delivery by Panchayat Office or recommending suspension of Ration Cards etc. as last resort, after passing a Gram Sabha resolution. This is not being coercive. This is only speaking in the language they understand.

### Monitoring, Evaluation and Reporting

MDWS along with States monitor the ODF-S program on a concurrent basis using the following instruments:

- a) **Independent Verification Agents:** MDWS sends Independent Verification Agents as part of its National Annual Rural Sanitation Survey to ascertain the ODF status.
- b) **Third Party Surveys**: MDWS and States would commission Third party Surveys from time to time to ascertain the sustainability of the ODF status of villages.

- c) Concurrent Monitoring by State and District Officials: State and District level Officials will make visits to ODF villages to ascertain the sustainability of interventions and benefits.
- d) **Sustainability Verification:** SBM-G guidelines call for sustainability verification after nine months of declaration of ODF. These surveys would also inform the sustainability status of ODF declared villages. Appropriate provision for recording outcomes of the sustainability verification has been made on the IMIS and States can use that report on ODF sustainability.

# Unit - 9

# **Financing for Post-ODF Sustainability**

### **Elements to include in Budgeting**

The financing for ODF-S would include budget for:

- a) Human Resources at State District, Sub District and Village level
- b) IEC activities to be undertaken for ODF-S
- c) Training and capacity building activities for ODF-S
- d) Coordination and convergence with Line Ministries, Departments and Development Partners

### Activities to be prioritized while planning for ODF-S

MDWS would finance the interventions of States and Districts for undertaking ODF-S activities through SBM funds and other source like World Bank resources etc. Different elements that could be financed included:

- a) HR Cost: Financing cost of deployment of Human Resources need for Undertaking ODF-S work. This could involve having IEC/HRD/SLVM Consultants at State. District level consultants and Block level Coordinators. Swachhagrahis employed in all villages should be retained and could be paid from the IEC budget already provisioned in the program.
- b) **IEC Cost:** IEC activities planned for ODF S can be financed from the IEC funds made available to the States and Districts.
- c) **SLWM:**MDWS would finance the project proposal on undertaking Solid Liquid waste management as provisioned in the SBM-G Guidelines

### **Sources of Funding ODF-S**

The sources of funding for financing ODF-S could include the following:

- MDWS funds and State Government resources
- MPLAD/MLALAD Funds
- Funds from Fourteenth Finance Commission
- Development partner's resources
- Bank Credit facilities
- Revolving Loan

### Financing for ODF-S from the year 2017-18 onwards

MDWS intends to make funds provisions in the year 2017-2018 itself for allowing the States to initiate implementation of ODF sustainability interventions. Accordingly, States are advised to make funds provisions for ODF S activities at State and Districts levels, in accordance with the extant provisions of SBM (G) guidelines, as detailed below:-

- Allocate at least Rupees Twenty five lakhs for each ODF District for ODF-Sactivities.
   The allocation to a District could be increased on the basis of itspopulation
- Use at least Rupees One Crore at State level for supporting the Districts to undertake ODF sustainability interventions.

Based on ODF-S activities and performance of the States/UTs in 2017-18, the Ministry would come up with appropriate mechanisms for allocating funds for ODF-S activities from the financial year 2018-19 onwards after considering the ODF-S plan submitted by the States as part of their Annual Implementation Plan (AIP) and other parameters as decided by the Ministry from time to time.

# **Unit – 10**

# **ODF** + and **ODF** + + **Villages**

### The Next Big Step

When toilet coverage in rural areas is crossing well over 96%, the next big thing coming up in rural areas under Swachh Bharat Mission (G) is solid waste management (SWM). The way SWM component has been designed in the guidelines of SBM-G is that the government shall provide *capital cost* for setting up the SWM units – ranging from Rs.7 lakhs to Rs.20 lakhs based on the size of the Gram Panchayat. The onus of finding funds for *operational expenses* (such as salary of garbage collectors, maintenance of waste collection vehicles etc.) shall rest with the Gram Panchayat, except that there are IEC funds in order to educate and prepare communities for household level waste segregation. There shall be no funds made available from the government side for meeting the actual operational expenses of the SWM units.

