iDE

CREATE REPORT - **PRODUCT FOCUS**

Sanitation in Complex Operational Environments

JUNE 2019

This document includes design specifications and SWOT analysis for proposed technical solutions. The above photo is an in-progress latrine installation in the Borodol Vagbari and Kawkandi village of Dakshin Baradal Union of Tahirpur Upazila, Sunamganj.

June 2019

DISCLAIMER

This deep dive learning document is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the PRO-WASH Award and do not necessarily reflect the views of USAID or the United States Government.

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CONTRACT MILESTONE 3

This report is the completion of Milestone 3 from the SCORE contract. It includes background information and pilot installation findings for each of the four solution options. The main design specifications are found in **Section 8** as described below.

Completion of PRO-WASH approved design specifications and SWOT analyses for each solution. The design specifications and SWOT analyses will consist of 1-2 page design specification drawing/visual with detailed accompanying narrative for each solution including a SWOT analysis for each solution.

EXECUTIVE SUMMARY

This report summarizes the findings of CREATE phase of the SCORE study in Haor and Char regions of northern Bangladesh in collaboration of the SHOUHARDO III program in collaboration with CARE. This SCORE study contains three phases: HEAR, CREATE and DELIVER. During the HEAR phase, iDE conducted deep dive research and the CREATE phase will summarize findings for a final recommendation. During this CREATE phase, iDE has conducted prototype installations of latrines (products). This process helped to refine latrine designs, to identify challenges in installation, and to test components of transport, delivery and services through local service providers.

The team installed five latrines in Sunamganj and four latrines in Kurigram. The team worked with local NGO staff, latrine producers (LPs) and households to identify the installation challenges and barriers. While the installations were more complicated in Sunamganj and differed from the original plan, the team tightened the designs for prototyping in Kurigram and have selected four latrines to move on to the DELIVER phase as follows:

Basic: This latrine is a simple low-cost design. It is a simple pit latrine, where the squatting slab sits directly on top of the pit. The pit is lined with three concrete rings. The squatting slab has a trap door latrine pan that keeps away flies and blocks smell. This latrine includes a corrugated iron (tin) shelter with bamboo pillars that is wider than traditional designs.

Basic+: The Basic+ design includes three upgrades on the Basic design. Firstly, concrete pillars are used in the shelter instead of bamboo with a transparent roof panel for more light. The squatting slab is square which allows for more space in the latrine. And the pit includes a low-cost onsite Fecal Sludge Management system called FilTo, which increases leaching, decreases the volume of sludge in the tank, conducts primary treatment of the sludge in the tank, and promotes safer emptying. FilTo has four concrete rings sealed as a tank.

Offset: The Offset design moves the pit from directly underneath the squatting slab, to 'offset' from the slab by 2-3 feet. The pit remains the same as the Basic+ latrine with a FilTo system. The shelter is the same as the Basic design with bamboo pillars and corrugated iron.

Offset+: The Offset+ design includes the same squatting slab and pit as the Offset design. However the shelter can also be attached to the home - which is especially helpful for individuals with disabilities. The shelter is the same as the Basic+ design, with four countrete pillars, corrugated iron walls and a transparent roof panel.

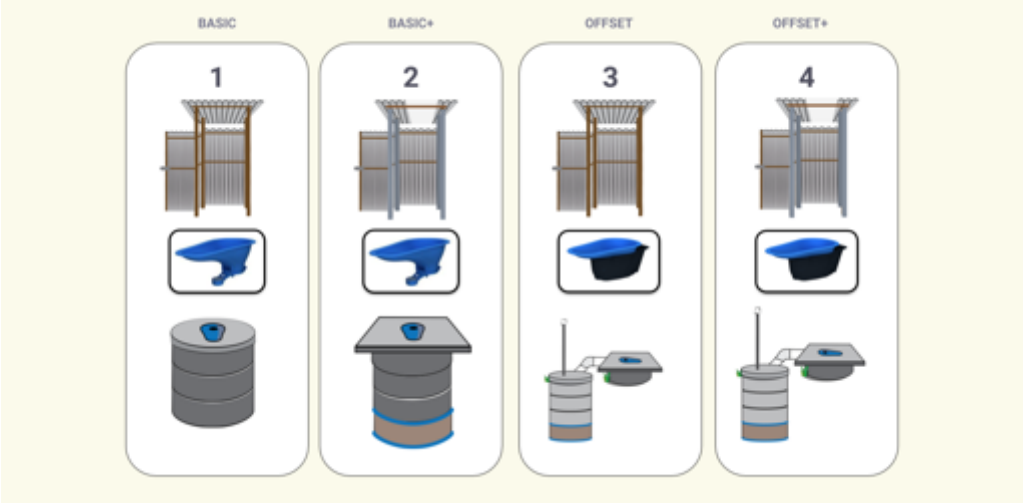


TABLE OF CONTENTS

Background

The WASH situation is difficult in hard to reach (HtR) areas such as *chars* (riverine islands) and *haors* (wetlands) due to the geophysical, socio-cultural and economic situation. Out of 1,144 unions identified as HtR based on physiographic conditions and spatial distribution, more than 45% (517 unions) have *haors* or *chars*[1]. With limited infrastructure development, especially road networks, water and sanitation coverage in these areas still remains well below the Joint Monitoring Programme (JMP) 'basic' standard.

The sanitation market system is fragmented in *haor* and *char* areas with weak linkages between retailers and sanitation entrepreneurs. Innovative technologies and improved practices do not reach the last mile and are not shared between entrepreneurs. Additionally, entrepreneurs have limited incentives to produce quality products and deliver them to the last mile.

A number of organizations have undertaken studies and pilot projects to develop latrines and sanitation systems appropriate for the flood prone areas of Bangladesh. Some of these solutions include raised latrines[2], hanging latrines[3], and floating latrines[4]. However, despite being technically feasible, these solutions have not yet reached scale due to a number of factors including lack of viable business models; engagement with supply chains and sanitation entrepreneurs; and a mismatch between product features and consumer demand.

Research Approach

iDE has utilized Human Centred Design (HCD) as the grounding for this project. HCD[5] is a systematic method for acquiring a deep understanding of customers, their environments, and their routines in order to create innovative solutions to the problems that they face. We have considered the entire user experience from how a solution is built to how it is promoted, financed, delivered, serviced, and more. HCD seeks to find solutions that are desirable, feasible and viable as defined below.

- **Desirability (Social)—**What do users need and want? What are the drivers and barriers to adoption? What incentives drive their decisions? What is the entire user experience like, from the moment they are exposed to the solution to their ongoing use and maintenance?
- **Feasibility (Technical)—**What can be done technically? Will this technology work locally and in the environmental constraints?
- **Viability (Economic)—**What is financially and economically viable? Is there a financing model and incentive structure that allows this solution to be sustained for as long as it is needed?

Research Methods

The research approach was designed to blend Human-Centered Design and Design Thinking methodologies in order to capture various perspectives from multiple user and actor groups across genders. The team conducted one week of HEAR research in the Sunamganj (Haor) and Kurigram

[1] GoB (2011). National Strategy on Water and Sanitation for Hard to Reach areas of Bangladesh. Ministry of LGRD&C, Government of Bangladesh, Dhaka

[2] Hanchett, S. (2016). Sanitation in Bangladesh: Revolution, Evolution, and New Challenges. CLTS Knowledge Hub Paper.

[3] SSWM (no date). Overhung latrines.

[4] CARE Bangladesh Program Strategy 2015-2020. Feb 2016. Care International

[5] IDEO (2011). Human Centered Design Toolkit: An Open Source Toolkit To Inspire New Solutions in the Developing World.

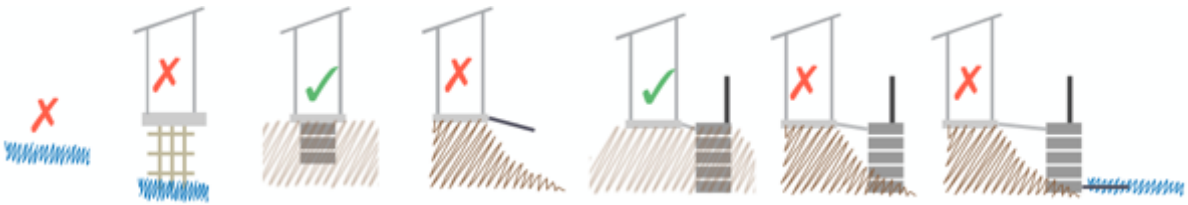
(Char) districts in April 2019. During this CREATE phase, the team then supported the rapid prototyping of recommended latrines to identify what 'could go wrong' in wider dissemination in May 2019.

