



## Orissa State Volunteers and Social Worker Association

(Agreement between Oximus Advisory Services Private Limited “Service Provider” and Orissa State Volunteers and Social Workers Association (OSVSWA) “Employer”)

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**Practical  
ACTION**

Final Evaluation

# **PROJECT NIRMAL**

Orissa State-Level Sanitation Partnership





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# ABBREVIATIONS AND ACRONYMS

Abbreviations/ Acronyms	Full Form
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
BMGF	Bill and Melinda Gates Foundation
Capex	Capital Expenditure
CPR	Centre for Policy Research
CTs/PTs	Community/Public Toilets
DC	District Collector
EO	Executive Officer
FSM	Faecal Sludge Management
FSS	Faecal Sludge and Septage
FSTP	Faecal Sludge Treatment Plant
GoO	Government of Odisha
Govt.	Government
HUDD	Housing and Urban Development Department
IEC	Information, Education and Communication
IHHLs	Individual Household Latrines
INR	Indian Rupees
KMA	Knowledge Management
LFA	Logical Framework Analysis
M&E	Monitoring & Evaluation
NGO	Non- Government Organization
O&M	Operation and Maintenance
OECD- DAC	Organization for Economic Cooperation and Development- Development Assistance Committee
Opex	Operational Expenditure
OSCPB	Odisha State Pollution Control Board
OSS	On-site Sanitation
OUSP	Odisha Urban Sanitation Policy
OUSS	Odisha Urban Sanitation Strategy
PA	Practical Action
SBM	Swachh Bharat Mission
SCI-FI	Scaling City Institutions for India: Sanitation
SDG	Sustainable Development Goals
SLW	Solid and Liquid Waste
SWOT	Strength, Weakness, Opportunity, Threat
ToR	Terms of Reference
UK	United Kingdom
ULB	Urban Local Bodies
UNICEF	United Nations Children’s Fund



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***Devanshu Chakravarti***  
*Director,*  
*Oximus Advisory Services Private Limited*



# EXECUTIVE SUMMARY

In India, urban sanitation sector got a policy impetus with the launch of Swachh Bharat Mission in 2014 and Atal Mission for Rejuvenation and Urban Transformation (ATAL) in 2015. Project Nirmal was initiated in November 2014 as a State level Sanitation Partnership to demonstrate sustainable sanitation service delivery for small towns.

Project NIRMAL is highly relevant to the context at both the state and national level as the project offers solutions to safe sanitation services that are not present in many small towns and cities in India. The project had a significant policy impact at the state level as it supported the state Government in the preparation of the Odisha Urban Sanitation Policy (OUSP) and revised the Odisha Urban Sanitation Strategy (OUSS). Both these documents were notified in December 2016, prior to the launch of the Government of India's "National Policy on Faecal Sludge and Septage Management" in February 2017.

As the indirect population outreach of the project is across the state and because the project could achieve most of its project outcomes and successfully demonstrate FSM, the effectiveness of the project is rated as high. The project efficiency is rated as moderate as there were cost and time overruns for achieving the project outcomes. The sustainability of the project is rated as moderate as full cycle implementation of operation and maintenance (O&M) was not completed in both project locations. The two municipalities also expressed their inability to take over the project and require further handholding support. As part of social inclusion, the project worked with municipal workers to introduce safe and hygienic faecal sludge and septage cleaning practices. Hence, the rating under social inclusion is high. Overall the project is rated as satisfactory.

The major learning of the project are that land is an important factor while designing FSM projects; an enabling environment is necessary for successful project demonstration; while working with the Government, patience and building relationship is the key to success; there are bound to be time and cost escalations in pilot projects and these should be factored into the project design; for effective demonstration of sustainable models, it is important to consider a full cycle operation and maintenance for FSM projects and while working with Government bodies for improving processes, transparency and accountability in operations emerge as positive unintended impacts.

The key recommendations from the evaluation are as follows:

- **Continuing Project Nirmal for two more years for complete demonstration of Integrated FSM Model:** The vision of project Nirmal was demonstration of sustainable sanitation service delivery for small towns. As of December 2019, while the other project components like awareness generation, FSTP construction and citywide participatory planning were demonstrated successfully, the operation and maintenance component of the unique Integrated FSM model involving private sector, could be demonstrated for only one year. Closing the project at this stage, will be an opportunity missed on demonstrating the high sustainability potential of the integrated FSM model to the State Government in Odisha. It is imperative to support operations for two more years till operational viability of the FSTP operations in line with the FSTP business plan is achieved.
- **Project Nirmal to serve as 'demonstration' for Future FSM Projects:** Future projects may consider using the current sites of project Nirmal – Dhenkanal and Angul as demonstration sites for FSTPs, especially for Government funded Projects in Odisha.

- **Considering alternate strategies for land identification for FSTPs in future Projects:** Identifying land for FSTP was the major cause for implementation delay in project Nirmal. For future project, alternate strategies for land identification like planning exposure visits for communities to existing FSTPs are recommended. This will dispel doubts in the mind of communities regarding FSTPs being sources of air and water pollution.
- **Function as a Knowledge Hub on FSM and offer services to other ULBs/ states:** Project Nirmal resources can function as part of a 'knowledge hub on FSM' and can offer services to other stakeholders, nationally and internationally. FSM projects are being taken up across the country by the Government and private operators. The learning from Project Nirmal can be used to offer services to different stakeholders.
- **Capturing the Learning from Project Nirmal:** It is imperative to capture the learning from project Nirmal- both from successes and failures -in a systematic manner. These learning can be used for institutional growth as well as for offering services to the sector. Short films of 2-3 minutes that can be shared through social media can be the best way of capturing the key lessons and sharing with others in the sector.
- **Policy Advocacy at the national level:** While the project was successful in influencing policy at the state level, project experiences need to be shared with top level policy making bodies in the country like the Niti Aayog, Advisors to the Prime Minister's Office and the officials of the Ministry of Jal Shakti.
- **Offering services in other areas under Urban Sanitation:** During discussions, senior Government official in the state indicated that Practical Action can work in other areas in urban sanitation, like solid waste management. Practical Action and CPR should capitalise on its existing goodwill and rapport with the state Government to experiment with innovations in new ideas under the larger theme of Urban Sanitation. There can be other area of showcasing where 'Big Change Starts Small'.

# 1.0 INTRODUCTION

## 1.1 Background

### 1.1.1 Urban Sanitation Scenario in India during 2011-2014<sup>1</sup>

In 2008, the Government of India launched the National Urban Sanitation Policy (NUSP) to ensure focus and prominence to urban sanitation. NUSP's vision was "to transform all Indian cities into community driven, totally sanitized, healthy and liveable habitations for all citizens, especially the urban poor".

The urban sanitation scenario in India at the time of the 2011 Census was as follows:

- Thirty one percent<sup>2</sup> of India's population was residing in urban centres<sup>3</sup>.
- Eight One percent (81.4%) of urban households had access to Individual Household Latrines (IHHLs), 12.6 per cent were using Community/Public Toilets (CTs/PTs) and six per cent were defecating in the open<sup>4</sup>.
- Forty Five (45.3) percent of urban households had toilets connected to On-Site Sanitation (OSS) systems; this included households with toilets based on septic tanks (38.2 percent) and pits (7.1 percent)<sup>5</sup>; while only 32.7 percent were connected to underground sewerage systems<sup>6</sup>.
- Around 88 percent of households in small and medium urban centres were connected to OSS systems<sup>7</sup> as compared to 37 percent in Million Plus cities and 72 percent in Class I cities. The high capital and Operation and Maintenance (O&M) costs of underground sewerage systems had limited sewer-based wastewater collection and conveyance systems to large cities.
- Most of the small and medium urban centres lacked underground sewerage systems and only 17.36 percent of households had IHHLs connected to such systems<sup>8</sup>.

Urban sanitation received a renewed focus in India in 2014 with the launch of Swachh Bharat Mission - Urban (SBM-U) which set out to make urban India Open Defecation Free (ODF) by October 2019.

Since 2014, looking at the swift progress made under Swachh Bharat Mission - Urban, it was realised that issues related to septage collection, treatment and disposal are likely to exacerbate in the likely future. This was the premise for conceptualising Project Nirmal.

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1 Section adapted from material shared by CPR

2 377.2 million in 2011

3 935 urban centres which included 4041 statutory towns and 3894 Census Towns, Source: Census 2011

4 Census of India, 2011, "Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011", [http://censusindia.gov.in/2011census/hlo/Data\\_sheet/India/Latrine.pdf](http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf)

5 Includes with Slab Improved Ventilated Pit (6.4 percent) and Without Slab / Open Pit (0.7 percent). Source: Census of India, 2011, "Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011", [http://censusindia.gov.in/2011census/hlo/Data\\_sheet/India/Latrine.pdf](http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf)

6 Census of India, 2011, "Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011", [http://censusindia.gov.in/2011census/hlo/Data\\_sheet/India/Latrine.pdf](http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf)

7 Includes septic tank (64.87 percent), other systems (3.10 percent), with slab improved ventilated pit (10.65 percent), without slab / open pit (1.46 percent), night soil disposed in open drain (1.55 percent), night soil removed by humans (0.71) and night soil removed by animals (0.29 percent). Source: CPR analysis based on data from Census 2011 (Census of India, 2011, "Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011", [http://censusindia.gov.in/2011census/hlo/Data\\_sheet/India/Latrine.pdf](http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf))

8 The corresponding figure for million plus cities is 72.25 percent and for Class I cities it is 32.60 percent

Since the launch of Swachh Bharat Mission- Urban in 2014, advocacy efforts in Odisha related to ensuring adequate and safe sanitation facilities and wastewater management had gained momentum. The Additional Chief Secretary, Housing and Urban Development Department (HUDD), GoO made a strong case for effective FSSM in the state and the need for piloting decentralized solutions through his presentation at the “Reinvent the Toilet Fair”<sup>9</sup> in March 2014.

### 1.1.2 Urban Sanitation Scenario in Odisha during 2011-2014<sup>10</sup>

Odisha, is the least urbanised state in India. In 2011, it had only 16.7 per cent of its population living in urban areas, little less than half the national average (31 percent). As per Census 2011,

- all 110 urban centres<sup>11</sup> in the state, had very poor access to sanitation facilities and less than 35 percent of urban households lacked access to IHHLs<sup>12</sup>.
- While 2.17 percent of urban households were using CTs/PTs 33.2 percent were defecating in the open<sup>13</sup>.
- Among the 65 percent of urban households that had IHHLs, only 11.5 percent were connected to sewerage systems<sup>14</sup> while majority (52 percent) relied on septic tanks and other OSS systems (including pit latrines)<sup>15</sup>.
- It was estimated that less than 2 percent of the faecal sludge generated was being treated through Sewage Treatment Plants (STPs). (Figure 1)
- Existing pit latrines and septic tanks had deficiencies in construction of containment structures<sup>16</sup>, irregular emptying, inadequate desludging and cesspool services (provided by ULB and/or private operators) for collection and transportation of septage as well as lack of faecal sludge treatment and disposal facilities. It was estimated that septage from less than half of the households that relied on septic tanks was being collected safely<sup>17</sup>.

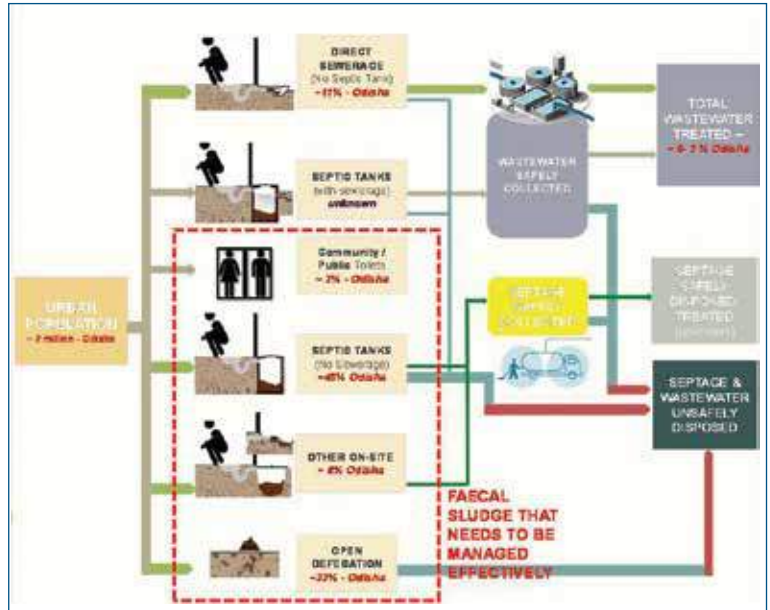


Figure 1: Shit Flow Diagram for Odisha

9 The second “Reinvent the Toilet Fair” was held in New Delhi, India, in March 2014. It was co-hosted by Gol’s Department of Biotechnology and Bill & Melinda Gates Foundation, with support from Gol’s Ministry of Urban Development (MoUD). The Fair aimed to stimulate discussion and spur partnerships to bring safe, affordable sanitation to the people who lack access to sanitation. Researchers from India and around the world were among the more than 700 participants who attended the fair. Toilet prototypes – toilets that aren’t connected to water, sewer, electricity, that reuse the waste for energy or fertilizer, that are affordable for the poor – were on display at this two-day event.

10 Section adapted from material shared by CPR

11 110 Urban Local Bodies including 5 Municipal Corporations, 45 Municipalities and 60 Notified Area Councils (NACs)

12 Census of India, 2011, “Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011”, [http://censusindia.gov.in/2011census/hlo/Data\\_sheet/India/Latrine.pdf](http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf)

13 Ibid.

14 The state has only two operational STPs - one in Cuttack (33 MLD) and Puri (15 MLD) with a combined treatment capacity of 48 MLD. In order to enhance the treatment capacity three STPs are under construction in Cuttack (two) and Bhubaneswar (one) with funding from Japan International Cooperation Agency (JICA).

15 Includes other systems (2.3 percent), with slab improved ventilated pit (3.1 percent), without slab / open pit (1.1 percent),

16 Both septic tanks and pits

17 Source: Bhullar, L., Koonan, S., Cullet, P. 2019. Faecal Sludge and Septage Management in Odisha: A review of the law and policy framework. New Delhi: Centre for Policy Research

- Untreated faecal sludge and septage, thus, was finding its way into drains and open areas. According to the Odisha State Pollution Control Board's (OSCPB's) report, untreated water and sewage from urban centres has led to pollution of the State's major rivers.<sup>18</sup>
- Some toilets were still being serviced manually, despite explicit legal prohibition as per the provisions of the "Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act", 1993.

Among States in India, Odisha was ranked second, after Chhattisgarh, on open defecation in urban areas<sup>19</sup>.

**Table 1: Odisha Key Facts**

<b>Area</b>	155,707 km <sup>2</sup> (tenth largest state in the country)
<b>Population</b>	41.9 million (eleventh largest state in the country)
<b>Rate of urbanisation</b>	16.68 Percent (Census 2011)
<b>Urban Population</b>	~ 7 million (Census 2011)
<b>Urban Households</b>	1,517,073 (Census 2011)
<b>Urban Local Bodies</b>	114 ULBs with a population of 50,000 or more; including 5 Municipal Corporations, 48 Municipalities and 61 Notified Area Councils (NACs)

Since 2010, Bill and Melinda Gates Foundation (BMGF) was implementing "Project Samaan" in Odisha, under which rural and public toilet grants were utilized to provide adequate and suitably designed sanitation facilities for urban poor households in Bhubaneswar and Cuttack who were unable to construct individual household latrines and were residing too far away from public toilets.

In subsequent years, the intensity and focus of research initiatives aimed at developing a better understanding on issues and challenges in urban sanitation sector in Odisha, was further deepened and widened. One such study was the "Sanitation Landscaping Study of nine urban centres<sup>20</sup>" which was undertaken by Practical Action in 2013. The findings of the study pointed to the need for ensuring universal access to sanitation facilities and provision of adequate FSM services. The study also brought to light the need for creating awareness among urban households on safe sanitation and hygiene practices; capacity building of ULB staff on FSSM and demonstrating implementation of innovative decentralised pilot programs for safe management of faecal waste. This was the foundation for the conceptualisation of project Nirmal.

### 1.1.3 Project Partners

Practical Action is a UK based charity organisation established in 1966 with the objective to build futures free from poverty and help shape a world that works better for everyone. Practical Action puts ingenious ideas to work so people in poverty can change their world. Practical Action thinks differently, so answers that start small can grow big-bringing people together in bold collaboration, using innovation and knowledge. Practical Action South Asia mainly focuses under four goal areas (1) Energy that transforms, (2) Framing that works, (3) Resilience that protects and (4) Cities fit for people. Besides these major areas, two cross-cutting themes include gender and market along with overarching goal of climate resilience and climate technologies. Practical Action India office

18 'River pollution caused by urban waste alarmingly high in Odisha' The Hindu (7 June 2014).

19 Government of Odisha, Housing & Urban Development Department, Odisha Urban Sanitation Policy 2017 (H&UDD 2017) 2.

20 These included Balasore, Baripada, Berhampur, Bhadrak, Bhubaneswar, Cuttack, Puri, Rourkela and Sambalpur. These cities are now covered under AMRUT.

is focusing on goal area four for providing better urban sanitation facilities to urban slums and low income communities.

The Centre for Policy Research (CPR) has been one of India's leading public policy think tanks since 1973. The Centre is a non-profit, non-partisan independent institution dedicated to conducting research that contributes to the production of high quality scholarship, better policies, and a more robust public discourse about the structures and processes that shape life in India. Scaling City Institutions for India: Sanitation (SCI-FI): Sanitation programme at the Centre for Policy Research (CPR) is a multi-disciplinary research, outreach and policy support initiative. The programme seeks to improve the understanding of the reasons for poor sanitation, and to examine how these might be related to technology and service delivery models, institutions, governance and financial issues, and socio-economic dimensions. Based on research findings, it seeks to support national, state and city authorities develop policies and programmes for intervention with the goal of increasing access to inclusive, safe and sustainable sanitation. Initiated in 2013, the programme is primarily funded by the Bill and Melinda Gates Foundation (BMGF).

Practical Action, India and Centre for Policy Research, New Delhi, have been implementing the "Project Nirmal" in two Urban Local Bodies(ULBs), i.e., Dhenkanal and Angul, of Odisha with the support from BMGF and Arghyam Trust since November 2014. The Project is being implemented on pilot basis in close consultation/coordination with the Housing and Urban Development Department, Government of Odisha and the local Governments of both the ULBs. Based on the lessons learned from the pilot project, the State Government will/may replicate the same in other ULBs of similar typologies in the state. The project will be over by 31<sup>st</sup> March 2020.

## **1.2 Project Background**

### **1.2.1 Project Vision**

The overall vision of success of the project is demonstration of sustainable sanitation service delivery for small towns leading to increased coverage of households through enabling institutional and financial arrangements and increased private sector participation.

### **1.2.2 Project Outcomes**

The project aimed to achieve the following outcomes:

- Demonstrated State Government and ULB commitment towards sanitation service delivery in small towns.
- Capacity developed of states and cities for effective sanitation service delivery.
- Increased number of people in pilot towns with access to better sanitation services.
- Improved city-wide planning approaches for sanitation.
- Demonstrated models for Faecal Sludge Management ("FSM").