One argument is *waste is not waste and it's only a perception*, meaning it's possible to covert waste into usable compost, reusable and recyclable items which can become a source of income for Gram Panchayats to meet out the operational expenses. States must initiate implementation of Solid and Liquid waste management programs in ODF villages. This would ensure sustained engagement of functionaries with villages and people. MDWS has provided details of SLWM work that could be implemented in the SBM-G guidelines and other technical notes shared from time to time.

Though, solid waste generated in rural areas is predominantly organic and biodegradable, it is becoming a major problem as the waste generated is not segregated in-situ and is of the order of 0.3 to 0.4 million metric tons per day, as reported the Ministry of Drinking Water and Sanitation (MDWS), Government of India. Inconsiderate littering causes poor environmental sanitation resulting in unhealthy quality of living. Therefore, domestic-refuse should be handled responsibly. In order to manage waste in a desirable way, there should be a functional waste management system in place. Without a functional waste collection and disposal system at the Panchayat level it is arbitrary to hold individual households responsible, or blame them of irresponsibility.

Gram Panchayats in India aspire to become clean, by putting in place a solid waste management system. It is not dumping or disposing – but *managing*. But what is meant by *managing waste*? It is said: manage waste 'systematically'. To do this, we need to first of all understand *what types of wastes* are generated in your Gram Panchayats (GP), and the category of *waste generators*. There needs to be a system in place – for waste collection, transport and treatment.

In a centralised arrangement, door to door collection, transport and appropriate treatment of waste takes place. The GP shall designate a place specifically for secondary segregation, and for further treatment. Alternatively, promoting home-based composting of kitchen waste and the local body collecting only the dry wastes is also possible. This can be called partly decentralised waste collection system. Be it centralised or home-based system, the first task is weaning off from mixing up all types of wastes. That means to say that in setting up a system, the very first step is understanding the types of wastes generated; Secondly, educating and enabling the waste generators to separate wet (kitchen) waste from other types of dry wastes. Making the households segregate the waste, is the most challenging and difficult task, especially when the initiative is not from within the community. If we are successful at this step, our likelihood of being successful in the subsequent steps is strong.

The next step is assessing the logistics requirements, arrangements for transport and treatment. When wastes are segregated by type and kept as separate piles, it becomes easier to determine what treatment technology to apply. For instance, kitchen waste can be easily treated at village level applying simple windrow composting or vermi-composting. And other types of waste such as bottles and plastics can be sent to commercial recycling / resource recovery centres only. There are certain residual waste, which are not suitable for recycling or further processing, they can be incinerated (adopting one of the green incineration methods) or sent to a sanitary landfill.

In order to do all these, preparing the community mindset is significant. The community must understand that burning or burying waste is dangerous to human health, as well as environment. Secondly, the Panchayat functionaries need to have a clear plan, and it must be made clear to all sections of the waste generators. The plan must include cost of setting up; cost of operation; and contribution / services charges to be paid by the waste generator categories. Similarly, the technologies chosen must be prudent and suitable for the local conditions.

**Subsidiarity Principle:** Subsidiarity is an organizing principle which is based on the understanding that matters should be handled at the lowest or least centralized stakeholder. This principle should be the driving force of Solid and Liquid Waste Management (SLWM) in rural areas. It implies that whatever can be done at the household level should be done at household level. If not possible at household level, then the possible association of multiple households (neighbours) could play a role at village level, and so on up to cluster of Gram Panchayats level.

When applied to rural SLWM, subsidiarity means that maximum efforts should be focused on the management of waste at the point of generation e.g. a household, institution or marketplace. By managing the waste as close to the source of generation as possible, it is possible to save time, money and labour. Only waste that cannot be managed at the household level should be part of the collective or public waste management system. In other words, the identification of solutions should start at household level, and then go upward like the rungs on a ladder. Whatever can be done at household level should be done at household level (ADB, 2014). We highly recommend kitchen waste be composted at household level.

Doing at the household level implies that households get trained in composting methods, and convert kitchen waste into compost for use in their garden. The dry wastes shall be collected and transported through a centralised arrangement and shall be sorted and passed onto the recyclers. Doing at the household level reduces considerable work for the waste collectors / sanitation workers. This considerably reduces the costs incurred in waste collection arrangements. It is always wise to put in place a system where the households (waste generators) have a considerable role to play. In order to treat waste at the household level, all that is needed is a basic understanding of composting, and an appropriate method of homecomposting.

