

Course 1

Course refreshed by: Jess MacArthur for IRC-WASH supported by the PRO-WASH & SCALE project

2025



- **Alt-text** A man in Malawi uses the Gulper latrine pump to empty a pit. Welcome to Market-Based Sanitation: The Basic (WfP)
- **Credits**: Water for People

This 2-hour course is part one of a two-part learning journey on Market-Based Sanitation.

The course provides a basic introduction to 'Market-Based Sanitation' - a sanitation intervention approach that addresses market challenges to create sustainable sanitation services for all. Course 2 will dive deeper into nine different aspects of the sanitation market with examples from around the world.

Session 0. Welcome

Welcome! 👋 We are glad you are here.

This course introduces 'Market-Based Sanitation' - a sanitation intervention approach that engages the private sector in creating sustainable sanitation services for all.



Course summary

Course rationale

Inadequate access to sustainable sanitation services remains a significant problem globally. Despite recent progress, many lack access to safe and reliable sanitation services. Globally, 616 million people lack improved sanitation services, and 494 million defecate in the open (WHO/UNICEF 2023).

To address the scale of our global sanitation problem, **we need to grow our intervention toolbox, include new stakeholders, and think creatively**. Yet, development practitioners often overlook the private sector as a stakeholder in sustainable sanitation services.

One promising approach is 'Market-Based Sanitation' (MBS), which aims to strengthen the **demand**, **supply,** and **enabling environment** for private sector-led sanitation service provision. Built on Market Systems Development principles, MBS engages the private sector, alongside communities, civil society, financial services, and the public sector, to market and deliver quality sanitation products and services.

Course objectives

By the end of the course, you will have a basic understanding of the role of Market-Based Sanitation as part of the robust WASH systems needed to realise universal and sustainable sanitation services.

- **Session 1 - Clarify** the extent of our global sanitation challenge and explore the path towards universal and lasting sanitation services
- **Session 2 - Reflect on** where the private sector is already operating in the sanitation sector
- **Session 3 - Introduce** how market-based sanitation approaches can address sanitation challenges

Course activities

The activities in each session are different, but expect to:

	**Watch** videos, animations, and infographics explaining key concepts
	**Read** short texts
	**Reflect** on and deepen your learning
	**Learn more** through additional resources, cases, and tools
	**Connect** with others in forums to share and reflect

	**Check** your understanding with multiple-choice questions
	**Test** your knowledge to earn a certificate

Course creators

This course brings together the latest thinking from around the world, and it has been developed by IRC with the support of USAID Transform WASH in collaboration with Water For People and PSI. In 2024, the course was refreshed with support from the USAID Bureau for Humanitarian Assistance funded PRO-WASH & SCALE activity.

Connect: Getting to know each other



Let's connect

In the online version of this course, the Connect activities are tied to the online forum. In this offline version, we use personal self-reflection.

What is your background and motivation for starting this course?

None

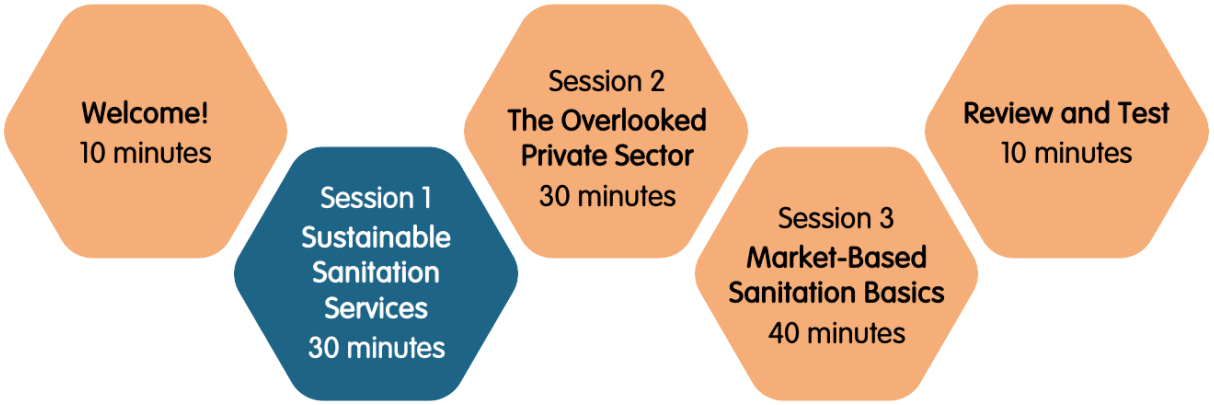
Session 1: Sustainable sanitation services



In this session, you will:

1. **Explore** Goal 6.2 in the context of the Sustainable Development Goals (SDGs)
2. **Reflect on** the main challenges and reasons for universal and sustainable access to sanitation
3. **Differentiate between** the definitions of limited, basic, and safely managed sanitation services
4. **Understand** the different stages of the sanitation service chain
5. **Evaluate** how sanitation trends have changed in your context in the last 20 years

Average estimated session duration: 30 minutes



1.1 Sanitation in the Sustainable Development Goals



Goal 6 | Source: Adapted from UN SGDs

SDG 6 - Clean Water and Sanitation

The 2030 Agenda for Sustainable Development established 17 big goals known as the Sustainable Development Goals (SDGs).

Take a moment to review the 17 Sustainable Development Goals as illustrated below.



The 17 Sustainable Development Goals | Source: United Nations

SDG 6 aims for universal access to drinking water, sanitation, and hygiene by 2030. It calls for thorough monitoring to ensure no one is left behind.

For this course, **sanitation** refers to the processes of safely dealing with human poop - sometimes called excreta or faeces. The combination of water, sanitation and hygiene is known by the acronym 'WASH'. Often, this includes handwashing practices. Sometimes, this also includes solid waste management (rubbish), liquid waste management, and menstrual hygiene management.

SDG Target 6.2 provides our global sanitation target: *"By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations".* (Open defecation means not using a latrine or toilet; for example, defecating in a bush or field).

Progress towards target 6.2 at the global level is monitored through indicator 6.2.1: *"Proportion of the population using safely managed sanitation services, including a handwashing facility with soap and water."*

SDG 6 is important because:

- Safe and reliable WASH is essential for sustainable development and is a basic human right. It allows individuals to live healthy and dignified lives.
- Sanitation is a pathway towards many other SDGs that cover health, nutrition, education, the environment, and gender equality.



Reflection question

What other SDGs does sanitation connect with?

None

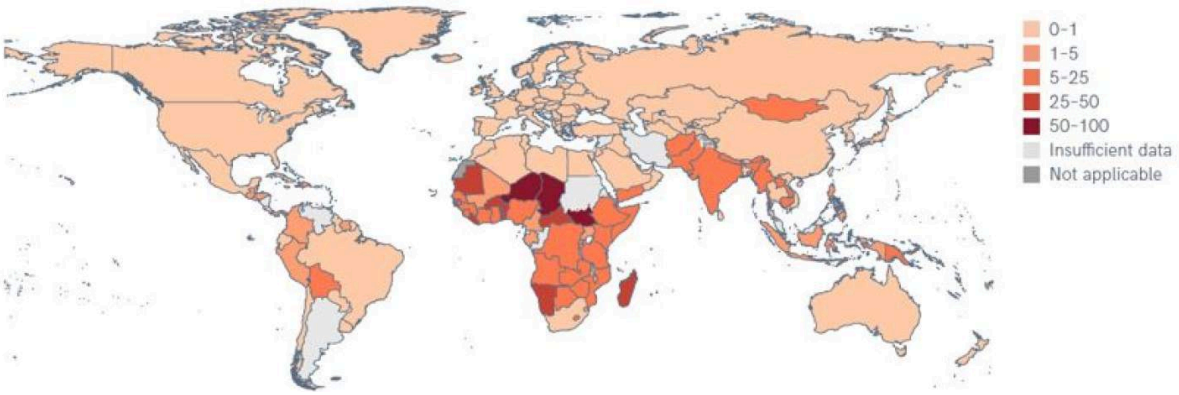
1.2. The scope of the sanitation problem



Putting the spotlight on open defecation | ***Credits**: Albert Hoffman for IRC*

How big of a problem is sanitation?

Despite recent progress, many lack access to safe and reliable sanitation services. Globally, 616 million people lack improved sanitation services, and 494 million defecate in the open (WHO/UNICEF 2023). Ending open defecation is a top priority for reducing global inequalities in WASH (WHO/UN-Water, 2019). In 2022, 36 countries still had open defecation rates between 5% and 25%; and in 13 countries, more than 25% of people still practise open defecation (WHO/UNICEF 2023). The map below illustrates the areas where open defecation remains a challenge.



- **Caption:** Proportion of population practising open defecation in 2022 (%),
- **Source:** WHO/UNICEF 2023

Why should we care about sanitation?

There are lots of good and important reasons to care about sanitation. Often, the reason *you* choose to care about sanitation will be connected to your (academic) background or your experience. For example, public health professionals tend to focus on the health implications, while economists focus on the economic benefits. This diversity builds a robust and interconnected sector.

- **Human rights and dignity** - The United Nations General Assembly Resolution 64/292 explicitly recognised the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to realising all human rights.
- **Health** - Poor sanitation is linked to the spread of diarrheal diseases, intestinal worms, schistosomiasis, trachoma, and even decreased mental health. Additionally, leaking latrines and raw wastewater can spread disease and provide a breeding ground for mosquitoes, leading to vector-borne diseases such as Malaria and Dengue. *"Every day, almost 4,000 people die from diseases attributable to inadequate WASH; over 1,000 of these deaths are among children under five."* (UNICEF, 2023)
- **Nutrition** - Poor sanitation can increase the severity and impact of malnutrition, but the evidence is inconsistent about how specific WASH interventions prevent acute malnutrition. Newer evidence shows the importance of total sanitation coverage and managing other forms of waste (animal, solid, liquid etc.). Nutrition practitioners often speak about blocking faecal contamination pathways - an approach which comes from the F-diagram or faecal-diagram and maps how faecal matter spreads. More about the F-diagram can be found in additional resources.
- **Education** - Poor sanitation at home and in schools is linked to poor school performance and attendance, leading to fewer future opportunities for students with economic and social impacts.
- **Environment** - Poor sanitation can pollute groundwater and surface water, while safe water, nutrients, and energy recovery from wastewater and sludge can have positive environmental and economic impacts.
- **Gender equality** - Increasing access to sanitation also has gender implications, such as reductions in gender-based violence.

Reflection question

Why else should we care about sanitation? Which reason(s) most resonated with you?

None

1.3. Defining good sanitation



Good sanitation in communities | Credits: Albert Hoffman for IRC

How do we know when sanitation is good?

Have you ever heard about a project that supported households to install latrines that were never actually used? Sanitation is much more than a physical structure which can be used to defecate. At the most fundamental level, we hope that households **construct, use,** and **maintain** sanitation facilities **plus safely manage** their waste. Together, these four parts make up a sanitation service. The word 'service' can be confusing, as in many communities, there is not a utility or organisation providing sanitation services like in large urban cities. It might be helpful to think about a 'sanitation service' as the connection between the construction, use, maintenance, and management of sanitation facilities in each household, supported by the government and private sector.

Construction	Use	Maintenance and Repair	Safely Managing
			

Source: PRO-WASH and the Takunda project in Zimbabwe; and Erick Baetings (IRC)

Good sanitation - called the **'safely managed'** service level in the sanitation sector, is defined as using an improved sanitation facility that is not shared with other households, where human excreta (faeces and urine) are safely disposed of onsite or transported and treated off-site.

An **improved** sanitation facility hygienically separates excreta from human contact.

This can include: flush/pour flush toilets connected to piped sewer systems, septic tanks or pit latrines; pit latrines with slabs (including ventilated pit latrines); and composting toilets.

With pit latrines, improved facilities have a 'slab' that completely covers the latrine pit, constructed with durable materials and easy to clean. Slabs can be made of concrete, bricks, stone, fibreglass, ceramic, metal, wooden planks, durable plastic, or other similar materials.

While not included in the official definition, most practitioners also include the importance of a superstructure (latrine shelter or small building) that makes the latrine private and safe, and a tight-fitting lid that keeps away flies and smell. The substructure, interface (midstructure) and superstructure should all be durable to ensure long lasting and clean sanitation facilities. Options for handwashing, cleansing (water or toilet paper) and menstrual management are also frequently included.

Sanitation service levels

In this video, we learn how the sector defines different service levels. (YouTube, 2 minutes)



The transcript of this animation is available as part of the course resources.

Reflection question

So far, we have focused on households; what sanitation services might apply to institutions like schools or public markets?

None

1.4 Safely managed sanitation



Credits: Illustration by Albert Hoffman for IRC

What do we mean by limited, basic and safely managed sanitation services?

As described in the last video above, the WHO and UNICEF's Joint Monitoring Programme (JMP) service ladders provide universal indicators to monitor drinking water, sanitation, and hygiene service levels in households and institutions towards the Sustainable Development Goal. SDG 6.2 aims for safely managed sanitation services. Some communities climb the sanitation ladder step by step; others jump from open defecation to safely managed.

Safely managed	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated offsite.
Basic	Use of improved facilities which are not shared with other households.
Limited	Use of improved facilities shared between two or more households.
Unimproved	Use of pit latrines without a slab or platform, hanging latrines, or bucket latrines.
Open defecation	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches, and other open spaces or with solid waste.

Source: WHO/UNICEF

As described above, sanitation practitioners aim to help households **construct, use, and maintain** sanitation facilities and safely **manage** their waste - together, these comprise a sustainable sanitation service. Focusing on waste management, there are three different types of safely managed sanitation:

Type 1 Human excreta are treated and disposed of *in situ* (a Latin word which means in the original place) - more common in rural or off-grid areas.	**Type 2** Human excreta are stored temporarily and then emptied and transported for treatment off-site - more common in peri-urban or urban areas.	**Type 3** Human excreta is transported through a sewer with wastewater and treated off-site - more common in larger urban areas.
 • **Caption:** Pour flush latrine in Bangladesh with an offset pit using cement rings. • **Source:** iDE from the SanMarkS Project	 • **Caption:** A man uses the Gulper to empty a pit latrine in Malawi • **Source:** Water for People	 • **Caption:** Cochabamba, Bolivia – Decentralised Wastewater Collection, Treatment and Reuse • **Source:** World Bank

Most Market-Based Sanitation programs work in Type 1 and Type 2 contexts. Utilities more often manage Type 3 contexts and have their own processes, regulations, and even technologies. Sometimes, you might have a mix of types in a single neighbourhood or village.

In the additional resources, we have provided a list of key sanitation services for households and institutions regarding the three types. If you need to become more familiar with these technical options, please feel free to review this content.

Reflection question

What sanitation technologies would be used in situ treatment and disposal? What technologies are related to temporary storage?

None

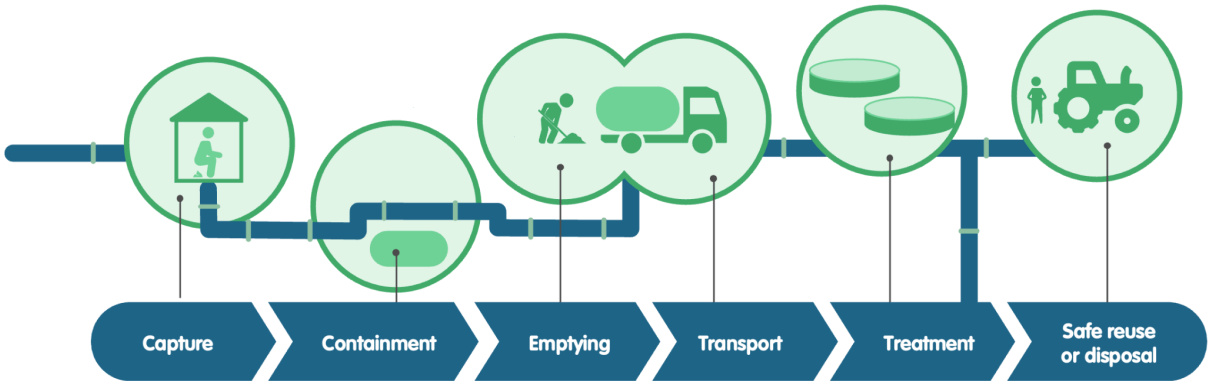
1.5 Beyond latrines



Briquette making from faecal sludge in Uganda | Water for People

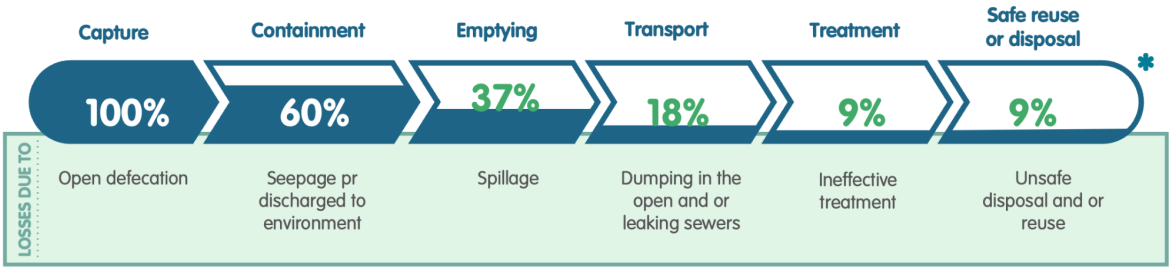
What about Type 2 contexts?

As Type 2 sanitation systems (peri-urban and urban contexts and increasingly sophisticated sanitation facilities in rural contexts) become more prevalent, there is an increasing focus on the **sanitation service chain**, which describes the process of construction, use, maintenance, and management from a slightly different perspective. For Type 2 contexts, the sanitation service chain comprises six connected functions: capture, containment, emptying, transport, treatment, and safe disposal or reuse of human waste depicted below:



*The full sanitation service chain is required to manage waste in Type 2 contexts | **Source:** IRC*

Like a physical chain, the sanitation service chain is only as strong as its weakest link: if one link of the chain breaks, the entire chain stops functioning correctly. While we would like 100% of the waste to be safely managed in each link of the chain - in reality, much of the human waste disappears along the process resulting in contamination and reducing the effectiveness of sanitation, as illustrated below.



* Percentages represent a hypothetical scenario. Actual loss values vary across locations.

The reality of the sanitation service chain; human waste disappears |***Source:*** *IRC*

In its last step, the sanitation service chain involves recycling waste by recovering the nutrients, water, energy, or organic matter in human waste and wastewater. Some ways that waste might be reused include:

- **Fertiliser and irrigation water for agriculture and horticulture**: using recovered and treated water for irrigation, using composted human waste (and other organic waste) or appropriately treated biosolids such as fertiliser and soil conditioners, or using treated source-separated urine as fertiliser.
- **Energy:** producing biogas from faeces and other organic waste or producing combustible fuels.
- **Emerging reuse options**: producing protein feed for livestock, using black soldier fly larvae, and recovering organic matter for use as a building material or in paper production. Reuse may not be applicable in all situations because of local regulation and risk.

How does safely managed sanitation fit into the sanitation system?

Watch this short animation to learn more about safely managed sanitation within a sanitation system (YouTube, 1:45 minutes). *Download the animation transcript as part of the course resources.*



Reflection question

What sanitation technologies would be used in situ treatment and disposal? What technologies are related to temporary storage?

None

CONNECT: Explore trends in sanitation service levels

What are the sanitation service levels in the contexts in which you primarily work?

The web portal washdata.org is managed by the JMP and provides a great database of water, sanitation, and hygiene coverage over time for nearly every country in the world.

1. Take 5 minutes to explore the portal for a context of your choosing.
2. Below, reflect on the trend you see regarding sanitation service levels. How does this trend compare to global or regional trends?

None

QUIZ: Check your knowledge

Check your knowledge of Session 1

Question 1.1: Which statement is true? Select one.

- [ ] We are on track to meeting SDG 6.2.
- [ ] Sanitation services should be the same in all contexts.
- [ ] At the household level, a sanitation service includes how households construct, use, and maintain sanitation facilities and safely manage their waste.
- [ ] There are only health and economic benefits to improved sanitation.

Question 1.2: Order the five sanitation ladder levels from worst to best.

- [ ] Safely managed
- [ ] Unimproved
- [ ] Basic
- [ ] Open defecation
- [ ] Limited

Question 1.3: Order the six processes of a sanitation service chain.

- [ ] Emptying
- [ ] Capture
- [ ] Disposal/reuse of human waste
- [ ] Containment
- [ ] Transport
- [ ] Treatment

Learn More: Additional resources

Learn about the basics of sanitation through these foundational sanitation resources and tools.

WHO/UNICEF Joint Monitoring Programme Webportal

"The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has reported country, regional and global estimates of progress on drinking water, sanitation and hygiene (WASH) since 1990." The portal includes access to data, reports and updates in multiple UN languages.

State of the World's Sanitation (PDF, 6 MB, English | French | Spanish)

“This report presents the state of sanitation in the world today to increase awareness of the progress made towards achieving the SDG targets for sanitation, and the challenges that remain. It calls on Member States, the United Nations system and partners to rise to these challenges within the context of the SDG 6 Global Acceleration Framework.”

WHO/UNICEF, 2020

Progress on household drinking water, sanitation and hygiene 2000-2022: special focus on gender (PDF, 15 MB English | French | Spanish)

"This report presents the state of sanitation in the world today to raise awareness of the progress made towards achieving the SDG sanitation targets and the challenges that remain. It calls on Member States, the UN system and partners to address these challenges in the context of the Global Framework for Accelerating SDG 6."

WHO/UNICEF, 2023

Guidelines on Sanitation and Health (PDF, 5.7 MB)

The WHO Guidelines on Sanitation and Health summarise the evidence on the effectiveness of a range of sanitation interventions and provide a comprehensive framework for health-protecting sanitation, covering policy and governance measures, implementation of sanitation technologies, systems and behavioural interventions, risk-based management, and monitoring approaches.

WHO, 2018

Compendium of Sanitation Systems and Technologies (PDF, 9.0 MB English | French | Spanish)

This guidance document for engineers and planners in low- and middle-income countries can aid in communicative planning processes involving local communities. It is also intended for individuals with detailed knowledge of conventional high-end technologies and requires information on infrastructure and different system configurations. Available in English, French, Spanish, Arabic, Russian, and Romanian.

Tilley, E., Ulrich, E., Lüthi, C., Reymond, P., Schertenleib, R. and Zurbrügg C. 2nd Edition Eawag

Towards systemic change in urban sanitation (PDF, 922 KB | English)

This IRC Working Paper explores why a whole-system approach offers a solution to addressing the debilitating impacts of the unsatisfactory implementation of current sanitation approaches in urban contexts.

Galli, G., Nothomb, C. and Baetings, E., 2014. The Hague: IRC

Rural Sanitation Technical Brief (PDF, 570 KB | English)

“The purpose of this technical brief is to provide an overview of the important factors to consider in USAID rural sanitation programming. Drawing upon the latest evidence, it provides guidance for developing and implementing rural sanitation activities.”

USAID, 2020. Technical Brief 2

Learn More: Sanitation basics

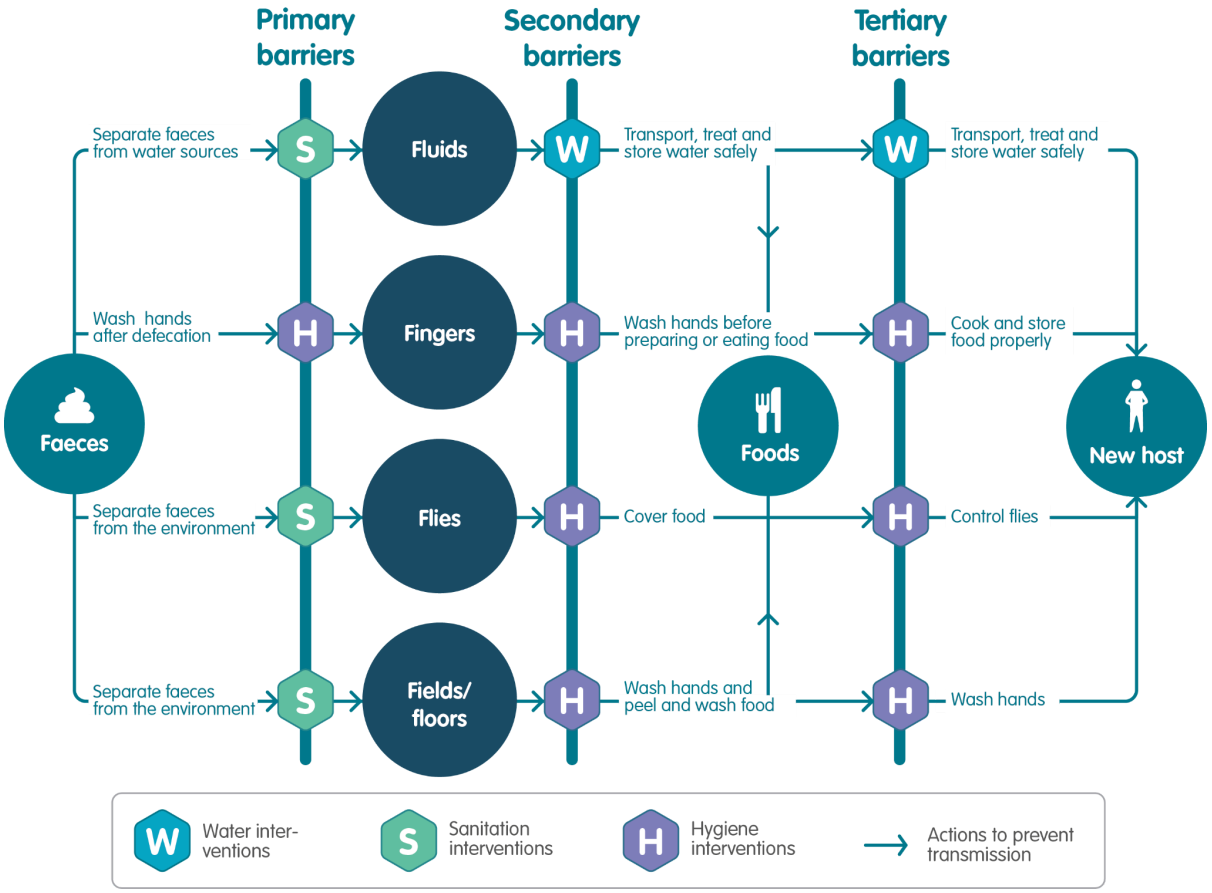
This is an additional page for learners who are new to sanitation.

You may also benefit from completing the Sanitation systems strengthening: The basics course on the academy.

Part 1: The F-diagram

How do diseases spread due to poor hygiene, inadequate sanitation and unsafe or limited water supplies?

The F-diagram (see below) is a simple concept that shows how diseases spread due to poor hygiene practices, inadequate sanitation, unsafe or limited water supplies, and the possible barriers to preventing this through interventions. It shows how water, sanitation, and hygiene services are interlinked and mutually reinforce each other.



- **Caption:** Faecal-oral disease transmission pathways
- **Source**: IRC

This diagram is referred to as the F-diagram as it shows the main faecal-oral disease transmission pathways, in other words, how faeces can get into your mouth. All the pathways begin with the letter 'F': fluids (drinking water), fingers, flies, fields (crops and soil), floors, and food. A different version of the diagram also brings in animal faeces as a key pathway, especially for infants.

Infectious faecal-oral diseases are spread when a susceptible person (or sometimes an animal) ingests a pathogen that gives them the disease—the pathogen multiplies inside the host (person or animal) and then transfers to their faeces. Pathogens can move from the host's faeces to where they are ingested by somebody else.

- The **blue arrows** show the actions that must be taken to prevent faeces from getting into your mouth.
- The **vertical green lines** in the diagram show the barriers that can stop the transmission of these diseases. They are primary, secondary, and tertiary and comprise a range of WASH interventions.

Original Source: Wagner, E. G., and Lanoix, L. N. (1958). Excreta disposal for rural and small communities. WHO, Geneva, Switzerland. p. 12.

Part 2: Sanitation service delivery models

A service delivery model describes how sanitation services are provided. It includes the infrastructure type, the management model (or the delivery mechanism), and other key system elements, such as the regulatory system needed to operate and maintain the service.

The table below summarises the most common sanitation service delivery models.

Type	Definition	Service Delivery Model
Onsite Sanitation		
Type 1: Household toilets with onsite storage and treatment facilities (dry latrines, composting latrines, twin pits, etc.).	The excreta is collected, stored (and treated) at the same place where it is generated.	The household is responsible for the installation/construction and maintenance of this type of sanitation, from the capture stage to treatment, reuse/ disposal.
Type 2: Household toilets with onsite storage and offsite treatment/ disposal (e.g. pit latrines, septic tanks)	The excreta is collected and stored (temporarily) in an underground chamber, which, upon filling up, is emptied (either manually or mechanically) and disposed of near the toilet or taken to a designated disposal or treatment facility.	The household is responsible for the installation/construction and maintenance of this type of sanitation. The pits are emptied by household members or public/private operators upon payment by the households.
Offsite Sanitation		
Type 3: Centralised Sewer Network	The excreta is transported from the premise (household) to another location for treatment, disposal, or reuse via a network of pipes (sewer) and pumps.	The household is responsible for the toilet infrastructure. Centralised sewer systems are typically initiated and operated (managed) by a utility or a municipal department because of the high capital investments and skills required to install and operate them efficiently.
Type 3: Decentralised Sewer Network/ Communal Septic Tanks	The excreta is transported from the premise (household) to a decentralised treatment plant for treatment and disposal via a small bore sewer network.	The household is responsible for the toilet infrastructure. Local authorities usually install decentralised sewer and treatment plants as they require relatively high capital investments. After that, the responsibilities of operation and maintenance are often handed over to community-based organisations.
Sanitation Away from Home/ Public or Institutional Sanitation		
Type 1-3: Public Toilets/ Community Toilets	Toilet blocks are installed in public places such as markets, bus stops, and stations or in community areas such as poor neighbourhoods. The toilet blocks may comprise latrines, urinals, handwashing facilities, and bathing facilities and can either be sewered or non-sewered.	Local authorities often install these toilets. Management of the facilities is done by the local authorities, a utility, a private entrepreneur, or handed over to a local user group (as in the case of community toilets). The use of these toilets may or may not be free of charge.
Type 1-3: School Toilets	Toilet blocks in schools can be sewered or non-sewered, accessible to school children, teachers, caretakers and others.	School management committees are often responsible for the day-to-day operation of the toilets.

	To meet JMP standards, schools should have gender-disaggregated toilets with improved sanitation facilities and meet national standards.	
Type 1-3: Toilets in healthcare facilities	Toilets in healthcare facilities, either sewered or non-sewered. According to JMP, healthcare facilities are expected to have improved usable toilets, separated for patients and staff, separated for women with menstrual facilities, and meet the needs of people with limited mobility.	The healthcare facility itself typically manages toilets in healthcare facilities.
Type 1-3: Other institutional toilets (e.g., in childcare homes, women's homes, prisons, etc.)	Sewered or non-sewered toilets in institutions are often gender disaggregated.	Institutional toilets are typically managed by the institution in which they are housed.

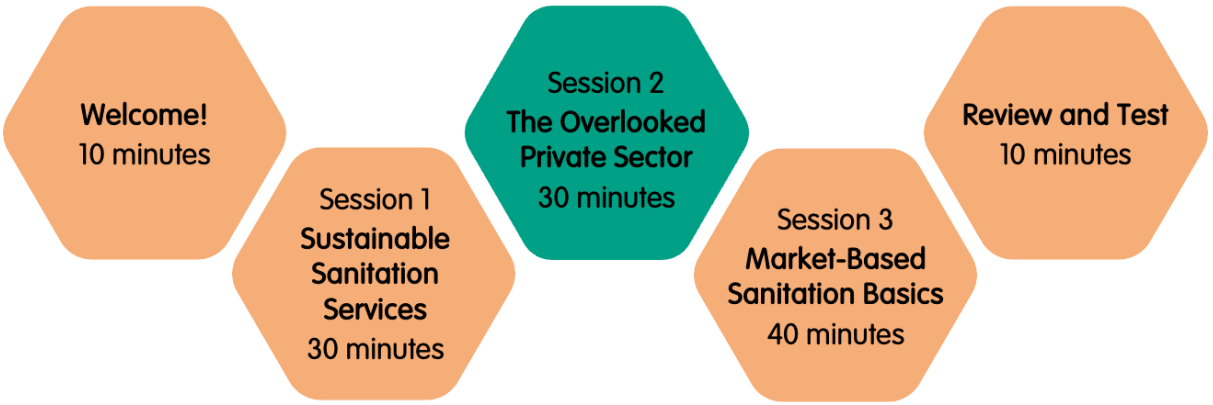
Session 2: The overlooked private sector



In this session, you will:

1. **Consider** the role of the private sector in improving access to sanitation
2. **Reflect** on at least two examples of how the private sector has supported sanitation

Average estimated session duration: 30 minutes



2.1 The private sector in sanitation service provision



A successful sanitation entrepreneur in southern Bangladesh | ***Source**: Jess MacArthur / iDE Bangladesh*

What is the role of the private sector in sanitation?

In Session 1, we learned sanitation basics and explored sanitation services for **constructing, using, maintaining, and managing** lasting sanitation facilities. In this session, we begin exploring how private-sector service providers support this process. Typically, there are four different areas that the private sector supports in Type 1 and Type 2 sanitation contexts (not sewered). Some actors provide multiple services, and others work together in a supply and value chain. Service providers also often market and promote their service to foster demand for improved sanitation services.

1. **Importation, transportation manufacturing and/or retail** of improved sanitation products or components
2. **Construction or installation** of improved sanitation facilities (supporting capture and containment)
3. **Emptying and/or transportation** of faecal waste from facilities
4. **Treatment and/or disposal/reuse** of faecal waste from facilities
5. **Financing** of sanitation products or services
6. **Media** promoting safely managed sanitation products or services

Sanitation is a business opportunity. To reach the SDGs, millions of toilets need to be constructed (most of them paid for by private households), and millions of toilets will need to be emptied on a regular basis (again, most of it paid for by private households). The private sector has the opportunity to develop products and services to serve these customers and to get paid by them. As an example, a willingness-to-pay study in Ethiopia revealed that eleven percent of the households are willing to pay the full market price of approximately USD 50 for a new toilet - creating a market potential of at least USD 110 million (WASHPaLS#2, 2024).

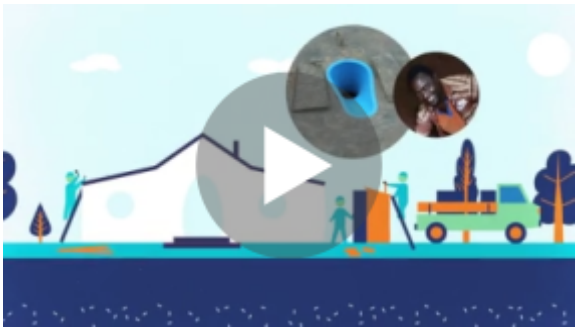
Your context will shape what type of private sector actors may be involved in service provision. For example, in Uganda, the organisation Water For People has developed a series of Market-Based Sanitation interventions which span the entire sanitation service chain for a Type 2 context.



Market-Based Sanitation Interventions by Water For People | **Source**: Water For People

What is the sanitation business opportunity?

This video briefly introduces the business opportunity of sanitation for the private sector (YouTube, 1:43 minutes).



Reflection question

Which sanitation service providers do you think are most relevant for your context?

None

2.2 Benefits of engaging the private sector



A sanitation retail shop in rural Bangladesh | ***Source**: Jess MacArthur / iDE Bangladesh*

How can an active private sector help?

In this video, Monte Achenbach (former Chief of Party for a Market-Based Sanitation program in Ethiopia - USAID Transform WASH) explains how an active private sector can contribute to safely managed sanitation services (YouTube, 2 minutes)



Why does sanitation need the private sector?

We have identified five reasons why the private sector is an important actor in sanitation:

- **Scale -** Over 600 million people still don't have access to improved sanitation around the globe. No one organisation, government, or utility can adequately meet this need.
- **Sustainability** - One-off subsidised investments have not proved to provide sustained services for communities.
- **Context** - As many of these unserved households are in rural and scattered communities, it is not always feasible to construct a centralised sanitation system.
- **Investment -** The scale of investment required to deliver sanitation services to those who lack access is beyond the capacity of public finance and available subsidies.
- **Skills and labour** - The breadth of the need requires the technical knowledge, skills and labour of the private sector for the construction, maintenance, and management of human waste.

Reflection question

What other reasons can you think of?

None

2.3 Case study deep dive



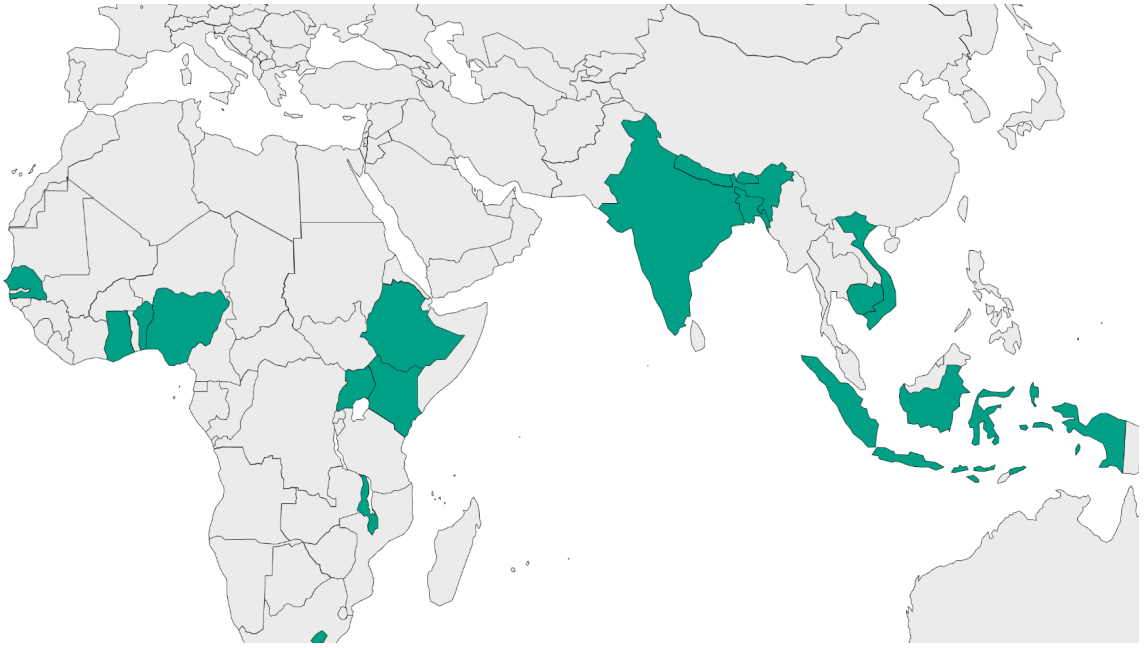
Transporting faecal sludge in Uganda | ***Source**: Water for People*

There are many good examples of the private sector's engagement in sanitation services, and there is no one way to do Marked-Based Sanitation (also known as Sanitation Marketing). A quality strategy will be based on the particular context, funding stream, and existing demand and supply for lasting sanitation services.

Select two case studies that best relate to your interest. Some of the case studies are embedded in the course, and others are found in external sites or reports.

***There may be terms and concepts that are entirely new!* Please do not worry. We will cover most of these terms and concepts in the next session. The goal of this 'preview' activity is to build familiarity with the different types of organisations, governments and teams that are engaging the private sector in sanitation.**

As you read or watch, reflect on the unique roles of the private sector, development organisations, and public sector.



Cambodia	WATCH (video): Catalysing local enterprises through a "Hands-Off" approach (YouTube, 10:44 minutes).
Ethiopia	READ (external blog): Strengthening the supply of latrine components
Benin	READ (external report): Experiences from rural Benin: sanitation marketing at scale
Bangladesh	Working Paper: Making sanitation marketing work - (WSP, 2013 | English)
Lesotho	Field Note: The National Sanitation Programme in Lesotho: How Political Leadership Achieved Long-Term Results - WSP, 2002 | English
Nepal	Tactic Report: Driving Sanitation Market Growth in Nepal - (iDE, 2018 | English)
Nigeria	Conference Paper: Addressing the sanitation crisis through a Market-Based approach (Akwunwa, 2017 | English)
Bhutan	Learning Report: Based Approach Introduction Developing the Sanitation Supply Chain: Lessons From Bhutan (SNV, 2015 | English)
Indonesia	Working Paper: Rural sanitation market expansion of domestic private sector in Indonesia Indonesia (WSP, 2015 | English)
India	Learning Report: Building a Sustainable Market for Toilets: Lessons Learned from Rural Bihar, India (PSI, English)
Vietnam	Working Paper: Case Study on Sustainability of Rural Sanitation Marketing in Vietnam (WSP, 2010 | English)
Ghana	READ (external blog): Jumpstarting a sanitation social enterprise 'Sama Sama' - Ghana
Senegal	Learning Note: Sagal's Sanitation Marketing Journey - USAID/ACCES, 2016 | English
Uganda	READ (external blog): Strengthening the private sector's role in faecal waste treatment
Malawi	Learning Brief: From Beneficiaries to Businesses to the Big Picture: Monitoring for Sustainability in Market-based Approaches to Sanitation. (Sparkman 2013 / Water for People | English)
Kenya	Case Study: Evaluating the Potential of Container-Based Sanitation: Sanergy in Nairobi, Kenya - World Bank, 2019 | English

Reflection question

What is one thing that surprised you from the case studies?

None

CONNECT: Identifying the private sector

What stood out to you in the case studies?

We have now begun to uncover the role of the private sector in sanitation service provision and are starting to see a range of market-based sanitation program models. In our next session, we will investigate the definitions of market-based sanitation, so do not worry if they are not fully clear yet.

1. Take 5 minutes to reflect on your selected case studies. Revisit them if required.
2. Below, reflect on the different roles of the private sector and any collaborations with the public sector and civil society (non-governmental organisations). What roles did the private sector play in the case studies you explored?

None

QUIZ: Check your knowledge



Check your knowledge of Session 2

Question 2.1: True or false?

The private sector is only involved in providing improved sanitation products and services. Creating demand for sanitation is the role of the government and NGOs. Select one.

- ☐ True
- ☐ False

Question 2.2: How can an active private sector contribute to realising SDG 6.2? Select one or more.

- ☐ Leverage household finance to pay for the construction and maintenance of private sanitation facilities.
- ☐ There is no role for the private sector.
- ☐ Provide sustainable access to sanitation products through profitable business models.
- ☐ Provide an array of different sanitation products that fit the needs of different customer segments.

Question 2.3: What sanitation products and services can be provided by the private sector? (The list is not exhaustive). Select one or more:

- ☐ Manufacturing plastic toilet pans
- ☐ Importing improved sanitation products
- ☐ Producing fertiliser or cooking fuel from faecal sludge
- ☐ Manufacturing and installing concrete slabs
- ☐ Emptying of pit latrines and septic tanks

Learn more

Additional Market-based Sanitation case studies

Sub-Saharan Africa

1. **Blogpost:** Developing a Market-Based Approach to Sanitation in Uganda - Uganda (FSG, 2020 | English)
2. **Field Note:** Who buys latrines, where and why (insights from rural Benin). WSP, 2004 | English
3. **Learning Brief:** Beyond CLTS: Learnings from Apolou's Community-Led Total Sanitation Plus (CLTS+) Approach - Uganda/Nuyok 2023 | English, French
4. WATCH (video): Creating safe sanitation services in small towns (YouTube, 7:19 minutes).

Southeast Asia

5. **Working Paper:** Sanitation marketing lessons from Cambodia: a market-based approach to delivering sanitation - Cambodia (WSP, 2012 | English)
6. **Academic Paper (paywall):** Sanitation marketing in Cambodia - Cambodia (Rosenboom, Jacks, Phyrum, Roberts and Baker, 2011 | English)
7. **Technical Paper:** Case Study on Sustainability of Rural Sanitation Marketing in Vietnam (WSP - Sijbesma C, Truong TX, and Devine J, 2010 | English)

South Asia

8. **Case study**: One fly is deadlier than 100 tigers: Total sanitation as a business and community action in Bangladesh and elsewhere (Heierli, U. Jaime Frias, J., Moulik, SG and Ahmed, SA, 2007 | English)
9. **Report**: The Sanitation Movement in Bangladesh And The Role of Private Sector (Quazi, AR and Pramanik, AA 2004 | English)
10. **Learning Brief:** Developing sustainable rural markets for resilient sanitation: lessons from Bangladesh (RésEAU, 2022)

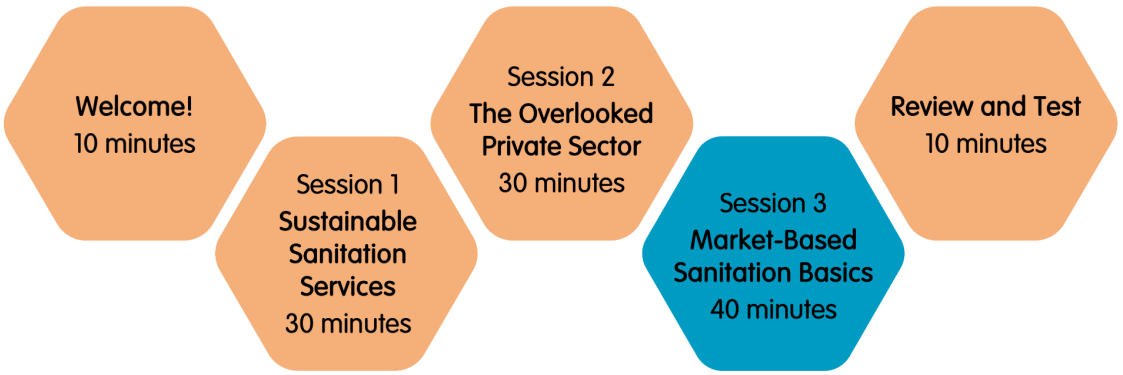
Session 3: Market-Based Sanitation for universal and lasting services



In this session, you will:

1. **Clarify** how MBS fits into overarching development or humanitarian approaches
2. **Learn about** MBS through a conceptual framework
3. **Reflect on** the objectives of a good market development intervention
4. **Explore** how MBS can be sequenced, integrated and layered with other development activities
5. **Consider** common misconceptions about MBS

Average estimated session duration: 40 minutes



3.1 Building on Market Systems Development



A rural market in East Hararghe Ethiopia | ***Source**: Jess MacArthur - PRO-WASH & SCALE*

What is Market-Based Sanitation?

Market-Based Sanitation (MBS) is a promising development approach to address the global sanitation challenge sustainably and at scale. It is based on the principle that access to sanitation can be stimulated through the private sector, which supplies households with (appropriate and affordable) sanitation-related products and services.

MBS builds on Market Systems Development (MSD) approaches, which reduce poverty by enhancing the ways that poor women and men interact with the markets that provide them with jobs, income, and access to services. In this case, a market is not necessarily a physical space for trade - like a bazaar, but the invisible system that shapes how goods and services move between buyers and sellers.

Applying these concepts to sanitation, MBS refers to the interventions by non-governmental organisations or the public sector to foster a strong sanitation market system providing desirable sanitation products and services to households through viable sanitation enterprises. Sanitation markets exist in every country and context in the world, from low- to high-income countries as well as in emergency settings and fragile states. However, sanitation market systems are often weak, unorganised or fragmented - leading to reduced access, increased costs, and a disincentivized private sector.

MBS supports the development of three aspects of a strong sanitation market:

- **Demand** for improved sanitation products and services
- **Supply** of improved sanitation products and services
- **System** (Support or the enabling environment) that fosters strong demand and supply

A **system** is all the factors, actors, and links between them that are needed to deliver those products and services. It is a dynamic network of human and non-human elements - whose success is judged by the quality of its output (i.e., delivering clean, safe water for drinking and practising basic hygiene in homes, schools, and health facilities).

For an introduction to WASH systems strengthening, you can follow the course 'Introducing water, sanitation and hygiene systems strengthening'. It is available in English, French, and Spanish.

Ultimately, MBS requires a shift in how development practitioners work and think. In MBS:

- Households shift from **beneficiaries → customers**
- Local businesses shift from **suppliers/contractors → service providers**
- Implementing organisations shift from **project agents → market facilitators**

What is Market Systems Development?

This video made by BEAM Exchange introduces the concept of Market Systems Development (MSD) and the interplay between supply and demand (YouTube, 4 minutes).



Reflection question

Do you have experience working in MSD? Drawing from the video or your own experience, what are some of the benefits of MSD?

None

3.2 Defining Market-Based Sanitation



*Sanitation products on sale at a local retailer in Ethiopia / **Source**: IRC Ethiopia*

Why Market-Based Sanitation?

In this video, Monte Achenbach (former Chief of Party for a Marked-Based Sanitation program in Ethiopia - USAID Transform WASH) defines Marked-Based Sanitation (YouTube, 2 minutes).
To watch this video with subtitles or a transcript, click on the YouTube image in the bottom right corner of the video and access the video through YouTube.



A sanitation intervention approach by many names…

Market-Based Sanitation (MBS) is an umbrella term and includes approaches such as **'sanitation market shaping'**, **'sanitation as a business', 'sanitation market development'** and **'sanitation marketing' (or 'SanMark')**.

While individual understanding and definitions may vary, the 'sanitation marketing' (or 'SanMark') approach usually focuses on improving private sector capacity to supply sanitation products and services and increasing customer demand through commercial marketing.

MBS does the same, but often also emphasises the **WASH system** to develop a thriving sanitation market. Nonetheless, there are many working definitions of MBS based on the context, system, organisational focus, and intervention funding.

For the WASH Systems Academy courses, we will adopt a flexible and inclusive definition of MBS, including activities that are called SanMark, sanitation marketing, and sanitation market systems

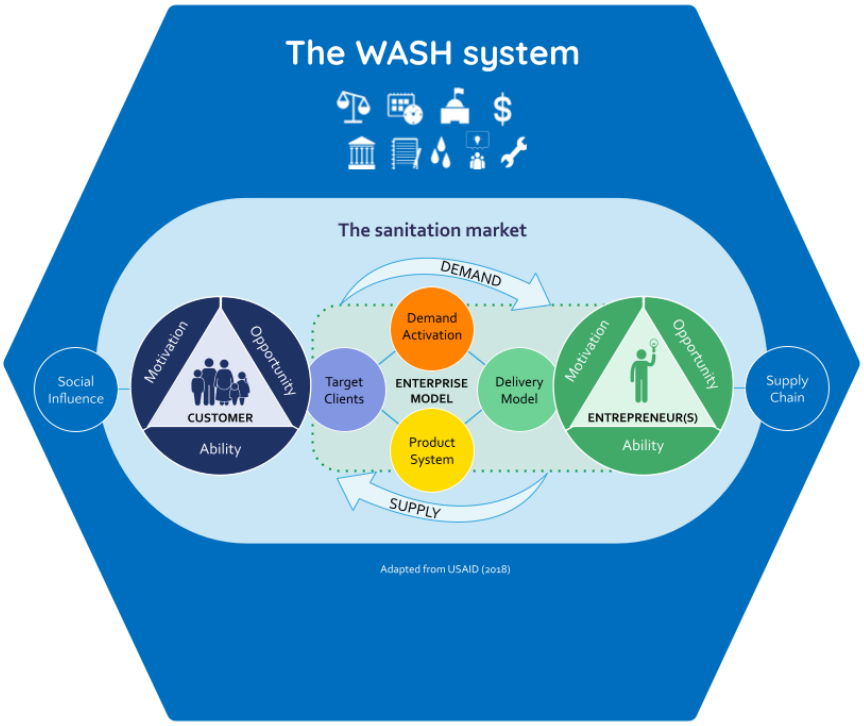
strengthening. All of these programs can teach us useful lessons about the challenges, opportunities, and successes of using MBS principles to strengthen sanitation outcomes.

To learn more about how Monte defines these differences take a look at this short video (1 minute)
What is the difference between Market Based Sanitation and sanitation marketing? [2022]

What is included in Market-Based Sanitation?

There are many ways of explaining MBS, but one helpful way is through a conceptual framework. A conceptual model is a diagram that clarifies the different parts of a system and how these parts are connected. In this diagram, we embed the sanitation market inside the WASH System with the nine WASH Systems building blocks.

Take some time to read and reflect on the diagram. The second MBS course on the WASH Systems Academy dives into each aspect of this conceptual model.



Conceptual framework for the sanitation market embedded in the WASH system | ***Source****: Adapted from USAID, 2018*

Reflection question

What parts of this conceptual framework seem the most clear? Which parts are still unclear?

None

3.3 Situating Market-Based Sanitation



*A lone latrine sits on the edge of a rural property in Zimbabwe / **Source**: Jess MacArthur - PRO-WASH*

Where does Market-Based Sanitation fit?

As an intervention approach, MBS is most commonly embedded into three different forms of development or humanitarian programming. Each of these types of development practice align with particular objectives, organisational interests, and donor funding streams.

Area-wide Sanitation (AWS) or City-wide Inclusive Sanitation (CWIS)	Area-wide Sanitation (AWS) or City-wide Inclusive Sanitation (CWIS) activities leverage systems thinking to achieve equitable, universal access and use of safely managed sanitation and hygiene in an administrative area, such as a district or city. The approach recognizes the government as the duty-bearer for sanitation sustainability, scale, and universal access.
Multi-sectoral Food Security Activities	Multi-sectoral Food Security Activities activities aim to increase food security and nutrition outcomes. Sanitation often remains a core component of multi-sectoral activities to ensure and strengthen nutrition and food security outcomes. A subset of these activities take place in fragile communities embedded into humanitarian programs or emergency contexts.
Market Systems Development (MSD)	Market Systems Development (MSD) programs aim to make markets work better for women and men living in poverty by growing incomes, services and livelihoods. MSD is most often used in agriculture, but the approach has also been used to strengthen sanitation markets.

Each of these different ways of applying MBS can teach us something unique about the challenges, opportunities, and strengths of applying a market-based approach to sanitation.

Working in fragile contexts

MBS has also been effective in fragile or conflict-affected areas and can draw on principles and practices from antifragility programming.

While resilient systems flex under stress and return to their former state, antifragile systems improve when stressed due to their capacities to adapt and grow stronger. In fragile contexts, the optimal strategy is to design systems with particular traits that enable them to quickly foresee and adjust to stressors and shocks, ultimately becoming more resilient.

There are five key principles to build and strengthen (sanitation) market systems in fragile contexts (adapted from Cracking the Nut, 2024).

1. **Optionality –** Antifragile systems have multiple ways for people to access capital, technologies, and partnerships, so that the system can react to potentially disruptive events in more than one way.
2. **Innovation –** Antifragile systems require the ongoing emergence, adoption, and scaling of new innovations. Often, these innovations are simple changes to existing technologies.
3. **Variation –** Antifragile systems thrive on diversity, offering alternative perspectives and approaches. They recognize a wide range of stakeholders, such as women and youth, benefiting from a diverse resource base and fresh ways of thinking. There is no one solution for antifragile systems.
4. **Learning –** Antifragile systems are able to adapt through reliable, timely, and verifiable data so that teams can make informed decisions. Feedback loops are essential for constant monitoring and adaptation to changing conditions.
5. **Trust –** Antifragile systems require a strong foundation of trust among actors, which includes a commitment to equity, transparency, and accountability. This trust unlocks possibilities that would otherwise remain inaccessible.



Reflection question

Which style of development programming are you most familiar with? Are there any missing approaches?

None

-

3.4 Defining a robust market system

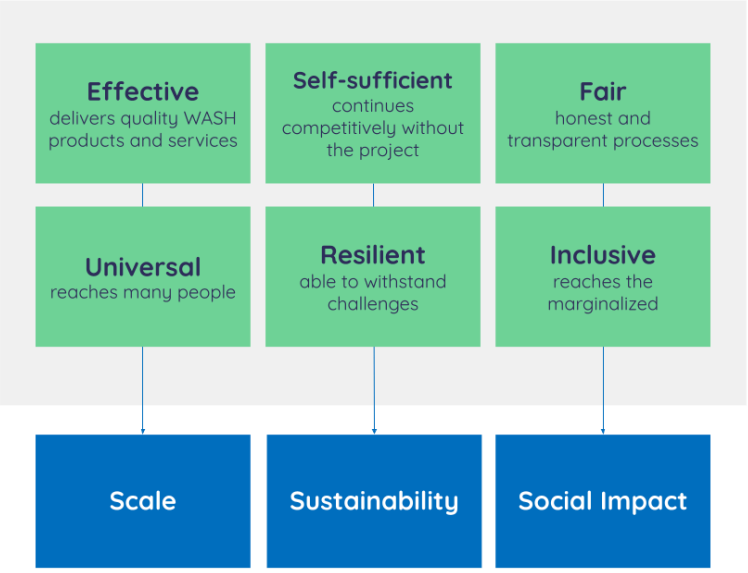


*An poster of a market map displayed a local sanitation businesses in rural Bangladesh / **Source**: Jess MacArthur - iDE Bangladesh*

What is a 'good' sanitation market system?

There are many different styles of MBS programming, and the most appropriate approach for your organisation is determined by the situational context and your organisation's funding, parallel programming and team capabilities. However, ultimately, MBS activities aim to shape a sustainable sanitation market system at scale and emphasise social impact. The diagram below illustrates the six ideal objectives of market systems development programs - including MBS - and how these objectives lead to sustainability, scale, and social welfare.

Take some time to read and reflect on the diagram below.