### **1.2.3 Project Area**

The project is being undertaken in Angul and Dhenkanal Municipalities of Odisha. The Angul Municipality extends over a municipal area of 19.24 sq.km and spreads over 23 municipal Wards. As per 2011 census, the total population of the town is 43,795, out of which 23,474 males and 20,321 females. The Scheduled Caste and Scheduled Tribe population of the town is counted as 5,039 and 1,473 respectively. About 9,778 households live in the town. There are 27 slums in the town, out of which 14 are authorized and 13 are unauthorized slums.

The Dhenkanal Municipality extends over a municipal area of 30.56 sq.km and spreads over 23 municipal Wards. As per the 2011 census, the total population of the town is 67,414, out of which 34,864 males and 32,550 females. About 11,105 Scheduled Caste and 4,095 Scheduled Tribe population live in the town. The town is having 14,908 households. There are 17 authorized slums in Dhenkanal town.

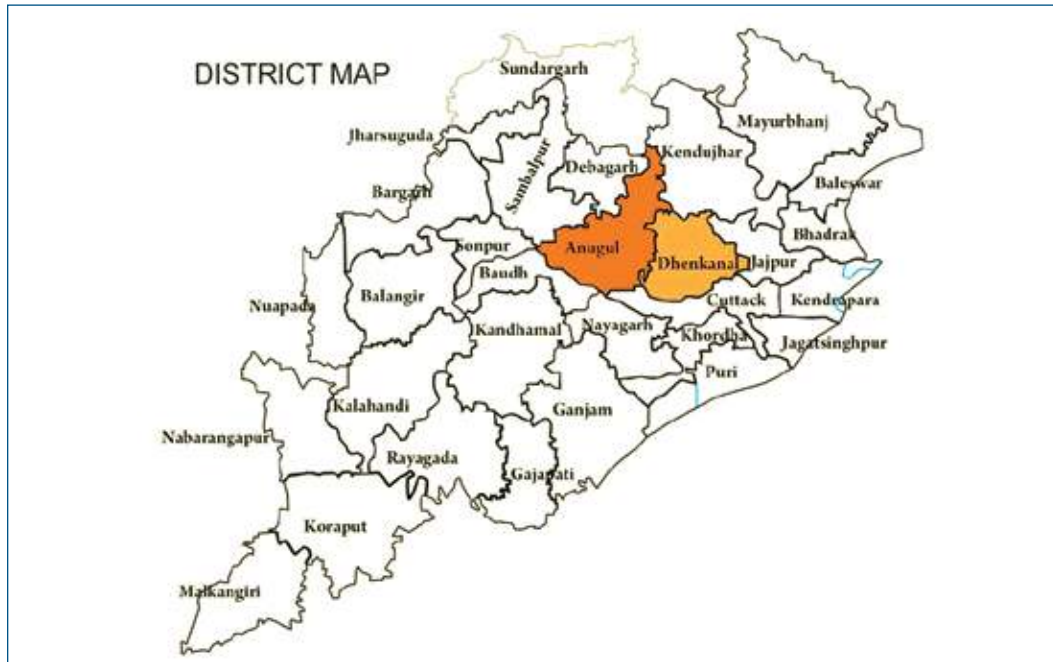


Figure 2: Project Area

### 1.2.4 Project Components

The project has the following components:

- Preparatory Activities
- DPR and City Sanitation Strategy Development
- Pilot Demonstration
- Research
- Capacity Building Component
- Knowledge Management & Advocacy (KMA)

# 2.0 METHODOLOGY

The evaluation for Project Nirmal was carried out in November 2019 using the OECD-DAC evaluation framework comprising relevance, impact, efficiency, effectiveness and sustainability. The project achievements were measured against the project vision and project outcomes using the evaluation criterion. The detailed ToR for the evaluation is shared in Annexure-1.

The evaluation was qualitative in nature and comprised secondary review and primary data collection. Customised checklists were prepared for each stakeholder set prior to the field visits. These were shared with Practical Action and finalised based on the feedback provided by Practical Action and CPR. The checklists are shared in Annexure- 8 to 14.

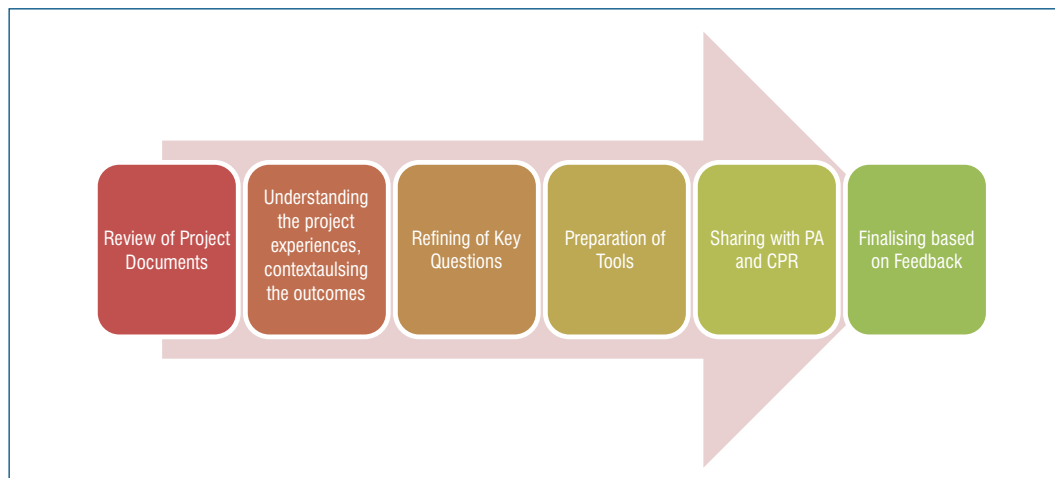
The secondary review comprised review of project documents shared by Practical Action and CPR like the PPT on project Nirmal, project background, MoU, LFA, the baseline report, progress reports, IEC Strategy and Sanitation Communication Report, Report on Manual Scavenging, DPRs and Business Plan for the FSM O&M, etc. The secondary review began prior to the fieldwork and continued post the fieldwork.



**Figure 3: Meeting with EO Municipality Angul**

The fieldwork for the evaluation was completed between November 18 to 24, 2019. Interactions were held with different stakeholder sets, the details of which are shared in Table 7 in Annexure-3. The fieldwork covered the project locations- Dhenkanal and Angul and the state capital, Bhubaneswar. Three group exercises were also completed with the Project Nirmal team- from both Practical Action and Centre for Policy Research and these are shared as part of this report.

Post the fieldwork, the data collected was analysed using the OECD DAC criterion and a draft report comprising text was shared with Practical Action. The feedback on this report was incorporated in a revised report which also had photos and graphics. This revised draft was shared with Practical Action. Based on a second round of feedback, the evaluation report was finalised.



**Figure 4: Secondary Review- Process and outputs**

The evaluation team was led by an external consultant, Mr. Devanshu Chakravarti. The evaluation team for the fieldwork comprised Mr. Arun Hial, the M&E and Gender focal point of Practical Action India, Mr. Bhim Kumar Shreshtra, the M&E Specialist of Practical Action, Asia Regional team and Mr. Ganesh Parida from Project Nirmal.

**Table 2: Summary of number of Meeting held and people interacted with during the Evaluation**

S. No.	Level	Number of Meetings	Number of People Interacted with
1	State Level	3	3
2	Regional Level	2	2
3	District Level	1	1
4	ULB level	4	10
5	FSTP level	4	4
6	Community Level	2	21
7	Project Nirmal staff	3	3
8	Practical Action Staff	1	1
9	CPR Staff	1	1
10	Other Stakeholders- NGO/ UNICEF	2	2

# 3.0 DISCUSSION AND FINDINGS

## 3.1 Participatory Exercises Completed by the Review Team

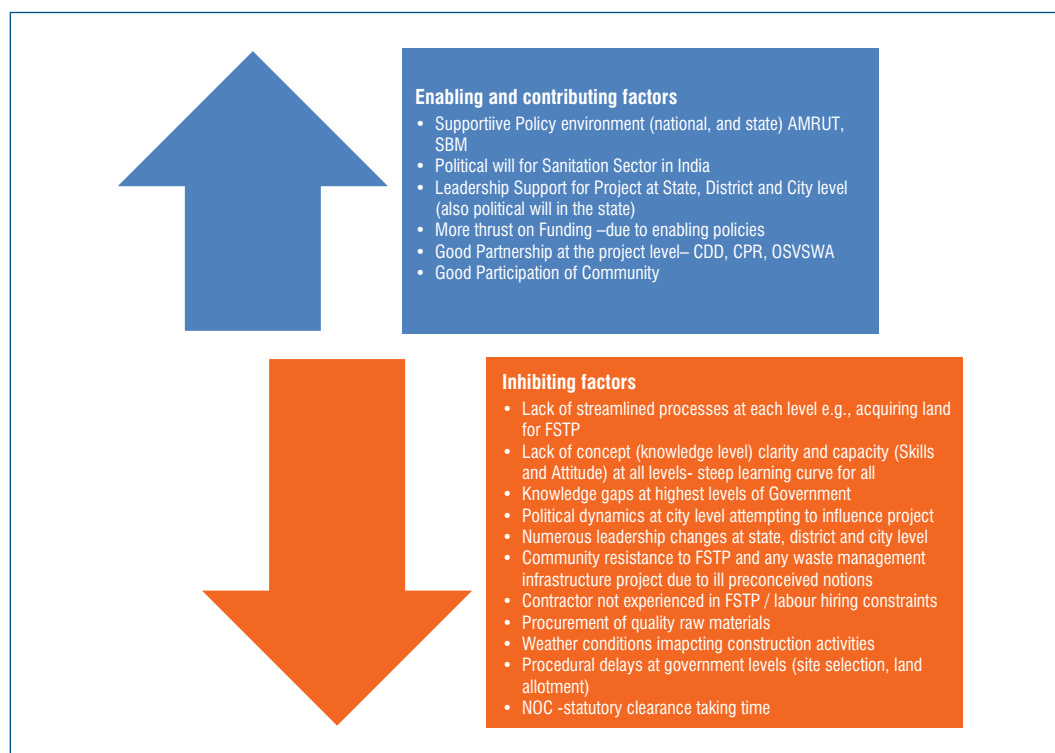
As part of the evaluation, three group exercises involving CPR and Practical Action staff of Project Nirmal were completed. The outputs of the group exercises are shared in sections below.

### 3.1.1 SWOT Analysis of Project Nirmal

**Table 3: SWOT Analysis of Project Nirmal**

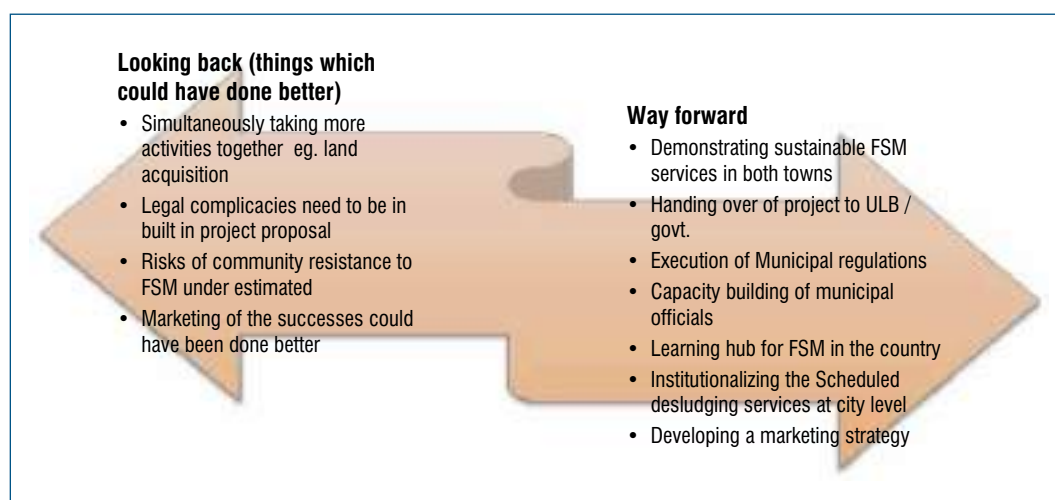
Strengths	Weaknesses	Opportunity	Threats
<ul style="list-style-type: none"> <li>Partnership / Collaboration with expertise of CPR and Practical Action + Arghyam</li> <li>Good rapport with government agencies and donors</li> <li>Staff stability (in key positions)</li> <li>Staff competencies</li> <li>Work directly with government</li> <li>Foresight of project team</li> <li>Continuous mobilization + building relationship at city and state level</li> <li>Acceptance at community levels</li> <li>Good documentation</li> </ul>	<ul style="list-style-type: none"> <li>Initial competency of staff on FSM (Knowledge and Skills) such as land acquisition</li> <li>Turnover at field level</li> <li>Full business cycle for FSM O&amp;M not implemented in Angul</li> <li>Inadequate capacities of the ULB staff in terms of HR skills and competencies to deal with FSM</li> </ul>	<ul style="list-style-type: none"> <li>Focus of Policies on Water conservation and waste water management</li> <li>Project opportunity to scale up at state and country for small and medium towns</li> <li>Convergence of rural and urban service for SLW Management</li> <li>Leveraging urban services for rural fringe areas</li> <li>Material on capacity building can be used for scaling up</li> <li>Opportunity to establish centre for excellence</li> <li>Developing as learning site for all the govt. projects</li> <li>Toolkit for FSM can be prepared</li> <li>Develop communication product</li> </ul>	<ul style="list-style-type: none"> <li>No O&amp;M funds for small cities on FSM</li> <li>Funding for operation and maintenance from the govt.</li> <li>Slip back of manual scavenging</li> <li>Post project sustainability in absence of funding</li> <li>Major bureaucratic and political resistance to FSM private sector participation</li> </ul>

Source: Discussion with Project Nirmal Staff in Bhubaneswar



**Figure 5: Enabling and Inhibiting Factors - Outcome of Group Exercises with Project Nirmal Staff**

### 3.1.2 Enabling and Inhibiting factors in Project Nirmal



**Figure 6: Reflecting Back and Way Forward - Outcome of Group exercise with Project Nirmal Staff**

### 3.1.2 Reflecting Back and Way Forward

## 3.2 Findings as per OECD – DAC Criteria

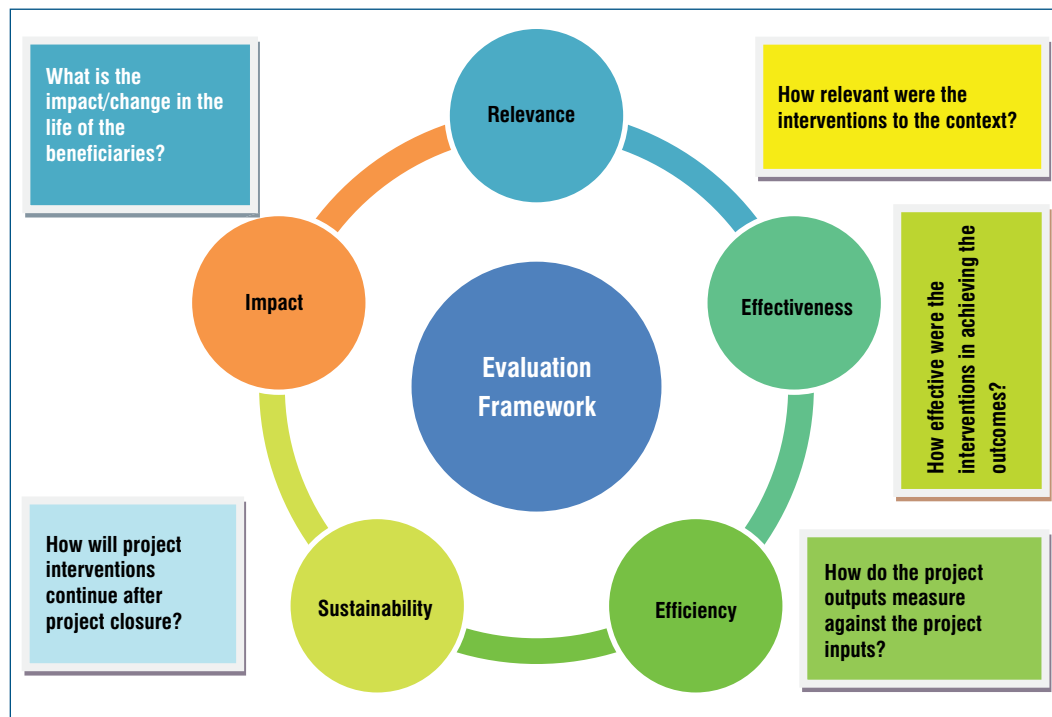


Figure 7: Evaluation Framework- OECD- DAC Criteria

The findings of the evaluation are presented as per the OECD DAC criteria as mentioned in the ToR. The findings are based on the field validation of project outputs presented in the progress reports and the project tracker (updated Results Framework) shared by Practical Action.

The project tracker listed the original and revised project outputs/outcomes, indicators, the target timeline of completion and the actual date of completion. While the achievement against the timeline was shared, the achievements against the indicators are not mentioned in the project tracker. It is assumed that the revised indicators were achieved at the indicated achievement date. The detailed table of output for each project outcome was compiled from the Updated Results Framework and is presented in Table 9 in Annexure-5.

It was shared by CPR that a LFA linking the Project Vision/ Goal- Outcomes- and Outputs, with relevant indicators at each hierarchical level of the intervening logic was prepared for project Nirmal. However, it was the choice of the donors to adopt a RFD. In addition, as per the risk analysis document, there was rating on satisfactory, good and best outcomes.

The Outcomes shared in the evaluation ToR were not logically/ organically linked to the project outputs shared in the Updated Results Framework. While the measure of Outputs and Efficiency can be judged from the results framework, in the absence of a project defined impact indicators set for goal and outcomes, it becomes difficult for an end evaluation to measure the impact against

agreed verifiable indicators. In the absence of the project defined indicators, the evidences of impact contributing towards the project vision and each project outcome are detailed in section on Impact.

### 3.2.1 Relevance

The intervention was highly relevant (A)<sup>21</sup> to the context at both the state and national level. The project also contributes directly to SDG Goal-6: Clean Water and Sanitation and indirectly to SDGs Goal 3: Good Health and Well Being; SDG-5: Gender Equality; SDG- 8: Decent Work and Economic Growth;



**Figure 8: Project Contributes to Flagship Programme of Government of India- Swachh Bharat Mission**

SDG Goal -9: Industry, Innovation and Infrastructure; SDG-10: Reduced Inequalities; SDG Goal 11- Sustainable Cities and Communities; SDG-5: Life on Land and SDG-17: Partnerships for the Goals.



**Figure 9: SDG Coverage from the Project**

There are many small towns and cities in India covered by a municipality that still do not offer safe sanitation services to its citizens. While in the last decade, due to the intervention of the Swachh Bharat Mission and prior programmes like Jawaharlal Nehru National Urban Renewal Mission (2005) and National Urban Sanitation Policy (NUSP) launched in 2008, focussed on urban sanitation, interventions on FSM and solid waste management are recent. In this context, the project is a timely intervention for both Odisha and India.