The team engaged with the Shouhardo III field team and public sector key informants; as well as direct field research with beneficiaries. The research used interviews, focus groups, active observation and co-creation to gather data (See **Annex C** for interview guides).. Activities such as testing assumptions, the 'ideal toilet', and journey mapping supported the collection of data. We spoke to 45 consumers, 3 service providers, 2 Government officials, and 10 CARE project staff. We conducted observations in 6 unions and co-creation workshops in Sunamganj, Kurigram and Dhaka. We then installed five latrines in Borodol Vagbari and Kawkandi village of Dakshin Baradal Union of Tahirpur Upazila, Sunamganj District, and four latrines in Nama Char and Bepari Para of Kaliganj Union of Nageshwari Upazila, Kurigram District

Research Findings

The following seven latrine option are the most commonly found in the Haor and Char areas. A green check indicates a latrine design that the project should promote and a red x indicates a latrine that the project should not promote and should actively avoid - either they are not improved or are unsafe for the community. In haor areas areas people raise their *homesteads* on mounds. These mounds are made of a loamy-clay soil and are susceptible to erosion. Cultural norms around cleanliness and smell have strengthened preferences for latrines to be on the teetering edge of the mound. In char areas people raise their *homes* to mitigate flood damage. Latrines are not raised to the same level as the home and are often damaged in floods. Latrine are also placed on the edge of property lines and on the edge of raised areas (see pipe to nowhere latrine below)

No latrine	Hanging	Direct Pit	Pipe to Nowhere	Offset Pit	Offset Edge Pit	Offset Edge Pit with Pipe
. Water defecation	Bamboo slats and poles over water body	3 ring direct pit latrine. Not on edge of home mound	Piped latrine, with no pit on edge of mound	5 ring offset pit. In ground, not on the edge of the mound.	5 ring offset pit, not in the ground and on the edge of the mound	5 ring offset pit, not in the ground, on the edge of the mound and with a pipe or hole for easy emptying.



This current level of sanitation coverage can be traced back to the history of Community Led Total Sanitation (CLTS) which promoted fixed-point do-it-yourself sanitation. Additionally many subsidy programs have promoted products over installation and often with unimproved components. Many HHs have rings (and unimproved slabs), but have not installed them due to a perception that more rings are better. This concept comes from 1) seeing wealthy homes (incorrectly) install many rings as a way to show wealth and 2) the fact that incorrectly installed latrines do not leach properly and therefore fill up quickly - promoting more rings. Based on the HEAR research[6] **installation is the most critical aspect of this strategy,** however this must be accompanied by quality technologies, components and maintenance.

[6] See HEAR Report for further details.

What is an Improved Latrine?

Improved latrines require four levels of improvement: technology, components, installation and maintenance. iDE's deep dive research found that the weakest links in the Haor and Char areas are **installation and latrine sitting.** This is surprising to many who expect that technology and components are the problem. Fancy technologies *could* solve some of the problems, but require proper installation and continuous maintenance. iDE always recommends the **lowest viable option,** not because we don't believe that the rural poor deserve nice things (all the recommend latrines are of high quality and much nicer than predominant designs), but because the lowest viable option reduces risk of backsliding, improper installation, inconsistent maintenance, breakage, and improper use. Experiences from across the globe show that technology uptake is higher when it is designed for purpose and context. The recommendations here have taken into account these requirements. Floating latrines, wetlands, septic systems, and fecal matter drying systems are technically feasible in the Haor areas, but the risks to sustainable desirability and commercial viability are very high. These options are shiny to start, but often fall into disrepair quickly - therefore our recommended solutions are simple - because simple works.

- **Technology**: Basic or higher latrine (based on JMP definition - see sanitation ladder p.8)
- **Components**: Functional quality waterseal + Inclusive Shelter
- **Installation**: Latrine siting plan
- **Maintenance**: Handwashing + Easy/Safe Sweeping

The latrines recommended in this document are resilient latrines. This is distinguished from resistant latrines. Resilient latrines are designed to match a level of disaster as recommended through a participatory activity. Community members have recommended that latrines not be more resilient than homes. Therefore the latrines in this document are usable in a similar fashion to homes in the area[7]. Resistant latrines would be exponentially more expensive and would outlast homes during disasters. Not only is this undesirable for households, but also technically challenging and commercially unviable.

Trade-offs are required in these recommendations. Three of the key trade-offs are summarized below.

- **Technology** - We have prioritized designs that are low-cost. This means less fancy designs.
- **Space** - We have prioritized design that take up a mid-amount of space. Designs that take up less mound space often are perched on the edge of the mound and are dangerous and unsafe.
- **"Newness"** - New designs are fun and interesting, but we have balanced newness with tried and true designs that have innovative components. This evolutionary design perspective is more appropriate for HHs to adopt and consistently use.

[7] Options for disaster period fall outside the scope of this project and are well documented in procedures for humanitarian action (see Harvey, P. (2007) Excreta disposal in emergencies: A field manual. Loughborough: WEDC)

The table below shows the Joint Monitoring Programme sanitation ladder[8]. All newly installed latrines in Bangladesh should include quality waterseals and shelters. Safely managed latrines require offset fecal sludge management (FSM) technology. We have adapted the diagram slightly to show where recommend technologies fall. All proposed solutions are between levels 3-4.

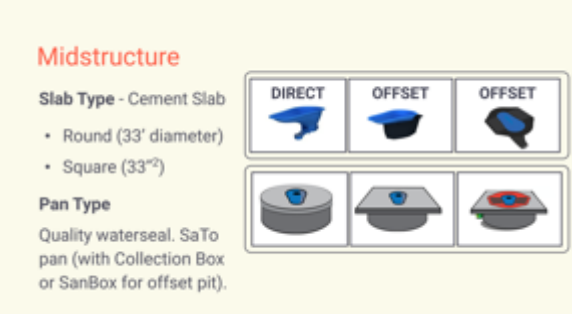
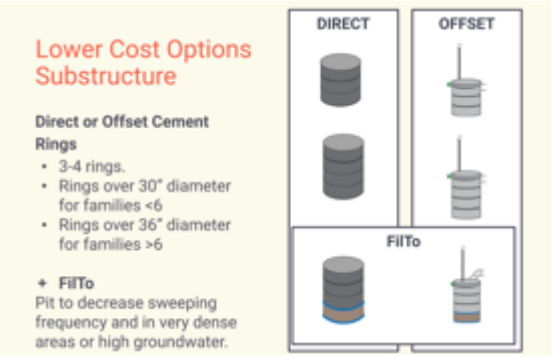
Class	Level		Definition
Improved	6	Sewerage	A piped connection for wastewater and excrement into sewers.
	5	Bathroom facilities	A latrine with bathing and washing facilities.
	4	Safely managed	An improved offset latrine with 1) safely disposed excreta (i.e. FilTo); 2) handwashing with soap/water; and 3) a more sustainable superstructure.
	3	Improved latrine	A latrine that includes a waterseal or a VIP system.
Unimproved	2	Basic latrine	A latrine that does not ensure the hygienic separation of human excreta from human contact; a ring/slab latrine without a waterseal.
	1	Open defecation	When human faeces are disposed of in fields, forests, bushes, open bodies of water, beaches or other open spaces or disposed of with solid waste.

