





# RESEARCH - ACTION - LEARNING NOTES

# **About Project Nirmal**

The overall vision of Project Nirmal is the demonstration of appropriate, low-cost, decentralized, inclusive and sustainable sanitation service delivery solutions for two small towns (Angul and Dhenkanal) in Odisha leading to improved sanitation access for all households and integration of FSM in the sanitation value chain, through enabling institutional and financial arrangements and increased private sector participation.

The project is being implemented by Practical Action and Centre for Policy Research with support from Bill and Melinda Gates Foundation; Arghyam; Housing and Urban Development, Government of Odisha; and Municipalities of Angul and Dhenkanal.

## The project aims to:

- Demonstrate State Government and ULB commitment towards sanitation service delivery in small towns;
- Capacity development of states and cities for effective sanitation service delivery;
- Increase in number of people in Angul and Dhenkanal with access to better sanitation services;
- Improve city-wide planning approaches for sanitation; and
- Demonstrate models for Faecal Sludge Management (FSM).

# CREATING DEMAND, ENSURING USAGE AND ADEQUATE MAINTENANCE OF URBAN SANITATION INFRASTRUCTURE THROUGH COMMUNICATION INPUTS















# **Background**

Under the Swachh Bharat Mission—Urban (SBM-U) substantial progress has been made with respect to ensuring access to sanitation infrastructure for urban households in Odisha. However, in order to fully leverage the benefits of improved sanitation access on health and economic well-being of citizens as well as the environment, it is crucial to ensure that the sanitation infrastructure which has been created is used and maintained properly along with adoption of safe hygiene practices. Research and field experience suggest that personal, social and cultural beliefs have a strong role to play in creating demand for better sanitation services and in influencing behaviours related to usage and maintenance of these services.

Although sanitation is a basic need of every

its overall objective of "demonstrating the feasibility of town-wide low-cost decentralized sanitation systems for small and medium towns, strongly incorporating Faecal Sludge Management (FSM) techniques for On-Site Sanitation (OSS) systems". Specifically, the project aimed at spreading awareness on the need for FSM and its linkages with health, economic well-being and the environment. Further, the project was committed to building an understanding and knowledge about the various processes (technical, institutional and financial) to be implemented in order to ensure safe, scientific and sustainable management of faecal waste (including safe containment1, collection, transportation, treatment, disposal2 and reuse3). The target audiences for the communication inputs were all stakeholders along the FSM value chain including households, institutions (schools and

For any sanitation related initiative to be impactful it is crucial to focus on the behaviours of all concerned stakeholders in order to weed out negative behaviour patterns and to reinforce positive ones.

household other functional aspects often take credence over it. Generating awareness on the linkages between improved sanitation and better health, economic well-being and cleaner environmental conditions is imperative for creating demand for better sanitation services and is likely to lead to construction of toilets and result in a decline in open defecation. Further, given that usage and adequate maintenance of sanitation infrastructure is also a learned and imbibed behaviour - a practice developed over time - it is crucial to aid this process through appropriate communication inputs that help generate awareness about the impact of poor containment, collection, transportation and treatment systems on the environment among all stakeholders.

# **Designing Communication Inputs under Project Nirmal**

## **Objectives**

The communication inputs under Project Nirmal were aimed at ensuring that the Project achieves

health institutions), private service providers (including desludging operators, masons, etc.), and Urban Local Bodies (ULBs).

Assessment of Existing Knowledge, Attitudes and Practices (KAPs) along FSM value chain

Research4 and stakeholder interactions brought to light that the existing knowledge,

<sup>&</sup>lt;sup>1</sup> Ensuring that toilets and OSS systems (septic tanks / pits) constructed by households and institutions adhere to the existing National standards and that they are regularly desludged.

