

Meeting cum exposure visit on sustainable rural sanitation for African stakeholders

Impact of faulty toilet structure: Health, Water and Economics

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Short films

[Mahatma Gandhi Sanitation Convention Film](#)

What is ODF?

The Government of India, vide its letter of 9 June 2015, addressed to all administrative secretaries, defines ODF (open defecation free) as:

ODF is the **termination of fecal-oral transmission**, defined by:

(a) No visible feces found in the environment/village; and

(b) Every house as well as public/community institutions using safe technology option for disposal of feces.

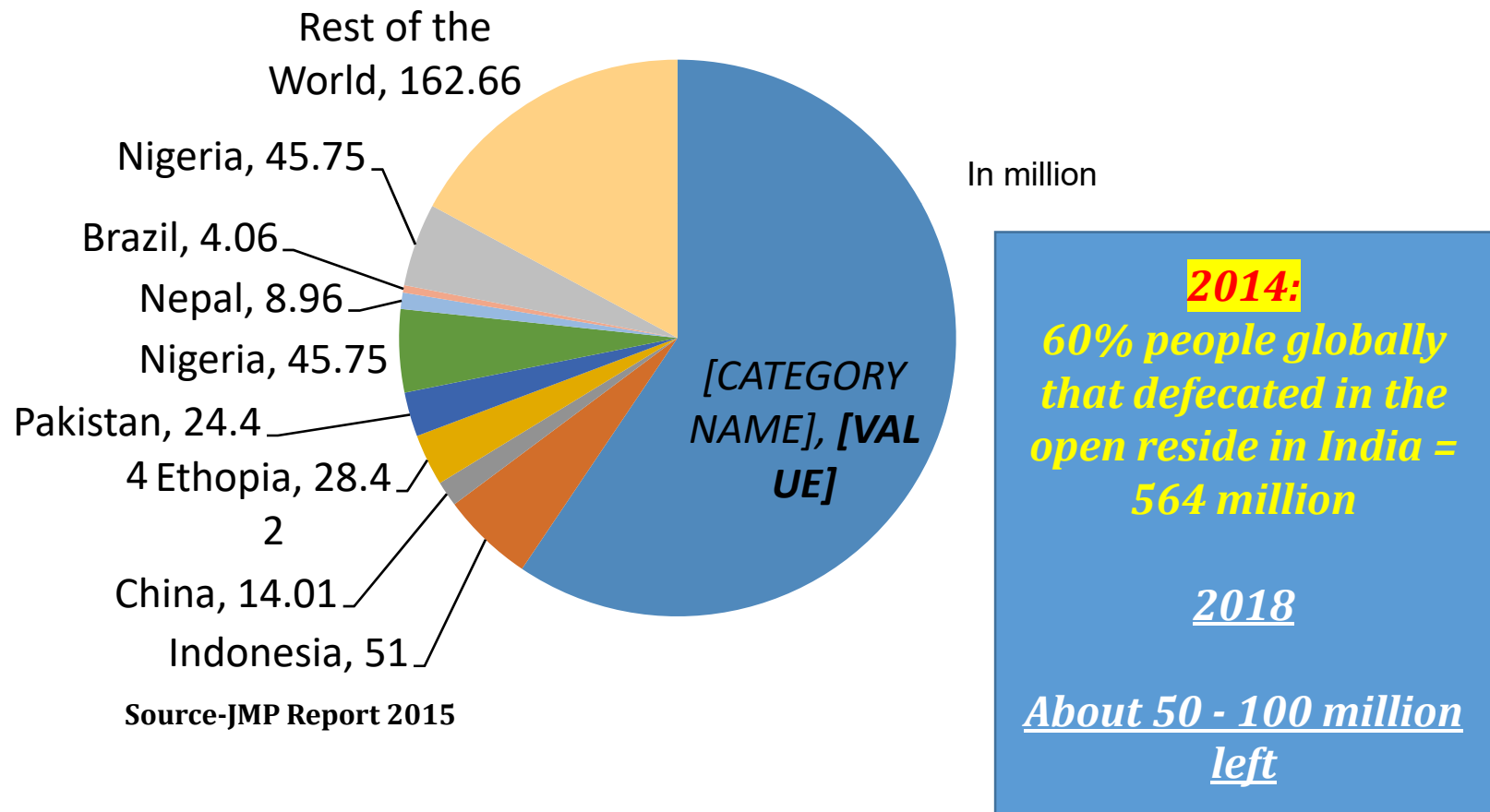
Safe technology option means

- *no contamination of surface soil, groundwater or surface water'*
- *excreta inaccessible to flies or animals;*
- *no handling of fresh excreta; and*
- *freedom from odor and unsightly condition.*