Design Criteria

Desirable		Feasible		Viable	
Accessible	**Acceptable**	**Adequate**	**Appropriate**	**Affordable**	**Available**
For women, children and the vulnerable	Taking into account socio-cultural norms such as latrine sharing and location	Meeting a minimum standard of JMP basic latrine	Durable and resilient in floods and dry season	Between 6,000 - 15,000 BDT + 2,000 - 4,000 BDT for installation and labor which can be subsidized by HH	Locally available in the *haor* and *char*

[8] JMP (2017). Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines. Geneva: World Health Organization (WHO) and the United Nations Children's Fund

Technical Specifications of Key Components

These four components represent the key design concepts for the rapid prototyping in both Haor and Char. Variations of these components were then adapted in the final recommendations.	
	The 4TinBera shelter, developed by the iDE team in 2014/15, is a low-cost, latrine shelter than uses an innovative cutting technique to create a wider (33-36") shelter that is more accessible for women and children. Additionally addons for those with physical disabilities and the elderly are also promoted. The team found that many latrines had cloth, leaves or tall skinny pieces of tin to create ad-hoc 'fences' for latrines. This coupled with the deep consumer interest to stick with tin over other materials led the team to create a shelter design that uses the four pieces of tin that households are accustomed to buying. Instead of a 26" x 7 foot tall shelter with four walls, the shelter is wider, but slightly shorter.
	The SaTo Latrine technology, is a low-cost, direct or offset latrine technology that ensures hygiene through an innovative water seal[9]. The pan is low-flush and its bright color is suitable for individuals with challenged vision. Two other complementary products can be used with SaTo to make it offset: 1) collection box and SanBox. All three quality components are manufactured by RFL plastics. SaTo and Collection Box are patented by LIXIL.
	The substructure recommended pit options here are basic, but remain the best in the industry. They leverage existing local knowledge and are low cost. The round shape ensures that the pit can withstand the pressures of soil underground. Plastic ring options have a tendency to burst during flood events. Rings are 11" to 12" tall. iDE recommends using a gas pipe when the soil is loamy or clay based. iDE also recommends that the ring diameter be a factor of the size of the family. Bigger rings for bigger families - this is in contrast to the practice of more rings for bigger families.
	The FilTo technology, developed by the iDE team in 2014/15, is a low-cost, safer leaching, onsite FSM solution that can be incorporated into any offset pit latrine. Installed by trained sanitation entrepreneurs, the technology uses simple mechanisms to ensure safer leaching water and reduce sweeping time (3 times less) while promoting compost use and dry sludge removal for safer sweeping. The FilTo is applicable for areas with high groundwater, seasonal and flash floods and limited land size (where latrines and water points are very close together). Dry sludge is safer to move and can be buried and used

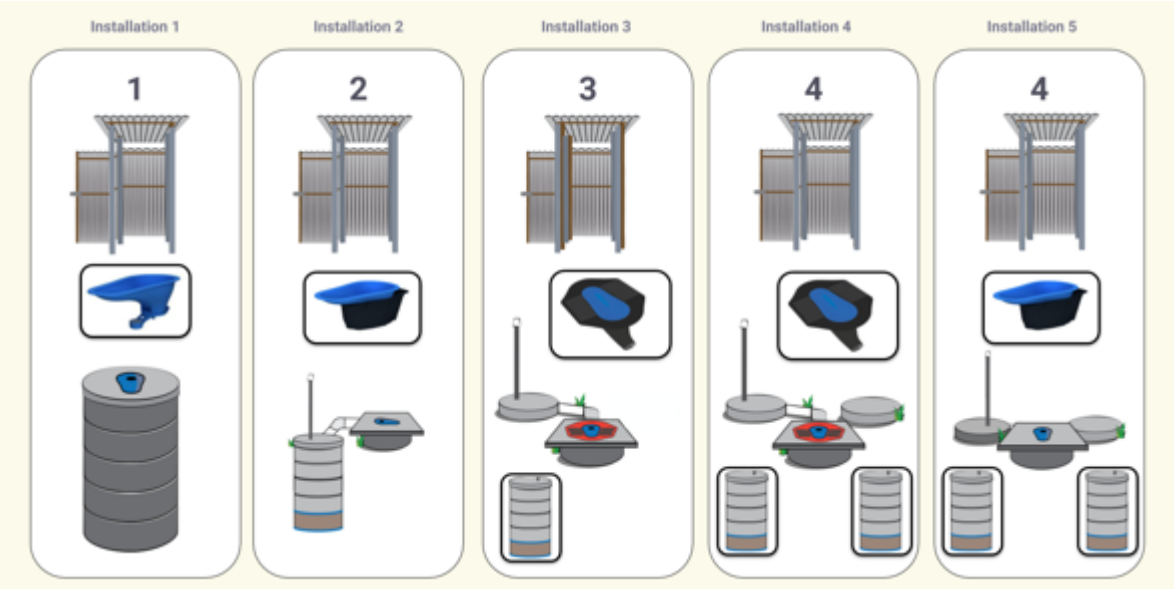
[9] A waterseal is a water barrier between the pit and the open environment. A functional waterseal is critical to ensure the health impacts of latrines. This seal is often through a cup trap or syphon (p, q or s); however iDE recommends a trap door seal which decreases the chances of breakage because of the innovative design. Seals sometimes break due to natural wear and tear but most often due to users not understanding the point of a seal or trying to unblock a pipe by ramming a broom handle through the seal and piercing it.

	for fruit tree planting.

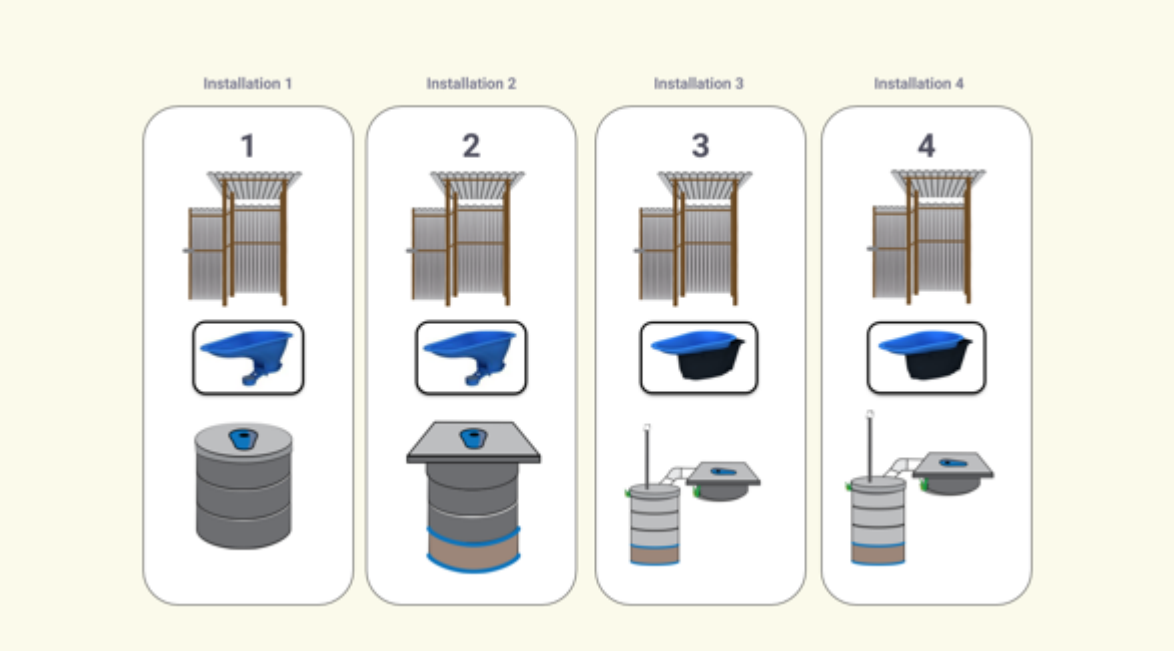
Rapid Prototyping in Haor and Char

With these components in mind, the team entered a rapid prototyping phase with sample installations in the Haor and Char areas. Installation designs were derived in collaboration with iDE staff, local NGO staff, latrine producers and expert consultants. The goal of this prototyping is to identify the opportunities, threats, strengths and weaknesses of different designs - with a focus on technology, components, installation and maintenance.