While the project aligned with the national priorities, the ‘action’- project implementation was largely at the State level. Swachh Bharat Abhiyan is a flagship programme of the Government of India. There are two missions- one focussing on the rural areas and the second on the urban areas. The mission objectives of the Swachh Bharat Mission (Urban)<sup>22</sup> are

- Elimination of open defecation
- Eradication of Manual Scavenging
- Modern and Scientific Municipal Solid Waste Management
- To effect behavioral change regarding healthy sanitation practices
- Generate awareness about sanitation and its linkage with public health
- Capacity Augmentation for ULBs to create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)

The project contributed differentially towards all the objectives of the SBM (Urban) in the two project locations of Dhenkanal and Angul, although the major focus of the project activities was on Faecal Sludge Management, an important focus for municipal and rural areas for safe disposal of liquid sludge. Building capacities of the ULBs was also an important area.

21 Rating Standard- Highly Relevant (A), Relevant(B), Moderately Relevant (C), Not Relevant (D); Refer Annexure-6.

22 Guidelines for Swachh Bharat Mission – Urban Revised as on 5th October 2017, Ministry of Housing and Urban Affairs, Government of India, page 9: [http://swachhbharaturban.gov.in/writereaddata/SBM\\_Guideline.pdf?id=jjacwz3c5udr14ts](http://swachhbharaturban.gov.in/writereaddata/SBM_Guideline.pdf?id=jjacwz3c5udr14ts)

In the initial stages, the project contributed towards the activities of the SBM through IEC and awareness generation in the slums in the different Wards of the two municipalities regarding safe sanitation and hygiene. However, as funds from Central and State Government were available for both the hard (toilet construction) and soft (awareness generation and IEC) components, the project invested in IEC and awareness generation for the FSM.

The project was pioneering as it focussed on FSM when not many agencies were working on the concept in India. The donor, Bill and Melinda Gates Foundation is instrumental in promoting FSM in the country and this was the first project in Odisha of this nature.



**Figure 10: IEC Campaign under Project Nirmal**

The project was innovative for the following reasons:

- The project thrust was on state partnership and policy support provided at the state level resulted in the development of the Odisha Urban Sanitation Policy (Ousp) and revised the Odisha Urban Sanitation Strategy (OUSS). Both these documents were notified in December 2016, prior to the launch of the Government of India’s “National Policy on Faecal Sludge and Septage Management” in February 2017.
- The project focussed on developing a FSM model for small and medium towns and cities in Odisha and India, a neglected segment. For bigger cities, Government funds are being made available for FSM.
- The project focussed on working with ULBs and also engaged private sector as a service provider, a novel concept.
- For operation and maintenance, the project tried a new model where it established an organic link between Faecal Sludge Treatment Plant (FSTP) management and the sludge collection through a cesspool vehicle. Compared to existing models, where the faecal sludge collection and FSTP plant are managed as separate operations by different entities, project Nirmal tried to experiment with an integrated model linking both faecal sludge collection and FSTP management in a sustainable model.

### 3.2.2 Effectiveness

The direct beneficiaries of the project are the community living in the municipal areas of Dhenkanal and Angul and the officers dealing with urban sanitation at the state and municipality level. The indirect beneficiaries cover the population living in the entire state of Odisha.

The project had a successful demonstration at Dhenkanal. The project also engaged successfully at the policy level in the state. As the state is keen to rapidly cover all its cities and towns under FSM, the indirect contribution of the project is far higher than the direct reach. Hence, the effectiveness of the project will be rated as highly effective (A)<sup>23</sup>.

23 Rating Standard-Highly Effective (A), Effective (B), Moderately Effective (C), Not Effective (D); Refer Annexure-6.

### 3.2.3 Efficiency

The project efficiency judging by its current project achievements against the outlay and timelines is Moderately Efficient (C)<sup>24</sup>. It can be seen that while the project achieved its outputs, there were delays in achieving this against the initially agreed timeline.

Unforeseen risks, like delays in land acquisition and litigation over the identified land in Angul, delayed the project implementation resulting in time and cost overruns. There were frequent transfers of the officials at the ULB and district level, with whom the project has a first and second level of contact. The project staff had to invest their energies in engaging with the new officials taking charge, share the project concept, update on the progress and then engage with them for smooth implementation of activities. The level of engagement with Government officials was at the State, district and ULB level. While bureaucratic stability at the top level of the State (refer Annexure-4) was an enabling factor for project Nirmal, the frequent changes at the state, district and ULB level did act as constraining factors (refer Annexure-4).

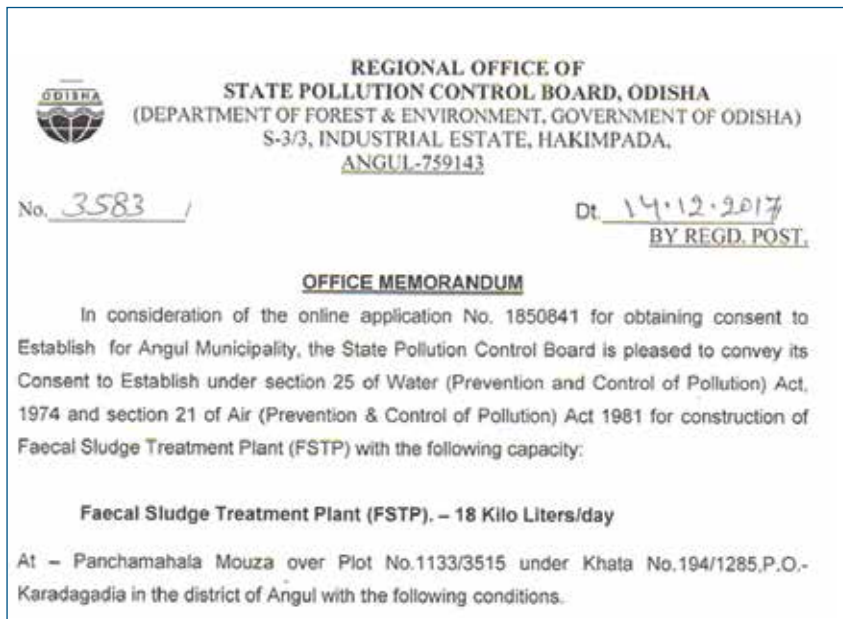
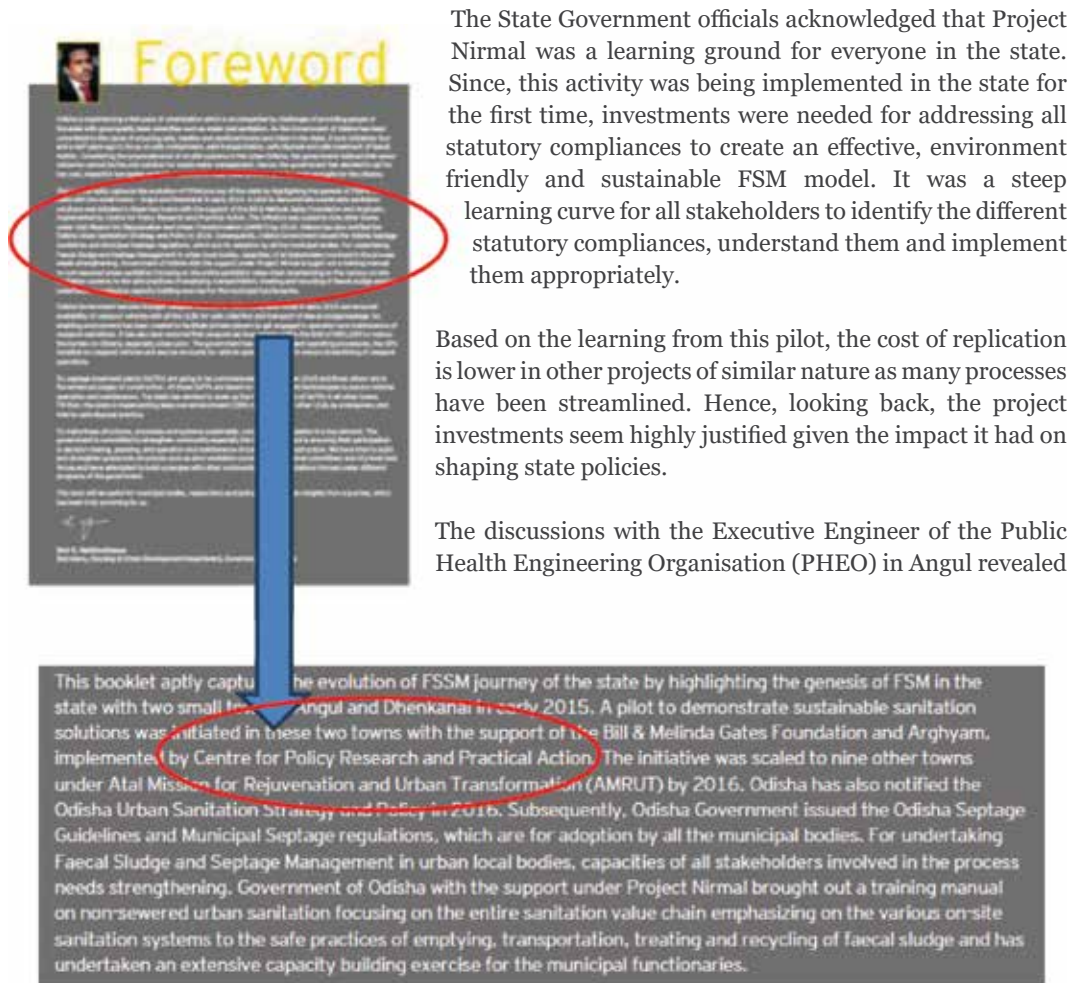


Figure 11: No Objection Certificate from the Pollution Control Board for Angul STFP

Projects involving Government Partnerships are by their nature, time intensive. Hence, this must have been factored while preparing the project proposal. However, the delay in identification of land and the subsequent litigation was totally unforeseen and disrupted the implementation.

Due to the cost overruns, Practical Action had to absorb costs of the Leadership Support, M&E, communication and other technical resources for the last two years. Even after project extensions, the project could complete construction in both locations and showcase operation and maintenance for one year in only one location. This time frame allocated for operation and maintenance under the project is less than the time required for reaching operational sustainability (Break Even Point) as per the FSM business plan prepared under the project. The full business cycle (at least till the Break Even Point is reached) was not committed by the donors. Now a days, even Government funded projects have a full O&M cycle project support.

24 Rating Standard- Highly Efficient (A), Efficient (B), Moderately Efficient (C), Not Efficient (D); Refer Annexure-6.



**Figure 12: Foreword of State Published Document – ‘Odisha's Journey of Faecal Sludge and Septage Management referring to Project Nirmal Partners**

The State Government officials acknowledged that Project Nirmal was a learning ground for everyone in the state. Since, this activity was being implemented in the state for the first time, investments were needed for addressing all statutory compliances to create an effective, environment friendly and sustainable FSM model. It was a steep learning curve for all stakeholders to identify the different statutory compliances, understand them and implement them appropriately.

Based on the learning from this pilot, the cost of replication is lower in other projects of similar nature as many processes have been streamlined. Hence, looking back, the project investments seem highly justified given the impact it had on shaping state policies.

The discussions with the Executive Engineer of the Public Health Engineering Organisation (PHEO) in Angul revealed

that the Government in their water supply projects, provision for and ensure funding for at least three years of operations and maintenance.

The DPR for Project Nirmal also proposed O&M for a five to seven year period and the Business Plan has calculated the Break Even in the fourth year of the FSM operations. During the design of the project Nirmal, as per the discussions with state Government, the project funding for operation and maintenance was limited to one year. This funding was for strengthening capacities of the two municipalities to operate and maintain the plant. As per the decisions taken during the initial negotiations, project Nirmal was to handhold municipalities for O&M of plant and not to undertake the FSTP O&M. Later, the project requested and successfully sought supplementary donor funding for running the plant for at least one year to design system for better FSTP management.

In hindsight, given the fact that it was a pilot project and also that an innovative Integrated FSM model was being implemented for the first time, a longer time frame for funding operation and maintenance could have been considered at the design stage. This would have better addressed the challenges of post project sustainability.

In the two locations that it was implemented, the project could not see one full cycle of operation and maintenance even in one location by December 2019. Although, in Dhenkanal, the project

funded operation and maintenance for one year and the results have been promising in a short period, it is still too early to suggest that a sustainable model is in place. Financial viability as per the business plan was proposed in the sixth year, when the project break-even was to be achieved.

It is understandable that there can be limitations on project cycle at the donor end. But this can be overcome by adopting a programmatic approach at the implementing partner end. The programmatic approach will comprise of distinct project phases with one phase achievements becoming the foundation for the next phase. For example, the community mobilisation phase provides the basis for the FSTP construction phase and likewise, the completion of the FSTP construction phase leads to the FSM management O&M phase.



Figure 13: Discussion with Executive Engineer, PHEO, Angul

Project Nirmal has successfully demonstrated resource mobilisation from multiple donors for the same project but for meeting different objectives. Going forward, it would be best to share long term vision with prospective donors and plan multiple donors funding from different donors for different phases/projects of the same programme.

### 3.2.4 Impact

#### 3.2.4.1 Impact Assessment of Project Outcomes

The overall impact is rated as Highly Impacted (A)<sup>25</sup>. The impact of the project is being analysed with respect to the project vision and the project outcomes in sections below.

Table 4: Evidences of Impact for Each Level of Intervening Logic

Evidences of Impact for Each level of Intervening Logic
<p><b>Project Vision:</b> <i>The overall vision of success of the project is demonstration of sustainable sanitation service delivery for small towns leading to increased coverage of households through enabling institutional and financial arrangements and increased private sector participation.</i></p> <ul style="list-style-type: none"> <li>• Project Nirmal supported the State Government in developing policy framework for FSM at the state level – the drafting of the Odisha Urban Sanitation Policy (Ousp) and revision of the Odisha Urban Sanitation Strategy (OUSS) was funded by project Nirmal. Both these documents were notified in December 2016, prior to the launch of the Government of India’s “National Policy on Faecal Sludge and Septage Management” in February 2017.</li> <li>• Project Nirmal was considered as a learning ground on FSM by the State Government.</li> <li>• The project could successfully demonstrate the delivery of sustainable sanitation service delivery model for small towns.</li> <li>• FSTPs were established in two locations following all norms of the State Government and all statutory clearance certificates were obtained from the different regulatory agencies.</li> <li>• An innovative institutional and Integrated FSM model was demonstrated that involved the participation of the private sector and as an unintended positive impact brought in transparency and accountability in the FSM operations at the ULB level.</li> <li>• Project experiences influenced State Government FSM policy, a fact well acknowledged in the state Government document, ‘Odisha’s Journey of Faecal Sludge and Septage Management’.</li> <li>• Draft legislative framework for FSM was also prepared and submitted to the state by the project.</li> <li>• Project experiences leads to preparation of Capacity building strategy on FSM for the state.</li> <li>• Urban sanitation training programmes were institutionalised in regular state training for urban cadre.</li> </ul>

25 Rating Standard- High impacted (A), Impacted (B), Moderately Impacted (C), Not Impacted/Negative Impact (D); Refer Annexure-6.

**Evidences of Impact for Each level of Intervening Logic**

**Project Outcome 1: Demonstrate State Government and ULB commitment towards sanitation service delivery in small towns.**

- Prior to the project, the state Government and ULB officials shared that they had had little understanding of FSM. They also acknowledged that being stakeholders in Project Nirmal helped in developing their understanding on FSM.
- The State Government signed an MoU with Practical Action and CPR to implement FSM projects in the Municipalities of Dhenkanal and Angul. The state Government and ULBs continued to be the partners in Project Nirmal even in the extension period. Further, the ULBs were actively involved in solving problems being faced by the project. For example, in Dhenkanal, the Chairperson of the ULB, was involved in helping identifying land for the FSTP and also monitored the construction of the FST plant. This demonstrated the commitment of the State Government and the ULB to the pilot project on sanitation service delivery in small towns.
- The State Government and ULB officials participated regularly in project monitoring meeting at the PSC and the DCC.
- During the time of the evaluation, it was shared by OWSSB staff that tender notices for 26 FSTPs under OWSSB in different cities in Odisha were being prepared to be released in November/ December 2019 and before the financial year end (March 2020), the tender for nearly 45 FSTP plants would be finalised to cover more Municipalities in the state.
- This state wide scaling up is demonstration of the State level commitment towards sanitation services in small towns across Odisha.

**Project Outcome 2: Capacity development of states and cities for effective sanitation service delivery.**

- Project experiences contributed to preparation of capacity building strategy for delivering sanitation services in the state.
- Urban sanitation training programmes were institutionalised in regular state training for urban cadre.
- At the State level, the project contributed significantly to changing perspectives of the senior officials in the state administration, both bureaucrats and technocrats.
  - The project funded exposure visits to Malaysia, Vietnam and other locations in India, helped in improving the understanding and in building perspectives of state Government officials, ULB elected leaders and ULB officials on FSM.
  - While the exposure visits convinced the State level and ULB level officials on the utility of FSM in an urban setting, the implementation of Project Nirmal with State Government and ULB participation was instrumental in the state Government and the ULB officials understanding the intricacies of implementing an FSM project and streamlining process for replication at state level.
  - All state Government officials met during the evaluation duly acknowledged the contribution of the project to piloting FSM implementation in the state.
  - Hence, the project contributed to building capacities of state through both exposure and project implementation.
  - Due to the project efforts, Sanitation becomes a permanent agenda point in the ULB's meetings in pilot cities.
- The project also invested heavily in IEC material and awareness campaigns.
  - The IEC material covered both WASH and FSM. As part of the awareness campaign on FSM, in both locations-Dhenkanal and Angul, pictorial display boards of FSM with messages in the local vernacular were put up in major intersection points in the two cities, some of which could be seen during the time of the evaluation visit. This was complemented with other communication modes like SMS messages and awareness campaigns, all of which led to greater understanding on FSM among the larger public in the two cities.
- Capacity Building on FSM and WASH was undertaken in slums areas of the two municipal areas.
  - The project efforts complimented the Government's capacity building programme undertaken as part of the SBM.
  - In 2019, the two Municipalities of Angul and Dhenkanal are open defecation free areas.
  - Interactions held with slum sanitation committee members during the course of the evaluation revealed that the community members, in addition to having knowledge about safe WASH practises, were also aware of practices on safe disposal of faecal sludge and septage and the periodicity of cleaning of septic tanks and pits.



**Figure 14: Capacity Building Strategy for Delivering Sanitation Services in State**



**Figure 15: Toll Free Number for Cess Pool Services in Dhenkanal Municipality (facilitated by Project Nirmal)**

## Evidences of Impact for Each level of Intervening Logic

### Project Outcome 3: Increase in number of people in pilot towns with access to better sanitation services.

- In Dhenkanal, where project Nirmal was implemented as a pilot FSM project and where the FSM plant was operational for the last nine months, there was an increase in the number of people having access to better sanitation services. This is evidenced from the following:
  - Due to the awareness campaigns, the number of trips for the trucks carrying faecal sludge and septage increased dramatically over the past one year.
  - The revenue collection from septage clearing and collection increased more than 3 fold from INR 4 lakhs in the last fiscal to INR 16.5 lakhs in the current fiscal (Figure-18 and Table 11).