Pour Flush Twin Pit Toilet is promoted by Government

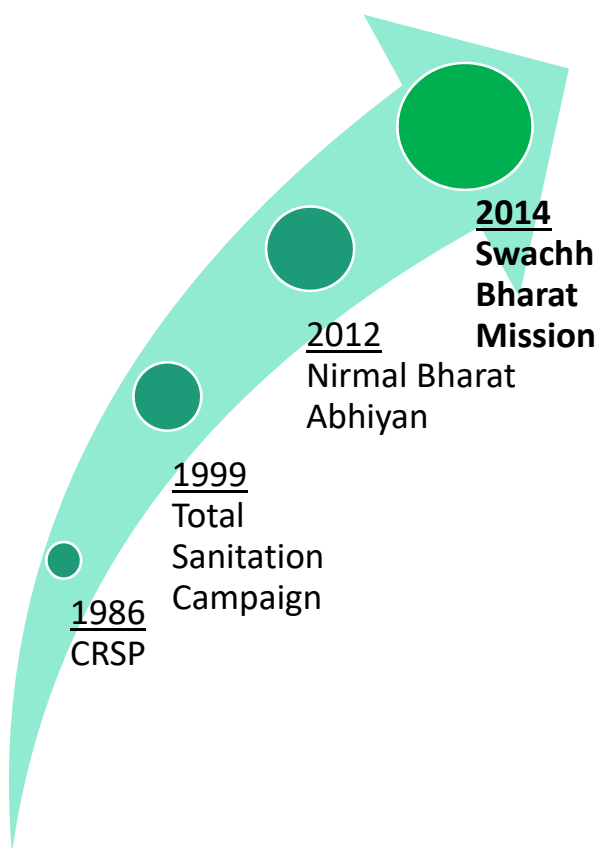
USD 200 given to all BPL a(Poor) and selected APL households

World Picture on Open Defecation



* **60% of India's rural population defecated in the Open : 564 million people**

How is SBM–G different from previous sanitation programs



PM's flagship program + a people's movement

Behaviour change at the heart of SBM's strategy

Focus shifted from outputs to outcomes - toilet construction to ODF

Use of innovative techniques, technologies and partnerships

Massive Communication campaign – People Movement

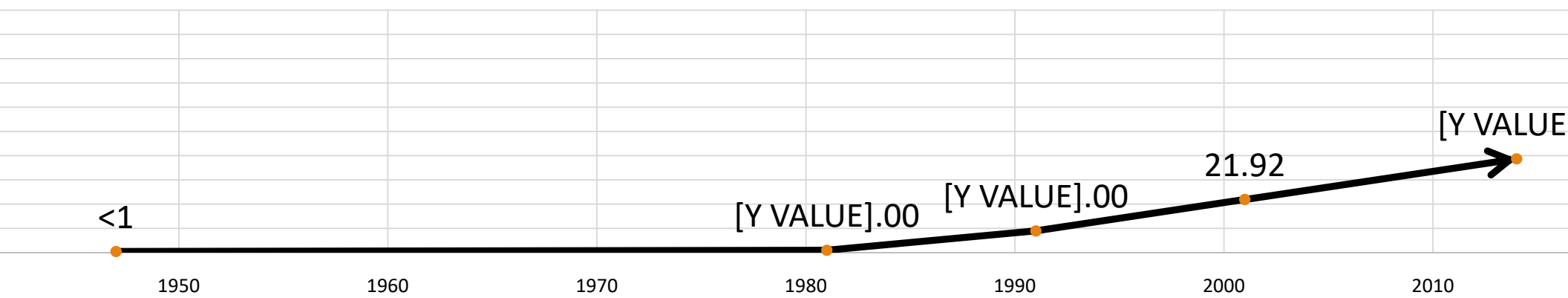
Focus on verification and sustainability