*Aspects of a 'good' market system / **Source:** Adapted from Suchana 2018.*

Can we 'grade' a sanitation market?

Like the sanitation ladder, we can think of any market - including sanitation markets - as being on a ladder from nascent to mature.

Take some time to read the table below and reflect on the differences between each level.

Mature	Mature markets are able to **sustainably** provide products and services to safely manage sanitation at **scale** and with **social impact,** including meeting the needs of the most marginal and vulnerable. The markets can withstand shocks and stresses.
Transforming	Transforming markets begin to reach the most vulnerable along with the majority of the population with products and services to safely manage sanitation. These markets integrate public, development, and private sector interests, skills and resources.
Emerging	Developing markets are able to reach the majority of the population with products and services to safely manage sanitation but still rely on resources from development partners or the public sector.
Weak	Weak markets are able to reach some of the population with products and services to reach safely managed sanitation but without resources from development partners or the public sector it would not be able to sustain.
Nascent	Nascent markets are able to reach a small number of people with sanitation products or services. They require complete support from development partners or the public sector and are not sustainable.

Source: Adapted from Suchana 2018.

Reflection question

How would you grade the sanitation market in your area?

None

-

3.5 MBS and other sanitation approaches



*A child runs back to class from the school latrine / **Source**: IRC*

How does MBS connect to other sanitation approaches?

There are many approaches to support communities in constructing, using, maintaining, and managing sanitation. Sometimes these approaches are done in isolation, but often they are sequenced, integrated, or layered on top of one another. No one approach has been proven to be effective in all circumstances. This requires teams to think strategically about the strengths and weaknesses of each approach and what approaches have already been used in their context.

The table below highlights five of the most common sanitation approaches used by governments and non-governmental organisations in addition to MBS. Often, one or several of these approaches are integrated into a broader development program as discussed in section 3.2.

Community-Led Total Sanitation (CLTS)	Community-Led Total Sanitation (CLTS) aims to trigger collective behaviour change toward open defecation free (ODF) communities. In CLTS, facilitators support rural communities in collectively adopting safe and hygienic sanitation behaviour and guaranteeing all households access to sanitation facilities. The approach uses no hardware subsidies and relies on quality facilitators to trigger change. As there are no standard latrine types, CLTS can lead to low-quality facilities that are not durable. Learn more about CLTS here. **Optional Video:** How are Community-Led Total Sanitation and Hygiene (CLTS) and Market-Based Sanitation linked? (2:30 minutes)
Community Approaches to Total Sanitation (CATS)	Community Approaches to Total Sanitation (CATS) is an umbrella term used primarily by UNICEF, and it contains variations of sanitation programming led by communities. This includes CLTS, School Led Total Sanitation (SLTS), and the Total Sanitation Campaign (TSC). Most CATS programs collaborate with government stakeholders and are inspired by CLTS to aim for open defecation-free villages Learn more about CATS here.
Participatory Hygiene and Sanitation	Participatory Hygiene and Sanitation Transformation (PHAST) is an interactive methodology that empowers communities to improve sanitation and hygiene

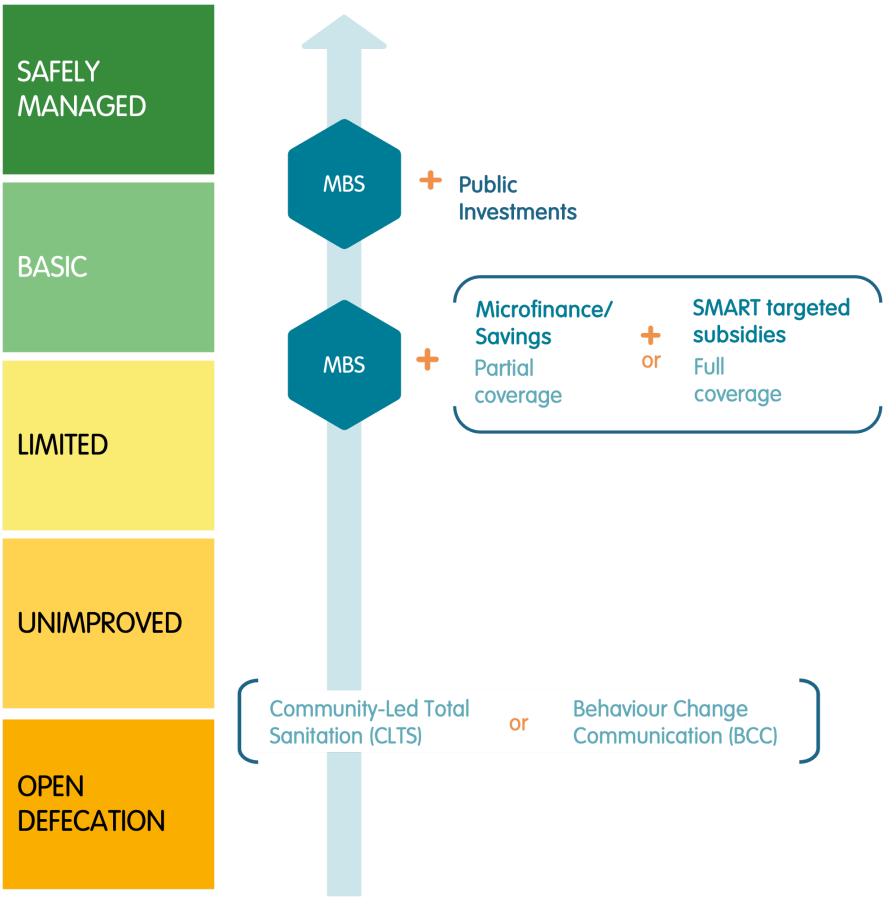
Transformation (PHAST)	behaviours. It leverages a participatory seven-step framework for community learning and planning and was introduced by the World Health Organization. Learn more about PHAST here
Leader-Led Total Sanitation (LLTS)	Leader-led total sanitation (LLTS) is a complementary approach to CLTS, which leveraged leader influence to strengthen sanitation practices. Leaders can include traditional leaders, ministers, business owners, and even athletes. These leaders also contribute financially to subsidy latrines for those unable to purchase on their own. LLTS was introduced by WaterAid in Burkina Faso. Learn more about LLTS here
Community Health Clubs (CHCs)	Often led by Community Health Workers (CHW) and Environmental Health Technicians (EHT), Community Health (or Hygiene) Clubs (CHCs) are voluntary community-based organisations that promote and support improved hygiene. Sanitation is often a core component of CHCs. CHCs were introduced and popularised by several locally-led organisations in Kenya and Zimbabwe. Learn more about CHCs here.



Then why do we need MBS?

CLTS - CLTS is mainly focused on getting people out of open defecation - we call this 'getting communities on the sanitation ladder'. In CLTS, we assume that once households are on the ladder, they will continue to move up from unimproved latrines to safely managed sanitation. However, evidence shows that this does not always happen - and communities can often backslide (slide back down the ladder) to open defecation, especially after climate shocks or once a latrine fills up. Communities can also get stuck using unimproved sanitation facilities and may not move up the ladder to safely managed sanitation.

MBS - MBS often focuses on improved basic or safely managed sanitation facilities. This is often fostered through public investments, microfinance, and SMART-targeted subsidies - all part of a good MBS strategy. Evidence from Cambodia shows that with MBS programs, communities can 'jump on' the sanitation ladder at the basic or safely managed level - fully missing the steps of unimproved sanitation. There are still risks of backsliding, but the higher up the ladder communities are, the more likely they are to reinvest in sanitation after a climate shock.



The JMP sanitation service ladder with approaches to move from open defecation towards safely managed sanitation services | Source: Adapted from Trémolet 2012.

How can we best connect MBS to other approaches?

MBS often overlaps or is interconnected with one or more other approaches, sometimes purposively, sometimes unintentionally. There are three ways that this can occur: sequencing, layering, and integration (SLI). SLI can occur with other sanitation activities but has also been very effective when connected with other development activities related to Area-wise Sanitation, savings, food security, income generation, natural resource management, and gender equality.

- **Sequencing** is the ordering of activities through time. For example, an MBS program might build on previously conducted CLTS programming in a particular geography, creating interest in improved sanitation facilities.
- **Layering** is the overlapping of activities in the same geographic areas. For example, an MBS program might overlap with village savings and loans (VSLA) activities to strengthen a household's ability to invest in improved sanitation facilities.
- **Integration** is the blended facilitation of activities at the same time. For example, an MBS program might integrate school-led approaches to strengthen the demand for improved sanitation facilities.

Reflection question

What other development activities have happened or are happening in your context? How can this shape how you apply MBS?

None

3.6 Misconceptions about MBS



*A line of recently painted latrine slabs in rural Bangladesh / **Source**: Jess MacArthur - iDE Bangladesh*

What are the common challenges with MBS?

As with any development approach, many challenges and misconceptions exist about MBS. Many of these misconceptions emerge from 'bad' MBS facilitation and can be addressed by stronger facilitation and MBS strategies. But your MBS programme doesn't need to do everything. In many cases programmes collaborate with each other, each working in a different aspect of the sanitation market.

This explores the most common misconceptions about MBS drawing from UNICEF 2021 and Wainaina 2024. Match each misconception with the appropriate response.

Misconception	Response
MBS is a quick win or 'silver bullet'.	Unless a context already has a developing market infrastructure, MBS requires time and collaboration to build a robust and mature market system.

MBS is training some local masons on latrine constructions	MBS is much more than training masons. Reflect back on the MBS framework and think about all the pieces that are required for a strong market system. Local entrepreneurs will require support in technical, marketing, business and linkage capacities. MBS must also not neglect active sales, broader supply chains, and the business environment.
WASH teams already have sufficient skills to design and implement MBS programmes.	MBS programmes require marketing, engineering, financial, governance, and communication expertise. Not all these skills and expertise are normally found in WASH teams and development organisations. There is a need for other actors with these skills and expertise to be involved in MBS interventions.
MBS can never reach the most marginalised populations.	MBS can, and should, aim to reach marginalised populations through targeted subsidies and specialised support. When working in a system-strengthening activity, it is often most effective to begin an MBS program by strengthening the wider market system and once these structures are in place actively support the most marginalised populations.
MBS doesn't need to work with the government but instead should focus on the private sector.	Governments are an important stakeholders for MBS interventions. Government is not only a regulator of sanitation markets but also needs to be a key player in catalysing and legitimising the sanitation markets and providing smart and targeted subsidies.
There is only one way to do MBS.	All MBS programmes must be designed to context. What works in one location may not work in another. Contextualization can include: in what part of the market system a programme intervenes, product design, the starting target market, the service model, and the demand strategy.

Working with poor and marginalised communities

Using MBS with funding targeted for the poor and marginalised requires teams to think strategically from the start.

Here are five ways to consider the poor and marginalised from the start, while also supporting local entrepreneurs to create strong, sustainable businesses.

1. Ensure a **suite of products and services** - including affordable versions specifically designed for the poor.

2. Carefully identify households for any **demonstrations** or **piloting** (of models known to work well). These households can be from poor and marginalised communities, selected in collaboration with village leadership.

3. Introduce **smart and targeted subsidies** through government, civil society, private or even local elites.

4. **Integrate sanitation messaging** with other Behaviour Change Communication strategies to

households through care groups and other platforms.

5. **Sequencing sales targets and targeted messaging** to align with increased incomes from harvests, livelihoods, or income generation activities.

What type of MBS is most effective?

The effectiveness of an MBS program is related to **why**, **when**, **where,** and **how** MBS is utilised. Each context will be unique and will require a fully contextualised approach.

- **Why**. MBS is most effective while used as one tool in a larger systems-strengthening toolkit. It requires a strong enabling environment, including government support, alignment between development partners, and an engaged private sector from imports to last-mile sales.
- **When**. MBS is most effective when sequenced with awareness-raising and sensitization campaigns. While MBS has been effective in open-defecation communities (for example, in Cambodia and Nepal), most successful examples come from communities already primed through approaches such as CLTS.
- **Where**. MBS is most effective in communities with existing strong market access. While MBS programs have also been successfully adopted for hard-to-reach communities, these programs have relied on previous work to build a robust sanitation market in easier-to-reach communities.
- **How**. As with any approach, poor implementation can greatly harm the effectiveness of MBS. MBS is most effective when facilitated by trained market development practitioners who responsively design to context while engaging in the wider WASH system. It's not an easy task!

Reflection question

From your other work, do you have any examples of how bad implementation or incomplete strategy has led to poor results?

None

CONNECT: Contextualising MBS



How might you contextualise MBS?

We have now begun to untangle what MBS is really all about. This is the last session of Course 1 (MBS Basics). In Course 2 (MBS In-depth) you will have time to explore MBS in much more detail. In this **Connect** activity, reflect on your learnings about MBS so far.

1. Take 5 minutes to revisit the MBS conceptual diagram.
2. Below, reflect on how you might contextualise MBS for your context or a context you are most familiar with.

None

-

QUIZ: Check your knowledge



Check your knowledge of Session 3

Question 1: What is not part of the sanitation market as illustrated in the conceptual diagram? Select one.

- [ ] Target Market
- [ ] Product System
- [ ] Customer
- [ ] Entrepreneur
- [ ] Delivery Model
- [x] Mason
- [ ] Demand Activation

Question 2: What are the three outcomes of a mature market system? Select all that apply

- [ ] Government Involvement
- [x] Scale
- [x] Sustainability
- [x] Social Impact
- [ ] Private Sector Involvement
- [ ] Subsidy

Question 3: True or False

MBS should not be done alongside any other sanitation interventions. Select one.

- [ ] True
- [x] False

Learn more

Key guidance

There are many useful tools to help support teams implementing MBS. Here we share a few of the documents which take a global perspective.

Guidance on Market-Based Sanitation (PDF, 8.2 MB | English)

Guidance provides practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services, as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2.

UNICEF, 2021

The Operational Guide for the Making Markets Work for the Poor Approach (PDF 2.8 MB | English, French and Spanish)

"Provides an accessible resource to help practitioners put the market systems development approach into practice. It explains the key principles and frameworks which guide effective intervention in – and development of – market systems. It addresses common challenges with examples of good practice based on practitioner experience."

The Springfield Centre, 2015. The Operational Guide for the Making Markets Work for the Poor (M4P) Approach, 2nd edition funded by SDC & DFID

Introductory guide to sanitation marketing (PDF, 4.6 MB | English and French)

"With an introductory guide to sanitation marketing, the Water and Sanitation Program (WSP) seeks to contribute to the field by sharing practical guidance on the design, implementation, and monitoring of rural sanitation marketing programs at scale in India, Indonesia, and Tanzania, plus additional projects implemented in Cambodia and Peru."

Devine, J. Kullmann C.P., 2011. Washington, D.C.: World Bank Group.

Sanitation marketing for managers: Guidance and tools for program development (PDF, 1,818 KB | English)

"This manual provides guidance and tools for designing a sanitation marketing program. It guides professionals in the fields of sanitation and marketing to complete two important and necessary steps: (1) to comprehensively assess the current market for sanitation products and services and (2) to use the results of this assessment to design a multi-pronged strategy"

USAID, 2010

The case for marketing sanitation. (PDF, 0.61 MB | English)

"This field note explains the marketing approach and suggests that it should be promoted as a central feature of sanitation improvement programs.

Water and Sanitation Program, 2004. Washington, D.C. : World Bank Group

Towards systemic change in urban sanitation (PDF, 922 KB | English)

This IRC Working Paper explores why a whole-system approach offers a solution to addressing the debilitating impacts of the unsatisfactory implementation of current sanitation approaches in urban contexts.

Galli, G., Nothomb, C. and Baetings, E., 2014. The Hague: IRC

Desk Review on Market-Based Rural Sanitation Development Programs (PDF, 2.9 MB | English and French).

"This desk review from the USAID/WASHPaLS project investigates the current state of knowledge in market-based sanitation (MBS) and establishes a framework to analyse, design, and improve MBS interventions. This report is based on a survey of approximately 600 documents on MBS, in-depth research into 13 MBS intervention case studies across the global south, and interviews with sector experts and program personnel."

USAID, 2018.

Sanitation marketing: A systematic review and theoretical critique using the capability approach

"We systematically reviewed the grey and peer-reviewed literature on sanitation marketing, including qualitatively analysing and calculating descriptive statistics for the parameters measured, or intended to be measured, in publications reporting on 33 SMIs."

Barrington, D.J., Sridharan, S., Shields, K.F., Saunders, S.G., Souter, R.T., and Bartram, J., 2017 https://doi.org/10.1016/j.socscimed.2017.10.021 (paywall)

Market-based approaches in water and sanitation: The role of entrepreneurship

"This article explores the different markets in water and sanitation provision and the roles that entrepreneurship plays. It argues that, with global interest in social entrepreneurship rising, the water and sanitation sector is well placed to capitalize on a hidden strength."

Schaub-Jones D, 2011 https://www.jstor.org/stable/24686742 (paywall)

Global assessment of grant-funded, market-based sanitation development projects

"We conducted a comprehensive review of WASH grant funding since 1980 to identify household sanitation supply projects using an MBS approach, assessed project characteristics and outcomes (population impacted), and reviewed project strategies against three key factors for scaling MBS (customer and business finance; availability and viability of local entrepreneurs; appropriate toilet product and business models)."

Agarwal, R., Kohli, A., Chennuri, S., & Jenkins, M. W., 2020
http://dx.doi.org/10.3362/1756-3488.19-00018

Additional toolkits

Introduction to Market-Based Sanitation Training (PDF, 63.4 MB | English and French)

PRO-WASH's Introduction to Market-Based Sanitation training package aims to support partners as they integrate market-based approaches into their rural sanitation activities during multiyear USAID/BHA Resilience Food Security Activities. The training may also be of interest to other partners working in rural settings. The training includes eight modules on topics such as:

Market Research, Product Design, Business Models, Sales Planning, Financing, and more. The training package includes:

- A Facilitator's Guide
- Editable Presentation Slide Decks
- Summary Handouts (“Cheatsheets")
- Participant exercises
- Case studies and links to Videos

PRO-WASH, 2023

Market-Based Sanitation training package. (webportal, | English)

WASHPaLS developed a standardised training package for sanitation market development practitioners, consisting of presentations, materials for learning activities, and facilitation guides. “The package includes eight modules that focus on the sanitation market system as related to the enterprise (module series A) or specific elements of the system (module series B). Trainers are encouraged to review the modules’ objectives and formats to plan their training sessions based on the local context, knowledge levels, and intended outcomes for their audience.”

WASHPaLS, 2018

Also see a webinar (1 hour and 20 minutes) on Scaling Market-Based Sanitation by USAID/WASHPaLS (2018).

Country-specific guidelines

Sanitation Marketing A handbook for: Sanitation Managers and Private Sector Players - Uganda (PDF, 3.1 MB | English)

“This handbook outlines key facts about sanitation marketing, a step-by-step approach to development and implementation of a sanitation marketing project and also suggested key references for further reading for a wide range of audiences but more specifically, policy makers, program managers, business entrepreneurs in sanitation, financial institutions and behavioural change communication specialists.”

Nabembezi, D., Nabunya, H. (no date). Ministry of Health Uganda and Plan International

National Sanitation Marketing Guidelines - Bangladesh (PDF 111 MB 2020 | English)

The National Sanitation Marketing Guidelines in Bangladesh were supported by UNICEF, the Swiss Development Cooperation and iDE. They draw from a decade of work on sanitation marketing activities led by these partners in the country along with many other organisations who have worked with the private sector for sanitation in rural Bangladesh.

Department of Public Health and Engineering (DPHE) - Bangladesh, 2020

National Market-Based Sanitation Training Manual for Ethiopia (PDF, 63.4 MB | English)

“The purpose of this training manual is to provide guidance for designing, developing, planning, implementing and monitoring and evaluation of the Market-Based Sanitation approach and related sanitation products and service delivery mechanisms in a simple, clear and participatory manner. The manual also provides tools for designing a Market-Based

Sanitation programme, to understand what it means, the different components of market-based sanitation and its relevance to the improvement of household sanitation in a sustained manner."

Ministry of Health - Ethiopia, 2020

Suivi Post-FDAL et Marketing de l'assainissement en Milieu Rural (PDF, 1.6 MB |French)

Developed collaborative by UNICEF and GRET for the "Ministère de l'Hydraulique et de l'Assainissement" (Ministry of Water and Sanitation), the "Stratégie marketing de l'assainissement locale et plan d'action en Mauritanie" (Local sanitation marketing strategy and action plan in Mauritania) is the first step in the development of an operational marketing strategy at local level for the four communes involved in the study carried out as part of the UNICEF-funded project "Sustainability of rural water services and maintenance of FDAL status through sanitation marketing"

Ministère de l'Hydraulique et de l'Assainissement with UNICEF, GRET, 2018

Guide opérationnel de l'assainissement autonome des excrétas et eaux usées au Togo (PDF, 1.6 MB |French)

Developed for the Government of of Togo, this guide "Guide opérationnel de l'assainissement autonome des excrétas et eaux usées au Togo" (Operational guide to autonomous excreta and wastewater sanitation in Togo) was supported by the European Union. In addition to proposing appropriate technologies, experience has shown the importance of structured implementation approaches based on needs assessment, situation diagnosis and stakeholder awareness-raising. Strategies aimed at promoting demand for sanitation are recommended and fall into two broad categories: community-based approaches, including Participatory Hygiene and Sanitation Transformation (PHAST) methods and their adaptation for children (CHAST), as well as Community-Led Total Sanitation (CLTS); and marketing approaches, including Sanitation Marketing (SanMark).

ARTELIA - Echirolles IGA - Lomé Ministère de la Santé , 2016

Integration and Sequencing Case Studies

Sub-Saharan Africa

- **Learning Brief:** Beyond CLTS: Leveraging Social Mobilization to Address Sanitation and Hygiene in Karamoja through the Home Improvement Campaign (HIC) - Uganda/Apolou 2023 | English, French
- **Learning Brief:** Beyond CLTS: Learnings from Apolou's Community-Led Total Sanitation Plus (CLTS+) Approach - Uganda/Nuyok 2023 | English, French
- **Learning Brief:** Promoting Latrine Sales in CLTS Interventions through Integrated Sanitation Marketing - Senegal USAID/ACCES, 2016 | English

Asia

- **Learning Brief:** Leveraging human-centered design and market approaches for Sanitation in Complex Operational Environments (SCORE) - Bangladesh (PRO-WASH, 2022 | English, French)

- **Video Case Study:** Sanitation Marketing in Multi-sectoral Food Programming (Suchana/iDE Bangladesh, 2019 | English)
- **Tactic Report:** Integrating Community Approaches to Sanitation (CATS) and Sanitation Marketing (iDE Bangladesh | English)
- **Tactic Report:** How to Scale Up Rural Sanitation Service Delivery in Indonesia (Global Delivery Initiative | English)

Answer Key

Course 1

Question 1.1: Which statement is true? Select one. ☐ We are on track to meeting SDG 6.2. ☐ Sanitation services should be the same in all contexts. ☑ At the household level, a sanitation service includes how households construct, use, and maintain sanitation facilities and safely manage their waste. ☐ There are only health and economic benefits to improved sanitation.	We are not yet on track for SGD 6.2 and sanitation services must be contextualised. Additionally sanitation can lead to benefits such as improved nutrition, education, the environment, human rights, and equality.
Question 1.2: Order the five sanitation ladder levels from worst to best. ☐ Safely managed ☐ Unimproved ☐ Basic ☐ Open defecation ☐ Limited	• Open defecation • Unimproved • Limited • Basic • Safely managed The order of the ladder steps has been designed by the WHO and UNICEF's Joint Monitoring Programme.
Question 1.3: Order the six processes of a sanitation service chain. ☐ Emptying ☐ Capture ☐ Disposal/reuse of human waste ☐ Containment ☐ Transport ☐ Treatment	• Capture • Containment • Emptying • Transport • Treatment • Disposal/reuse The sanitation service chain starts with capture and ends in the safe use and disposal of waste.

Question 2.1: True or false? The private sector is only involved in providing improved sanitation products and services. Creating demand for sanitation is the role of the government and NGOs. Select one. ☐ True ☑ False	The private sector is often involved in both creating demand and providing products and services.
Question 2.2: How can an active private sector contribute to realising SDG 6.2? Select one or more. ☑ Leverage household finance to pay for the construction and maintenance of private sanitation facilities.	

☐ There is no role for the private sector. ☑ Provide sustainable access to sanitation products through profitable business models. ☑ Provide an array of different sanitation products that fit the needs of different customer segments.	The private sector can leverage household finance, provide an array of sanitation products and services and also maintain a profitable business model.
Question 2.3: What sanitation products and services can be provided by the private sector? (The list is not exhaustive). Select one or more: ☑ Manufacturing plastic toilet pans ☑ Importing improved sanitation products ☑ Producing fertiliser or cooking fuel from faecal sludge ☑ Manufacturing and installing concrete slabs ☑ Emptying of pit latrines and septic tanks	The private sector can support all of these services.

Question 3.1: What is not part of the sanitation market as illustrated in the conceptual diagram? Select one. ☐ Target Market ☐ Product System ☐ Customer ☐ Entrepreneur ☐ Delivery Model ☑ Mason ☐ Demand Activation	Masons remain an important actor in the delivery model for sanitation products and services, but they are not part of the conceptual framework.
Question 3.2: What are the three outcomes of a mature market system? Select all that apply ☐ Government Involvement ☑ Scale ☑ Sustainability ☑ Social Impact ☐ Private Sector Involvement ☐ Subsidy	While the involvement of the public and private sector alongside subsidies are important within market systems, they are not the outcomes of a mature market system.
Question 3 3: True or False MBS should not be done alongside any other sanitation interventions. Select one. ☐ True ☑ False	MBS is best done alongside other sanitation interventions.



Course 2

Course refreshed by: Jess MacArthur for IRC-WASH supported by the PRO-WASH & SCALE project

2025

Session 0: Welcome



*A latrine prepared for use with water, soapy water, and sandals in rural Bangladesh | **Source**: iDE Bangladesh*

Market-Based Sanitation: In-depth is Course 2 of a two-course learning journey on Market-Based Sanitation (MBS). MBS is a sanitation programming approach which addresses market challenges to create sustainable sanitation services for all. **Course 1 (MBS: The Basics)** is a prerequisite for this course and we will use many terms, concepts, and strategies from Course 1 with a limited introduction.

Welcome! 👋 We are glad you are here.

This course dives deeper into 'Market-Based Sanitation'

MBS is a sanitation programming approach which addresses market challenges to create sustainable sanitation services for all.



Course summary

Course rationale

Inadequate access to sustainable sanitation services remains a significant problem globally. While strides have been made over the past few decades to expand sanitation services worldwide, 3.5 billion people live without access to safely managed sanitation services, and 419 million still defecate in the open (WHO/UNICEF, 2022).

To address the scale of our global sanitation problem, **we need to grow our intervention toolbox, include new stakeholders, and think creatively**. Yet, development practitioners often overlook the private sector as a stakeholder in sustainable sanitation services.

One promising approach is 'Market-Based Sanitation' (MBS), which aims to strengthen **demand** and **supply, linking buyers and sellers;** and improve the **enabling environment** for private sector-led sanitation service provision. Built on Market Systems Development principles, MBS engages the private sector, alongside communities, civil society, financial services, and the public sector, to market and deliver quality sanitation products and services. MBS is not a silver bullet but a tool that can be used in conjunction with other approaches to strengthen the WASH system.

Course sources

There are **many** ways to describe, explain, and frame MBS. In this course, we take an open perspective on MBS to include the many ways in which sanitation programs partner with the private sector to achieve sustainability, scale, and social impact. *We also currently draw more on rural onsite treatment examples, but will be continuously updating the course to include more urban and offsite treatment content.*

To ensure that you can access further information and details after the course, we have adapted much of the content from three main sources: UNICEF (2021), USAID/WASHPaLS (2018), and WASH Cluster (2021). All of the adaptations to these approaches have come from real-world experiences of teams implementing MBS activities and in particular in fragile contexts. Case studies from fragile contexts have this icon ⚠️.

As introduced in Course-1 the main adaptation has been a redrawing of the conceptual framework for MBS, blending it with the WASH Systems Building Blocks from IRC-WASH.

	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) The guidance provides practitioners with simple, easy-to-follow, and evidence-based resources to plan, design, implement, and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021
	Desk Review on Market-Based Rural Sanitation Development Programs (PDF, 2.9 MB | English and French). "This desk review from the USAID/WASHPaLS project investigates the current state of knowledge in market-based sanitation (MBS) and establishes a framework to analyse, design, and improve MBS interventions. This report is based on a survey of approximately

	600 documents on MBS, in-depth research into 13 MBS intervention case studies across the global south, and interviews with sector experts and program personnel." USAID, 2018.
	Market-Based Programming in Wash – Technical guidance for humanitarian practitioners (PDF, 2.1 MB | English) "The purpose of this document is to provide practical guidance on market-based programming (MBP) in humanitarian WASH responses. This document introduces concrete steps that can be followed and implemented in line with the key phases of the humanitarian programme management cycle. Each phase is presented as an individual chapter, with a final chapter focused on coordination in relation to MBP. Coordination applies to all phases of the cycle." Allen and Brown - WASH Cluster (2021)

Course summary

Course objectives

By the end of the course, you will have strengthened your understanding of the role of Market-Based Sanitation as a part of the robust water, sanitation, and hygiene (WASH) system needed to realise universal access to sustainable sanitation services.

The course includes nine sessions, each with its own objectives.

- **Session 1 -** Introduces the importance of **market assessments** to identify key context-specific gaps in the sanitation market.

Four building blocks of a strong sanitation enterprise strategy:

- **Session 2 -** Explores tools and techniques to clarify the appropriate **target markets**.
- **Session 3 -** Considers ways to design a **suite of appropriate products and services** to meet the needs of target markets.
- **Session 4 -** Explores opportunities to **cultivate local enterprises** for lasting service provision.
- **Session 5 -** Reflects on approaches to help **activate demand** for improved sanitation products and services.

Sanitation markets as part of WASH systems:

- **Session 6 -** Considers approaches to **strengthen the supply chain** for improved sanitation components.
- **Session 7 -** Reflects on the connections between the **WASH system** and the sanitation market.
- **Session 8 -** Clarifies opportunities for **formal and informal financing** in the sanitation market.
- **Session 9 -** Considers approaches to foster **scale, sustainability, and social impact** in the sanitation market.

The course relies heavily on case study examples from around the world to help contextualise and illustrate how Market-Based Sanitation has worked in practice. As context differs, we encourage participants to think critically about how MBS can best be applied to their specific context.

Course structure

The course is divided into nine sessions. Each session covers a different aspect of the sanitation market and relevant supporting themes.

The course is also designed for three different levels of depth. Which level would you like to do?

Level 1	• Review the main content of the 9 sessions • Explore 1-2 case studies in each session • Take the 3-question quiz in each session • Take the final exam	1 day
Level 2	• Study the main content of the 9 sessions • Explore 3-4 case studies in each session • Take the 3-question quiz in each session • Take the final exam	2-3 days
Level 3	• Study the main content of the 9 sessions • Explore 5+ case studies in each session • Dive deeper into the additional resources in each session • Take the 3-question quiz in each session • Take the final exam	4-9 days

Course Supporters

Course creators

This course brings together the latest thinking from around the world, and it has been developed by IRC WASH with the support of USAID Transform WASH in collaboration with Water For People and Population Services International (PSI). In 2024, the course was refreshed with support from USAID's Bureau for Humanitarian Assistance (BHA) funded PRO-WASH & SCALE activity.

We are thankful to the technical reviewers of this course for their valuable time and effort.

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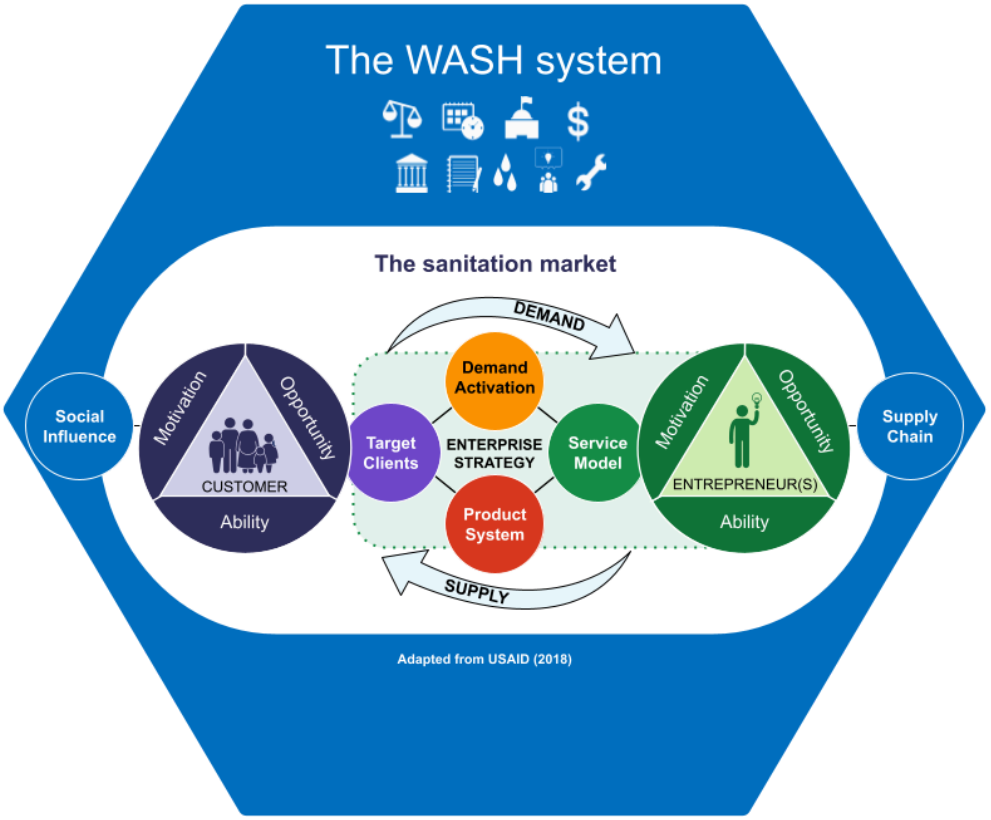
- Bernard Ahoga ELEGBE (PSI Liberia)
- Rémi Kaupp (CBSA)
- Elise Mann (iDE Global)
- Lars Osterwalder (IRC WASH)
- Wilbert Quintanilla (Save the Children)
- Rochelle Rainey (USAID)
- Precious Sancho (BHA/USAID)
- Kimberly Worsham (FLUSH)

MBS Diagram

A brief reminder of the MBS Conceptual Model



{This will be a clickable image with the linked text below}

Enabling Environment (The WASH system)	Each sanitation market is shaped by nine different building blocks of the **WASH system**. These building blocks shape context and the business environment and are standardized by IRC-WASH. They are explored in detail in a parallel course on the WASH systems academy. 1. Institutions 2. Policy and legislation 3. Regulation and accountability 4. Planning 5. Monitoring 6. Finance 7. Infrastructure 8. Water resource management 9. Learning and adaptation
Sanitation market	The **sanitation market** is the invisible network of sanitation consumers and suppliers within a particular geographic context. While the sanitation market is not a physical market space, it connects the supply and demand of sanitation products and services. It is embedded into the WASH system.
Customer	The **customer** is the person who purchases a sanitation product and service. They are influenced by motivation, opportunity and ability to buy sanitation products and services.

Entrepreneur	An **entrepreneur** is the person who sells sanitation products and services. Each entrepreneur is shaped by their motivation, opportunity and ability to provide sanitation products and services. An entrepreneur often is the leader of their enterprise (business or company) and sometimes an enterprise is led by multiple people.
Enterprise strategy	The **enterprise strategy** is the approach used by entrepreneurs to sell sanitation products and services to customers. It is often designed by MBS activities in collaboration with enterprises. An enterprise strategy includes target clients (**WHO - people**), demand strategies **(WHY - promotion**), a service model (**HOW - process**), and a product system (**WHAT- product**).
Target clients	(**WHO - people**) **Target clients** are *potential* sanitation customers who are offered services through enterprises. They are often divided into segments with different wants and needs.
Service model	(**HOW - process**) Next, the service model is the way in which the enterprise provides products and additional services to the customer. The service model is often a connection of multiple services including manufacturing, transportation, installation, repair and emptying.
Promotion model	**(WHY - promotion**) The **promotion model** is the approach taken to activate demand for sanitation products and services among target customers. This can include using sales agents or community leaders as demand activators.
Product system	(**WHAT- product**) A sanitation **product system** refers to the curated package of materials, components, and labour and is traded between customers and entrepreneurs. This package is highly contextualised and some contexts have specific standardised sanitation product systems. A product system is often selected or designed using principles of human-centered design.
Social influence	**Social influence** is the social connections and pressures which shape sanitation behaviours. In MBS social influences can include peer pressure, aspirations, leadership influence, and expert influence. Both customers and entrepreneurs experience social influence.
Supply chain	The sanitation **supply chain** is the network of actors involved in the import, manufacture, production, distribution, and sale of sanitation-related products and services to the end customer. We can think of the supply chain as a physical chain, with each link playing an important part. One broken link breaks the whole chain.
Footer	This conceptual model is based on the work of WASHPaLS (USAID 2018) and the IRC WASH Building Blocks.

MBS Process - A brief overview of a MBS strategy process

As with all good development and humanitarian activities, MBS activities require a strong strategy process from planning to program design to implementation (including continuous monitoring, refinement, and adaptation).

This course focuses on understanding the main building blocks of a strong MBS strategy rather than providing step-by-step guidance on how to run an MBS activity.

The table below presents a summary of an MBS activity strategy and timeframe, adapted from UNICEF's guidance.

Phase	Component		Year 1				Year 2	Years 3-5+
			Q1	Q2	Q3	Q4		
Plan	Desk Assessment and Planning	Identify target markets and draw market boundaries through document review and situation analysis						
	Market Assessments [Session 1]	Formative assessment and market research which interacts iteratively with the design phase (Target Clients, Product System, Service Model, Demand Strategy)						
Design	**Target Market** Selection [Session 2]	Prototyping of the enterprise strategy for the target market clients (Product System, Service Model, Demand Strategy, Customer Financing)						
	Product System Design [Session 3]							
	Service Approach Design [Session 4]							
	Demand Strategy Design [Session 5]							
	Consumer Financing Design [Session 8]							
Implement iteratively	**Optimising Market Interactions** [Session 6]	Analysis of the wider market system barriers and enablers Addressing market barriers and strengthening enablers between market actors and in the market system						
	Expanding Access to Business Finance[1] [Session 8]							
	Market Enablers [Session 7 and 9]							
	Piloting	Piloting and expansion of the designed market system model Monitoring and refinement of the model to adapt to emergent challenges and opportunities						
	Monitoring							
	Refinement and Adaptation	Continue to refine both product, service model, and marketing approaches to improve links between consumers and quality sanitation products and services						

[1] Note that in the UNICEF guidance financing is split into two components (consumers and businesses), in this course we have all financing in one session.

- **Source**: Adapted from UNICEF 2021

To learn more about the stages of implementation, you may watch this optional video (5 minutes) by Michael Negash from T/WASH in Ethiopia.

What are the stages of implementation for Market-Based Sanitation?

Session 1: Discovering Sanitation Market Gaps



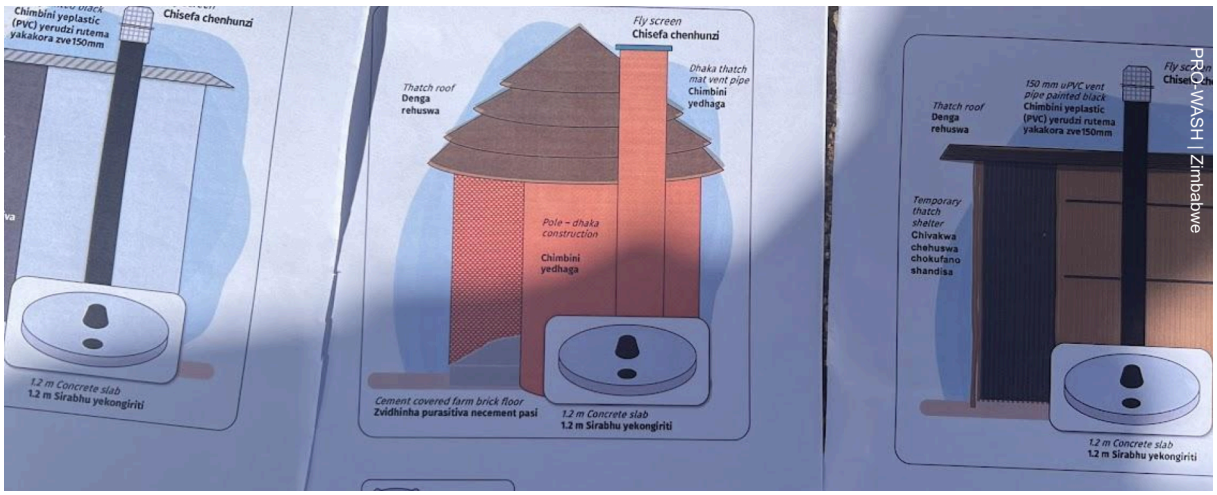
An unimproved pit latrine in the Kurfa Chele district of Ethiopia | ***Source**: PRO-WASH & SCALE*

In this session, you will:

1. **Learn about** the two types of MBS as set and flexible boundary activities
2. **Understand** the importance of conducting market assessments as the first step in MBS
3. **Explore** common gaps in sanitation market systems
4. **Review** key tools used to summarise sanitation market assessment findings
5. **Reflect on** examples of market assessments and how they are similar and different to your context



1.1 Identifying a sanitation market



A set of research cards used for a rapid market assessment in Zimbabwe | ***Source**: PRO-WASH and Takunda*

What is a sanitation market?

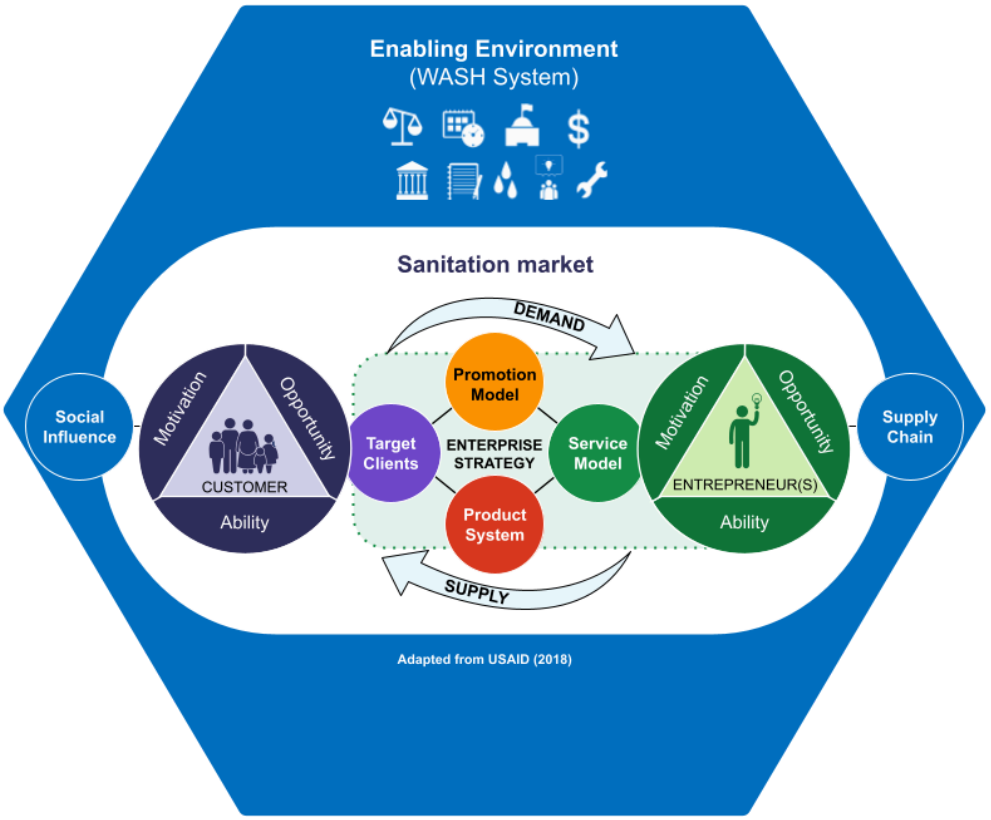
Watch this short video (1 minute) to learn how the T/WASH project in Ethiopia has defined the concept of a sanitation market. What is a sanitation market?



What is your sanitation market?

Once a team has decided to use MBS, the first step in any MBS activity is identifying the boundaries of your market. In simplest terms, market boundaries are the geographic area supported by the MBS activity and the system factors, actors, and links that influence this area. Sometimes, this is a county, ward, or kebele; other times, this is a district or province or even country - depending on your level of scale. In some cases, the market boundaries could include urban, peri-urban areas or areas near roads. These boundaries can change over time. Unlike Community-led Total Sanitation (CLTS), MBS looks at larger areas rather than individual villages.

Refamiliarise yourself with the sanitation market, as illustrated below. The white background frame is what we think of as the market boundary. Remember that the sanitation market is situated within the wider WASH system and that aspects such as the supply chain and social influence span both the wider enabling environment (as defined by IRC's WASH System Building Blocks) and the sanitation market.



A diagram outlining the main aspects of the sanitation market | ***Source**: Adapted from [USAID, 2018]*

Boundaries can either be predetermined (closed) or identified as part of the program or planning activity (open).

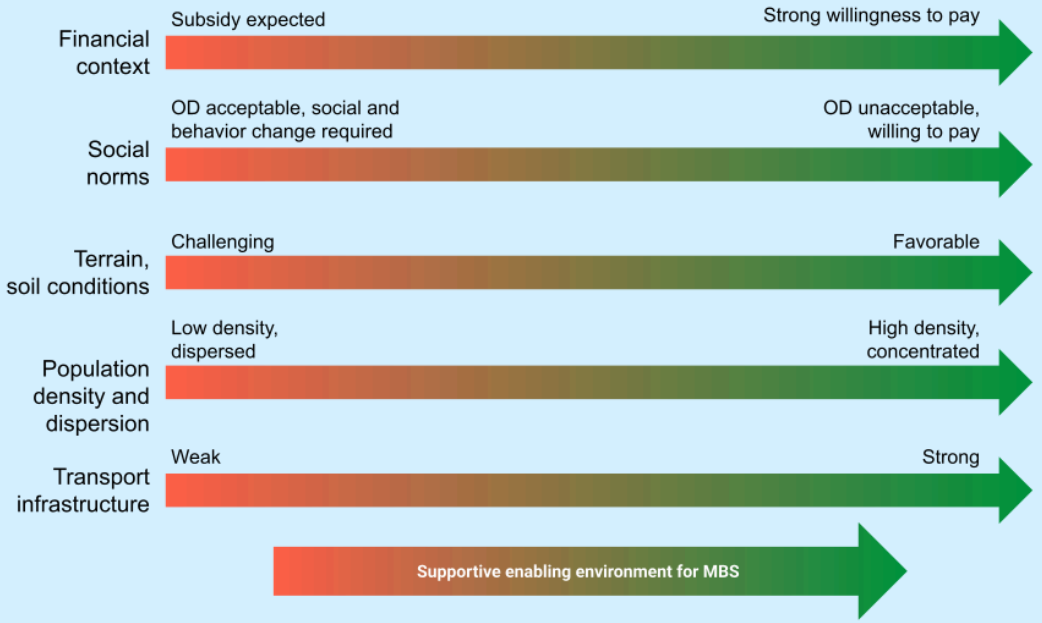
- ➔ **Set boundary** activities focus on hard-to-reach, disaster-prone, or poverty-stricken communities. In these projects, the market boundaries are often already drawn, and the project team identifies ways to best bring MBS into these contexts. In these cases, target populations are often already set. Ideally, these programs collaborate with other MBS or Market Systems Development (MSD) projects and Area-wide Sanitation (AWS) activities working across other aspects of the wider WASH system. No one project can do it all.
- ➔ **Flexible boundary** activities have the flexibility to choose the markets in which they would like to start often through area-wide sanitation planning. This means MBS activities are started in areas that are most likely successful. Often, these programs partner with other projects to ensure no one is left behind. No one project can do it all.

As described in more detail in Course-1, MBS activities are often sequenced, layered, and integrated (SLI) with Area-wide Sanitation (AWS), City-wide Inclusive Sanitation (CWIS), Multi-sectoral Programs, and Market Systems Development (MSD), leading to stronger outcomes for all people.

Where do you start when you have flexible boundaries?

Analysis by UNICEF (2020:2.1; 2013) and WASHPaLS (2018) identified a set of broader contextual factors that have shaped the success of previous MBS projects. These include financial context, social norms, terrain, population density, and transport infrastructure. As such you can think of these as part of the enabling environment for MBS.

As illustrated below, these factors can range from challenging to easy for different contexts. Each context will have both challenging and supportive factors. If you have flexible boundaries, you may choose to test the model in an area with fewer challenges; however the most transformative MBS activities are often those who tackle the challenges.



- **Caption**: Ease of entry for MBS sanitation

- **Source**: Adapted from USAID, 2018

Reflection question

In your type of programming, are the boundaries pre-set or flexible? How might this affect how you engage in the sanitation market?

None

-

1.2 Conducting sanitation market assessments

Teams using MBS typically conduct market assessments to help design appropriate MBS strategies. *Assessments are often paid for by the MBS activity and then used to design solutions (product systems, service models, marketing strategies and market segmentation) with and for local enterprises. An activity's funding, context and focus can shape their assessment strategy.*



*A group of men sort sanitation option cards in rural Bangladesh | **Source**: iDE Bangladesh*

What is a market assessment?

Most MBS activities should start with a market assessment to understand the current gaps within the market system. Poor assessments at the beginning of an MBS intervention can lead to incorrect assumptions about customer needs and aspirations and may lead to project failure (USAID, 2018). An MBS program strategy is designed to tackle gaps identified during the market assessment.

➔ Assessments can be detailed, human-centred, or rapid but must be actionable. They often report findings in a simple framework, grid, or slide deck.

➔ Assessments are often best done by the project team, which will facilitate the MBS strategy. This is to increase the uptake and use of the findings.

Common focus areas of market assessments align with the market system aspects of demand, supply and enabling environment.

- **DEMAND - Sanitation customers and non-customers** (customer preferences, barriers, aspirations, and the features for which they are willing to pay)
- **SUPPLY - Sanitation enterprises and other suppliers** (enterprise strategies, product offerings, supply chains, and marketing strategies)
- **ENABLING ENVIRONMENT- Public sector, wider private sector, financiers, and civil society organisations** (interest in and support of sanitation markets, existing subsidy, and financing opportunities)

Part 1. Desk Assessment. As with any successful development intervention, it is important to start by understanding what has already been done and learn about your context.	➔ **Conduct expert interviews** with organizations who have experience with MBS in your context or adjacent contexts. This can include public, private and development partners. ➔ **Conduct a rapid literature review** on sanitation processes and experiences in your context. This can include MBS, but also other relevant sanitation literature. Explore both academic and practitioner materials and be open to materials in other languages.
Part 2. Field Assessment. Next is important to do a field-based assessment. Often in WASH programs, formative field research explores community members' knowledge, attitudes, and practices. However, MBS market assessments - explore the experiences and aspirations of *both customers and entrepreneurs.*	➔ **Conduct user and non-user interviews** to explore preferences, barriers, aspirations, and the features for which they are willing to pay ➔ **Conduct community observations or rapid spot-checks** to explore the types of products and service that are being adopted and potential pitfalls with these solutions ➔ **Conduct entrepreneur interviews** to explore existing and potential strategies, product offerings, supply chains, and marketing strategies ➔ **Conduct enabling environment interviews or focus groups** with public, private and development actors who might or already support the market system through aspects such as subsidy and promotion *Note:* Many MBS activities overlay field assessments with a Human-centred Design (HCD) formative research phase. We will explore HCD in more detail in Session 3.

In Session 1.2 you will learn about different styles of reporting assessments and in Session 1.4 you will have the chance to explore some assessments in more detail.



Reflection question

If you start an MBS program in a new district of a country that has already done an MBS project, should you still do a market assessment? Why or why not?

None

-

1.3 Common sanitation market gaps

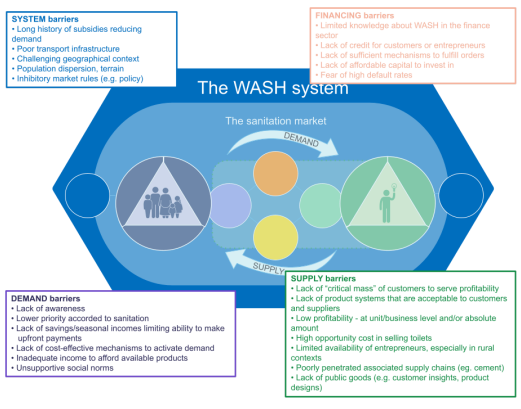


A team explores the quality of a locally manufactured latrine pan in northern Bangladesh | ***Source**: iDE Bangladesh*

What are common market barriers?

Although the goal of a market assessment is to uncover context-specific market barriers and gaps, it is helpful to know what types of gaps exist in other contexts. A 2018 study by WASPaLS reviewed approximately 600 documents on Market-Based Sanitation, conducted in-depth research into 13 MBS interventions across the global south, and interviewed experts.

Take a moment to review the illustration below, which highlights demand, supply, system, and financing barriers.



https://washsystemsacademy.org/draftfile.php/36272/user/draft

SUPPLY barriers

- Weak supply chains (eg. cement, plastic components)
- Limited opportunity, ability and/or motivation of entrepreneurs to manufacture, sell and manage sanitation products/services
- Lack of product systems that are producible by suppliers
- Lack of "critical mass" of customers to serve profitability
- Low profitability for sanitation sales

DEMAND barriers

- Low opportunity, ability and/or motivation of customers to purchase, use and maintain sanitation facilities
- Lack of product systems that are acceptable and aspirational to customers

/745702789/image-hotspots-2257.h5p	• Lack of cost-effective mechanisms to activate demand
	Enabling Environment barriers • Lack of coordination between public, private and development partners • Long history of inadequate subsidies reducing demand • Poor transport infrastructure • Challenging geographical context • Population dispersion, terrain • Inhibitory market rules (e.g. policy) • Limited knowledge about WASH in the finance and wider manufacturing sectors • Limited capital or credit for customers or entrepreneurs

{this will be a clickable image online with updated

Barriers to scaling Market-Based Sanitation | ***Source:*** *Adapted from USAID, 2018*

Market assessments help identify and address addressable gaps for your context. Remember that not all aspects above will be a gap in your context. For example, perhaps you are in a context where the latrine design is already great; there is no reason to redesign the latrine. Or if you already have a strong demand for quality sanitation products, there will be less emphasis on demand strategies.



Reflection question

Do any other barriers or gaps come to mind?

None

-

1.4 Broad Market Assessment Tools



A rapid market assessment interview in northern Bangladesh | ***Source**: iDE Bangladesh*

What are some useful assessment tools?

This section provides an **overview of four summary market assessment tools**. The next four sessions (Sessions 2-5) will dive deeper into specific tools and resources to assess target clients, product systems, demand strategies and service models.

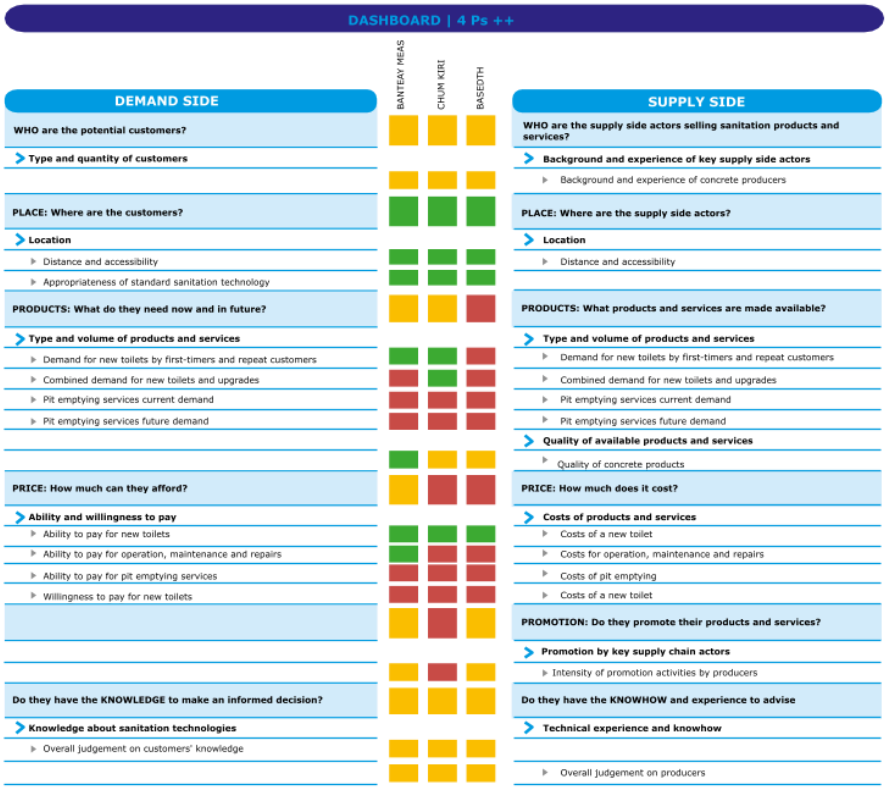
→ Tool 1: Marketing Mix

Promoted widely by the World Bank's Water and Sanitation Program (WSP) in their SanMark (a precursor to MBS) work, the **4Ps Marketing Mix** is a simple framework to help synthesise findings and recommendations from a market assessment. While originally designed to support marketing activities, the 4Ps broadly align with the four aspects of a sanitation enterprise (the four circles at the centre of the MBS conceptual framework). The Marketing mix is often displayed as a grid but can also be used as chapters or sections in an assessment report. Many teams also add partnerships and policies to this marketing mix.