Summary of Prototyped Installations from Haor



Summary of Prototyped Installations from Char



Current Installation Practices from Haor

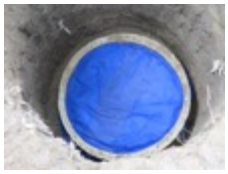
As part of the rapid prototyping process, we tested five installations with LPs in Haor areas. One of the aspects of this exercise was to identify what "could go wrong" in installations. This can include broader problems, but also local interpretations and variations on technology designs. This divergence helps to show the different perceptions in practice and the strong pulls of the different stakeholders. All five installations installed the same shelter with cement pillars. The methods to share designs were significantly altered for the Char areas with a more refined and clear definition of exactly what the four designs entail.

Installation 1 - 5 ring direct pit as recommended by local NGO staff. This is due to a perception that deeper pits are required. However, this proves expensive and more dangerous for pit sweeping; and therefore the Char installation only includes 3 rings. Only one direct pit option was installed in Haor.

Installation 2 - 5 ring offset pit FilTo will decrease to 4 rings in the Char installation in alignment with traditional FilTo design; this increases the safety for emptying and reduces the volume of the pit which allows for better treatment of the waste.

Installation 3 - SanBox squatting slab will be replaced with SaTo with Collection box in Char installation. The cost of SanBox is prohibitive and the SanBox does not offer significantly more functionality that the SaTo with Collection Box.

IInstallation 4/ 5 - We replaced the Biofil option with a Twin Pit offset latrine with a FilTo FSM unit, to reduce cost. This was eliminated for the Char installation and only four options will continue, due to cost and space. This option was installed twice: once with a SanBox and once with SaTo Pan with Collection Box. SanBox was removed as per the Installation 3; FilTo was reduced to 4 rings as per Installations 2 and 3.

Technology				
Installation 1	**Installation 2**	**Installation 3**	**Installation 4**	**Installation 5**
7 x 6' tin, SaTo Pan, 5 Rings Direct Pit,FilTo	7 x 6' tin, SaTo with Box, Offset single Pit, FilTo	7 x 6' tin, SanBox, Offset single, FilTo	7 x 6' tin, SaTo with Box, Offset Pit (Twin), FilTo	7 x 6' tin, SanBox, Offset pit (Twin), FilTo
				
				














Installation Notes

Strong cultural desire for latrine on mound edge. BCC is *very* important.

It was very difficult to get the installations as per strategy. All the options were adapted.

Men decide where latrines go, because they pay. Women are not able to decide, because they don't control the money. **Women want latrines close to home with access 24h/day.**

HH is a little upset about the placement of the latrine. Would prefer it to be on the mound edge, however they came around by the end of the installation.

Why are you installing here? **Smell** is going to be a problem.

Why are you installing here? Too close to mosque!

Why are you installing here? I have installed it on the mound edge for 14 years and haven't had sickness. But I **sweep with monsoon.**

Installation Learnings

Twin pit options will not be feasible in most homes due to land size and price ***although*** more technically sound for onsite FSM.

4TinBera is lower cost, but HHs still desire have a taller shelter (6' over 5'). BCC required

As these are demonstration installations, we have upgraded to higher level installations (not Option 1)

Still need to reduce costing, which is difficult in demonstration latrines for the team who want to provide top quality installations.

Current Installation Practices from Char

While the technologies and components remain essentially the same from Haor and Char, there are separate installation goals for the locations. For **Haor** the goal is **mound-installation**; for **Char** the goal is **raised to the same level of the house.**

Based on insights from the Haor installations we made several adjustments to our installation strategies and four installations were conducted in the Char. The biggest difference between these four installations and the final recommendation is the shelter design. In the final versions we reduced costing of the shelter for Options 1 and 3, by replacing concrete pillars with bamboo.

Technology			
Installation 1 **Basic**	**Installation 2** **Basic + FilTo**	**Installation 3** **Offset**	**Installation 4** **Offset**
7 x 6' tin, Round SaTo slab FilTo with 4 rings. Direct pit	7 x 6' tin, Square SaTo Slab FilTo with 4 rings. Direct pit	7 x 6' tin, SaTo with Collection Box. 4rings including FilTo. Single pit offset	7 x 6' tin, SaTo with Collection Box. 4 rings including FilTo. Single pit offset
			

Installation Notes

HHs were selected by partner NGOs and are women headed households. One of the female beneficiaries was not truthful about not having a husband. Several neighbours stated that "toilets should be free as they are poor". People thought that their neighbors had paid a bribe to get the installation. Many people gathered around to see the installations.

Mound extension was done by HHs at their own cost, they were happy to do this. Partner NGOs requested women to bring soil; assumption that there would be a raised toilet, this is about ⅓ cost in Char. Women wouldn't install by themselves, would wait for male relatives.

HHs said they would naturally install latrines far from house, on the edge of the mound. Want to expand house, so don't want to have the space used for a latrine. Think it is smelly. Waterseals all broken in the area (take too much water (more than one bodna) and therefore they break the seal. Don't want to have to bring multiple bodnas to the toilet.

In once case HH wanted latrine close to the tubewell (12 ft) for convenience sake, we supported to install it 30 ft away from the tubewell.

LP was happy to learn techniques and technologies - two new orders based on his preparation work. FIlto was very interesting -- hopefully this will help reduce filling time and replacement cost, and sweeping cost.

The biggest barrier to adoption by LPs is change to support installation and to slightly different product designs. iDE has a strong track record in helping make these changes in LPs through training and associations. Part of this is in the selection of early adopters and more entrepreneurial LPs in the first round.

Char girls marry in the char, so they have family and male relatives nearby. Therefore women were not concerned about finding a sweeper.

Prices were fairly normal 180 BDT / ring

Installation Learnings

Option 2, with handhold on the slab were not used. Instead the latrine producer created a notched square slab design - see photos. This was well received by HHs.

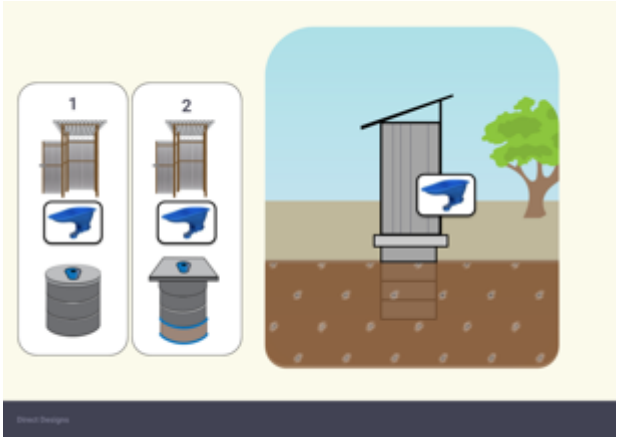
All the women expressed that it would be easy to find a sweeper.

Option 1 was installed with a Filto as it was a very high mound with little leaching area. This will need to be at the advice of the 'honest broker' or sales agent.

Options 1-4 are well suited to the Char environment and installation was once again proved to the key ingredient.

Recommendations after Prototyping

Options 1-2 - Direct Pit Options



Options 1 and 2 are very similar. They feature the lowest cost and space requirement options for a more immediate solution. These are not meant to be long-term solutions for households, but temporary solutions until households can build up their mounds or find more permanent space. Many homes already have uninstalled rings from government subsidy programs and will only need to purchase installation and an improved-pan slab. These options can be installed in very space limited areas and the movable slab with handles (Option 2) helps to reduce slab breakage during pit sweeping. The cement seal can be broken with a chisel and the slab lifted and moved to the side during the sweeping[10]. It can then be replaced easily without having to touch the bottom of the slab.