### Box - 10.1 Wastes Collection: Models and Variants

There are many 'variants and models' Gram Panchayats in various states have tried.

**Option – 1:** Households segregate wet and dry wastes separately and keep them ready, including the hazardous ones. The GP cart collects the 'wet waste and dry wastes' regularly in the mornings (at designated timings), in the same cart / van where provision has been made for separate storage.

**Option – 2:** Households segregate wet and dry wastes separately, and keep them ready. The collection cart from GP collects only the wet waste. The dry wastes are collected twice a week - and not daily (for instance, on Mondays, and Thursdays). This saves time, and trips.

**Option – 3:** The households are trained in various methods of home-composting. Households segregate wet waste and dry waste. The GP collects only the dry waste. The households do composting of wet waste at household level, and use it for the plants / in their garden. This further saves the time, and trips, because part of the problem (wet waste) is dealt with by households.

Waste management has to take place for it's becoming a medical emergency from the point of view of health. Further, it's more an expression of cultural practice and quality of mindset, than a matter of visual aesthetics. Our perspective and reasoning may differ. But, the fact remains that none of us want to live on a pile of garbage. Garbage must be collected regularly, and disposed off scientifically – be it understood as wealth or waste; be it for-profit or as a civic duty of a Gram Panchayat. The point is: a waste management system introduced must be sustainable in the long run. Waste management cannot be a project with an end-date.

'Solid waste management' is an important component that must go into Gram Panchayat Development Plan (GPDP). It's good it is prepared in the form of a viable business model, meaning it must pay for itself – at least within a period of 2 to 3 years. Therefore, what perspective a Gram Panchayat can adopt on generating a business model with regard to waste management. It should be a model that creates value to the citizens, and so people are willing to pay for. Waste management at the GP level must be viewed like a social enterprise. The intent is not profit, but common good at an economic breakeven.

Some lessons we can distil from the existing experience are presented below for easy grasp.

- 1. Let's begin in villages that are close to cities and towns, where people strongly feel waste as a real problem. The chances of gaining firm grounding is high in villages where people already feel that it's a problem.
- 2. A budgeting exercise at the GP level seems to be a must. It allows a mental dry run of how much is likely to be the expenditure; and determine which category of users shall pay how much user charge so that up to 80 85% of the expenditure incurred is collected through user charges. Many SWM Units closed down after a short stint, especially because the GPs functionaries were drawn into it with the idea of waste to

- wealth, without having done any exercise on the likely operational expenditure, and the sources of income to meet the expenses.
- 3. Determine deferential rates for different category of users of waste collection service (households, shops, restaurants, marriage halls, and other establishments) and have it approved by the Gram Sabha.
- 4. Identify an NGO or an institution with experience / expertise in waste management to do the mentoring / guide GPs.
- 5. Realise that waste management is more a socio-psychological problem, rather than a problem that technologies can solve. Simplify. Build a strong management system.
- 6. There must be IEC activities taking place for household level waste segregation. Let them take responsibility. Consider the possibility of preparing the households towards home composting. Let them manage the kitchen waste, and the dry waste can be collected once a week by the sanitation workers employed. Our message should not be: You create waste, we are here to manage. Rather it must be to move towards progressive reduction of waste from being generated in the first place.

**Box 1.2** The NIRDPR has come out with a handbook titled: Solid Waste Management - Step by Step Guide for Gram Panchayats. We urge the SBM-G facilitators to download it from <a href="www.nird.og.in">www.nird.og.in</a> for a detailed understanding of solid waste management in rural areas.