- **Product:** The appropriate products and services for target clients that are sold by enterprises. This includes physical items, such as a concrete latrine, and services, such as pit emptying.
- **Price:** The price at which a product or service is traded between a customer and an enterprise. Price may include monetary and non-monetary costs a customer incurs when purchasing sanitation materials.
- **Place:** Where or how a product or service is sold or obtained and maintained, and how it is distributed.
- **Promotion:** The activities undertaken to make the product or service known to the user. This can include advertising, word of mouth, press reports, incentives, commissions, and awards to the trade.
- **+ Partnerships:** Formal and informal collaborations with public sector actors, private sector suppliers, local elites, other projects, and development organisations such as non-governmental organisations (NGOs) and community-based organisations (CBOs).
- **+ Policy:** Formal and informal rules or regulations which help shape sanitation access and use. This can include laws, by-laws, standards, cultural norms, enforcement, and standards for pollution protection.

→ Tool 2: Market Dashboard

Building on the 4Ps, a market dashboard simply illustrates the status of sanitation market aspects against a benchmark of a mature market system. The dashboards often include aspects related to the demand and supply alongside details like product, price, place, and promotion. The dashboards offer a simple way for teams to understand the status of a market, compare across geographic areas, and track change over time. The dashboards are filled in during a participatory workshop and rely on assessment data and team member's knowledge of the context.



Combined sanitation supply and demand dashboard for the three districts

- **Caption:** Sanitation Market Dashboard for the three districts in Cambodia
- **Source:** IRC 2016

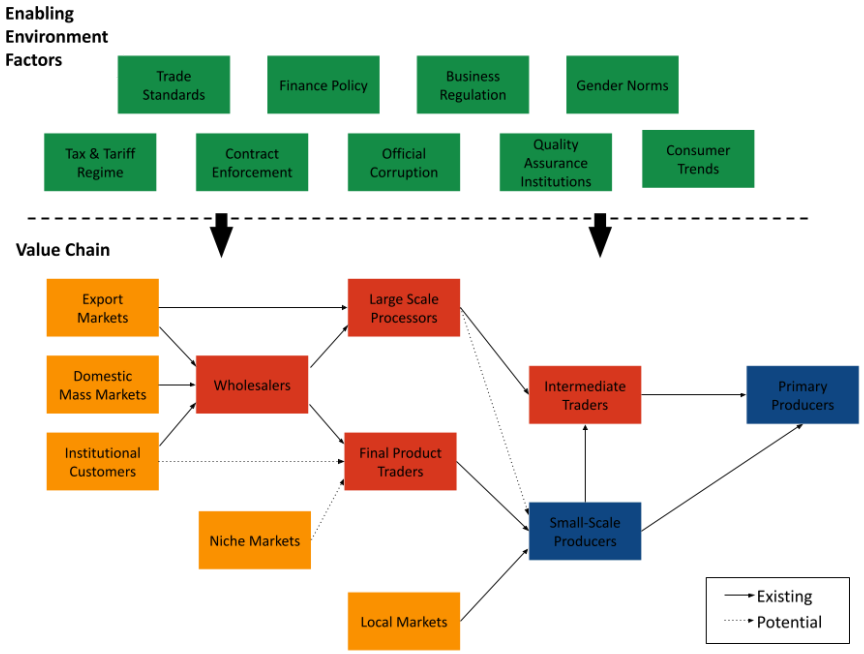
"The results of the sanitation market research (rapid assessment) were visualised with the aid of a traffic light dashboard to show the match or mismatch between supply and demand. The dashboard was designed with three traffic lights indicating different degrees of match between supply and demand. The dashboard…provides immediate and easy insight into the main issues that require attention.

- The green lights show a match between supply and demand of 75% and more: these issues require no attention.
- The yellow lights indicate a match between supply and demand of between 50% and 75%: these issues deserve attention but only after the red traffic light issues have been addressed.
- Finally, the red lights indicate a match between demand and supply of less than 50%: these issues require immediate attention and may need to be analysed further."

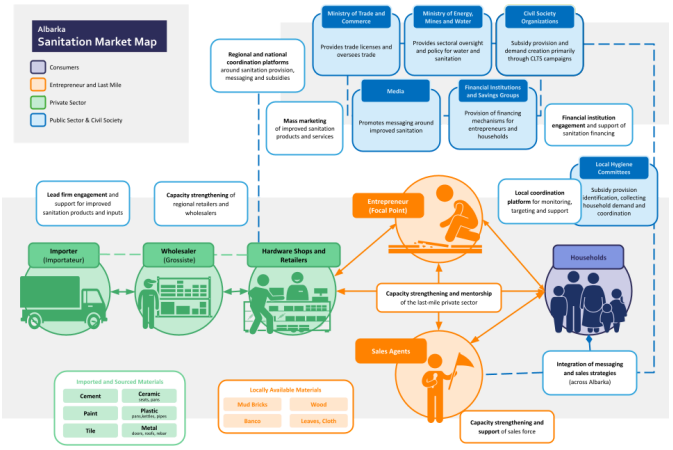
→ Tool 3: Market Map

Another helpful tool is a market map, which illustrates the factors, linkages, and actors that work within the market system. A market map is similar to a stakeholder map but often also includes the flow of products

and services (value chain) and the rules, regulations, and supporting functions (enabling environment). There are many different versions of market maps, as highlighted by the BEAM Exchange Guidance. For example, the Market Systems Mapping tool can help teams generate visually appealing market system maps. Practical Action's Participatory Market Mapping Guidance walks a team step-by-step through the process.



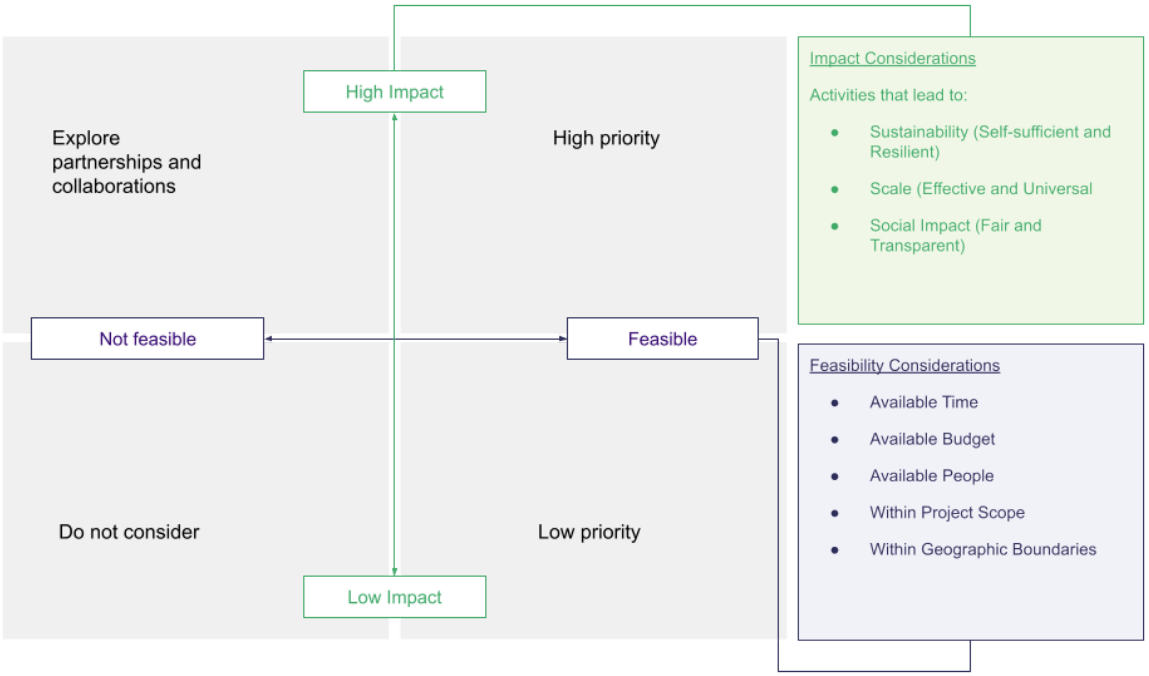
- **Caption:** Generic Market Map
- **Source:** Practical Action Core Market Mapping Guidance



- **Caption:** Stylized Market Map with Recommended Actions for the Albarka project in Mali
- **Source:** Albarka Market Assessment (2023, unpublished) Albarka is a USAID/BHA funded Resilience and Food Security Activity. The market assessment was conducted by a consulting firm on behalf of the project and supported by PRO-WASH & SCALE.

→ Tool 5: Prioritisation Matrix

Not all MBS activities can do everything, and teams must prioritise high-impact and feasible activities for the project. Once a list of context-specific barriers has been collected through a market assessment, teams can rank barriers from low to high impact and not feasible to feasible. This is often best completed in an in-person workshop, where barriers are listed on sticky notes and stuck to a wall with the quadrants in mind. High-impact, non-feasible activities, are a great opportunity for partnerships and collaborations with other programs, organisations, and initiatives



- Barriers identified as **low-impact and not feasible** should not be considered.
- Barriers identified as **high-impact but not feasible** are great opportunities to seek partnerships.
- Barriers identified as **low-impact and not feasible** are low-priority barriers to address in the MBS activities.
- Barriers identified as **high-impact and feasible** are high-priority barriers to address in the MBS activities.

Reflection question

Have you ever used these tools? What other tools might be useful in the market assessment process?

None

-

1.5 Market assessment case studies



A market research activity in Ethiopia | ***Source**: T/WASH Ethiopia*

What can we learn from other contexts about market assessments?

There are many good examples of market assessments in the sanitation sector. As always, a quality assessment will be based on your context, funding, and focus. We have selected a few case studies for you to explore which show geographic variety. Additional case studies can be found at the end of the session.

Select *two* case studies that best relate to your interest and spend the next 15 minutes exploring them. Start by reading or watching the summary and if you would like to explore further explore the linked resources. For longer external resources - you do not need to read word-for-word, but skim over the structure and organisation of the report.

As you read or watch, reflect on **how the assessment is being framed.** What are they using as sections or headers?



Bangladesh - rural	This video, developed with Strengthening Household Ability to Respond to Development Opportunities (SHOUHARDO) III Resilience Food Security Activity (RFSA) in Bangladesh, shows how HCD was used to shape the market assessment and used to design MBS activities. WATCH video: YouTube (3:44 minutes)
Cambodia - rural	SNV Cambodia, with support from IRC, conducted a rapid assessment to strengthen the sanitation supply chain in three SSH4A focus districts: Banteay Meas and Chum Kiri in Kampot province, and Basedth in Kampong Speu province. The assessment aimed to achieve three main objectives: 1. **Understanding Consumer Needs:** The research sought to gather insights into consumer demands, needs, and aspirations regarding sanitation products and services. This understanding is crucial for developing solutions that resonate with the community. 2. **Analysing Current Supply:** The assessment evaluated the existing supply of sanitation-related products and services. By identifying gaps in the market, the research aimed to highlight areas where improvements could be made to better meet consumer needs. 3. **Formulating Practical Recommendations:** Based on the findings, the research aimed to provide actionable recommendations tailored to the specific contexts of the three districts. Additionally, the market research explored whether existing market mechanisms could enhance latrine uptake and identified opportunities to scale up the availability of affordable, demand-responsive sanitation products and services. This comprehensive approach is expected to contribute significantly to improving sanitation access and hygiene practices in the targeted areas, ultimately fostering better health outcomes for the communities involved. • **Read more:** Using the marketing mix to diagnose market gaps in Cambodia (English) (rapid assessment report - 8 pages)
Mozambique - urban	"This rapid assessment for water supply and sanitation was sponsored by the USAID-funded Supporting the Policy Environment for Economic Development (SPEED+), a four-year project (2016 to 2020) designed to support broad-based inclusive economic growth and the conservation of natural resources in Mozambique." The rapid market assessment aimed to analyse current government policies, regulations, and practices in the water and sanitation sectors, with the goal of fostering private sector investment and involvement in urban and peri-urban areas, as well as secondary cities in Mozambique. To achieve this, the assessment included several key components: • **Value Chain Analysis**: It identified the various actors within the water and sanitation sectors, along with their relationships, interactions, and transactions. • **Market Mapping:** The team developed comprehensive maps that illustrated existing public and private sector initiatives, service delivery approaches, power dynamics among market players, and gaps in policies and information exchange. • **Incentive Exploration:** The assessment examined the incentives and forces that had influenced the current state of water and sanitation services in urban and peri-urban regions. • **Constraint and Opportunity Identification:** It highlighted critical constraints and immediate opportunities to stimulate market system changes, thereby accelerating coordinated investments from both the public and private sectors to help Mozambique achieve its universal coverage objectives. This assessment was designed to provide actionable insights that could lead to more effective and sustainable water and sanitation service provision. • **Read more:** Water and sanitation rapid market assessment in Urban Mozambique (English) (assessment report - 40 pages to skim)

Indonesia - urban and rural	This assessment by the Ministry of National Planning and UNICEF in Indonesia leveraged in-depth analysis to advance markets for safely managed sanitation products and services. It evaluated market gaps and business opportunities for private sector involvement, focusing on how to strengthen the enabling environment. The assessment generated targeted and actionable recommendations aimed at stimulating both demand and supply, ensuring that affordable sanitation products and services are accessible to all, including poor households and communities in challenging environments. The assessment specifically targeted the market for products and services necessary for implementing on-site sanitation solutions, recognizing that a significant portion of Indonesia's population relies on these systems, a situation expected to persist for years. Utilising a combination of qualitative and quantitative research methods, the analysis included interviews with over 700 households for the quantitative aspect and 76 respondents from various sectors—such as materials stores, septic tank manufacturers, masons, small contractors, pit emptying service providers, and septage treatment facilities—for the qualitative component. This comprehensive approach aimed to provide insights that would enhance private sector engagement and improve sanitation access across the region. • **Read more:** Market Assessment for Safely Managed Sanitation in Indonesia (English) (assessment report - 84 pages to skim)
Burkina Faso - rural and peri-urban	In 2019, an assessment commissioned by the Victory Against Malnutrition Plus (ViMPlus) Development and Food Security Activity (DFSA) aimed to evaluate the feasibility of implementing a Market-Based Solutions (MBS) approach. The study aimed to gather insights on household consumer preferences, motivators, and barriers related to the purchase and use of water, sanitation, and hygiene (WASH) products and services, while also identifying local businesses and supply chains. Employing a mixed-methods approach, the assessment included qualitative and quantitative research methods, such as key informant interviews, focus group discussions, and household surveys. Twelve focus groups were conducted—six with men and six with women—across six selected villages. Additionally, 42 individual interviews were held with various stakeholders involved in WASH activities, including businesses, masons, and technical service providers. A total of 120 surveys were administered to heads of households. Data collection took place in November 2019 in the communes of Pissila, Yalgo, and Tougouri, located in the Centre-North region of Burkina Faso. The analysis and report writing occurred from December 2019 to February 2020. Key findings were organised into three categories: Demand (consumer insights), Supply (business engagement), and the Enabling Environment/Risks, providing a comprehensive overview to inform the ViMPlus WASH strategy. • **Read more:** WASH Markets Assessment Report from ViMPlus in Burkina Faso (English) (assessment report - 63 pages to skim)
Niger - small towns	Carried out by the PSI/Practica consortium, in close collaboration with the Resilience and Food Security Activities (RFSAs) Hamzari, Girma and Wadata and their partners TerresEauVie (TEV) and Sahel Collaboration and Communication (SCC), as part of the PRO-WASH programme, this assessment aimed to strengthen the effectiveness and sustainability of WASH interventions associated with emergency development and food security activities funded by USAID's Bureau of Humanitarian Assistance. This study was part of the development of an overall market development strategy aimed at improving the availability and supply of improved toilets and handwashing products in the Maradi and Zinder Regions of Niger. • **Read more in French:** Diagnostic du marché en produits d'assainissement et de lavage des mains sur les régions de Zinder et Maradi, Niger (French) [Diagnosis of the sanitation and handwashing product market in the regions of Zinder and Maradi, Niger] (assessment report - 39 pages to skim)
Madagascar	The RANO WASH project team identified gaps in the sanitation market by conducting comprehensive

	assessments and engaging with local communities to understand their needs and challenges. They utilized a market-based approach, which involved mapping existing sanitation services, analyzing supply and demand dynamics, and identifying barriers to access. This approach enabled them to pinpoint specific areas where sanitation services were lacking or inefficient, and to develop targeted interventions to address these gaps, ultimately improving access to sanitation for underserved populations. • **Read more in French:** Modèle-d'assainissement-basé-sur-le-marché - RANO WASH (French)

Case study summaries were adapted from auto-generated versions from Microsoft Co-pilot or copied from the case study source materials (indicated through quotation marks).

Connect: Exploring your sanitation market



How might you contextualise MBS?

In this session, we have had an overview of approaches used to draw boundaries and assess the sanitation market for a Market-Based Sanitation activity. In the next sessions, we will dive into specific activities related to clients, products, demand strategies, and service models.

1. Take 5 minutes to revisit one of the tools introduced in Section 1.4
2. Below, reflect on how you might use one of these tools to help better understand, report, or map your sanitation market.

None

Quiz: Check your knowledge



Check your knowledge of Session 1

Question 1: If a project is able to identify where they would like to start an MBS activity, does it have set or flexible boundaries? Select one.

- ☐ Set boundaries
- ☐ Flexible boundaries

Question 2: What is a sanitation common market gap? Select all that apply.

- ☐ High customer demand
- ☐ History of poorly designed subsidies
- ☐ Well-connected supply chains
- ☐ Too many sanitation enterprises

Question 3: What are the 4Ps of the Marketing Mix Tool

- ☐ Product
- ☐ Place
- ☐ Peace
- ☐ Price
- ☐ Promotion
- ☐ Progress

Learn More

Key Resources

	Sanitation marketing for managers: Guidance and tools for program development (PDF, 1,818 KB | English) "This manual provides guidance and tools for designing a sanitation marketing program. It guides professionals in the fields of sanitation and marketing to complete two important and necessary steps: (1) to comprehensively assess the current market for sanitation products and services and (2) to use the results of this assessment to design a multi-pronged strategy." USAID, 2010
	[Research guides]: Sanitation in Mozambique (PDF, 851 KB| English) While not specifically designed for MBS activities, these research guides provide a good foundation on tools to conduct a rapid market assessment. SNV, 2020
	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) This resource provides practitioners with simple, easy-to-follow, and evidence-based resources to plan, design, implement, and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021
	Situation Analysis: How do I know if Sanitation Marketing will work in my country? (PDF 321 KB | English) "Provides an accessible resource to help practitioners put the market systems development approach into practice. It explains the key principles and frameworks which guide effective intervention in – and development of – market systems. It addresses common challenges with examples of good practice based on practitioner experience." UNICEF, 2013. Sanitation Marketing Learning Series: Guidance Note 1
	BEAM Exchange Web Portal (English with published tools in French and Spanish) This platform provides tools, resources, and guidance for teams using Market System Development (MSD) approaches to strengthen markets. While the portal is primarily focused on agriculture, the tools and resources are also valuable for the sanitation market.
	Integrated Functional Sanitation Value Chain: The Role of the Sanitation Economy (Academic Book, Open Access E-book | English) "The underlying premise of this book is that the [Integrated Functional Sanitation Value Chain] IFSVC represents a new perspective that would have major social, environmental, and economic implications for local, national, regional, and global sanitation service delivery. It is hoped that researchers, business leaders, entrepreneurs, government officials, and funders will find this book valuable and be inspired and enabled to carry sanitation work forward in their own spheres of operation." Cookey PE, Koottatep T, Gibson WT, Polprasert C, 2022

Additional Examples and Case Studies

Southern Africa	• Academic Paper (paywall): Investigating the dynamic interactions between supply and demand for rural sanitation, Malawi (Cole, Pinfold, Ho & Anda, 2012 | English) • Master's Thesis: Opportunities and Constraints for more Sustainable Sanitation through Sanitation Marketing in Malawi (Kappauf, 2011 | English) • Assessment Deck: Strategic Recommendations for RANO WASH (iDE, 2021 | English) • Assessment Report: Water and sanitation rapid market assessment in Urban Mozambique (USAID, 2018 | English)
Eastern Africa	• Assessment Report: An assessment of demand creation of sanitation products and services Lessons from Ethiopia (T/WASH, 2019 | English) • Working Paper: Market-Based Models and Public-Private Partnership Options for Non-Sewered Sanitation in Selected Cities and Towns in Kenya (WSP, 2022 | English) • Final Report and Compendium: Kenya Sanitation Market Assessment Findings (USAID/WASHPaLS, 2021 | English)
Western Africa	• Assessment Report: : WASH Markets Assessment Report from ViMPlus in Burkina Faso (VimPlus, 2020 | English) • Policy Brief: Sanitation Economy Estimates for Sierra Leone (SHF, 2023 | English) • Field Note: Who buys latrines? Where and why? Lessons from Benin (WSP, 2004 | English) • Final Report and Compendium: Liberia Sanitation Market Assessment Findings (USAID/WASHPaLS, 2021 | English)
South Asia	• Learning Brief: Leveraging human-centered design and market approaches for Sanitation in Complex Operational Environments (SCORE) in Bangladesh (English |French) (PRO-WASH, 2022) • Assessment Report: Sanitation Supply Chain Analysis Pemagetshel Dzongkhag, Bhutan (Pedi, 2012 | English) • Summary Report: Sanitation Market Analysis Summary Report: Nepal (UNICEF, 2020 | English) • Summary Report: Sanitation Market Analysis Summary Report: Bangladesh (UNICEF, 2020 | English) • Summary Report: Sanitation Market Analysis Summary Report: Pakistan (UNICEF, 2020 | English)
Southeast Asia	• Assessment Report: Using the marketing mix to diagnose market gaps in Cambodia (SNV, 2016 | English) • Field Note: Sanitation Demand and Supply in Cambodia. (WSP, 2008 | English) • Assessment Report: Market Assessment for Safely Managed Sanitation in Indonesia (Bappenas, and UNICEF, 2024 | English)
Latin America	• Learning Report: Fostering Water and Sanitation Markets in Latin America and the Caribbean: How the Public Sector Can Support the Private Sector to Bridge Coverage Gaps and Improve Service Quality for Low-Income Populations (IDB, 2016 | English, Spanish)

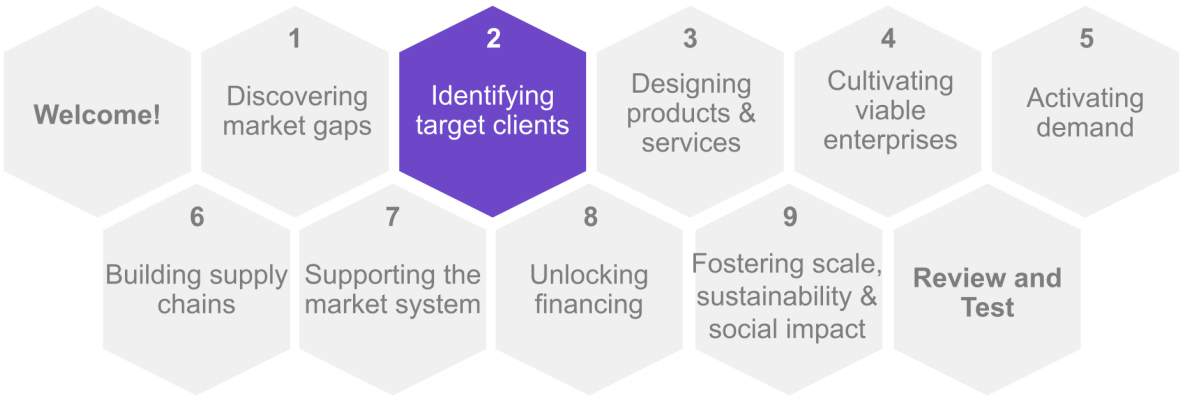
Session 2: Identifying target clients



A rural market in the Kurfa Chele district of Ethiopia | ***Source**: PRO-WASH & SCALE*

In this session, you will:

1. **Clarify** the difference between sanitation clients, customers, and consumers
2. **Discover** common ways that sanitation clients may be divided into subgroups for better targeting and phasing of MBS strategies
3. **Review** three key tools used to identify potential sanitation clients
4. **Reflect on** examples of market segmentation in practice and how they may be applied to your context



2.1 Clarifying sanitation customers, consumers and clients



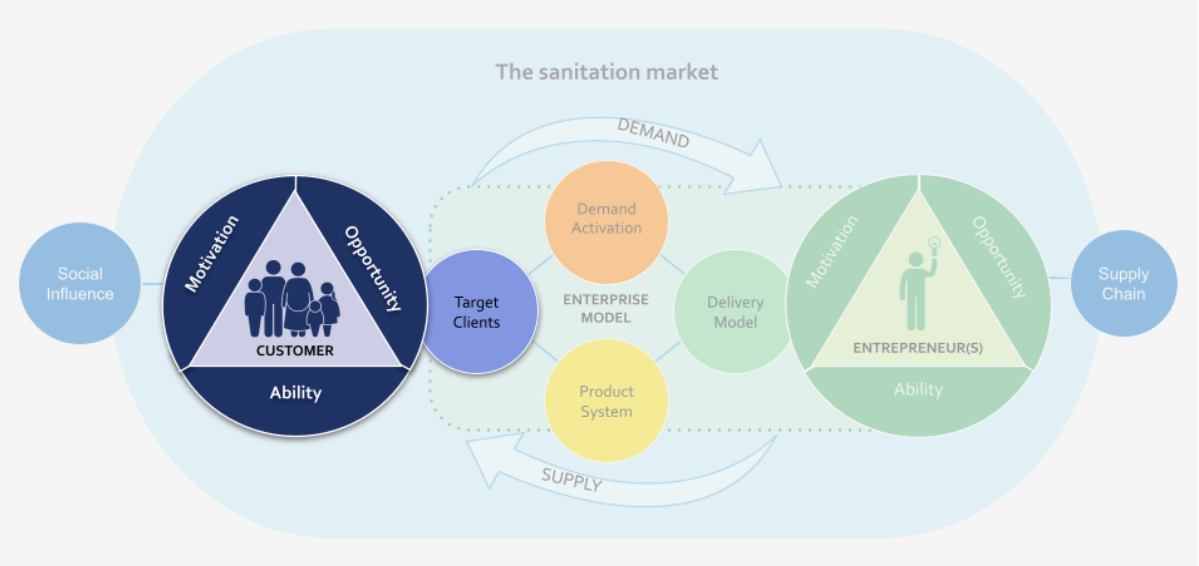
*A Bangladeshi couple with the sanitation sales agent who sold them a new latrine | **Source**: iDE Bangladesh*

Teams using MBS typically identify potential sanitation client markets with and for the private sector actors. These target segmentations are groups of people interested in improvements in sanitation. The costs of identifying key market segments are often paid for by the MBS activity and then passed on to local enterprises. Sometimes MBS activities will choose where they plan to work and which enterprises they partner with based on geographic segmentation activities.

Who are the customers in a sanitation market?

Building on the boundaries we identified in Session-1, we now zoom-in to discuss each of the four pillars (**Target Clients**, **Product System**, **Service Model**, and **Demand Strategy**) that connect customer demand and entrepreneur supply. We will start in Session 2 with the target client and how these people link to the customer. Sessions 3-5 will explore the other aspects.

Take a moment to revisit the sanitation market diagram below, which highlights the consumer and target clients.



- **Caption**: Sanitation Market conceptual framework - focused on the consumer and target clients
- **Source**: Adapted from USAID, 2018.

You may notice that we have used slightly different wording for the people who are offered, purchase, or use improved sanitation products and services.

- **Consumers**: Anyone who uses a purchased product or service, also known as 'users'.
- **Target Clients**: Potential customers who are offered services through enterprises. A target market overlays the target clients with the boundaries of a selected market area.
- **Customer:** The person who makes the purchase, also known as 'buyers'.

Within MBS, the Customer is a Target Client who has actually made a purchase, or the member of a household that purchases a sanitation product or service. Sometimes, this person is a head-of-household or the family member responsible for sanitation and hygiene. Occasionally, the customer is multiple people - such as a husband-wife couple or a father-son duo. Sometimes, this person is a relative living in the city or even overseas. Often in MBS-targeted contexts, customers are public sector actors and NGOs, but in MBS, we aim to shift this to include community members. Customers frequently also oversee the construction, maintenance, repair, and management of the sanitation facility. We can think about three lenses for a person to become a customer: Opportunity, Ability, and Motivation (SaniFOAM framework - Coombes & Devine, 2010).

- **Opportunity**: *Does the person have the opportunity to purchase the sanitation product or service leading to a safely managed sanitation facility?* proximity to markets, access to inputs, access to information, access to skilled labour, and access to land
- **Ability**: *Does the person have the ability to purchase the sanitation product or service leading to a safely managed sanitation facility?* money (ability to pay/liquidity or money available to use, not stored in assets), labour, skills, transportation, decision-making, self-efficacy, and social support
- **Motivation:** Is the person motivated *to purchase the sanitation product or service leading to a safely managed sanitation facility?* attitudes, beliefs, values, willingness to pay, competing priorities, and emotional and physical drivers (convenience, comfort, privacy, and safety)

Opportunity, Ability, and Willingness to Pay

As MBS requires the trade of a product or service - often through cash - it is important to reflect on how consumers consider this payment. We can also use Sanifoam to think about the payment transaction

- **Opportunity to pay** is the opportunity a consumer has to make a payment. This can be limited by access to markets or proximity to service providers. In many contexts, households are willing and able to spend money on sanitation but never get the opportunity.
- **Ability to pay** (ATP) is the ability of a consumer to pay for a particular product or service also known as liquidity. This is often related to having the actual cash on hand, which is not stored in assets or income-generating activities. It is hard to justify spending money on a latrine if there isn't food on the table. In many contexts, households don't have the cash at the moment they are offered the service and therefore can't pay. Ability to pay is closely linked to the affordability of the product or service offering.
- **Willingness to pay** (WTP) is connected to a customer's motivation to pay a particular amount for a particular product or service. Some households have the possibility and ability to purchase a latrine but are not willing to spend money on sanitation - instead spending on things like refrigerators or televisions. This could be due to beliefs or competing priorities. In economic terms, WTP is the maximum amount of money at which a customer will buy a product.



Reflection question

What types of people are sanitation consumers in your context? Think about age, gender, and household roles. What is their opportunity, ability, and willingness to pay?

None

2.2 Understanding the client



A client focus group discussion on sanitation products in rural Ethiopia | ***Source**: USAID T/WASH Ethiopia*

Who are the clients in a sanitation market?

Just like the boundaries of a sanitation market, the clients of supported enterprises are influenced by context, funding, and focus. Sometimes, the clients are pre-determined; sometimes, projects can identify target clients; and sometimes, projects support multiple types of clients. Often, targeted clients change over time. However, clients are not all exactly the same. It is valuable to divide potential clients into smaller groups - called market segments.

The identification of market segments is often done iteratively as part of the market assessment and design processes, in which detailed qualitative information about potential clients, their preferences, their desires, and their challenges are understood. This is often overlaid with quantitative or geospatial information from census or other national datasets. This helps to create market segments. However, there are many segmentation styles. Here, we highlight a few types of segmentation:

1. **Geography.** Segmentation by physical geography can help identify client segments based on the areas in which they live. This can include variables such as water access/scarcity, soil types, terrain, forest coverage, and the distance to roads, cities, or major water bodies. This segmentation can overlap with market boundaries.

2. **Demography**. Segmentation by demographics focuses on the types of communities that clients live in. This can include aspects such as community size, social cohesion, population density, ethnicity, religion, literacy, and education.

3. **Economics.** Segmentation by economics explores aspects such as ability and willingness to pay, income-generating activities, access to financing, or even seasonality.

4. **Motivations.** Segmentation by motivation focuses on the reason that a household or consumer for getting or upgrading a latrine. This can include variables such as zoning regulations, socal status, upcoming social events such as weddings or funerals, diarrhoea prevalence, cholera risk, and after climatic shocks

5. **Integration**. Segmentation by integration focuses on zones or people targeted by other activities such as income generation, agriculture support, cash transfers, behaviour change communication, and access to markets.

6. **Beneficiary status.** For closed-boundary MBS activities, beneficiaries are often pre-selected. For these programs, teams often work with 'primary' and 'secondary' clients. Primary clients are those actively supported by the program who might meet certain economic, geographic, or social criteria (ultra-poor, hard-to-reach, with a disability, etc.). Secondary clients are other community members who are not beneficiaries.

7. **Required innovation to unique barriers.** Innovation to address the unique barriers faced by subsets of communities or individuals - such as facilities in areas with a high water table or difficult soil conditions.



How can teams support inclusivity with target clients?

Individuals and communities with unique barriers are also important to the sanitation market. This could include people with disabilities (PWD), the ultra-poor, hard-to-reach communities because of geography, or other systemically marginalized groups with different sanitation practices. Additionally intra-household power dynamics and landlord tenant dynamics can leave certain voices out of the conversation. Ensuring these groups are not left behind and that their voices are heard is an important part in fostering an equitable sanitation market; and this often requires additional activities or strategies.

Typically MBS acitivies take one of two approaches to ensure that these vulnerable populations are not left behind:

- **Targeting from the beginning.** These activities engage entrepreneurs to provide sanitation products and services to everyone within a geographic zone equitably and often partner with other MBS-focused activities for wider market systems strengthening. They actively support targeted demand activation (Session 4) and financial support strategies (vouchers, savings, credit, etc.), which focus on the most vulnerable as primary beneficiaries. Secondary beneficiaries include other clients outside the main targeted group. One risk with this approach is undermining willingness to pay if the market is not already established.

- **Targeting once the market is established.** The second approach aims to first build a mature, local sanitation market. It does not necessarily focus on the ultra-poor at the start. Once the market is more established - teams then ensure that financial support strategies are in place to support more vulnerable clients. One risk with this approach is that it might take a very long time to build an established market that will be the most vulnerable.

In this video, Kitka Goyol from UNICEF describes the importance of good planning to ensure MBS can support the most vulnerable households. (YouTube, 2 minutes)

As the video highlights, good planning is key to making sure that the vulnerable are well served.



Inclusivity will be explored again when we discuss **product system design** in Session3 and **equitable reach** in Session 9.

Reflection question

What other factors might be important to consider when identifying market segments?

None

2.3 Aligning innovation diffusion with market segments



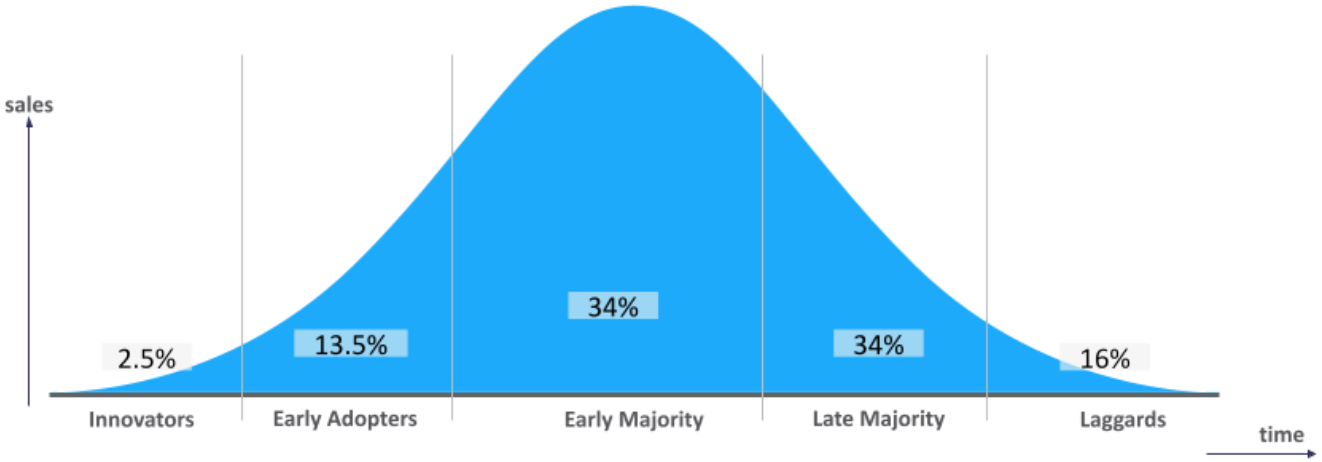
*A sales meeting for hygiene and sanitation products in rural Bangladesh | **Source**: iDE Bangladesh - Suchana*

What can we learn from Diffusion of Innovation theory?

Not all client segments will have the same opportunity, ability, and interest to purchase a sanitation product or service. So it is valuable to connect client segments to a targeting approach. One way of thinking about a targeting approach is through Diffusion of Innovation theory.

- **Innovators** and **early adopters** are those who adopt first and are more likely to be on the cutting edge and are inherently primed to pick up innovations and novel products in a market to integrate into their lives.
- **Middle** and **late adopters** are the majority of people and will adopt an innovation when there is evidence or solid reasons to use it; these middle adopters wait until they get the right information.
- **Late adopters and laggards** tend to pick up an innovation when there is evidence that the innovation is sustainable or until a new social norm is established regarding the product or service.

The segments of customers can be visualized as a bell-curve over time as seen below.



These segments are **distinct from an individual's or household's disposable income**. While it is easier for innovators and early adopters to invest in new products and services if they have disposable income, individuals later on the curve can also have money. Access to finance is not always a limitation to adoption of innovations; adoption is also influenced by the level of risk the individual is comfortable with, and their adherence to social norms.

Often the shifts from **early to middle adopters** and from **late adopters to laggards** require a bit more support as illustrated with the orange lines on the visualization. This additional support can be in the form of regulations, strategic social influence or even targeted demand creation; think about the different strategies that CLTS uses to overcome these barriers.

Watch this video to learn more about Diffusion of Innovation theory (YouTube, 3:36 minutes).



From Diffusion of Innovation theory, we learn that it is most effective to first target people who have the opportunity, ability, and interest in a new innovation. This often builds momentum within a community, leading to more sales.

Reflection question

How else could Diffusion of Innovation theory support the development of strategies for sanitation teams?

None

2.4 Targeting tools



*A village map in rural Zimbabwe with latrines marked | **Source**: PRO-WASH & SCALE in the Takunda project*

What are some useful segmentation tools?

Many useful tools from the business world can help teams accurately select a target market and clients. Together, this process is called market segmentation. Here are three tools used in MBS to help create market segments.

→ Tool 1: Secondary Data Analysis

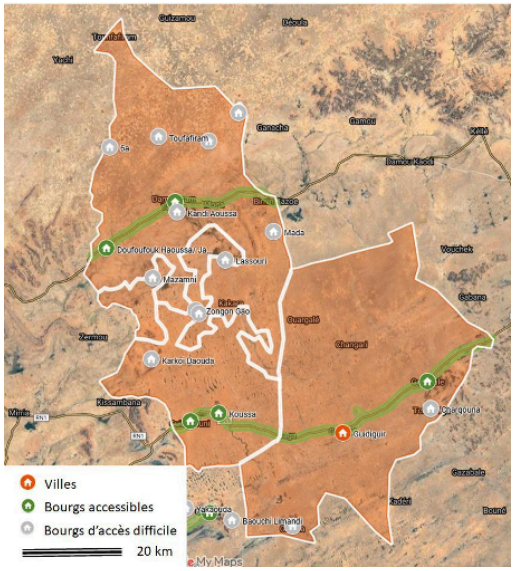
One tool is to analyse existing nationally representative datasets focused on indicators or areas of interest. Secondary analysis is often used in conjunction with qualitative data collection. The table below summarises some of the most useful datasets that include data by time and space.

	Data over Time	Data over Time and Space
Sanitation Data	➔ Joint Monitoring Programme (English only)	➔ WASH Atlas (Spatial Data Repository) Selected countries (Auto translation tool on page) ➔ SanPlan Selected countries (English only)
Census and Development Data	➔ World Bank Open Data (English, French)	➔ Integrated Public Use Microdata Series (IPUMS) (English only)

This approach has been followed in Niger (PRO-WASH, 2022), Haiti (see Box 2: UNICEF, 2020) and Bangladesh (iDE 2016) among others.

→ Tool 1 Example

Where a project has open boundaries (see section 1.1), geographic information system (GIS) tools can help identify priority areas for the MBS activities. GIS tools can be used to identify the most densely populated, most accessible zones characterised by a more dynamic economy, making them easier to tap into to develop a sanitation market that is currently nonexistent or, at best, barely existent. For example, the online SanPlan mapping tools help overlay maps to identify target areas in selected countries. This example from Niger is partnered with detailed instructions in a webinar using Google Maps.



Source: PRO-WASH, 2022

- Ville = **City**
- Bourgs accessible = **Accessible towns** (targeted in MBS strategy Phase 1)
- Bourgs d'accès difficile = **Non-accessible towns** (not targeted in MBS strategy Phase 1)

Example of market modeling outputs for the Maradi region (Niger). The segments targeted by the partners' chosen strategy are localised on the map (accessible towns), which also shows the cities on which supply chains can rely (link to the online map).

→ Tool 2: Qualitative and Participatory Research

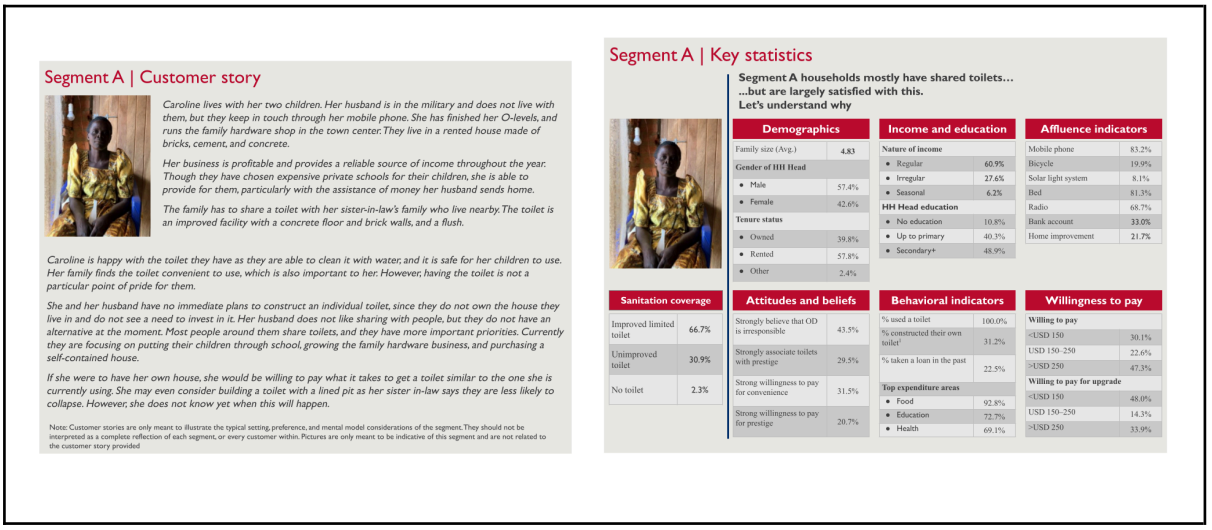
Detailed qualitative research into the opportunity, ability, and motivation of households has been used extensively to understand target clients. This includes qualitative research activities such as in-depth interviews and discussions, focus groups, observations, surveys and informal assessments. Participatory tools are a useful starting place as community members might be better able to use visual tools to express their perspectives than speaking alone. Studies may speak with users and non-users alike. A few compendiums of relevant participatory tools are highlighted below.

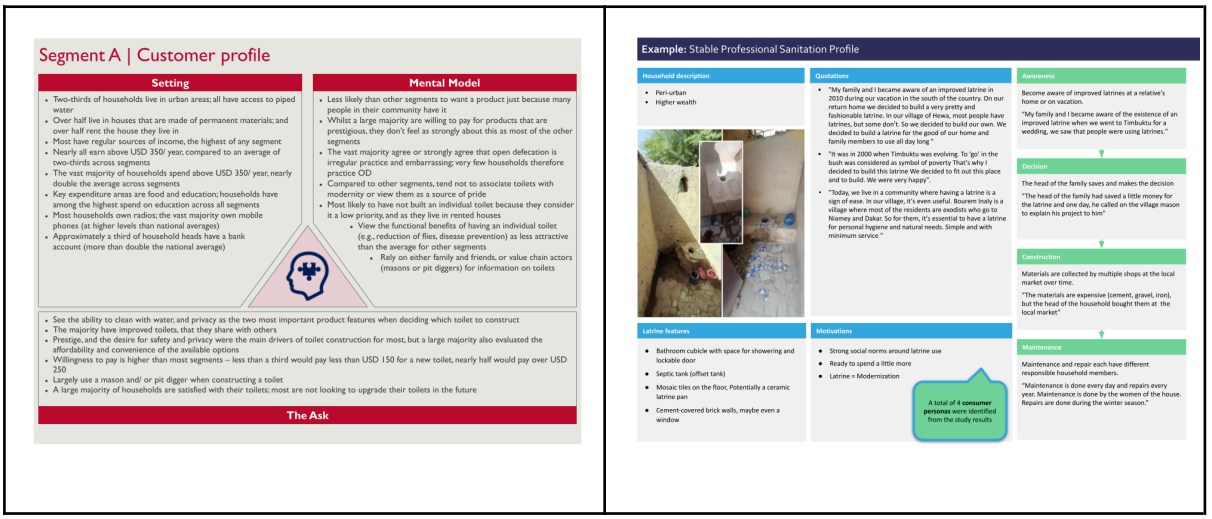
This approach has been followed in Zimbabwe (PRO-WASH 2022), Mali (forthcoming), Haiti (see Box 2: UNICEF 2020), Cambodia (iDE 2019), and Bangladesh (iDE 2016,) among others.

→ Tool 3: Personas

Once the market segments have been identified it is important to communicate them both to project staff, but also to the entrepreneurs. One simple way to do this is through personas.

Personas are fictional characters created from market research that represent the different user types that might use the service, product, site, or brand in a similar way. They are often visual summaries of each key client segment. A persona captures the characteristics of a person who is most likely to either make a purchase or drive a purchase decision. Creating personas helps product and marketing teams understand users' needs, experiences, behaviours, and goals to inform product and service design, as well as communication and sales strategy. Personas are often built from empathy maps which are a useful way for teams to consolidate qualitative insights.





- **Caption:** Example Personas
- **Sources**: WASHPaLS and Albarka in Mali (unpublished)

Reflection question

Have you ever used these tools? Who may you miss with such tools?

None

-

2.5 Segmentation and targeting case studies

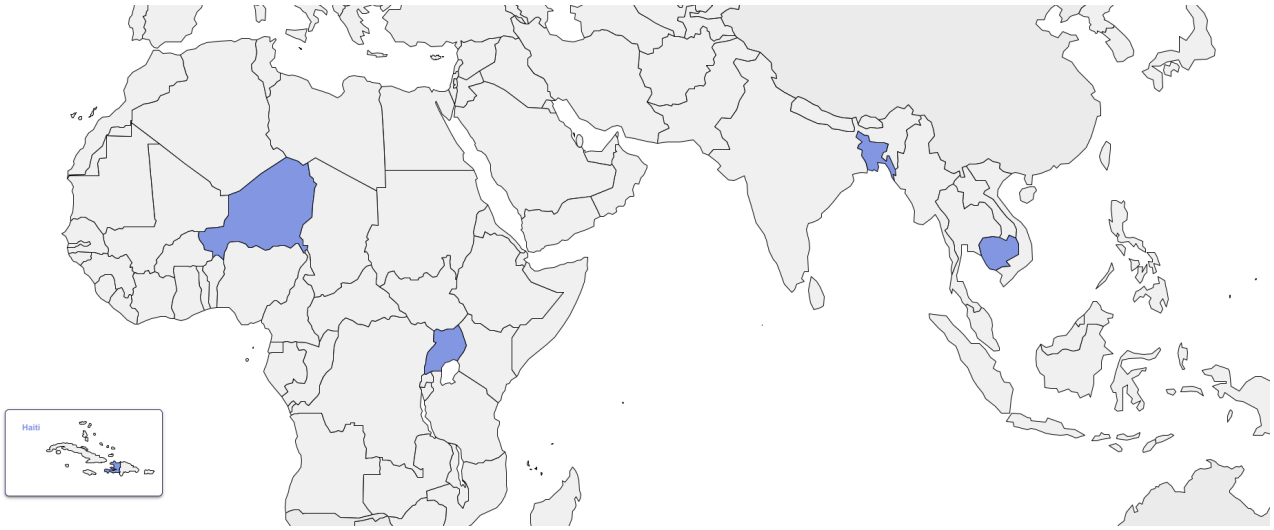


A woman stands in front of her two stall shower and latrine in rural southern Zimbabwe | ***Source***: *PRO-WASH & SCALE in the Takunda project*

What can we learn from other contexts about segmentation and targeting?

There are many good examples of segmentation in the sanitation sector. We have selected a few case studies for you to explore which show geographic variety. Additional case studies can be found at the end of the session.

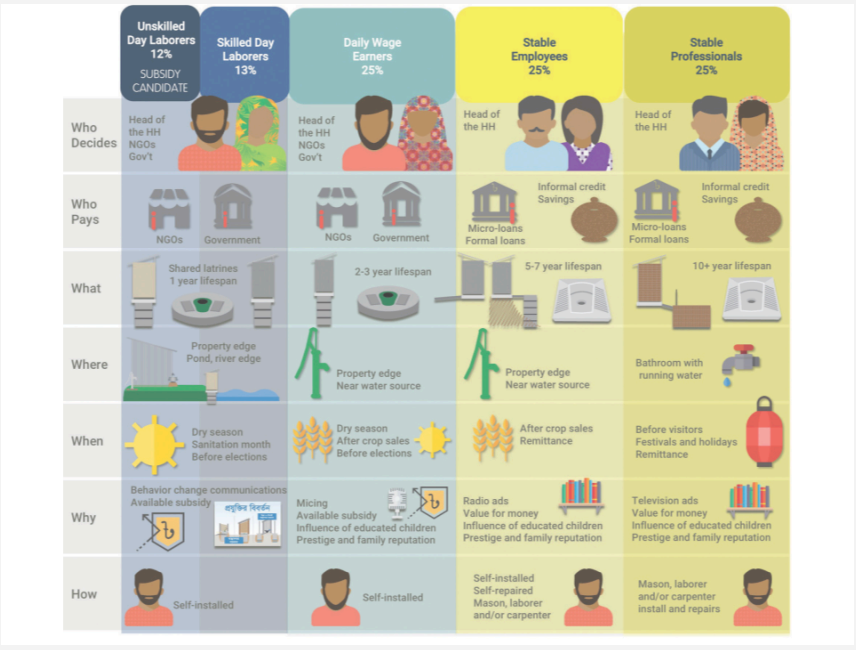
Select two case studies that best relate to your interest and spend the next 15 minutes exploring them. Start by reading or watching the summary and if you would like to explore further explore the linked resources. For longer external resources - you do not need to read word-for-word, but skim over the structure and organisation of the report.

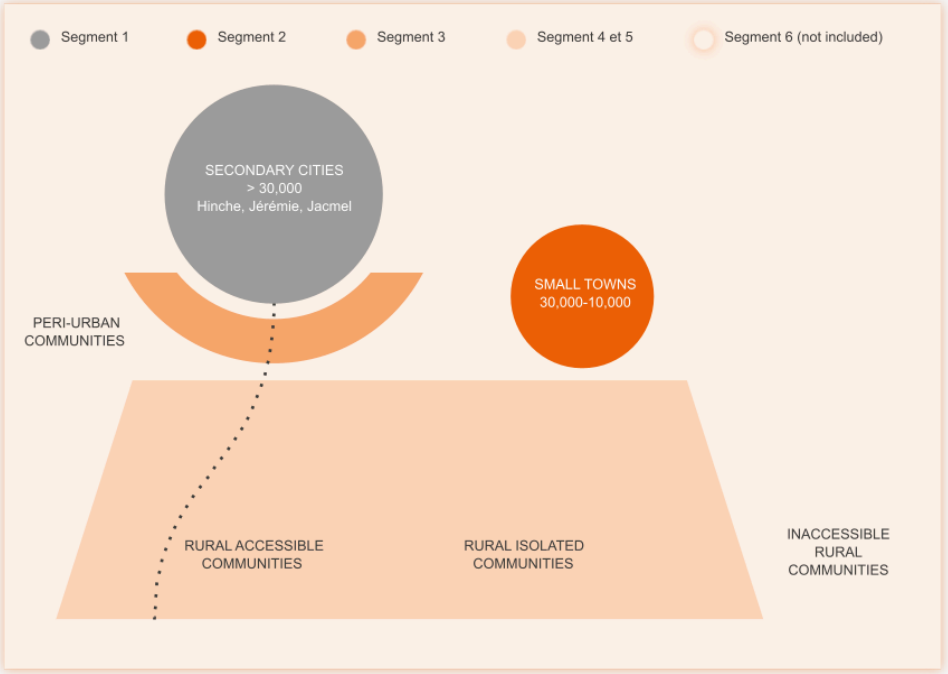


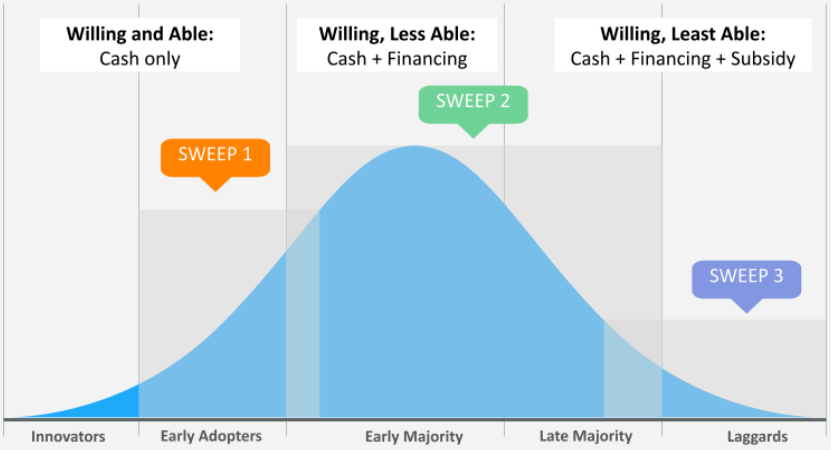
Peri-Urban Niger	In the Maradi and Zinder regions of Niger in 2021, an applied research project initiated by the USAID/BHA-funded PRO-WASH Activity and carried out by Population Services International (PSI) and the PRACTICA Foundation used secondary data to assess the size of the sanitation market and create market segments.

	The process included four steps: 1. Compiling key data, including demographic and sanitation data from secondary sources 2. Using this data to evaluate the market size and market for improved latrines 3. Break this market size into smaller market segments based on geography and existing behaviours 4. Characterising the market segments through additional research through aspects like wealth quintiles, accessibility, and profitability This process assisted the Niger Resilience Food Security Activities (RFSAs) in identifying the target markets in which to begin their MBS activities. This process has also helped RFSAs to demonstrate the market potential to businesses that are interested in working in the sanitation sector. • **Learn more:** How to Assess the Size of a Sanitation Market and Segment It - Examples from Niger (English + French) (learning brief, 8 pages)
Rural Bangladesh	In 2014 in Bangladesh, iDE used market segmentation to help clarify the different types of clients in their selected districts and to link these to consumer characteristics, product systems, demand strategies, and delivery models. Additionally the process helped to clarify which types of consumers would be eligible for subsidy in areas where subsidy was linked to nepotism. This process used secondary data, backed up by consumer research, to help understand the size of the market and create clear market segments. For simplicity, these market segments were described by the types of jobs that the different segments held: Stable Professionals, Stable Employees, Daily Wage Earners, Skilled Day Laborers, and Unskilled Day Laborers. This final category, representing 12% of the population, represented those eligible for subsidy. The process highlighted the limitations of existing subsidy programs, which often fail to reach the ultra-poor households they aim to assist. It emphasised the need for a more nuanced

	CITIES	TOWNS	VILLAGES
Households using toilets	Segment 1 7,600	Segment 3 4,800	Segment 5 32,300
Households practicing OD	Segment 2 860	Segment 4 32,080	Segment 6 215,900



	approach to market segmentation, allowing for targeted subsidies and effective messaging to stimulate demand among different income levels. • **Learn more:** Market Segmentation: a more effective approach to balance subsidies and private sector engagement in Bangladesh (tactic report, 8 pages)
Rural and Small Towns Haiti	In 2017, the World Bank commissioned a national market research study in Haiti to analyse the sanitation service chain in rural areas and small towns, aiming to provide programming recommendations for the Sustainable Rural and Small Towns Water and Sanitation Project. The study utilised a sampling and segmentation methodology developed by Aquaya, focusing on three strategically important departments selected by the Direction Nationale de l'Eau Potable et de l'Assainissement (DINEPA). Over six months, the research involved broad geographic segmentation of the rural landscape, identifying three main segments: small towns, peri-urban communities, and dispersed rural areas.  The methodology included cross-referencing terrain types and other data to select nine communes for in-depth research, ensuring the representation of various terrains and existing sanitation programs. In-depth interviews and focus group discussions were conducted across 20 villages, alongside interviews with local businesses involved in sanitation. The final market segmentation model identified one urban and five rural sanitation market segments, recommending a targeted Market-Based Solutions (MBS) strategy for segments with similar household preferences and favourable market conditions. This approach aimed to enhance sanitation access and improve health outcomes in the selected areas. • **Learn more:** Segmenting and sampling the rural landscape for national market research in Haiti (Box 2: UNICEF, 2020 2 pages)
Rural Cambodia	iDE in Cambodia leveraged a "three sweeps" segmentation model to effectively reach different market segments - divided by a household's willingness to adopt a new technology and using diffusion theory.