Option 1: Corrugated Iron Shelter (bamboo pillars), Round SaTo Slab, 3 rings direct pit

Option 2: Corrugated Iron Shelter (concrete pillars and transparent roof panel), Square SaTo Slab, 4 rings direct pit with FilTo

Strengths	Opportunities
• Lowest cost option • Lowest space requirement • Shelter is designed for women and seniors • Slab is designed for women and seniors • Pan is improved, low-flush and disaster resilient	• Leverges rings that HHs have, but haven't yet installed • Temporary first tier solution • HHs can upgrade this latrine to an offset in the next year • Pit volume can be adapted for larger households through increased diameter rings
Weaknesses	**Threats**
• Not long term solution [HHs can easily upgrade in the next season to an offset latrine] • Not as easy for sweeping [version with handles is easier to lift to the side for sweeping]	• Poor installation (such as on mound edge) could perpetuate dangerous leaching and unstable slabs [installation to be included in service model] • Improper maintenance and failure to sweep pre-monsoon, could lead to overflow [BCC materials to promote proper sweeping] • HHs are used to breaking rings for monsoon sweeping [BCC materials to promote proper sweeping]

[10] Sweeping service providers are common in the area and the future goal for Shouhardo III is to help formalize and solidify safe practices. In the service delivery model, sweepers would be connected to LPs and trained on safe practices of emptying pits through shovels into a new pit and reburying waste for tree planting. The distances to formal treatment facilities and lack of land, highlight the value of onsite FSM solutions such as FilTo and Arborloo.

Mitigation strategies to weaknesses and threats are in [red text]

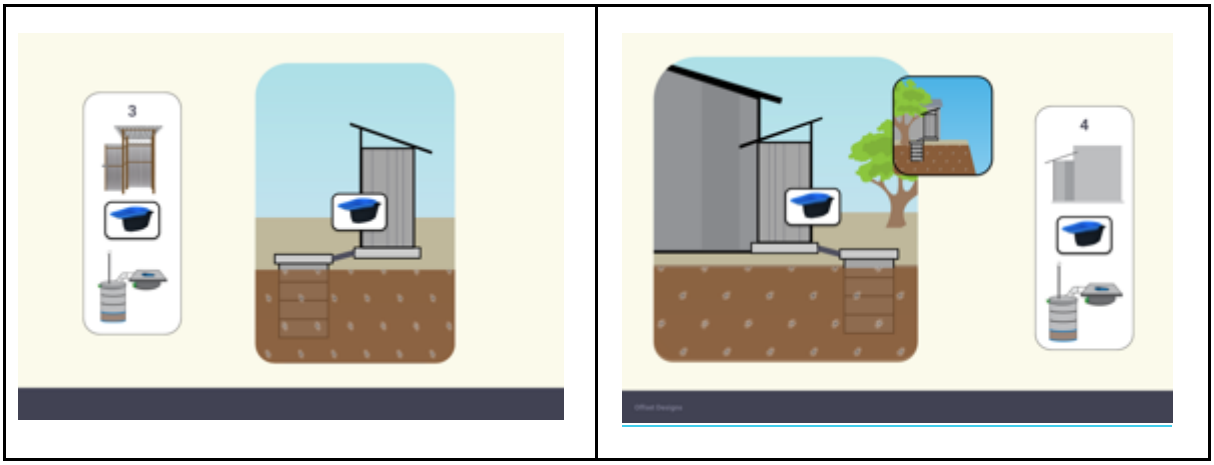
Options 3 and 4 - Offset Pit with FilTo

Options 3 and 4 move the pit offset from direct pit options. This is a longer-term solution and is easier for pit sweeping. The offset system is unique from traditional systems. The use of a collection box and SaTo pan ensures flushing and eliminates syphon trap blockages. Additionally traditional syphon traps are often of poor quality and crack when installed. This system is high quality and has a very low risk of breakage. The system also includes the FilTo technology which increases leaching in loamy soil and dries out the sludge for easier sweeping. This solution **must be installed in the mound to correctly function**. While this does takes up mound space, annual plants can be planted over the pit and the space. The space should not be wasted. Mound-edge installation will prove unstable and promote dangerous pit sweeping practices. Option 4 attaches the latrine to the home. This ensures access even during heavy rains and reduces the foot print.

Additional pipe bends and layout options can support offset pit systems without too much land, but this is at the discretion of the household and installer.

Option 3: Corrugated Iron Shelter (bamboo pillars), square SaTo Slab with collection box, offset FilTo

Option 4: Corrugated Iron Shelter (concrete pillars and transparent roof panel)[11], square SaTo Slab with collection box, FilTo offset pit



[11] Optional attachment to home.

SWOT

Strengths	Opportunities
• Lower cost option • Lower space requirement and flexible spacing using pipe bends • Shelter is designed for women and seniors • Slab is designed for women and seniors • Pan is improved, low-flush and disaster resilient	• Leverges rings that HHs have, but haven't yet installed • Pit volume can be adapted for larger households through increased diameter rings • Sweeping is easier due to offset pit and FilTo
Weaknesses	**Threats**
• Needs to be installed inside mound for stability and safety [BCC materials to promote proper siting; brokers/agents to support sitting through land assessment planning; service delivery includes installation]	• Poor installation (such as on mound edge) could perpetuate dangerous leaching and unstable slabs [installation service embedded] • Improper maintenance and failure to sweep pre-monsoon, could lead to overflow [BCC materials to promote proper sweeping] • HHs are used to breaking rings for monsoon sweeping [BCC materials to promote proper sweeping] • HHs may not have space for a slab and pit [identify siting solutions through land assessment plan and/or utilize direct pit until mound can be increased]

Mitigation strategies to weaknesses and threats are in [red text]

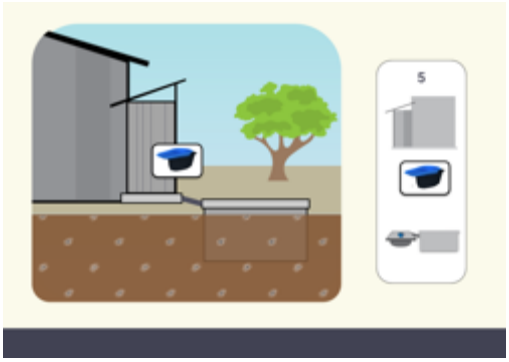
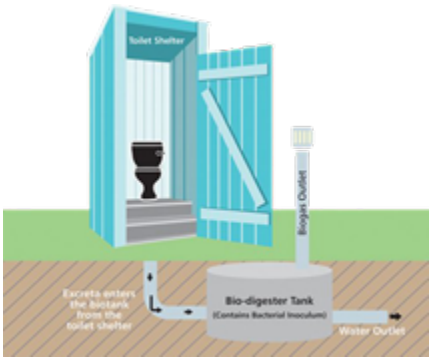
Notes on Key Changes from Prototypes

Superstructure	Midstructure	Substructure
Based on feedback from the prototype installations we are not recommending the 4TinBera in its initial form and are utilizing an adaptation that has taller walls (6 feet instead of 5 feet). The shelter uses corrugated, galvanized iron sheets in 6 feet lengths. For the base version we recommend bamboo pillars. For the upgraded version we recommend concrete pillars and a transparent panel for the roof. The pillars are more stable in flood events and the panel makes the latrine easier to use during daylight hours.	Although we tested three different pan varieties: SaTo, SaTo with Collection Box, and SanBox. Our final recommendation has eliminated the SanBox as it is thrice the price of the SaTo with Collection box with similar functionality. We recommend two varieties of squatting slabs: round and square. The round slab is included in the Basic design to cut costs, but the square slabs have more space to hold soap and water vessels.	The major difference between the prototypes and the recommendations in the design of the substructure pits, is the reduction in the number of rings. Many people prefer to have a high number of a latrine rings based on a 'install and forget' mentality, however the long term costs and safety concerns associated with emptying such deep pits are significant. We recommend shallower, wider pits that are designed for safer leaching, promote sludge decomposition and treatment, and reduce safety hazards for sweepers - hence the recommendation of the FilTo system.

Excluded Option - BioFil System

While included in the first draft of the create report as Option 5, this option has been excluded as the pit is more than 10 times more expensive than the other options and exceeds the threshold costs as stated in the request for proposal. While iDE recognizes that this could be an option for community latrines, it is too expensive without a financing model in place for the haor and char households targeted by the program.

The Biofil Digester is a simple compact on-site organic waste treatment system that uniquely combines the benefits of the flush toilet system and those of the composting toilets and eliminates the disadvantages and drawbacks of both systems. The system has been successfully piloted in Slum areas of Dhaka 2014/15 in iDE's SanMark CITY project. The design reduces waste volumes and only needs to be emptied every 10 years.