### Outcome 4: Improve city-wide planning approaches for sanitation.

- Under Project Nirmal, participatory approaches were followed to prepare the city sanitation plan (CSP) for the first time in the state.
  - Bottom up participatory CSPs were developed for both the pilot cities of Dhenkanal and Angul.
  - The communities both at the slum and ward levels played a crucial role in the development of the CSP.
  - Both CSPs were vetted by the City Sanitation Task Force constituted at the respective municipalities.
  - Both the CSPs were also presented to the State Government and accepted at the state level.
  - For the first time, integrated city sanitation plan was prepared in the state making liquid waste management (FSTP) as part of the planning document.
  - CSP documents were followed by both the municipalities for construction of toilets under SBM and also establishment of FSTPs.
- Post the implementation of FSM operations in Dhenkanal, the planning approaches for FSM services were improved at the ULB level.
  - The catchment for sourcing faecal sludge and septage was mapped.
  - The cleaning process was made safer for the sanitation workers by providing safety gear and equipment.
  - The septage disposal was made safer as disposal was made at the FST plant and not to any random dumping point.
  - The process of payments was made more systematic and transparent through use of a PoS machine.
  - The vehicle movement was tracked using GPS.

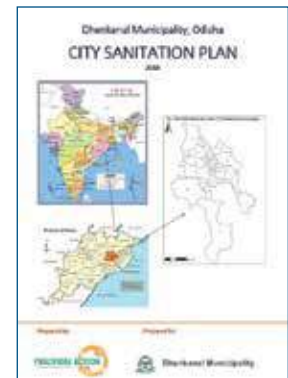


Figure 16: City Sanitation Plan for Dhenkanal Municipality

### Outcome 5: Demonstrate models for Faecal Sludge Management (“FSM”).

- Project Nirmal has been successful in terms of establishing two FSTPs following all the norms of the government.
- DPR for FSM for small towns in Odisha was adopted.
- Community-level demand generation exercises were completed for city-wide sustainable sanitation solutions.
- FSM model for small towns in Odisha was demonstrated in one pilot city- Dhenkanal
  - Project Nirmal demonstrated an innovative model of Integrated Faecal Sludge Management linking both faecal sludge collection and FSTP management to create a sustainable Integrated FSM model. In existing models, faecal sludge collection and FSTP plant are managed as separate operations by different entities.
  - The integrated system is a ‘win- win system’ for both the faecal sludge and septage collection as also the O&M of the FSTP. For the plant to run at optimal capacity, it needs a regular supply of faecal sludge and septage. Focussing on just one parameter, increasing the number of septage units cleaned per day/ month can achieve the dual objective of both sourcing the raw material for the FSTP and also the revenues for the operations. If the operations are not integrated, the staff will not be motivated to bring the sludge to the plant and scrupulously deposit all the monies from the cleaning to the ULB. It is convenient to dump the faecal sludge and septage into a nearby drain and to pocket a portion of revenue collections.

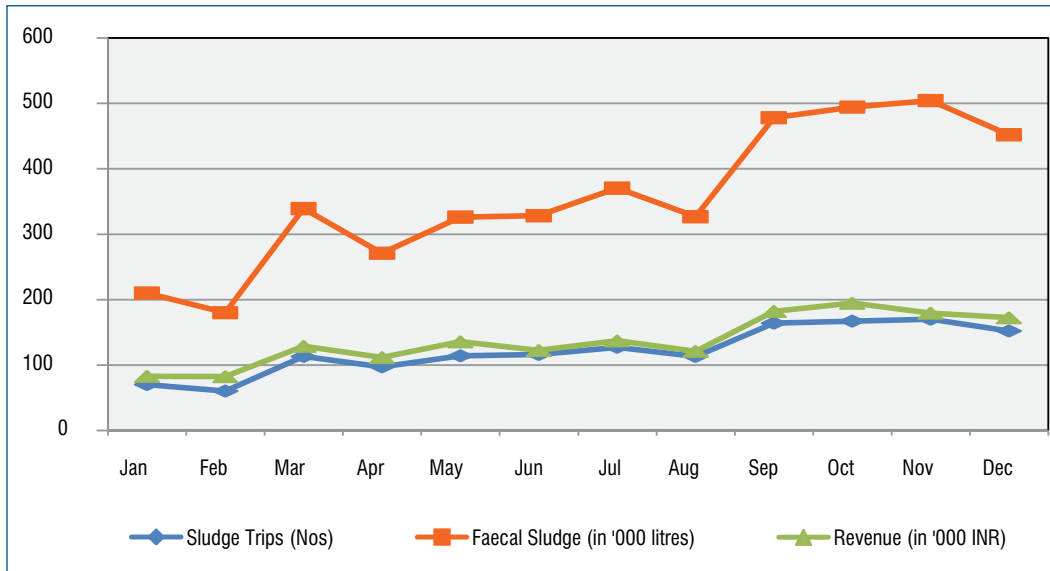


Figure 17: Operation of FSTP Dhenkanal

### 3.2.4.2 Unintended Positive Impact

The integrated FSM model implemented by project Nirmal had an unintended impact of ushering in greater accountability and transparency in the FSM operations of the Urban Local Body in Dhenkanal. Discussions with the staff of the Hoolock Technologies Private Limited, the private operator managing the FSM operations in Dhenkanal, revealed that the revenue collection has gone up significantly since the company took over the operations. Till last year, when the ULB was managing the faecal sludge and septage cleaning, the collection was INR 4 lakhs. This year, after the Hoolock Technologies Private Limited took charge of the operations, it was INR 16.5 lakhs in 12 months (refer Figure 18 and Table 11 in Annexure -7), although the cleaning fee remains the same. The reasons for this spurt in collection are due to process changes introduced in the FSM operations.

- Prior to the project, when the Dhenkanal Municipality was managing the faecal cleaning and transportation service,
  - Walk ins at the Municipality were the major source of bookings for faecal sludge and septage removal.
  - The faecal sludge and septage cleaning charges were arbitrary and collected by the workers. There was informal or liberal practices of depositing the revenues back to the Municipality as the prices/rates were varying from customer to customer. The workers enjoyed greater operation freedom with lower levels of supervisions.
  - Liberties were taken in disposal of collected faecal sludge and septage to points of convenience -in water bodies, drains, open dumping grounds or just by the roadside and not necessarily the designated dumping ground.
  - The sanitary workers did not undertake safety precautions while cleaning and transportation of septage. They used to suffer regularly from health problems like gas, heartburns, fever, skin rashes, etc.



**Figure 18: Revenue Collected (in INR), Faecal Sludge Collected (in '000 litres) and Trips made by CessPool Vehicle in Dhenkanal Municipality for Integrated FSM services in 2019 (since handover to private player)**

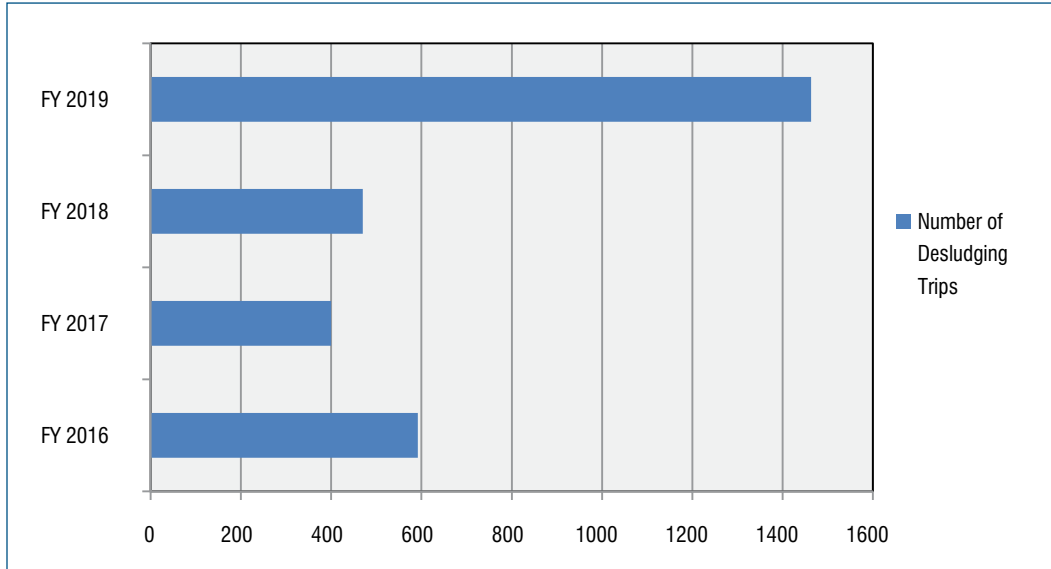
Source: Graph prepared based on Data Provided by Project Nirmal (refer Table 11)

**Table 5: Process Changes brought in by the Private Player in O&M Operations in Dhenkanal**

Process Parameter	Prior to Project Nirmal- Managed by ULB Directly	Project Nirmal- Seconded to Hoolock Technologies Private Limited
<b>Booking Method</b>	<ul style="list-style-type: none"> <li>Walk ins at the Municipality</li> </ul>	<ul style="list-style-type: none"> <li>Through a call to Toll Free Call Centre established at Dhenkanal ULB</li> </ul>
<b>Charges</b>	<ul style="list-style-type: none"> <li>Arbitrary.</li> <li>Communicated by Cleaner</li> </ul>	<ul style="list-style-type: none"> <li>Fixed Charges depending to unit to be cleaned and distance from FSTP</li> <li>Communicated by Call centre at the time of booking</li> </ul>
<b>Time of Cleaning</b>	<ul style="list-style-type: none"> <li>Communicated by Cleaner</li> </ul>	<ul style="list-style-type: none"> <li>Fixed at the time of booking through the call centre</li> </ul>
<b>Collection Mode</b>	<ul style="list-style-type: none"> <li>Charges collection in Cash</li> </ul>	<ul style="list-style-type: none"> <li>Cash Collection discouraged.</li> <li>Discount offered for cleaning through e-transfers/ PoS/ e- wallets.</li> </ul>
<b>Movement of Septage and Faecal Sludge</b>	<ul style="list-style-type: none"> <li>Not monitored</li> </ul>	<ul style="list-style-type: none"> <li>Use of GPS installed on Cess Pool Vehicle</li> <li>Vehicle Movement monitored.</li> </ul>
<b>Feedback</b>	<ul style="list-style-type: none"> <li>No feedback system</li> </ul>	<ul style="list-style-type: none"> <li>Feedback call made through Call centre</li> </ul>
<b>Disposal of septage and Faecal Sludge</b>	<ul style="list-style-type: none"> <li>Convenience of driver and cleaner- dumping to open sewers done occasionally</li> </ul>	<ul style="list-style-type: none"> <li>All septage disposed safely at the FSTP</li> </ul>
<b>Safety of Sanitary Workers</b>	<ul style="list-style-type: none"> <li>Cleaning done without taking care of personal safety</li> <li>Sanitary workers suffer from health problems like skin rashes, itching, etc.</li> </ul>	<ul style="list-style-type: none"> <li>For safety, dress, mask and cleaning kit provided to the Sanitary workers.</li> <li>Cleaning takes place in safe environment.</li> </ul>

- Under Project Nirmal, after the FSM plant became operational, the septage cleaning and transportation was handed over to the Hoolock Technologies Private Limited and the responsible staff seconded to the company.
- After secondment to the company, the operations were streamlined. Now,
  - Most bookings for faecal sludge and septage removal are made through a call centre established at the Dhenkanal Municipality. Walk-ins are also welcomed, but it is to the call centre where most of the bookings are currently being done by calling a toll free number.
  - During the call, the time of septage cleaning is fixed as per the customer convenience and the cleaning charges communicated to the customer.
  - The sanitation workers are intimated of the timing and charges. Cash collection is discouraged and there is a focus on collecting the fees electronically or digitally through e-wallets/ PoS/ Cheque. Customers using e-transfers or PoS machines are offered discounts. Discouraging cash transactions has reduced the scope of leakages. While customers are told not to tip the sanitation workers, it was shared that the practise of giving tips by happy customers continues.
  - For the revenue collected, the client gets a receipt for the amount paid.
  - After the service is completed, there is a call from the call centre to collect feedback from the customer. Earlier, the practise of collecting feedback did not exist.
  - A GPS installed Cess Pool Vehicle is used for transportation of Septage and Faecal Sludge and the vehicle movement is tracked online.
  - Now all the faecal sludge and septage collected comes to the FSTP, reducing the scope of unsafe dumping of faecal sludge and septage.

- The safety of the sanitary worker is ensured through use of protective gear like masks, boots and gloves and as per the sanitary worker, they do not suffer health problems like they used to earlier.
- Although initially uncomfortable with the strict operational norms, the sanitation workers have accepted the new processes.



**Figure 19: Number of Trips Reported for de-sludging by Dhenkanal Municipality between 2016 and 2019**

Source: Graph Shared by Project Nirmal (refer Table 12)

Although the current revenue collection is not enough to meet operational cost, it is much higher than the projected revenues as per the business plan prepared for the FSM. This means that the break-even point will be reached earlier than the four year period projected in the business plan. Given the fact that this is a unique integrated model, it is imperative to ensure that this model gets funding support for some more time. There is a potential to demonstrate sustainability through operational income from the Integrated FSM Model.

Discussions with the Hoolock Technologies Private Limited staff managing the FSTP unit revealed that for addressing operational sustainability, the focus of revenue generation is through increasing the number of collection trips. This is a direct impact of infusing transparency and accountability into the system.

- According to the staff of the Hoolock Technologies Private Limited, the revenues can be increased further by the following measures:
- Increasing the catchment from where faecal sludge and septage is sourced by including villages on city fringes.
- Creating awareness among the general public on the periodicity of cleaning of the septic tanks. Most of people are not aware on the periodicity of cleaning of septic tanks.
- Creating awareness on the toll free call centre number as not many are aware of this facility.
- Increase in the service charges for the service provided.

The company also requires support in the form of a smaller vehicle that can move in the small by-lanes of the city, which the large truck currently operational is not being able to reach.

### 3.2.4.3 Scaling up FSM across state by State Government

The State Government officials acknowledged the contribution of project Nirmal in being a pilot for the entire state and the learning from the project being used in framing FSM policies for the entire state. However, while framing the state level policies, the technical parameters for the FSTP plant were slightly different (the project used additional inputs- Sand and carbon filter, pasteurization unit, roofing of the drying bed with polycarbonate sheet etc.) and the systems for operations and maintenance were vastly different from those adopted by project Nirmal.



Figure 20: Meeting with Dpty. Agriculture, Angul

The changes adopted by the State Government factored in the challenges of operating at scale- the varying context across the state, the capacities of the state officials to manage the FSTP units and the resources available with the State Government. While project Nirmal has adopted an integrated model in FSM management with a single agency managing the collection and transportation of septage and the running of the FSTP, the Odisha State policy has bifurcated the roles. The septage collection and transportation is being proposed to be managed by the Urban Local Bodies and the decision on the O&M of the FSTP is yet to be taken, although the current thinking in the Government is to handover the management to the Self Help Groups.

The Government currently is not keen to link the revenues collected from faecal sludge and septage collection with O&M of FSTPs due to the following reasons:

SeTP specifications				
S. No.	City/Town	Population catered by SeTP	Capacity	Technology*
1	Angul	81,105	18 KLD	Sludge stabilization/sterilization, DEWATS, aeration, sand and carbon filtration, ultraviolet (UV) treatment
2	Balasora	1,20,000	60 KLD	Liquid solid separation with DEWATS
3	Baripada	1,00,000	50 KLD	Liquid solid separation with DEWATS
4	Berhampur	80,000	40 KLD	Liquid solid separation with DEWATS
5	Bhadrak	80,000	40 KLD	Liquid solid separation with DEWATS
6	Bhubaneswar	1,40,000	75 KLD	DEWATS
7	Cuttack	1,20,000	60 KLD	Liquid solid separation (co-treatment with sewerage treatment plant)
8	Dhenkanal	1,10,015	27 KLD	Sludge stabilization/sterilization, DEWATS, aeration, sand and carbon filtration, UV treatment
9	Puri	1,00,000	50 KLD	Liquid solid separation with DEWATS (co-treatment with sewerage treatment plant)
10	Rourkela	80,000	40 KLD	Liquid solid separation with DEWATS
11	Sambalpur	40,000	20 KLD	Liquid solid separation with DEWATS

Figure 21: Technical Specifications of Project Nirmal funded FSTPs and Government funded FSTPs in the State

- Most of the proposals from private companies/ entrepreneurs for managing the FSTPs are motivated by the subsidy provided by the Government. The Government feels that instead of providing grant money/ subsidy to the private players, it is better to give it to SHGs.
- The collections from faecal sludge and septage cleaning are low and do not inspire hopes of cost coverage for O&M of FSTPs. The leakages are not considered while arriving at the picture and also, the scope of the leakages have not been estimated.
- Funds are currently available with the Government for O&M of FSTPs. This role of providing FSM services is seen primarily as the responsibility of the ULB/ Government. However, it is imperative to show financially viable models as the resource allocations for O&M of FSTPs, in the near future when the FSM cover the entire state, will reduce and the ULBs will be forced to look for solutions or abandon the running of the plant altogether.
- The faecal sludge and septage cleaning and FSTP operations are currently being undertaken by informal sanitation workers. Given the nature of the work, in the context of the Indian social system, no other community is likely to take up this work. The community undertaking this work is from among the informal waste/ sanitation workers community. They are poor and mostly stay in the urban slums. From the Government perspective, all evidences, even from project Nirmal suggests that the faecal and septage collection and management is best left to these poor communities. Given the capacities, instead of considering a 'business model' from FSM and septage operations, it is better to consider it as a service being provided by the Government through its Urban Local Bodies.

### 3.2.5 Sustainability

#### 3.2.5.1 Project Level Sustainability

Looking at the evidences of impact at the policy level and at the ULB level, it can be concluded that the project has definitely achieved its vision of successful demonstration. However, the challenge for any project of this nature is how the field operations and learning will sustain beyond the project period through integration in state and national policies and scaling up in similar geographies at State, national or international level.

While the challenge of state level policy influence was addressed, the sustainability of field operations is still circumspect in both locations. The Rating for Sustainability is Moderately Sustainable (C)<sup>26</sup>.

In Angul, due to unforeseen risks, the project implementation suffered and as of December 2019, the FSTP was ready but the operation and maintenance could not be initiated. The Angul Municipality, being a party to the project implementation and having contributed to the project by identifying land and constructing an approach road to the FSTP, was keen to get handholding support on the operation and maintenance of the FSTP, this being the first time the ULB had an FSTP and no previous experience of managing the plant. The Executive Officer of Angul Municipality expressed that a support of one year would provide an opportunity for the Municipality staff to learn about the FSM operations. However, discussions with the EO in Dhenkanal Municipality and other stakeholders brought to light



**Figure 22: Discussion with ex- Municipal Chairman Angul**

26 Rating Standard- Highly Sustainable (A), Sustainable (B), Moderately Sustainable (C), Not Sustainable (D); Refer Annexure-6.

the fact that the operation and maintenance support may require a time frame longer than one year.

In Dhenkanal, at the time of the evaluation, the FSTP operation and maintenance through project Nirmal was under implementation for nine months. During this period, the private operator worked to improve processes for smooth FSM operations. The major challenge was to bring in attitudinal changes in the workers who were seconded from the municipality to the company. The streamlining of operations has resulted in the plant running at higher operational capacity than that projected in the business plan as also the revenue collection from FSM operations being higher than those projected in the business plan. Additional support for operation and maintenance for a two year period can help test the financial viability of the integrated FSM model. Closure at this stage may result in abandoning changes mid-way. The ULB may opt for adopting a different model for operation and maintenance being proposed by the State Government and this will result in the integrated model not being provided a full business cycle support.