In the first sweep, sales agents targeted early adopters who were willing to pay upfront for sanitation products. The second sweep focused on the early and late majority, utilising targeted marketing and financing options to engage households with less cash on hand. Finally, the third sweep was aimed at the remaining households, including the poorest, through targeted subsidies and low-burden financing mechanisms.

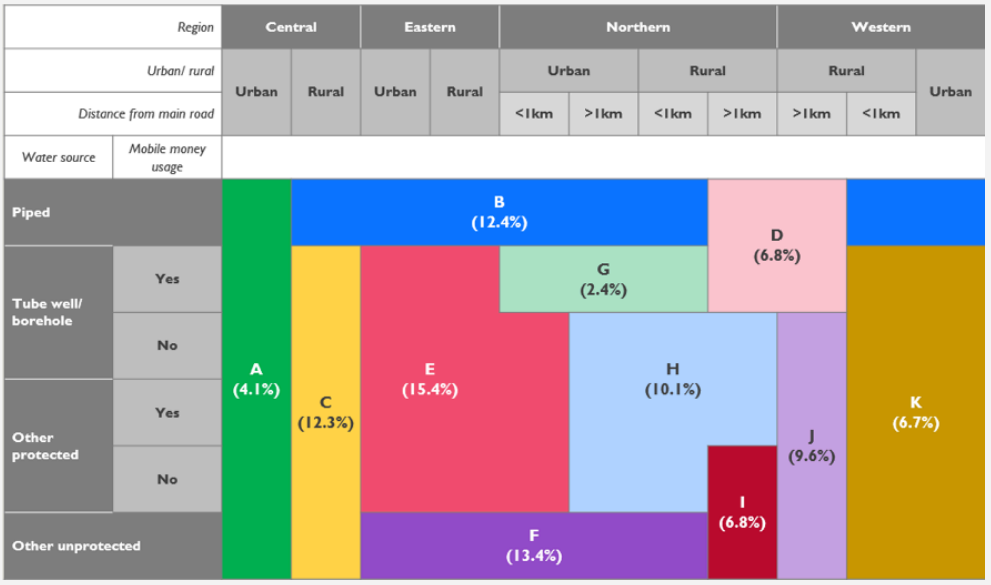
The strategy highlights iDE Cambodia's use of door-to-door sales over group presentations, as personal engagement tends to yield better results. By continuously training sales agents and adapting to market needs, iDE has sought to enhance sanitation access while ensuring that the market remains sustainable and equitable for all consumers.

- **Learn more:** A sweeping sales strategy - Cambodia (external blog)

Uganda

In 2018 and 2019, USAID's Uganda Sanitation for Health Activity (USHA) leveraged census data, household surveys, and collaborative workshops to help create and disseminate market segments to better coordinate government and development partner initiatives.

USHA analysed the results of a household survey to categorise the potential sanitation market in Uganda—specifically, households lacking basic facilities—into 11 distinct groups. These groups were identified based on statistically significant differences in their attitudes, beliefs, preferences, and behaviours.



By defining market segments that are both internally consistent and externally distinct using

	relevant (statistically significant) and actionable variables, the study enabled: • Prioritisation of segments with the greatest potential for impact. • Identification of leverage points and potential activation strategies for each segment. • Development of tailored interventions that align with the specific attitudes, preferences, and behaviours of each group. • **Learn more:** Customer Behaviour in the Uganda Sanitation Marketplace (external blog)

Summaries of each case study were generated using Microsoft Co-pilot or copied from the case study summary (indicated through quotation marks).

Connect: Targeting with data



How might you identify potential clients?

In this session, we have had a rapid overview of approaches used to identify potential sanitation clients and how to segment them into actionable sub-groups. In the next sessions, we will reflect on how these market segments connect iteratively to sanitation products/services, demand strategies, and service models.

1. Take 5 minutes to explore one of the recommended secondary data platforms (Joint Monitoring Programme, World Bank Open Data, WASH Atlas, or SanPlan.
2. Below, reflect on how you might use one of these tools to help better understand, report, or map potential clients.

None

QUIZ: Check your knowledge



Check your knowledge of Session 2

Question 1: Using the framing from this course, who are potential customers who are offered services through enterprises? Select one.

- ☐ Customers
- ☐ Consumers
- ☐ Target clients

Question 2: What is NOT a client segmentation approach discussed in this course? Select one.

- ☐ Geography
- ☐ Demography
- ☐ Opportunity
- ☐ Economics
- ☐ Motivation
- ☐ Integration
- ☐ Required innovation

Question 3: What are the three core aspects of consumers that MBS activities should consider? Select three.

- ☐ Opportunity
- ☐ Skill
- ☐ Ability
- ☐ Climate
- ☐ Motivation
- ☐ Perspective

Learn More

Key Resources

	Introduction to Market-Based Sanitation Training (PDF, 63.4 MB | English and French) PRO-WASH's Introduction to Market-Based Sanitation training package includes detailed instructions on consumer market research, including the use of GIS, personas, and empathy mapping. PRO-WASH, 2023
	Consumer Behavior: How do we understand sanitation consumers in target markets? This Guidance Note includes information on how consumer market research and common consumer motivations, desired product attributes, and barriers to investing in improved latrine designs. UNICEF (Jenkins and Pedi) 2010, GUIDANCE NOTE 2
	Sanitation Marketing for Managers: Guidance and Tools for Program Development This guidance provides comprehensive instructions for preparing, planning, and managing market research. It includes example interview and focus group guides, tools, analysis templates, probing techniques, sampling criteria, selection methods, and examples of outputs based on applications in Benin, Ghana, Uganda, and Tanzania. USAID's 'Hygiene Improvement Project' (HIP) 2010.
	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) This guidance provides practitioners with simple, easy-to-follow, and evidence-based resources to plan, design, implement, and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021

Session 3: Designing Products and Services

Session 3: Designing products and services



Masons and an entrepreneur install the easy latrine in Cambodia | ***Source**: iDE Cambodia*

In this session, you will:

1. **Clarify** the definition of a sanitation product system
2. **Discover** how processes such as Human-Centred Design can support sanitation product systems
3. **Explore** how different market segments connect to product systems
4. **Review** opportunities to reduce product system costs
5. **Reflect on** examples of sanitation product systems from around the world



3.1 Defining the product system

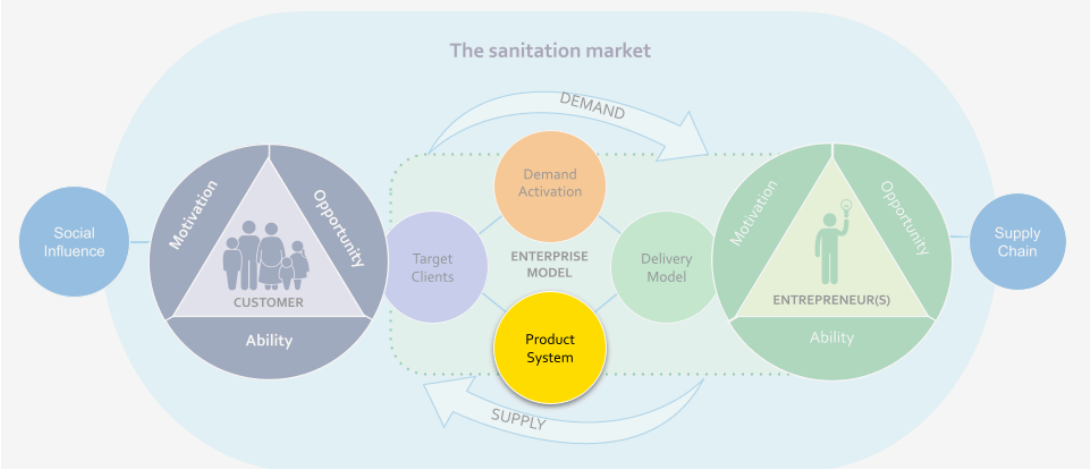


A focus group discussion helps to clarify the product system in rural Zimbabwe | ***Source**: PRO-WASH & SCALE and the Takunda RFSA*

Teams using MBS typically partner with the private sector and potential customers to co-design sanitation product systems (products and services) that are desirable to consumers, technically feasible, and viable in the market. The research and design costs are often paid for by the MBS activity and then passed on as open-source designs to the private sector. Sometimes, private sector companies may also support product design through patented components such as latrine pans, slabs, or treatment systems.

What is a product system?

Building on the target client and understanding customers, we now move counterclockwise around the sanitation market diagram to the product system. Take a moment to revisit the sanitation market diagram below, which highlights the **Product System**. See how the product system is deeply linked with the **Target Clients** and the **Service Model**.



- **Caption**: Sanitation market conceptual framework - focused on the **Product System**
- **Source**: Adapted from USAID, 2018.

A sanitation **Product System** refers to the curated package of materials, components, and labour and is traded between customers and entrepreneurs.

It is worth noting that a more holistic name for this part of the framework would be **product and service system**, but this becomes quite wordy. For this course, we use 'product system' - this implies both the products and services - or **WHAT** is traded between customers and enterprises.

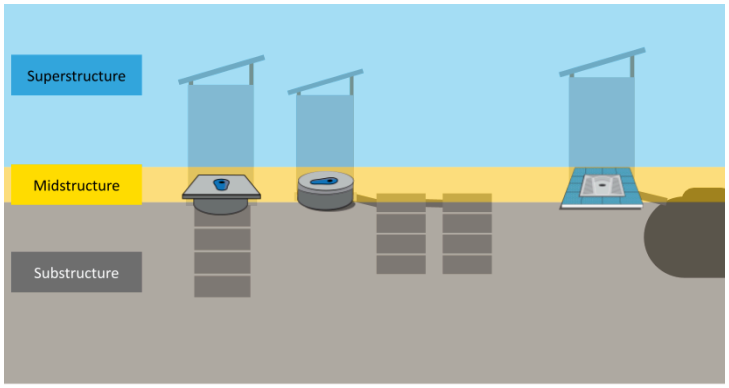
This product system package (product and service) is highly contextualised and some contexts have specific standardised sanitation product systems. A product system is often selected or designed using principles of human-centered design. While in some sanitation markets, consumers and entrepreneurs trade unimproved sanitation systems, in MBS there is a strong emphasis and minimum requirement for improved sanitation facilities that can deliver safely managed sanitation in the specific context.

What are some common parts of a sanitation product system?

Let's start with the *materials and components (product)* part of the sanitation product system

Most sanitation facilities contain three parts: above-ground, ground-level, and below-ground, known as the superstructure, user interface, and substructure, respectively. These elements should be assembled at the customer's home and correctly installed in order to provide access to improved sanitation. However, these three parts do not always align with the product system that is traded in a sanitation market.

Products - Components and Materials	
Midstructure	**Part of the sanitation facility that the user stands or sits on, such as a platform or slab**. Squat pans or seats are often made of plastic, ceramic, or cement. These pans are sometimes cast or installed into a slab of plastic, concrete, or metal.
Superstructure	**Part of the sanitation facility that provides cover, privacy and safety.** Wood, thatch, metal sheeting, bricks, or plastic components to make walls, doors, and roofs.
Substructure	**Part of the sanitation facility that contains and sometimes treats the waste.** Brick, stone, plastic, or cement components for the sub-structure to keep the sub-structure from caving. This can include pits, septic tanks, and sewer components.



Main sanitation facility components with the sub-structure, the user interface, and the superstructure | ***Source**: Adapted from iDE Cambodia*

In other courses or documentation, you might see a sanitation facility described as a **toilet**. But the word toilet can also be a bit confusing as it often refers to just the user interface. As such, throughout the course, we refer to the space that is used for urination, defecation, managing menstruation, and handwashing as a **'sanitation facility.'** Sometimes, these spaces are also used for bathing. Sometimes, they are inside a dwelling, attached to a dwelling, or detached from a dwelling. When they are detached from a dwelling they are often called a '**latrine**' and often are not connected to running water or sewerage.

Let's now look at the *labour* (*service)* part of the sanitation product system

The types of services embedded into the safe delivery and management of sanitation will be directly linked to your context. In this way, it is often very difficult to untangle what conceptually fits in the 'product system' box and what fits in the 'service delivery' box. One way of thinking about it is through **WHAT is provided (product system including services)** and **HOW it is provided (service model).** In our next session (Session 4), we will explore how local enterprises provide these services. But first we need to understand **WHAT the services actually are**.

Services	
Facility siting	Selection of an appropriate location for a sanitation facility. This is especially important with pit latrines to avoid contamination of groundwater sources.
Contextual adaptation	Enterprise-led adaptation of a sanitation facility for a specific environment or user group such as high groundwater, flood-prone, or disability friendly.
Superstructure construction	Construction of the sanitation facility's superstructure. This is an important aspect to ensure the safety and privacy of women and girls.
Pit digging and substructure construction	Digging of the underground space in which to install pit lining materials or septic systems.
Superstructure construction	Installation of a slab, floors, or user interface components. A cleanable midstructure is important to maintaining an improved sanitation facility.
Emptying of pit or septic system	Safe removal of faecal matter from a pit, holding tank, or septic system. This can be done by hand or through a pump (manual or vacuum truck).
Replacement of holding tank	Primarily in urban environments, the removal and replacement of container-based sanitation systems.
Repairs	Repair or maintenance of a sanitation facility, often after storms or flooding.



Reflection question

How might a product system be linked to a particular client group?

None

Read More - What is a safely managed sanitation facility?

Remember from Course-1 that MBS supports households to **construct, use,** and **maintain** improved sanitation facilities **plus safely manage** their waste. Together, these four parts make up a sanitation service.

Good sanitation, called the **'safely managed'** (WHO/UNICEF 2018) service level, is defined as using an improved sanitation facility that is not shared with other households, where human excreta (faeces and urine) are safely disposed of onsite or transported and treated off-site. Safely managed sanitation typically needs a safe and resilient sanitation **service** to accompany improved sanitation facilities to address the collection and transport (for on-site sanitation), treatment and reuse or disposal of the treated human waste.

An **improved** (WHO/UNICEF, 2018) sanitation facility hygienically separates excreta from human contact. This includes flush/pour flush toilets connected to piped sewer systems, septic tanks or pit latrines, pit latrines with slabs (including ventilated pit latrines), and composting toilets. With pit latrines, improved facilities have a 'slab' that completely covers the latrine pit, is constructed with durable materials, and is easy to clean. Slabs can be made of concrete, bricks, stone, fibreglass, ceramic, metal, wooden planks, durable plastic, or other similar materials. While not included in the standard global definition, most practitioners also include the importance of unshared latrines, a durable superstructure (latrine shelter or small building) that makes the latrine private and safe, and a tight-fitting lid that keeps away flies and smells. Options for handwashing, cleansing (water or toilet paper), and menstrual management are also frequently included. Be sure to check your country's standards, as improved sanitation might be defined differently.

Historically, MBS has focused on both **Type 1** (excreta are treated and disposed of *in situ)* and **Type 2** (excreta are stored temporarily and then emptied and transported for treatment off-site) sanitation systems. However, there are some emerging examples of using MBS approaches for **Type 3** (sewered) systems.

3.2 Crafting an appropriate product system



A sanitation enterprises prototypes a new superstructure design in rural Bangladesh | ***Source:*** *iDE Bangladesh*

How can we create a good product system?

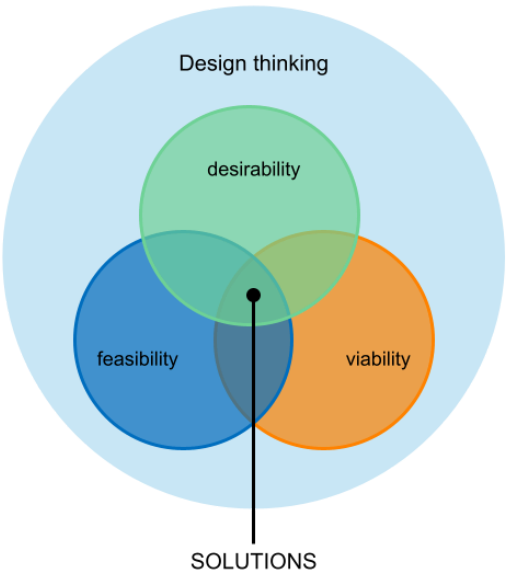
In collaboration with the private and public sectors, MBS practitioners aim to craft a contextualised sanitation product system. One of the most powerful tools for sanitation product design is Human-Centered Design (HCD), which has been used around the world to craft appropriate sanitation product systems. Within MBS, HCD is to design solutions that work for the end user in the sanitation market system, often balancing trade-offs. With HCD, teams aim to reduce costs, improve value, and simplify processes.

Aligned with Design Thinking, the process of HCD aims to balance the desirability, feasibility, and viability of solutions. It balances the trade-offs between what people really want and what is realistically possible.

Desirability: What do people really want? What would solve their problem?

Feasibility: What is technically possible? What do people actually need? What makes sanitation safely managed?

Viability: What is realistic in the market system? What is economically valid?

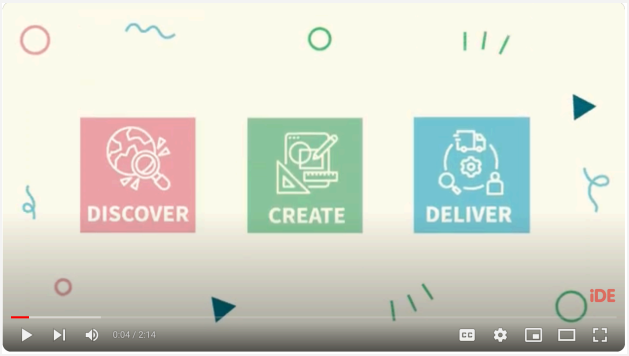


- **Caption:** Venn diagram illustrating solutions at the intersection of desirability, feasibility, and viability
- **Source**: Adapted from IDEO

.

What are the stages of HCD?

Watch this video to learn more about the three phases of HCD: Discover, Create, and Deliver (YouTube, 2:14 minutes).



What is HCD?

HCD follows three phases: Discover, Create, and Deliver. In MBS, product design research is often integrated with formative market research, prototyping, and piloting.

- **Discover** - Research with customers, entrepreneurs, and key stakeholders helps to identify key gaps in existing product systems, capacities of the private sector, and interest from customers. Sometimes, this phase is also called the 'Hear' or 'Inspiration' phase.
- **Create** - Prototyping and rapid feedback from customers, entrepreneurs, and key stakeholders to understand the challenges and opportunities with prototyped products and services. Sometimes, this phase is also called the 'Ideation' phase.
- **Deliver** - Piloting and scale-up of the product system through the enterprise strategy. Sometimes, this phase is also called the 'implementation' phase.

During the 'Discover/Hear' phase of an HCD process, a team explores what sanitation technologies, construction materials, components, and building services are currently available, their costs, and what people think about them. In many cases, what is available does not meet the needs of the target market. The 'Create' phase is an iterative design process to test and refine suitable sanitation product systems that meet your target customers' needs and preferences.

The design processes address the user's entire experience with the product system – including how it will be purchased, packaged, transported, installed, used, and maintained. In designing the 'right' sanitation product systems, you will consider technologies, user preferences, and the capacities and needs of local businesses that will make, deliver, and install the package options.

The right product systems should be more attractive to families, more affordable, easier to purchase, and quicker to install for your target customers. They should also be technically feasible and viable for local businesses to offer, sell, deliver, install, repair, and manage.

The online HCDforWASH platform has many tools, resources and examples from teams using HCD to support the development of sanitation products and services. HCD has been used in MBS to also design service models and demand strategies

A gentle warning: It's not always about a shiny new design

We often think that a fun new sanitation design will solve all the problems with a product system. However, in many MBS programs, a small tweak or change to the product system or service model is actually more effective. For example, during market research in the 'Hear' phase, teams have identified that the real failures include disconnects in information or capacities.

In the SCORE program in Bangladesh, 'Hear' phase market research identified that the true product system gap was in **how latrines were installed** in riverine communities. Local enterprises did not offer installation as a service, leaving installation to households and leading to poor quality and often dangerous latrines. In this case, the product system did not require much refinement, rather the services was expanded to include proper installation.

In the Takunda activity in Zimbabwe, 'Hear' phase market research **identified communication and information gaps** between public, private and development stakeholders - particularly with reference to a low-cost version of the national standardised latrine. In this case, the product also did not require refinement. Instead the project sought to clarify and document design standards for low-cost latrines. These communication tools were then incorporated into the systems strengthening and enterprise capacity strengthening activities for the project.



Reflection question

Can you think of a sanitation product system that is technically feasible but not desirable or viable?

None

Learn More - Ensuring safely managed sanitation in the design phase

Technical feasibility requires teams to think not only about ensuring improved sanitation, but also ensure that sanitation systems are safely managed. The type of safely managed sanitation will depend on your context. Here are a few design considerations (written as HCD "how might we" statements) based on the different types of systems. The list does not aim to be exhaustive.

Type 1. Onsite treatment

- How might we support households to safely cover or close off a full latrine substructure and move the midstructure and superstructure to a new place?
- How might we support households to use their full latrines as a resource - such as Arborloo?
- How might we ensure that pit lining is adequate (durable enough for the expected lifetime but also not over-engineered, protected from flooding)?

Type 2. Removal and offset treatment

- How might we ensure that pits can be safely emptied on a regular basis?
- How might we ensure that latrines are sited in accessible locations by vacuum trucks?
- How might we dewater sludge in the pits to decrease treatment time/cost?
- How might we ensure that container-based sanitation systems are easily moved so that service providers don't come in contact with waste?

Type . Sewered removal

- How might we ensure that sewer pipes can be easily retrofitted into existing systems?

- How might we reduce illegal connections that destabilise the system?

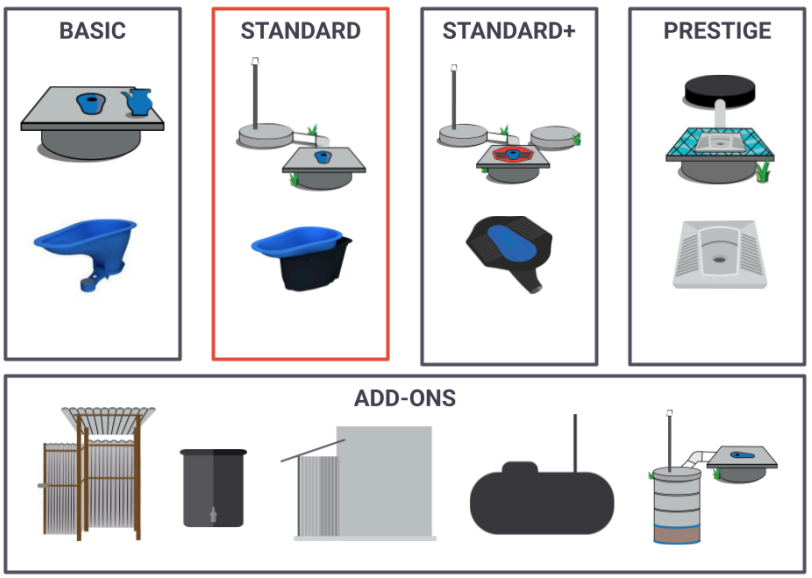
3.3 Matching market segments to product systems



A product catalogue of sanitation facilities for rural Bangladesh | ***Source:*** *iDE Bangladesh with WSP*

How can we match product systems with different client personas?

As teams are designing product systems, it is also recommended to ensure that there are appropriate sanitation systems for the different personas identified during the target client selection. For example, an MBS activity might have different product systems for ultra-poor, hard-to-reach, or wealthier client segments. However, having too many product systems can add more complexity to the market system and overwhelm consumers to do nothing because there is too much choice. One way around this is to have a standardised base product that can be added to or slightly modified for different market segments.



Exploring sanitation designs for differently abled individuals

We often think about disability-friendly sanitation options as a separate aspect or even a separate project, but in reality, nearly everyone will have a form of disability in their lifetime. Sometimes, these are more permanent or acute challenges, or sometimes, they can be related to an injury or health concern. Additionally, women who are pregnant and the elderly have unique and important needs.

Some programs have found success in ensuring that local entrepreneurs are trained on how to work with households to install appropriate add-ons or augmentations.

- In Bangladesh, the SHOUHARDO III, with the iDE team, piloted the use of yellow and glow-in-the-dark paint options around the squat hole to help those with reduced vision and those using the latrine at night.
- Also, in Bangladesh, the SanMarkS team explored options for foldable raised seats for those with difficulty squatting.
- In Zimbabwe, the Takunda project is working to link local suppliers of low-cost fibreglass latrine seats that can be easily retrofitted onto latrines in support of elderly family members.
- In Cambodia, the iDE team explored options to strengthen shelter design options specifically for people with disabilities. More on equitable access to sanitation and reaching the most systemically marginalised in Session 9.

Reflection question

What types of market segments might be relevant for each of these four sanitation systems above?

None

3.4 Improving product system affordability



A latrine slab under construction in rural Zimbabwe | ***Source:*** *PRO-WASH & SCALE and Takunda*

How might MBS activities support affordable product systems?

Reducing costs for service providers also reduces costs for consumers, leading to more affordable options. Affordability is usually identified by Market-Based Sanitation target households as one of the key barriers to investment, so addressing costs of the product system is essential. Cost drivers will vary from country to country, however, transport costs and labour are often significant contributors to high cost of improved toilets in rural markets.

Costing of product systems by entrepreneurs is covered in other tools and resources such as the SanEnt Toolkit and Guidance on Rural Sanitation Costing. This section instead aims to provide guidance to teams supporting enterprises through MBS activities by conducting research and design for sanitation products and services.

This list explores common product system tweaks drawing from UNICEF 2021. This list is not exhaustive.

Strategy	Definition
1. **Simplify and right-size the engineering.** 2. **Standardise a portfolio offering.** 3. **Aggregate solutions.** 4. **Start by thinking about emptying.** 5. **Consider the lifecycle of the materials.**	1. Typically, sanitation components are designed for sewered (Type 3) systems and are over-engineered for pour-flush or waterless systems (Types 1 and 2). Simplifying the engineering of components and right-sizing them for MBS contexts can reduce costs and right-size systems. This can include low-water pour-flush systems, smaller latrine pits, smaller slab dimensions, and thinner slabs. 2. Often, sanitation systems are custom-built for each installation and this adds costs and complexity. It is also common for households to design their own systems - without understanding the basics of plumbing. Standardising a base model with one or two upgrading options can make purchasing and construction more cost-effective for households and enterprises. The mid-structure or user interface of the product system is often what is standardised - removing potential issues to safety and hygiene.

	3. Typically, households are responsible for purchasing and transporting all of the many toilet components, which can be expensive and logistically complex. Aggregating sanitation products and labour, can simplify and demystify the purchase and construction for both households and enterprises. 4. Often when households manage the design and construction of their own systems, they forget about how to safely manage the waste through emptying or *in situ* treatment. Including access points for emptying the sub-structure or opportunities to convert a single pit into an alternating twin pit system can reduce additional costs and complexity during sanitation facility use and management. 5. The lifecycle of a sanitation facility is also important to consider. A system that needs to be replaced annually will cost much more to customers over the long term. Different materials and installation practices will be required for a system that is intended to last 10-20 years.



Reflection question

What other ideas do you have to reduce product system costs?

None

3.5 Product design case studies

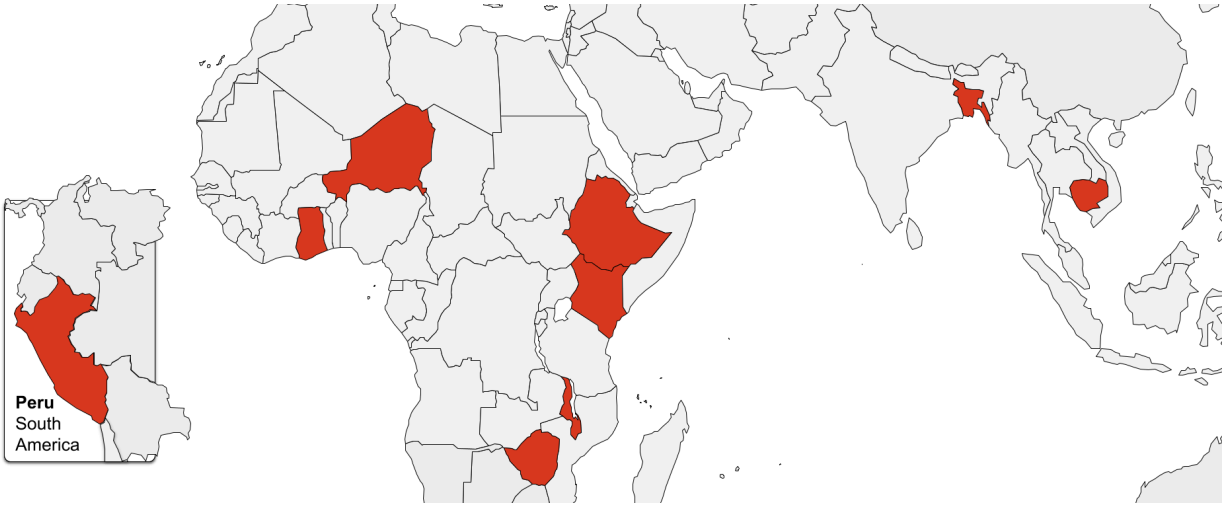


A series of product design activities in rural Bangladesh | ***Source:*** *iDE Bangladesh*

What can we learn from other contexts about product system design?

There are many good examples of product system design in the sanitation sector. We have selected a few case studies for you to explore, which show geographic variety. Additional case studies can be found at the end of the session.

Select two case studies that best relate to your interest and spend the next 15 minutes exploring them. Start by reading or watching the summary, and if you would like to explore further explore the linked resources. For longer external resources - you do not need to read word-for-word but skim over the structure and organisation of the report.



Niger - Small Towns	This video explores the Human-Centred Design (HCD) process supported by PRO-WASH in the Maradi and Zinder regions of Niger and was structured around four key phases: Inspiration, Co-Creation, Exhibition, and Implementation. **WATCH (video 3:44 minutes):** Human-Centered Design for Market-Based Sanitation in Niger (English + French)

	• **Learn More:** How to Use Human-Centered Design for Sanitation Products in Niger (English + French) (learning note, 9 pages)
Zimbabwe - Rural	This video describes the Human-Centred Design (HCD) process supported by PRO-WASH with the Takunda Resilience Food Security Activity to enhance latrine construction and utilisation in four rural districts of Zimbabwe (Buhera, Chivi, Mutare, and Zaka). **WATCH (video 3:44 minutes):** How can Human Centered Design solve longstanding sanitation challenges: A case study from Zimbabwe (English + French) • **Learn More:** Human-Centered Design Approaches for Safe and Sustainable Latrine Construction and Utilization in Communities in Zimbabwe (learning note, 7 pages | English and French)
Ghana - Urban	The Clean Team initiative originated from the Uniloo project, a collaborative effort involving WSUP, Unilever, and design consultants IDEO. This project targeted low-income neighbourhoods in Kumasi, Ghana, where many residents lack access to private toilets and rely on unsanitary public facilities. In the first phase, conducted in late 2010, IDEO employed Human-Centred Design techniques, such as inspiration cards and shadowing, to explore the sanitation needs and aspirations of the community. The following six weeks in early 2011 were dedicated to developing toilet prototypes and corresponding business models. Four distinct prototypes were introduced in Kumasi, each placed with a different family. After several days, the team returned to collect feedback, clean the toilets, and test the prototypes with new families. This phase also aimed to gather insights on user preferences regarding toilet placement within the home, as well as considerations for maintenance, pricing, and branding. The toilets and the removal service have been further refined over the years, taking into account regular feedback from customers. • **Learn More:** Clean team, a human-centred approach to sanitation: Initial trails in Ghana. Resource Document (practice note, 2 pages | English)
Bangladesh - Rural	This video, developed with Strengthening Household Ability to Respond to Development Opportunities (SHOUHARDO) III Resilience Food Security Activity (RFSA) in Bangladesh, shows how HCD was used to shape the market assessment and used to design MBS activities. **WATCH (video, 3:45 minutes):** How can Human Centered Design help solve sanitation challenges: A case from Bangladesh (English + French) • **Learn more:** Leveraging human-centered design and market approaches for Sanitation in Complex Operational Environments (SCORE) (learning brief - 12 pages | English and French) • **Explore more:** Sanitation in Complex Operational Environments Resources (web portal | English)
Ethiopia - Rural	This video, developed by the T/WASH program, clarifies how the Sato pan, a sanitation innovation by LIXIL's SATO team, was introduced in Ethiopia. **WATCH (video 1:56 minutes):** Introducing Sato pans in Ethiopia • **Learn more:** WASH Products and Services - Innovations and Sales Performance (learning note, 48 pages | English)
Kenya - Urban	In this video Edith Karimi and Sheila Kibuthu, Sanitation Experts at Sanergy talk about the impact of the Fresh Life toilets in Nairobi slums. **WATCH (video, 2:16 minutes):** Fresh Life toilets introduced in Nairobi slums

	• **Learn more:** Fresh Life works with municipalities to deliver safe, equitable and sustainable sanitation (website | English)
Cambodia - Rural	In 2009, iDE Cambodia worked with WSP and IDEO to help design a simplified pit latrine for rural Cambodian customers. The process drew on the initial User Research Report and prototyped a variety of potential latrine designs. The report outlines four rounds of prototyping and next steps. The final version of this 'Easy Latrine' remains a success story in sanitation re-design and right-sizing. The core of the Easy Latrine can be upgraded with a variety of different substructure and substructure options. • **Learn more:** Final Report Design Project Easy Latrine in Cambodia (slide deck, 94 slides | English)
Cambodia - Challenging Environments	"In Cambodia's flood-prone communities around Tonle Sap Lake, seasonal challenges make safe sanitation a critical need. iDE Cambodia powers local entrepreneurs to provide affordable, flood-resistant Sky Latrines, transforming hygiene and reducing health risks. Through innovative solutions, collaboration with local authorities, and community engagement, iDE is paving the way for a climate-resilient, open defecation-free future." https://www.youtube.com/watch?v=V7_I_N6Jx5E (6:30 minutes | Khmer with English subtitles)
Malawi - Rural	In Malawi, an innovative sanitation initiative aimed to combine local toilet construction practices with ecological approaches to develop, popularize, and market a new range of pit toilets. The design process began with a field trip in 2001 by WaterAid Malawi and Mozambique to study EcoSan work in Zimbabwe. Inspired by the success of composting toilets there, the team initiated their own EcoSan program in Malawi. The design focused on integrating local toilet construction practices with ecological approaches. Two main types of EcoSan toilets were developed: the Arborloo and the Fossa alterna. The Arborloo is a simple, shallow pit latrine that eventually becomes a tree planting site, while the Fossa alterna is a more durable structure with alternating pits. Key to the design process was the principle of converting human waste into valuable, odor-free compost, which could be used as fertilizer. This not only addressed sanitation issues but also provided economic benefits to households. The program emphasized physical demonstrations and word-of-mouth promotion to overcome initial skepticism and popularize the technology. By 2007, over 11,000 EcoSan units had been built, demonstrating the effectiveness of combining traditional practices with innovative ecological sanitation solutions. • **Learn more:** Lessons from a low cost ecological approach to sanitation in Malawi (field note, 12 pages | English)
Peru - Urban	"Many people living in Peru dream of having a safe, well-built, multi-use bathroom that includes an adjacent area for a shower with a nice shower curtain and mirror and is constructed with bricks and cement, and has a wooden door and window...But for 2.4 million households in Peru this dream is out of reach because they have no access to credit lines, and the only way for them to construct an in-house bathroom would be by paying the entire construction cost upfront. This situation created an unexplored market estimated at $500 million – an amount large enough to attract private-sector investors. This great market opportunity allowed a team from the World Bank Group's Water Global Practice, with support from the Public-Private Infrastructure Advisory Facility's (PPIAF) Sub-National Technical Assistance Program (SNTA), to design an innovative and effective solution to help Peru solve this issue by involving the local private sector. The SNTA helps subnational entities develop their capacity to access market-based financing without sovereign guarantees to improve infrastructure services.**"** • **Learn more:** How the Mi Baño is helping Peruvians attain the dream of an in-home bathroom (external blog | English) • **Learn more:** Conoce más de la iniciativa Mi Baño (video | Spanish)

Summaries were generated using Microsoft Copilot or are direct quotations.

Connect: Designing to context



How to balance what's desirable, feasible, and viable?

In this session, we have had a rapid overview of the use of Human-Centred Design processes and tools to design appropriate product systems. In the next sessions, we will reflect on how these product systems connect to service models and demand strategies.

1. Take 5 minutes to review one of the case studies that you explored in the last section or an example from your own experience.
2. Below, describe the tensions between **desirability, feasibility,** and **viability** from this case study.

None

QUIZ: Check your knowledge



Check your knowledge of Session 3

Question 1: What is NOT included in a sanitation product system? Select one.

- ☐ Materials
- ☐ Components
- ☐ Marketing
- ☐ Labour

Question 2: What is NOT an aspect to balance in sanitation product system design? Select one.

- ☐ Possibility
- ☐ Desirability
- ☐ Feasibility
- ☐ Viability

Question 4: True or false.

Teams should design one product system for all market segments. Select one.

- ☐ True
- ☐ False

Question 5: True or false.

A project should prioritise designing a completely new sanitation product. Select one.

- ☐ True
- ☐ False

Learn More

Key Resources

	HCDforWASH Online Resource Platform (English, French) This online portal was co-created to promote innovative, sustainable, scalable community-centered solutions for WASH. This resource center provides easy-to-use tools and templates, case studies, short videos, and more. PRO-WASH and iDE
	User-centered Design in Sanitation Microsite (English) The User-Centred Design in sanitation microsite provides tips, examples and video stories from the field on how to apply design thinking to sanitation challenges. Bill and Melinda Gates Foundation
	Design Kit (English) The Design Kit includes a set of techniques developed by design firm IDEO to create new solutions, including products, services, business models and modes of interaction. Within the Design Kit, the HCD field guide and toolkit has adapted the approach to developing country contexts, resulting in new product system designs for MBS. IDEO
	Reflections on Materials and Methods for Latrine Pit Design (PDF, 1.8 MB | English) "Despite a growing focus on product design and market development for latrine products such as slabs and superstructures, innovation around affordable, effective, and marketable pit lining materials and methods has been limited.. WASHPaLS #2 conducted a two-phase study to examine existing options and potential innovations for pit lining (Phase 1), and propose an approach to sourcing, developing, testing, and examining select marketable innovations to improve pit lining options (Phase 2). This report highlights findings and recommendations from Phase 1." USAID, 2024
	Resources Guide: Inclusive Human-Centered Design (HCD) for More Impactful Programming (PDF, 218 KB English) This catalogue of human-centered design (HCD) resources was compiled to support practitioners in designing inclusive HCD for more impactful sanitation activities. PRO-WASH & SCALE, iDE, CARE, 2023
	Getting the Product and Service Right: How do we design affordable, desirable latrines that businesses can profitable produce and sell? (PDF 655 KB | English) This UNICEF Guidance Note discusses the use of design thinking and how to achieve the three objectives of desirability, viability and feasibility for a successful latrine design. UNICEF. 2013. Sanitation Marketing Learning Series: Guidance Note 5
	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) Guidance provides practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor Market-Based Sanitation interventions that build the market for

	sanitation goods and services, as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021

Additional Examples

Southern Africa	• **Field Note:** Lessons from a low cost ecological approach to sanitation in Malawi (IRC-WASH, 2007| English) • **Learning Brief:** Human-Centered Design Approaches for Safe and Sustainable Latrine Construction and Utilization in Communities in Zimbabwe (PRO-WASH, 2022 | English, French)
Eastern Africa	• **Tactic Report:** When is a slab more than just a slab? (iDE Ethiopia, 2020 | English) • **Learning Note:** WASH Products and Services - Innovations and Sales Performance in Ethiopia (USAID T/WASH, 2024 | English)
Western Africa	• **Practice Note:** Clean team, a human-centred approach to sanitation: Initial trails in Ghana. Resource Document (CleanTeam, 2011 | English) • **Guidelines**: "Sagal" Sanitation Catalogue for Senegal (ACCES, 2016 | French) • **Learning Brief:** A Market-Based Strategy for Improved Latrines and Handwashing Products in Niger (PRO-WASH, 2022 | English, French) • **Learning Brief:** How to Use Human-Centered Design for Sanitation Products in Niger (PRO-WASH, 2022 | English, French)
South Asia	• **Pilot Report**: Inclusive Latrines Pilot (iDE Bangladesh, 2017 | English) • Learning Brief: Leveraging human-centered design and market approaches for Sanitation in Complex Operational Environments (SCORE) in Bangladesh (PRO-WASH, 2022 | English, French)
Southeast Asia	• **Learning Report:** Development and marketing of affordable technology options for sanitation in Lao PDR final report (WSP and iDE, 2012 | English) • **Tactic Report:** Highlights of a latrine shelter designed in Cambodia specifically for people with disabilities. (iDE, 2017 | English) • **Design Report:** Final Report Design Project Easy Latrine in Cambodia (iDE, 2009 | English)
Latin America	• **Blogpost:** How the Mi Baño is helping Peruvians attain the dream of an in-home bathroom (World Bank, 2017 | English)

Session 4: Cultivating viable enterprises



A latrine producer in Bangladesh stands in front of his manufacturing plot. | ***Source**: iDE Bangladesh*

In this session, you will:

1. **Clarify** how the service model fits as part of the enterprise strategy in a sanitation market
2. **Learn about** the common types of service models
3. **Explore** common challenges in service models and entrepreneur support
4. **Review** three tools used to understand models and strengthen entrepreneurs
5. **Reflect on** examples of service models in existing MBS projects



4.1 Defining the service model

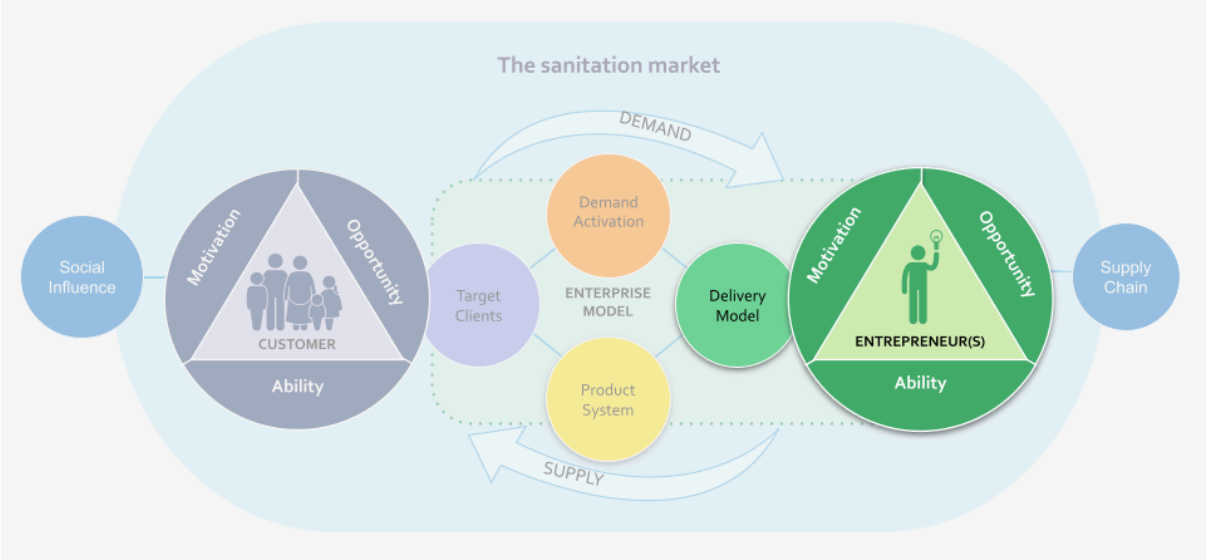


Daily laborers hired by a local entrepreneur construct a latrine slab in Ethiopia | ***Source:*** *USAID T/WASH Ethiopia*

Teams using MBS typically partner with the private sector and potential customers to co-design a service model to help ensure that quality product systems can reach target clients. The business model design costs are often paid for by the MBS activity and then passed on to local enterprises. Enterprises then adapt these business models through the coaching and support of MBS teams and partners.

What is a service model?

Building on the target clients and product system, we now continue counterclockwise around the sanitation market diagram to the **service model**. The service model is directly connected to the entrepreneur, just as the target clients are directly connected to customers. Take a moment to revisit the sanitation market diagram below, which highlights the service model in relation to the other aspects of the enterprise strategy.



Sanitation market conceptual framework - focused on the service model and entrepreneur | ***Source**: Adapted from [USAID, 2018](#).*

A sanitation '**service model'** refers to ways in which sanitation product systems are produced and distributed to customers by local businesses. In other terms, how sanitation businesses sell goods and services to the target clients. As always, the service model is highly contextualised. Some contexts have specific standardised models, in other contexts, there are social norms that restrict who can produce, transport, and distribute sanitation products.

The **entrepreneur** is the leader of a **'focal point'** business or enterprise who manages the trade of sanitation products or services. Sometimes this is a single person leading a business, other times this is a couple or partnership. However, notice that the enterprise is more than just the service model - it also includes the product system, the target clients, and demand strategy. A focal point business provides information and facilitates the purchase of components, materials, or services for the new sanitation product system. These businesses may already have existing businesses and add sanitation to their portfolio of products and services. An entrepreneur or entrepreneurial team will require the right opportunity, ability, and motivation to participate in the sanitation market (adapting SaniFOAM framework - Coombes & Devine, 2010).

- **Opportunity**: *Does the entrepreneur have the opportunity to participate in the sanitation market?* (access to capital, access to land, licences or permits to operate, opportunity costs, proximity to markets, existing market client base)
- **Ability**: *Does the entrepreneur have the ability to offer the sanitation product or service leading to a safely managed sanitation facility?* (labour, skills, tools, transportation, decision-making, self-efficacy, and social support)
- **Motivation:** *Is the entrepreneur motivated to participate in the sanitation market?* (attitudes, beliefs, values, competing priorities, and emotional and physical drivers)

In collaboration with the private and public sectors, MBS practitioners aim to build or reorganise sanitation service models to help catalyze a market for sanitation. The reorganisation relies on market research which identifies complexities, broken linkages, and lack of efficiency in the existing sanitation service model.

- **From the business side**, re-organizing reflects how different components of the sanitation facility and service are delivered to the household.
- **From the consumer side**, re-organizing reflects all the different services that are combined to achieve safely managed sanitation services. This can include multiple providers to cover the full sanitation value chain.

To foster this reorganisation of the sanitation market, MBS teams support and strengthen sanitation enterprises. Strengthening can come in capacity development, helping to form linkages with public, private, or financing actors, providing coaching or mentorship, sharing information, and even developing networks of small enterprises. In many contexts, businesses already provide some sanitation services (or somewhat similar services) to communities, and these existing enterprises are often a great place to start.



Reflection question

What types of support might a sanitation entrepreneur need to strengthen their opportunity, ability, and motivation to engage in the sanitation market?

None

4.2 Understanding service models



A husband and wife run who sanitation business stand in front of their shop in rural Bangladesh | ***Source:*** *iDE Bangladesh*

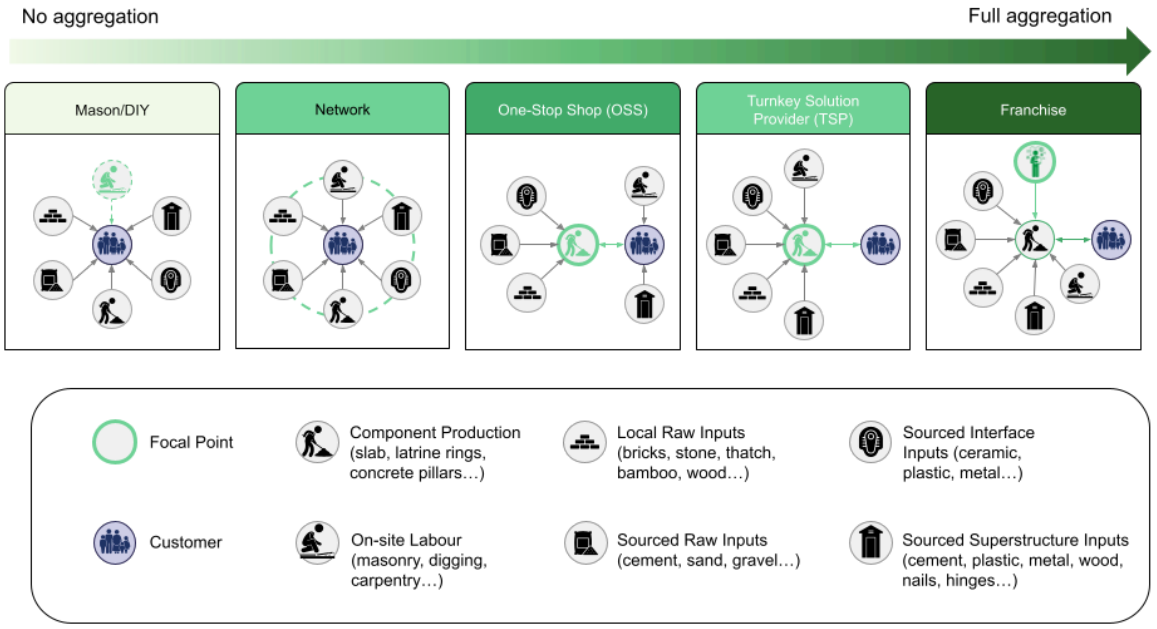
What are common service models for facility construction?

Sanitation service models can be differentiated by the ways in which products and services are bundled or aggregated together. There can be different service models for facility construction, maintenance, repair, and replacement, as well as the management, removal, treatment, and reuse of waste. The types of relevant service models differ for the different types of sanitation systems - **Type 1** (onsite treatment), **Type 2** (removal and treatment), and **Type 3** (sewered treatment).

For simplicity, in this section, we will narrow in on the service **model for the service of sanitation facility construction which is most common in Type 1 and Type 2 rural settings.** *In the future, we hope to expand this to include more urban examples.*

Adapted from WASHPaLS (USAID, 2018), there are five typical service models for facility construction which range from little or no aggregation to full aggregation. Most MBS projects support either the Mason (Do-it-yourself, DIY), One Stop Shop (OSS), or Turnkey Solution Provider (TSP) options. In this spectrum, we also include the use of franchises.

Take a moment to review the illustration below to learn about the five service models for latrine construction, their market suitability, and common constraints (adapted from UNICEF, 2021; USAID 2018).



Spectrum of sanitation service models for facility construction | ***Source**: Adapted from USAID 2018.*

	Description	**Market suitability**	**Common constraints**
Mason/DIY	• Masons act as de-facto focal points and provide on-site, build-to-order service to customers in nearby villages, for standardised designs • Masons might procure materials, or provide a list for DIY procurement from associated business(es)	• Usually, the only option in remote areas with low population density, poor transport connectivity • Best suited for markets where pre-casting businesses do not exist	• Very small addressable market in remote, sparsely populated areas – masons have a very small operational area • Limited demand for sanitation among households • Lack of capital, especially for moulds to cast a slab
Network	• A loose affiliation of businesses, with the potential for any network business to be a focal point • Businesses in the network sell some components while connecting customers to others to procure the remaining inputs • The focal point network business aggregates information for customers about other network businesses for remaining components and services to navigate	• Works where toilet system components and services are easily available, price competition exists, and customers save money by making multiple transactions • Suitable in places where market fragmentation and customer information (rather than accessibility or other factors) are the main constraints	• Sustainability and success depend on mechanisms such as referral fees or reciprocal business for the focal point, as well as trust • Customers must be willing to trade their time and effort working with multiple businesses to gain better prices • Toilet system designs are already standardised and well-understood

	purchases more easily and quickly		
One Stop Shop (OSS)	• The focal point business adds value by fabricating key components of the toilet system (e.g., concrete rings, slab with integrated pan) to offer ready-to-install packages • May offer services (service, installation) as optional add-ons • May offer additional materials (e.g., for superstructure) • Costs lowered, quality raised through prefabrication with increasing efficiencies at higher volumes	• Suitable where customers incur high transaction costs (in terms of money, transport, and/or time) for multiple, repeat transactions • Can greatly reduce total toilet system costs and improve price predictability for existing custom-built toilets with high labour cost or material wastage • Where local value-added businesses (e.g., concrete precasting, cement block makers) already exist	• Since the OSS model requires stocking inventory, high inventory costs and lack of working capital can be challenges • Depends on higher-capacity businesses • Transport methods for prefabricated concrete/ cement products may limit reach to road-accessible communities and households
Turnkey Service Provider (TSP)	• One focal point business aggregates all products and services needed to deliver the completed toilet system at a premium • Reduces the number of touchpoints to the customer to only one	• Suitable in situations where customer subsegments are willing to pay a premium for the convenience of interacting with one focal point business to manage and deliver a 'turnkey' solution • Most appropriate for more complex, higher levels of service (e.g., septic tank, semi-septic tank)	• Focal point businesses must have facilities and working capital (or credit relationships with other businesses) for the purchase of materials, components, and transport, and production capacity and skills to cast and construct on-site (e.g., concrete rings) • Requires skills to manage labour and the service aspects
Franchise	• Centrally managed social enterprise supports smaller enterprises as either OSSs or TSPs • Provides oversight and support of local enterprises to ensure quality service	• Suitable in contexts with strong centralised business interests, start-up funds, and capable staff • Social enterprises are able to offer faster impact through centralised data, information, and strategy.	• Often requires significant ongoing capital as the sustainability of the social enterprises is required to sustain the smaller businesses. For example, sales agents for customer interface are hired by the social enterprise. • There are a few examples where costs are covered by revenues



Reflection question

Is there a particular type of service model that is common in your context?

None

What are some of the non-traditional market actors that can play important roles in the sanitation value chain? For example for emptying pits and septic tanks, transporting, and treatment of the waste?

None

4.3 Overcoming challenges



A group of masons and technicians work together to construct a latrine slab in southern Zimbabwe | ***Source:*** *PRO-WASH and Takunda*

What are common challenges faced by entrepreneurs in Ethiopia?

In this video (1:50 minutes), Eyerusalem Taye, Country Leader, Ethiopia, Sato Africa shares her perspective on some of the main challenges faced by entrepreneurs in Ethiopia.

What are the main challenges experienced by entrepreneurs in Ethiopia and suggested solutions?[20...



What are common challenges with service models?

Many organisations have tried to jumpstart sanitation businesses over the years - and many of these businesses have failed.

This game explores several common pitfalls in cultivating viable sanitation enterprises adapted from UNICEF 2021. The list is not intended to be exhaustive. Match each pitfall with its mitigation strategy.

service model Pitfalls	Mitigation Strategy
1. MBS programs assume all businesses will succeed 2. MBS programs attempt to control businesses. 3. Starting project-centric businesses. 4. Distorting financial incentives. 5. Over-prioritising technical capacity.	1. **Recognize failure as an option.** Not all sanitation businesses will be equally successful, and some sanitation businesses will need additional help and support. 2. **Take a hands-off approach.** While it can be tempting to set prices, and force businesses to focus on a set of products, businesses are more likely to thrive and sustain when they are persuaded rather than forced. 3. **Target high-potential, existing businesses.** Rather than setting up project-specific businesses, working with existing businesses is more cost-effective and more sustained. 4. **Consider non-grant alternatives to reduce market barriers.** While financing can be a strong enabler for enterprises, it can also distort the market and lead to unintended outcomes. 5. **Strengthen technical, business, marketing, and linkage capacities holistically.** In many contexts, sanitation enterprises already have the technical capacity to make and install sanitation products. However, they have much less capacity in business, marketing, and linkages.

4.4 Service model tools



A mason poses for a photo after showing several latrines he is constructing in rural southern Zimbabwe | ***Source:*** *PRO-WASH and Takunda*

What are some tools to understand and support sanitation entrepreneurs?

Tools from the business world can help teams to understand and shape enterprise strategies and service models.

→ Tool 1: Business Model Canvas

The 'Business Model Canvas' tool is a framework for thinking about business models. You can think of a canvas like a worksheet or one page summary that helps you to articulate the value proposition and service of your proposed business. .