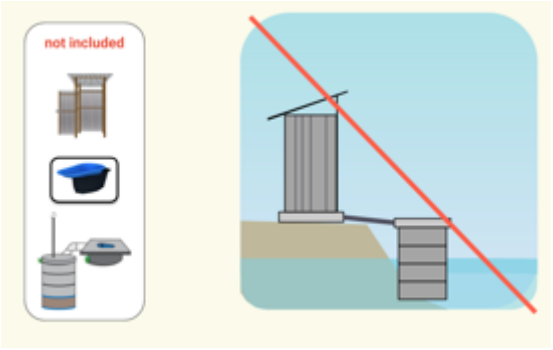
Visual Basic Technical Drawings	
	

SWOT

Strengths	Opportunities
• Can be sited above ground in flood prone areas • Pit sweeping every 10 years	• Could be utilized for community or shared installations
Weaknesses	**Threats**
• Significantly more expensive and outside the current pricing for target HHs [microfinance partnership or community shared latrines] • Needs to be installed inside mound for stability and safety [BCC materials to promote proper siting; brokers/agents to support sitting through land assessment planning; service delivery includes installation]	• Poor installation (such as on mound edge) could perpetuate unstability [installation service embedded] • Complex installation. BioFil is very concerned about IP and installation is quite complex. Trained LPs require several weeks of hands-on installation support and become a franchisee of the brand [partnership with BioFil] • HHs are used to breaking rings for monsoon sweeping [BCC materials to promote proper sweeping] • HHs may not have space for the BioFil on mound [identify siting solutions through land assessment plan and/or utilize alternative]

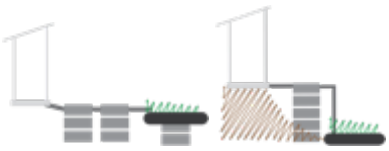
Excluded Option - Offset Septic Tank

This option was recommended by the CARE field team and iDE has reviewed the option thoroughly. The design includes a sealed mound edge pit to minimize land use. The design is an updated version of existing mound-edge installations. Floating wetlands have also been proposed with the septic tank designs, but because of the significant variation in water level and high risk of backwashing through the pipes, these have also been excluded.



iDE does not recommend this latrine for several key **technical** and **behavioral** reasons as described below.

1. **Maintains possibility for monsoon sweeping.** One of the biggest challenges in both the Haoris sweeping of pits during the monsoon by breaking the rings. If the tank is on the edge of the mound this is highly probable and a dangerous practice.
2. **Reinforces unstable slab installations.** Each flood season washes away soil from the mound edge. Edge installations become quickly unstable and dangerous for women, children and seniors. They are often then abandoned as seen multiple times during the field research.
3. **Retains faster filling tank.** Septic tank designs require some form of outlet. Without an outlet they fill quickly and overflow onto the slab. In the FilTo this is through the bottom ring of sand. Other versions have a top outlet pipe and second tank with overflow. There is a lot of water culturally used in latrines in Bangladesh both for cleansing and for cleaning. This tends to fill septic tanks very quickly with liquid and therefore they are more difficult and dangerous to empty.
4. **Perpetuates unsafe leaching options.** There is not enough stable ground/soil in this design to install a FilTo or a bottom leaching ring and nowhere to safely remove effluent liquid through a pipe. Leaching through the bottom of the tank without ground is destabilizing and can erode soil faster. Leaching liquid through soil/sand is the safest option as sand can trap bacteria; therefore we recommend mound installations

Strengths/Opportunities	Previous Designs
• Can be sited on the mound edge for less space	
Weaknesses	**Threats**
• Nowhere for effluent to go without destabilizing tank base • No safe space for a second pit and effluent pipe • Wetland for effluent treatment is complex to maintain and would backwash during flood	• Unstable slabs after floods • Tank can fill very quickly • HHs are used to breaking rings for monsoon sweeping and would resort to this

Ensuring an Affordable Product Suite - Pricing Breakdown

iDE proposes a three-pronged approach to ensuring the affordability and cost effectiveness of the proposed latrine solutions. Consistent with an HCD approach, these proposed solutions meet required affordability criteria, as well as being commercially viable for the private sector to sustainably and autonomously deliver. Firstly, products and services are inherently low cost. This will require a strong focus on **food secure and Shouhardo III graduated HHs**[12] with a priority on those who **already have** some (uninstalled) **components**. Additionally, **microfinance** options help to spread costs over a longer period of time and raise the value of a latrine in the HH. Ultimately our goal is to get HHs latrines that are properly sited and installed and ideally with components that they already have.

Pricing for the latrines is composed of seven cost clusters as follows. In the deep dive research, it was found that many HHs already have latrine components such as rings, shelter tin, shelter bamboo, and maintenance add-ons. HHs also are willing to land preparation, pit digging, installation and transport on their own to reduce costs. The pilot installations were therefore not a true representation of what households will need to pay. If HHs have rings and loose building materials from government programs and general repairs, the minimum cost will be that of a base slab of approximately 650 BDT.

Land Preparation	Preparation required onsite for latrine installation, based on the land type and area
Base Slab	Basic costs latrine midstructure (slab with hygienic latrine pan)
Base Pit	Basic cost for latrine rings with FilTo in options 2-4
Base Shelter	Basic cost for a simple shelter
Upgraded Shelter	Upgrade costs for cement pillars and higher end shelter include transparent roof panel
Add-ons	Add ons for daily maintenance including sandals, bucket and soap
Installation and Transport	Average cost for installation and transport of materials, will be dependent on HH location
Sweeping	Annual latrine sweeping costs (150/ring)

Average in Bangladeshi Taka (approximately 80 BDT/USD)

CHAR[13]		Land Preparation	Slab	Pit	Shelter	Installation and Transport	Total	Total USD
1	Basic	HH Labor (not included in costing)	650 - 1000	500 - 600	2700 - 3200	1400 - 2500 Often HH labor to decrease costs	5250 - 7300	66 - 91
2	Basic+		1200 - 1400	1200 - 1300	3700 - 4700		7500 - 9900	94 - 124
3	Offset		2300 - 2600	1500 - 1600	2700 - 3200		7900 - 9900	98 - 124
4	Offset+		2300 - 2600	1500 - 1600	3700 - 4700		8900 - 11400	111 - 140

HAOR		Slab	Pit[14]	Shelter	Installation and Transport	Total	Total USD
1	Basic	900 - 1000	800 - 900	2700 - 3200	1800 - 3000	6200 - 8100	76 - 101

[12] iDE's deep dive in the HEAR phase identified targeting food secure households who have more secure sources of income to spend on latrines. For food insecure households the first Shouhardo goal is food security and then WASH.

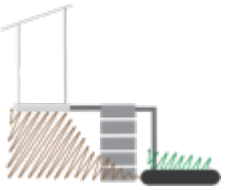
[13] The detailed budget breakdown of individual component of the recommended options will be included in the final report.

[14] Rings are significantly more expensive in Haor (180 BDT/ring in Char, 300 BDT/ring in Haor). We need to identify the reason for this price, but it could be **possible to reduce costs in the Haor by 20-30%.**

2	Basic+	1000 - 1200	2000 - 2200	3700 - 4700		8500 - 11100	106 - 139
3	Offset	2200 - 2500	2200 - 2500	2700 - 3200		8900 - 11200	111 - 140
4	Offset+	2200 - 2500	2200 - 2500	3700 - 4700		9900 - 12700	124 - 159

Comparison with Proposal Technologies and Components

During the proposal phase iDE presented several ideas that could be utilized in the Haor and Char based on our experience.