<sup>&</sup>lt;sup>2</sup> This included addressing negative behavior patterns (and thereby practices) pertaining to collection, transportation, treatment and disposal of faecal sludge and reinforcing the adoption of proper method of collection, use of safety gear during collection, use of proper medium for safe transportation, and prevention of disposal in the water bodies/open spaces/drains.

 $<sup>^3</sup>$  To augment understanding about the end-use of treated faecal sludge within the community and with other government and private entities.

<sup>&</sup>lt;sup>4</sup> Including a Baseline Study on Sanitation Service Delivery in Angul and Dhenkanal and Formative research

attitudes and practices related to management of faecal waste were very poor in both towns (Angul and Dhenkanal) - the containment systems (septic tanks and pits) were poorly designed and not conforming to existing standards and were not being desludged regularly; there was an absence of adequate and scientific mechanisms for collection and transportation of faecal sludge; and untreated faecal sludge was being disposed rampantly into the open environment (in drains, open areas and water bodies). Lacunae with respect to awareness, knowledge and practices along the FSM value chain were observed for all stakeholders and these findings have been presented in Figure 1 and Table 1.

The assessment also revealed that slum communities were not aware about the proper de-

sign of toilets / OSS systems as well as sources of funding available for construction of toilets (schemes and programs of Government of India and Government of Odisha). Further, the assessment also brought to light the fact that poor awareness on sanitation and FSM was not just limited to slum communities but was also a huge challenge in non-slum communities. In fact, non-slum communities found it even harder to establish a connection between improper FSM and their health and environmental pollution. Given the rigid personal boundaries in non-slum communities and the fact that households have very limited time and avenues for community bonding and collective action it was extremely challenging to design appropriate communication channels for them communities.

#### TREATMENT AND **COLLECTION AND CONTAINMENT DISPOSAL TRANSPORTATION** Containment systems do not · Limited availability of • Disposal of untreated sludge adhere to national standards desludging/emptying services and septage in the open being provided by the environment OSS systems are not desludged Municipality regularly Reliance on manual scavengers OSS systems discharge directly High costs of desludging into open drains services provided by manual scavengers and/or private operators Cleaning of septic tanks isn't welcome in slum communities

**Figure 1:** Lacunae / Gaps related to Knowledge, Attitudes and Practices along the FSSM Value Chain in Angul and Dhenkanal



**Table 1:** Details of negative behaviours and practices of stakeholders along the FSM Value chain in Angul and Dhenkanal

Stage in the FSM Value Chain	Stakeholder(s)	Issues as revealed by Baseline Study on Sanitation Service Delivery and Formative Research	Aspect to be addressed by communication Input⁵
Containment	Households / Institutions / Masons	Toilets and OSS systems (Septic tanks/pits) do not adhere to national standards	Awareness about proper design and construction of toilets and OSS systems (septic tanks and pits)
		Most of the OSS systems (Septic tanks/pits) discharge into the open drains	Awareness on safe disposal mechanism
	Household / Institutions	Households / institutions do not regularly empty / desludge the septic tanks/ pit latrines	Awareness about the need for timely desludging / emptying of OSS systems (including septic tanks and pits)
Collection and Transportation of sludge	Households / ULB	Limited availability of desludging / emptying services provided by the Municipality due to which households have to rely on manual scavengers or private cesspool operators	Advocacy measures to address the supply side concerns of limited desludging / emptying services being provided by the Municipality
	Households / private cesspool operators / ULB	The cost of engaging manual scavengers is very high <sup>7</sup> and this dissuades households, especially slum households, from desludging regularly	Create adequate linkages between the community and private service providers
	Households (especially in slum communities) / private cesspool operators	Cleaning of septic tanks and pits is not welcome within the community because of the stench and the presence of sludge in the open	Awareness on proper / safe method of collection and transportation of faecal sludge and ensuring adoption of safe hygiene practices among service providers (Municipal and private)
Treatment and Disposal	Households / Institutions / ULB / private operators	Untreated disposal of faecal sludge in open fields, drains, open spaces and water bodies	Generating awareness and knowledge on safe and scientific methods for treatment of faecal waste
			Addressing the negative behaviour of disposing the untreated sludge into the water bodies/open space/drains
			Creating awareness on the end use of treated faecal waste