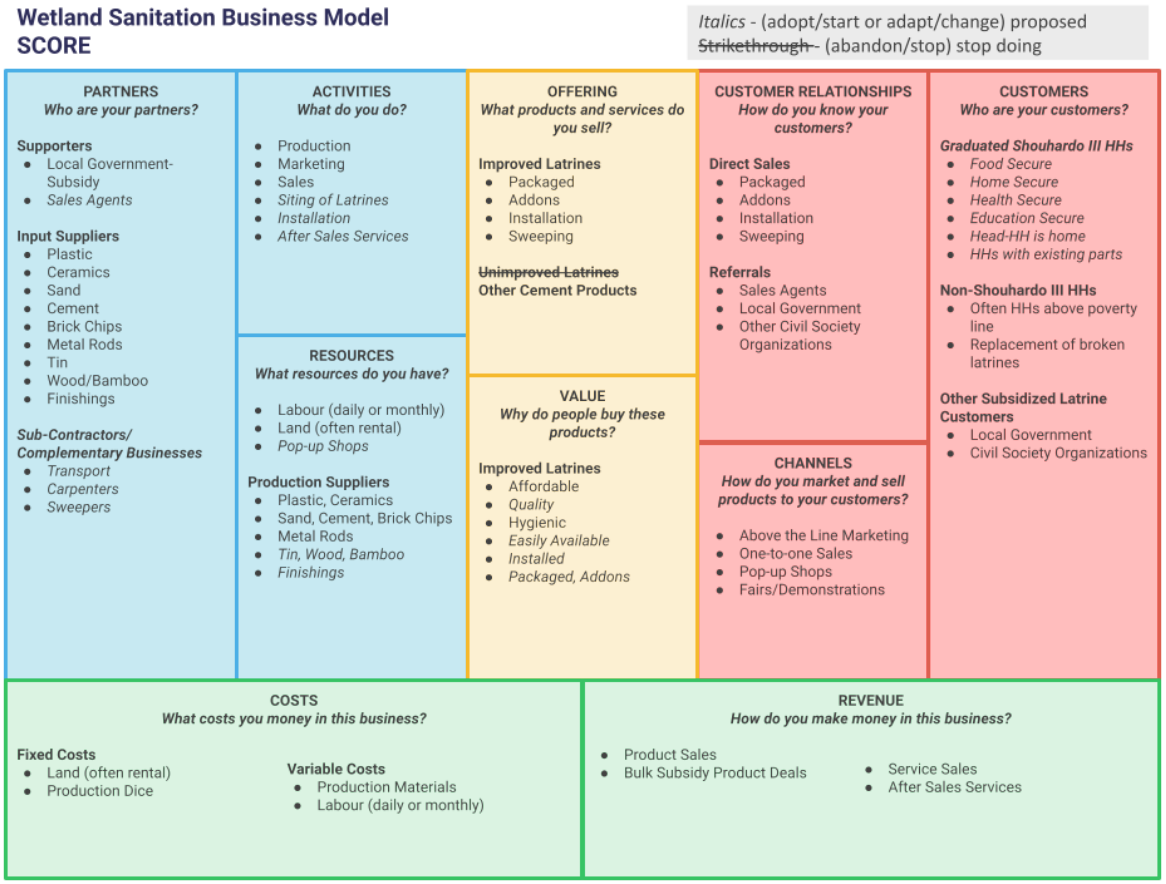
A business model defines how a business creates, delivers, and captures 'value' – the benefit that customers receive by using a product or service. It is a plan for the successful operation of a business, identifying sources of revenue, the intended customer base, products, and details of financing.

Watch this video to learn more about the Business Model Canvas (YouTube, 2:14 minutes).	

A business model is not to be confused with a business plan or business strategy. Before rolling out a business idea or writing a business plan for convincing financing partners to invest in a business, you need to be clear about your business model. Essentially, it is the architecture or the design of the business that the business plan and strategy are built on.

MBS interventions create value for customers by 1) improving the product and service offerings, 2) reducing their costs, and 3) making them easier for consumers to purchase and install. These three goals must be balanced alongside the need to ensure that the offerings can be profitably produced and sold.

Take a moment to explore the Business Model Canvas below. Notice that for clarity in this version, we have split out the products and services section and the product value.



- **Caption.** Business Model Canvas for Sanitation Enterprises in the Wetland Areas of Northern Bangladesh
- **Source:** Adapted from Osterwalder & Pigneur (2009) for the SCORE Project

Clickable aspects in the image above.

1. **Customers:** The different customer segments that a business tries to serve with its offering. Aligned with the target clients from Session 2.
2. **Customer relationships**: The types of relationships a business has with its customers or the ways in which consumers are connected to businesses.
3. **Channels**: The ways businesses communicate and connect with their customers.
4. **Offering:** The products and services being offered by a business.
5. **Value**: The benefit obtained by a consumer by the offering.
6. **Key Activities**: The activities or tasks that need to be completed by the business.
7. **Key Resources**: The human, financial, interaction and physical resources a business needs to carry out its key activities.
8. **Key Partners**: The external public, private, development and financial organisations that will help a business carry out its key activities.

9. **Costs**: The costs of doing business, which include fixed and variable costs. Money that goes out of the business.
10. **Revenue**: The sources from which a business generates money by selling the offering. Money that comes into the business.

The business model canvas can be used in multiple ways. Here are a few:

- **Interview Guide.** Bring a blank canvas with you to help interview entrepreneurs and other supply chain actors during market research. The sections serve as an interview guide to help understand their existing business model.
- **Analysis Summary.** Cluster similar responses together from the interviews to create a composite canvas to share with key stakeholders (see the SCORE example above, the team created separate canvases for Wetland and River-Island markets).
- **Thinking Tool.** Leverage the canvas to help think through gaps and opportunities in service models
- **Enterprise Training Framework.** Leverage the aspects of the canvas to frame training of entrepreneurs in the different areas of their business.



Reflection question

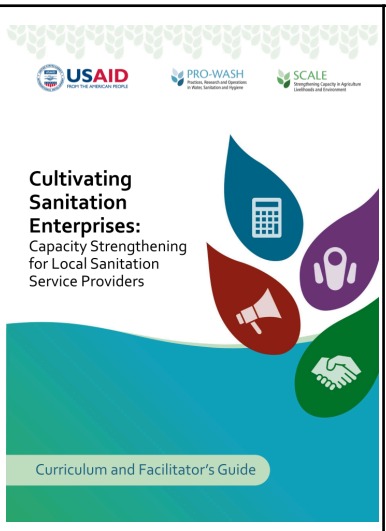
Where do you see the four parts of the sanitation enterprises (Product System; Target Clients; Service Model; and Demand Strategy) in the business model canvas?

None

→ Tool 2: Sanitation Enterprise Capacity Strengthening Curriculum

Building on the Business Model Canvas, this curriculum is designed to give sanitation teams the tools and resources to train small enterprises interested in the sanitation sector. The guide is partnered with a series of participant-facing handouts and posters.

The guide has been adapted by a working group with members from five BHA Resilience Food Security Activity (RFSA) activities (in collaboration with PRO-WASH & SCALE). It has been adapted from a set of tools developed by iDE Bangladesh and UNICEF in 2015. Other examples of curriculum exist within individual organisations, but few are open source or free access.

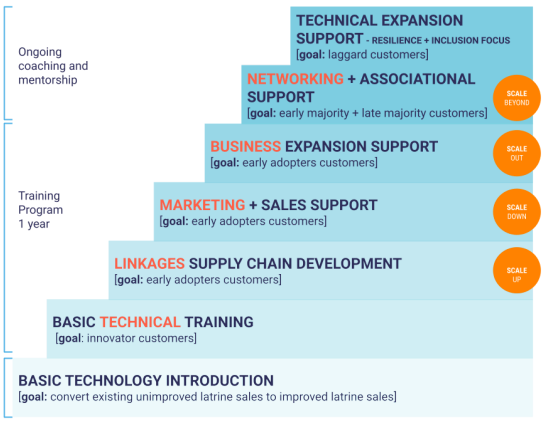




- **Caption.** Front Cover and Overview of the SanEnt Curriculum
- **Source:** Adapted from Osterwalder & Pigneur (2009) for the SCORE Project

→ Tool 3: Sanitation Enterprise Capacity Strengthening Ladder

This capacity strengthening ladder from Bangladesh, describes the staggered support to enterprises with a focus on scaling up, down, out and beyond and overlaid with the types of customers that the enterprises are reaching in this phase of development. This ladder was used to help teams run annual batches of capacity strengthening for enterprises that offer latrine construction products and services: 1) onboarding, 2) training, and 3) graduating the enterprises into coaching and mentorship. This allowed the team to stagger the training into different target geographies each year.



Ladder of capacity strengthening and support | ***Source**: Adapted from SanMarkS (iDE, UNICEF and DPHE Bangladesh)*

4.5 Service model case studies

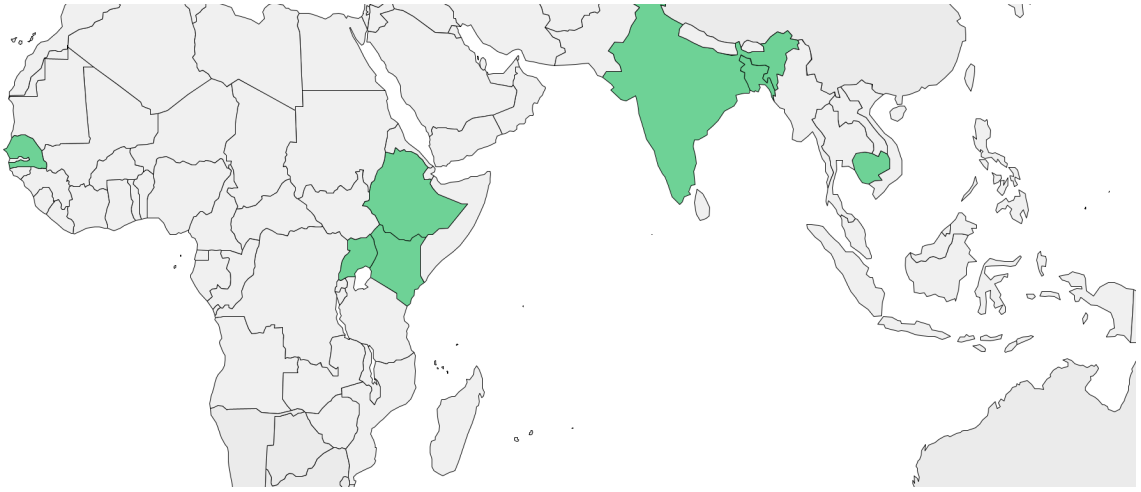


A latrine product team stand in front of their stocked latrine rings to ready to support a humanitarian crisis in eastern Bangladesh | ***Source:*** *iDE Bangladesh*

What can we learn from other contexts about service models?

There are many good examples of service model designs in the sanitation sector. We have selected a few case studies for you to explore, which show geographic variety. Additional case studies can be found at the end of the session.

Select two case studies that best relate to your interests and spend the next 15 minutes exploring them. Start by reading or watching the summary, and if you would like to explore further explore the linked resources. For longer external resources - you do not need to read word-for-word, but skim over the structure and organisation of the report.



India - Rural	As part of the WASHPaLS project, team members at FSG analyzed the sustainability and viability of three mature MBS programs, including Population Services International's (PSI) Supporting Sustainable Sanitation Improvements (3Si) intervention in Bihar (India). The analysis highlights the challenges and opportunities in establishing sustainable sanitation businesses. Key findings include the importance of integrating sanitation enterprises with existing businesses rather than as standalone ventures. The report follows four sanitation entrepreneurs, highlighting the

	similarities and differences in each strategy. It emphasizes the need for entrepreneurs to have a strategic approach tailored to their capabilities and constraints. Sustainability is a significant challenge, particularly for enterprises unaccustomed to budgeting for all expenses. The report recommends recruiting entrepreneurs with related business experience and guiding them in choosing viable strategic paths. It also notes that not all sanitation enterprises will be scalable or viable, underscoring the importance of realistic expectations and targeted support. • **Learn More:** Creating Viable and Sustainable Sanitation Enterprises (case study, 57 pages | English)
Kenya - Urban	This video describes the business model adapted by Sanergy in the collection, treatment and reuse of fecal waste in Kenya and how the strategy is scaling up in other contexts. **WATCH (video, 4:18 minutes):** The Sanergy business model - **Learn more:** Scaling Sustainable Sanitation Delivery in Nairobi's Slums (blog post | English)
Malawi - Urban	Some enterprises expand their services over time. For example, John from Blantyre in Malawi was trained by Water For People and a local partner, Hygiene Village Project, on how to build latrines and market his business. "His first marketing strategy was to write his phone number on every latrine he built so customers could easily contact him if they needed more help in the future – a move that soon paid off. John opened his sanitation shop in Blantyre, and before long he was able to expand to the capital city of Lilongwe. He went on building latrines, slowly growing his business and hiring employees. Then he discovered pit-emptying services. Pit latrines like the ones John builds fill up with waste, and because space is limited in urban Blantyre, households have to empty their latrines rather than build new ones. John saw this demand for pit emptying, and adding this service to his sanitation portfolio turned out to be a lucrative decision." • **Learn more:** Prosperity Through Poop (blog post | English)
Bangladesh - Rural	In many contexts, sanitation entrepreneurs are trained over and over on technical installation skills, but primarily see their clients as local government and NGOs. In Bangladesh, iDE has worked with local entrepreneurs to expand their technical, business, marketing and linkage capacities. Entrepreneurs like Mubeen gained new confidence and capacity to become an active entrepreneur and grow his business. "In Mubeen's case, iDE invited him to participate in training sessions where program staff taught him about bookkeeping and examined his business model to see if it could be modified and refined. They also discussed challenges he faced recruiting workers, transporting raw materials, displaying, and selling products to the customers. With iDE's facilitation, he expanded his product range to include pipes and ceramic pans. From the training, he also learned how to produce "improved latrines", which include cement rings, slabs, and lids, which he is now making at his small factory." • **Learn more:** Bangladeshi entrepreneurs create market for latrines (blog post | English)
Ethiopia - Rural	The USAID Transform WASH Activity (T/WASH) aimed to strengthen Ethiopian businesses that offer consumers WASH products and services and include a focus on women-led enterprises with a commitment to increasing their representation to 25 percent of all project business partners. As part of this work, T/WASH has sought to understand more about how female entrepreneurs are performing and what unique challenges they face across the WASH business value chain. The project identified aspects such as coaching of female entrepreneurs, creation of networking opportunities, sensitization of government staff, reformulating incentive systems, addressing gender norms, and supporting better field staff gender representation.

	• **Learn more:** USAID Transform WASH Women as Business Leaders (learning note, 12 pages | English)
Senegal - Peri-urban	The ACCES program in Senegal explored four different service models to identify the most appropriate format for the Senegalese context. 1. **Classic Circuit:** Salespeople prospect individual households. If convinced, the household orders a latrine, and the contractor, supplied by a hardware store, builds it. 2. **Women's Associations Circuit:** Groups, such as market vendors or neighbors, are canvassed together. They order latrines, which are then built by the contractor in agreement with the group leader. 3. **Solidarity Groups Circuit:** Participants express interest during focus groups but pay in installments. Crédit Mutuel du Sénégal (CMS) finances groups of 5-10 people who collectively pay for the latrines, with CMS managing payments to the contractor and hardware store. 4. **Professional Cooperatives Circuit:** Cooperatives, like banana producers, are canvassed. Members register for latrines, and the cooperative office handles estimates and payments to contractors and hardware stores. • **Learn more:** A sanitation Marketing Journey from Senegal (learning note, 12 pages | English)

Connect: Designing service Models



How to select the right focal business?

In this session, we have had a rapid overview of the different styles of service models and how this connects to focal businesses (entrepreneurs or enterprises). In the next sessions, we will reflect on how these service models connect to demand strategies, rounding out the full enterprise strategy.

1. Take 5 minutes to review one of the case studies that you explored in the last section or an example from your own experience.
2. Below, describe which **service model** this case study has leveraged. Why do you think this particular model was used? What challenges did the teams face?

None

QUIZ: Check your knowledge



Check your knowledge of Session 4

Question 1: True or false.

A sanitation **'service model'** refers to ways in which sanitation product systems are produced and distributed to customers by local businesses. Select one.

- [ ] True
- [ ] False

Question 2: Order the types of service models from least to most aggregated.

- [ ] One Stop Shop (OSS)
- [ ] Mason/DIY
- [ ] Social Enterprise
- [ ] Turnkey Solution Provider (TSP)
- [ ] Network

Question 3: True or false.

An MBS project should focus on technical capacity strengthening for entrepreneurs. Select one.

- [ ] True
- [ ] False

Question 4: Match each component of the Business Model Canvas with its definition.

- ☐ The sources from which a business generates money by selling their product or service to the customers.
- ☐ The groups of people that a business tries to target and sell its product or service to.
- ☐ The external companies or suppliers that will help a business focus on its key activities.
- ☐ How businesses communicate with and reach out to their customers.

Learn more

Key resources

	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) This guidance provides practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021
	Desk Review on Market-Based Rural Sanitation Development Programs (PDF, 2.9 MB | English and French). "This desk review from the USAID/WASHPaLS project investigates the current state of knowledge in market-based sanitation (MBS) and establishes a framework to analyse, design, and improve MBS interventions. This report is based on a survey of approximately 600 documents on MBS, in-depth research into 13 MBS intervention case studies across the global south, and interviews with sector experts and program personnel." USAID, 2018.
	Private sector development: How do we improve capacity of local sanitation businesses? (PDF 334 KB | English) This UNICEF Guidance Note discusses how the principles of profit, risk and investment are the core building blocks of supply-side strategies. UNICEF. 2013. Sanitation Marketing Learning Series: Guidance Note 4
	Private and social enterprise engagement in water and sanitation for the poor: A Systematic Review of Current Evidence (PDF 1,870 KB | English) "This paper is structured to include an initial section on the types of enterprise providing WASH services of some kind with an assessment of the nature of the available evidence. This is followed by qualitative analysis of the evidence against the three areas above, first with a focus on sanitation, then on water, and then on literature that cross across the two sub-sectors. The paper concludes with a short section on implications for the sector." Gero, A., Carrard, N., Murta, J., & Willetts, J. (2013)

	Creating Viable and Sustainable Sanitation Enterprises: Guidance for Practitioners "This report consolidates the findings and recommendations across the three case studies to offer implementers guidance on improving the viability and sustainability of the sanitation enterprises they support. USAID/WASHPaLS, 2020 | English
	Business Models for Rural Fecal Sludge Management (FSM): A desk review "The USAID WASHPaLS #2 project conducted a desk review to understand the market for rural fecal sludge services, suitable methods along the sanitation value chain, and potentially viable business models involving the private sector in rural areas. The desk review is based on analyses of several examples in Asia and sub-Saharan Africa, key informant interviews, and a literature review. The report offers guidance for stakeholders on contexts where the two identified business models for safe FSM would be most relevant and measures that public bodies (e.g., local governments, utilities) could take to broaden their application." USAID/WASHPaLS, 2024 | English
	Designing Effective Sanitation Enterprises This webinar presentation from WASHPaLS shares insights on how to design effective sanitation enterprises. Shapiro, J., Chennuri, S., Israel, M., & Albert, J. (2018, September 18).
	Business Skills Training for Rural Sanitation Entrepreneurs: Trainer's Guide "The overall objective of this manual is to equip sanitation specialists and public resource persons with the basic concepts and tools, to facilitate entrepreneurship and financial literacy training for start-up sanitation entrepreneurs in rural communities." Kibet, J., 2020
	Competition in Water and Sanitation : The Role of Small-Scale Entrepreneurs "This Note explores the diversity of small scale entrepreneurs and their role in meeting unserved niches of the water and sanitation market. Indeed, small enterprises often account for a larger share of the market than incumbent utilities and they are well placed to complement and even compete with trunk concessions and public companies in tailoring service to the poor. So in designing concessions or any long term rules for the sector, governments should take account of existing or potential small providers." Solo, 1998 | English
	We have a (waste) problem - a business model to integrate solid and faecal sludge waste "This paper was originally a blog making the case that SWM and FSM can be integrated. Well-integrated FSM and SWM systems improve the overall operational efficiency and financial sustainability of value chains. Sales of waste-based reuse products (e.g. briquettes, co-compost biogas) and recyclable materials from both waste systems can be important revenue streams and are enhanced when business processes are combined. The better the waste collection, the higher the quality and quantity of waste-based quantity of waste-based reuse products that can be produced and sold." Worsham et al., 2021 | English

Additional learning - Entrepreneurs and service models

Eastern Africa	• **Learning Note:** Approaches to Sanitation Business Development Support at District Level (PSI T/WASH, 2024 | English) • **Learning Note:** Ethiopia's business environment and how it influences WASH market development (IRC (T/WASH), 2021 | English)
Western Africa	• **Case Study:** Enterprise Viability Case Study: A Retrospective Analysis of Rural Sanitation Enterprises in Nigeria (USAID/WASHPaLS, 2020 | English) • **Entrepreneur Spotlight:** Ambroise Tiemoko: A Marketing Strategist in San Pedro, Côte d'Ivoire (Côte d'Ivoire USAID MuniWASH, 2024 | English and French)
Southern Africa	• **Academic Publication (paywall):** Enhancing sustainable sanitation through capacity building and rural sanitation marketing in Malawi (Kasuloet al. 2018 | English)
South Asia	• **Case Study:** Enterprise Viability Case Study: A Retrospective Analysis of Rural Sanitation Enterprises in Bihar, India (USAID/WASHPaLS, 2020 | English) • **Video Series**: Entrepreneurship Mentorship Videos (iDE Bangladesh, 2023, Bangla/English) • **White Paper:** A market-led, evidence-based approach to rural sanitation in India (Monitor Deloitte, 2013 | English) • **Tactic Report:** Lessons in sustainable sanitation business from dropout latrine producers in rural Bangladesh (iDE Bangladesh, 2019 | English) • **Technical paper:** Long-Term Sustainability of Improved Sanitation in Rural Bangladesh (WSP, Hanchett, et al. 2011 | English)
Southeast Asia	• **Case Study:** Enterprise Viability Case Study: A Retrospective Analysis of Rural Sanitation Enterprises in Cambodia (USAID/WASHPaLS, 2020 | English) • **Research Brief:** Assessing the Sustainability of Latrine Business Owners (iDE Cambodia, 2021 | English) • **Training package:** FACILITATION MANUAL - Sanitation Entrepreneur Training (Indonesia PSEU, 2014) • **Training package:** Business Skills Training for Sanitation Entrepreneurs Sanitation Marketing Toolkit: Facilitator's Guide Water and Sanitation Program. (Laos, WSP, n.d.)
Latin America	• **Blog post:** The Sanitation Shop in Cascas (Water For People, n.d.)

Session 5: Activating demand for sanitation

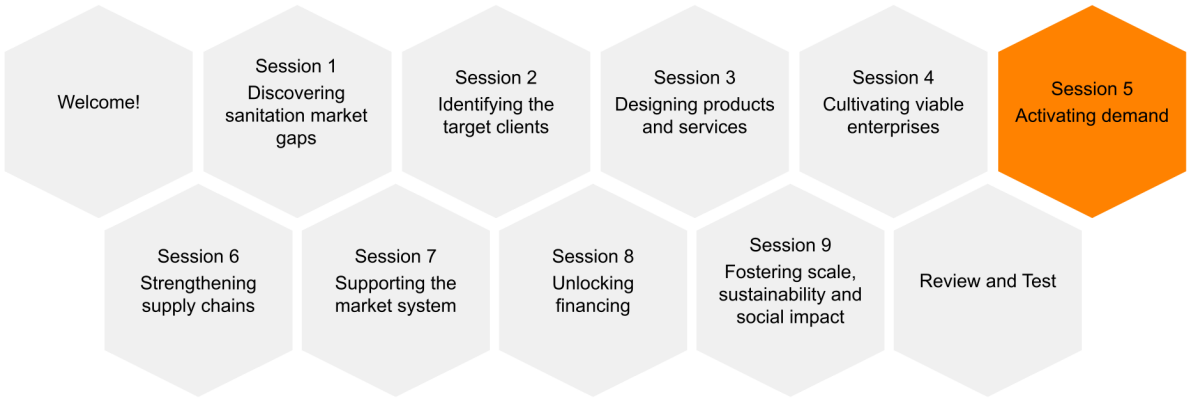


A group sales meeting led by a local sanitation entrepreneur in rural Bangladesh. | ***Source**: iDE Bangladesh*

In this session, you will:

1. **Learn about** demand and the different ways to strengthen demand
2. **Review** the impact of social influence on the sanitation market and demand
3. **Explore** strategies to strengthen demand
4. **Clarify** who might facilitate demand activation
5. **Reflect on** examples of demand strengthening in existing MBS projects

Average estimated session duration: 1 hour



5.1 Defining demand

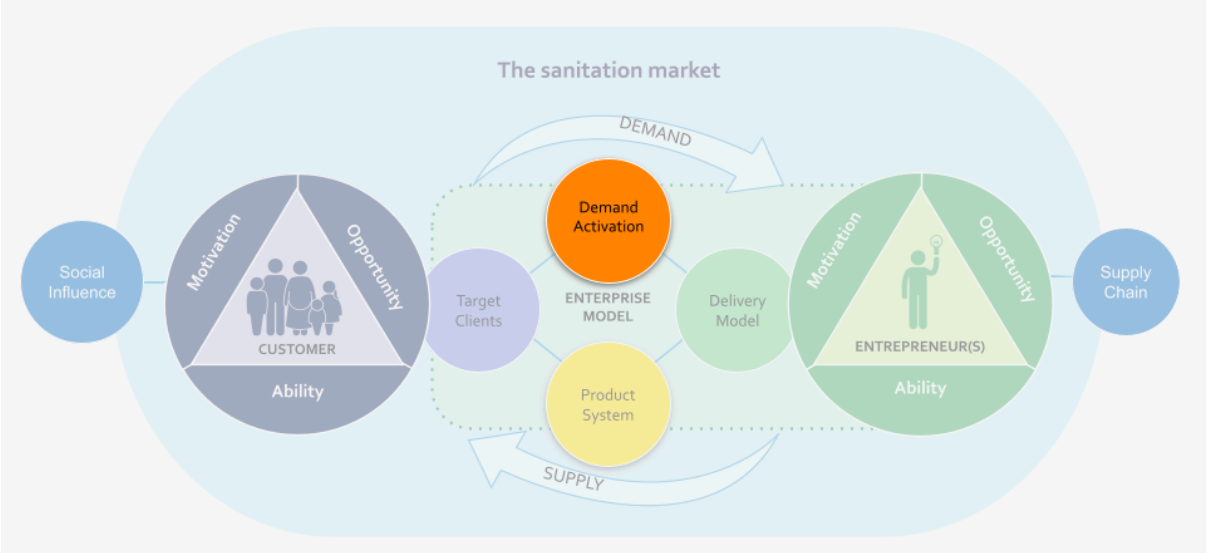


A local sanitation entrepreneur starts a sales pitch for improved sanitation. | ***Source:*** *iDE Bangladesh*

What is a demand strategy?

Building on the target clients, product systems, and the service model, we now move counterclockwise to **the demand strategy** which focuses heavily on **demand activation**.

Take a moment to revisit the sanitation market diagram below, which highlights the demand strategy in relation to other enterprise strategy components. How might demand strategy be connected to the target clients, product systems, and service model?



- **Caption**: Sanitation market conceptual framework - focused on the promotional model
- **Source**: Adapted from USAID, 2018.

As described in Course-1, in MBS, **demand** refers to client desire (want and/or need) for products or services. Strengthening the demand for sanitation-related products and services is an important element of successful MBS interventions and the way that a project supports this process is the **promotion model.**

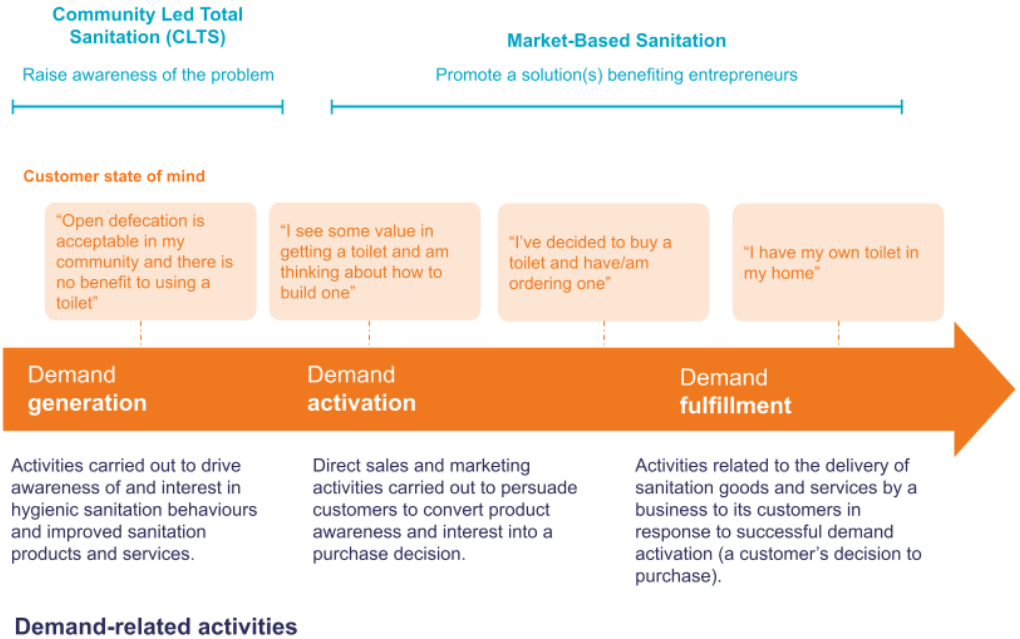
If there is no demand, there are no sales, no matter how many sanitation products and services are available. Demand strengthening is about designing and testing the best ways to reach and motivate customers to invest in sanitation-related products and services.

What are the stages of demand?

One simplified way of thinking about the promotional model of demand strengthening is through three steps: generation, activation, and fulfilment.

- **Demand generation** is the first step in helping generate interest in products or services that facilitate safe sanitation behaviours. Common demand generation approaches include triggering in Community-led total sanitation (CLTS), behaviour change communication in Community Health Clubs (CHCs), and social marketing through mass media campaigns. Often this has already been done in communities and teams can jump into demand activation.
- **Demand activation** converts interest into a decision to invest in products or services that facilitate safe sanitation behaviours. Activation is often connected to deep motivations such as comfort, safety, convenience, or prestige rather than health benefits or disgust.
- **Demand fulfilment** combines all activities related to the delivery of sanitation products or services that facilitate safe sanitation behaviours. In MBS, demand fulfilment is completed by the private sector, whereas in CLTS fulfilment is completed by the household.

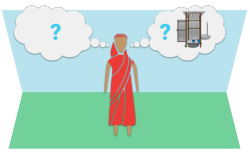
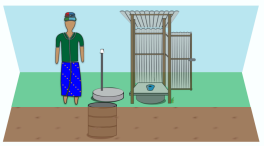
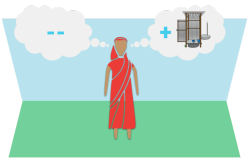
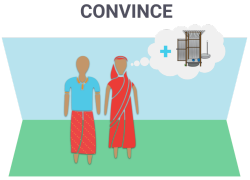
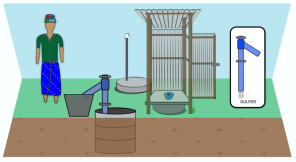
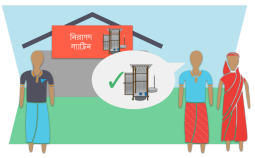
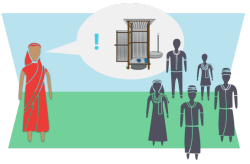
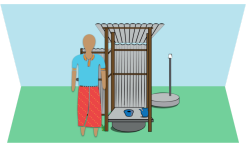
Take a moment to review the diagram below, which includes illustrative quotes from a customer across the different stages.



- **Caption**: Phases of customer demand
- **Source**: Adapted from USAID, 2018.

Can we overlay a latrine journey with the stages of demand?

This game helps to clarify what might happen in a customer's journey to getting a sanitation facility in Type 1 contexts. Sort the journey stage cards into three piles: demand generation, activation, and fulfilment. *Adapted from iDE 2019.*

Demand generation	Demand activation	Demand fulfilment
AWARENESS 	CONSIDER 	INSTALLATION 
INTEREST 	EVALUATE 	REPAIR 
	CONVINCE 	SAFE EMPTYING 
	PURCHASE 	ADVOCATE 
		USE 

Reflection question

What are some barriers to demand activation in your context?

None

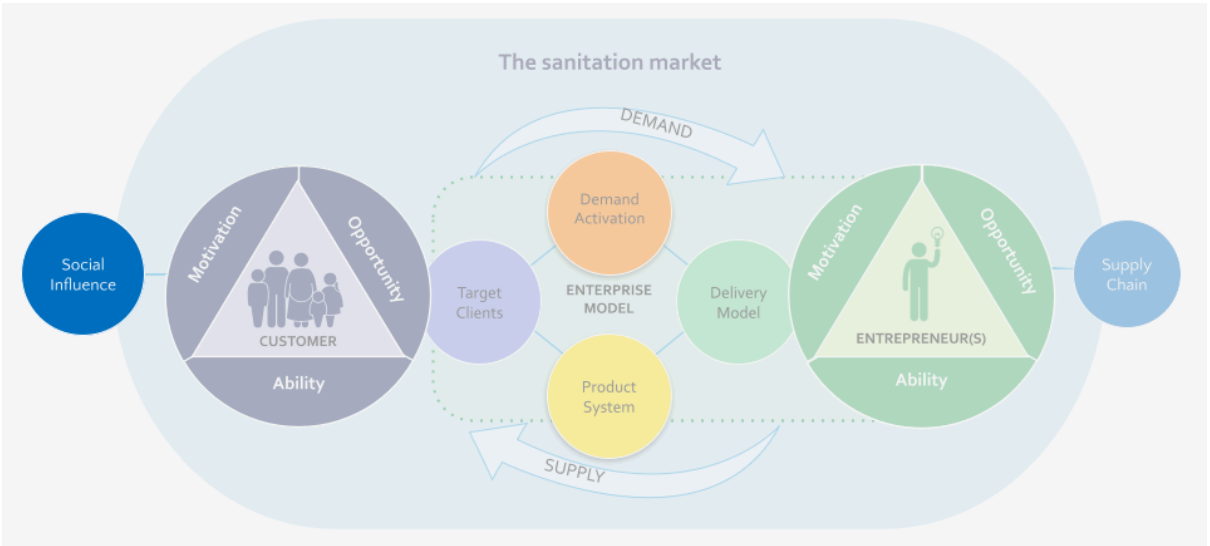
5.2 The importance of social influence



A female sales agent holds a sales meeting as part of the Suchana project in northern Bangladesh. | ***Source:*** *iDE Bangladesh*

What is social influence?

As all customers live within communities, it is important to also consider the social influences that impact purchasing behaviour. Take a moment to revisit the sanitation market diagram below and reflect on how social influence might influence the full sanitation market.



Most commonly, social influence is important in demand strategies, but target clients, product systems, and serrvice models are also influenced socially. There are lots of conceptual models to help untangle social influence, but for the purposes of this course, we can consider three different aspects of social influence: social norms, dynamics, and structures.

- **Social norms** are "the perceived informal, mostly unwritten, rules that define acceptable and appropriate actions within a given group or community, thus guiding human behaviour." (UNICEF, 2021) In other terms, social norms are the beliefs, attitudes, values, and behaviours shared by a group of people.
- **Social dynamics** are the relations, networks, connections, and interactions between people and groups of people. Social dynamics often include aspects such as gender and power. (Bannester, 1969)
- **Social structures** are the ways in which societies are organised or ordered. Social structures are often influenced by wider systems such as economic, political, legal, religious, and class. (Wilterdink and Form, 2024)

Building on these three aspects of social influence, there are several forms of social influence that MBS projects may consider to strengthen sanitation behaviours.

- **Leader Influence -** Local leadership, and in particular, traditional leaders such as village heads or chiefs, hold strong influence over their communities.
- **Peer Pressure -** As referenced in *Diffusion of Innovation Theory* (Session 2.2), peer pressure is the social pressure to act in the same way as one's friends or neighbours.
- **Expert Influence -** The influence and recommendations of external experts such as doctors, nurses, plumbers, or technicians can also shape sanitation behaviours.
- **Aspirations** - The ambition or hope to achieve a certain level of sanitation, often motivated by social status.

Women's role in decision-making

Despite the generally high decision-making power of men, women are critical in driving the decision to purchase a toilet (Geertz & Iyer 2018 [en], iDE 2017 [en], and Sama Sama 2018 [en]).

While research is still emerging, there are several key findings:

- Female-headed households are more likely to adopt sanitation solutions.
- Men and women have different drivers for adopting sanitation facilities.
- Men are more willing to pay for sanitation than women.
- Women are a critical factor in informing and influencing men's decisions.
- When women gain decision-making power in the household, they can better access sanitation solutions that will meet their specific needs.



Reflection question

What other types of social influence could MBS programs consider?

None

5.3 Demand strengthening strategies



A school awareness campaign partners with a MBS program to help create synergies in rural Bangladesh. | ***Source:*** *iDE Bangladesh*

How can MBS activities strengthen demand?

Within MBS, there are several social and commercial marketing communication strategies that help strengthen demand generation and activation. As part of the assessment process, MBS activities also analyze what messaging approaches are the most effective at generating and activating demand. Most activities will use a blend of approaches.

Take a moment to review some of the more common approaches summarized below.

Word of Mouth	The conversation often between neighbours, friends, and relatives. These conversations are often spontaneous and based on someone sharing their own experiences.	Need photo
Interpersonal Communication	Two-way dialogues between a demand agent and small groups or individual household decision-makers. The facilitated dialogues provide opportunities to ask and answer questions, provoke thinking, and to persuade and change attitudes.	 • Small group sales meeting in the Suchana program Bangladesh (iDE 2018).

Entrepreneur Showrooms and Advertising	Entrepreneur-led advertising such as t-shirts, shop signs, hats, and flyers. The campaigns aim to raise awareness and convey information.	 • An entrepreneur in front of his shop with signage in Bangladesh (iDE 2018).
Promotional events	Events such as fairs, market days, or day celebrations (such as World Toilet Day) that raise awareness of a solution. This can also be partnered with discounted rates on products or services.	Need photo
Scripted Events	Scripted events such as theatre, product demonstration, or videos that leverage 'edutainment.' The sessions aim to raise awareness, convey information, or provoke thinking.	 • Mobile Movie in Bangladesh (ICCO 2016).  • Sales meeting in Cambodia (WaterSHED 2013)
Mass Media	Advertising campaigns through television, radio, posters, billboards, banners, or t-shirts. The campaigns aim to raise awareness and convey information. These are often paid for by groups of enterprises or programs and, therefore, *may* differ from enterprises' advertising.	 • Sama Sama billboard in northern Ghana (iDE 2018).
Digital and Social Media	Use of online platforms such as Facebook, Whatsapp, Instagram, Tik Tok, LinkedIn, or other systems to raise awareness, convey information or provoke thinking.	Need photo

- **Source:** Adapted from WSP, 2011

Reflection question

Which approaches might be best suited for your context? And why?

None

5.4 Demand activators



A female sales agent poses for a photo before a team meeting at the local sanitation enterprise. | ***Source:*** *iDE Bangladesh*

What types of people can MBS activities work with to activate demand?

Several of the strategies described in the last section rely specifically on people who foster demand - we call these people demand activators. Depending on your context, funding and focus, the individuals facilitating demand activation can be public, private and development actors. In fact, demand activation is a common way for public and development actors to help catalyse a sanitation market system. However, it is important that the private sector is also involved for sustainability. There is no right way to activate demand, but it is important that the strategy is designed based on a market assessment.

Local leaders and influencers	Community leaders, such elected officials, traditional chiefs, teachers and doctors, often play a significant role in promoting and influencing behaviours within their communities.	Agents and influencers are often trained and coached by development sector, public sector or private sector actors on sales techniques. → Interpersonal Communication
Local platforms	Local platforms such as Village Savings and Loans Associations (VSLAs), women's groups, WASH committees are often involved in the generation of demand within their communities.	

Sales agents	Private sector sales agents are either salaried or commission-based community facilitators who are paid to conduct sales meetings with community members. The roles are often part-time and from the communities that they support.	
Community agents	Private sector sales agents are volunteer, salaried or commission-based community facilitators who support a variety of health, education or even agricultural services. Sometimes they are Health Extension Workers, Community Workers or Environmental Technicians. They are most often supported by the government or civil society organisations.	
Sanitation entrepreneurs or Sanitation retailers	Sanitation entrepreneurs and retailers are often responsible for the sale of sanitation products and components, and as such they also play a role in marketing and selling sanitation products and services. Both types of small business sectors often leverage either interpersonal communication or small advertising.	Development or private sector actors often support entrepreneurs by co-designing or co-producing events or advertising materials. → Scripted Events, Local Advertising and Mass Media
Ministry, department or programme	At the district or national level, governments or organisations may run communication and awareness campaigns on television and radio to support local demand-creation efforts.	



Reflection question

What types of community agents exist in your context?

None

5.5 Demand strategies case studies

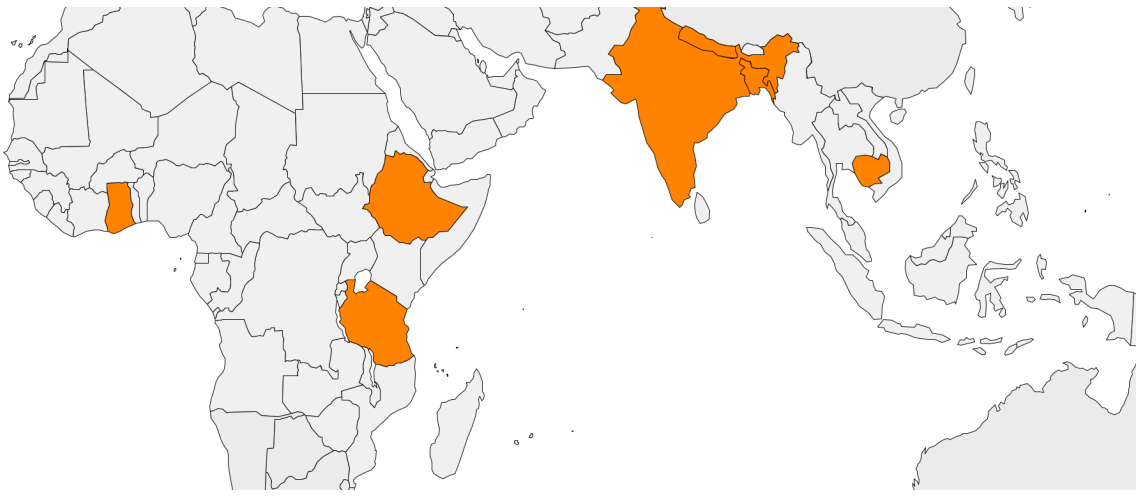


*A billboard for the Sama Sama latrine in northern Ghana | **Source:** iDE Ghana*

What can we learn from other contexts about demand strategies?

There are many good examples of demand strategy design in the sanitation sector. We have selected a few case studies for you to explore, which show geographic variety. Additional case studies can be found at the end of the session.

Select two case studies that best relate to your interest and spend the next 15 minutes exploring them. Start by reading or watching the summary, and if you would like to further explore the linked resources. For longer external resources - you do not need to read word-for-word but skim over the structure and organisation of the report.



Cambodia - Rural 1	Watch this video to learn more about how WaterSHED in Cambodia has developed a nine-step approach that has local sales agents conducting community sales events. The approach uses a flip book with targeted messaging. • **WATCH (video):** Selling Toilets in Cambodia: WaterSHED Style (2:36 minutes | English) • **Learn more:** Demand Generation WaterSHED (Website | English)

Cambodia - Rural 2	"As part of the effort to professionalize latrine sales, iDE Cambodia engaged 17Triggers, a social marketing agency, and Whitten & Roy Partnership (WRP) to work collaboratively with iDE to develop effective sales tools for Cambodia. These sales tools and sales agent training materials incorporated many elements from the national Cambodia Stop the Diarrhea campaign, an open-source social marketing campaign developed under the guidance of the Cambodian Ministry of Rural Development by the WaterSHED and Lien Aid WASH Marketing Program with 17 Triggers. The messaging used in the sales materials of the program's first phase was informed by the insights of the market segmentation research and follows the "CLEAR" sales framework:" • Connect with the customer, • Learn from the customer about their problems, • Educate the customer about the solution, • Ask the customer for the sale, and • Resolve any buying problems. • **Learn more:** Developing effective sanitation sales techniques (Blogpost | English
Bangladesh - rural	In Bangladesh, iDE has supported local sanitation entrepreneurs to become active in their own marketing and to hire sales agents who can reach more communities. In this approach, entrepreneurs often selected women sales agents who previously worked as community mobilizers or health workers. Armed with the skills from their previous community roles, these women are interested in earning money from their skills - especially after their other programs have ended. The entrepreneurs were introduced to the salary and commission options for paying sales agents and allowed to choose the option that worked best for their business. This flexible and entrepreneur-led approach has catalyzed business growth in rural Bangladesh. • **Learn more:** Reaching the last mile: Lessons and learnings in the sanitation market in rural Bangladesh (Tactic Report, 9 pages | English)
Ethiopia - rural	"USAID Transform WASH recognized the effectiveness of door-to-door promotion and installation services over selling sanitation products at a fixed location. The team developed low-cost toilet upgrading options to be offered by local masons. Collaborating with the sales consulting firm Whitten & Roy Partnership, the project trained the local masons and business facilitators on a new sales and sales management approach, DQ Selling®, to optimize door-to-door sales. The DQ Selling® approach aims to improve the sales performance by enhancing customers' ability to make well-informed decisions. This learning note provides an overview of this sales and sales management approach, detailing the implementation and the results achieved in improving sanitation in rural Ethiopia." • **Learn more:** Door-to-door sales of toilet installation services : lessons from Ethiopia (Learning Note, 20 pages | English)
Ghana - Peri-urban	In Ghana, to jumpstart sanitations sales iDE hired a sales force and partnered with local sanitation businesses to fulfil latrine orders for the social enterprise Sama Sama. The sales agents travelled door-to-door to find customers and speak with them about improving sanitation and purchasing a Sama Sama latrine. This sales force is organized through managers who coach and support new agents as they aim to convince households about latrines. Followup research found that creating multiple pathways such as market stalls would help to further strengthen demand activation as many women with purchasing power are not actually home when the sales agents arrive.

	Also within Sama Sama in Northern Ghana, about a year and a half into the program, the team realized that the sales agents weren't actually reaching the influencers of the decisions - they were going to people's homes to sell the product while women were away at the market. So switching how and when we did the pitches increased sales dramatically. • **Learn more:** The sales team powers the business (Blogpost | English) • **Learn more:** How We Got Our Toilet Business Moving Again (Blogpost | English) • **Learn more:** Insights from a deep dive into how gender affects purchasing (Blogpost | English)
Tanzania - Rural	"In 2009 the Water and Sanitation Program-Africa began working with 10 local governments to test the effectiveness of marketing as a method to prompt households in rural Tanzania to invest in improving their sanitation facilities. This initiative—carried out with local and national governments, development agencies, nongovernmental organizations (NGOs), and private marketing firms delivering an integrated campaign—is resulting in households upgrading their sanitation facilities. The emerging experiences have enabled the Ministry of Health and Social Welfare to secure funding for a national sanitation campaign in fiscal year 2012. The campaign aims to increase sustained access to improved sanitation. Promotion is taking place through mass media (radio) and interpersonal events and activities, such as entertainment road shows. To date, the initiative has trained 470 masons in construction methods for upgrading latrines as well as sales and business skills, prompted 711 communities to draft declarations and action plans, and designated individuals to follow up and ensure that all households have sanitation facilities. The initiative has reached 80,000 people through experiential marketing events and exposed 3.5 million households to a national radio soap opera. Reporting by the 10 participating districts suggests that thousands of households have invested in improving their sanitation facilities." • **Learn more:** Marketing Rural Sanitation Improvements in Tanzania (Smart Lessons Article, 3 pages | English)
Nepal - Rural	"iDE has been building markets for sanitation in Nepal since 2011. The sanitation marketing model relies on a network of iDE-trained latrine manufacturers and commission-based sales agents to deliver improved latrines to households at market price. In the four districts where this research took place, iDE has trained 106 sales agents, also known as community business facilitators (CBFs). Of these, 68 (64 percent) are male and 38 (36 percent) are female. Overall, female sales agents have accounted for 40 percent of latrine sales, roughly matching their share of the labor force. The aim of this research was to go beyond this simple sales analysis to understand how women and men participate in and experience this key role, and to explore how their participation impacts key sanitation behaviors like latrine purchase and use. The research relied on a mixed-methods approach utilizing quantitative and qualitative strategies to better understand the main drivers and barriers for female sales agents in promoting latrine purchase and key sanitation behaviors....This study found that female sales agents appear to be more effective at driving positive sanitation behaviors among marginalized households (defined here as poor, ethnic-minority households), while men were more effective with non-marginalized households." • **Learn more:** Understanding How Sanitation Sales Agent Gender Affects Key Sanitation Behaviors in Nepal (Research Report, 60 pages | English)

Madagascar	The RANO WASH project team created market-based sanitation services and product demand by conducting thorough market assessments and engaging with local communities to understand their needs and preferences. They collaborated with local entrepreneurs and businesses to develop affordable and desirable sanitation solutions, ensuring these products and services were accessible to the target population. The team also provided training and support to local businesses to enhance their capacity to produce and distribute these sanitation products effectively, fostering a sustainable market for improved sanitation. **Read more here:** **Resource-Guide_RANOWASH-FR.pdf**

Connect: Designing demand strategies



How to catalyse demand?

In this session, we have had a rapid overview of the different styles of demand strengthening and how this connects to public, private, and development. In the next sessions, we will reflect on how the different aspects of the product system, demand strategies, service model, and target clients connect to the wider supply chain.

1. Take 5 minutes to review one of the case studies that you explored in the last section or an example from your own experience.
2. Below, describe which **type of demand strengthening** this case study has leveraged. Why do you think this particular model was used? What challenges did the teams face?

None

Quiz: Check your knowledge



Check your knowledge of Session 5

Question 1: Put the phases of a customer journey in the correct order.

- Demand activation
- Demand fulfilment
- Demand generation

Question 2: What are NOT types of social influence that MBS projects can leverage? Select one.

- ☐ Leader Influence
- ☐ Mass Media
- ☐ Peer Pressure
- ☐ Expert Influence

Question 3: Which is NOT an overarching type of marketing common in MBS programs. Select one.

- ☐ Interpersonal Communication
- ☐ Entrepreneur Advertising
- ☐ Scripted Events
- ☐ Product Development
- ☐ Mass Media

Question 4: True or false.

Interpersonal communication is often the most effective form of marketing in MBS activities. Select one.

- ☐ True
- ☐ False

Learn More

Additional Reading

	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) Guidance provides practitioners with simple, easy-to-follow, and evidence-based resources to plan, design, implement, and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services, as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. **Section 3.4 focuses on Demand Strategies.** UNICEF, 2021
	Introductory Guide to Sanitation Marketing (PDF, 4.6 MB | English, Spanish, French) This guide aims to "define sanitation marketing and the key components of sanitation marketing; initiative; provide an overall framework for scaling up rural sanitation programs and the justification for using a sanitation marketing approach; explain the steps needed to design, implement, and monitor sanitation marketing programs at scale; and highlight key challenges and recommend solutions." **Section IV focuses in detail on developing Promotion Campaigns.** WSP, 2011
	Sanitation Marketing for Managers: Guidance and Tools for Program Development This guidance provides comprehensive instructions for preparing, planning, and managing market research. It includes example interview and focus group guides, tools, analysis templates, probing techniques, sampling criteria, selection methods, and examples of outputs based on applications in Benin, Ghana, Uganda, and Tanzania. **Activity 13 focuses on development of a communication plan and materials.** USAID's 'Hygiene Improvement Project' (HIP) 2010.
	Hands-on Social Marketing: A Step-by-Step Guide to Designing Change for Good "Since Hands-On Social Marketing: A Step-by-Step Guide...has been adopted by social marketers across health, social and environmental disciplines, working in many different settings to bring about behavior change on a large scale. The book is primarily intended for professionals working in nonprofits, government agencies and other organizations that want to create positive social change." Weinreich, 2010 (2nd Edition) - Paywall Book
	The Fundamental Templates of Quality Ads This academic paper has guidance for developing quality creative advertising using six templates. Whether developing ideas in-house or with a supplier, these may help you identify formulas to connect with target audiences. Goldenberg, Mazursky and Solomon, 1999. *Marketing Science.*

	Decision Support Tools: Demand Activation Model (English) Designed by WASHPaLS, this tool helps interested stakeholders understand, adapt, and apply the demand activation model in geographies/ markets in which they work. - Guidance - Tool WASHPaLS/USAID 2022
	Designing a Social and Behavior Change Communication Strategy I-Kit "This SBCC Implementation Kit (or I-Kit) provides practical guidance on developing a communication strategy for social and behavior change communication (SBCC)." Johns Hopkins Center for Communication Programs
	"Stop the Diarrhea" WASH campaign Developed in Cambodia, this campaign plan is an "open-source toolkit to serve as a springboard for WASH marketing campaigns for anyone working in water, sanitation, and hygiene. The tools have been tested with villagers and village leaders with positive reactions. While long-term results have yet to be quantified, the following tools serve as functional examples that we hope organizations and governments can use in current and future WASH programs." WaterSHED
	The Toilet Trade: How to Sell Sanitation Successfully and to Scale "During this webinar we will focus on selling toilets successfully, discussing: what to do and what not to do when building sanitation sales capability and how iDE, a market-based NGO, has used direct sales strategies to reach accelerated scale." Sustainable Sanitation Alliance (2018). Webinar 22. Aug 22, 2018

Additional case studies

Sub-saharan Africa

- **Learning Note:** An assessment of demand creation of sanitation products and services Lessons from Ethiopia (PSI T/WASH, 2019 | English)

- **Learning Note:** Assessment of health extension workers and sales agents in creating demand for sanitation products and services (PSI T/WASH, 2019 | English)

Session 6: Strengthening supply chains

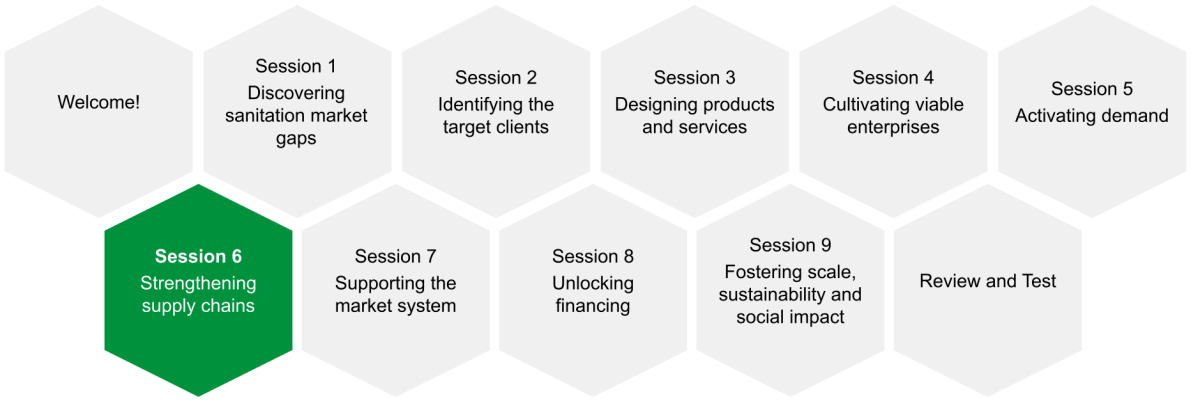


A group of masons unload a truck with the materials to construct a latrine with a technician. | ***Source**: PRO-WASH and Takunda*

In this session, you will:

1. **Learn about** the sanitation supply chain as network of sanitation actors
2. **Review** opportunities to optimise the supply chain
3. **Explore** the benefits of networks for focal sanitation businesses
4. **Clarify** relevant supply chain analysis tools
5. **Reflect on** examples of supply chain maps in existing MBS projects

Average estimated session duration: 1 hour



6.1 Defining sanitation supply chains

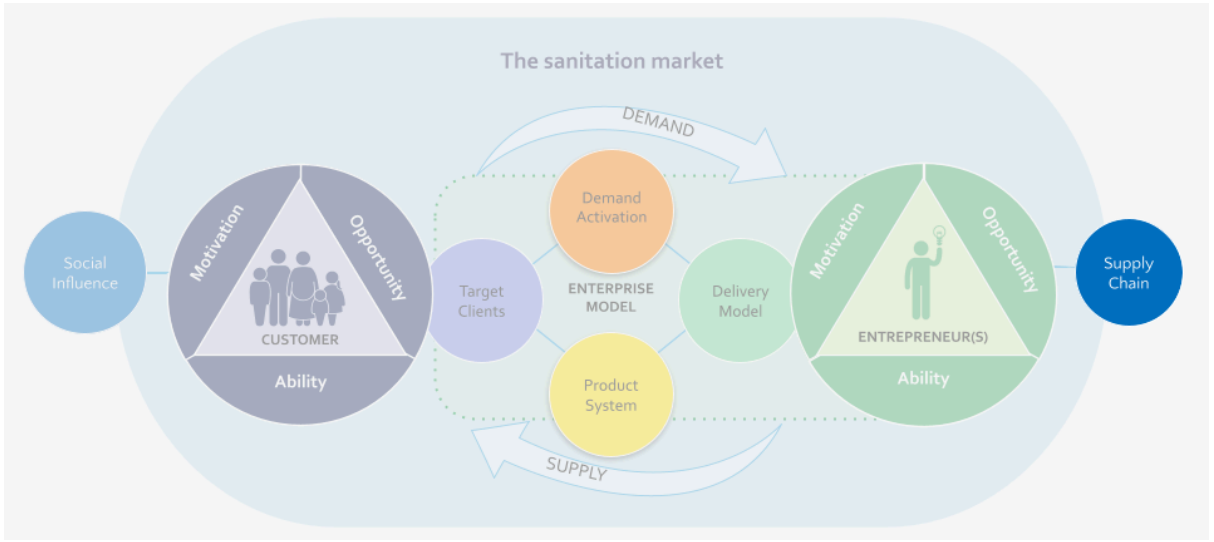


A sanitaryware shop in a small town in Zimbabwe. | ***Source**: PRO-WASH and Takunda*

What is the sanitation supply chain?