	Component	Technology	Visual	Justification
✓	Toilet	OFFSET LATRINE SYSTEM		• Reduces space requirements • Safer for women, children and seniors
✓	4Tin Bera	INCLUSIVE LATRINE SHELTER		• Low-cost • Easy to install • Ensures wide shelter
✓	Offset Latrine SaTo Pan + Collection Box	OFFSET LATRINE SYSTEM		• Quality waterseal and pan • Flood resilient • Offset reduces sweeping complexity
✓X	Moveable Slab	MOVABLE LATRINE SLAB		• Slab can be moved easily for sweeping • Not required everywhere
✓X	BioFil	ONSITE FECAL SLUDGE MANAGEMENT		• 10 year sweeping frequency • Highly resilient design • Expensive
X	Wetland Effluent	ONSITE FECAL SLUDGE MANAGEMENT		• Strong possibility of backwash in flood • Floating wetlands are **complex to maintain, expensive and not resilient in flash floods**
✓	FilTo	ONSITE FECAL SLUDGE MANAGEMENT		• Low-cost • Simple to install • Flood resilient • Increases safe leaching
X	Septic Tank	ONSITE FECAL SLUDGE MANAGEMENT		• Strong possibility of backwash in flood • Floating wetlands are **complex to maintain, expensive and not resilient in flash floods**

Annex A: Installation Photographs - HAOR

Installation 1	Description
Latrine Location: Well inside the mound, close to house	Substructure: 6 rings with FilTo
	
Midstructure: SaTo Slab, stairs for accessibility	Superstructure: Seven six feet tin, concrete pillars, timber
	

Installation 2	Description
Latrine Location: Well inside the mound. Close to the house	Substructure: Five rings with FilTo
	
Midstructure: SaTo with collection Box, stair for accessibility	Superstructure: Seven six feet tin, concrete pillars, timber
	

Installation 3	Description
Latrine Location: Inside the mound, attached to the house	Substructure: Twin pit (five rings each) with FilTo
	
Midstructure: SaTo with collection box, stairs for accessibility	Superstructure: Seven six feet tin, concrete pillars, timber
	

Installation 4	Description
Latrine Location: Attached to the house, stairs for accessibility	Substructure: Twin pit offset (five rings each pit), FilTo
	
Midstructure: offset with SanBox	Superstructure: Seven six feet tin, concrete pillars, timber
	

Installation 5	Description
Latrine Location: Attached to the house	Substructure: Single pit, five rings with FilTo
	
Midstructure: offset with Sanbox	Superstructure: Seven six feet tin, concrete pillars, timber

Annex B: Installation Photographs - CHAR

Installation 1	Round SaTo slab+FilTo with 4 rings. Direct pit
	Latrine location: Latrine location is very close to the house. Raised mound more than two foot of the plinth and well inside the edge of property. This household can use the toilet as long as they usually live in the house during flood. Stairs for accessibility.
	Substructure: Four rings with FilTo. Raised more than two foot of the plinth.
	Midstructure: 33” round SaTo slab
	Superstructure: 4 cement pillars, 6 feet seven pieces of tin+ transparent tin for light. Stairs for accessibility

Installation 2	Square SaTo Slab+FilTo with 4 rings. Direct pit
	Location is very close to the house.
 	Substructure: Four rings with FilTo. Raised above plinth level.
	Midstructure: Square SaTo slab.

	Superstructure: Four cement pillars and 6 foot seven pieces of tin used. Transparent tin used for light. One and a half foot raised than house plinth. Stairs for accessibility.

Installation 3	SaTo with Collection Box. 4rings including FilTo. Single pit offset
 	Location 2 foot inside the mound. Substructure is about one foot higher and midstructire is about two foot higher than the plinth. Top photo is taken from the other side of the mound. Bottom one from inside the mound.
	Four rings including FilTo.

	Offset with collection box+bend pipe
	Superstructure: Four cement pillars. 6 foot seven pieces of tin. Transparent tin for light. Stairs for accessibility.

Installation 4	4 SaTo with Collection Box. 4 rings including FilTo. Single pit offset
	Location is close to the house. Raised more than two foot of the plinth.
	Substructure: Four rings with FilTo. Raised above the plinth level.
	Midstructure: Offset with SaTo and collection box.
	Superstructure: Four cement pillars. 6 foot seven pieces tin. Transparent tin for light. Stairs for accessibility.

Annex C: Interview Guides

Score Guidelines - Initial HCD Deep Dive // USER

Big Goals

1. Uncover insights related to the perceptions, motivations, and barriers for users to purchase, adopt, and maintain latrines.
2. Uncover insights related to the perceptions, motivations, and barriers to producers/suppliers to create, sell, and maintain latrines.
3. Understand the financial and social costs and challenges faced by households with latrine adoption/lack of adoption.
4. Understand consumer and actor insights related to a desirable, viable and feasible business model: 5 P's (Product, Price, Promotion, People, Place).
5. Run a parallel HCD exercise to trace the user journey of a potential *toilet purchaser*, focusing on their decisions to purchase, use and maintain a toilet.
6. Design a livelihood calendar as it related to income generation and spending priorities.

To achieve big goals, the discussion will focus on the following key areas:

- General
    - Income/Expenses
    - Lifestyle (Respondent/Residents)
    - Home/Land
- Health & Safety
- Financial Services
- Climate Resilience
- Decisions re: Toilet
- Price/Promotion/Place
- Delivery
- Install
- Problems

Introduction – warm up

1. Hello, my name is ----. I come from ------ and I want to know about your house and your life.. I am not here to sell or buy anything, nor give away anything for free. Please be honest and open, tell us what you like and what you don't like as it will help us learn better. All your answers will remain confidential, and you are not obligated to answer if you do not feel comfortable. You can stop the interview at any time, and please feel free to ask questions. We are here to understand how your toilet works/doesn't work. We are going to ask you a series of questions about your life and your toilet and your experience with it.

2. Is it OK to continue?
3. What is your name?
4. How old are you?
5. Where do you live?
    a. How long have you lived here?

6. How big is your family? Do they all live here with you?
7. Do you own this land? Or do you rent it?

GENERAL

Income/Expenses

1. What is your main source of income? Are there any additional sources? (Explore off-farm income: fishing, labor, etc.)
2. Can you tell me about your expenses?
    a. Explore the order of expenses/priority.
3. When do you have the most money? When is money very scarce? Why?
    a. Explore time of year. Specific events: sickness, wedding.

Lifestyle

1. Explore: What do they do?
2. Explore: What do they eat? Alternative sources of food? Do they buy food? Where do they buy food?
3. Explore: Diet & Nutrition
4. Explore: What are the upgrades that consist - house upgrades? Prompt: Toilets?
5. Explore: Upgrades: If they currently pay for electricity? Do they pay? Water? (zinc roofs plaster on the wall, what they cook with)
6. Explore: Get a picture of the area: roads, electricity, get a general landscape.
7. Explore: Health of the respondents/residents, health care facilities, hospital visits
8. Explore: Economic activity in the area, drinking water, water source, power, roads, phone network

Home/Land

1. Is this the area of your home? Does it remain the same all year round? Why/why not?
2. Did you notice any change in the area that your house is on the last few years? Did it increase? OR decrease? Why/why not?
3. Do you have flooding in the monsoon season?
    a. Can you show me where it floods to?
4. Have you had any problems with your home in the monsoon season? What happened?
5. Did you fix it? How?

Health & Safety

1. Do you and your family get sick sometimes? How often?
    a. Are there times during the year when you are sicker?
2. What makes you sick do you think?
3. Have any dangerous things happened to you or your family?
4. Explore: People's thoughts about defecation during the monsoon

Financial Services

1. Do you currently have a loan? What did you take the loan out for? Who did you take the loan from? If no, why not?
2. When you want to take out a loan, is it difficult to do? Why or why not?
3. Are you able to pay your loans back? Why or why not?
4. Are all members of the community able to get a loan when they need to? What does a person need to have in order to access a loan? What type of person is not able to access loans?
5. Are you able to save money?
6. What resources do you need to invest more in your house?

Climate Resilience:

1. How has the weather/rainfall pattern changed over the last years? Has there been any change? Does it have any impact on your house?
2. Has the source of water changed? Has the rainfall/sunshine received changed? Did it impact your crops/vegetables?
3. How do you get information about the weather?
4. Have you seen any changes in the weather? Over what period? How has the weather changed?
5. How do changes in the weather affect you? What changes do you make because of the change in weather?

Decision to Toilet

1. Do you have a toilet? Can you show us?
2. Observe: distance from home, general condition, materials used
3. When did you buy this toilet? From whom?
4. Why did you decide to get this toilet?
5. How much did it cost, do you remember? Did you think that was expensive?
6. Did you get a loan for the toilet? Can you tell us about it?
7. Who delivered the toilet? How did they get here?
8. Who installed the toilet? Do you think they did a good job?
    a. If self install, explore training, process.
9. How long did the installation take? Was that long? Short?
10. Who uses the toilet?
11. Do you use the toilet in the monsoon? Why? Why not?