## **REFERENCES**

### ANNEXURE - 1

## **GLOSSARY**

SNO	TERM	DEFINITION
1.	Faecal	Faecal Sludge comes from on-site sanitation technologies, and has
	Sludge(FS)	not been transported through a sewer. It is raw or partially digested, a
		slurry or semi-solid, and results from the collection, storage or
		treatment of combinations of excreta and black water, with or
		without grey water. FS is highly variable in consistency. Quantity
		and concentration.
2.	Septage	Septage is the partially treated settled faecal matter in a semi solid
		condition found at the bottom of septic tanks. It also includes liquids,
		solids, as well as fat, oil and grease (scum) that accumulate in a
		septic tank over time.
3.	Scum	Greasy substance floating on the surface of sewage or sludge
4.	Sewage	Sewage is the general term given to the mixture of water and excreta
		(urine and faeces).
5.	Sewer	An open channel or closed pipe to convey sewage.
6.	Faeces	Refers to (semi-solid) excrements devoid of urine or water.
7.	Cesspit	An enclosed container used for storing sewage.
8.	Sludge	The thick, viscous layer of materials that settles at the bottom of
		septic tanks and pits. Sludge comprises mainly organics but also
		sand, grit, metals and various chemical compounds.
9.	Sullage	Old term for greywater, it includes wastewater from cooking,
		washing and bathing but not excreta.
10.	Single Pit	A sanitation solution including a superstructure and a pit in which
	Latrine	faeces, urine and anal cleansing material (water and/or solids) are
		disposed. The pit is lined to prevent it from collapsing and provide
		support to the superstructure, but the bottom of the pit is permeable
		to release leachate.
11.	Twin Pit	The single Pit Latrine with an additional pit for use, when the first pit
		is full. It should be possible to dig out a filled pit, after it has stood
		for year, without any objectionable smell, whilst the other pit is in
	0 61	use.
12.	On-Site	A system of sanitation whose storage facilities are contained within
	Sanitation	the plot occupied by a dwelling and its immediate surroundings. For
	System	some systems (e.g. twin –pit), faecal matter treatment is conducted
		on site. With other systems (e.g. septic tanks, single pit), the sludge
10	W C1	has to be collected and treated off-site.
13.	Water Closet	A room with only a toilet/pan/commode, usually a pour flush toilet is
1.4	D . 11 1	generally known as a water closet.
14.	Decentralised	Decentralised sanitation solutions are on-site sanitation systems
	Sanitation	which are used to collect and partially treat septage/faecal sludge
	Solutions	from individual dwellings, businesses or small communities that are
1.7	г 1	managed individually.
15.		Faecal sludge management includes the entire process of design,
	Sludge	collection, conveyance, safe treatment and re-use/disposal of faecal
1.0	Management	sludge.
16.	Desludging	A person involved in the collection and cleaning of domestic or

	Operator	commercial septic tanks and pits using a vaccum suction vehicle.
17.	Urban Local	Urban Local Body means Many Municipal Corporation, City
	Body	Corporation, City Municipal Council, Town Municipal Council,
		Town Panchayat, Notified Area Committee and Cantonment Board
		Within the Limits of Rajasthan.
18.	Urban Area	Urban Area Includes all cities and Towns Falling Under The Purview
		of The Urban Development Department, Government Of Rajasthan.
19.	Desludging	Desuldging refers to the process of removing the accumulated faecal
		sludge or septage from the on-site sanitation systems.
20.	Effluent	Effluent means the wastewater that flows out of a septic tank or
		supernatant liquid discharged from the septic tank.
21.	Septic Tank	A septic tank is a combined sedimentation and digestion tank where
		the sewage is held for one to two days. During this period, the
		suspended solids settle down to the bottom. This is accompanied by
		anaerobic digestion of settled solids and liquid, resulting in
		reasonable reduction in the volume of sludge, reduction in
		biodegradable organic matter and release of gasses like carbon
		dioxide, methane and hydrogen sulphide. The effluent although
		clarified to a large extent, will still contain appreciable amount of
		dissolved and suspended putrescible organic solids and pathogens.
22.		Extraction of the useful portion of the faecal sludge for reuse.
	Recovery	