So far, we have focused on the small focal enterprises that deliver sanitation products and services to customers. However, these enterprises operate in a much wider business environment. The course's conceptual model builds on IRC's WASH System Building Blocks. As such, some of the wider enabling environment is part of the WASH System and some is part of a supply network that is illustrated on the right of our conceptual model.

Take a moment to revisit the sanitation market diagram below, which highlights the supply chain in relation to other enterprise strategy components.



- **Caption**: Sanitation Market conceptual framework - focused on the supply chain
- **Source**: Adapted from USAID, 2018.

The sanitation **supply chain** is the network of actors involved in the import, manufacture, production, distribution, and sale of sanitation-related products and services to the end customer. Sanitation supply chain actors can consist of a mix of importers, wholesalers, raw material suppliers,

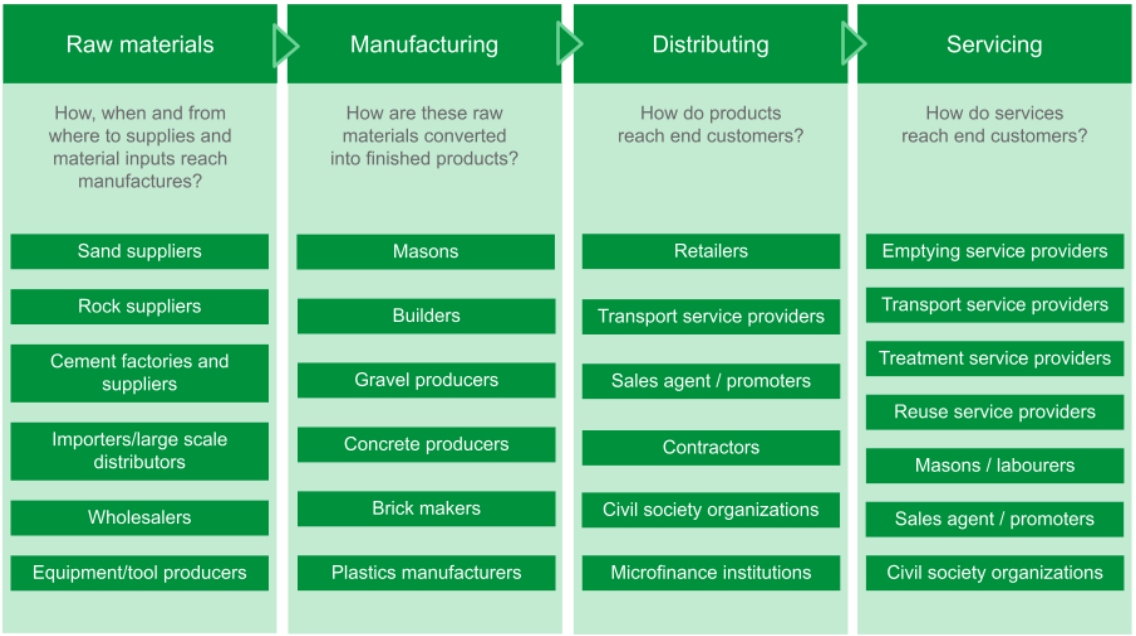
manufacturers/producers, retailers, sales agents, transporters, contractors/masons and possibly microfinance institutions. In other terms, a supply chain is the sequence of processes involved in the production and distribution of sanitation products and services. We can think of the supply chain as a physical chain, with each link playing an important part. One broken link breaks the whole chain.

The **service model** (Session 4) is the part of the sanitation supply chain that operates within a particular sanitation market often within a district or province. A supply chain can link different sanitation markets together and also include aspects such as manufacturing and importation of raw materials.

In this course we have focused on the supply of **sanitation products and services**, but we can use the same principles and tools to think about the service chain for the **management of faecal sludge or waste** (as discussed in Course 1 - Session 2).

What is the sanitation supply chain?

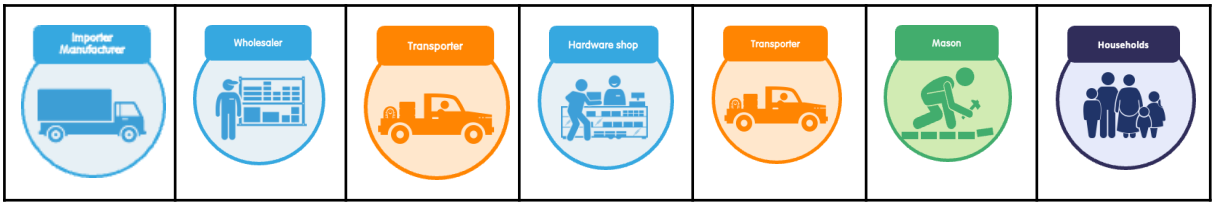
Typically, the sanitation supply chain includes three different elements: raw materials, manufacturing and distributing. Explore the image below to see the typical actors involved in the sanitation supply chain. Notice that public sector and NGOs actors are **not** involved in the supply chain.



- **Caption**: Key elements and actors in the sanitation supply chain
- **Source**: Adapted from UNICEF 2021

Can you put a supply chain in order?

In this game, arrange these selected supply chain links in order for the **construction of a sanitation facility**. The last card will be the customer. Remember this is one potential example, but each context will have its own nuance.



Reflection question

How does the supply chain connect to the focal sanitation business covered in Session 4?

None

6.2 Optimising the sanitation supply chain



Two men load latrine parts into a boat to take them to an island home in rural Bangladesh. | ***Source:*** *iDE Bangladesh*

Where are the weakest links?

As part of the market assessment and ongoing implementation, MBS activities must actively understand the weakest parts of the supply chain or the whole system will not function properly. Activities must continue to monitor and adapt to help mend the supply chain. Each link in the supply chain is usually a business run by a person - which we call an actor. Sanitation focal businesses are one of these links.

Just like focal businesses and customers, each actor in the supply chain is also shaped by their opportunity, ability, and motivation. MBS activities often conduct interventions to help shape these three factors such as capacity strengthening, knowledge exchange, co-promotion and network building.

- **Opportunity**: *Does the actor have the chance to participate in the sanitation market?* access to capital, access to land, licences or permits to operate, opportunity costs, proximity to markets, existing market client base
- **Ability**: *Does the actor have the capacity to purchase the sanitation product or service leading to a safely managed sanitation facility?* labour, skills, tools, transportation, decision-making, self-efficacy, and social support
- **Motivation:** *Does the actor have interest in participating in the sanitation market?* attitudes, beliefs, values, competing priorities, and emotional and physical drivers

Weak market actors are weak links when they exhibit poor motivation, ability and opportunity to conduct their business.

Just like market systems (Course 1- Session 3), we can grade and rank market actors. Take some time to read the table below and reflect on the differences between each level.

Mature	Mature market actors are able to **sustainably** fulfil their role in the sanitation supply chain including meeting the needs of the most marginal and vulnerable. The businesses can withstand shocks and stresses. They exhibit high motivation, ability and opportunity.
Transforming	Transforming markets actors are beginning to overcome challenges in their businesses. They often have good motivation and opportunities, and ability.
Emerging	Emerging market actors are just starting out and might be vulnerable to economic and climatic shocks and stresses. They often have high motivation and opportunities, but lower ability.
Weak	Weak market actors do exist, but operate sporadically and are vulnerable to economic and climatic shocks and stresses. They often have low motivation, but higher opportunities and ability.
Missing	Missing market actors do not exist in the sanitation supply chain.

What is a typical supply chain for latrine construction?

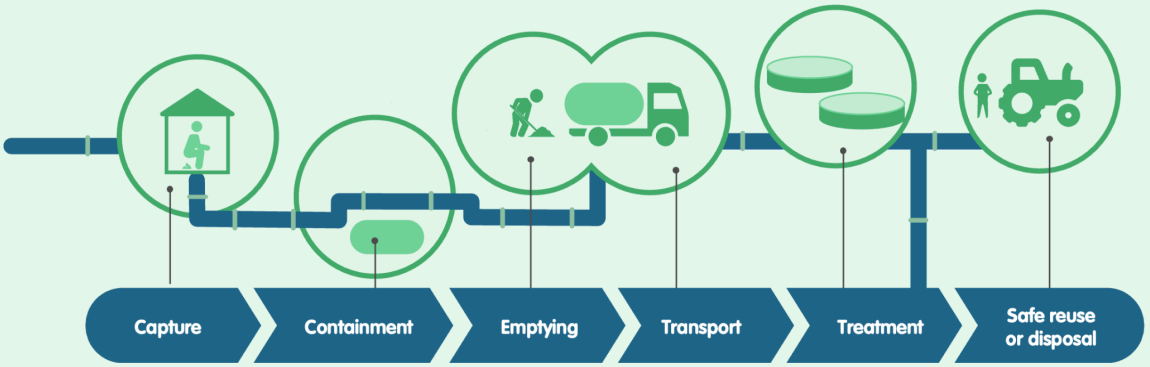
Each sanitation market will have a unique sanitation supply chain and some chains will be more broken than others. The supply chain is strongly related to the types and location of customers, the product system and the service model. Sometimes the supply chain is also called a value chain - which is a common term in Market Systems Development programs in agriculture - where households are often producers of produce or grain, rather than consumers of sanitation products and services.

Just like in some cases, the key market barrier is the capacity of focal enterprises, often a fragmented supply chain can be a serious hindrance. For example, in Bhutan, most of the Market-Based Sanitation activities focused on strengthening the supply of sanitation components from central areas to rural hard to reach communities.

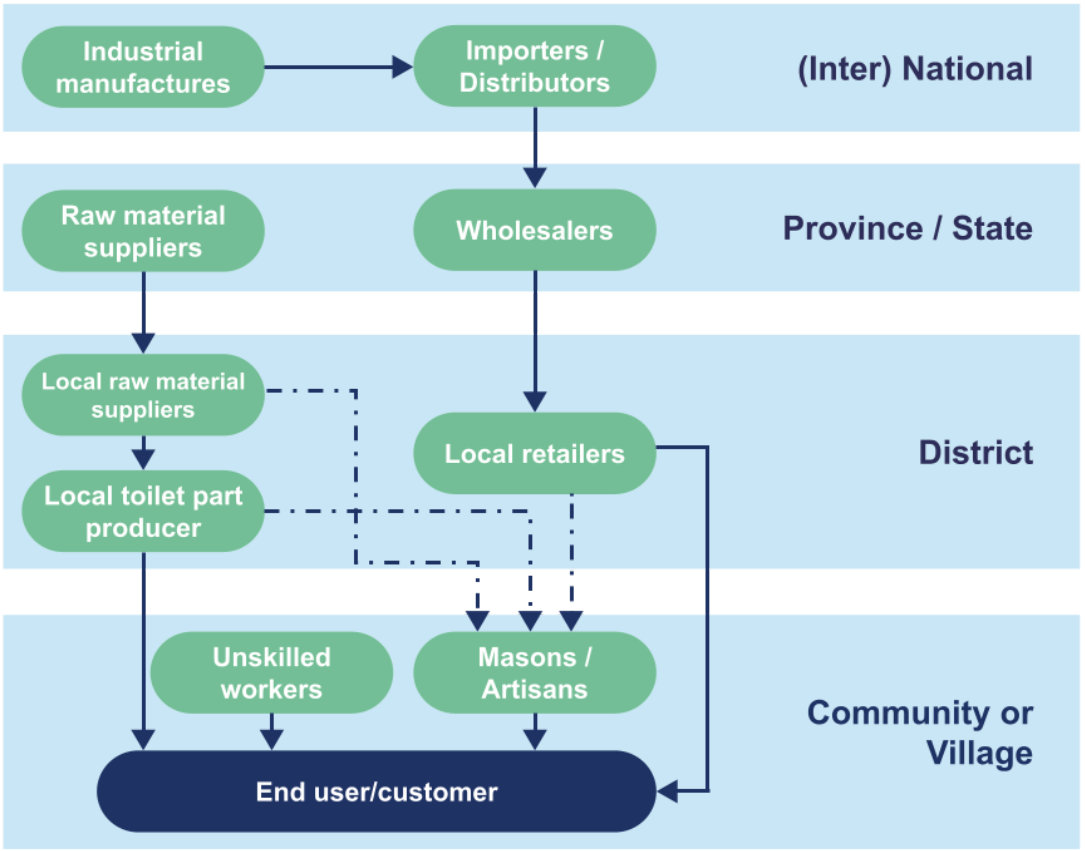
What about other parts of the service chain?

The sanitation supply chain is different from the service delivery chain for sanitation covered in Course 1, which looked at the capture containment, removal, transport, treatment, and safe reuse/disposal. This supply chain refers to the supply of raw materials, goods, and services that help manage the different aspects of safe sanitation.

Each stage of the service delivery chain (containment, removal, transport etc.) will have its own supply chain to bring the required raw materials, manufacturing, and distribution. For example, emptying will require emptiers, equipment and safety gear, while transport will require drivers and trucks.



Take a moment to review this example supply chain from Nigeria focused on facility construction (capture) and repair. What stands out to you? Are there similarities to your context?

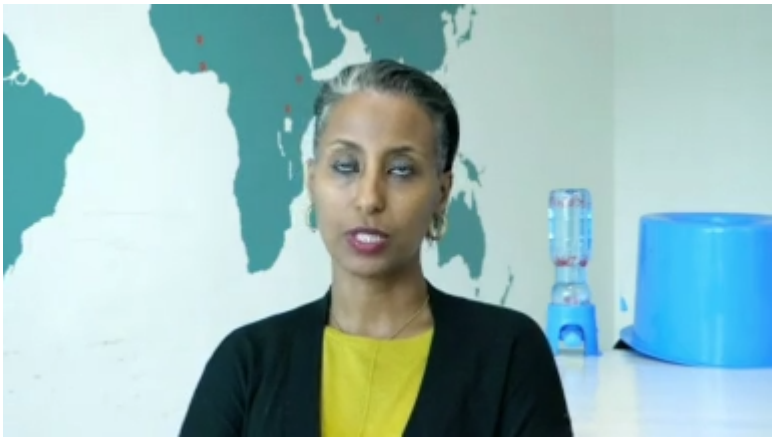


- **Caption**: Key elements and actors in the sanitation supply chain
- **Source**: Adapted from UNICEF 2021

How can a Market-Based Sanitation intervention effectively support the private sector?

In this video (2: 59 minutes), Eyerusalem Taye, Country Leader, Sato Ethiopia shares how MBS activities can support the private sector, ultimately strengthening supply chains.

How can a Market-Based Sanitation intervention effectively support the private sector?



Reflection question

What part of the supply chain is weakest in your context?

None

6.3 Entrepreneur Networks



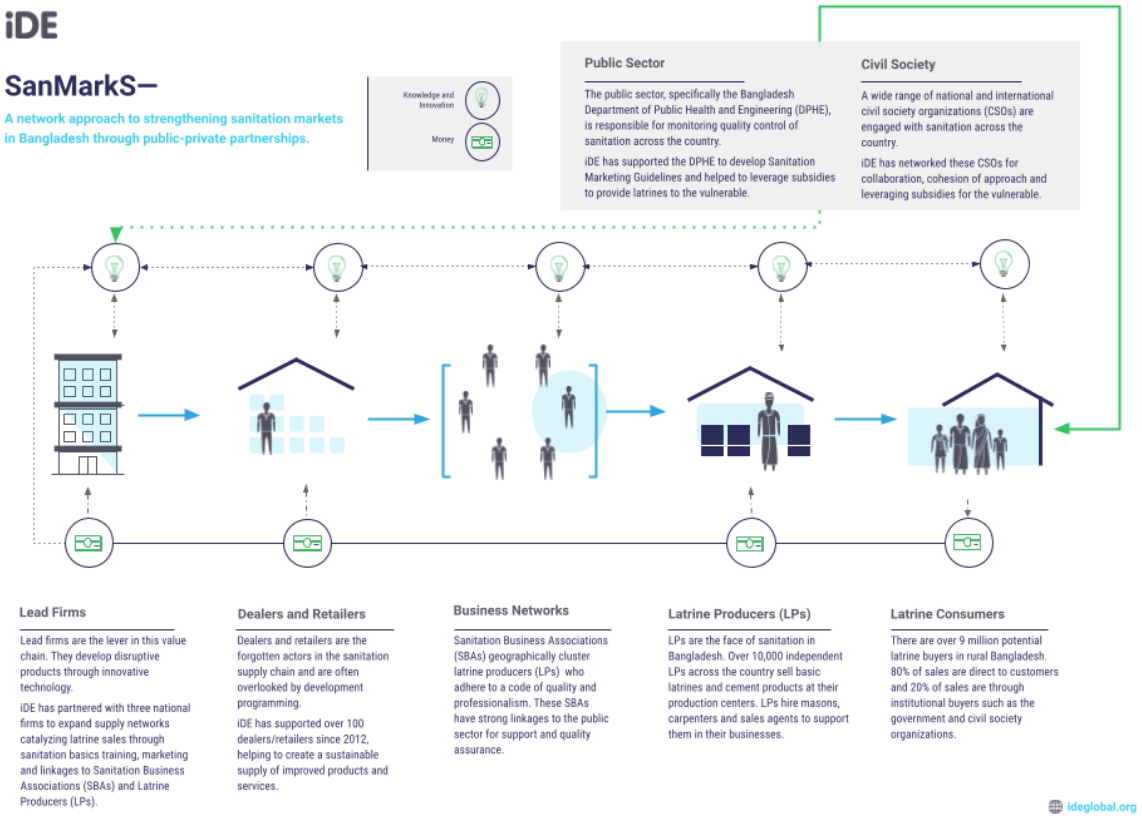
A group of sanitation entrepreneurs gather to discuss their challenges and learn about new techniques. | ***Source:*** *iDE Bangladesh*

One effective way to strengthen the supply chain and support focal sanitation enterprises is by linking independent entrepreneurs or sanitation enterprises into networks or sanitation business associations. In Ethiopia, the T/WASH team found that working with established business was much more effective than establishing businesses with many individuals (e.g. groups of unemployed youths forming a new business).

Networks have many valuable benefits:

- Enable businesses to reach new customers through co-production and distribution

- Pool resources for mass media and marketing campaigns
- Promote stronger quality control and de facto standards for product systems
- Pool procurement to reduce market gaps by enabling lead entrepreneurs to become wholesalers and stockists
- Provide importers and manufacturer with key points of contact for supply chain strengthening
- Encourage collaborative physical, emotional and financial support during climate and financial shocks and stresses



- **Caption:** Stylized Market Map with from the SanMarkS project in Bangladesh
- **Source:** SanMarkS Market Assessment (unpublished)

Reflection question

What are some other potential benefits of networking enterprises? What are any risks?

None

6.4 Supply Chain Analysis Tools



A sanitaryware shop in a small town in Zimbabwe. | ***Source**: PRO-WASH and Takunda*

What are some useful supply chain analysis tools?

Many useful tools from the business world can help teams to understand sanitation supply chains in their contexts. Here are two tools used in MBS. Both of these tools have already been covered in other sessions.

→ Tool 1: Business Model Canvas

Used for focal sanitation businesses, the 'Business Model Canvas' tool is a framework that can also be used to explore the business models of other supply chain actors. You can think of a canvas like a worksheet or one page summary.

Wetland Sanitation Business Model SCORE

Italics - (adopt/start or adapt/change) proposed
~~Strikethrough~~ - (abandon/stop) stop doing

PARTNERS
Who are your partners?

Supporters
- Local Government- Subsidy
- *Sales Agents*

Input Suppliers
- Plastic
- Ceramics
- Sand
- Cement
- Brick Chips
- Metal Rods
- Tin
- Wood/Bamboo
- Finishings

Sub-Contractors/ Complementary Businesses
- *Transport*
- *Carpenters*
- *Sweepers*

ACTIVITIES
What do you do?
- Production
- Marketing
- Sales
- *Siting of Latrines*
- *Installation*
- *After Sales Services*

RESOURCES
What resources do you have?
- Labour (daily or monthly)
- Land (often rental)
- *Pop-up Shops*

Production Suppliers
- Plastic, Ceramics
- Sand, Cement, Brick Chips
- Metal Rods
- *Tin, Wood, Bamboo*
- *Finishings*

OFFERING
What products and services do you sell?

Improved Latrines
- Packaged
- Addons
- Installation
- Sweeping

~~**Unimproved Latrines**~~
Other Cement Products

VALUE
Why do people buy these products?

Improved Latrines
- Affordable
- *Quality*
- Hygienic
- *Easily Available*
- *Installed*
- *Packaged, Addons*

CUSTOMER RELATIONSHIPS
How do you know your customers?

Direct Sales
- Packaged
- Addons
- Installation
- Sweeping

Referrals
- Sales Agents
- Local Government
- Other Civil Society Organizations

CHANNELS
How do you market and sell products to your customers?
- Above the Line Marketing
- One-to-one Sales
- Pop-up Shops
- Fairs/Demonstrations

CUSTOMERS
Who are your customers?

Graduated Shouhardo III HHs
- *Food Secure*
- *Home Secure*
- *Health Secure*
- *Education Secure*
- *Head-HH is home*
- *HHs with existing parts*

Non-Shouhardo III HHs
- Often HHs above poverty line
- Replacement of broken latrines

Other Subsidized Latrine Customers
- Local Government
- Civil Society Organizations

COSTS
What costs you money in this business?

Fixed Costs
- Land (often rental)
- Production Dice

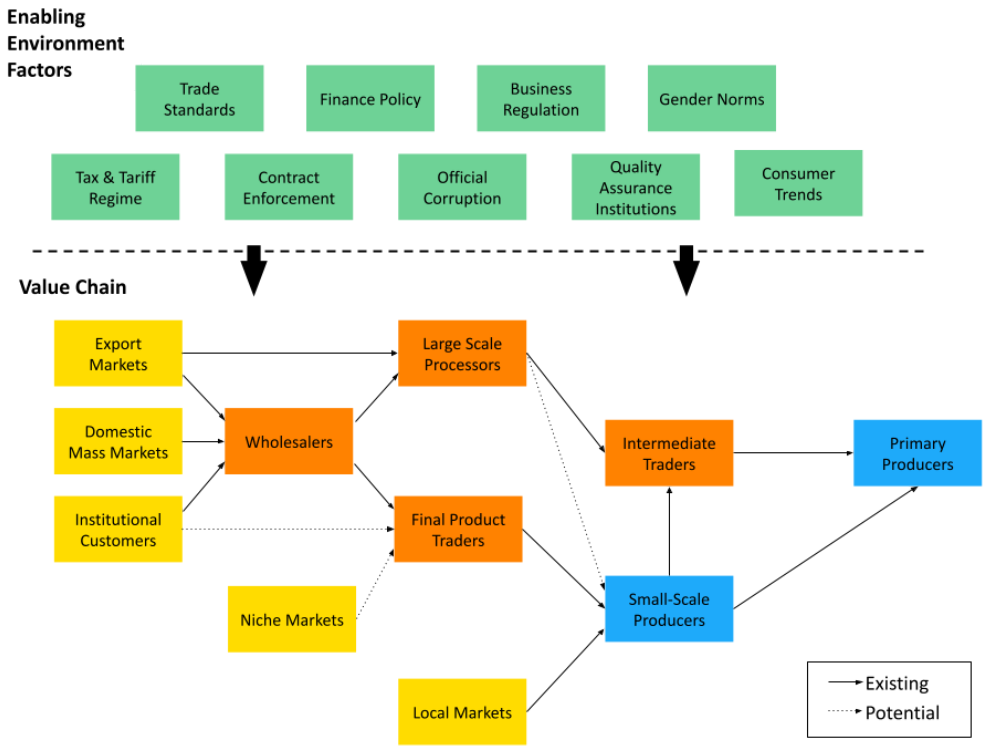
Variable Costs
- Production Materials
- Labour (daily or monthly)

REVENUE
How do you make money in this business?
- Product Sales
- Bulk Subsidy Product Deals
- Service Sales
- After Sales Services

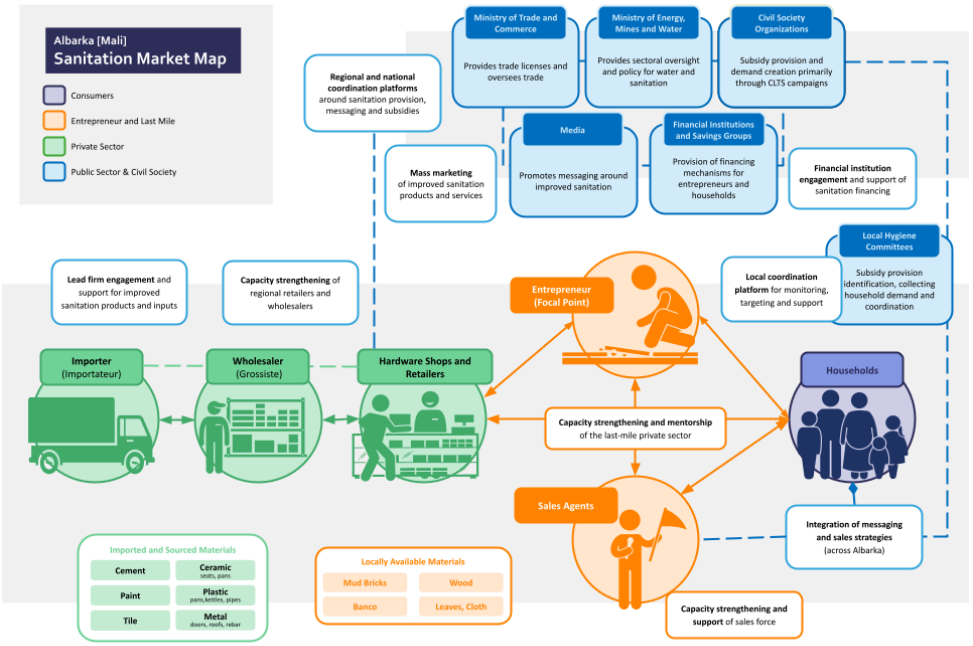
- **Caption.** Business Model Canvas for Sanitation Enterprises in the Wetland Areas of Northern Bangladesh
- **Source:** Adapted from Osterwalder & Pigneur (2009) for the SCORE Project

→ Tool 2: Value Chain Map

The central part of the Market Systems Map (Session 1), a value chain map can help illustrate the factors, linkages and actors that work within the market system. The market map also maps the enabling environment (top of the diagram) and supporting functions (below the diagram). There are many different versions of market maps as highlighted by the BEAM Exchange Guidance. This online Value Chain Analysis toolkit includes tools and procedures to map a value chain.



- **Caption:** Generic Market Map
- **Source:** Practical Action Core Market Mapping Guidance



- **Caption:** Stylized Market Map with Recommended Actions for the Albarka project in Mali

- **Source:** Albarka Market Assessment (unpublished)

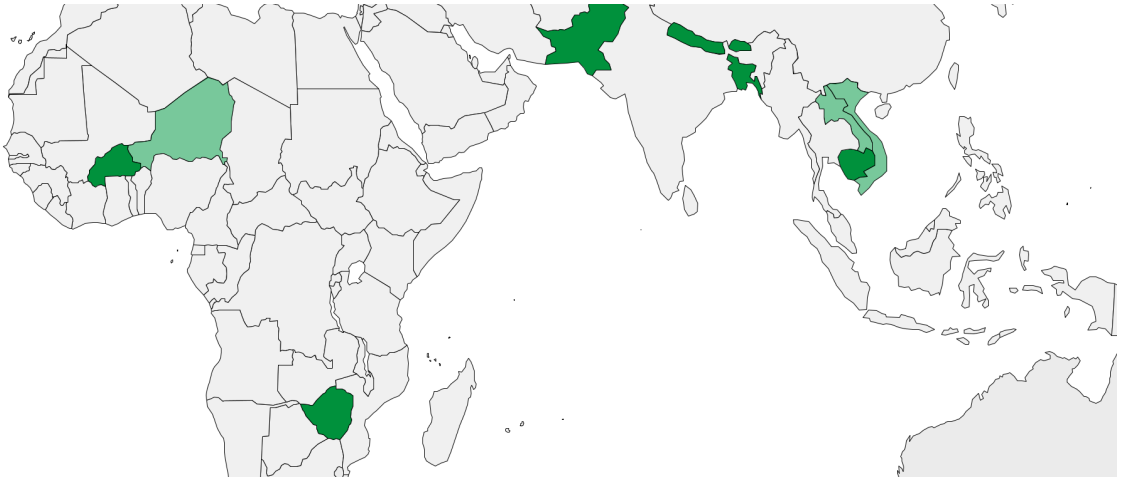
6.5 Supply Chain Case Studies

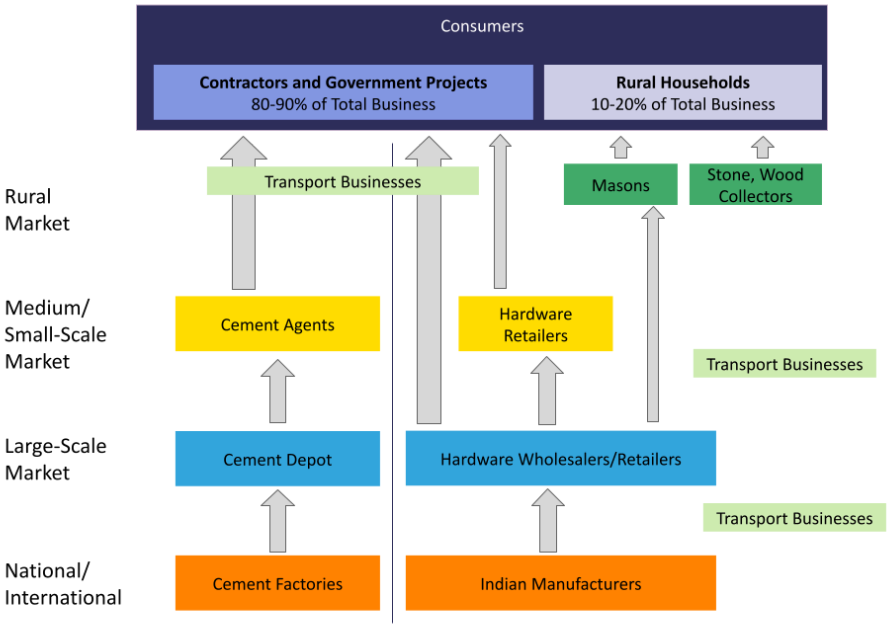
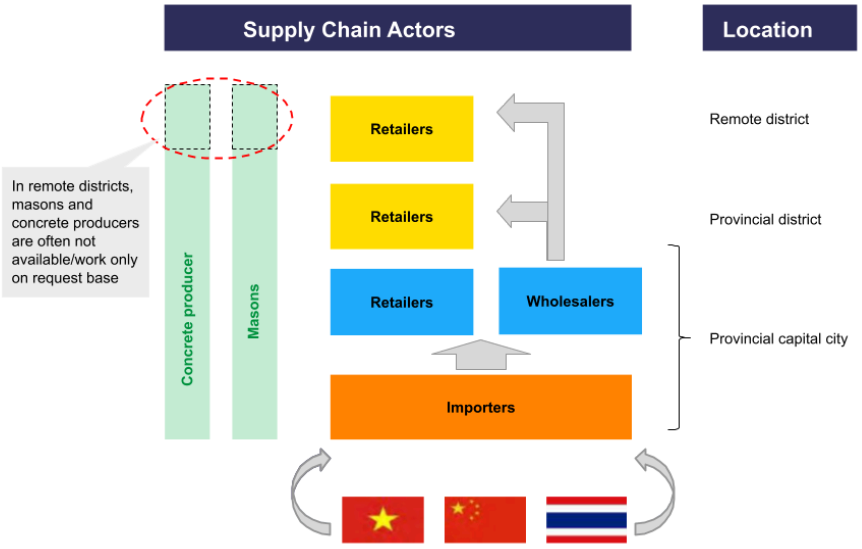


A mason and new latrine owner steer a bicycle rickshaw loaded with all the purchased materials required to construct a latrine. | ***Source:*** *iDE Bangladesh*

There are many good examples of supply chain exploration in the sanitation sector. As always, your activity's service model will be based on your context, funding and focus.

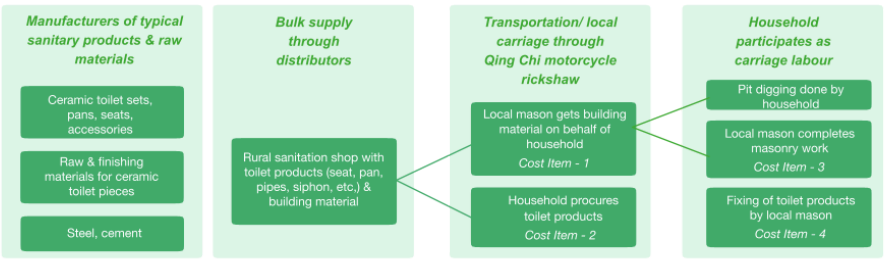
This case study section will be slightly different. Take a moment to review the illustration of each supply chain and to review one external report section in more detail.



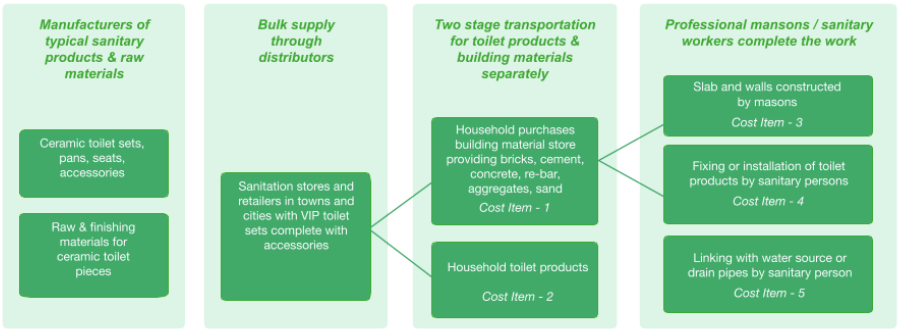
Bhutan	 [Sanitation Supply Chain Analysis Pemagetshel Dzongkhag](#) (Section 6)
Cambodia	 [WASH Supply Chain and Market Analysis Report](#) (Section 3)

Pakistan

Supply chain map: Pour-flush latrine (low-cost for low-income households)

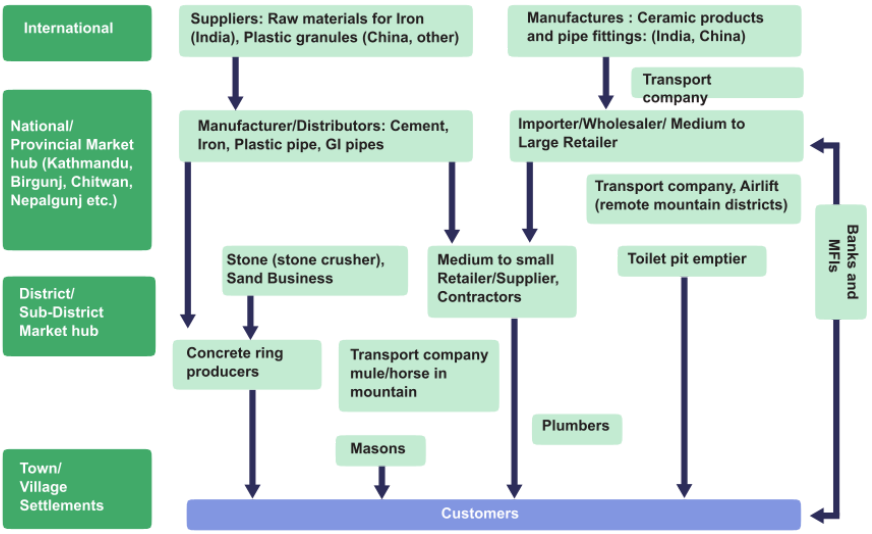


Supply chain map: VIP latrine (low-cost for the poorest of the poor)

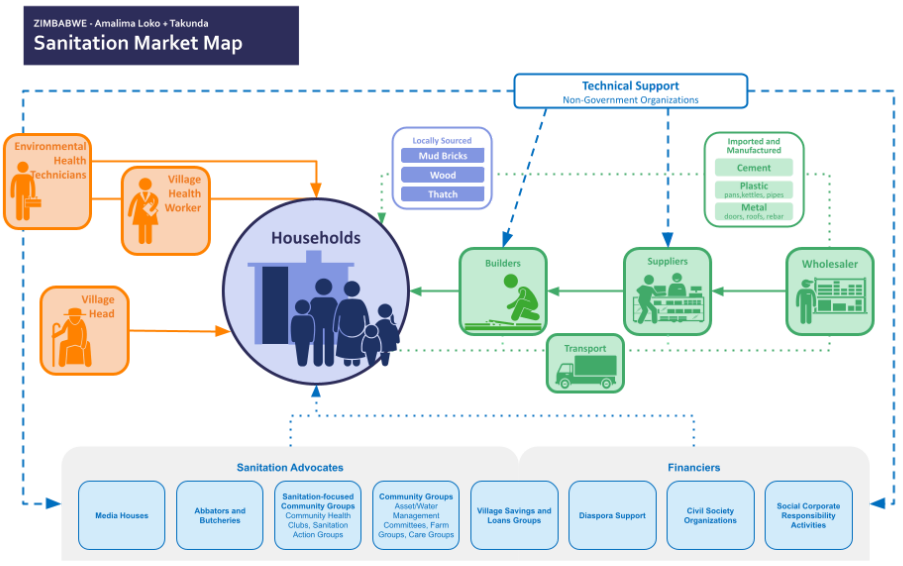
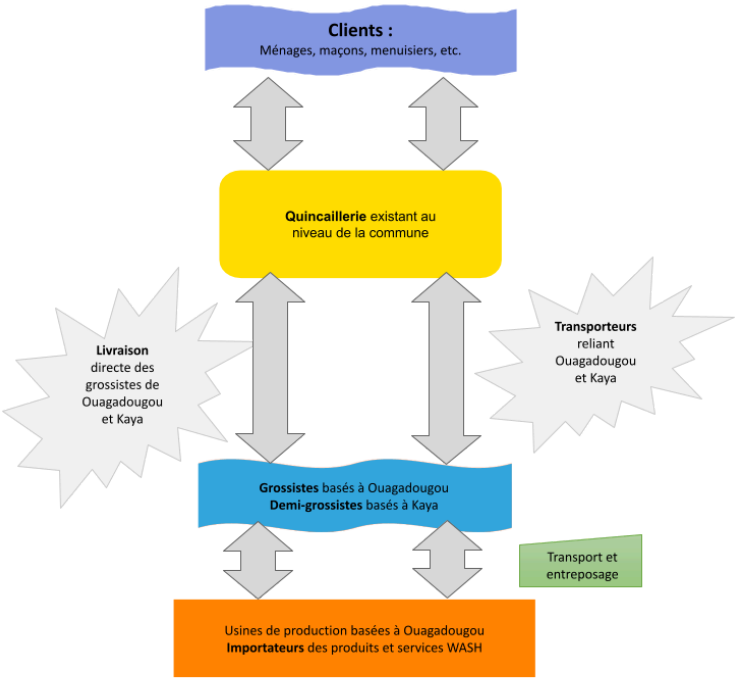
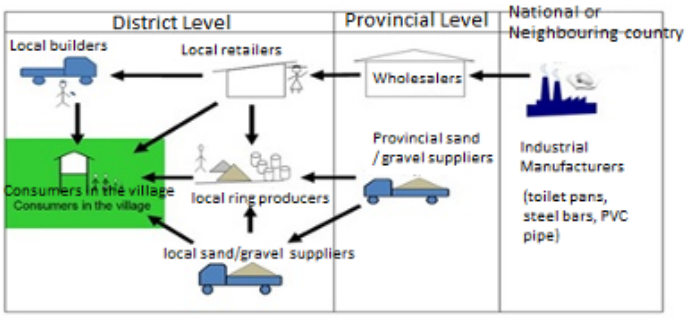


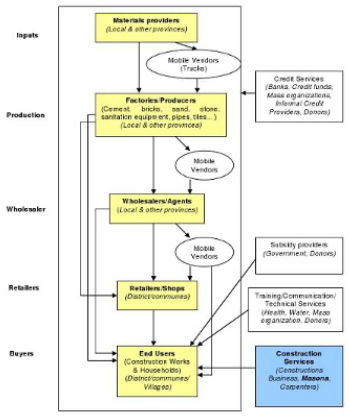
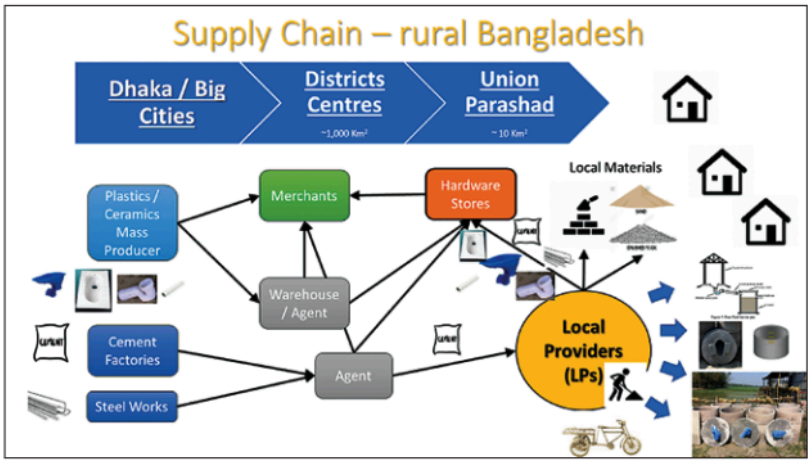
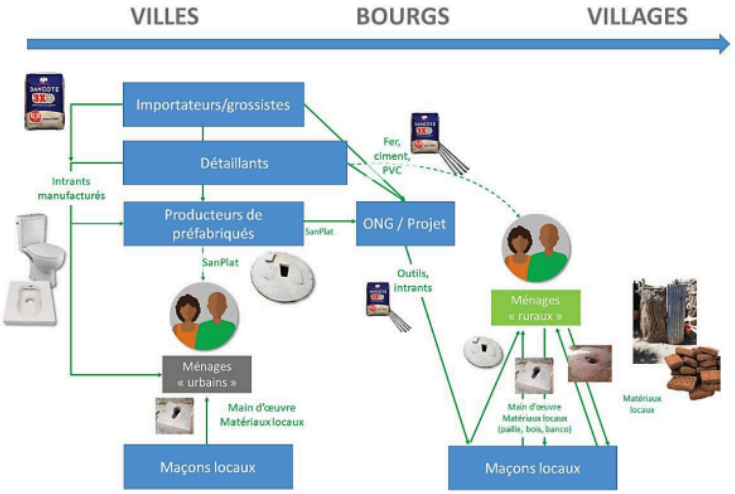
Sanitation Market Analysis Summary Report: Pakistan (Section 2)

Nepal



Sanitation Market Analysis Summary Report: Nepal (Section 2)

Zimbabwe	 Sanitation Market Map Zimbabwe (Takunda and Amalima Loko (unpublished)
Burkina Faso	
Laos	

	[Report Rural Sanitation Supply Chains and Finance Workshop](#) (Part 2)
Vietnam	 [Report Rural Sanitation Supply Chains and Finance Workshop](#) (Part 2)
Bangladesh	 [Sanitation Market Analysis Summary Report: Bangladesh](#) (Section 2)
Niger	 [Evaluation de la chaîne d'approvisionnement](#) (French)

Connect: Understanding supply chains



How to analyse supply chains?

In this session, we have had a rapid overview of the network of actors who help facilitate the delivery of sanitation products and services and the safe management of waste. In the next session, we will explore more about the wider WASH System.

1. Take 5 minutes to revisit the illustrations of the different supply chain models.
2. Below, describe what differences you see between the models this case study has leveraged. Why do you think there are differences?

None

Quiz: Check your knowledge



Check your knowledge of Session 6

Question 1: True or false.

The Opportunity, Ability and Motivation framework can also be applied to supply chain actors. Select one.

- ☐ True
- ☐ False

Question 2: What are the three types of supply chain aspects that MBS activities should consider? Select three.

- ☐ Manufacturing
- ☐ Raw material inputs
- ☐ Mass Media
- ☐ Distribution

Question 3: Which is NOT a potential benefit of networking local enterprises in the supply chain. Select one.

- ☐ New potential clients
- ☐ Pooled resources for marketing
- ☐ Unlink supply chain
- ☐ Increased quality control
- ☐ Pooled procurement
- ☐ Emotional support

Question 4: True or false.

The sanitation supply chain is exactly the same in all contexts. Select one.

- ☐ True
- ☐ False

Learn More

	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) Guidance provides practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. UNICEF, 2021
	Introductory Guide to Sanitation Marketing (PDF, 4.6 MB | English, Spanish, French) This guide aims to "define sanitation marketing and the key components of sanitation marketing; initiative; provide an overall framework for scaling up rural sanitation programs and the justification for using a sanitation marketing approach; explain the steps needed to design, implement, and monitor sanitation marketing programs at scale; and highlight key challenges and recommend solutions." WSP, 2011
	Sanitation Supply Chains and Business Models: How can we improve market systems? This Guidance Note includes information on how to understand and research sanitation supply chains and businesses and how to assess common sanitation business models, including what works and what doesn't work. UNICEF (Jenkins and Pedi) 2010, GUIDANCE NOTE 3
	Manual on Sustainable Value Chain Development "The ValueLinks manual is the reference book for the ValueLinks methodology and one of several knowledge products. It is intended for use by development projects or by public agencies promoting specific agribusiness, handicraft, or manufacturing sub-sectors of the economy. It has no specific sectoral focus. However, the emphasis is on those product markets that offer opportunities for the poor." Springer-Heinze A. 2018

	Lesson 3: Market Research (Supply Assessment) This 30-minute webinar by PRO-WASH provides a comprehensive discussion on supply assessments within market research, including the use of actor mapping and systems flow. PRO-WASH and WASHPaLS

Additional Case Studies

Sub-Saharan Africa

- **Uganda - Assessment Report:** In-depth Supply Assessment Report for the Sanitation Marketing Pilot – Tororo District Uganda (HIP Project, 2009 | English)
- **Ethiopia - Assessment Report:** An assessment of demand creation of sanitation products and services Lessons from Ethiopia (T/WASH, 2019 | English)
- **Senegal - Case Study:** Quels modèles d'affaires propices au développement du marché de l'assainissement rural au Sénégal ? (USAID/ACCES, 2016 | French)
- **Rwanda - Assessment Report:** Assessment & Improvement of Sanitation and Hand Washing Supply Chain in Burera, Musanze, Nyabihu & Rubavu Districts in Rwanda (SNV, 2015 | English)
- **Eastern and Southern Africa - Final Report and Compendium:** Key Findings of a Sanitation Supply Chains Study in Eastern and Southern Africa WASH (UNICEF, 2014 | English)
- **Liberia - Final Report and Compendium:** Liberia Sanitation Market Assessment Findings (USAID/WASHPaLS, 2021 | English)
- **Kenya - Final Report and Compendium:** Kenya Sanitation Market Assessment Findings (USAID/WASHPaLS, 2021 | English)
- **Burkina Faso - Assessment Report:** Victory Against Malnutrition Plus (ViMPlus) WASH Markets Assessment Report (ViMPlus in Burkina Faso, 2021 | English)
- **Cote D'Ivoire - Assessment Report -** Commercial Performance of Sanitation Service Providers in Côte D'ivoire (USAID MuniWASH, 2024 | English)
-
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Asia

- **Bangladesh**
  - **Tactic Report:** Reaching remote customers by facilitating sanitation business linkages (iDE, 2019 | English)
  - **Summary Report:** Sanitation Market Analysis Summary Report: Bangladesh (UNICEF, 2020 | English)
  -
- **Cambodia**
  - **Learning Report:** Supply Chain Assessment for Sanitary Latrines in Rural and Peri-Urban Areas of Cambodia (iDE Cambodia, 2007 | English)
  - **Analysis Report:** WASH Supply Chain and Market Analysis Report An Analysis of Select Areas in Siem Reap, Battambang, Pursat Provinces (Save the Children, 2015 | English)
  - **Blogpost**: Linking the supply chain together in Cambodia (iDE, 2019 | English)
  -
- **Nepal**
  - **Learning Report:** A Report on Consumer Preference and Supply Chain Analysis for Sanitation (SNV Nepal 2015 | English)

    - **Summary Report:** Sanitation Market Analysis Summary Report: Nepal (UNICEF, 2020 | English)
- **India - Program Brief:** Strengthening the Supply Chain for Sanitation in Bihar, India (PSI, 2016 | English)
- **Indonesia and Vietnam - Academic Paper (open access):** Sanitation value chains in low density settings in Indonesia and Vietnam: impetus for a rethink to achieve pro-poor outcomes (Willetts et al., 2017 | English)
- **Bhutan - Assessment Report:** Sanitation Supply Chain Analysis Pemagetshel Dzongkhag, Bhutan (Pedi, 2012 | English)
- **Myanmar - Academic Paper (open-access):** How can we improve demand and supply chain barriers in rural dry zone area of Myanmar?
- **Pakistan** - **Summary Report:** Sanitation Market Analysis Summary Report: Pakistan (UNICEF, 2020 | English)

Session 7: Strengthening the WASH system for sanitation market development

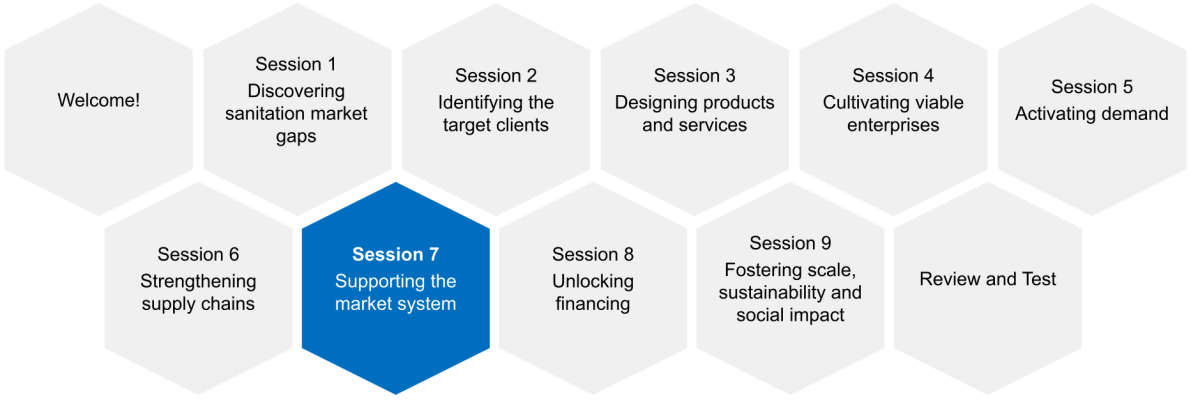


A local government official from the ward Union Parishad meets with members of the SanMarkS team to discuss coordination efforts. | ***Source**: iDE Bangladesh*

In this session, you will:

1. **Review** how the sanitation market fits within the wider WASH System
2. **Explore** how programs have strengthen institutions, regulations, policy, and monitoring
3. **Reflect on** systems gaps for your contexts

Average estimated session duration:



7.1 Defining the WASH System

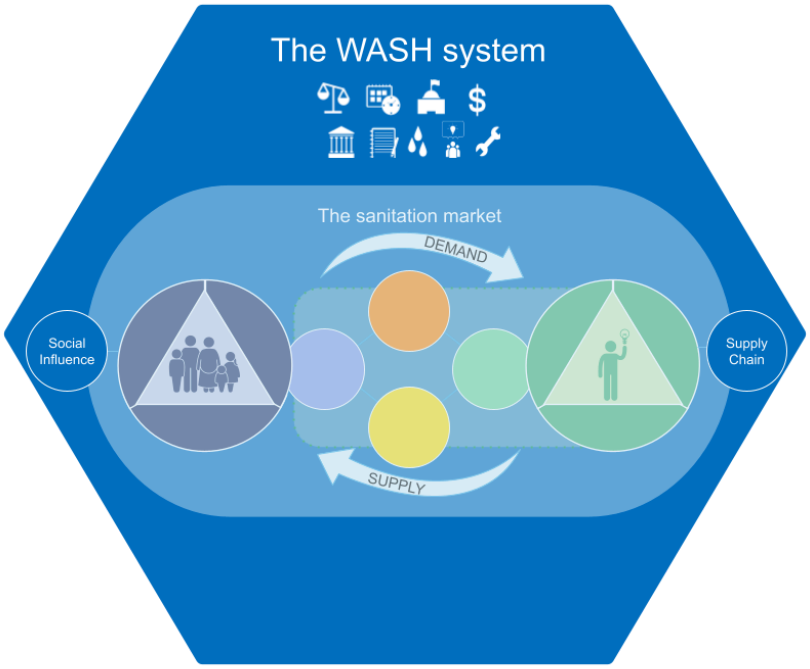


*Two community toilets in peri-urban Vanuatu | **Source**: EWB Vanuatu*

What is the WASH System?

We now zoom out to look at the wider enabling environment that shapes the entire sanitation market. Sometimes, this is described as the 'business environment' and the 'broader context' (see USAID, 2018). Others describe activities to support this environment as 'market shaping' (see UNICEF, 2021). In our framework, we conceptualise the enabling environment as the WASH system alongside social influence (Session 5.2) and the supply chain (Session 6). The WASH system includes nine key building blocks.

Take a moment to revisit the sanitation market diagram below, which highlights the WASH system with reference to the sanitation market.



*Sanitation Market conceptual framework - focused on the WASH System | **Source**: Adapted from USAID, 2018.*

Ensuring universal and long-lasting access to improved sanitation requires a whole system of actors and factors to work together. The businesses that supply sanitation-related products and services, and the customers buying these products and services, are both part of that system. Unsafe sanitation cannot be tackled one project at a time or by focussing solely on strengthening supply or demand. This type of overly narrow approach is what has caused the problem in the first place. What is needed is an approach that looks not just at the sanitation market, which ensures supply and demand for sanitation, but the whole WASH System within which the market exists.

What are the WASH System Building Blocks?

The WASH System, as described by IRC, includes the nine building blocks shown below and are covered in much more detail in a parallel course on the Academy. In this session, we will briefly explore four of these building blocks and how ongoing MBS programs have addressed gaps in the WASH System.

Take a moment to explore the building blocks (interactive image - text is provided in the table below IRC, 2018) and key assessment questions that MBS activities might consider. What stands out to you?



IRC's WASH System Building Blocks | ***Source**: IRC WASH*

Institutions	The ***institutions*** building block refers to the formal organizational arrangements in a country and its WASH sector, the capacity and resources that each organization has to perform its role, and the coordination mechanisms amongst the organisations. Institutional arrangements vary significantly. Most important is that the actors have clarity about their roles and their interactions with others, and that there be no major gaps. • Which institution(s) are leading MBS activities in a country? • Are efforts by different actors well coordinated?

	• Is the private sector included in coordination platforms and recognized for its role in sanitation service delivery?
Policy and legislation	The ***policy and legislation*** building block comprises the mechanisms by which a government sets out its vision for the sector (policy) and determines the legal framework for achieving that vision (legislation). To address the challenge of the SDGs, national policy must identify targets for improving WASH services and then provide guidance on the institutional arrangements and strategies for achieving these targets – for example, by identifying the permissible service models. Legislation needs to be linked to and supportive of policy and provide a clear framework for the interaction of actors in the WASH institutional setting. Legislation is particularly important where non-state actors (e.g., communities, the private sector) are service providers. • Is MBS recognized as an approach to reach universal access to improved sanitation? • Are market-based approaches part of the government's vision and strategy (i.e., the policy) and legal framework (i.e., legislation) for delivering WASH services?
Regulation and accountability	The ***regulation and accountability*** building block covers formal regulatory mechanisms and enforcement processes as well as other mechanisms to hold decision makers, service providers and users to account and ensure that the interests of each group of actors are respected. It also includes accountability that goes beyond formal mechanisms to include behaviour of different actors and their obligations in civil society. Governments are accountable for their formal commitments under their signed human rights accords, which include a process of systematic follow-up and review of implementation • Are there mechanisms in place to control and assure quality of sanitation-related products and services produced by the private sector? • Is there transparency about the support provided to the private sector and about selection criteria for the businesses that benefit from the support? • Are there balanced incentives and sanctions for ensuring quality sanitation delivery?
Planning	The planning building block is the foundation for implementation of policies to achieve universal access to sustainable services. Plans must include costs and details on financing and may involve multiple phases. • Which institutions have activities and budgets related to MBS included in their annual workplans? • Do the activities address the issues raised by private sector actors engaged in market-based sanitation? • Is the private sector consulted about its needs when such plans are being developed?
Monitoring	The ***monitoring*** building block covers the capture, management and dissemination of the information required to effectively manage WASH services at all levels. Monitoring is the basis for the information feedback loops that ensure effectiveness and allow adaptive change. Monitoring also supports both regulation and planning. It should be both systematic and reliable so that it is accepted by different sector actors and can be used for decision making. • Do national monitoring systems include indicators directly linked to MBS (e.g. availability of sanitation service providers in each district)? • Do national monitoring systems reliably capture access to improved and safely-managed sanitation at the district-level?
Finance	The ***finance*** building block deals with identifying the costs of service delivery, the sources of funding, the roles of different actors in providing finance, effective mechanisms for long-term financial procurement, and channels for getting the money where it is needed. • Are businesses that offer sanitation products and services able to access loans to grow their operations? • Are financial solutions available for consumers to make sanitation products more affordable (e.g., consumer loans)? • Are subsidies needed to reach the poorest? Unlocking finance is the focus of the **next session.**

Infrastructure	***Infrastructure*** is the essential physical component that actually delivers the service. It comprises not only hardware but also the mechanisms and processes for developing new infrastructure and maintaining existing facilities. • Are treatment plants for faecal sludge and wastewater in place?
Water resource management	The quality and quantity of water resources need to be managed - with unsafe sanitation posing a main risk to the quality of water resources. In many cases water resources are managed by agencies other than those responsible for WASH, so coordination and communication between these groups is important. The management of other environmental aspects such as soil can also be included in this building block. • Are the toilet solutions offered by the private sector suitable to protect groundwater resources from becoming contaminated (e.g. pit latrines in areas with shallow groundwater that is used as a source for water supply)?
Learning and adaptation	The ability to ***learn and adapt*** based on experience and changing circumstances is an essential characteristic of any robust system. This is even more so in complex adaptive systems like WASH, where the outcomes of policy action are difficult to predict. A 'learning sector' is one 'that engages in continuous learning and reflection and is thus able to adapt to changing circumstances and demands.' The learning and adaptation building block presumes inclusive platforms for the regular sharing of information and use of data for critical analysis, with insights from multiple stakeholders, including civil society. The stakeholders then respond to the learning through adaptation, changing their policies and practices: they are willing to address failure and work with others to do things differently. Thus, this building block may alternatively be considered readiness for innovation and a way to drive change in the other building blocks. • What mechanisms are in place to help support learning and adaptation? • Where is documentation and learning stored? How is it shared?