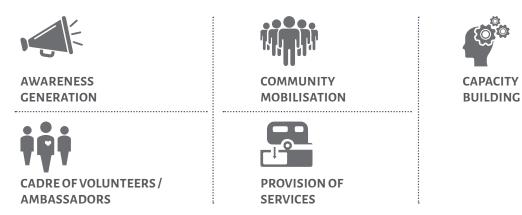


Figure 2: Guiding Principles of the Communication Strategy

# **Communication Strategy**

#### **GUIDING PRINCIPLES**

A communication strategy was developed under Project Nirmal to (a) address the negative behaviours and practices being followed by different stakeholders along the sanitation value chain and (b) address supply side constraints in order to ensure adequate provision of sanitation related services (including collection, transportation, treatment, reuse and disposal related services). The overarching theme was "ensuring implementation of safe and scientific sanitation practices along the entire sanitation value chain with

FSM as an integral component".

The Communication Strategy had five guiding principles, namely, awareness generation, community mobilisation, creating a cadre of community mobilisers/champions/ambassadors, capacity building and adequate provision of sanitation related services. The implementation details of each of these principles are presented in Table 2. Inter Personal Communication (IPC) was identified as the primary communication tool for enhancing awareness levels and building knowledge / capacities of all stakeholders on issues related to sanitation in general and FSM in particular.

Table 2: GUIDING PRINCIPLES OF THE COMMUNICATION STRATEGY AND THEIR IMPLEMENTATION DETAILS

<b>Guiding Principle</b>	Details		
Awareness Generation	"Awareness brings knowledge which is the root for motivation to change"		
	• Awareness generation on FSM and its importance given the linkages with health and environment		
	<ul> <li>Awareness generation on FSM processes</li> </ul>		
	<ul> <li>Information dissemination and awareness generation activities targeted at making local communities aware about the existing norms for construction of toilets / OSS and FSM</li> </ul>		
	<ul> <li>Building awareness among local communities about the role of the local government (Municipality) in the sanitation / FSM domain so that they are able to hold the latter accountable</li> </ul>		
Community Mobilisation	"Sanitation behaviours are influenced not just by individual choices but by community-based norms and traditional mores."		
	• For behaviour change to take root and for new practices to become the norm sustained community mobilisation and engagement is crucial		
Creating a cadre of community mobil- isers/champions/ ambassadors	"Leveraging the motivation and enthusiasm of members / leaders of community engagement structures established under Project Nirmal"		
	■ The members of community engagement structures created under Project Nirmal namely, Slum Sanitation Committees (SSCs) and Ward Sanitation Committees (WSCs), to be supported to take on the role of community mobilisers/champions/ambassadors and to facilitate awareness generation.		
Capacity Building	"Capacity Building of local communities to enable them to take on the role of change agents"		
	■ Capacity building of leaders and members of community engagement structures namely, SSCs and WSCs to enable them to play the role of change agents and disseminators of information in their respective communities		
	<ul> <li>Capacity building and hand holding support to leaders and members of community engagement structures namely, SSCs and WSCs to negotiate and engage with the local Municipality for ensur- ing adequate sanitation services and to ensure creation of FSM infrastructure</li> </ul>		
	Capacity building of service providers, institutions and officials involved in sanitation service delivery		
	<ul> <li>Building capacities of service providers (including masons, cesspool operators and sanitation workers) on the acceptable practices / standards related to construction of toilets/OSS systems, collection and transportation of faecal sludge</li> </ul>		
Strengthening provision of essential services	<ul> <li>Addressing supply side constraints regarding collection, transportation and treatment services for faecal sludge</li> </ul>		
	Addressing constraints for construction of toilets in slums (space and finance)		



#### TARGET AUDIENCES

# Change in behaviour needs to be preceded by various stakeholder groups thinking and acting differently than before.

Sanitation and FSM does not have a single, monolithic audience; instead it has many audiences each perceiving a different set of benefits/risks arising from behaviour change and each responding differently to various types of communication inputs.