Even in Dhenkanal, the Executive Officer shared that the project should continue for at least one year, so that capacities of the municipality staff can be built on managing the FSM efficiently.

### **3.2.5.2 Operational Sustainability of the FSM plants**

Despite the good intentions of the Government to support the SHGs from the marginalised social groups, there exist practical challenges in SHGs taking up the FSM operations. As of now, there is no experience of SHGs managing a FSTP. The Government feels that by training and building capacities of the SHGs from this community, the FSTPs can be managed by them and this will give them a better economic return compared to working for some private contractor or service provider who will manage the plant but will engage them or others from their community as employees. In Dhenkanal, the workers at the FSTP are from the same community who undertake the faecal sludge and septage cleaning work. However, all employees are males.

Capacities of SHGs can be built but the details of capacity building are not yet clear. There is no precedence of this being done in the state. There are technical, business and institutional aspects to managing the FSM unit. From previous experience of livelihood projects, SHGs will need a capacity development of at least 3 years to manage the FSM plant operations successfully and efficiently. As of now, training modules for this are available at the state level.

The interaction with the NGO staff supporting the capacity building of SHGs in Dhenkanal revealed that they have formed two SHGs and are in the process of building their capacity. Currently skills on institution building and communication are being provided. The training on business skills will be provided at a later stage. The team placed at Dhenkanal did not have a person with business training skills. In this scenario, it is difficult to see how the SHGs will manage the FSM, in case the project is withdrawn.



**Figure 23: Meeting with Collector and District Magistrate, Angul**

The Municipalities are not in a position to take over the project. They lack institutional capacities to manage the FSM operations in a professional manner as currently being done by the Hoolock Technologies Private Limited. Further hand holding support for the municipality is needed.

It is pertinent to fund the most critical part of the project- the operation and maintenance till break-even point, as operational viability has a strong link to post project sustainability. During the time of the evaluation, the EO in Angul had yet to see the FSM business plan, having taken charge recently. It is important to have continuity in leadership for the project time frame to implement a project

successfully. This cannot be expected in a Government system where frequent transfers take place. It is important for Practical Action and the Hoolock Technologies Private Limited to continue for some more time to demonstrate sustainability from operations.

### ***3.2.5.3 Sustainability at the state level***

The policy level intervention is well acknowledged by Government officials, both technocrats and bureaucrats. The project could motivate and inspire rapid scaling up action at the state level which in itself is a commendable achievement.

However, if further time to complete at least one full cycle of operation and maintenance is provided, going by the numbers generated so far, the financial sustainability of the plant from internal revenue generation can also be demonstrated. Having invested so much in the project, it will be worthwhile to see the results by working with a lean team in the two sites till break-even point is reached.

Although the policy influence at the state level was highly successful, there was little visibility for the project at the national level. While the project experiences were shared in the workshops organised by CPR, presentations to national level bodies like the Niti Aayog, Prime Minister's Advisory Council and Ministry of Jal Shakti (earlier Ministry of Drinking Water and Sanitation) could not be made during the project period. CPR which is located in Delhi and has a good relationship with the Government can consider taking this forward. Practical Action also has an office in Delhi and may partner with CPR to ensure that project experiences, especially the learning from the operation and maintenance are shared with policy makers at the national level.



**Figure 24: Potential Area for Work - Solid Waste Management**

### ***3.2.5.4 Sustainability of learning at institutional level***

There are two major partners in the project. Practical Action and Centre for Policy Research. While Practical Action is the implementation partner, Centre for Policy Research is responsible for policy advocacy. Interactions with both partner staff were held on how do they intent to take the project learning forward.

Centre for Policy Research shared it is open to collaborate on future projects.

Practical Action has experience of working on FSM in different locations. Prior to this project, it was already working on a similar project in Bangladesh and Nepal. Practical Action is also implementing another FSM project in another location in Odisha. The project learning was consciously being replicated in the same geography.

As there is an institutional interest to work in this area, it is important to ensure that the project lessons are well harvested and benefit the institution. At the time of the evaluation, Practical Action was simultaneously finalising contracts for process documentation. During the evaluation other ideas like preparation of a toolkit and becoming a knowledge hub for FSM were also discussed.

It is quite understandable that Practical Action having invested in three positions from institutional funds, has constraints on supporting projects initiated with donor funds and at some point project closure is expected. However, given the scope of FSM services across the country, it will be a pity to lose resources and experiences gained under Project Nirmal. Given the excellent traction the project

could generate at the policy level, Practical Action may consider using the available project resources in developing a portfolio of projects or consider offering services to similar projects elsewhere.

It is imperative to use the knowledge gained in the project in other programmes within the ambit of the Swachh Bharat Mission like the ODF Plus programmes, Swachh Sundar Samudayik Shauchalaya (SSS) and Solid Liquid Water Management (SLWM). Some of the learning, especially on identification of land for projects, can also be used in other projects being funded under GobarDHAN.

There exist numerous funding options for scaling up the experiences of Project Nirmal. CSR funds can be tapped as Angul is the hub of the industrial activities. The industries contribute to the District Mineral Development Fund, a fund running into hundreds of crores, which is at the discretion of the District Collector. Although the fund is meant for development of the mining areas, it has largely been unutilised.



**Figure 25: Road Mobilised by Slum Sanitation Committee members in Angul through lobbying with Angul Municipality**

The Municipalities in both Angul and Dhenkanal offered to fund from their limited kitty for FSM operations for six months to one year.

State Government officials were keen that Practical Action expand their work area under urban sanitation and consider solid waste management as it was an area where a lot of work needed to be done.

### **3.2.6 Gender and Social Inclusion**

The rating for work under this head is Highly Cover (A)<sup>27</sup>. This will impact the poor sanitation workers across the state.

The project worked with Slum and Ward Sanitation Committees in the two urban local bodies. During the initial stages, the project invested heavily in community mobilization, awareness generation and training of communities for developing their understanding on WASH and FSM. IEC material was developed and awareness campaigns conducted in the two municipal areas, targeting the population living in authorised and unauthorised slums. The project efforts complimented the Government's capacity building programme undertaken as part of the SBM. The IEC material covered both WASH and FSM. Display boards and wall painting on WASH and FSM with messages in the local vernacular were displayed in different parts of the two cities. Capacity Building on FSM and WASH was undertaken in slum areas of the two municipal areas. In 2019, the two Municipalities of Angul and Dhenkanal are open defecation free areas.

During Community interaction conducted as part of the evaluation, it was found that the women in the slum sanitation committees were proactive in leading the agenda of toilet construction, safe sanitation and also of leading the delegation to the municipality for addressing community development issues related to water, sanitation, road access and electricity connections. In Angul, in addition to the success of achieving ODF status, women members proudly shared of their successes of

27 Standard- Highly cover (A) Cover (B) moderately Cover (C), Not cover (D); Refer Annexure-6

addressing larger development issues like improved road access, electricity access and water access, through representations to the Municipality. The confidence to make representations was gained due to the capacity building efforts of the project. Most of the happy moments of the women were related to their bringing about changes in the community infrastructure in their respective slums. During the initial period, there were also disheartening moments when few community members from their habitations did not contribute to the agenda of safe sanitation and made fun of them. Both Slum areas visited in the two municipalities were Open Defecation Free and had good access road. The Slum in Angul had better electricity and water connectivity compared to the slum in Dhenkanal.

**Social Inclusion:** The project worked with the municipal workers involved in faecal sludge and septage cleaning and transportation in Dhenkanal Municipality. The work on faecal sludge and septage cleaning is done by one particular community group in Odisha and this group is also involved in manual scavenging activities. Project Nirmal did a detailed study on Manual Scavenging in the two municipalities and shared the same with the State Government.

Interactions with the staff involved in faecal sludge and septage cleaning in the Dhenkanal Municipality revealed that prior to the project intervention, the municipal workers did not adopt safe methods while dealing with faecal sludge and septage cleaning. Protective gear was not used while cleaning the tanks or pits and it was done using bare hands. This led to the workers suffering from skin rashes and other health issues. They used to work in the smelly environment without masks and undertake the work under the influence of alcohol. Their appearance was shabby, clothes unclean and a foul smell stayed with them after the cleaning.

Post the project training, the staff undertake the cleaning and transportation only using protective gear and masks. They also wash and clean up after the faecal sludge and septage cleaning operations. The masks protect them from the foul smells. The gear protects their hands and clothes. The worker, Mr. Kakodi Jena reported that now he feel his health is better than earlier. He does not inhale toxic gases. The skin rashes and other health issues related with the unsafe cleaning practices have subsided. He also feels important and respectful as many of the visitors interact with him regarding the work. Ultimately, the work environment is now giving them a dignified living.



**Figure 26: Interaction with Slum Sanitation Committee Members in Angul**

# 4.0 LESSON LEARNT

The following are the lessons learnt from the implementation of Project Nirmal:

- **Land is an important factor while designing FSM Projects:** Identification of land for the FSTP should be considered as one of the first activities in any FSM project. However, as stated by the Project Director of the OSWSSB, finding land is proving to be a challenge for any project, not only FSM projects.
- **Expediting land identification process through exposure to local communities.** There was opposition to the project from local communities in different villages due to many misconceptions regarding FSTPs and the fear of foul smell and diseases spreading from faecal sludge. The major learning from the project is that the process of land identification for FSTP can be expedited if the communities living close to the site identified by the Government are educated about FSM and FSTP through an exposure to an existing FSTP during the initial stages of the project.
- **An enabling environment is necessary for implementing projects involving policy influence.**
  - The positive disposition of the senior bureaucrats and technocrats of the State Government towards Project Nirmal was a key factor in the project influencing state FSM policy.
  - It was helpful that there was little change in the top leadership at the State level, despite changes of leadership at the state, district and municipality level.
  - The elected leaders of the two municipalities had a vision to do something significant in the municipality during their tenure and saw the project as an opportunity to achieve this vision. The Chairman of the Angul and Dhenkanal Municipalities were positively inclined towards the project. In Dhenkanal, the Chairman supported the project immensely, with regard to land allocation and also took personal interest in the FSTP construction, turning up at the site almost daily for monitoring the progress.
- **Good and perceptive Leadership at the top is necessary to drive innovation.** Leadership of Practical Action and CPR displayed faith in their teams despite project delays. Practical Action also partially supported three positions for the past two years with its own funds.
- **While working with the Government and for policy impact, patience and building relationship is the key to success.** Despite numerous changes at the district and municipality levels, smooth project continuity could be ensured because the project staff spent their energies in engaging regularly and developing good relations with their Government counterparts.
- **There are bound to be time and cost escalations in pilot projects working on process innovations and these time and cost escalations should be factored into the project design.** There are many unforeseen factors that cannot be factored in the project design in pilot projects working on process innovations. The project timeline should therefore be linked with the outcomes of the project with some flexibility in the time period.
- **It is important for project staff to be flexible and allocate resource, time and energy to unforeseen pressing issues that impact project implementation.** Project resources were devoted to dealing with frequent bureaucratic changes at the district and ULB level and challenges like court cases and land acquisition.
- **It is important to consider a full cycle Operation and Maintenance for FSM projects for effective demonstration of innovative and sustainable models.** Half funded models may not give desired results and impact the performance of the entire project.
- **Institutions working on pilot demonstrations should have a plan for potential scaling up, else there is a risk of learning being lost and demonstration not being successful.** The experience of project Nirmal was scaled up in different Municipality in the state. It is imperative to apply the learning in other contexts and in similar programmes.
- **While working with state Government is important, it is equally important to work at the national level for larger policy impact.** While project Nirmal worked on a model

that was innovative at the country level, the policy impact was only made at the state level and the policy impact at the national level was missed out.

- **While working with Government bodies for improving processes, transparency and accountability in operations emerge as positive unintended impacts.** The process of streamlining FSM operations in Dhenkanal Municipality led to improving the transparency and accountability of FSM operations.
- **Partnerships work well if roles of the different partners are clear and there is good communication and rapport among the project teams.** The two partners in project Nirmal, Practical Action and CPR worked well in tandem as both had non-conflicting, well defined roles and were bound together by a common vision. Regular communication between the project staff of the two organisations helped in smooth project implementation and in addressing the challenges together.
- **Well defined project structures help in overcoming the challenge of frequent bureaucratic change at district and ULB level.** The regular meeting of the project structures at different levels- PSC, DSC, ULB level, helped in updating the project concept and progress to the people in position in Government organisations.



Figure 27: FSTP in Angul Municipality

# 5.0 CONCLUSION

## 5.1 Overall Achievements

Despite the costs and time overruns, the project was successful in achieving its said objectives. The summary of project achievements is as follows:

Project Nirmal supported the State Government in developing policy framework for FSM at the state level – the drafting of the Odisha Urban Sanitation Policy (Ousp) and revision of the Odisha Urban Sanitation Strategy (OUSS) was funded by project Nirmal. Both these documents were notified in December 2016, prior to the launch of the Government of India’s “National Policy on Faecal Sludge and Septage Management” in February 2017.

- Project Nirmal was considered as a learning ground on FSM by the State Government.
- The project could successfully demonstrate the delivery of sustainable sanitation service delivery model for small towns.
- FSTPs were established in two locations following all norms of the State Government and all statutory clearance certificates were obtained from the different regulatory agencies.
- For the first time, participatory integrated city sanitation plan, involving communities living in slums was prepared in the state making the liquid waste management (FSTP) as part of the planning document.
- An innovative institutional and Integrated FSM model was demonstrated that involved the participation of the private sector and as an unintended positive impact brought in transparency and accountability in the FSM operations at the ULB level.
- Project experiences influenced State Government FSM policy, a fact well acknowledged in the state Government document, ‘Odisha’s Journey of Faecal Sludge and Septage Management’.
- Draft legislative framework for FSM was also prepared and submitted to the state by the project.
- Project experiences led to preparation of Capacity building strategy on FSM for the state.
- Urban sanitation training programmes were institutionalised in regular state training for urban cadre.

## 5.2 Rating on OECD DAC Criteria and Rationale

Based on the project evaluation, the following is the rating of the project on the different OECD Criteria

**Relevancy:** Rating- Highly Relevant (A)<sup>28</sup>

- The project is highly relevant to National and State Context. There are large sections of population in urban areas in India that are not serviced through safe FSM services.
- High replication potential of the intervention in at both -State and National level
- The project intervention contribute towards National Priorities – Swachh Bharat Mission and Global Goals-Direct Contribution to SDG Goal-6: Clean Water and Sanitation; and indirect contribution to SDGs Goal 3: Good Health and Well Being; SDG-5: Gender Equality; SDG- 8: Decent Work and Economic Growth; SDG Goal -9: Industry, Innovation and Infrastructure; SDG-10: Reduced Inequalities; SDG Goal 11- Sustainable Cities and Communities; SDG-5: Life on Land and SDG-17: Partnerships for the Goals.

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28 Rating Standard- Highly Relevant (A), Relevant(B), Moderately Relevant (C), Not Relevant (D); Refer Annexure-6.

**Effectiveness:** Rating-Highly Effective (A)<sup>29</sup>

- State initiatives to cover entire state with FSM, indirect outreach of project across state much higher than the project target population in the two ULBs.

**Efficiency:** Rating-Moderately Efficient (C)<sup>30</sup>

- All objectives achieved but there were time and cost over runs.
- Being a pilot project, unforeseen challenges derailed project timeline.
- Implementation complete in both locations and Operation and Management initiated in one location.

**Impact:** Rating-Highly Impacted (A)<sup>31</sup>

- State Government demonstrated its commitment towards sanitation service delivery in small towns by signing an MoU with Practical Action and CPR to implement FSM projects, by participating regularly in project monitoring meeting at the PSC and the DCC and by Scaling up of FSTPs at State level.
- Capacity development of states and cities for effective sanitation service delivery was evidenced by project experiences contributing to preparation of capacity building strategy for delivering sanitation services in the state, exposure visits in India and abroad resulting in changing perspectives of the senior officials in the state administration and capacity building on FSM and WASH being undertaken in slums areas of the two municipal areas.
- Increase in number of people in pilot towns with access to better sanitation services is evidenced from the pilot project in Dhenkanal, where number of trips for the trucks carrying faecal sludge and septage increased dramatically over the past nine months and revenue collection from septage clearing and collection increased more than 4 fold from INR 4 lakhs in the last fiscal to INR 16.5 lakhs in twelve months in the current fiscal.
- Improve city-wide planning approaches for sanitation is evidenced by bottom up participatory CSPs being developed for both the pilot cities of Dhenkanal and Angul and for the first time in the state, integrated city sanitation plan including liquid waste management (FSTP) as part of the planning document.
- Demonstrate models for Faecal Sludge Management (“FSM”) is evidenced by successfully establishing two FSTPs following all the norms of the government and operating an Integrated FSM model in Dhenkanal for the last twelve months.

**Sustainability:** Rating-Moderately Sustainable (C)<sup>32</sup>

- Operation and Maintenance, full cycle implementation not undertaken for integrated FSM model in both locations.
- ULBs not ready to take over projects- Executive Officers of both ULBs – Dhenkanal and Angul and also Angul Collector expressed need for project support for developing capacities for operation and maintenance for at least one more year.
- Handing over to ULB at this stage will undo everything the project has been trying to demonstrate.

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29 Rating Standard-Highly Effective (A), Effective (B), Moderately Effective (C), Not Effective (D); Refer Annexure-6.

30 Rating Standard- Highly Efficient (A), Efficient (B), Moderately Efficient (C), Not Efficient (D); Refer Annexure-6.

31 Rating Standard- High impacted (A), Impacted (B), Moderately Impacted (C), Not Impacted/Negative Impact (D); Refer Annexure-6.

32 Rating Standard- Highly Sustainable (A), Sustainable (B), Moderately Sustainable (C), Not Sustainable (D); Refer Annexure-6.

**Gender and Social Inclusion:** Rating – Highly Cover (A)<sup>33</sup>

- Capacities of women in Slum Sanitation committees built on sanitation.
- Engagement with municipal workers working on faecal sludge and septage and introduction of safe and hygienic cleaning practices- improvement in health shared as an impact by municipal workers.

**Overall conclusion:** Rating- Satisfactory (B)<sup>34</sup>

- Good impact at project level, despite cost and time overruns, contribution acknowledged by Government- it is rare to get acknowledged so many times in a state level document.
- Pilot Projects bear the risk of unforeseen challenges that cannot be anticipated at the time of planning.

## 5.3 Recommendations

Based on the discussions with different stakeholders and review of project documents, the following are the recommendations from the evaluation of project Nirmal.

- **Continuity of project Nirmal for complete demonstration for two more years:** The vision of the project was demonstration and as of December 2019, the full demonstration is by no way complete. The uniqueness/ innovation of project Nirmal is the Integrated FSM Management. It is important to demonstrate the effectiveness and sustainability of the Integrated FSM Model by implementing the complete business cycle for the Operation and Maintenance of FSTPs, at least till the Break Even Point in operations is reached. The early signs are encouraging and project continuity till break-even point will provide project Nirmal an opportunity to fulfil its vision of successful demonstration of an integrated FSM model. Closing the project at this stage, will be an opportunity missed on demonstrating the merits of the integrated model to the State Government in Odisha.
- **Updating of FSM Business Plans:** Based on the learning of the past one year from Dhenkanal, the Business Plan needs to be updated and the break-even point calculations revised.
- **Additional Resources for Project Completion:** There is an immediate need to find additional resource to complete the full business cycle implementation for two more years of the operation and maintenance till the break- even point is reached. A lean project structure can support the operations for the next one to two years. Project support can taper annually. While unutilised resources available in project will fund part of the operations, fresh resources need to be tapped for Project Nirmal, for continuity for the next two years.
- **Documenting Project Experience using a Decentralised Governance Framework:** An unintended positive impact of project Nirmal has been the streamlining of process for Faecal Sludge and septage collection operations at Dhenkanal Municipality by bringing in transparency and accountability. There are lessons in Governance of Local Bodies that are applicable for not only Urban Local Bodies but for local governance units in general. The experience should be documented and analysed using a Decentralised Governance Framework for contributing lessons towards that thematic area.