For an introduction to **WASH systems strengthening**, you can follow the course 'Introducing water, sanitation and hygiene systems strengthening'. It is available in English, French, and Spanish



How might MBS teams support a strong WASH System?

The objective of WASH system strengthening for Market-Based Sanitation is to support and facilitate an accelerated scaling-up of sanitation and hygiene services. There are many potential activities to strengthen the system for sanitation and better enable private sector involvement with the vision of reaching universal sanitation.

In this game, match each potential intervention with the WASH Building Block that it is most connected to.

Activity	Building Block
1. **capacity development** of local government on the concept of Market-Based Sanitation	1. Institutions 2. Institutions 3. Regulation and accountability 4. Planning

2. **multi-stakeholder platforms** where government, NGOs and private sector can meet to strengthen sector coordination 3. clarifying and enforcing **regulations** on sanitation-related products and services 4. support national government to **plan and budget** for market-based activities 5. improved **monitoring** to be able to track progress on sanitation services at the district/province level 6. clarify and refine **subsidy policies** so that criteria for receiving subsidies are more fair, poverty-focused, transparent, and based on objective criteria and data 7. support the development of **financial** models for households to pay for their sanitation facilities	5. Monitoring 6. Policy and legislation 7. Financing

We could spend much time on each of these building blocks and how they related to MBS. However, for simplicity in the following sections we will explore four building blocks: institutions, regulation & accountability, policy & legislation, and monitoring.



Reflection question

Which building blocks are the weakest in your context? Which are the strongest?

None

7.2 Strengthening institutions

Institutions: coordination, roles, responsibilities, capacity, sector mechanisms

Market systems strengthening does not replace the government's central responsibility for ensuring the adoption of adequate sanitation by all households and protecting public health.

As the duty bearer, governments must take a lead role on both the demand and supply side: building their own capacity to facilitate community-led efforts to stop open defecation, and promoting household investment, whilst engaging with and encouraging local businesses to ensure they deliver good-quality sanitation services at fair prices - for example through legislation.

For this section, we have a series of videos from Ethiopia to learn more and additional written examples from other contexts.

Who have been the key stakeholders and institutions in Ethiopia?

In this video (3:13 minutes), Melaku Worku, a Learning Alliance Facilitator with USAID Transform WASH shares the key stakeholders and how they connect to government institutions.

Who are the key stakeholders in USAID Transform WASH in Ethiopia? [2022]



What are some ways that MBS activities support institutions?

Part of WASH system strengthening is therefore also to build the capacity of government to strengthen Market-Based Sanitation. In our other sessions, we have asked to pick a case study to explore in more depth. In this session we will ask you to watch a short video with an example from Ethiopia, and then provide short descriptions of other key examples with linked resources.

Capacity Strengthening	Watch this short video (5 mins) with Michael Negash from SNV and the T/WASH program.  **Ethiopia** - The government of Ethiopia has made Market-Based Sanitation part of their national policy. The USAID Trandform WASH activity aimed to strengthen the capacity of local government to provide a better enabling environment for Market-Based Sanitation through training, coaching and facilitating cross learning through exposure visits.
	Vietnam - Vietnam has made significant strides in improving access to WASH, but challenges remain, particularly in remote and rural areas. The government is shifting from subsidies to engaging the private sector to address these gaps. However, local officials need training to effectively collaborate with businesses. Through WASH Scale Up Project (WASH-SUP), funded by DFAT, iDE aimed to build government capacity for market-based WASH programs in two rural provinces. iDE trained officials to promote improved latrines, handwashing, and affordable WASH products. Partnerships with the Center for Preventive Medicine and the Women's Union were crucial for reaching and educating last-mile customers. - **Optional**: To learn more explore this iDE Tactic Report (PDF 4.9 MB | English
	Cambodia - Aimed at improving sanitation coverage through local civic champions, WaterSHED supported a leadership development activity. The project involves self-selected participants from two districts who engage in a cyclical program of conferencing and coaching. These civic leaders were incentivized through financial and non-financial rewards to drive transformational change in their communities. The initiative led to significant improvements in sanitation access, with some villages achieving 100% coverage. - **Optional**: To learn more explore this WEDC conference paper (McLennan et al, 2014, PDF 192 KB | English)

Stakeholder Platforms and Orientations	Watch this short video (3 mins) with Melaku Worku of IRC WASH Ethiopia.  **Ethiopia -** Sanitation Marketing Multi-Stakeholder Platforms aim to enhance sanitation and foster collaboration on the practical implementation of the Ethiopian National Sanitation Marketing Guidelines. It focuses on creating a supportive business environment for the private sector in sanitation. The platform is chaired by the Federal Ministry of Health (FMoH) and co-chaired by the Federal Urban Job Creation and Food Security Agency , with members from government, non-government organizations, and the private sector.
	Bangladesh - Bangladesh has a long-standing tradition of collaboration among the government, development actors, and the private sector. These partnerships unite diverse groups to work towards the shared goal of enhancing social welfare, tackling issues from infrastructure projects to household-level water provision. iDE, UNICEF and SDC through the SanMarkS program worked on creating public-private development platforms (PPDPs) to strengthen coordination. They aimed to support the development of standards, provide smart subsidies and coordinate promotion activities by collaborating with development organisations and the public sector. - **Optional**: To learn more explore this iDE Tactic Report (PDF 4.3 MB | English) and explore the session slides
	Ghana - In 2015, UNICEF initiated MBS efforts in Ghana by collaborating with national government stakeholders to deliver a one-week orientation and training package for various government levels and implementing partners. The workshops covered the integration of sanitation marketing within Ghana's rural sanitation strategy, an overview of MBS programme principles, and presentations on successful interventions like mason training and village savings initiatives. Discussions addressed stakeholder concerns and differentiated the new approach from past efforts. Intensive training was provided for implementers, and market research plans were presented. Notably, business development officers were included in the core district team for the first time, bringing valuable new perspectives to the initiative. - **Optional**: To learn more see Box 1 from UNICEF 2021 (page 47)

Reflection question

What might be done to strengthen institutions in your context?

None

7.3 Strengthening regulation & accountability



Regulation & accountability: accountability, mechanisms, regulatory framework & capacity

Building on strong institutions, regulatory mechanisms and processes need to be in place to ensure the quality of sanitation-related products and services produced by the private sector. Regulation is also important to make sure that intellectual property and the rights of entrepreneurs are protected. One important right is to set fair prices without being dictated to by development or government partners.



What are some ways that MBS activities support regulations and accountability?

Once again, here are some descriptions and examples of the role of regulations on sanitation-related products and services for successful Market-Based Sanitation interventions. You will also have the option to learn more through linked resources.

Regulation and standards to ensure quality products	One barrier to sanitation business growth is on a spectrum from the complete lack of standards to overly stringent standards. • On one end of the spectrum, is a lack of transparent or harmonised quality assurance standards at national and local levels. • On the other end of the spectrum, overly stringent standards, such as setting the quality of building materials or over-designed pit construction specifications, can increase the cost of sanitation solutions, rendering them unprofitable to supply or unaffordable to consumers.
	Kenya - A recent analysis of the Kenyan market suggests there is strong potential demand for this type of animal feed made from the by-product of black soldier fly processing of human waste. However, without strong regulations and enforcement of product quality, businesses are not willing to take the risk to engage in the market. analysis notes that the "potential could be threatened" preventing competent businesses from engaging in the market. • **Optional**: To learn more see UNICEF, 2021 (page 172 - AquaConsult)
	Bangladesh - The World Bank project in Bangladesh encouraged microfinance institutions (MFIs) to provide loans for household latrines by establishing pre-agreed quality standards. These standards ensured the latrines remained functional, reducing the risk for MFIs and leading to high loan repayment rates. This success boosted MFIs' confidence, resulting in

	increased investment in the sanitation market despite the initial enforcement costs. • **Optional**: To learn more see this World Bank blog
	Bhutan - The Bhutanese Ministry of Health streamlined their sanitation options from a catalogue of 22 slab, pit, and shelter choices to just three product system options. This shift led to a 45% increase in basic sanitation in the pilot area within a year of implementation. - **Optional**: To learn more see UNICEF 2021 (page 47)
	Malawi - A study of 28 prefabricated latrine slabs in two cities of Malawi by Mchenga and Holm (2019) showed that slabs were often not thick enough or were not large enough in diameter. The results of this research illustrate the inherent complexity in ensuring high-quality decentralised sanitation solutions and how one component, the user interface, if implemented poorly, can affect the rest of the value chain. It shows how not only regulation but also policy and monitoring, are critical elements for the success of Market-Based Sanitation interventions. - **Optional:** Learn more from this academic paper (Mchenga J and Holm R, 2019, Journal of WASH for Development)
Regulation to protect investors and businesses	Licensed production is the authorised production of a product using technology developed elsewhere. This involves obtaining permission from a company to manufacture and sell its products. The company that obtains these rights usually agrees to pay royalty fees to the owner or licensor. Intellectual property (IP) rights play a crucial role in protecting the licensor's technology and also give the local licensee a market advantage. However, in many countries, there are financial and administrative hurdles to obtaining IP rights, and once granted, they are not protected. Businesses that have invested extensively in design innovations and their "brand" need to be able to protect those designs and brand names and rely upon patents and royalty payments to maintain their ability to operate competitively in the market. A lack of regulation (and policy) can scare away potential investors and inhibit companies from exploring local manufacturing of new (WASH) products. Stronger IP protection, as well as longer protection periods, could help encourage investors to introduce and/or invent new WASH products and services. This type of policy reform could also encourage local manufacturing of essential WASH products.
	Bangladesh - In Bangladesh, the plastics manufacturer RFL holds the licence to produce SaTo pans within the country. RFL has faced competition from lower-cost and lower-quality 'copycat' versions of the pan. This has led to negative impacts such as lost revenue from the copycat producers and discrediting the original brand through inferior quality of the copycat product. - **Optional**: To learn more, see UNICEF 2021 (page 173)

Regulation to protect the market (Type 2 environments)	A weak or absent regulatory framework can also lead to vulnerable transport and treatment markets for human waste. - Some countries regulate wastewater management but not sludge management. - Enforcement is difficult due to the limited capacity of local governments. - Some regulation is harmful rather than beneficial to the establishment of sustainable waste management businesses. - Existing fines and other methods of enforcement may not be high or strong enough to dissuade local emptiers from engaging in illegal dumping. - Or Tariffs may be too low to achieve cost recovery for the transporting waste management businesses.
	Thailand - In Thailand, the national public health act sets tariffs for public and private operators at US$ 7 for the first cubic metre and US$ 4 for each subsequent cubic metre. As a result, some private operators do not register with the local government agencies to avoid such restrictions (and are known to charge as much as US$ 100 per cubic metre), as well as to avoid other taxes and dumping fees - **Optional**: Learn more in this learning paper by Sophie Trémolet
	Further examples to improve regulation for faecal sludge management ● Outlawing or regulating manual emptying (as in Vietnam or South Africa); ● Licensing operators (as in Ghana); ● Regulating emptying of on-site systems (Vietnam); ● Allocating disposal points (Accra, Freetown, Dhaka); ● Setting treatment and effluent standards (as in Vietnam and many other countries); ● Tariff setting (as in Indonesia or Thailand). - **Optional**: Learn more in this learning paper by Sophie Trémolet



Reflection question

What might be done to strengthen regulation and accountability in your context?

None

7.4 Strengthening policy & legislation

MBS activities are able to thrive when conducted in countries with pro-MBS policies and guidelines. These policies can be formal or informal, but often take time to be approved and are based on evidence from the ground through successful pilots through partner organisations.



What are some ways that MBS activities support policy and legislation?

Here are some descriptions and examples of the role of policy and guidelines on sanitation-related products and services for successful Market-Based Sanitation interventions. You will also have the option to learn more through linked resources. Not all of these guidelines are publicly available and it is important to discuss with your local government representative to understand your context.

Ethiopia	"This revised guideline, developed by the Ethiopian Ministry of Health, in collaboration with IRC Ethiopia and other non-governmental partners, aims to facilitate the development of sustainable sanitation and hygiene markets whereby households have access to a broader range of quality, affordable and preferred basic sanitation and hygiene products and/or services from private-sector suppliers at accessible delivery outlets. The guideline is also designed to support accelerated implementation of market-based sanitation interventions on a wider scale in the regions, districts and ensure sectoral accountability at all levels in Ethiopia." - **Optional**: Explore the guidelines (PDF 861 KB, 2020 | English)
Bangladesh	The National Sanitation Marketing Guidelines in Bangladesh were led by the Department of Public Health and Engineering (DPHE) and were supported by UNICEF, the Swiss Development Cooperation and iDE. They draw from a decade of work on sanitation marketing activities led by these partners in the country along with many other organisations who have worked with the private sector for sanitation in rural Bangladesh. - **Optional**: Explore the guidelines (PDF 111 MB, 2020 | English)
Uganda	Developed by the Ministry of Health Uganda and Plan International, this handbook provides essential information on sanitation marketing, offering a step-by-step guide for developing and implementing a sanitation marketing project. It also includes recommended references for further reading, catering to a broad audience, particularly policy makers, program managers, sanitation business entrepreneurs, financial institutions, and behavioural change communication specialists. - **Optional**: Explore the handbook (PDF, 3.1 MB | English)
Mauritania (Mauritanie)	Developed collaboratively by UNICEF and GRET for the "Ministère de l'Hydraulique et de l'Assainissement" (Ministry of Water and Sanitation), the "Stratégie marketing de l'assainissement locale et plan d'action en Mauritanie" (Local sanitation marketing strategy and action plan in Mauritania) is the first step in the development of an operational marketing strategy at local level for the four

	communes involved in the study carried out as part of the UNICEF-funded project "Sustainability of rural water services and maintenance of FDAL status through sanitation marketing." - **Optional**: Explore the strategy (PDF, 1.6 MB |French)
Togo	Developed for the Government of Togo, this guide "Guide opérationnel de l'assainissement autonome des excrétas et eaux usées au Togo" (Operational guide to autonomous excreta and wastewater sanitation in Togo) was supported by the European Union. In addition to proposing appropriate technologies, experience has shown the importance of structured implementation approaches based on needs assessment, situation diagnosis, and stakeholder awareness-raising. Strategies aimed at promoting demand for sanitation are recommended and fall into two broad categories: community-based approaches, including Participatory Hygiene and Sanitation Transformation (PHAST) methods and their adaptation for children (CHAST), as well as Community-Led Total Sanitation (CLTS), and marketing approaches, including Sanitation Marketing (SanMark). - **Optional**: Explore the guide (PDF, 1.6 MB |French)
Lao People's Democratic Republic (PDR)	Lao PDR has developed MBS implementation guidance, which includes facilitator's guides and trainee handbooks covering Business Skills Training, Entrepreneur Operating Model, Latrine Production & Installation, and Sales Agent Training. Additionally, there is an overall implementation guide with templates and tools (UNICEF 2021).
Indonesia	The Government of Indonesia has created a comprehensive "Sanitation Entrepreneur Training" manual with training modules and standard operating procedures for each step of the implementation process, including business processes, planning, social mapping, order receiving, construction, and payment. (UNICEF 2021).
Bhutan	The Government of Bhutan has created comprehensive national guidelines for district-wide supply-side strengthening under its Rural Sanitation and Hygiene Programme. These guidelines cover steps and procedures for SME Inventory & Engagement, SME-Community Linkages, Sales Coordination, Technical Guidance, SME Coaching & Monitoring, Awareness Creation, and Propoor Support. They also include templates, tools, and forms for each topic (UNICEF 2021).



Reflection question

What do you think different governments use guidelines, standards, or handbooks rather than formal policies? What might the advantages be? What about the disadvantages?

None

7.5 Strengthening monitoring

Monitoring: framework & routine, implementation, service levels, use of data

In sanitation, we typically monitor the number of people who get latrines, but monitoring market systems change and strength is much more complex. At the most fundamental, it can be challenging to clearly define the difference between improved and unimproved sanitation (building on national guidance and WHO 2018). Monitoring is key to know if your MBS activities interventions are having the intended effect; that access to sanitation is stimulated through the private sector supplying households with sanitation-related products and services.



*Monitoring in progress / **Source**: IRC Ethiopia*

What are some indicators used by MBS activities?

There are many potential indicators and here are a few potential options building from guidelines in Ethiopia and Bangladesh.

Demand	Supply	WASH System (Enabling Environment)
☐ Number of households mobilised or reached with demand creation or promotional activities	☐ Number functional enterprises/entrepreneurs delivering different types of improved sanitation	☐ Number of functional national, regional, zonal and district Market-Based Sanitation coordination groups

☐ Number of households with access to improved sanitation products and services through Market-Based Sanitation (i.e., number of households purchased washable latrine slabs and other products from sanitation entrepreneurs/enterprise) ☐ Number of households with access to improved latrines that meet the standard of a basic sanitation service (i.e., installed and using washable latrine slabs) ☐ Number of poor and vulnerable households having access to improved sanitation products and services as part of the smart subsidy (e.g., female-headed, household with disability, permanently ill or elderly above 60, etc.) ☐ Number of households with handwashing facility that meet the standard of a basic sanitation service ☐ Number of households that practise proper and safe water handling and home water treatment ☐ Number of Village Savings and Loan Associations (VSLAs) established and functional ☐ Number of households who received sanitation loans from financial institutions (such as micro-finance institutions, VSLAs, etc.) and purchased improved sanitation products and service	and hygiene products disaggregated by gender ☐ New WASH products and services introduced to the market ☐ Number of sanitation products sold or sales volumes ☐ Number of enterprises/entrepreneurs with documented business plan or model	☐ Number of regions and districts with sanitation sector offices with integrated Market-Based Sanitation strategic and annual operational plans ☐ Number of national, regional and district sanitation marketing programme joint quarterly performance reviews ☐ Number of financial institutions engaged in providing sanitation loans to consumers and enterprises ☐ Sanitation product and service standards, regulations, directives and training manuals developed and implemented ☐ Policy and operational research conducted, communicated and used for policy and operational decisions ☐ Number of capacitated Business Development Service providers ☐ Number of district allocated finance/budget for Market-Based Sanitation activities ☐ Number of districts included private sector performance in their report



Reflection question

What other indicators would you add to this list? Which would you remove?

None

Connect: System strengths and constraints



What about the WASH System in your context?

In this session, we have had a rapid overview of how the sanitation market requires a strong WASH system. In the next session, we will explore more the financing block of the WASH System.

1. Take 5 minutes to reflect on your own context
2. Below, describe at least two strengths and two constraints for your context.

None

Quiz: Check your knowledge



Check your knowledge of Session 7

Question 1: Which is NOT a WASH Systems building block? Select one.

- ☐ Institutions
- ☐ Policy and Legislation
- ☐ Platforms
- ☐ Monitoring
- ☐ Regulation and Accountability
- ☐ Financing

Question 2: True or false?

You can't start an MBS program until your country has an approved MBS guideline.

- ☐ True
- ☐ False

Question 3: True or false?

A lack of regulation (and policy) can scare away potential investors and inhibit companies from exploring local manufacturing of new water and sanitation products.

- ☐ True
- ☐ False

Question 4: Which of these indicators is better NOT a strong MBS monitoring indicator? Select one.

- [ ] Number of households mobilised or reached with demand creation or promotional activities
- [ ] Number of national, regional and district sanitation marketing programme joint quarterly performance reviews
- [ ] Number of trained masons trained on latrine installation
- [ ] Number of enterprises/entrepreneurs with documented business plan or model

Learn More

Additional Reading

	Guidance on Market-Based Sanitation (PDF, 8.2 MB | English) Guidance provides practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor Market-Based Sanitation interventions that build the market for sanitation goods and services as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2. **Section 3.8 focuses on Market Enablers.** UNICEF, 2021
	Striking the balance: what is the role of the public sector in sanitation as a service and as a business? (PDF, Paywall | English) This academic paper explores the roles and responsibilities of different stakeholders in a market system within the context of Uganda and provides clear recommendations for public, private and development partners. Mulumba JN., Nothomb C, Potter A, & Snel, M, 2014. Waterlines, 33(3), 195–210. http://www.jstor.org/stable/24688166
	Sanitation Markets: Using economics to improve the delivery of services along the sanitation value chain (PDF, 1MB | English) This paper aims "to identify how market failures affect the ability to extend appropriate and sustainable sanitation services alongside the entire sanitation value chain." Using economic modelling, the author explores which models help to best shape improvements in sanitation outcomes. Trémolet S, 2012
	Decision Support Tools: Taxes and Tariffs (English) Designed by WASHPaLS, this economic modelling tool helps interested stakeholders explore how taxes and tariffs can impact the uptake of improved sanitation facilities. - Guidance - Tool

	WASHPaLS/USAID 2022
	Decision Support Tools: Penalties (English) Designed by WASHPaLS, this economic modelling tool helps interested stakeholders explore how financial penalties on property owners can impact the uptake of improved sanitation facilities. - Guidance - Tool WASHPaLS/USAID 2022

Country-specific guidelines

	Sanitation Marketing A handbook for: Sanitation Managers and Private Sector Players - **Uganda** (PDF, 3.1 MB | English) Nabembezi, D., Nabunya, H. (no date). Ministry of Health Uganda and Plan International
	National Sanitation Marketing Guidelines - **Bangladesh** (PDF 111 MB 2020 | English) Department of Public Health and Engineering (DPHE) - Bangladesh, 2020
	National Market-Based Sanitation Training Manual for **Ethiopia** (PDF, 63.4 MB | English) Ministry of Health - Ethiopia, 2020
	Suivi Post-FDAL et Marketing de l'assainissement en Milieu Rural - **Martinque** (PDF, 1.6 MB |French) Ministère de l'Hydraulique et de l'Assainissement with UNICEF, GRET, 2018
	Guide opérationnel de l'assainissement autonome des excrétas et eaux usées au **Togo** (PDF, 1.6 MB |French) ARTELIA - Echirolles IGA - Lomé Ministère de la Santé , 2016

Additional Case Studies

Asia

- **Learning Brief:** Engaging government in market-based sanitation in Southeast Asia (Willetts J and Powell B, 2016 | English)
- **Tactic Report:** Building Government Capacity to Implement Market-based WASH in Vietnam (iDE, 2017 | English)
- **Tactic Report:** Solving sanitation from all sides. (iDE/UNICEF, 2017| English)
- **Conference Proceeding:** Transforming sanitation coverage: civic champions inspire sustainable change in Cambodia (MeLennan, 2014 | English)
- **Blog**: Bangladesh: Sanitation Microfinance for Rural Households (WSP, 2018 | English)

Latin America and the Caribbean

- **Learning Report:** Fostering Water and Sanitation Markets in Latin America and the Caribbean: How the Public Sector Can Support the Private Sector to Bridge Coverage Gaps and Improve Service Quality for Low-Income Populations (IDB, 2016 | English, Spanish)
- **Learning Note:** Sanitation Markets at the Bottom of the Pyramid: A Win-Win Scenario for Government, the Private Sector, and Communities in Peru (WSP, 2010 | English)

Session 8: Unlocking finance to reach the poor

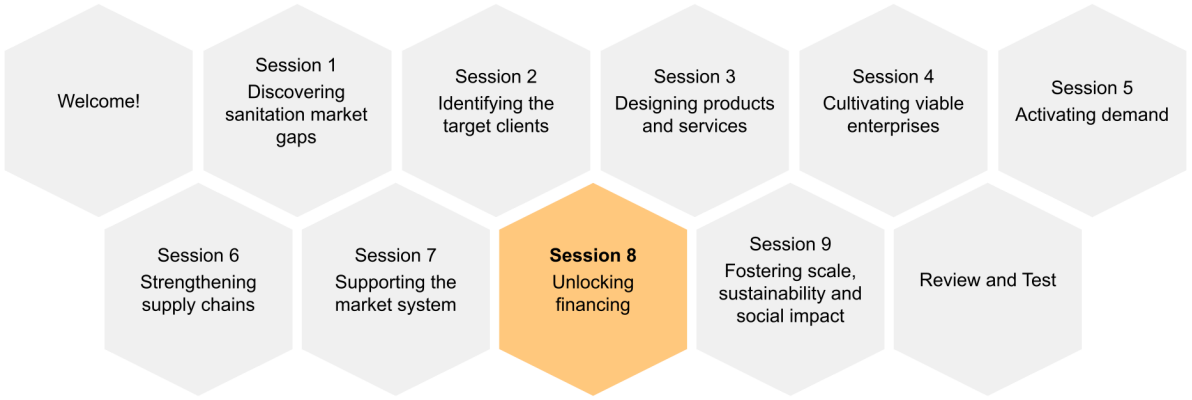


*A set of record keeping books at a local entepneur's shop in rural Bangladesh | **Source**: iDE Bangladesh*

In this session, you will:

1. **Review** how financing can strengthen both demand and supply for sanitation
2. **Explore** options to improve consumer financing
3. **Explore** different options for business financing
4. **Learn about** how to strengthen the financing enabling environment
5. **Reflect on** which financing strategies might be most relevant for your context

Average estimated session duration:



8.1 Defining financing



A focus on the financing building block | ***Source**: Albert Hoffman for IRC*

What is financing?

Finance is an essential part of Market-Based Sanitation interventions; it can jump start fledgling sanitation markets and enable existing sanitation markets to grow and function sustainably over the long term. But it often needs to be "unlocked"; meaning properly designed, leveraged, directed, and used for both the demand and the supply side, to foster and scale Market-Based Sanitation solutions (Trémolet et al. 2012).

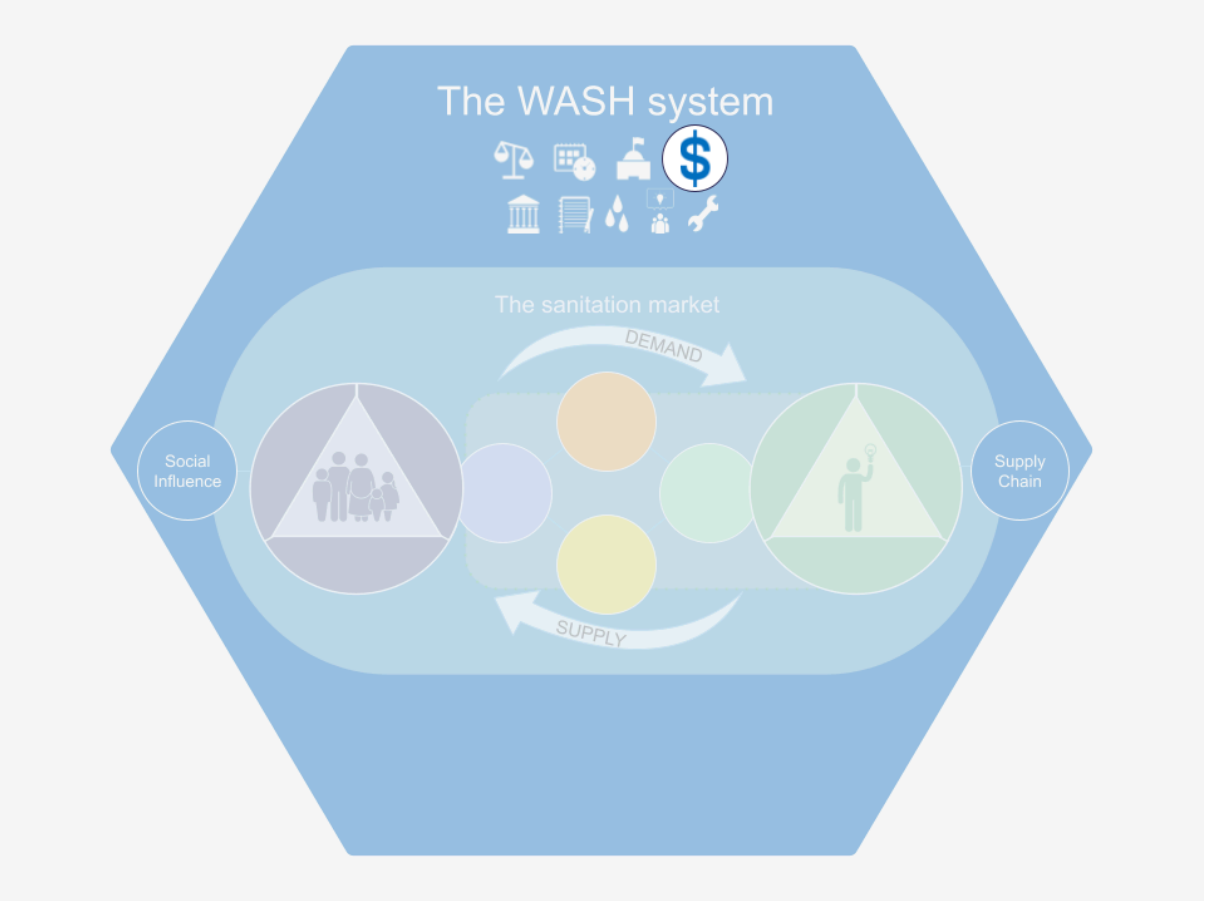
Unlocking finance involves ways to decrease the costs of sanitation products and services and increase their affordability for both customers and businesses.

- First, we need to find ways to **make the product system more affordable** (see Session 3.4: Lowering product systems costs) so that more people can buy sanitation products out of pocket.
- Next we need to **make loans and savings products available** to reach the ones that can afford it but only if paid in instalments.
- Finally, we need **smart subsidies** to reach the poorest.

Yet, each of these three strategies comes with potential trade offs for the market system. So financing must also be done with caution and strategy.

- When the product system is too cheap and doesn't cover manufacturing costs - businesses are not sustainable.
- When loans are introduced without care - households may be left with loans they can't afford or paying for unusable latrines.
- When subsidies are introduced without care - demand might be stifled and the market system distorted.

Take a moment to revisit the sanitation market diagram below, and see how financing is highlighted.



- **Caption**: Sanitation Market conceptual framework - focused on the WASH System
- **Source**: Adapted from USAID, 2018.

Who needs financing?

In MBS, financing primarily focuses on two groups of people within the system.

- **Customers.** Many poor consumers often face financial constraints and are unable to cover the full cost of sanitation products and services (such as concrete or plastic slabs). Poor households may need support to access and use sanitation products or services. Unlocking finance can solve the timing mismatch between household resource availability and hardware expenditures and ensure customers have sufficient resources and liquidity to purchase sanitation products and services such as a toilet (BRAC 2011; PATH 2012; Trémolet et al. 2010a).

- **Entrepreneurs.** Many local enterprises that wish to offer sanitation products and services often lack the capital to purchase raw materials in bulk to invest in production facilities and marketing activities, or to offer credit terms (e.g. instalment payments) to their customers. Producers may need credit to buy raw materials for manufacturing sanitation products. Retailers may need working capital to increase their stock to accommodate demand.

MBS activities often aim to strengthen financing options for both customers and entrepreneurs by partnering with government and financial institutions. However it is important to note that also governments and development partners require financing to conduct MBS activities.

What can governments do to unlock finance? Leveraging public finance for universal sanitation.

Investments by governments (from taxes or transfers) in sanitation services will always be needed. No country in the world has realised safely managed water and sanitation services for all without public investments. Leveraging public finance is needed to ensure also the poorest have access to services and can help kick start market development.

On-site sanitation is a private investment. However, investment in household sanitation generates significant public benefits which justifies the need for public spending. Like for immunisation, sanitation has benefits beyond the immediate household which acquires the service. Safe collection of excreta has the effect of reducing the number of faecal pathogens in the environment, which in turn reduces people's exposure to those pathogens. A significant number of people need to change their behaviours for this effect to occur.

Enterprises offering sanitation products and services need to be self-sustainable. However, investments in strengthening underdeveloped markets might be needed to develop a private sector that offers sanitation products and services suitable for the local context and affordable to the majority of the population. This is the role of the government with (where needed) support of development partners.

Reflection question

What (if any) types of sanitation financing is available in your context?

None

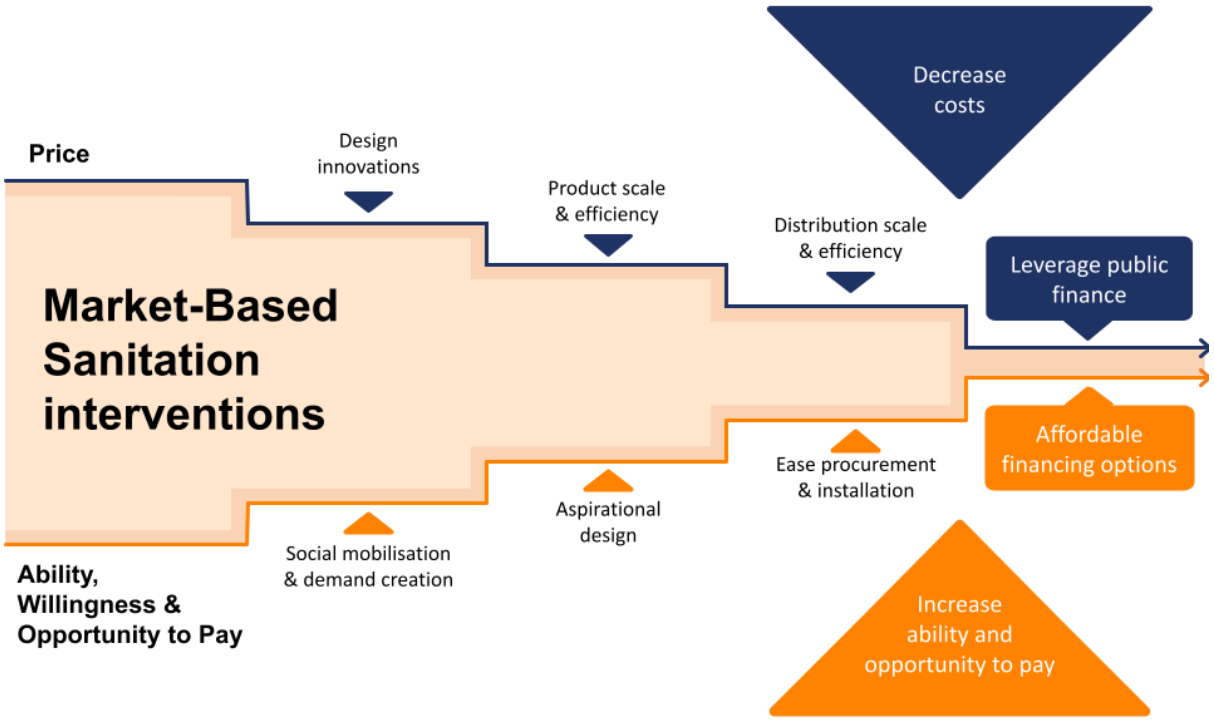
8.2 Customer financing



How might we decrease costs and increase ability, willingness and opportunity to pay?

Ultimately, MBS programs aim to decrease the gap between prices and consumer's ability, willingness and opportunity to pay for improved sanitation facilities and services.

Take a look at the diagram below to explore all the different ways that this gap can be reduced.



Bridging the financial gap between supply and demand. ***Source****: Adapted from xxxx*

What are the options to support customer financing?

There are several different options when supporting customers to access financial support including saving up, borrowing, and subsidies. Take a moment to review the table below which highlights these different options (from UNICEF 2021).

Category	Financing option	Modality
Saving up	VSLAs (village savings & loans associations), RoSCAs (rotating savings & credit associations), savings groups	• Households group together, each putting aside small amounts of cash on a regular basis, taking turns for who gets the funds • Outside source of funds not required • Accumulated savings used to purchase, build & upgrade
	Lay-away purchase	• Lay-away schemes allow households to pay businesses in advance in instalments, receiving product/service when full amount is paid
	Health insurance scheme	• Health insurance premiums include free or reduced-price sanitation goods/services, or insurance premium discounts given for having/installing a sanitation facility
Borrowing (loans/credit)	Consumer loan through microfinance institution (MFI), community or formal bank, revolving loan fund, self-help group	• Addresses cash flow problems for households with ability to repay over time (but cannot pay lump sum upfront) • Grant or donor funding often used for loan market research, loan product development, or credit guarantees/subsidies for loan capital and/or ongoing administration costs • Interest rate paid by consumer must cover loan administration and commercial borrowing costs, unless loans are subsidised • Often requires a new source of capital for loan fund
	Instalment payment purchase (credit via business)	• Businesses offer purchase on credit from own or outside resources, collect instalment payments from households at and after installation/ purchase
	Product leasing/renting	• Lease towards ownership or rent when product can be repossessed and resold or re-used (e.g. portable toilets)
Subsidy	Vouchers	• Physical coupon for price discount (or free), for specified hardware options or set cash amount, redeemed at authorised businesses • Can be distributed via existing social protection programmes (e.g. the identity card for the poor in India)

	Conditional cash transfers (CCTs)	• Cash is transferred to beneficiary, conditional on future performance of a measurable sanitation behaviour, with ongoing independent verification of behaviour performance • As with vouchers, can be distributed to poorest or vulnerable groups by linking to existing social protection programmes
	Purchase rebate (consumer output-based aid)	• Rebate is paid to household who pre-finances toilet purchase/ installation or upgrade (or safe pit emptying service) meeting prescribed criteria/quality, after independent verification • As with vouchers and CCT, can be delivered to poorest or vulnerable groups by linking to existing social protection programmes

What do these options look like in practice?

In our other sessions, we have asked to pick a case study to explore in more depth. In this session we will provide a short description of key examples and you have the option to learn more through linked resources.

Micro-finance	• **Lesotho.** In the 1980s, urban Lesotho saw one of the first large-scale toilet construction loan programs, funded by the government and managed by a commercial bank. The program, part of a government-led sanitation campaign, provided loans as purchase orders for high-quality pit toilet materials from certified businesses, which were paid directly by the bank. Learn more in this report. • **Nicaragua**. If families invest in improving their own bathrooms, they are more likely to use them. In rural Nicaragua, Water For People is partnering with micro-finance institutions that offer loans to families to improve their bathrooms, creating long-term change. Learn more in this blog post. • **Cambodia.** WaterSHED Cambodia partnered with three MFIs to pilot-test toilet loans for rural households, requiring significant effort to coordinate MFI lending with toilet sales marketing. Initially, about 5% of attendees at village events received loans, but a more cost-effective model was later developed where MFIs disbursed loans directly to toilet suppliers, resulting in over 1,200 loans during a nine-month pilot. Learn more in this blog post. • **Vietnam.** From 2001-08, the Vietnam Women's Union ran a revolving loan fund program, providing over 46,000 low-income households with $150 toilet loans, repayable in three instalments over 24 months. The program achieved a 99.6% repayment rate and was scaled up nationwide by the Vietnam Bank for Social Policy due to high demand. Learn more in this report (also covers cases from Bangladesh, Indida, Bangladesh, Mozambique, Ecuador and Senegal). • **India.** Over the last decade, several MFIs and financing companies have begun offering toilet loans to support the uptake of sanitation facilities. Research has identified a high demand for sanitation microfinance, driven by low coverage rates and national policies, and highlighted the importance of coordinating sanitation loans with hygiene awareness campaigns to enhance demand. Learn more in this report. • **Ghana**. A pilot in Ghana by iDE in partnership with the Entrepreneurial Finance Lab (EFL) used psychometric surveys to identify potential clients for sanitation loans. The repayments are then collected through mobile money or a mobile money agent. Learn more in this blog post. While an important finding, there were limitations to the success of

	the tool, and iDE ultimately stopped leveraging EFL's tool given minimal difference in repayment rates.
Smart subsidies	• **Philippines.** Catholic Relief Services implemented a Conditional Cash Transfer (CCT) subsidy program to help poor households rebuild or repair septic tank toilets and shelters destroyed by Typhoon Haiyan in 2013. Over 20 months, the program successfully rebuilt or repaired 20,000 shelters and 23,000 family toilets, with high satisfaction rates among beneficiaries. Learn more in this report. • **Vietnam**. Thrive Networks offered $20 rebates to poor households in Vietnam for constructing toilets that met government hygiene standards, using community-based targeting and providing education on hygiene and sanitation. The program, which scaled to 10 provinces, benefited over 5,000 households in its first two years by linking them with local sanitation businesses and offering social loans to supplement their purchases. Learn more in this report. • **Cambodia**. In 2015, NGOs iDE and WaterSHED piloted voucher programs in Cambodia to reduce the cost of materials for pour flush toilets for the poorest rural households, using the national 'IDPoor' system to identify eligible recipients. WaterSHED's pilot saw a 26% uptake among eligible households, while iDE's pilot had a 15% uptake, with some evidence that vouchers suppressed purchase rates among non-IDPoor households. Learn more in this policy brief and webpage. iDE ended up incorporating this approach into its core programming after the pilot. • **Bangladesh**. Each year, the Prime Minister's Office Subsidy program provides funds for model villages with a specific focus on displaced people. In 2018, iDE supported local government to ensure that this subsidy provision was effectively applied to reach the most marginalised and did not distort the market. Learn more in this tactic report.
Savings Groups	• **Ethiopia**. The T/WASH program established 292 sanitation-focused VSLAs with a total of 5,280 members in eight districts across Ethiopia. Each member weekly contributed around 10 Ethiopian Birr (ETB or USD 0.20) to support a savings group that could then loan money to households for sanitation facilities. Initially loan repayment rates were low, however as the intervention matured repayment exceeded 90%. Learn more in this report**.**

Reflection question

What are the linkages between regulation and policy with the above financing approaches?

None

8.3 Business financing



Woman promoting sanitation products in Ethiopia | ***Source**: IRC Ethiopia*

What are the options to support business financing?

On the supply side, financing can provide the necessary support to manufacture and sell sanitation products as well as to set up services such as emptying pit latrines. Evidence shows that enterprises that take loans are more likely to be top-sales performers (USAID 2018) and that around one third of enterprises consider access to finance as a major obstacle.

Take a moment to explore five of the strategies below and some case studies. Note that this list is not exhaustive.

Micro-finance support	Micro-credit support has been widely used to help provide capital and liquidity to support enterprises as they scale their businesses.	**Bangladesh, India, Kenya, Ethiopia, Tanzania and Uganda.** FINISH Mondial provides microfinance to kick-start small businesses, such as masons. They train them in the construction of above and below the ground sanitation products, and also support them with business training and capacity development – to construct a high quality safely managed sanitation system at low prices.
Revolving fund	A revolving fund is a financial mechanism involving a temporary capital injection from which loans are issued. Typically, a large in-country financial organisation, like an Apex Bank, manages the fund and loans the capital to financial institutions (FIs) or microfinance institutions (MFIs) at preferential rates. These FIs/MFIs then lend the funds to borrowers at capped rates. As loans are repaid, the capital is	**Ghana**. In 2015, SNV launched the five-year From Possible to Profitable Programme, a €4 million revolving fund managed by Fidelity Bank Ghana, to increase access to WASH services at the household level. The fund provided liquidity to financial institutions to lend to MSMEs and households at below-market rates, but collateral requirements for loans remained prohibitive for some borrowers despite

	recycled into new loans throughout the agreement's duration, eventually being fully repaid to the funder.	the fund's support. Learn more in this blog post. A similar fund was leveraged in Ghana by UNICEF (see Box 37 UNICEF 2021)
Guarantee fund	A guarantee fund is a risk-sharing mechanism that compensates financial institutions (FIs) for a portion of capital losses if borrowers default, excluding interest payments or fees. FIs or microfinance institutions (MFIs) use their own capital to provide loans to the market. The fund can guarantee losses either for a portfolio of loans over a specified period or for individual loans.	**Rwanda**. Water For People in Rwanda established a US$100,000 guarantee fund to support sanitation entrepreneurs to access financing by covering most of the collateral they need to acquire loans in commercial banks in Rwanda. Through consultations, the Guarantee Trust (GT) Bank agreed to offer loans to sanitation entrepreneurs with an 80% cover from the Water For People Guarantee Fund, instead of the 110-125% collateral cover usually required. GAPM, a pit emptying business in Rwanda, received a $34,000 loan from a guarantee fund to acquire a pit emptying truck, improving its services and increasing its client base. Despite business growth, GAPM faced cashflow issues due to delayed client payments, leading to over 5 million Rwandan Francs in outstanding payments. Water for People has been supporting the firm to streamline payments and aid loan repayment. Learn more in this report.
Subsidised interest rate	The subsidised interest rate mechanism helps grow the sanitation market by making loans more affordable for borrowers through significantly reduced interest rates. This is achieved by providing subsidies to financial institutions (FIs) and microfinance institutions (MFIs) to cover the difference between the standard market rate and the lower, pre-agreed rate for targeted borrowers.	This mechanism has yet to be applied to sanitation businesses.
Foreign currency support	In many developing countries sanitation businesses require imported goods or materials. Accessing hard currency through the banking system to import goods is one of the biggest challenges they face. To purchase a product for import into any country, the national currency must be converted to a "hard currency," one that is accepted by a seller for purchase of the product, through the	**Ethiopia**. The T/WASH program has supported local entrepreneurs to tackle Forex challenges. Forex operating guidelines were reviewed to make the application, queuing, and liquidation processes more accessible, accommodating, and transparent. Policy reforms were encouraged to raise the priority of Forex access for socially oriented businesses in emerging markets, such as for WASH products.

	foreign exchange market such as the US Dollar or the Euro. However, foreign currency and exacerbated by below-market official exchange rates.	Advocacy efforts aimed to add WASH products to the list of "essential or priority goods" to ensure Forex was more readily allocated to businesses importing or manufacturing these goods. Learn more in this blog post.

Reflection question

What are the linkages between regulation and policy with the above financing approaches?

None

8.4 Public sector financing support



A church latrine has just been finished in southern Zimbabwe. | ***Source**: PRO-WASH and Takunda*

What are the options to support public sector financing?

The third way that MBS activities can support financing is to work directly with government partners to increase public investments. These types of strategies are often part of a wider systems strengthening strategy and require changes in policy. Short term MBS activities may not be able to support governments to enact these strategies, but may contribute to national working groups and guidance.

Take a moment to explore three of the strategies below and some case studies. Note that this list is not exhaustive.

Earmarking taxes. Earmarking is the budgeting practice of dedicating tax or other revenues to a specific programme or purpose. This practice typically involves depositing tax or other revenues into a special account from which the legislature appropriates money for the designated purpose.	• **India**. To accelerate universal sanitation coverage, the Prime Minister of India launched the Swachh Bharat Mission on 2nd October 2014. By 2nd October 2019, all villages, Gram Panchayats, Districts, States, and Union Territories in India declared themselves "open defecation free" after constructing over 100 million toilets in rural areas. The mission was funded by the 'Swachh Bharat Cess,' a 0.5% tax on all taxable services, which became a major revenue stream. Between 2014 and 2019, the central and state governments spent over Rs 1.5 lakh crores (US$ 23 billion) on sanitation infrastructure. From 2019, the mission moved to Phase II (ODF Plus), focusing on reinforcing ODF behaviours and managing solid and liquid waste in villages.
Fund allocation. Similar to the earmarking of taxes, fund allocation provides a fund to support the most vulnerable.	• **Bangladesh**. The government of Bangladesh operates a pro-poor strategy for the most marginalized communities offering capital subsidies with households responsible for operation and maintenance of water and sanitation facilities. The program operates through supply-side subsidies, where local service providers (including sanitation entrepreneurs) are bulk paid for subsidised services. A proportion of local government annual budgets (for example Union Parsharids) are to go towards water and sanitation subsidy provision for the 'hard-core poor'. Learn more in the National Cost Sharing Strategy and Pro-poor Strategy

Cross subsidies. Governments can provide a cross-subsidy from richer to poorer users within a service area (or from one country to another) via general taxes.	• **Vietnam**. In Vietnam, the intergovernmental transfer system ensured redistributive benefits for poorer provinces, with the Vietnam State Budget Law of 2002 assigning specific revenue streams to local governments. Revenues included fully assigned tax revenues, shared tax revenues, other central government-assigned revenues, lotteries, non-refundable grants, domestic borrowing, and central government budget allocations. The system used a formula-based approach to ensure higher per capita transfers to poorer provinces, addressing horizontal fiscal imbalances through estimated revenue capacity and spending norms. Vertical imbalances were managed via revenue sharing arrangements. Targeted transfers, including National Targeted Programmes for rural water, sanitation, and hygiene, were designed to be pro-poor, with higher allocations to provinces with greater poverty levels. Learn more in this report. • **Burkina Faso.** Burkina Faso presents a successful example where a cross-subsidy between existing water and sanitation customers allows new customers to access on-site sanitation facilities. In Zambia, Lusaka Water Supply Company (LWSC) has developed an interesting 'sanitation levy' in order to raise revenues for supporting sanitation investments in peri-urban areas. This is paid by existing customers in addition to the standard sewerage charge (for access to sewerage services). This type of charge could be an attractive way to generate additional revenues for the sector, it is seldom used in African cities. Learn more in this report.

Reflection question

Does your context have any government or donor supported financing schemes?

None

Connect: Unlocking finance

What about sanitation financing in your context?

In this session, we have had a rapid overview of how financing is a key part of improving sanitation service provision. In the next session, we will wrap up our course by reflecting on sustainability, scale and social impact..

1. Watch this short video (2 mins) with Eyerusalem Taye, the Country Leader for SATO Africa, a social business in Ethiopia. She gives the three key challenges and possible solutions towards unlocking finance in Ethiopia. https://youtu.be/aPl0oZoUqI0

2. Below, describe what types of financing support are most relevant with your context. Or share your experience with unlocking finance.

None

Quiz: Check your knowledge

Check your knowledge of Session 8

Question 1: Which is NOT a type of unlocking finance directly for customers? Select one.

- ☐ Village savings & loans associations
- ☐ Tax
- ☐ Consumer loan through microfinance institution
- ☐ Vouchers
- ☐ Conditional cash transfers
- ☐ Purchase rebate

Question 2: Which is NOT a type of unlocking finance for businesses? Select one.

- ☐ Micro-finance support
- ☐ Revolving fund
- ☐ Guarantee fund
- ☐ Subsidised interest rate
- ☐ Conditional cash transfers
- ☐ Foreign currency support

Question 3: True or false?

Earmarking taxes typically involves depositing tax or other revenues into a special account from which the legislature appropriates money for the designated purpose.

- ☐ True
- ☐ False

Question 4: True or false?

Sanitation enterprises that take loans are less likely to be top-sales performers.

- ☐ True
- ☐ False

Learn More

Additional Reading - Sanitation Financing Opportunities

There are many good resources related to sanitation financing that are relevant for MBS activities. This list does not aim to be exhaustive.

	Equity in Sanitation Marketing: How can we support the market to reach the poorest? This Guidance Note includes information on how Sanitation Marketing activities aim to reach poor households by increasing affordability and access. The brief also describes the strengths and limitations of alternative consumer financing options including cash-based social subsidies. UNICEF (Jenkins and Pedi) 2010, GUIDANCE NOTE 8
	Tapping the Market: Opportunities for Domestic Investment in Sanitation for the Poor "This document examines private sector provision of piped water services and on-site sanitation services in rural areas and small towns, with case studies from several countries. The preferences and circumstances of poor households and the performance of enterprises that provide services directly to them are examined, as are commercial and investment climate factors that may affect enterprises' actual or perceived costs and risks." Sy J, Warner R, Jamieson J. (WSP-IFC), 2013.
	Financing On-site Sanitation for the Poor: A Six Country Comparative Review and Analysis This "study offers evidence on alternative financing approaches for on-site household sanitation from case studies in six countries: Bangladesh, Ecuador, India, Mozambique, Senegal, and Vietnam. This evidence can help identify the best-performing approaches and the relevant factors and issues to consider in designing a sanitation financing strategy. " Trémolet S, Kolsky P, Perez E, 2010. World Bank, Washington, DC. http://hdl.handle.net/10986/17265

	Supply and Demand for Improved Sanitation: Results from Randomized Pricing Experiments in Rural Tanzania (open access) "To measure consumer demand for hygienic latrine platform products in rural Tanzania, we conducted a randomized, voucher-based real-money sales trial with 1638 households with unimproved latrines. We also evaluated multiple supply chain options to determine the costs of supplying latrine platform products to rural households." Peletz R, Cock-Esteb A, Ysenburg D, Haji S, Khush R. and Dupas P, 2017. *Environmental Science & Technology*, 51(12). https://pubs.acs.org/doi/full/10.1021/acs.est.6b03846
	Alternative consumer financing approaches to increase purchase of commercially available durable health-related products by the poor: A review and assessment of promising options. "This report describes a literature-based systematic review of consumer-side financing approaches to enable purchase and acquisition of durable health products in developing countries by low income households" Jenkins M, 2012

Additional Reading - Not Context Specific

Micro-credit and Micro-finance

- **Learning Note:** Financing Water and Sanitation for the Poor: The Role of Microfinance Institutions in Addressing the Water and Sanitation Gap. (WSP, 2015 | English).
- **Review:** Le micro-crédit pour l'accès à l'assainissement autonome (Arnaud Assié, 2013 | French)

Subsidies

- **Review**: The Use of Subsidies in an Area-Wide Sanitation Approach (USAID, 2024 | English)
- **White Paper:** Doing more with less: Smarter Subsidies for Water Supply and Sanitation (Word Bank, 2015 | English)

Taxation

- Working Paper: Should sanitation be taxed? (Kebede, A - IRC WASH, 2019 | English).