Renewed focus on Solid and Liquid Waste Management (SLWM)

4: The Challenge



Rural India Sanitation Coverage %



Speed

...and a Sunset Clause!



ve the vision
an ODF India
October 2019

CM

- Chief Ministers lead at the State level

DM

- District Magistrates prioritize sanitation

VM

- Village Mukhi (village leader) lead behaviour change in village

First, behaviour change in leadership
Quick wins, Friendly Competition among States
“Wholesale” and “Retail”

Scale

Team Swachh Bharat



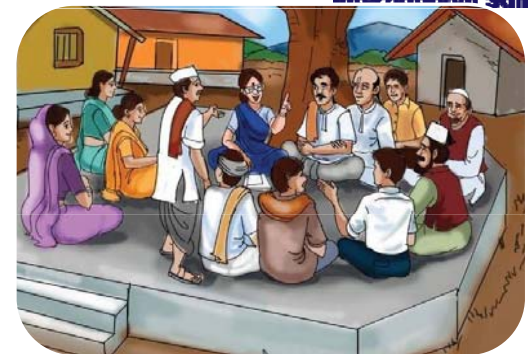
120 million
school students



1 million masons
(100,000 women)



500,000
Swachhagrahis



250,000
Sarpanches



700 District
Collectors



400 Preraks (YPs)

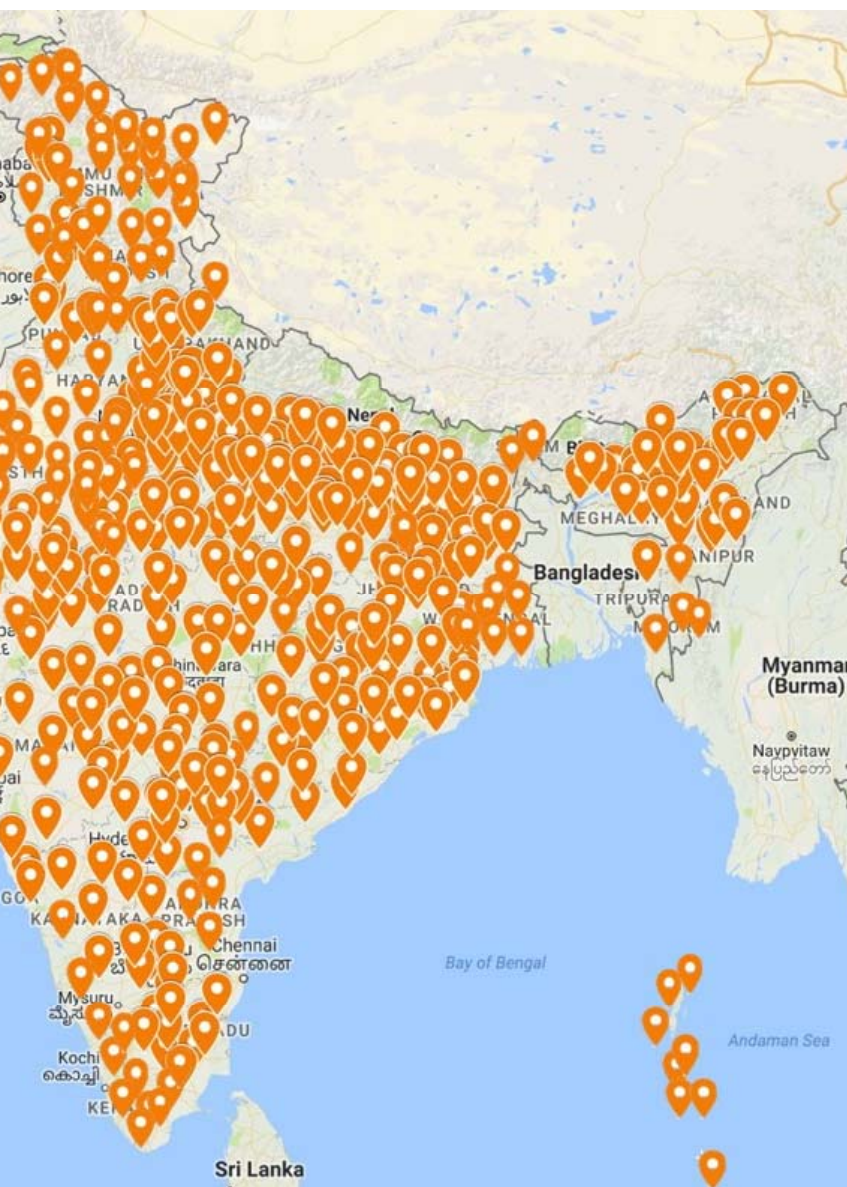


20 Brand
Ambassadors



1 Communicator-
in-Chief

Ensuring Sustainability



ODF-Q

- Every toilet geo-tagged
- Double Verification system
- Rapid response to reports of poor quality

ODF-S

- Continuous behavior change communication
- O&M important for sustained usage
- Institutional mechanisms and financial incentives
- Ten Year Sanitation Strategy for sustainability

ODF-plus

- Solid and Liquid Waste Mgt prioritized in ODF villages
- Water supply on priority to ODF villages

Lessons Learned

Political Leadership

- Political will and leadership from the top is critical

Public Funding

- Put your money where your mouth is (Over \$20 billion committed)