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33 Standard- Highly cover (A) Cover (B) moderately Cover (C), Not cover (D); Refer Annexure-6.

34 Rating Standard- Highly Satisfactory (A), Satisfactory (B), Moderately Satisfactory (C), Acceptable (D), Partially Unsatisfactory (E); Totally Unsatisfactory (F); Refer Annexure-6.

- **Demonstration for Future Integrated FSM Projects:** Future projects may consider using the current sites of project Nirmal – Dhenkanal and Angul as demonstration sites for FSTPs, especially for Government funded Projects in Odisha.
- **Considering alternate strategies for land identification for FSTP in future Projects:** Identifying land for FSTP was the major cause for implementation delays in project Nirmal. For future project, alternate strategies for land identification like planning exposure visits for communities to existing FSTPs are recommended. This will dispel doubts in the mind of communities regarding FSTPs being sources of air and water pollution.
- **Design Considerations for Future Projects:** The following design considerations are suggested for incorporation in future projects:
- **Adopting a Programme Approach:** Given the complexities involved in implementing policy demonstration pilot projects, where all risks are not fully articulated at the design stage and there is a scope for unforeseen challenges to derail the project implementation, it is important to adopt a programmatic approach for implementation of pilot projects. The long term project goal can be broken up into separate phases and each phase implemented separately with the outcome of one phase laying the foundation for the implementation of the next phase. For example, taking the example of project Nirmal, there can be three distinct phases- the awareness generation and capacity building can be phase 1, the FSM construction can be phase 2 and the operation and management can be phase 3. The three interlinked projects contributing towards a single goal/ vision.
- **Preparing a complete Log Frame with Indicators mapped at all hierarchical levels for a future project:** It is important to map indicators for all levels of project hierarchy for periodic measurements. The process of defining impact indicators makes the measurements objective and subjective interpretation is avoided.
- **Capitalising on the Experience of Project Nirmal to offer services to other ULBs/ states:** There are many non AMRUT cities in India. FSM projects are being planned and taken up across the country by the Government and private operators. There is huge potential to apply the learning from project Nirmal by both Practical Action and CPR. The need of the hour is to offer different services to different stakeholders. As per the requirement, human resources developed under the project can be engaged on different advisory services, project implementation or project management consultancies.
- **Functioning as a Knowledge Hub on FSM:** During a brainstorming session, it was felt that the current project Nirmal resources can function as part of a 'knowledge hub on FSM' and can offer services to other stakeholders, nationally and internationally. To fulfil this ambition of functioning as a knowledge hub, it is imperative to document experiences and develop knowledge products on FSM.
- **Capturing the Learning from Project Nirmal:** Despite many setbacks and constraints, the project has had its successes. It is imperative to capture the learning from the project, both from successes and failures, in a systematic manner. These learning can be used for institutional growth as well as for offering services to the sector. The ideas generated during the evaluation centred around preparing a marketing brochure, sanitation toolkit and process documentation. In today era, a short film of 2-3 minutes telling the project Nirmal story can be the best way of marketing, given the power of the social media.
- **Policy Advocacy at the national level:** While the project was successful in influencing policy at the state level, there was little by way of policy advocacy at the national level. The project experiences need to be shared with top level policy making bodies in the country like the Niti Aayog, Advisors to the Prime Minister's Office and the officials of the Ministry of Jal Shakti.

- **Offering services in other areas of the Urban Sanitation Theme:** During discussions, senior Government officials indicated that Practical Action can work in other areas in urban sanitation, like solid waste management, an area having huge potential. Practical Action should capitalise on its existing goodwill and rapport with the state Government to experiment with innovations in new ideas under the larger theme of Urban Sanitation. There can be other area of showcasing where ‘Big Change Starts Small’.



Figure 28: Meeting with Executive Officer, Dhenkanal Municipality

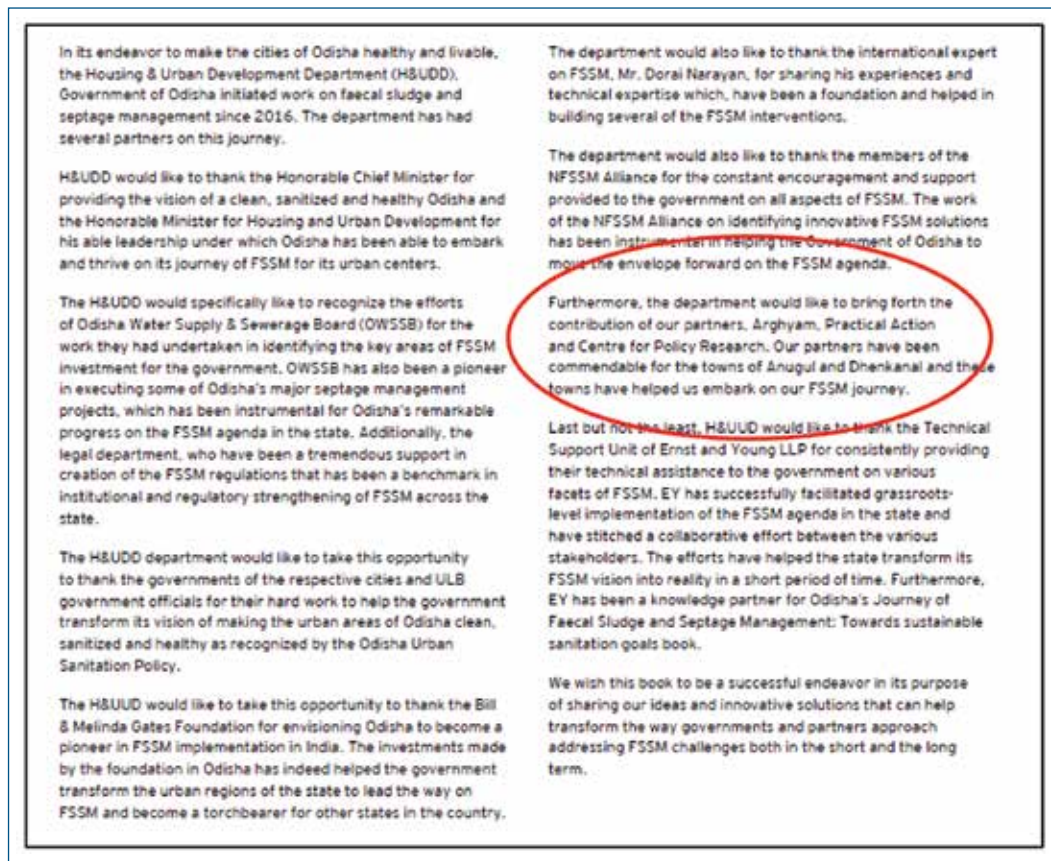


Figure 29: Acknowledgement of state published document ‘Odisha’s Journey of Faecal Sludge and Septage Management’ mentioning Project Nirmal Partners

# ANNEXURE-1

## Terms of Reference for the Evaluation

### Background

Practical Action is a UK based charity organisation established in 1966 with the objective to build futures free from poverty and help shape a world that works better for everyone. We put ingenious ideas to work so people in poverty can change their world. We do think differently, so answers that starts small can grow big-bringing people together in bold collaboration, using innovation and knowledge. Practical Action South Asia mainly focuses under four goal areas (1) energy that transform, (2) Framing that works, (3) Resilience that protects and (4) Cities fit for people . Besides these major areas, two cross-cutting themes include gender and market along with overarching goal of climate resilience and climate technologies.

The Centre for Policy Research (CPR) has been one of India's leading public policy think tanks since 1973. The Centre is a **non-profit, non-partisan independent institution** dedicated to conducting research that contributes to the production of high quality scholarship, better policies, and a more robust public discourse about the structures and processes that shape life in India. **Scaling City Institutions for India: Sanitation (SCI-FI):** Sanitation programme at the Centre for Policy Research (CPR) is a multi-disciplinary research, outreach and policy support initiative. The programme seeks to improve the understanding of the reasons for poor sanitation, and to examine how these might be related to technology and service delivery models, institutions, governance and financial issues, and socio-economic dimensions. Based on research findings, it seeks to support national, state and city authorities develop policies and programmes for intervention with the goal of increasing access to inclusive, safe and sustainable sanitation. Initiated in 2013, the programme is primarily funded by the Bill and Melinda Gates Foundation (BMGF).

Practical Action, India and Centre for Policy Research, New Delhi, have been implementing the "Project Nirmal" in two Urban Local Bodies(ULBs), i.e., Dhenkanal and Angul, of Odisha with the support from BMGF and Arghyam Foundation since November 2014. The Project is being implemented on pilot basis in close consultation/coordination with the Housing and Urban Development Department, Government of Odisha and the local Governments of both the ULBs. Based on the lessons learned from the pilot project, the State Government will replicate the same in other ULBs of similar typologies in the state. The project will be over by 31<sup>st</sup> December 2019. In view of this, final evaluation of the project is being proposed to assess the project delivery, achievements and lessons learned during the execution of the project. Keeping this in view, the present Term of Reference (ToR) is developed for undertaking the above assignment.

### Project Background

#### Project Vision

The overall vision of success of the project is demonstration of sustainable sanitation service delivery for small towns leading to increased coverage of households through enabling institutional and financial arrangements and increased private sector participation.

## Project Outcomes

The project aims to achieve the following outcomes:

- 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 pilot towns with access to better sanitation services.
- Improve city-wide planning approaches for sanitation.
- Demonstrate models for Faecal Sludge Management (“FSM”).

## Project Area

The project is being undertaken in Angul and Dhenkanal Municipalities of Odisha. The Angul Municipality extends over a municipal area of 19.24 sq.km and spreads over 23 municipal Wards. As per 2011 census, the total population of the town is 43,795, out of which 23474 males and 20321 females. The Scheduled Caste and Scheduled Tribe population of the town is counted as 5039 and 1473 respectively. About 9778 households live in the town. There are 27 slums in the town, out of which 14 are authorized and 13 are unauthorized slums.

The Dhenkanal Municipality extends over a municipal area of 30.56 sq.km and spreads over 23 municipal Wards. As per the 2011 census, the total population of the town is 67,414, out of which 34,864 males and 32,550 females. About 11,105 Scheduled Caste and 4095 Scheduled Tribe population live in the town. The town is having 14908 households. There are 17 slums in Dhenkanal town, out of which 13 are authorized and 4 are unauthorized slums.

## Project Components

The project has the following components:

- Preparatory Activities
- DPR and City Sanitation Strategy Development:
- Pilot Demonstration
- Research
- Capacity Building Component
- Knowledge Management & Advocacy (KMA)

NB: Log Frame (Results Framework Tracker) is annexed.

## Project Management Structure

The project management structure envisages a Project Steering Committee (PSC) chaired by the Commissioner-cum Secretary to Government, Government of Odisha and state and city level Project Management Units (PMUs). The PSC meets bi-annually and reviews project progress as well as provide inputs to and endorse project survey reports, DPRs etc. Project Management Units (PMUs) are established at the state and city levels and provides support in planning, technical, financial, policy, advocacy and capacity building.

## Project Strategy

The project works towards institutionalizing Government and ULB commitment towards sanitation service delivery in two small cities in Odisha in line with the 74th Constitutional Amendment and to achieve the objectives set out in the National Urban Sanitation Policy, 2008. The project is expected to demonstrate a participatory and inclusive planning process through involvement of

communities. The sanitation infrastructure conceived during the planning process was to address the entire sanitation chain. However, subsequently it was decided that the pilot would demonstrate the collection, disposal, treatment/reuse of faecal sludge. In addition to the signing of MoU with the State Housing and Urban Development Department at the beginning of the project, efforts would be made to mobilise government funds through evidence from the pilot demonstration.

To facilitate these initiatives and to ensure sustainability and replicability, the project is building capacity of existing institutions at the state level for effective capacity building of urban planners, ULB staff and line department officials (OWSSB). This was done through creating a cadre of state level master trainers in each of the specialized areas who would in turn train stakeholders across the state. Capacity gaps exist in decentralized planning and there is lack of specialised knowledge on sanitation technologies particularly FSM. Building knowledge resource and capacity on these as well as augmenting existing capacities on O&M and monitoring are the key areas of the capacity building undertaken under the project. Wherever feasible, efforts were made to converge with the existing capacity building programmes conducted and to utilize existing knowledge and training resources available with other stakeholders (specialized institutions). Additionally, during the investment period, the project aimed to strengthen state level institutions that will be handed over during the investment period and post this, will take up the capacity building activities.

A comprehensive market mapping exercise has been done using the Participatory Markets Systems Development (PMSD) tool and to facilitate participation of the private sector in the FSM chain.

## Objectives of ToR

The main objective of the assignment is to assess the impact of the project and synthesize learning at various levels. The specific objectives are to:

- Measure the overall progress/achievement of its expected result(s) against the log frame (project goal, objectives, outputs and outcomes) disaggregating between slum communities and the rest of the city, and highlighting gender issues
- Assess the project relevance, efficiency, effectiveness with impact and sustainability to draw lessons for future projects

## Expected Outputs

The major anticipated outputs of this assignment are:

- Work plan to accomplish the assessment within the given timeline;
- Final methodology and tools for the study;
- All data/record and photographs captured;
- Final draft report on overall assessment and learning;
- Presentation of the findings and recommendations
- Final report on both hard and soft copies.

## Methodology

This evaluation will be conducted by an external evaluation expert who will lead the whole process and will be supported by the team comprising of representatives from Practical Action South Asia and India programme (Two M&E, One Project Team Member), Programme Manager of PN from CPR New Delhi.

The assignment will be carried out based on the participatory approach and it is suggested to apply from the following methodologies while collecting and analysing the data but not limited to:

- Focus Group Discussion
- Key Informant Interviews
- Observation
- Stakeholder Analysis
- Recording of significant cases (Case Stories)
- Factor Analysis
- Data Validation and Analysis
- Desk Review of Progress reports and other reports.

The study team will further discuss and agree on overall process and methodology before carrying out the field works. The following stakeholders will be contacted during the evaluation:

- Project Staff and Advisors
- ULB Officials and People's representatives (Ward Councillors).
- Members from the Slum, Ward and City Sanitation Committees
- Members of the District Coordination Committees
- Members of the Project Steering Committees
- Private Service Providers
- State Government, district and city administration officials and related Line departments.
- State Pollution Control Board
- OWSSB
- Local NGOs
- Community Members.

## Evaluation Questions

The evaluation will address the following key questions:

- To what extent enabling policy frameworks were put in place at the State and city level?
- To what extent are the delivery mechanisms successful in delivering the intended results?
- What evidence exists that the project is replicable and scalable?
  - With specific reference to the effectiveness of capacity building efforts to train key staff at state and city levels with the intention that they can act as a resource for future replication and scaling in other parts of the state
  - With specific reference to the financial sustainability of the business models for the faecal sludge collection service and the FSTP site.
- How has this project inspired and influenced the government for related policies and guidelines.
- What challenges the project faced during its tenure, how it overcame those and how these affected the work of the project
- Are the established project management and community structures sustainable?
  - And are the community structures working as an effective mechanism for slum communities to improve their sanitation situation in the future
- How far the project interventions are relevant and its potential for impact at scale
  - Highlighting the extent to which the project has changed key aspects of safe sanitation coverage (as represented in a shit-flow diagram) and the extent of improvements in coverage of available, affordable, safe, culturally acceptable sanitation for slum dwellers as well as the rest of the city residents.
- How has the project done in an effective and efficient way efficiency in delivering the achieving its desired results

- In particular considering the effectiveness of IEC campaigns for behaviour change
  - Also paying particular attention to how the efficiency of processes for land and construction approvals for future FSTP sites could be improved
- How has the project developed linkages with the Housing and Urban Development Department and other line departments to imbibe a sense of ownership and define roles of each of the stakeholders?
  - What kinds of capacities were built up and strengthened at state and city level for FSM
  - What key roles women have played in this project, what has been the approach of the project in terms of gender and what gender transformative actions have been taken under the project

In addition, the following information in the table will be developed and implemented for the field study.

Broad question	Lines of queries	Data Source	Data collection method	Major findings	At least two to three relevant quote
<b>Relevance:</b> How well the project addresses the problem of the Impact Groups (in particular slum dwellers, and considering gender issues), and how well it supports/complements the national and international priorities (linked to project design) such as its contribution to SDG6.					
<b>Effectiveness:</b> Degree to which the project's outputs have provided benefits to the impact groups					
<b>Efficiency:</b> How well the inputs are transformed into outputs and outcomes					
<b>Impact:</b> Degree to which the project has contributed to the solution of the problem in question					
<b>Sustainability:</b> Likelihoods of a continuation of benefits produced by the project after the project has ended					
<b>GESI ???</b>					

NB: the Project Log Frame (Results Framework Tracker) is annexed.

**Table: Rating standard of Criteria**

Criteria	Rating standard	Comments on rating
Relevancy:		
Effectiveness:		
Efficiency:		
Impact:		
Sustainability:		
Gender		
Overall conclusion:		

*\*Consultant should clearly write not only “letters” (e.g., A, B, C...) but also “words” (e.g., Highly Satisfactory, Satisfactory,). For detail, please refer annex 3*

## Responsibilities of the Parties

The following are the specific tasks of the study team;

- Develop study methodologies, tools and techniques for the study based on the consultation with Project Manager/Project Team, Policy and Practice Team (India and South Asia), Government and M&E Advisor, UK Office
- Develop questionnaire /checklists in consultation with the Project Manager and Others
- Organise field visit and interaction programme followed by analysis and synthesis,
- Produce and submit a quality and acceptable learning report

The main responsibility of Practical Action is to support study team to produce a professional and acceptable study report. The following are the specific responsibilities;

- Provide project related documents including project proposal, results framework tracker, baseline survey report, Odisha Urban Sanitation Policy and Strategy. GIS Mapping, Information, Education and Communication Strategy, City Sanitation Plan, Market Mapping, Financial Modelling, DPR, FSM Plan, Business Plan of both cities, O&M Manual, Training Module and other study reports;
- Hold discussion meeting with the evaluation team to clarify the objective of project and scope of study
- Provide support in finalising study methodology;
- Facilitate field visits in coordination with Municipalities, , and OSVSWA and also provide logistics
- Provide inputs and comments on draft report;
- Release budget as per agreed schedule.

## Reporting

The Study Team shall be responsible to produce an Evaluation Report as per the schedule given. The report shall be based on the field study, observations, discussions and analysis of the evaluating team with regard to the Project in the following structure as at annex 1. The report will then be reviewed by the PA Program Coordinator – India and Senior Fellow CPR who will complete the Management Response.

## Work Schedule

The Evaluation Team (Consulting Firm) will follow the below mentioned schedule to undertake the evaluation.