### **ODF Verification Guidelines**

### **Guidelines for ODF Verification**

- 1.(These guidelines are indicative and meant for guidance of States to evolve their own mechanism for ODF verification, based on the ODF definition issued by Government of India vide Joint Secretary's DO letter dated 9th June, 2015) Sanitation is a State subject. After the launch of Swachh Bharat Mission, work of sanitation has accelerated in all the States. At the same time, in order to ensure quality of outcomes, two things have been emphasized. One, focus on behavior change, and two, focus on making villages completely open defecation free (ODF) for health benefits to accrue (while continuing to respond to demand for individual toilets).
- 2. Many GPs and villages have now begun to become ODF. In 2015-16, the States have planned to make 42828 GPs ODF, as per their AlPs. On MIS, a module has been initiated to capture GPs where 100% toilet access has been achieved. This number, as on 1st July, 2015 is 12,216. Across the country, from different States, information is being received regularly about different villages/GPs declaring themselves ODF.
- 3. In order to ensure that the term ODF conveys the same meaning across India, Ministry of Drinking Water and Sanitation defined 'Open defecation free' (ODF) and communicated the same to all States/UTs, vide Joint Secretary's DO letter dated 9<sup>th</sup> June, 2015. The definition is as follows:
  - "ODF is the termination of faecal-oral transmission, defined by
- a) No visible faeces found in the environment/village; and
- b) Every household as well as public/community institutions using

(Tip: Safe technology option means no contamination of surface soil, ground water or surface water; excreta inaccessible to flies or animals; no handling of fresh excreta; and freedom from odour and unsightly condition)"

- 4. It is now required, that mechanism should be evolved for verification of ODF. This mechanism can be best evolved by the States themselves for the following reasons:
  - Sanitation is a State subject, and States are the key entities in implementation of the programme

- The term ODF has been defined nationally and the indicators for the same finalised. It only remains now to have a credible process to verify those indicators. This can be left to the States, so that they can choose a process best suited to them.
- This will ensure greater ownership of outcomes and processes by the States
- This will also ensure greater accountability of the States, and therefore, greater focus on the quality of work
- It is logistically/administratively easier for States to take up their own verification work
- Some States are coming up with schemes for incentivising good performance. Therefore, they can have their own process of measuring results.

This will allow different models/innovations to come up.

- 5. The role of the Centre will then be to cross share processes adopted by different States, evolve a mechanism to cross check a small percentage of GPs/viliages declared ODF by the States and further facilitate and guide the States where there is large difference in evaluation of Centre/State
- 6. Some broad guidelines are being provided to the States, for evolving their verification process. These guidelines are only indicative for guidance to the States and are as follows:
  - a) The process of ODF verification will start with a Gram Sabha resolution of selfdeclaration of achievement of ODF status. The resolution may be for the entire Gram Panchayat or even a village/habitation.
  - b) Since ODF is not a one-time process, at least two verifications may be carried out. The first verification may be carried out within three months of the declaration to verify the ODF status. Thereafter, in order to ensure sustainability of ODF, one more verification may be carried out after around six months of first verification.
  - c) The unit of verification may be a Gram Panchayat or even a village/habitation
  - d) The indicators for verification will be as per the definition of ODF given by the Government of India. The States are free to verify any more indicators, should they so desire.
  - e) The State will get verified every GP/village, that self declares itself as ODF

- f) The State may choose through whom to verify it can be through own teams or through third party. If own teams are used, there will be cross verification of villages/blocks/districts. Even in these teams, it will be useful to have nongovernmental independent reputed people, including journalists. If third party is resorted to, there will be clear ToRs and standards. It may be better to have voluntary teams.
- g) The block officials, community may be involved during the process of actual verification.
- h) The State can design their own proforma for evaluation. However, the indicators defined in the definition of ODF must be captured in the survey. Typically, both village and household level questionnaires may be designed. A Model check list, with suggested questions and options for evaluation has been prepared and annexed (Annexure 2) for reference. The States may use this format or evolve their own survey format. However, the indicators defined in the definition of ODF must be captured in the survey.
- i) The verifying teams will have to be appropriately trained to understand ODF definition, including safe disposal of excreta.