Partnerships

- Engage with Development Partners, NGOs, pvt sector, civil society, media

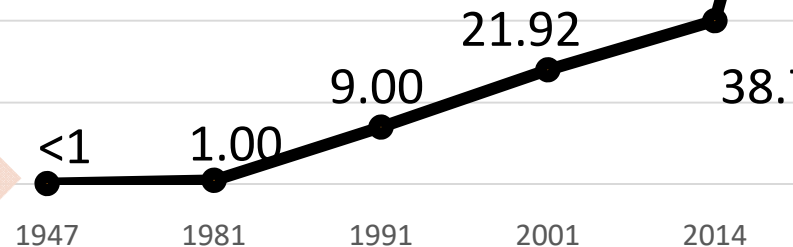
People's Participation

- Sanitation not a government programme, but a jan andolan



Rural India Sanitation Coverage

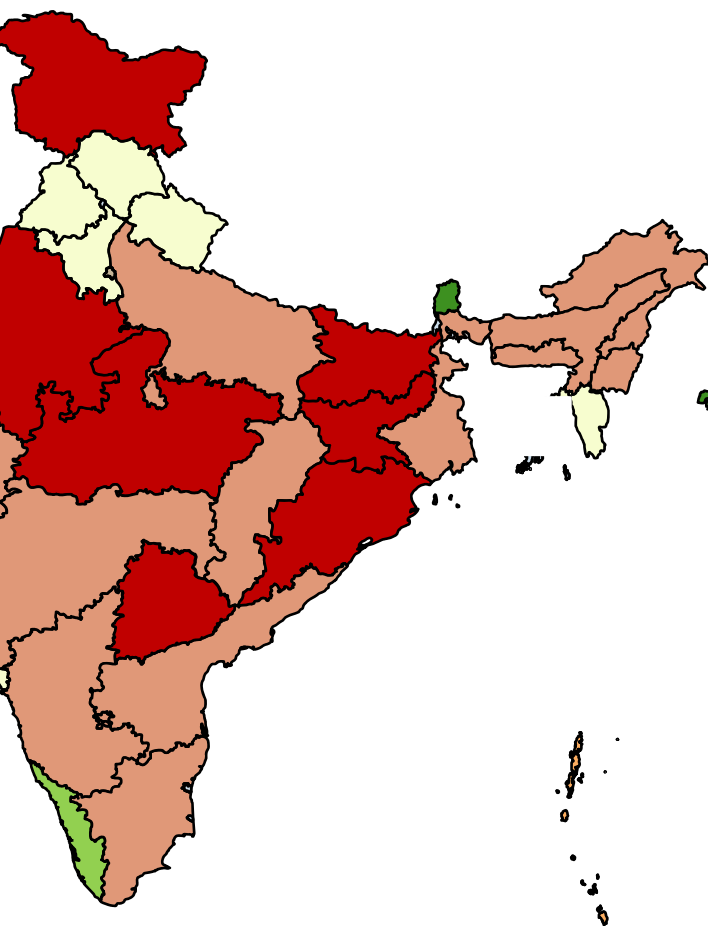
The Concorde Slope



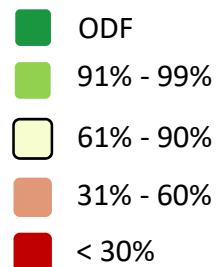
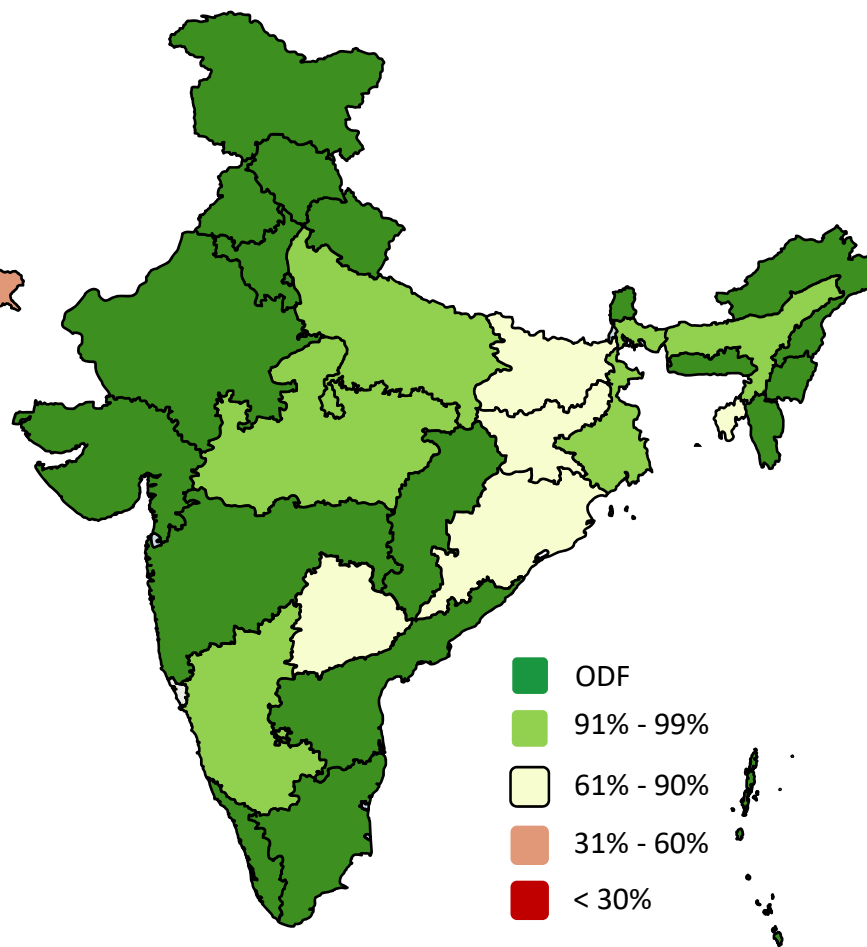
8: Swachh Bharat Outcome So Far



9% (Oct 2, 2014)



98% (As on date)



**450 million people
changed their behavior**

**92 million toilets built
(93% usage)**

555,000 villages ODF

616 districts ODF

30 States/UTs ODF

Impact so far



SBM saves lives

100,000
diarrheal
deaths avoided
in India
since ODF

BILL & MELINDA
GATES foundation

SBM improves
health

- 58% higher cases of **wasting**, 17% higher cases of **stunting**, in non-ODF areas



SBM empowers
women

- Strengthens **safety of women** and increases their workforce participation



SBM saves money

- Household in an ODF village in India saves on average **Rs 50,000 (USD 800) per year**

2019 Study UNICEF : Impact Assessment of the SBM-G on faecal contamination in the Environment

Overall, in terms of faecal contamination, ODF villages (as compared to non-ODF villages) were, on average:

- 21.7 times less likely to have their groundwater sources contaminated (17.1 times less from contaminants traceable to humans alone)
- 1.16 times less likely to have their soil contaminated
- 36.7 times less likely to have food contaminated and 20.1 times less likely to have household drinking water contaminated.