12. Does the toilet flood during the monsoon?
    a. If yes, where do you go to the bathroom?
    b. Explore: process/barriers/pain points
13. Would you prefer to use a toilet and not the river?
14. What problems does the toilet have?
15. Do you ever fix the problems?
    a. If yes, who do you call? How much does it cost?

If no toilet…

1. Do you have a toilet? Can you show us?
2. Why don't you have a toilet?
    a. Explore the land, cost, transport...
3. Where do you use the bathroom?
4. Where do you use the bathroom in dry season?
    b. Monsoon?

5. What is difficult about this for you?
6. If you wanted to buy a toilet, where would you get one?
7. What would change your mind about having a toilet?
    c. Explore: sickness, wedding, etc.
8. Are toilets expensive? How much do you think a toilet is?
9. Can you get a loan for a toilet? Why? Why not?
10. Where do you hear about toilets sales?
11. What is the last big purchase you made?
12. Does your house flood during the monsoon?
    d. Do you have other problems, can you show me?
    e. Explore: process/barriers/pain points
13. Would you prefer to use a toilet and not the river?

<u>Dream Toilet!</u>

Now we are going to do a little fun activity together, like school. Is that okay?

Prompt:
I want you to imagine you can build a new toilet, anything you like, okay? BUT you and your family have to use this toilet year-round during the monsoon and dry season, okay?

Where would you hear about this dream toilet?
Where would you buy this dream toilet?
What month would you buy this dream toilet?
How much would it cost?
Who sells you this dream toilet?
Who do you tell about your dream toilet?

Where would you put it?
Why?

Score Guidelines - Initial HCD Deep Dive // PRODUCER

Team: Abby, Imran, Mary, Badrul

Big Goals

1. Uncover insights related to the perceptions, motivations, and barriers for users to purchase, adopt, and maintain latrines.
2. Uncover insights related to the perceptions, motivations, and barriers to producers/suppliers to create, sell, and maintain latrines.
3. Understand the financial and social costs and challenges faced by households with latrine adoption/lack of adoption.
4. Understand consumer and actor insights related to a desirable, viable and feasible business model: 5 P's (Product, Price, Promotion, People, Place).
5. Run a parallel HCD exercise to trace the user journey of a potential *toilet purchaser*, focusing on their decisions to purchase, use and maintain a toilet.
6. Design a livelihood calendar as it related to income generation and spending priorities.

Introduction – warm up

1. Hello, my name is ----. I come from ------ and I want to know about your business and your life.. I am not here to sell or buy anything, nor give away anything for free. Please be honest and open, tell us what you like and what you don't like as it will help us learn better. All your answers will remain confidential, and you are not obligated to answer if you do not feel comfortable. You can stop the interview at any time, and please feel free to ask questions. We are here to understand how your business works/doesn't work. We are going to ask you a series of questions about your life and your business and your experience with it.

2. Is it OK to continue?
3. What is your name?
4. How old are you?
5. Where do you live?
    a. How long have you lived here?
6. How big is your family? Do they all live here with you?
7. Do you own this land? Or do you rent it?

GENERAL

Income/Expenses

1. What is your main source of income? Are there any additional sources?
2. Can you tell me about your expenses for your business?
    a. Explore the order of expenses/priority.
3. When do you have the most money? When is money very scarce? Why?
    a. Explore: time of year. Specific events: sickness, wedding.

Business/Land

1. Is this the area of your business? Does it remain the same all year round? Why/why not?
2. Do you have flooding here in the monsoon season?
    a. Can you show me where it floods?
4. Have you had any problems with your business in the monsoon season? What happened?
5. Did you fix it? How?

Work - Labor

1. How do you work? Do you work alone? How many hours per day? Days per week?
2. Is this just you who does this business, or do other members of your family assist you? Has this changed since you started the business? If yes: Why? When? If no: Why not? Would you like this to change?
3. Do you engage others for your work? Do you require additional labor - when?
4. Do you hire anyone to work on your business? Do you need more labor support to do more?

Productivity - Products

1. What products do you sell/make?
2. Who do you sell to?
3. What time of the year do you sell the most toilets?
    a. Why?
4. For how long have you been producing toilet parts?
5. What are some of the challenges you have producing toilets?
6. After you sell a toilet, what happens?
7. How do you transport the parts to the household? Has this changed over the years?
8. Where do you buy your materials?
    a. Observe: different materials, processes
9. What do your customers complain about?
10. Do customers toilets break during the monsoon?
11. Which parts break the most often?
12. Do you people ever ask you to fix the toilet?
13. Do people install the toilets themselves? Do you think this is a good/bad idea?

Organization(s) - Context

1. Which organizations are you currently working with? Which ones have you worked with in the past?
2. What services or resources do you receive from this organization?
3. Do you have to pay for them?
4. What are the benefits of working with this organization? Why is that a benefit? How does that help you?
5. What could this organization do to help you more?
6. Is there anything these organizations do that prevent you from being a better farmer?

Financial Services

1. Do you currently have a business loan? What did you take the loan out for? Who did you take the loan from? If no, why not?
2. When you want to take out a loan, is it difficult to do? Why or why not?
3. Are you able to pay your loans back? Why or why not?
4. Are all members of the community able to get a loan when they need to? What does a person need to have in order to access a loan? What type of person is not able to access loans?
5. Are you able to save money?
6. What resources do you need to invest more in your business?

Expert Interview Guidelines // TOPS

Gathering information from experts who have worked in the project areas: Chars and Haors. What has worked? What has failed?

Questions

Organization General—
Can you tell me a little bit about your organization and what it does?

And in the WASH space?

What have been some of the general challenges that you face within the WASH space? Technical? Logistical? Adoption?

Geography Specific—
Can you tell me about some of your organizations work in Chars and Haors? This doesn't have to be WASH…
What are some of the common challenges you find within your work in these areas? (People, supply-chain, financing, etc.)
Tell me about your organizations WASH specific work in these areas….
How long have you been working there?
What has worked? Why?
What has failed? Why?

In your opinion, what are some of the reasons people do not have adequate sanitation in these areas.

Presentation—
A presentation delivered by you to a group of people.
The PowerPoint template is designed to convey information about a project or program to a group.

The questions below are intended as a guide to help you prepare to write your first draft.

1. Do you have the necessary permissions to prepare this document?
Permissions that you may need to obtain include:

- Project funder(s)
- Prime contractors (if iDE is a subcontractor)
- Project manager (if not you)
- Country director

Permission to prepare the material for distribution does not have to be formal (i.e., a written document or agreement), but it should be clear that it is okay to do so.

2. Who is the audience for the finished product (who do you want to read this)?

- Project funders who are looking to understand iDE's intervention and results
- Sector Professionals who are looking to reproduce iDE's success
- Thought leaders who are looking for successful methods and approaches to champion

3. What action/result do you expect to occur after someone reads/views this product?
The typical action would be for the project funder or thought leader to share with their constituents or for a sector actor to learn more about iDE's success and begin a partnering conversation.

4. Do you have the background / context information necessary?
For example, what was the problem / market conditions that led to the solution being described. This information may be contained in any Request for Proposal that led to the project, general data regarding population/issue statistics (i.e., World Bank), or Deep Dive research conducted by iDE's design team.

5. Do you have quotes from those actively involved?
Actual quotes from the field (either team participants or the people they are working with) are stronger than description alone. A typical document would contain 2-3 quotes that describe how the intervention was performed by or affected the person quoted.

6. Do you have pictures?
A good variety of pictures, depicting people involved, work being performed, or a depiction of the landscape/community are useful to provide color and context. Pictures should be high quality (300+ pixels/inch). A Photo Release Form should be completed by any person in a photo who is shown clearly enough to be recognized.

7. Do you have results to report?
Typical results would include the impact and scale achieved by the intervention or lessons learned based on feedback from the intervention participants.

8. How does this document need to be branded (iDE only, iDE + funder, iDE + partner?)
Does the donor or partner require that we use their logo or any standard language?