Ser. No	Evaluation Activities	Days			
<b>1</b>	<b>Inception</b>	<b>15 Days</b>			
1.1	Agreement on the Assignment	2 day			
1.2	Study and Understand the Project through various Documents	5 days			
1.3	Develop guidelines and tools for the evaluation	8 Days			
<b>2</b>	<b>Methodology</b>	<b>10 Days</b>			
2.1	Conceptualize and share methodology	4 Days			
2.2	Agree on Methodology and Outcomes	3 Days			
2.3	Incorporate Feedback	3 Days			
<b>3</b>	<b>Main Evaluation</b>	<b>30 days</b>			
3.1	Field Visit: Observation	7 days			
3.2	Meeting relevant Stakeholders (Data Collection)	16 days			
3.3	Data Triangulation & Verification	7 days			
<b>4</b>	<b>Analysis and Report Writing</b>	<b>10 days</b>			
4.1	Draft Report and Sharing	5 days			
4.2	Incorporation of Feedback	3 days			
4.3	Submission of Final Report	2 days			

## Budgets

A total budget of INR 500000/- (Rupees Five Lakhs only) is available for the purpose inclusive of appropriate taxes.

## Requirements for an External Consultant

The external consultant will be supporting Practical Action staff in this assignment. Requirements include:

- At least seven years of professional experience of evaluation preferably in the areas of water and sanitation, community engagement and in government driven projects as well
- Masters' Degree in Development Studies / Urban Governance and or relevant discipline.

## Annex 1: Draft Reporting Format

<p style="text-align: center;">Report on</p> <p style="text-align: center;">Final Evaluation – PROJECT NIRMAL: Orissa State-Level Sanitation Partnership</p> <p><b>Executive Summary</b></p> <ul style="list-style-type: none"><li>■ One page summary with particular emphasis on main findings, conclusions, lessons learnt and recommendations.</li></ul> <p><b>Introduction</b></p> <ul style="list-style-type: none"><li>■ Presentation of the project, assessment purpose, questions and main findings</li></ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"><li>■ Description of the evaluated intervention/methodology, and its purpose, organisation and stakeholders</li></ul> <p><b>Discussion and Findings</b></p> <ul style="list-style-type: none"><li>■ Factual evidence, data and observations that are relevant to the specific questions asked by the evaluation</li><li>■ Learning and factors (in line with project assumptions and expected results)</li><li>■ Exit Plan</li></ul> <p><b>Conclusion</b></p> <ul style="list-style-type: none"><li>■ Assessment of the intervention and its results against given methods and criteria as stated in the ToR</li></ul> <p><b>Lesson Learnt</b></p> <ul style="list-style-type: none"><li>■ General conclusions those are likely to have a potential for wider application and use.</li></ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"><li>■ Actionable proposals to the users for improved intervention cycle management, policy and others.</li></ul> <p><b>Annexes</b></p> <ul style="list-style-type: none"><li>■ Terms of reference, methodology for data gathering and analysis, references, etc.</li><li>■ Key question and data collection</li></ul>
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## Annex 2: Project Log Frame

Logical Interventions	OVI	MoV	Assumptions

## Annex 3: Table: Rating standard of Criteria

Criteria	Rating standard
Relevancy:	Highly Relevant (A), Relevant(B), Moderately Relevant (C), Not Relevant (D)
Effectiveness:	Highly Effective (A), Effective (B), Moderately Effective (C), Not Effective (D)
Efficiency:	Highly Efficient (A), Efficient (B), Moderately Efficient (C), Not Efficient (D)
Impact:	High impacted (A), Impacted (B), Moderately Impacted (C), Not Impacted/Negative Impact (D)
Sustainability:	Highly Sustainable (A), Sustainable (B), Moderately Sustainable (C), Not Sustainable (D)
Gender	Highly cover (A) Cover (B) moderately Cover (C), Not cover (D)
Overall conclusion:	Highly Satisfactory (A), Satisfactory (B), Moderately Satisfactory (C), Acceptable (D), Partially Unsatisfactory (E); Totally Unsatisfactory (F)

*\*Consultant should clearly write not only "letters" (e.g., A, B, C...) but also "words" (e.g., Highly Satisfactory, Satisfactory,).*

# ANNEXURE-2

## Schedule for the Field Evaluation

**Table 6: Schedule for the Field Evaluation**

S. No.	Date	Activity Particulars
1	18.11.2019	<ul style="list-style-type: none"> <li>Assembling at Bhubaneswar</li> <li>Finalising Schedule for Fieldwork</li> <li>Interactions with Project Nirmal staff- Practical Action and CPR staff</li> <li>Presentation on Project</li> <li>Sharing of additional documents</li> <li>Brainstorming on Project Learnings and Way Forward</li> </ul>
	19.11.2019	<ul style="list-style-type: none"> <li>Meetings at Angul</li> <li>Interaction with DSC/ PSC members- PHED and Pollution Control Board</li> <li>Interaction with EO and other ULB officials</li> <li>Interaction with Ex- Municipal Chairperson</li> <li>Interaction with community in Unauthorised Slums (2), Authorised Slums (1)</li> <li>Visit to FSTP and discussion with FSM staff</li> </ul>
2	20.11.2019	<ul style="list-style-type: none"> <li>Meetings at Denkanal</li> <li>Visit to FSTP and discussion with FSM staff</li> <li>Interaction with Ex- Municipal Chairperson</li> <li>Interaction with EO and ULB officials</li> <li>Interaction with Blue Water Company staff</li> <li>Interaction with community in Unauthorised Slums (1)</li> <li>Interaction with Blue Water Company staff</li> <li>Interaction with NGO staff</li> </ul>
3	21.11.2019	<ul style="list-style-type: none"> <li>Meetings at State level</li> <li>Interaction with OWSSB Officials</li> <li>Review of Progress made</li> </ul>
4	22.11.2019	<ul style="list-style-type: none"> <li>Team -1: Meeting with Angul Collector</li> <li>Team-2: Skype call with CPR staff</li> <li>Team-2: Meeting with UNICEF Wash Officer</li> <li>Team-2: Meeting with Project Nirmal Staff</li> <li>Team-2: Meeting with Practical Action Staff</li> <li>Team -2: Meeting with Director, Municipal Administration</li> </ul>

# ANNEXURE-3

## List of People Met as part of the Evaluation

Table 7: List of People as part of the Evaluation

S. No.	Meeting Held	Name of Person	Designation of Person
1	18, 21,22.11.2019	Dr. H. Mohanty	Project Manager, Practical Action
2	18-22.11.2019	Ganesh Parida	Senior Project Officer, Practical Action
3	18.11.2019	Anju Dwivedi	Project Manager, CPR
4	19.11.2019	Mr. Parmeshwar Pani	Ex. Engg. PHEO
5	19.11.2019	Mr. Anup Mallik	Regional Officer, PCB
6	19.11.2019	A.K. Samant	Ex-Charman, Angul Municipality
7	19.11.2019	Mr. Panda	Executive Officer
8	19.11.2019	Mr. Simanchal Mishra	Municipal Engineer
9	19.11.2019	Mr. Devta	SBM Coordinator, Angul Mump
10	19.11.2019	Mr. Nrusingha Dhal	PMU, Angul
11	19.11.2019	6 women Members	Slums (2)- Unauthorized
12	20.11.2019	Mr. Sudhanshu Dalei	Ex-Chairman (key person) Separate
13	20.11.2019	Mr. Atanu Ku Samanta	EO, Dhenkanal
14	20.11.2019	Mr. Rashmita Mishra	ME, ULB
15	20.11.2019	Mr. Bibhuti	Sanitation Inspector
16	20.11.2019	Mr. Kedar	UMC (Separate Discussion)
17	20.11.2019	Mr. Swostik Pandey	Proj Mgr, Blue Water Company
18	20.11.2019	Ms. Sulochana Sahoo	Call Center Operator
19	20.11.2019	Mr. Suresh Jena	FSTP Operator
20	20.11.2019	Mr. Biranchi & Mr. Kakudi Jena	Ex-Manual Scavenger/ FSTP Staff
21	20.11.2019	15 members- 2 women; rest male	Slums (2)- Authorized
22	20.11.2019	Mr. Kedar	UMC, NGO staff supporting ULB
23	21.11.2019	Mr. Binod Sahoo	PD (Tech), OWSSB
24	21.11.2019	Mr. P.K. Mohapatra	PD (PMU) OWSSB
25	22.11.2019	Sangramjit Nayak	Director, Municipal Administration
26	22.11.2019	Manoj Kumar Mohanty, OAS (SAG)	District Magistrate and Collector, Angul
27	22.11.2019	Dr. Shubhagatu Dasgupta	Senior Fellow, CPR
28	22.11.2019	Dr. Birupakshya Dixit	India Programme Coordinator
29	22.11.2019	Ms. Shipra Saxena	WASH Officer, UNICEF

# ANNEXURE-4

## Changes in Officers Posted in Key Positions at State, District and ULB level during the Project Nirmal Tenure

**Table 8: Changes in Officers Posted at Key Positions at State, District and ULB level during the Project Nirmal Tenure**

Sr. No	Level/ Designation	Number of Officials Served During Project Period	Names of State Government Officers	Criticality to the project (High/Medium Low)
<b>A</b>	<b>State Level</b>			
1	Principal Secretary	1	Shri G. Mathivathanan, IAS	High
2	Director, Municipal Administration	2	Shri Sanjeeb Mishra, IAS Shri Sangramjeet Nayak, IAS	High
3	Jt. Secretary	2	B. Parameswaran, IAS Aji Mishra, OAS	High
4	Deputy Secretary	3	Shri Jyoti Mishara, OAS Shri Siba Narayan Patra, OAS Shri Kalyan Rath, OAS	High
5	Executive Engineer, PHEO	1	Er. Mrutyunjaya Pani	Medium
6	Regional Officer, PCB	2	Shri B.B Dash Shri A K Mallick	High
<b>B</b>	<b>District Level - Angul</b>			
	Collector, Angul	3	Shri Sachin Yadav, IAS Shri Anil Samal, IAS Shri Manoj Kumar Mohanty, OAS	High
	PD, DUDA	3		Low
	Sub-Collector	2		Low
	Tehsildar	2		Low
<b>C</b>	<b>District Level - DHENKANAL</b>			
1	Collector, Dkl	4	Smt R R Sahoo, IAS Shri Poonia, IAS Shri N P Kalyan, IAS Shri Bhumesh Chandra Behera, OAS	High
2	PD, DUDA	3		Low
3	Sub-Collector	3		Low
4	Tehsildar	2		Low
5	DFO	2		Low
6	Range Officer	1		Low

Sr. No	Level/ Designation	Number of Officials Served During Project Period	Names of State Government Officers	Criticality to the project (High/ Medium Low)
<b>D</b>				
<b>ULB Level- Angul</b>				
	Chairman	1	Shri A K Samanta	High
2	Executive Officer	5	Shri Praffula Kumar Sahu, Shri Subhendu Kumar Jena, Shri Simanchala Mishra, Shri Subrat Kumar Behera, Shri Binod Chandra Panda	High
3	Municipal Engineer	1	Shri Simanchala Mishra	Medium
<b>E</b>				
<b>ULB Level- Dhenkanal</b>				
1	Chairman	2	Shri Indramani Behera, Shri Sudhanshu Dalei	High
2	Executive Officer	8	Shri Padmanav Nayak, Shri Satrughna kar, Shri Rashmirekha Das, Shri Sasnka Sekhar Mishra, Shri Pradipta Kumar Chinara, Shri Shilpa Sharma, Shri Pradipta Kumar Chinara, Shri Atanu Kumar Samanta	High
3	Municipal Engineer	1	Shri Rasmita Mishra	Medium

# ANNEXURE-5

## Compiling the Updated Results Framework

**Table 9: Compiled Results Framework**

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
<b>Outcome 1: Demonstrate State Government and ULB commitment towards sanitation service delivery in small towns.</b>						
1.1.1	Signed MOU with state that addresses support and a vision of success for the project which will trigger them to provide financial support	Copy of MoU	Practical Action	Copy of the MoU	Oct-15	Nov-15
1.1.3	State-level policy on FSM for consideration of G/o Odisha	(1) FSM Policy submitted to and discussed with State Government; (2) FSM Policy notified	Centre for Policy Research	(1) Meeting Minutes; (2) copy of policy; (3) Notification	May-17	
1.1.4	Legislative framework for FSM in the state developed including roles and responsibilities of ULBs	Draft legislative framework prepared and submitted to the state	Centre for Policy Research	Copy of the legislative framework	Jun-17	
1.2.1	ULB Resolutions from cities including but not limited to support for pilot, provision of land necessary for the project and vision of success for the project	Copy of ULB resolutions issued in 2 pilot cities	Practical Action	Copy of the ULB resolutions	Jun-15	Jun-15
1.3.1	Project Management Unit (PMU) established at the state and city levels for effective sanitation service delivery	1 State PMU and 2 city PMUs established, fully staffed and functional	Practical Action	Record of work of the PMUs (work plan reports) of the PMU staff	Mar-15	Apr-15
1.3.2	Project Steering Committee (PSC) under the chair of DMA, G/o Odisha with participation from donors, implementing agencies and government representatives set-up and regular quarterly coordination and monitoring meetings held	PSC Established	Practical Action	Minutes of Meeting	Mar-15	Mar-15

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
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**Outcome 2: Increase in number of people in pilot towns with access to better sanitation services.**

1.7.1	Baseline survey in 2 pilot cities conducted	(1) survey report; (2) survey being used to measure pilot outputs; (3) Coverage targets based on baseline for pilot finalised	Practical Action	Copy of Report	Sep-15	Dec-15
1.7.2	GIS map of 2 pilot cities ready with basic sanitation indicators	(1) GIS survey covers sanitation services and hotspots in both cities; (2) GIS survey used as an input for CSP and DPR preparation	Practical Action	Copy of the GIS report	Jun-16	Jun-16
1.8.4	Community engagement structures set-up in 2 pilot cities	(1) Ward committees set up in every ward in each pilot city; (2) Slum committees set up in each slum in each pilot city; (3) 1 City Sanitation Task Force (CSTF) has community representation in each pilot city; (4) District Coordination Committee (DCC) has community representation from each pilot city;	Practical Action	Notification for each committee set up	Dec-15	Dec-15
	Increased community engagement in structures set up in two pilot cities	(1) 92 Ward Committee meetings per year, per city; (2) 108 Slum committees meetings in Angul per year, and 72 in Dhenkanal; (3) 80% of households/institutions in each pilot city engaged in the community engagement structures and (4) engagement of these structures in the participatory planning process for the city wide sanitation plan	Practical Action	Reports of community engagement with issues identified, and containing minutes of meetings with proof of participation from the community. Also an end-line survey of households of community outreach effectiveness. For engagement in participatory planning processes, the copies of community minutes of meetings with signatures of participants.		
2.2	Sustained M&E for FSM services institutionalised in pilot ULBs	Pilot ULBs adopt M&E plan; Plan endorsed by PSC	Practical Action	(1) ULB notification endorsing M&E plans; (2) Copy of annual plan; (3) copy of the quarterly plan; (4) Minutes of the PSC endorsing the plans	Mar-19	

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
	City-wide access to FSM increases in pilot cities	100% of mechanically collected Faecal Sludge is treated and disposed by year 3 in pilot cities	Practical Action	Baseline survey; mid-term and final evaluation reports; regular M&E reports; measured by treatment capacity of collection & treatment equipment and treatment capacity of created FSM infrastructure.	01-05-2019 (Construction completed) Sept-19 ( 100 % treatment of collected sludge)-Angul	

**Outcome 3: Capacity development of states and cities for effective sanitation service delivery.**

2.1.2	Training material developed based on material provided by BMGF and piloted in phases	Material developed and piloted in training programmes	Centre for Policy Research	Copy of training material	Dec 2016 (Material Developed)	Feb 2017 (Material Piloted)
	TOT manual developed including plan for institutionalising capacity building for city-wide sanitation service delivery training for small cities in Odisha	TOT Manual developed and piloted in training programmes	Centre for Policy Research	Copy of TOT manual	Dec 2016 (TOT Manual Developed)	Feb 2017 (TOT Manual Piloted)
2.1.3	National-level Advocacy Workshops	2 National-level advocacy workshops conducted	Centre for Policy Research	Workshop Reports	Dec-16	Nov-17
2.4	Urban sanitation training programmes institutionalised in regular state training for urban cadre	(1) At least 8-10 master trainers selected from and/or placed within SUDA, Odisha, and trained in the state; (2) At least 4-5 trainings conducted in the state and each pilot city (3) Work with NIUA, the capacity development platform supported by the Foundation, to scale up the training programs in SUDA; (4) Sanitation becomes a permanent agenda point in the ULB's meetings in pilot cities	Practical Action	Training calendar and reports; Training Reports prepared by SUDA for the TOTs; List of trained master trainers shared by SUDA; Minutes of the ULB meetings	Nov-19	
2.4.1	Municipality Capacity Building Needs Assessment Report for 2 ULBs in Odisha and State Capacity Building Needs Assessment	Report on ULBs and State CB need assessment on sanitation prepared and submitted to the State Government. The report leads to preparation of Capacity building strategy for the state	Centre for Policy Research	Report on the CB need Assessment	Nov-16	

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
2.4.2	Capacity Building strategy to deliver sanitation service	Capacity building strategy submitted to State Government	Centre for Policy Research	Copy of the strategy	Oct-16	
2.4.6	Supporting Materials for National and International exposure visits/city/state sanitation workshops	Supporting Materials Developed used to propose national and international exposure visits	Centre for Policy Research	Copy of materials	Dec-16	Nov-17
	Consolidation of lessons learned from the field outlining community engagement, sustainable FSM services, processes and outcomes of the project	Learning on Community engagement, FSM services, PPP arrangements disseminated	Centre for Policy Research	Copy of study reports	Oct-17	
	Understanding the non-government ecosystem of stakeholders for urban sanitation in the State	Map of stakeholders generated who could be the potential resource groups on sanitation in the State	Centre for Policy Research	Copy of study reports	Oct-17	
<b>Outcome 4: Improve city-wide planning approaches for sanitation.</b>						
3.4.1	Research conducted in 2 cities in Odisha:(a) understanding socio-psychological attitudes and perceptions of different strata in the community towards handling and re-use of faecal waste; and (b) Understanding the local agricultural market and the prospects for bio-fertiliser use conducted	Study conducted in two cities and findings are key learnings for the project	Centre for Policy Research	Study report	Dec-16	
1.4.2	Participatory City Sanitation Plans (CSP)	(1) Plan to be co-developed by the ULB and the project; (2) Plan to be put up before the PSC (chaired by the Commissioner-cum-Secretary, HUDD); and (3) Plan to be endorsed by the ULB (4) Copy of City Sanitation Plan including an implementation and financial plan	Practical Action	PSC Minutes endorsing the City Sanitation Plan	Apr-17	May-17
1.4.3	Guidelines for participatory city-wide sanitation plan in small cities developed	Guidelines developed and approved by PSC. Guidelines disseminated through SUDA, Odisha training programmes	Practical Action	PSC Minutes endorsing the guidelines; CB Dissemination plan of SUDA	Sep-17	Dec-17 ( incorporated in Odisha Urban Sanitation Strategy 2017)