The study findings indicate that these substantial reductions may potentially be attributed to the improvement in sanitation and hygiene practices, as well as supportive systems such as regular monitoring and behaviour change messaging.

SAFE SANITATION AND PREVENT SLIPPAGE

A. Sanitation infrastructure

Retrofitting	2. O&M	3. Upgrades	4. FSM
Single pits	Pit emptying	Bathrooms	Policy
Septic tanks not soak pits	Repairs	Accessibility	Regulation
Incorrect instruction		Aspirational	

B. Management

5. IEC	Usage, child excreta, hygi
6. Capacity Building	Departments, G ntline worke
7. Financing	Credit linkage, Sector
8. Monitoring	Slip-backs, tech course correc
9. Human Resources	Staffing, Tol
10. Partnerships	KRCs, Develop partners, other departments, Pvt
11. R & D	NISH, Engg colleges, TISS

HOW DO WE ACHIEVE ODF-S?

ODF

No visible faeces found in the environment/village
Every household uses **SAFE technology option for disposal of faeces**

ODF-S

Safe disposal of human excreta is sustained post attainment of ODF status; Handwashing and Personal hygiene

ODF +

SLWM, Grey Water management; Plastic Waste; Bio waste; MHM



Issues

What's wrong
here?



Distance between pits too low; this allows water from one pit to seep into the other; **min distance between pits is 3ft**

Photo Credit: Shrikant

What's wrong
with this?



Pit is too deep; **ideal depth of circular pit is 4ft**; if black soil, can dig upto one additional foot

Photo Credit: Shrikant

What's wrong
here?



Water source too close to the toilet; water from pit leaches into nearby ground and contaminates the surrounding ground water source; **ideal distance to be maintained is more than 10ft**

Photo Credit: Shrikant

ODF-S PROTOCOL

y	ODF-S Protocol
y and legal framework	<ul style="list-style-type: none"> • All States to submit annual plan for ODF-S • ODF-S agenda in Gram sabha and re-affirmation • New house construction to include installation of latrines • Toilet as qualification for elections • Second Verification, third party verifiers • Sanitation plans to integrate with GPDPs
nology	<ul style="list-style-type: none"> • Retrofitted toilets, accessible toilets • FSM protocol
	<ul style="list-style-type: none"> • Post ODF IEC Plan • Sanitation month - October
city Building	<ul style="list-style-type: none"> • Post ODF CB Plan • All States/district mapped with institutions
toring	<ul style="list-style-type: none"> • Sustainability parameters on MIS • Social audit at GP level
utional	<ul style="list-style-type: none"> • Retaining SBMG functionaries post ODF • Annual awards for ODF-S
ing	<ul style="list-style-type: none"> • Staff, IEC, CB



Thank you

1. Toilet Retrofit

Conversions

Incorrect construction

Access to water – overhead tank, hand pumps etc.

2. Operation and Maintenance

Repairs

Emptying of pits / septic tanks;

3. Upgrades

Disability

Bathing facilities

Aspirational toilets (tile cladding, wash basin, etc)

4. Fecal Sludge Management

Policy

- Technology recommendations
- Treatment and disposal

Regulation

- FSM vendors
- Certification

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Messaging for Sustainability

ODF IEC blind spots:

1. Usage by all – focus on men
2. **Child Excreta** Management
3. Handwashing and hygiene
4. Focus on technical corrections
5. Twin pit myths
6. Pit emptying
7. Safe cleaning agent for twin-pits
8. Publicizing jobs created / entrepreneurship

IEC Toolkit

1. Who to train?

Government employees, PRI officials, SIRD, NYK/NSS, ITIs, partner orgs, masons. **Massive cascading training on ODF S of 800,000 local govt officials being initiated in 2019.**

2. Who will train?

States through government institutes KRCs, NGOs, Partner Orgs

3. How to train?

Field modules (watch and learn, do it yourself)
Manuals, Ready Reckoners
Cross-visits

What components of ODF-S need financing?