### Checklist for a GP/Village to be declared ODF

The answers to the HH survey Questions 1,2,3,4 should be necessarily Yes( $\checkmark$ ) for a village to be ODF; In addition, the answers to the Village survey Questions 8,9,10,11,12 should also be necessarily Yes( $\checkmark$ ) for a village to be OD

### a) Household Survey

Parameters	Yes(✓)/No(X)
1) Access to toilet facility	
2) 100% usage	
3) Fly-Proofing of toilet	
4) Safe septage disposal	
5) Hand-washing before meals	
6) Hand-washing with soap after defecation	
7) Availability of soap and water in or near the toilet	

# b) Village Survey

Par	amete	ers		Yes(✔)/No(X)			
1.	No	visible	faeces	found	in	the	
	envir	onment/vil	lage				
2.	2. Proper usage of School toilet						
3.	3. Safe confinement of excreta in school toilet						
4.	4. Proper usage of Anganwadi toilet						
5.	. Safe confinement of excreta in anganwadi toilet						

## Key for parameters mentioned in checklists above

## **Household Survey:**

Q.No	Parameters	Suggested Questions	Answ	vers	Yes( <b>√</b> )/ No(X)
1.	Access to Toilet	Access of the HH	i.	Own toilet in premises	<b>V</b>
	Facility	members to a toilet facility	ii.	Own toilet outside Premises	~
		tonet facility	iii.	Shared toilet in premises	<b>'</b>
			iv.	Shared toilet outside Premises	~
			v.	Community Toilet	•
			vi.	Public Toilet	<b>'</b>
			vii.	No toilet	X
2.	100% usage	Does any member	i.	Yes	X
		defecate in the open sometimes	ii.	No	•
3.	Fly-proofing	Is the toilet fly-	i.	The toilet has a water seal	•
	(Physical Observation)	proof	ii.	The toilet has a cover of some kind	~
			iii.	The toilet does not have Such arrangement	Х
4.	Safe Septage disposal (Physical	How is the excreta in the toilet disposed	i.	Toilet discharges waste directly into open pit, open drain, nallahs, and river	Х
	Observation)		ii.	Toilet is connected to Closed drains which empties into open area, pond, nallahs, river, etc after treatment.	Х
			iii.	Toilet is connected to septic tanks and the overflow pipe of septic tanks empties directly into drain, ponds, nallahs or river.	~

			iv.	Toilet is connected to	Х
			v.	septic and above overflow pipes that empty into separate soak pits.	<b>V</b>
			vi.	Toilet is connected to an enclosed twin pit twin pit	<b>V</b>
			vii.	Toilet has a type of sub structure different from those mentioned above but is safe	<b>V</b>
5.	Hand –washing	Do all members	i.	Yes	<b>V</b>
	before meals	wash their hands before meals	ii.	No	Х
6.	Han – washing	Do all members	i.	Yes	<b>/</b>
	With soap after defecation	wash their hands with soap after defecation	ii.	No	Х
7.	Availability of soap and water in or near the toilet	Physical observation	i.	Soap and water available in or near the toilet	•
	of hear the toffet		ii.	Soap and water not available in or near the toilet	X

In ca	In case of an infant, the question will be, how is the infant faeces disposed?			
i.	Thrown into the paths, street or open area outside the household premises.	X		
ii.	Thrown into the toilet	•		

Q.No	Parameters	Suggested	Answers	Yes()/
		Questions		No(X)
8.	Zero incidence of Open	Physical Observation	i. No sign of open de smell in or around	
	Defecation	Gosel varion	ii. Open defecation some places in village and prevale smell at some places around the village	visible at X or around nce of foul

			iii.	Open defecation is rampant, visible at various places in and around the village with foul smell prevalent at various places ion the village	X
9,11	Proper Usage of School	Physical Observation	i.	The toilet appears to be abandoned/unused	Х
	/Anganwadi Toilets		ii.	The toilet appears to be poorly maintained with excreta visible in the toilet, inside or near by,no water availability; and appears to be seldom used.	X
			iii.	The toilet appears to be to kept, in regular use, with water inside or near by	~
10,12	Safeconfinement of excreta in School/	Physical Observation	i.	Toilet discharges waste directly into open drain,nallahs,pond,river	X
	Anganwadi Toilets		ii.	Toilet is connected to a closed drain which empties into open area , pond, nallahs , river . without treatment	X
			iii.	Toilet is connected to closed drain which empties into open area, pond, nallahs,etc. after treatment	~
			iv.	Toilet is connected to septic tanks and the overflow pipe of septic tank empties directly into drain pond,nallahs, river	X
			v.	Toilet is connected to septic tanks and have overflow pipes that empty into separate soak pits	~

vi. Toilet is connected to an
enclosed twin pit twin pit
vii. Toilet has a type of sub
structure different from those
mentioned above bus is safe.