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
2.3.4	PPP agreement for private sector engagement in city-wide sanitation drafted	(1) Copy of agreement with formal/informal players to operate the FSTP; (2) At least 2 operators per city are registered with the ULB for collection and transportation to treatment facility, measured against preliminary market mapping	Practical Action	Copy of PPP agreement;	Sept-19 (Angul)	Dec-19 (Dhenkanal)
2.3.5	ULB resolution supporting PPP arrangements adopted	Copy of ULB Resolutions issued	Practical Action	Copy of ULB Resolutions	Sept-19 (Angul)	Nov-19
<b>Outcome 5: Demonstrate models for Faecal Sludge Management (“FSM”).</b>						
1.5.1	DPR for FSM for small towns in Odisha adopted	DPR completed and endorsed by Project Steering Committee and City Sanitation Task Forces	Practical Action	PSC Minutes and CSTF minutes endorsing the DPR	Jun-17 -Dhenkanal & Sept-17-Angul	Jun-17-Dhenkanal & Oct-17,Angul
1.6.1	DPR reflects O&M arrangements	O&M arrangements for 5 years specified in the DPR- SATISFACTORY; O&M arrangements for 7 years specified in the DPR - EXCELLENT	Practical Action	Copy of the DPR	Jun-17 -Dhenkanal & Sept-17-Angul	Jun-17-Dhenkanal & Oct-17,Angul
	Community-level demand generation for city-wide sustainable sanitation solutions	(1) ULB guidance / regulation on Septic Tank / pit for collection, transportation, and disposal of Faecal Sludge; (2) 24 Community events for increased awareness and demand generation per project year (3) By the end of the project, at least 60% (disaggregated) of households/institutions using sanitation services including desludging, emptying, servicing community and public toilets [45% by June 2019]; (4) 95% of households requesting emptying services are met within 4 working days - SATISFACTORY; and 2 working days - EXCELLENT	Practical Action	(1) Copy of ULB resolutions / regulation issued with accompanying guidance note;	Dec-19	

Sl. No. in Updated Results Framework	REVISED: Outcome/ Output	REVISED: Indicator(s)	LEAD INSTITUTION	Data Sources (If Applicable)	Targets/ Milestones	Actual
3.1.1	FSM model for small towns in Odisha demonstrated in 2 pilot cities	(1) Indicator to capture that the plant is being operationalised will be decided in December 2016; (i). <b>Completion of the FSTP construction</b> (ii). <b>Trial run of the FSTP</b> (iii). <b>Commissioning of the FSTP</b> (iv). <b>Operation and maintenance of the FSTP</b> (2) <b>Transfer of FSTP as asset to ULB.</b>	Practical Action	Copy of the agreement	Dec-19	

# ANNEXURE-6

## Rating Standard for Different Criteria under OECD DAC

**Table 10: Rating Standard for Different Criteria under OECD -DAC**

Criteria	Rating standard
Relevancy:	Highly Relevant (A), Relevant(B), Moderately Relevant (C), Not Relevant (D)
Effectiveness:	Highly Effective (A), Effective (B), Moderately Effective (C), Not Effective (D)
Efficiency:	Highly Efficient (A), Efficient (B), Moderately Efficient (C), Not Efficient (D)
Impact:	High impacted (A), Impacted (B), Moderately Impacted (C), Not Impacted/Negative Impact (D)
Sustainability:	Highly Sustainable (A), Sustainable (B), Moderately Sustainable (C), Not Sustainable (D)
Gender	Highly cover (A) Cover (B) moderately Cover (C), Not cover (D)
Overall conclusion:	Highly Satisfactory (A), Satisfactory (B), Moderately Satisfactory (C), Acceptable (D), Partially Unsatisfactory (E); Totally Unsatisfactory (F)

# ANNEXURE-7

## Data on the Operations of the FSTP and Cesspool Vehicle in Dhenkanal Municipality

**Table 11: Sludge Trips, Faecal Sludge (in '000 litres) and Revenue ( in '000 INR) between Jan- Dec 2019 for Denkanal Municipality**

Months	Sludge Trips (Nos)	Faecal Sludge (in '000 litres)	Revenue (in '000 INR)
Jan	70	210	82.7
Feb	60	180	82.4
Mar	113	339	128.6
Apr	97	270.9	111.5
May	114	326	135.6
Jun	116	328.2	122.3
Jul	127	370.3	137.1
Aug	113	326.7	121.05
Sep	164	477.8	182.1
Oct	167	494.2	194.6
Nov	170	504	179.4
Dec	152	451.8	172.4
Total	1463	4278.9	1649.75

Source: Project Nirmal

**Table 12: Number of Trips made by Cesspool Vehicle for Faecal Sludge & Septage Collection in Dhenkanal Municipality between 2016 and 2019**

Year	Trips
FY 2016	592
FY 2017	400
FY 2018	470
FY 2019	1463

Source: Project Nirmal

# ANNEXURE-8

## Checklist for Discussion with State Level Government Officials

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Name of the Person \_\_\_\_\_

Designation \_\_\_\_\_

Organisation: \_\_\_\_\_

### Introduction

- Good Morning Madame/ Sir! Thank you for your time.
- As informed to you, we all are part of the evaluation team for Project Nirmal being implemented in partnership with Practical Action. We are interviewing different stakeholders involved in the project to understand the achievements, learning, scaling up/ replication potential of the project at the state and national level and also the post project sustainability readiness of the project.
- I am Devanshu Chakravarti, the evaluation lead and I have come from Hyderabad (if others take lead in discussion, they introduce themselves) and these are the other team members (members introduce themselves).

*We wait for the official to respond and allow the person to finish while some of us take notes and some maintain eye contact. After the official finishes, the designated interview lead will ask questions on aspects not covered by the interviewee. Other team members can also join in.*

### Key Questions

1. For how long were you associated with the project? In what capacity were you associated?
2. How did the state facilitate the smooth implementation of the project? What was your role?
3. How was the coordination between different departments managed in the project? How would you compare the effectiveness of the project mechanisms to other similar projects being implemented in the state? Would you suggest any change to make it more effective?
4. What was the project contribution towards making the two cities ODF?
5. There would be other cities in Odisha that became ODF during this period even without project intervention. What was the specific contribution of this particular project towards the Swachh Bharat Abhiyan? What is the innovativeness/ uniqueness of this project?
6. Were the project interventions relevant to the context?
7. Were there elements from the project that could be mainstreamed at the state level? What are the major lessons from the project? What are the policy lessons? What are the lessons in capacity building? What are the lessons in ULB engagement? What are the lessons in FSM? What are the lessons in private sector engagement?
8. Did the project contribute towards improving the efficiencies of service delivery and of existing process and structures at the ULB/ state Government level?
9. Overall, what are the policy lessons for small towns in similar contexts in Odisha and in the country?

10. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible? Can it be adopted in the other cities in Odisha in its current form or with modifications?
11. How will the financing for managing the structures take place in a post project scenario? Will there be a special window of assistance for the ULBs in Odisha?
12. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
13. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?
14. In your view, what policy lessons can be integrated at the national level?
15. Lastly, from your experience, can you share about the major impact of the project on different stakeholders?

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if you join us and offer your inputs to the outcomes.

# ANNEXURE-9

## Checklist for Discussion with District Level Government Officials

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Name of the Person \_\_\_\_\_

Designation \_\_\_\_\_

Organisation: \_\_\_\_\_

### Introduction

- Good Morning Madame/ Sir! Thank you for your time.
- As informed to you, we all are part of the evaluation team for Project Nirmal being implemented in partnership with Practical Action. We are interviewing different stakeholders involved in the project to understand the achievements, learning, scaling up/ replication potential of the project at the state and national level and also the post project sustainability readiness of the project.
- I am Devanshu Chakravarti, the evaluation lead and I have come from Hyderabad (if others take lead in discussion, they introduce themselves) and these are the other team members (members introduce themselves).

*We wait for the official to respond and allow the person to finish while some of us take notes and some maintain eye contact. After the person finishes, the designated interview lead will ask questions not covered by the interviewee. Other team members can also join in.*

### Key Questions

1. For how long were you associated with the project? In what capacity were you associated?
2. How did the district facilitate the smooth implementation of the project? What was your role in this?
3. How was the coordination between different departments managed in the project? How would you compare the effectiveness of the project mechanisms to other similar projects being implemented in the state? Would you suggest any change to make it more effective?
4. How was the coordination between the ULBs and the District line departments?
5. What has the impact of the project on the different stakeholders? How did it impact the poor and the women? What changes have you noticed? Any specific incident that you want to share with us?
6. What was the project contribution towards making Angul/ Denkanal ODF?
7. There would be other cities in the district that became ODF during this period even without project intervention. What was the specific contribution of this particular project towards the Swachh Bharat Abhiyan? What is the innovativeness/ uniqueness of this project? Was the intervention relevant to the context?
8. What have been the enabling factors for the project?
9. What were the constraining factors?
10. How many officials from your department received training/ exposure from the project? Where did they receive training and in what topics? Was the training beneficial? Is it being useful to the district/state? How?

11. What are the lessons in capacity building? Would you suggest changes in content and training methods?
12. What are the lessons in private sector engagement? How can they be strengthened further?
13. How was the capacity building and awareness generation strategy at the community level? Did it help in improving the effectiveness of the Swatchch Bharat Abhiyan? What were the gaps that the project filled?
14. Did the project contribute towards improving the efficiencies of service delivery and of existing process and structures at the ULB/ Government?
15. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible? Can it be adopted in the other cities in Odisha in its current form or with modifications?
16. Do the ULBs have the governance foresight, institutional mechanisms, technical capacities and financial resources and management capacity to manage the FSM in a post project scenario?
17. How will the financing for managing the structures take place in a post project scenario?
18. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
19. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if you join us and offer your inputs to the outcomes.



got from the project? Would you require any further training for discharging your duties as a ULB member working on sanitation?

9. How many members attended the training from your ULB? How many male and how many female?
10. How was the coordination between your ULB and the district administration for this project? How would you compare the effectiveness of the project mechanisms to other similar projects being implemented in the state? Would you suggest any change to make it more effective?
11. How was the coordination between the ULBs and Slum Committees? How can you make it more effective?
12. What was the project contribution towards making Angul/ Denkenal ODF?
13. Can you share about the enabling factors for the project? What are the constraining factors? (if time permits, a PRA exercise can be attempted).
14. What are the lessons in private sector engagement? How can they be strengthened further?
15. How was the awareness generation strategy at the community level? Did it help in improving the effectiveness of the Swatchch Bharat Abhiyan? What were the gaps that the project filled?
16. Did the project contribute towards improving the efficiencies of service delivery and of existing process and structures at the ULB/ Government?
17. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible?
18. If Yes, What is your motivation to take the initiative forward in the post project scenario?
19. Does your ULBs have the governance foresight, institutional mechanisms, technical capacities and financial resources and management capacity to manage the FSM in a post project scenario?
20. How will the financing for managing the structures take place in a post project scenario?
21. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
22. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if one or two of you can join us for the workshop and offer your inputs to the outcomes.



chart paper with impact on children, women, men, covering transaction time, disease incidence, understanding in overall hygiene, number of OD households, educational outcomes, effectiveness of Government services, FSM practices, etc.). What changes have you noticed? Any specific incident that you want to share with us?

6. How many people have benefitted from the project in your ward (make a shit flow diagram for the ward/ habitation)?
7. How has the project impacted you personally?
8. Did you attend any training? If yes, on what? Where did you attend the training? Was the training useful? What do you recall from the training? How are you using the trainings that you got from the project? Would you require any further training on sanitation?
9. How many members attended the training from your area? How many male and how many female?
10. How was the coordination between the ULBs and Slum Committees? How can you make it more effective?
11. Can you share about the enabling factors for the project? What are the constraining factors? (if time permits, a PRA exercise can be attempted).
12. Can you share on how often is your toilet cleaned? How do you get it cleaned? How much do you currently pay for the service?
13. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible? How much can you pay for the service?
14. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
15. Looking back, what could have been implemented differently in the current project to make it more beneficial to you?
16. We will do a voting exercise individually. Please make a que (Voting on Different aspects of handwashing by individual members).

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if one or two of you can join us for the workshop and offer your inputs to the outcomes.

# ANNEXURE-12

## Checklist for Discussion with FSM Operational Team

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Name of the Person \_\_\_\_\_

Designation \_\_\_\_\_

Organisation: \_\_\_\_\_

### Introduction

- Namaskar! Thank you for your time.
- We all are part of the evaluation team for Project Nirmal being implemented in partnership with Practical Action. We are interviewing different stakeholders involved in the project to understand the achievements, learning, scaling up/ replication potential of the project at the state and national level and also the post project sustainability readiness of the project. In this context, we want to ask you some questions on FSM operations.
- I am Devanshu Chakravarti, the evaluation lead and I have come from Hyderabad (if others take lead in discussion, they introduce themselves) and these are the other team members (members introduce themselves).

### Key Questions

1. For how long were you associated with the project? In what capacity were you associated?
2. Can you please describe how the FSM operations are currently being managed?
3. How do you operate?
4. How many houses/ pits/septic tanks do you cover?
5. How much do you charge?
6. Do you use any equipment?
7. How many people are involved in the current operations? What are their roles?
8. What is the nature of employment?
9. How are the payment aspects?
10. How are the safety aspects?
11. How was it earlier?
12. Did you receive any training for managing the FSM? If yes, where did you receive the training? On what topics? What are the topics that you require further training?
13. Is there a change in the way you operate when compared to situation prior to the project?
14. What are the challenges that you face today?
15. How do you propose to deal with these challenges?
16. What has the impact of the project on the different stakeholders? How did it impact the poor and the women? What changes have you noticed? Any specific incident that you want to share with us?
17. What have been the enabling factors for the project?
18. What were the constraining factors?
19. Do you feel that the post project operation and maintenance model is feasible?
20. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?

21. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if one or two of you can join us and offer your inputs to the outcomes.

# ANNEXURE-13

## Checklist for Discussion with NGO Staff

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Name of the Person \_\_\_\_\_

Designation \_\_\_\_\_

Organization: \_\_\_\_\_

### Introduction

- Good Morning Madame/ Sir! Thank you for your time.
- As informed to you, we all are part of the evaluation team for Project Nirmal being implemented in partnership with Practical Action. We are interviewing different stakeholders involved in the project to understand the achievements, learning, scaling up/ replication potential of the project at the state and national level and also the post project sustainability readiness of the project.
- I am Devanshu Chakravarti, the evaluation lead and I have come from Hyderabad (if others take lead in discussion, they introduce themselves) and these are the other team members (members introduce themselves).

### Key Questions

1. For how long were you associated with the project? In what capacity were you associated?
2. What was the role of your organisation in the project?
3. What were the enabling factors that helped you to play your role in the project?
4. What were the constraining factors? How were they addressed?
5. How was the coordination between different stakeholders managed in the project? How would you compare the effectiveness of the project mechanisms to other similar projects being implemented by you? Would you suggest any change to make it more effective?
6. What has the impact of the project on the different stakeholders? How did it impact the poor and the women? What changes have you noticed? Any specific incident that you want to share with us?
7. What was the project contribution towards making Angul/ Denkenal ODF?
8. There would be other cities in the district that became ODF during this period even without project intervention. What was the specific contribution of this particular project towards the Swachh Bharat Abhiyan? What is the innovativeness/ uniqueness of this project? Was the intervention relevant to the context?
9. How many staff from your NGO received training/ exposure from the project? Where did they receive training and in what topics? Was the training beneficial? Is it being useful? How?
10. Were you involved in the training of the community/ district officials/ ULB officials? How many trainings did you conduct/ or were a part of? How was the gender aspect addressed in the trainings?
11. What are the lessons in capacity building? Would you suggest changes in content and training methods?
12. How was the capacity building and awareness generation strategy at the community level? Did it help in improving the effectiveness of the Swachh Bharat Abhiyan? What were the gaps that the project filled?

13. Did the project contribute towards improving the efficiencies of service delivery and of existing process and structures at the ULB/ Government?
14. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible? Can it be adopted in the other cities in Odisha in its current form or with modifications?
15. Do the ULBs have the governance foresight, institutional mechanisms, technical capacities and financial resources and management capacity to manage the FSM in a post project scenario?
16. How will the financing for managing the structures take place in a post project scenario?
17. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
18. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?

Thank you for your time! We are hosting a Workshop on Saturday for harnessing the learnings from the project. We would be greatly obliged if you join us and offer your inputs to the outcomes.

# ANNEXURE-14

## Checklist for Discussion with Project Staff

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Name of the Person \_\_\_\_\_

Designation \_\_\_\_\_

Organisation: \_\_\_\_\_

### Introduction

Good Morning Madame/ Sir! Thank you for your time.

As informed to you, we all are part of the evaluation team for Project Nirmal. We are interviewing different stakeholders involved in the project to understand the achievements, learning, scaling up/ replication potential of the project at the state and national level and also the post project sustainability readiness of the project.

I am Devanshu Chakravarti, the evaluation lead and I have come from Hyderabad (if others take lead in discussion, they introduce themselves) and these are the other team members (members introduce themselves).

### Key Questions

1. For how long were you associated with the project? In what capacity were you associated? What was your role?
2. Having been part of the project team, can you share the project impact and achievements under different heads?
3. Please share your most satisfying experience from the project? Why do you call this satisfying?
4. Please share a 'lowlite' experience that was depressing and put you down? How did you overcome this experience?
5. What were the enabling factors for the project and what were the constraining factors?
6. Why would you share that the project is relevant to the context?
7. How was the coordination between different departments managed in the project? How would you compare the effectiveness of the project mechanisms to other similar projects being implemented in the state? Would you suggest any change to make it more effective?
8. What was the project contribution towards making the two cities ODF?
9. There would be other cities in Odisha that became ODF during this period even without project intervention. What was the specific contribution of this particular project towards the Swachh Bharat Abhiyan? What is the innovativeness/ uniqueness of this project? Was the intervention relevant to the context?
10. Were there elements from the project that could be mainstreamed at the state level? What are the major lessons from the project? What are the policy lessons? What are the lessons in capacity building? What are the lessons in ULB engagement? What are the lessons in FSM? What are the lessons in private sector engagement?
11. Did the project contribute towards improving the efficiencies of service delivery and of existing process and structures at the ULB/ state Government level?

12. Overall, what are the policy lessons for small towns in similar contexts in Odisha and in the country?
13. What are your views regarding the FSM implemented by the project? Do you feel that the post project operation and maintenance model is feasible? Can it be adopted in the other cities in Odisha in its current form or with modifications?
14. Do the ULBs have the governance foresight, institutional mechanisms, technical capacities and financial resources and management capacity to manage the FSM in a post project scenario?
15. How will the financing for managing the structures take place in a post project scenario?
16. How would you rate the effectiveness and sustainability aspects of the project on a scale of 1 to 5? Please justify your rating.
17. If there was a possibility of a follow up project, what would be your views on the project design, taking the current operations forward?
18. Looking back, what could have been implemented differently in the current project to make it more efficient and effective?
19. In your view, what policy lessons can be integrated at the national level?

About

# PRACTICAL ACTION

Practical Action is an international development organisation putting ingenious ideas to work so people in poverty can change their world.

We help people find solutions to some of the world's toughest problems – made worse by catastrophic climate change and persistent gender inequality. We work with communities to develop ingenious, lasting and locally owned solutions for agriculture, water and waste management, climate resilience and clean energy. We share what works with others, so many more people can change their worlds.

Practical Action is a global change-making group. The group consists of a UK registered charity with community projects in Africa, Asia and Latin America, an independent development publishing company and a technical consulting service. We combine these specialisms to multiply our impact and help shape a world that works better for everyone.

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