- IEC, Capacity building, Manpower
- Retrofitting, O&M, repair of toilets
- Construction of IHHLs not covered under SBMG, shared, CT/PT, in toilets, etc.

➤ CONVERGENCE OPPORTUNITIES

- **MGNREGA**, 14th FC, MPLADS / MLALADS, LIS, District Mining Fund, Inter Ministerial
- NABARD or District Lead Bank

➤ BALANCE IEC, ADMIN FUNDS FROM PREVIOUS YEARS

➤ CSR

➤ CREDIT LINKAGE For Retrofitting, O&M, Repairs and Upgrade of T

Aligning with MSRLM, MAVIM or other micro finance and alternative banking projects

Monitoring

Nigrani samitis to continue for 3 years post-ODF

Pit emptying of *due-HH pits* after two years of usage, to be tracked and captured

Social audit at GP level every October 2nd for re-affirmation of ODF

Technology to track usage? *a la* Swachhathon odour-sensors

IEC & Monitoring

- Swachhagrahis, ASHA, ANM, VWSCs, nigrani samitis, etc
- ICDS, Education, PR & RD, Tribal, State Pollution, Agriculture, etc

Service Delivery

- Scrap dealers, FSM vendors – job opportunities for rehabilitation of sanitation workers
- Rural marts for manufacturing, repairs, retrofitting, O&M and upgrades

Sustained behavior change

- Media (TV, print, Radio), NGOs, CSR, PSUs, govt. agencies (youth agencies)

Strengthened supply chain

- Production centres, private vendors, SHG run models

Credit Linkages

- Banks, micro-finance, SHGs, Revolving fund, etc.

Building capacities

- KRCs, SIRD, NIRD, NSDC, PR & RD, Agriculture dept, etc

Service Delivery

- Call centre, eg: Infosys
- PPP and social entrepreneurship for user-fee-based services

. Research
elopment

- **Tie-up with IITs, TISS, TERI, other engineering and design colleges**
- **Swachhathon 2.0?**

ODF-S as part of **ACR** for functionaries at all levels

An ODF-S-linked **increment** / incentive for ground functionaries

Awards for performance at major events –
local, State, National

Cross-exposure through exchange programmes to other
Districts / States / Countries



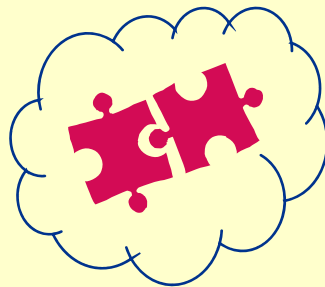
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Protocol Toolkit

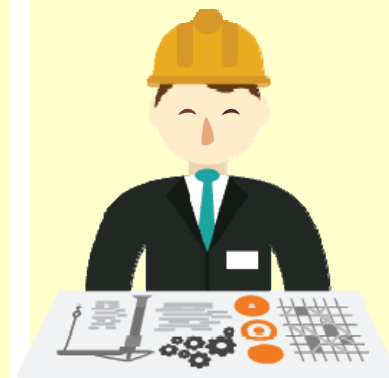
1. Annual plan template



2. Retrofitting guidance



3. IEC toolkit



4. Capacity building modules



- Advisory on IEC+CB+Admin expenditure at Centre for ODF-S as per ongoing norms; amount = last expenditure incurred in the ODF declared year
- Consultation with all States on ODF-S, Dec 2017
- Launch protocol, Jan 2018
- AIP submission by States, **Jan 2018**
- Create a committee for toilet technology advisement (development orgs, experts, etc), Feb 2018
- Pilot convergence of funds with one State
- National level institutional strengthening eg: NISH, TISS



Thank you

Retrofit Universe

a. Conversions

- Single Pit to Twin Pit
- Septic tank without soak pit to with soak pit
- Shared toilet to IHHL

b. Corrections

Before use

- Twin pits too close to each other
- Twin pits too close to drinking water source
- Pits too deep
- Single pit with no junction
- Twin pit in high water table areas
- Alternative toilet cleaning agents
- Incorrect pits beneath a structure
- No space for second pit
- Pit is cemented at the bottom and in use
- Leach pits without holes
- Poor angle of toilet pan trap
- Poor Junction chamber

SAMPLE

ern

ce between pits
; this allows
from one pit to
to the other;
tance between
3ft

Corrective measure

An **impermeable baffle wall** may be provided between the pits. This wall may be made of brickwork or concrete. To minimize cost, a trench of required depth and width can be dug in-between the pits and filled up with puddle clay/ bentonite clay to stop or retard travel of moisture.