The stakeholder mapping exercise undertaken as a part of the formative research identified students<sup>8</sup>, women<sup>9</sup> and sanitation service providers as **active stakeholders**. The communication inputs for this group were aimed at building upon

their existing motivation and enabling them to act as change agents and disseminators of information in their respective communities as well as to undertake advocacy and networking. Adult males, masons, plumbers and sanitary material suppliers were identified as passive stakeholders who required intensive and targetted communication inputs in order to develop their understanding on sanitation and FSM related processes. The third catgory of stakeholers were those that although had a significant stake / voice but had till now not been targeted by communication inputs and could potentially play the role of either audiences or change makers, these included sanitation workers, ward councillors and ULB officials. (Figure 3)

ACTIVE	PASSIVE	LIMITED OUTREACH
"Change agents" (Women, Students and Sanitation Service Providers)	Core group of audience (Adult males, Masons, Plumbers and Sanitary material suppliers)	Not been targeted or identified exclusively (Sanitation workers, ward councillors, ULB officials)
<ul> <li>High level of motivation, self motivated and open to change</li> <li>Are already sensitized to some extent and willing to receive more knowledge and are more welcoming towards outreach efforts</li> <li>Could be involved in high skilled communication plans like advocacy and networking</li> <li>Could also be used as channels of communication because they have a larger stake within the family, the community and the administration.</li> </ul>	<ul> <li>Slow to accommodate change based communication</li> <li>Less motivated to adapt and accept change</li> <li>Not sensitized about issues related to sanitation and FSSM</li> <li>Need more intensive outreach through targeted communication inouts.</li> </ul>	<ul> <li>Have significant stake and voice in the community / town</li> <li>Never been brought onto the centre stage and there have been limited efforts to design communication plans specifically for them</li> <li>This group could be effectively mobilized and be placed both in the roles of the audience and the change makers.</li> </ul>

Figure 3: Stakeholders / Target Audiences identified as a part of the Communication Strategy

<sup>&</sup>lt;sup>5</sup>The text in red are mostly advocacy related activities

<sup>&</sup>lt;sup>6</sup>In Dhenkanal there is one functional cesspool vehicle being operated by the Municipality while in Angul the Municipality has one dysfunctional cess pool truck

<sup>&</sup>lt;sup>7</sup>Ranges from INR 1,500 – INR 2,000

<sup>&</sup>lt;sup>8</sup>They had a high recall value for sanitation related messages

<sup>&</sup>lt;sup>9</sup>Women bore the brunt of poor sanitation systems and the embarrassment associated with open defecation

# Communication Methods and Tools implemented

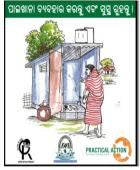
LEVERAGING COMMUNITY ENGAGEMENT STRUCTURES (SSCS AND WSCS) FOR SPREADING AWARENESS:

Regular meetings and capacity building sessions were organized with leaders of SSCs and WSCs across Angul and Dhenkanal. These meetings were aimed at (a) increasing awareness on the need for sanitation, (b) sources of funding available for construction of toilets, (c) technical specifications as per national norms for construction of toilets and OSS systems, and (d) the importance of FSM to ensure better health and environmental conditions in communities and the entire town. The leaders of SSCs and WSCs carried the message forward in their respective communities through IPC and small group meetings. Their efforts were suitably supported by the IEC material prepared under the Project.

PREPARATION OF IEC MATERIAL TO SUPPORT DEMAND GENERATION FOR TOILETS:

Under Project Nirmal, IEC material was developed and circulated among key stakeholders for









further dissemination. (Figure 4) The IEC material focussed on the importance of toilets and aimed at addressing emotions of shame, fear and dignity around use of toilets thereby generating demand for toilets and leading to reduction in open defecation.