Vouchers

- **Guidance**: A Guide to Competitive Vouchers in Health (World Bank, 2004 | English)
- **Manual**: Cash and Vouchers Manual - Second Edition (World Food Programme, 2014 | English, French, Spanish)

Output-based Aid ands Results-based Financing

- **Working Paper**: Identifying the Potential for Results-Based Financing for Sanitation (Trémolet, S WSP 2011| English)
- **Learning Note**: Output-Based Aid and Sustainable Sanitation. (WSP, 2010 | English)
- **Working Paper**: Identifying the Potential for Results-based Financing for Sanitation. (WSP, 2011)

Context-Specific Case Studies

Sub-Saharan Africa

- Lesotho - Field Note: The National Sanitation Programme in Lesotho (WSP, 2002 | English)
- Tanzania - Research Report: Evaluating the potential for microfinance for sanitation in Tanzania (Tremolet and Muruka, 2013 | English)
- Kenya - Report: Sanitation Financing: Lessons Learnt from Application of Different Financing Instruments in Busia County, Kenya (Josphat et al., 2018 | English)

Asia

- **Review:** Financing Sanitation For the Poor: Household level financing to address the sanitation gap in India (Ikeda and Arney - WSP, 2015 | English)
- **Report**: Evaluating the potential of microfinance for sanitation in India (Trémolet and Kumar, 2012 | English)

- **Vietnam**
  - Poster Presentation: Household Participation, Satisfaction, Usage and Investment in an OBA Sanitation Program to Increase Uptake of Hygienic Facilities Among the Rural Poor in Central Vietnam (Jenkins et al., 2011 | English)
  - Report: Output-based aid for delivering WASH services in Vietnam: ensuring sustainability and reaching the poor (Nguyen et al., 2014 | English)

- **Cambodia**
  - Journal Article (paywall): Using microfinance to facilitate household investment in sanitation in rural Cambodia (Geissler et al., 2016 | English)
  - Report: Leveraging Targeted Subsidies to Increase Sanitation Coverage Evidence from a Randomized Control Trial in Cambodia (iDE, 2017 | English)
  - Article: A Less Expensive Toilet: The Impact of Targeted Subsidies on Latrine Purchases in Cambodia (Nicoletti et al., 2017 | English)
  - Journal Article: Impact of targeted subsidies on access to resilient sanitation for climate-vulnerable households in rural Cambodia (Kozole et al, 2023 | English)
  - Report: Rural Consumer Sanitation Adoption Study: An Analysis of Rural Consumers in the Emerging Sanitation Market in Cambodia (Pedi et al., 2014 | English)
  - Presentation: The Effect of OBA Subsidies Combined with Sanitation Marketing (SanMark) on Latrine Uptake Among Rural Populations in Cambodia (Rivera et al., 2016 | English)
  - Article: Microfinance boosts latrine purchases in rural Cambodia (WaterSHED, 2013 | English)

    - Learning Note: Making Toilets More Affordable for Cambodia's Poor Through Microfinance (WSP, 2014 | English)

    - Poster Presentation: Microfinance and WASH Integration: Effect of Microcredit on Latrine Uptake in Rural Cambodia (Geissler et al., 2012 | English)

- Philippines
    - Study Report: Pintakasi: A Review of Shelter/WASH Delivery Methods in Post-disaster Recovery Interventions. (CRS, 2016 | English)

Session 9: Fostering scale, sustainability and social impact

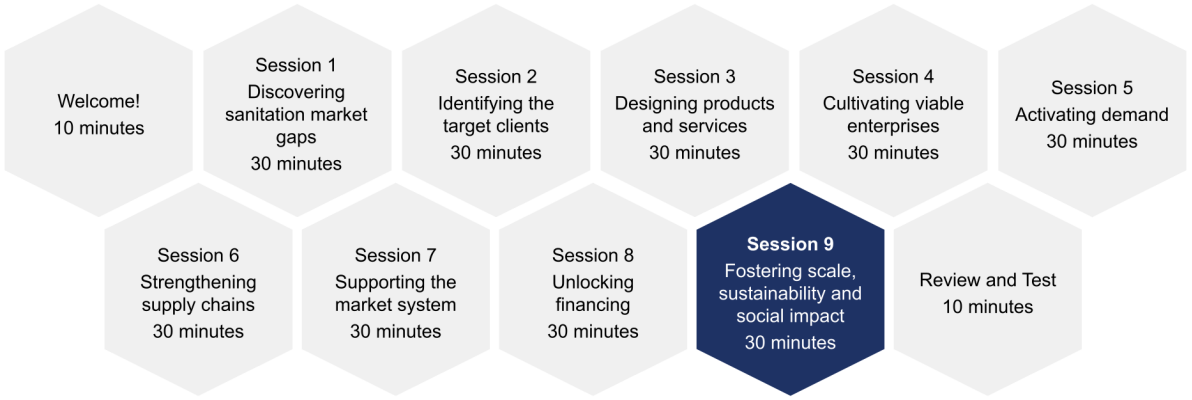


A group of women sanitation sales agents in Nepal reflect on potential barriers to their success in a participatory focus group | ***Source**: iDE Nepal*

In this session, you will:

1. **Review** six principles for guiding MBS activities related to sustainability, scale and social impact
2. **Reflect on** how these principles apply to your context

Average estimated session duration:



9.1 Defining MBS objectives



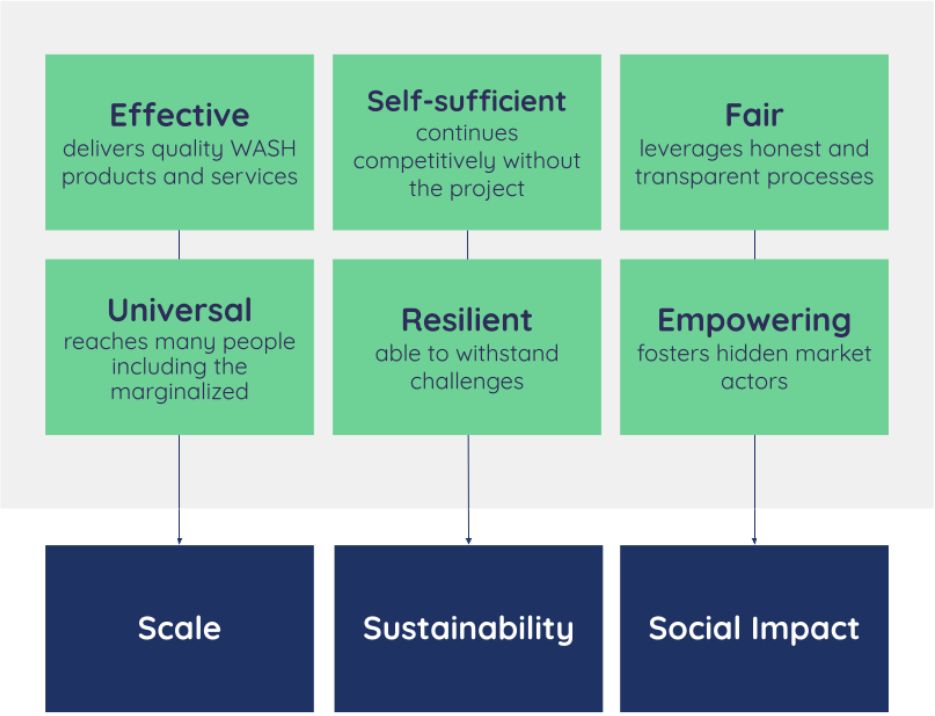
A latrine in peri-urban Vanuatu awaits it's next user | ***Source**: EWB Vanuatu*

What is the goal of MSB activities?

In Course-1 of this learning series on MBS, we introduce a framework of six guiding principles for MBS programming. These principles highlight the objectives of MBS - to shape a sustainable sanitation market system at scale and emphasise social impact.

The diagram below illustrates the six ideal objectives of market systems development programs - including MBS - and how these objectives lead to sustainability, scale, and social impact. There are lots of different ways that these principles could be labelled or framed, but for our purposes, we have labelled these principles as effective, universal, self-sufficient, resilient, fair and inclusive.

Take some time to re-read and reflect on the diagram below.



*Aspects of a 'good' market system / **Source:** Adapted from Suchana 2018.*

- **Scale** - MBS activities aim to create solutions that can scale - that reach more people through the market system than could be reached through traditional development interventions. This can include growing a customer base, developing new products or services, and diversifying into new sectors. This can be done by both expanding the breadth and the depth of an enterprise. To achieve scale, MBS activities must firstly foster **effective** solutions - delivering quality products and services that meet the requirements of hygienic and safe sanitation. MBS activities also should try to reach all people (**universality**) - rather than focusing on a small segment of the market.
- **Sustainability** - MBS activities aim to support robust market systems that balance the skills and resources of the public, private and development sectors. To achieve sustainability, MBS activities should support the market system to be **self-sufficient**, where new private sector actors crowd in, consumers seek and purchase goods and services, and, ideally, development actors are not supply actors in the system. MBS activities also support the market system to be **resilient** - able to withstand and bounce-back from shocks and stresses to the climate and economy.
- **Social Impact** - MBS activities aim to support models that are equitable and just. To achieve social impact, MBS activities should support businesses to be **empowering**. As inclusivity within clients and product and service design is discussed in the universal principle, the principle of empowering here focuses more on the empowerment of women and other marginalised groups within the supply chain. MBS activities should also foster a **fair** market system which has transparent governance structures.

While each of these could be a course on their own, in the subsequent sections we will briefly reflect on the six principles. For simplicity, we will not provide many detailed cases for each of the principles, but further case studies and examples for each can be found in additional reading.

Reflection question

How might teams monitor each of these six principles in MBS activities?

None

9.2 **Effective:** Delivers quality WASH solutions



Sanitation facilities of the local village chief that could use some maintenance and repair in rural Zimbabwe. | ***Source**: PRO-WASH & Takunda*

What are the challenges to effectiveness?

While often overlooked in MBS, it is important the market system is actually delivering quality and hygienic products and services. Latrines that quickly break or are installed incorrectly don't actually meet the goals of improving safely managed sanitation for all. Latrines that are uncomfortable unused also defeat the purpose. This principle also includes the maintenance, repair of sanitation facilities and emptying of pits or septic tanks. Notice that this principle is not just about the product system, but also about how it is delivered to households including instructions for use, opportunities for maintenance and repair and what to do.

While often not documented, MBS practitioners share stories of such as households paying off the micro-loans for latrines that were installed incorrectly and therefore unusable or breaking cup-trap water seals as households were not provided clear instructions on how to clean the latrine properly.

How to evaluate effectiveness?

To ensure that MBS activities are effective, teams often conduct spot-checks to monitor the quality of installations and upkeep or consumer satisfaction surveys as a way to track and improve the effectiveness.

Several tools can aid in this process. Take a moment to review the two types of tools below.

Latrine Inspection Form	Similar to a water-point checklist, a latrine checklist helps to identify if a latrine has been properly installed, maintained and repaired. The checklists have to be tailored to each context and are often done in tandem with a household survey. There are global versions from the WHO and many countries have their own inspection forms. Example designed for Zimbabwe's standardised *Ventilated Improved Pit Latrine.* **Name:** **Date:** **Location:** **Location**: 1 Is the latrine close to the home (within 20 meters) of the home? - *so that all members can use the latrine all the time*; 2 Is the latrine at least 30 meters from any well or handpump? - *so that waste from the latrine does not drain into the water supply*; 3 Is the latrine downhill from any well or borehole? - *so that waste from the latrine does not drain into the water supply*; 4 Is the latrine facing into the normal direction of the wind? - *so that fresh air blows into the entrance*; 5 Is the latrine on firm soil?- *so that the latrine will not collapse*; 6 Is the latrine on slightly raised ground?- *so that the rainwater can drain away*; 7 Is the vent-pipe away from trees?- *so that air can flow freely over the pipe* **Construction**: 8 Is the entryway at least 60cm wide? - *so that pregnant women and the elderly can easily enter*; 9 Is the squatting/sitting area at least 1 meter wide? - *so that pregnant women and the elderly can easily use the latrine*; 10 Does the latrine have walls? *Walls can be thatch, daggo, brick etc.*; 11 Does the latrine have a roof? *Roof can be thatch, iron sheet, cement etc.*; 12 Does the latrine have a vent-pipe or chimney? *Vent-pipe can be uPVC, brick or metal etc.*; 13 Does the vent-pipe have a fly screen? *If the latrine does not have a vent-pipe, check 'No'.* **Maintenance**: 14 Is the pathway to the latrine accessible around the year for all household members (over 2 years old)?; 15 Are the latrine walls stable and complete?; 16 Is the latrine roof stable and complete?; 17 Is the vent-pipe or chimney stable and complete? *No holes or cracks.*; 18 Is the inside of the latrine dark?; 19 Is there wiping material available in or near the latrine?; 20 Does the latrine smell?; 21 Is the slab free from feces or urine?; 22 Is the slab free from flies and bugs? **Handwashing**: 23 Does the latrine have a functional handwashing facility?; 24 Does the handwashing facility have soap?; 25 Does the handwashing facility have water? Each: Yes / No Score / Risk Level: 21-25 Very high risk; 16-20 High risk; 11-15 Medium risk; 6-10 Low risk; 0-5 Very low risk Sum 'Nos' / Risk Level Latrine Checklist
Latrine Satisfaction Surveys	Asking customers about their experience in accessing and using a sanitation facility through a series of short satisfaction questions can help identify if the facility is effective in helping all members of a household safely and comfortably urinate, defecate and where relevant - manage menstruation. One useful tool for this is the five-item "sanitation-related quality of life" index (SanQoL-5). This validated tool captures people's experience of sanitation in a multi-dimensional way with 5 short questions. See the five questions and learn more about the tool here.

Reflection question

Have you ever walked into an unusable sanitation facility? What would have made it usable and what type of market actor could potentially support this process?

None

9.3 **Universal:** Reaches many people



A local sanitation entrepreneurs' shop in rural Bangladesh | ***Source**: iDE Bangladesh*

What are the challenges to achieving equitable reach?

Universality, also known as **equitable reach**, is the ability for an MBS activity to reach as many people as possible with a goal of sanitation for all. Sometimes this can be done only through MBS activities, other times there will be a range of overlapping strategies, financing options and phases.

Reaching many people means choosing strategies that are able to spread out - rather than working in one village with a single mason, leveraging training programs that support entrepreneurs that can each support 10 masons. This concept of leverage aims to engage focal businesses at the highest level of the supply chain that is feasible to also ensure equity.

Equity reflects that MBS also aims to reach the most marginalised. As discussed in previous sessions, an MBS activity may choose to focus on a particular market segment because of funding, context or program objectives; however ideally a sanitation market system will be able to reach those who are often left behind through the product system, service model, and demand strategies.

Often, MBS programs will have specific or specialised funding streams to help increase the universality of the market system. In MBS programs that do not have to focus on a particular type of people (open-boundaries), universality is often part of a second phase or through a parallel partner program. Often the most marginalised require a form of smart-subsidy to ensure access (see Session 8.2). It is also important to to understand if the reason for non-use is interest, capacity or opportunity - as each of these reasons will require different strategies to overcome.

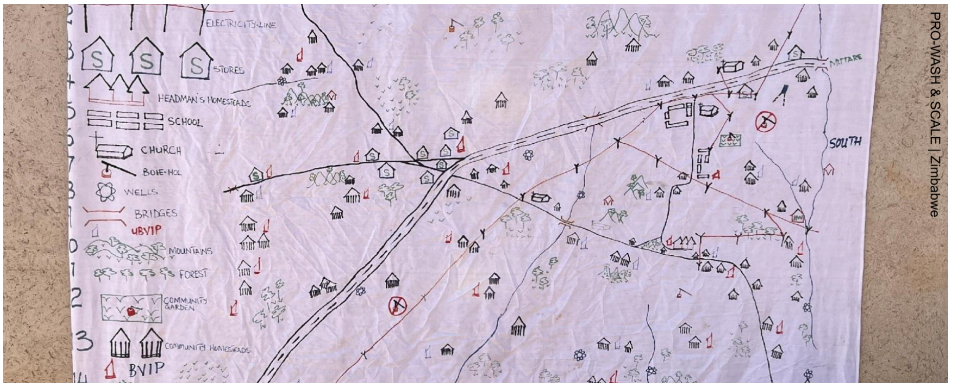
Take a moment to review some of the strategies below and remember that each of these aspects could warrant an entire course!

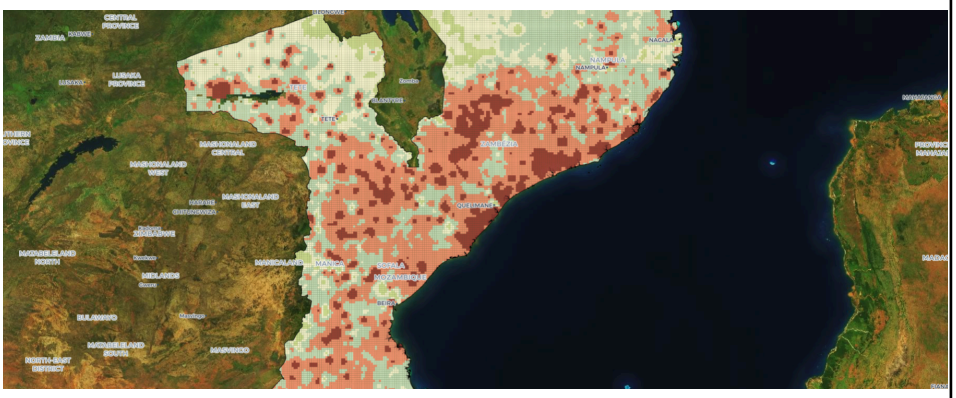
Disability	Individuals with a disability often require a unique or tailored product system and trained focal businesses to best deliver these tailored solutions. - In Bangladesh, focal businesses were trained on how to lead a household co-design product systems and were provided visual tools to illustrate potential solutions. This included specialised seats, handholds, and entry ramps.

	- In xxxx
Senior Citizens	Seniors often require a unique or tailored product system and trained focal businesses to best deliver these tailored solutions. - In Zimbabwe, a local manufacturing company has begun producing a low-cost fibreglass latrine seat that can be easily retrofitted onto latrines. MBS activities are working to link local suppliers with these manufacturers to reduce the complexity of accessing these seats. One woman interviewed in the Takunda project noted that "I travelled a whole day to get a latrine seat for my mother from the main city. It was a long way, but was very worth it. I want to respect and provide for my mother" - In South Africa, teams are leveraging the unique needs of senior citizens as a demand activation strategy. Children living in the city are encouraged over social media to provide sanitation facilities for their ageing parents.
Remote or Hard-to-Reach	Remote communities that are very hard to reach require tailored delivery mechanisms to ensure that safe products and services can be provided. - In the remote Chittagong Hill Tracts in Bangladesh, a light-weight bamboo-based latrine slab was co-designed with local enterprises and sold through grocery stores by trained grocers. This could be sold much closer to households and more easily carried up the mountains to communities. - In xxxx
Disaster Prone	Areas that are prone to flooding, cyclones and landslides also require tailored product systems. This also overlaps with the 'resilient' principle which will be covered in a subsequent section. - In Bangladesh, a team designed a circular latrine shelter which is able to withstand cyclone winds. - In Zimbabwe, a standard latrine design is coated in a high-strength cement to increase resilience to cyclone winds. - In xxxx

How to evaluate universality?

MBS activities often rely on surveys with strategy sampling strategies or community mapping to help ensure universality and identify at risk zones. Household surveys can also be used to track which household members are using the sanitation facilities and if any one is being left behind.

***Small scale* - Village Map**	A village map, often used in tracking open defecation in CLTS activities, can help identify households or individuals who are non-users. 

	Village map from rural Zimbabwe. | ***Source**: PRO-WASH & Takunda*
***Large scale* - Online Mapping Tools**	Geographic information system (GIS) tools can help identify unreached areas. For example, the online SanPlan, WASH Atlas (Spatial Data Repository) or Integrated Public Use Microdata Series (IPUMS) mapping tools helps overlay maps to identify the most vulnerable areas in selected countries.  *Zones of relevant open defecation in Mozambique* |***Source**: Sanplan*

Reflection question

Are there market segments (socio-demographic, age, ability, geography) in your context that are at risk for being overlooked? What could projects do to support these people?

None

9.4 **Self-sufficient:** Continues competitively without project assistance



A demonstration latrine installed in rural Ethiopia. | ***Source**: USAID T/WASH Program Ethiopia*

What are the challenges to self-sufficiency?

Sustainability through self-sufficiency is the likelihood of sanitation enterprises continuing operations in the long-term without external support from non-market players (adapted from WASHPaLS/USAID, 2018). This principle may also be known as autonomy or non-dependency and often is related to the **financial self-sufficiency** of enterprises In our definition, we also include the value of competition and crowding in of other market actors.

As described in other sessions, MBS activities often balance trade-offs based on their funding, context and focus. These are often related to how development actors temporarily become part of the sanitation market reducing the self-sufficiency or autonomy of the system. Here are few examples:

- Sometimes MBS teams set up a social enterprise strategy in which the development actors run a social sanitation business. This model reduces self-sufficiency, but can increase the effectiveness of solutions, inclusivity and resilience.
- Sometimes MBS teams hire sales agent teams as part of the project. This model increases the speed of universality and inclusivity, but can reduce self-sufficiency as the sale agents may not continue once program funding ends.
- Sometimes MBS teams may import sanitation components from outside the country. This style helps to provide a proof of concept for a product system or service model. However, once the shipping container is empty, the private sector may not yet be in a place to take over the importation.
- Sometimes MBS teams deliver subsidised inputs to focal businesses. This style can increase the speed of universality and inclusivity, but once the supply of inputs runs out, the businesses may not have the relevant connections or finances to access inputs in the long-term.

All of these trade-offs may have good reasons, but it is important that teams reflect on their **phase out or sustainability strategies** to avoid market-actor dependency.

It is good to remember that any development funded MBS activity is a form of subsidy into the market system. Often in MBS activities, this 'subsidy' is used for research, coordination, capacity strengthening, demand creation, product design, monitoring and learning. As such, MBS teams should design interventions that are the least disruptive to the market system and that public and private actors clearly understand how development actors will phase-out.

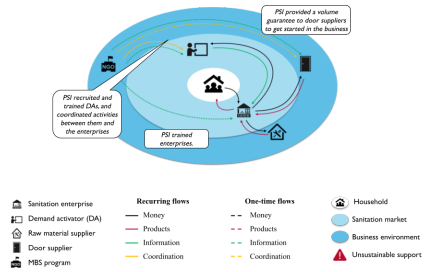
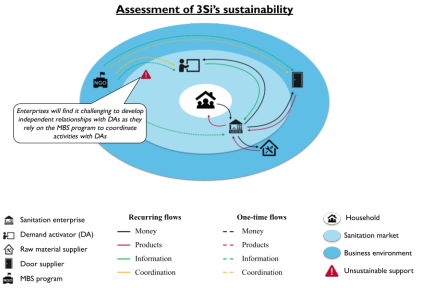
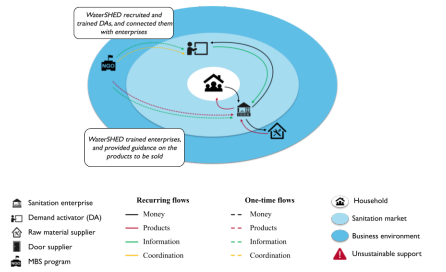
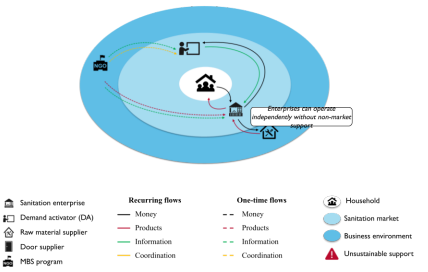
How to evaluate self-sufficiency?

During the design or implementation of an MBS activity, program teams can benefit from mapping the roles of all actors (public, private and development), illustrating potential risk areas for self-sufficiency.

Several tools can aid in the process. Take a moment to review the two tools highlighted below.

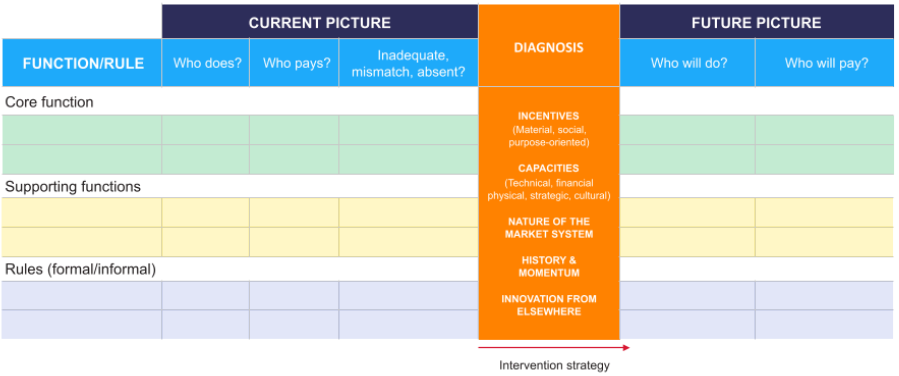
<table>
<tr>
<td>Adapted Market Map</td>
<td>Introduced in Session 1, market maps illustrate the connections between different market actors. While traditionally, market maps avoid showing the influence of development interventions, in this adaption, teams layer their program activities onto a market map and highlight risk areas for sustainability.

Learn more in WASHPaLS MBS Training Session 3 here.

Take some time to review the two examples below; one from India and one from Cambodia.
<table>
<tr>
<td>PSI's 3Si program in India

</td>
<td>PSI's 3Si program in India

</td>
</tr>
<tr>
<td>WaterSHED's Hands-Off program in Cambodia

</td>
<td>WaterSHED's Hands-Off program in Cambodia

</td>
</tr>
</table>
</td>
</tr>
<tr>
<td>Sustainability Analysis Framework (Who does, Who pays?</td>
<td>Similar to the market mapping activity, a 'who does, who pays?' is a useful framing for teams to identify potential risk to financial sustainability. Ultimately the goal is to pass on activities from temporary actors (such as development partners) to the public or private sector.
Learn more from the BEAM Exchange here.</td>
</tr>
</table>

Some key analysis questions include:

- Would market players continue with their new role without programme support?
- Will players be motivated and able to change how they behave with (modest) programme inputs?
- Can the new configuration of functions and players result in sustainable system change within the lifespan of the programme?



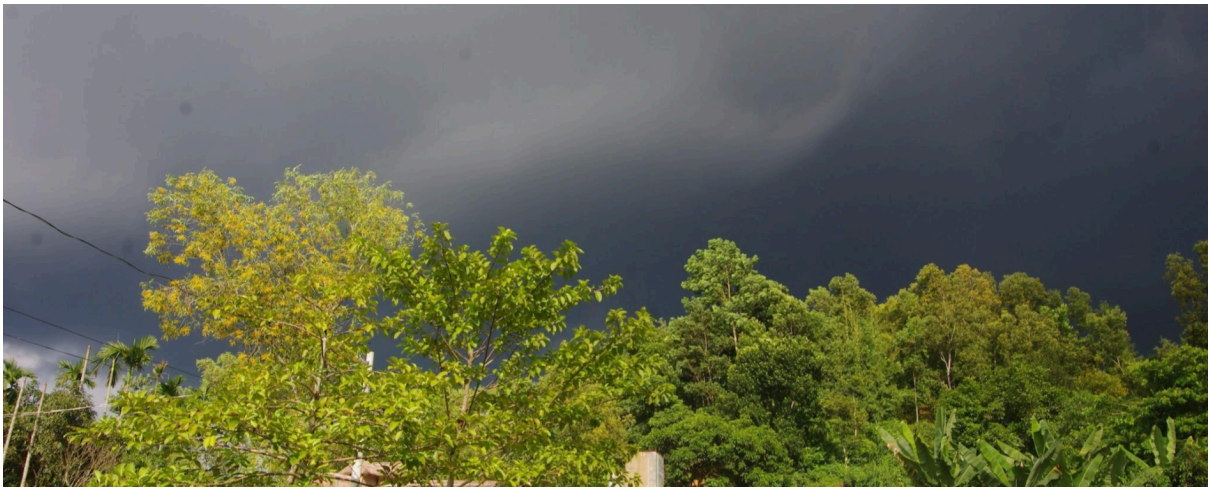
Adapted from M4P Operational Guide (2015)

Reflection question

Are there particular risks to self-sufficiency common in your context?

None

9.5 **Resilient:** Able to withstand challenges



A storm brews in rural Bangladesh. | ***Source***: Jess MacArthur

What are the challenges to resilience?

The second aspect of sustainability is resilience - the requirement for market systems to effectively withstand or rebound from shocks and stresses related to climatic, economic, and political instabilities. Resilient market structures are proactive rather than reactive to shocks and stresses. Resilience is also an important component of working in fragile contexts that already experience shocks and stresses.

Take a moment to review the table below that summarises common shocks and stresses

Geophysical/ Meteorological	Human induced	Biological	Technological
• Typhoons/ hurricanes/ cyclones • Tornadoes • Severe thunderstorms • Flooding • Earthquakes • Tsunamis • Landslides • Volcanoes • Heat/cold waves • Drought • Wildfires (naturally occurring) • Climate variability • Land degradation	• Terrorism • Conflict • Gender-based violence • Coups • Crime/ violence • Fire • Social exclusion/ discrimination • Market failures • Population pressure • Extreme poverty • Irregular migration • Land/soil degradation • Climate change	• HIV/AIDS • Vector borne diseases (dengue, influenza, malaria, etc.) • Hepatitis • Cholera • Avian Influenza • Ebola • SARS • COVID	• Toxic spills • Dam failure • Nuclear disaster • Grid failure

Adapted from Sagara, B. (2018). Resilience Measurement Practical Guidance Note Series 2: Measuring Shocks and Stresses. Produced by Mercy Corps as part of the Resilience Evaluation, Analysis and Learning (REAL) Associate Award.



How to evaluate resilience?

During the design or implementation of an MBS activity, program teams can benefit from reflecting on potential risk areas for resilience. Several tools can aid in the process. Take a moment to review the two tools highlighted below.

<table>
<tr>
<td>Risk Assessment</td>
<td>Risk assessments can help identify areas of potential risk and concern. One version, a PESTLE analysis explores the key Political, Economic, Sociological, Technological, Legal and Environmental factors that can influence an organisation or market system.

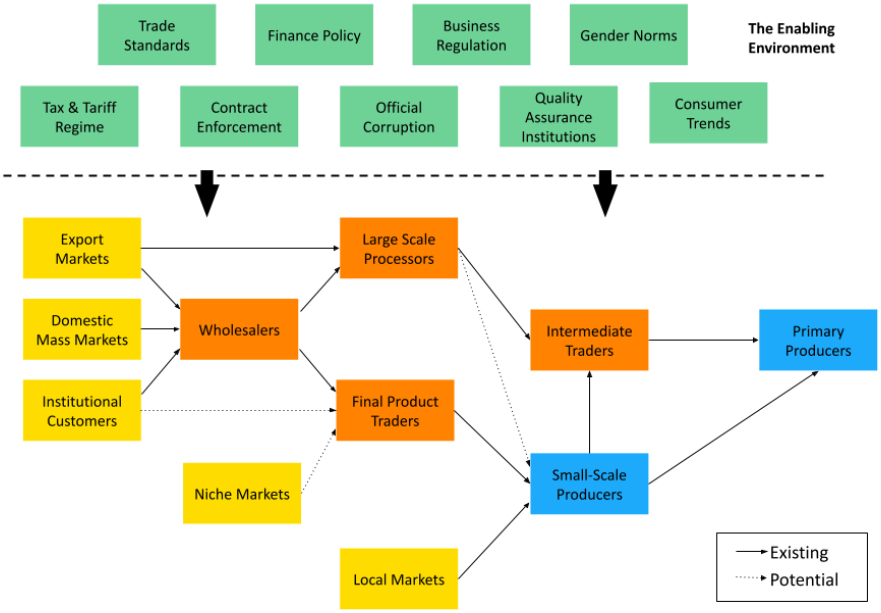
PESTLE analysis can be done using a simple table, like the one illustrated below.

<table>
<tr><th></th><th>External factors to consider</th><th>Factors affected within the sanitation market system</th><th>Importance to organisation</th></tr>
<tr><td>Political</td><td></td><td></td><td></td></tr>
<tr><td>Economic</td><td></td><td></td><td></td></tr>
<tr><td>Sociological</td><td></td><td></td><td></td></tr>
<tr><td>Technological</td><td></td><td></td><td></td></tr>
<tr><td>Legal</td><td></td><td></td><td></td></tr>
<tr><td>Environmental</td><td></td><td></td><td></td></tr>
</table>

The analysis is often done regularly to identify changing factors and potential risk.

Learn more here.</td>
</tr>
<tr><td></td><td></td></tr>
<tr>
<td>Market Map</td>
<td>Just like market maps can help illustrate risks to self-sufficiency, they can also be used to illustrate risks to resilience. The process often includes both a baseline map and then a map which highlights risks during emergencies such as floods, droughts, cyclones, or other shocks and stresses.

The Emergency Market Mapping and Analysis (EMMA) toolkit is available in English, French, and Spanish. Learn more here.</td>
</tr>
</table>

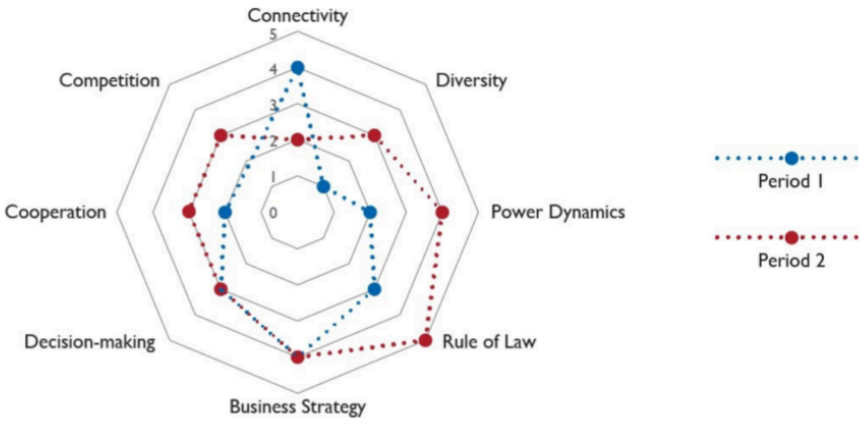


- **Caption:** Generic Market Map
- **Source:** Practical Action Core Market Mapping Guidance

Market Systems Resilience Assessment Tool

USAID's Market Systems Resilience Framework includes eight domains to help measure and track change for market actors and within a market system. It draws on a similar theoretical strategy to the first iteration of the Market Systems Resilience Index (MSRI). While iDE's use of the MSRI aims to quantify resilience of a market system, the impact of this activity emerges from the discussion about the different components of that system and how to system its overall system.

An illustrative example of changing resilience in a market system is provided below





Reflection question

What types of shocks and stresses are common in your context? How might these impact the sanitation market?

None

9.6 **Fair:** Leverage honest and transparent processes



Monitoring a local sanitation business in Ethiopia. | ***Source***: USAID T/WASH Ethiopia

What are the challenges to fairness?

As discussed in Session 7 on the wider WASH system, a sanitation market must also operate in an fair manner through honest and transparent processes. Often the public sector has a strong role to play in overseeing and regulating the sanitation market to foster fairness. In other fragile contexts, development partners may also play this overseeing role.

While less has been documented about the risks to market fairness, it can be easy to think about how market systems can become unfair. Here are a few examples:

- **Subsidies** are **unfairly allocated** to family members of the selection committee, focal businesses or local authorities.
- Dealers take advantage of MBS activities and **artificially inflate prices** for inputs such as sand, cement or plastic components.
- Manufacturers create **copy-cat latrine components** of patent protected technologies. These copy-cats are not not actually safe and are prone to breakage, weakening interest in the improved technologies.
- Financing schemes do not include safe installation in their strategies, leading to **unusable latrines** that households are **still paying micro-loans for**.
- Development partners create **parallel temporary supply chains** for improved latrine components that are only available for certain clients. This means that local entrepreneurs are forced out of the business and that other potential customers can't actually access the improved components even if they are willing to pay.

How to evaluate fairness?

During the design or implementation of an MBS activity, program teams can benefit from reflecting on potential risk areas for fairness often found in unintended outcomes. Outcome Mapping tools to help uncover unintended outcomes are useful when reflecting on fairness. It is important that teams use systematic methods and tools to avoid these risks being classified as 'anecdotal' and therefore ignored. Take a moment to review several outcome mapping tools highlighted below that are specifically designed to explore unintended outcomes.

Journals and logs	Journals and logs are forms of record-keeping tools that can be used to capture information about activities, results, conditions, or personal perspectives on how change occurred over a period of time
Key informant interviews	Key informant interviews involve interviewing people who have particularly informed perspectives on an aspect of the program being evaluated.
Negative programme theory	Most programme theories, logic models and theories of change show how an intervention is expected to contribute to positive impacts; Negative programme theory, a technique developed by Carol Weiss, shows how it might produce negative impacts.
Risk assessment	Conducting a risk assessment involves identifying potential negative impacts, their likelihood of occurring and how they might be avoided.
Six thinking hats	The Six Thinking Hats method encourages participants to cycle through six different ways of thinking, using the metaphor of wearing different conceptual "hats".
Unusual events reporting	The reporting of unusual events or incidents is important both for the sake of transparency and to improve policies and procedures.

Adapted from: Better Evaluation Identify potential unintended results - Rainbow Framework

Reflection question

What other risks to fairness do you see in your context? How might an MBS program overcome these risks?

None

9.7 **Empowering:** fosters hidden market actors



*A female toilet business owner stands proudly in front of her shop in northern Ghana | **Source**: iDE Ghana*

What are the challenges for empowerment and dignity in the sanitation workforce?

While the principle of 'universal' focuses on the customers and clients, 'inclusivity' focuses on **empowering** actors in the supply-side through decent work. Often around the world, people involved in sanitation businesses are systematically marginalised or vulnerable, and many members of the sanitation supply chain - including women - are often hidden or overlooked.

MBS can provide decent and inclusive work for systemically vulnerable sanitation workers. MBS provides a chance to re-calibrate the sector to provide decent and safe work opportunities for sanitation workers and to create empowering roles In many contexts, sanitation is seen as a gross sector. Workers are stigmatised and often work for low wages; for example:

- Unskilled day-labourers or masons work for minimal wages. In some cases these individuals work to pay off loans in indentured servitude.
- Women sanitation entrepreneurs often have inherited their businesses from deceased or disabled relatives and have limited personal agency to direct their businesses. Some describe doing this work out of shame or necessity rather than choice. Others describe challenging relationships with male laborers who disrespect their authority.
- Pit and septic tank cleaners or sweepers often work for below minimum wage and are extremely marginalised in their communities. They are often driven to substance abuse to deal with the shame, disgust and stigma associated with their jobs. In some cultures, these roles are also hereditary - and not a choice.

What are the challenges for women working in the sanitation sector?

MBS can empower women and other systemically marginalised actors to have meaningful paid roles in the sanitation sector. Women's presence in the supply of sanitation-related products and services creates economic opportunity, brings value chain efficiency, addresses diverse needs through increasing

equal participation in decision-making processes, and increases product uptake. However, women's involvement in businesses, particularly those related to WASH, remains low around the world. While historically sanitation has been seen as a male-dominated, studies from Cambodia, Bangladesh, Nepal and Ghana have shown that women are already strongly active in the sanitation space, but that their roles are often hidden and unpaid. However, social norms and other gendered constraints such as limited networks, lack of confidence and mobility restrictions can limit opportunities. The most common roles for women in sanitation are as sales agents or joint-entrepreneurs.

- **Sales Agents.** Women have been recruited as sales agents or sanitation promoters in a variety of contexts. For example, in Nepal, women sales agents for latrines have been shown to be more effective in ensuring that family members actually use latrines. In Ghana, women sales agents saw their roles as social teachers and more than just work.
- **Entrepreneurs**. In a variety of contexts, women have been empowered to become successful entrepreneurs either on their own or in partnership with male family members (husband or son). In many cases they are already supporting their family business, but in a hidden unpaid way. Supporting husband-wife sanitation businesses have been shown to transform social norms in Cambodia and Bangladesh.

As is the case with gender integration activities, just adding women to training is not effective and may have unintended harmful outcomes. Here are several strategies to positively support women and other marginalised participants within the sanitation supply chain.

➔ **Creative networking opportunities:** due to social norms, it is difficult for women to build and maintain their professional networks. Creative networking approaches could help in overcoming this challenge and might include telephone communication instead of in- person meetings and engaging their husbands to support networking opportunities.

➔ **Incentive-based network building:** in addition to creative networking, a commission for masons/artisans bringing new business may help expand the business network of women business owners.

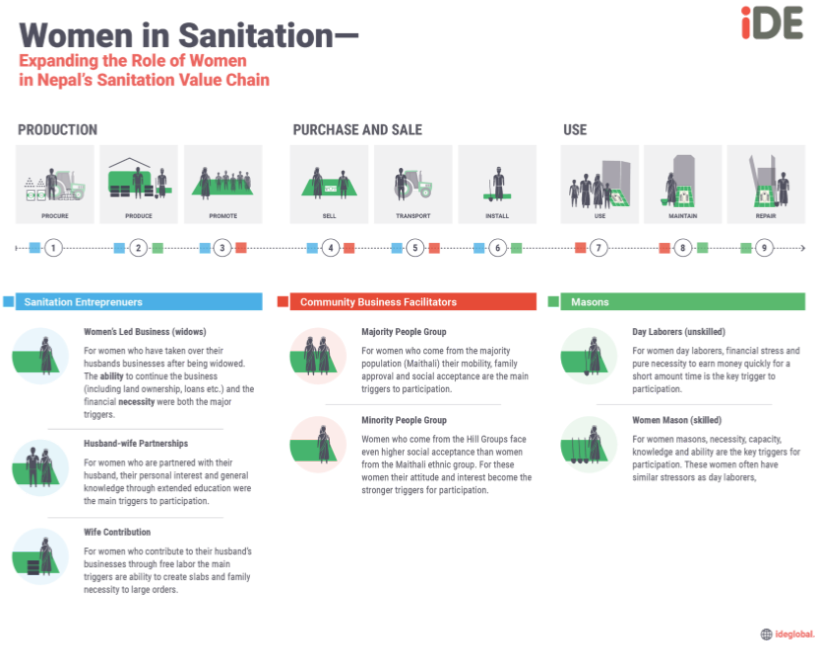
➔ **Specialised capacity strengthening**: empowering women to develop resilience and overcome negative gender norms through management skills, emotional intelligence, and assertiveness. However, having a fully separate training for women is a missed opportunity for male-colleagues to see the capacity and potential of women in business. Consider having a joint training, with specialised additional sessions for women. Be sure to reflect on timing, transport, and care support to ensure women's full and meaningful participation.

➔ **Product diversification:** due to their limited mobility and capital, women have limited access to new information and products. As such, providing them with information, technological inputs and skills to expand their product portfolios (e.g., cooking stoves, super- and sub-structures for toilet construction) will help enhance their businesses.

➔ **Sensitize supporting public and development actors:** Ongoing training and closer collaboration with government officials to fight gender blindness in the WASH sector and enhance their acumen to run Market-Based Sanitation activities effectively.

How to evaluate supply chain inclusivity?

During the design or implementation of an MBS activity, program teams can benefit from reflecting on potential risk areas for a lack of inclusivity. Several tools can aid in the process. Take a moment to review the two tools highlighted below.

Gender Audit or Analysis	Many organisations have gender or social inclusion analysis or audit tools to help uncover existing yet hidden roles for women and social minorities and to document the barriers which may keep women and social minorities from succeeding in sanitation business. For example, this gender audit in Nepal (similar studies also done in Cambodia, Bangladesh, and Ghana) helped to uncover the hidden women of the sanitation supply chain and identify opportunities for dignified and empowerment work. Notice that there were differences between the minority and majority populations, which made up different market segments in the Terai region of southern Nepal. 
Inclusive WASH Workplaces Database	The Inclusive Water and Sanitation Database builds from the Equal Aqua Initiative, and is an interactive tool which includes over 180 gender equality, disability and social inclusion (GEDSI) initiatives from organisations across the world, including water and sanitation utilities, government departments, civil society organisations, enterprises and the private sector. Examples have been sought from a range of countries and regions. As a living document, it will grow as more examples from around the world are added. Explore the database here.

Reflection question

Is sanitation work stigmatised in your context? What might be done to create decent jobs for sanitation workers?

None

Connect: Sustainability, Scale and Social Impact

What about your context?

In this final session, we have briefly explored how MBS programs can support sustainability, scale and social impact and potential risks to these outcomes.

1. Take a moment to reflect on one of the six principles from this session (effective, universal, self-sufficient, resilient, fair or inclusive).
2. Below, describe what you would do to help strengthen this principle in MBS programming in your context. What are the unique contextual risks? And how might you overcome them?

None

Quiz: Check your knowledge



Check your knowledge of Session 9

Question 1: Which is NOT one of the six principles described in this section? Select one.

- ☐ Effective
- ☐ Equitable
- ☐ Universal
- ☐ Self-sufficient
- ☐ Resilient
- ☐ Fair
- ☐ Inclusive

Question 2: True or false?

There is no good way to track if sanitation has been effective at scale.

- ☐ True
- ☐ False

Question 3: True or false?

Every MBS program should review their activities to check for risks of market system dependencies.

- ☐ True
- ☐ False

Question 4: What can programs do to help empower women or other marginalised community members in the sanitation supply chain? Select all that apply.

- ☐ Creative networking opportunities
- ☐ Incentive-based network building
- ☐ Specialised capacity strengthening
- ☐ Product diversification
- ☐ Sensitize supporting public and development actors

Learn More

This learn more section is broken down by each of the six principles discussed in this session.

Additional Reading

Effective	

Universal	• Global Guidance
	  ◦ **Desk Review:** Area-wide Sanitation Desk Review (USAID, 2023 | English)
	  ◦ **Guidance Note 8:** Equity in Sanitation Marketing: How can we support the market to reach the poorest? (Jenkins and Pedi - UNICEF | English)
	  ◦ **Blogpost:** Well-Functioning Sanitation Markets are Vital for Universal Sanitation (Shapiro J, 2022 | English)
	  ◦ **Blogpost:** The Many Ways of Scaling Sanitation (Worsham K, 2022 | English)
	• Ghana
	  ◦ **Briefing Paper:** Instituting Equity and Inclusion in Market-based Approaches: Reaching the Poor and Disabled in Sanitation (Wei et al., 2016 | English)
	  ◦ **Blogpost**: Insights from a deep dive into how gender affects purchasing (iDE, 2021 | English)
	• Cambodia
	  ◦ **Tactic Report:** Highlights of a latrine shelter designed in Cambodia specifically for people with disabilities. (iDE, 2017 | English)
	  ◦
	• Bangladesh
	  ◦ **Pilot Report**: Inclusive Latrines Pilot (iDE Bangladesh, 2017 | English)
	  ◦ **Insight Deck:** Hard to Reach Insight Deck (iDE Bangladesh, 2017 | English)

Self-sufficient	WASHPaLS MBS Training Session 3 here. • **Tactic Report:** Lessons in sustainable sanitation business from dropout latrine producers in rural Bangladesh (iDE Bangladesh, 2019 | English)

Resilient	• Global Guidance
	  ○ **Guidance**: Market-based Programming in WASH: Technical Guidance for Humanitarian Practitioners (Global WASH Cluster, Version 2 in 2021 | English, French, Spanish, Arabic)
	• Bangladesh
	  ○ **Case Study:** An approach to promote sanitation in times of humanitarian emergencies in Cox' Bazar (iDE and UNICEF, 2023 | English)
	  ○ **Insight Deck:** Resilience Insight Deck (iDE Bangladesh, 2017 | English)

Fair	

Inclusive	• Global Guidance
	  ○ **Guidance**: Strengthening gender integration in sanitation programming and policy: Insights from literature and practice (ISF-UTS, BMGF, 2023 | English)
	  ○ **Learning Note:** Women in WASH Enterprises – Learning from female entrepreneurship in Cambodia, Indonesia and Lao PDR (ISF-UTS, 2018 | English)
	  ○ **Guidance and Webportal:** Inclusive WASH Workplaces (ISF-UTS, 2021 | English)
	  ○ **Learning Note:** Civil Society Engagement with the Private Sector for Inclusive WASH: Insights from Water for Women (ISF-UTS, 2022 | English)
	• Benin
	  ○ **Analysis Report**: Challenges and Opportunities for Women Entrepreneurs in Benin's Sanitation Sector: A Comprehensive Analysis (USAID MuniWASH, 2024)
	  ○
	• India
	  - **Book Chapter:** Women-Led Total Sanitation: saving lives and dignity. Lessons learnt from Madhya Pradesh,' ch. 13 in Gender Issues in Water and Sanitation Programmes: Lessons from India" von Medeazza, G, et al, 2014)
	• Cambodia
	  ○ **Learning Cases:** Case studies in gender integration: Market-based solutions in Cambodia (BMGF - WaterSHED, 2018 | English).
	• Indonesia
	  ○ **Learning Brief:** What will it take to strengthen diversity amongst female water, sanitation and hygiene entrepreneurs in Indonesia? (ISF-UTS, 2021 | English, Bahasa Indonesia)
	• Kenya
	  ○ **Learning Cases:** Case Studies in Gender Integration: Sanitation Product and Service Delivery in Kenya (BMGF - Sanivation, 2018 | English)
	• Ghana
	  ○ **Blogpost**: Gender equality starts at home (iDE Ghana, 2021 | English)
	  ○ **Research Report:** The Women of Sama Sama (iDE Ghana, 2018 | English)

	• Nepal
	  ○ **Research Report:** Understanding How Sanitation Sales Agent Gender Affects Key Sanitation Behaviors in Nepal (iDE Nepal, 2019 | English)
	
	• Bangladesh
	  ○ **Insight Deck:** Minority Inclusion Insight Deck (iDE Bangladesh, 2017 | English)
	  ○ **Insight Deck:** Gender Inclusion Insight Deck (iDE Bangladesh, 2017 | English)
	• Ivory Coast
	  ○ The team fostered sustainability by implementing a comprehensive approach that included capacity building, community engagement, and the promotion of local ownership. They provided training and support to local stakeholders, ensuring they had the skills and knowledge to maintain and expand sanitation services. The team also worked closely with communities to develop culturally appropriate solutions and encouraged local businesses to participate in the sanitation market, creating a sustainable ecosystem that could continue to thrive beyond the project's duration.
	  ○ Read more in French (DYNAMISATION DU MARCHÉ DE L'ASSAINISSEMENT AUTONOME EN CÔTE D'IVOIRE)

End of course

Congratulations! You have reached the end of Course-2. We hope you have enjoyed the course, have learned a lot, and feel prepared to work in market-based sanitation activities.

Answer Key

Course 2

Question 1.1: If a project is able to identify where they would like to start an MBS activity, does it have set or flexible boundaries? Select one. ☐ Set boundaries ☑ Flexible boundaries	If a project can identify its own target locations, this is a flexible boundary MBS activity. These teams have the flexibility to identify what areas (such as peri-urban or higher density) to start their MBS work.
Question 1.2: What is a sanitation common market gap? Select all that apply. ☐ High customer demand ☑ History of poorly designed subsidies ☐ Well-connected supply chains ☐ Too many sanitation enterprises	The long history of poorly designed subsidies reduces demand in many contexts. The other three options are all exact opposites of common market gaps.
Question 1.3: What are the 4Ps of the Marketing Mix Tool ☑ Product ☑ Place ☐ Peace ☑ Price ☑ Promotion ☐ Progress	The four Ps covered in the Marketing Mix tool are Product, Price, Place and Promotion.

Question 2.1: Using the framing from this course, who are potential customers who are offered services through enterprises? Select one. ☐ Customers ☐ Consumers ☑ Target clients	In this course, we refer to potential customers as target clients. Customers are the purchasers, and consumers are the users.
Question 2.2: What is NOT a client segmentation approach discussed in this course? Select one. ☐ Geography ☐ Demography ☑ Opportunity ☐ Economics ☐ Motivation ☐ Integration	Within this course, opportunity is used as a way to understand a consumer's chance to purchase a product or service.

☐ Required innovation	
Question 2.3: What are the three core aspects of consumers that MBS activities should consider? Select three. ☑ Opportunity ☐ Skill ☑ Ability ☐ Climate ☑ Motivation ☐ Perspective	The three core consumer aspects that an MBS should consider are opportunity, ability, and motivation. The other options are embedded into these three overarching categories.

Question 3.1: What is NOT included in a sanitation product system? Select one. ☐ Materials ☐ Components ☑ Marketing ☐ Labour	Most often in MBS, the sanitation product system is the mix of materials, components, and labour purchased by a sanitation consumer.
Question 3.2: What is NOT an aspect to balance in sanitation product system design? Select one. ☑ Possibility ☐ Desirability ☐ Feasibility ☐ Viability	Drawing on Design Thinking and Human-Centred Design, sanitation product systems must balance desirability, feasibility, and viability.
Question 3.4: True or false. Teams should design one product system for all market segments. Select one. ☐ True ☑ False	While many MBS teams leverage a standard base model, it is important to offer upgrading or adaptation opportunities for different market segments.
Question 3.5: True or false. A project should prioritise designing a completely new sanitation product. Select one. ☐ True ☑ False	Often, the most effective sanitation product systems consider small tweaks to existing systems.

Question 4.1: True or false. A sanitation '**service model'** refers to ways in which sanitation product systems are produced and distributed to customers by local businesses. Select one. ☑ True ☐ False	The service model centres on the focal business and the ways in which they connect and provide to consumers.
Question 4.2: Order the types of service models from least to most aggregated.	• Mason/DIY • Network

☐ One Stop Shop (OSS) ☐ Mason/DIY ☐ Social Enterprise ☐ Turnkey Solution Provider (TSP) ☐ Network	• One Stop Shop (OSS) • Turnkey Solution Provider (TSP) • Social Enterprise
Question 4.3: True or false. A project should focus on technical capacity strengthening for entrepreneurs. Select one. ☐ True ☑ False	In many contexts, sanitation enterprises already have the technical capacity to make and install sanitation products. However, they have much less capacity in business, marketing and linkages.
Question 4.4: Match each component of the Business Model Canvas with its definition. ☐ The sources from which a business generates money by selling their product or service to the customers. ☐ The groups of people that a business tries to target and sell its product or service to. ☐ The external companies or suppliers that will help a business focus on its key activities. ☐ How businesses communicate with and reach out to their customers.	• 1. Revenue streams • 2. Customer segments • 3. Key partners • 4. Channels

Question 5.1: Put the phases of a customer journey in the correct order. • Demand activation • Demand fulfilment • Demand generation	The correct order of the customer journey is: • Demand generation • Demand activation • Demand fulfilment
Question 5.2: What are NOT types of social influence that MBS projects can leverage? Select one. ☐ Leader Influence ☑ Mass Media ☐ Peer Pressure ☐ Expert Influence	Within this course, we introduced leader and expert influence alongside peer pressure as potential social influence factors. Mass media is a form of marketing.
Question 5.3: Which is NOT an overarching type of marketing common in MBS programs. Select one. ☐ Interpersonal Communication ☐ Entrepreneur Advertising ☐ Scripted Events ☑ Product Development ☐ Mass Media	Product development is an important part of MBS, but it is not part of marketing to activate demand for sanitation.

Question 5.4: True or false. Interpersonal communication is often the most effective form of marketing in MBS activities. Select one. ☑ True ☐ False	While there is value in ensuring other forms of marketing, such as advertising, interpersonal communication has been found to be most effective in converting interest to decisions.
Question 6.1: True or false. The Opportunity, Ability and Motivation framework can also be applied to supply chain actors. Select one. ☑ True ☐ False	Just like customers and entrepreneurs, supply chain actors are also guided by their ability, motivation and opportunity.
Question 6.2: What are the three types of supply chain aspects that MBS activities should consider? Select three. ☑ Manufacturing ☑ Raw material inputs ☐ Mass Media ☑ Distribution	Within this course, we introduced the categories of raw inputs, manufacturing and distribution as the three types of supply chain actors.
Question 6.3: Which is NOT a potential benefit of networking local enterprises in the supply chain. Select one. ☐ New potential clients ☐ Pooled resources for marketing ☑ Unlink supply chain ☐ Increased quality control ☐ Pooled procurement ☐ Emotional support	The networking of enterprises can actually reduce the fragmentation in a supply chain creating linkages rather than breaking them. Fragmentation means broken up into unlinked pieces.
Question 6.4: True or false. The sanitation supply chain is exactly the same in all contexts. Select one. ☐ True ☑ False	Understanding the sanitation supply chain and the supply gaps is an important part of a sanitation market assessment.
Question 7.1: Which is NOT a WASH Systems building block? Select one. ☐ Institutions ☐ Policy and Legislation ☑ Platforms ☐ Monitoring ☐ Regulation and Accountability ☐ Financing	While platforms such as online or in-person forums for discussion, knowledge sharing and learning are an important part of a functioning WASH system - they are not their own building block.
Question 7.2: True or false? You can't start an MBS program until your country has an approved MBS guideline. ☐ True	While it is important to align with government policy, regulation and standards, many teams have piloted MBS

☑ False	approaches - which has led to the later development of national guidelines.
Question 7.3: True or false? A lack of regulation (and policy) can scare away potential investors and inhibit companies from exploring local manufacturing of new water and sanitation products. ☑ True ☐ False	While too much regulation can reduce opportunities for investment, too little also can signal a complex system for new investors.
Question 7.4: Which of these indicators is better NOT a strong MBS monitoring indicator? Select one. ☐ Number of households mobilised or reached with demand creation or promotional activities ☐ Number of national, regional and district sanitation marketing programme joint quarterly performance reviews ☑ Number of trained masons trained on latrine installation ☐ Number of enterprises/entrepreneurs with documented business plan or model	While training masons is an important part of many MBS activities, it isn't enough to create a robust market. Teams may consider how to support lead masons to develop into entrepreneurs.
Question 8.1: Which is NOT a type of unlocking finance directly for customers? Select one. ☐ Village savings & loans associations ☑ Tax ☐ Consumer loan through microfinance institution ☐ Vouchers ☐ Conditional cash transfers ☐ Purchase rebate	While tax is a useful public financing tool it is not directly for customers, but operates as a public financing tool to create a subsidy fund.
Question 8.2: Which is NOT a type of unlocking finance for businesses? Select one. ☐ Micro-finance support ☐ Revolving fund ☐ Guarantee fund ☐ Subsidised interest rate ☑ Conditional cash transfers ☐ Foreign currency support	Conditional cash transfers are a financial mechanism for customers. Cash is transferred to the beneficiary, conditional on future performance of a measurable sanitation behaviour, with ongoing independent verification of behaviour performance.
Question 8.3: True or false? Earmarking taxes typically involves depositing tax or other revenues into a special account from which the legislature appropriates money for the designated purpose. ☑ True ☐ False	Earmarking taxes leverage public tax income to create a special fund. This can then be used for sanitation finance.

Question 8.4: True or false? Sanitation enterprises that take loans are less likely to be top-sales performers. ☐ True ☑ False	Evidence from Cambodia shows that sanitation enterprises that take loans are more likely to be top sales performers.
Question 9.1: Which is NOT one of the six principles described in this section? Select one. ☐ Effective ☐ Equitable ☐ Universal ☐ Self-sufficient ☐ Resilient ☐ Fair ☐ Inclusive	While equity is a very important part of any strong sanitation market and MBS activities, in our framing, we include equity with the principle of universal access.
Question 9.2: True or false? There is no good way to track if sanitation has been effective at scale. ☐ True ☐ False	Tools such as latrine inspections and the sanitation quality of life index are great ways to help track if sanitation is effective.
Question 9.3: True or false? Every MBS program should review their activities to check for risks of market system dependencies. ☐ True ☐ False	Good market systems development programming will evaluate how their activities will be phased out and passed to private or public sector actors.
Question 9.4: What can programs do to help empower women or other marginalised community members in the sanitation supply chain? Select all that apply. ☐ Creative networking opportunities ☐ Incentive-based network building ☐ Specialised capacity strengthening ☐ Product diversification ☐ Sensitize supporting public and development actors	All five of these options are good ways to help empower women or other marginalised community members in the sanitation supply chain.