Photo Credit: Shrikant

Low or no-cost tools

- Community Radio
- Post cards
- SMS blast, IVR
- Wall paintings
- Cable TV
- Competitions (Schools)
- Song, Drama, Puppet shows (Division)
- Doctors' prescription, electricity bills, textbooks, rail tickets, etc

Using Community Radio to engage the rural population

Focus can be on –

1. Relatable community stories
2. Role Models and natural leaders
3. General awareness on sanitation and hygiene
4. Stories of successful Village Level Organisations

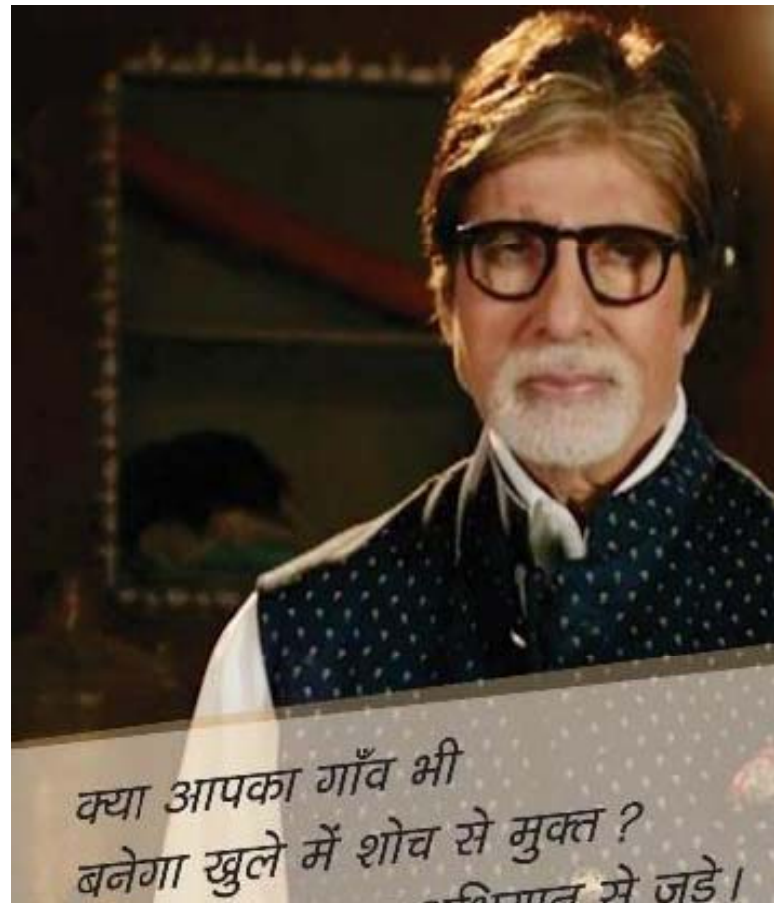
Example those provided by Railways



Re. 1.50 to buy print and mail each postcard across the country

S Blasts

Engage local celebrities to
voice the sms - es



Paintings



le TV

Use Cable-TV for messaging on twin pit technology and usage



<https://www.youtube.com/watch?v=ym4EJQ7XORk>



Making Toilet Aspirational

1. Brand and market a competition in schools amongst youth
2. Can be essay, film, short stories, paintings etc
3. Set up terms and conditions, regulations and judgment parameters

Strengthening IEC partnerships

Must-Do

- AIR
- Doordarshan, NFDC
- State vernacular media
- Department of Post, Electricity
- Inter- Ministerial Convergence

Can-do

- Independent Orgs - IMA, Corporates, PSUs
- Cable TV network
- Radio Mirchi
- CBOs