#### **OBSERVATION OF SPECIAL DAYS AND WEEKS:**

With the aim of spreading awareness on different aspects of sanitation several special days and weeks were observed. Global Hand washing day was celebrated on 15th October (Figure 5) and World Toilet Day was observed on 19th November. (Figure 6)

Sanitation week was celebrated In June 2015 using three communication modes including, a signature campaign inviting citizens to sign petitions demanding better sanitation services from their respective Municipality; an audio campaign with





Figure 4: IEC material prepared to support demand generation for toilets under SBM - U







Figure 5: Celebration of Global Handwashing Day on 15th October











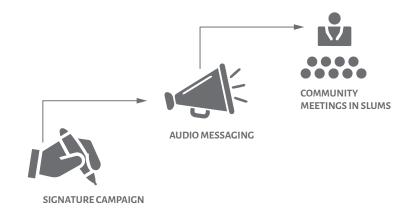
Figure 6: Celebration of World Toilet Day

the help of mobile vans which kept sharing sanitation related messages in the local language over a loud speaker; and community meetings in slums. The communication focused on seven key aspects, namely, handling of drinking water, food hygiene, personal hygiene, solid waste management, liquid waste management, safe disposal of human excreta, and environmental WASH.

## **Lessons Learnt**

 Since knowledge, attitudes, practices and behaviours related to sanitation and specifically those pertaining to creating a demand for sanitation services, their usage and proper maintenance are strongly influenced by personal beliefs and emotions it becomes imperative to understand these beliefs and emotions for all stakeholders along the sanitation value chain. Through appropriately designed communication inputs sanitation related initiatives can address the negative behaviour patterns and reinforce positive ones.

■ The development of communication inputs





HANDLING DRINKING WATER



FOOD HYGIENE



PERSONAL HYGIENE



SOLID WASTE MANAGEMENT



LIQUID WASTE MANAGEMENT



SAFE DISPOSAL OF HUMAN EXCRETA









Figure 7: Sanitation week observed in Angul and Dhenkanal



needs a scientific approach in order to ensure that current behaviors and practices which are impediments for realizing the optimal benefits of improved sanitation access are appropriately addressed. Under Project Nirmal, the communication strategy and inputs were developed based on the findings of a rigorous assessment which included formative research and consultations with all stakeholders. This process ensured that the local context and nuances were well understood and communication inputs were designed accordingly.

- The strategy of leveraging community engagement structures created under Project Nirmal, namely, SSCs and WSCs, has stood in good stead as the motivation and enthusiasm of the leaders and members of these community structures has been effectively channelized for awareness generation and information dissemination at the community and ward level as well as for undertaking advocacy and networking to ensure provision of adequate sanitation related services.
- The project recognizes women, children and sanitation service providers as active stakeholders. Women and youth have been trained and their capacities strengthened on issues related to design of toilets and OSS systems. However, care needs to be taken to ensure that

the project doesn't over burden these population groups with responsibilities related to communication, networking and advocacy.

- Community members, especially those who are a part of the SSCs have been trying to spread awareness among uninitiated members on better sanitation behaviour. At times, there is breakdown of IPC as people want change but feel that they cannot convince others. This needs to be addressed through appropriate training inputs on how to steer conversations and processes that help boost the motivation of community leaders / volunteers despite negative response from communities.
- The issues related to poor sanitation related awareness are not just limited to slum communities and there are also significant challenges in non-slum communities. Two key challenges encountered in non-slum communities are (a) inability of households to relate to the linkages between poor management of faecal sludge and their health as well as the micro environment of their colonies and (b) lack of spaces, platforms and opportunities for engaging effectively with these communities. This is something which needs to be addressed in order to ensure city-wide implementation of sanitation related awareness generation and communication.











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